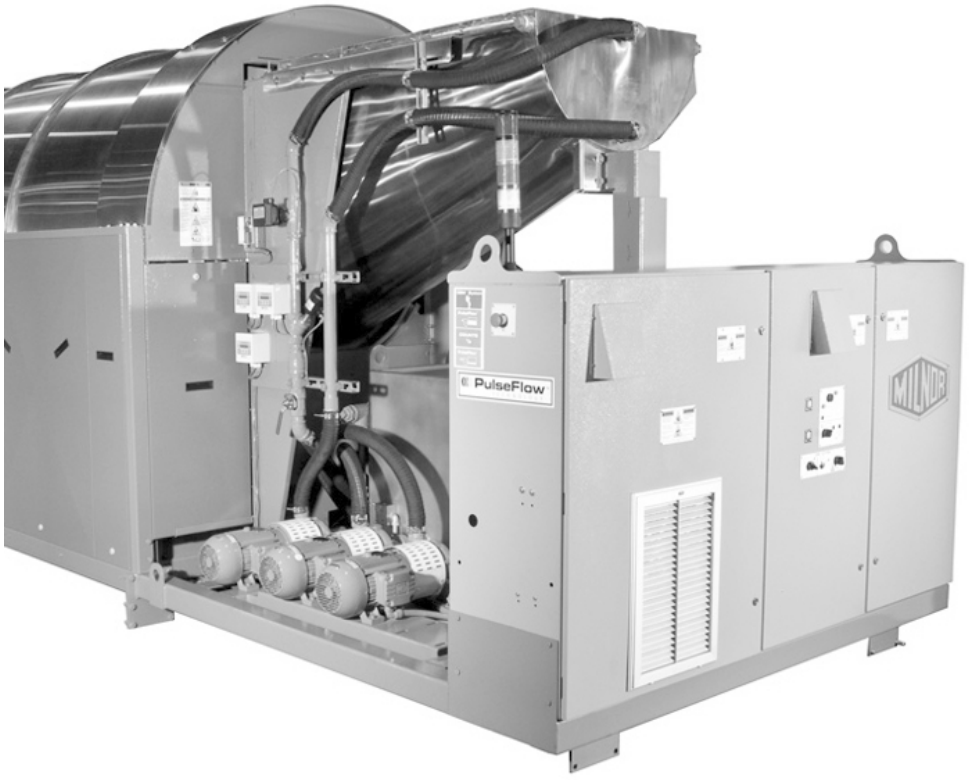
Published Manual Number/ECN: MPI39G3PAE/2025183A

- **Publishing System: TPAS2**
- **Access date: 05/02/2025**
- **Document ECNs: NOT latest**

Installation and Service

76028 & 76039 G3 PulseFlow® Continuous Batch Washers



Read the separate safety manual before installing, operating, or servicing

PELLERIN MILNOR CORPORATION POST OFFICE BOX 400, KENNER, LOUISIANA 70063-0400, U.S.A.

MPI39G3PAE/25183A

MPI39G3PAE/25183A

MPI39G3PAE/25183A

PELLERIN MILNOR CORPORATION
LIMITED STANDARD WARRANTY

We warrant to the original purchaser that MILNOR machines including electronic hardware/software (hereafter referred to as "equipment"), will be free from defects in material and workmanship for a period of one year from the date of shipment (unless the time period is specifically extended for certain parts pursuant to a specific MILNOR published extended warranty) from our factory with no operating hour limitation. This warranty is contingent upon the equipment being installed, operated and serviced as specified in the operating manual supplied with the equipment, and operated under normal conditions by competent operators.

Providing we receive written notification of a warranted defect within 30 days of its discovery, we will—at our option—repair or replace the defective part or parts, EX Factory (labor and freight specifically NOT included). We retain the right to require inspection of the parts claimed defective in our factory prior to repairing or replacing same. We will not be responsible, or in any way liable, for unauthorized repairs or service to our equipment, and this warranty shall be void if the equipment is tampered with, modified, or abused, used for purposes not intended in the design and construction of the machine, or is altered in any way without MILNOR's written consent.

Parts damaged by exposure to weather, to aggressive water, or to chemical attack are not covered by this warranty. For parts which require routine replacement due to normal wear—such as gaskets, contact points, brake and clutch linings, belts, hoses, and similar parts—the warranty time period is 90 days.

We reserve the right to make changes in the design and/or construction of our equipment (including purchased components) without obligation to change any equipment previously supplied.

ANY SALE OR FURNISHING OF ANY EQUIPMENT BY MILNOR IS MADE ONLY UPON THE EXPRESS UNDERSTANDING THAT MILNOR MAKES NO EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE OR ANY OTHER WARRANTY IMPLIED BY LAW INCLUDING BUT NOT LIMITED TO REDHIBITION. MILNOR WILL NOT BE RESPONSIBLE FOR ANY COSTS OR DAMAGES ACTUALLY INCURRED OR REQUIRED AS A RESULT OF: THE FAILURE OF ANY OTHER PERSON OR ENTITY TO PERFORM ITS RESPONSIBILITIES, FIRE OR OTHER HAZARD, ACCIDENT, IMPROPER STORAGE, MIS-USE, NEGLECT, POWER OR ENVIRONMENTAL CONTROL MALFUNCTIONS, DAMAGE FROM LIQUIDS, OR ANY OTHER CAUSE BEYOND THE NORMAL RANGE OF USE. REGARDLESS OF HOW CAUSED, IN NO EVENT SHALL MILNOR BE LIABLE FOR SPECIAL, INDIRECT, PUNITIVE, LIQUIDATED, OR CONSEQUENTIAL COSTS OR DAMAGES, OR ANY COSTS OR DAMAGES WHATSOEVER WHICH EXCEED THE PRICE PAID TO MILNOR FOR THE EQUIPMENT IT SELLS OR FURNISHES.

THE PROVISIONS ON THIS PAGE REPRESENT THE ONLY WARRANTY FROM MILNOR AND NO OTHER WARRANTY OR CONDITIONS, STATUTORY OR OTHERWISE, SHALL BE IMPLIED.

WE NEITHER ASSUME, NOR AUTHORIZE ANY EMPLOYEE OR OTHER PERSON TO ASSUME FOR US, ANY OTHER RESPONSIBILITY AND/OR LIABILITY IN CONNECTION WITH THE SALE OR FURNISHING OF OUR EQUIPMENT TO ANY BUYER.

BMP720097/25142

BIUUUD19 (Published) Book specs- Dates: 20081231 / 20081231 / 20081231 Lang: ENG01 Applic: UUU

How to Get the Necessary Repair Components

This document uses Simplified Technical English.
Learn more at http://www.asd-ste100.org.

You can get components to repair your machine from the approved supplier where you got this machine. Your supplier will usually have the necessary components in stock. You can also get components from the Milnor® factory.

Tell the supplier the machine model and serial number and this data for each necessary component:

- The component number from this manual
- The component name if known
- The necessary quantity
- The necessary transportation requirements
- If the component is an electrical component, give the schematic number if known.
- If the component is a motor or an electrical control, give the nameplate data from the used component.

To write to the Milnor factory:

Pellerin Milnor Corporation
Post Office Box 400
Kenner, LA 70063-0400
UNITED STATES

Telephone: 504-467-2787
Fax: 504-469-9777
Email: parts@milnor.com

— End of BIUUUD19 —

Trademarks

BNUUUU02.R01 0000158093 F.2 E.2 3/3/21, 9:47 AM Released

These words are trademarks of Pellerin Milnor® Corporation and other entities:

Table 1. Trademarks

AutoSpot™	GreenFlex™	MilMetrix®	PulseFlow®
CBW®	GearTrace™	MilTouch™	RAM Command™
Drynet™	GreenTurn™	MilTouch-EX™	Recirc*ONE*®
E-P Express®	Hydro-cushion™	MilRAIL®	RinSave®
E-P OneTouch®	Mentor®	Miltrac™	SmoothCoil™
E-P Plus®	Mildata®	MilVision™	Staph Guard®
Gear Guardian®	Milnor®	PBW™	

End of document: BNUUUU02

Safety and Maintenance

1

BIUUUS27 (Published) Book specs- Dates: 20051111 / 20051111 / 20060323 Lang: ENG01 Applic: PCU

Safety—Continuous Batch Washer

1. General Safety Requirements—Vital Information for Management Personnel [Document BIUUUS04]

Incorrect installation, neglected preventive maintenance, abuse, and/or improper repairs, or changes to the machine can cause unsafe operation and personal injuries, such as multiple fractures, amputations, or death. The owner or his selected representative (owner/user) is responsible for understanding and ensuring the proper operation and maintenance of the machine. The owner/user must familiarize himself with the contents of all machine instruction manuals. The owner/user should direct any questions about these instructions to a Milnor® dealer or the Milnor® Service department.

Most regulatory authorities (including OSHA in the USA and CE in Europe) hold the owner/user ultimately responsible for maintaining a safe working environment. Therefore, the owner/user must do or ensure the following:

- recognize all foreseeable safety hazards within his facility and take actions to protect his personnel, equipment, and facility;
- work equipment is suitable, properly adapted, can be used without risks to health or safety, and is adequately maintained;
- where specific hazards are likely to be involved, access to the equipment is restricted to those employees given the task of using it;
- only specifically designated workers carry out repairs, modifications, maintenance, or servicing;
- information, instruction, and training is provided;
- workers and/or their representatives are consulted.

Work equipment must comply with the requirements listed below. The owner/user must verify that installation and maintenance of equipment is performed in such a way as to support these requirements:

- control devices must be visible, identifiable, and marked; be located outside dangerous zones; and not give rise to a hazard due to unintentional operation;
- control systems must be safe and breakdown/damage must not result in danger;
- work equipment is to be stabilized;
- protection against rupture or disintegration of work equipment;
- guarding, to prevent access to danger zones or to stop movements of dangerous parts before the danger zones are reached. Guards to be robust; not give rise to any additional hazards; not be easily removed or rendered inoperative; situated at a sufficient distance from the danger zone; not restrict view of operating cycle; allow fitting, replacing, or maintenance by restricting access to relevant area and without removal of guard/protection device;
- suitable lighting for working and maintenance areas;
- maintenance to be possible when work equipment is shut down. If not possible, then protection measures to be carried out outside danger zones;
- work equipment must be appropriate for preventing the risk of fire or overheating; discharges of gas, dust, liquid, vapor, other substances; explosion of the equipment or substances in it.

1.1. **Laundry Facility**—Provide a supporting floor that is strong and rigid enough to support–with a reasonable safety factor and without undue or objectionable deflection–the weight of the fully loaded machine and the forces transmitted by it during operation. Provide sufficient clearance for machine movement. Provide any safety guards, fences, restraints, devices, and verbal and/or posted restrictions necessary to prevent personnel, machines, or other moving machinery from accessing the machine or its path. Provide adequate ventilation to carry away heat and vapors. Ensure service connections to installed machines meet local and national safety standards, especially regarding the electrical disconnect (see the National Electric Code). Prominently post safety information, including signs showing the source of electrical disconnect.

1.2. **Personnel**—Inform personnel about hazard avoidance and the importance of care and common sense. Provide personnel with the safety and operating instructions that apply to them. Verify that personnel use proper safety and operating procedures. Verify that personnel understand and abide by the warnings on the machine and precautions in the instruction manuals.

1.3. **Safety Devices**—Ensure that no one eliminates or disables any safety device on the machine or in the facility. Do not allow machine to be used with any missing guard, cover, panel or door. Service any failing or malfunctioning device before operating the machine.

1.4. **Hazard Information**—Important information on hazards is provided on the machine safety placards, in the Safety Guide, and throughout the other machine manuals. **Placards must be kept clean so that the information is not obscured. They must be replaced immediately if lost or damaged. The Safety Guide and other machine manuals must be available at all times to the appropriate personnel.** See the machine service manual for safety placard part numbers. Contact the Milnor Parts department for replacement placards or manuals.

1.5. **Maintenance**—Ensure the machine is inspected and serviced in accordance with the norms of good practice and with the preventive maintenance schedule. Replace belts, pulleys, brake shoes/disks, clutch plates/tires, rollers, seals, alignment guides, etc. before they are severely worn. Immediately investigate any evidence of impending failure and make needed repairs (e.g., cylinder, shell, or frame cracks; drive components such as motors, gear boxes, bearings, etc., whining, grinding, smoking, or becoming abnormally hot; bending or cracking of cylinder, shell, frame, etc.; leaking seals, hoses, valves, etc.) Do not permit service or maintenance by unqualified personnel.

2. Safety Alert Messages—Internal Electrical and Mechanical Hazards [Document BIUUUS11]

The following are instructions about hazards inside the machine and in electrical enclosures.

WARNING 1: Electrocution and Electrical Burn Hazards—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.

- Do not unlock or open electric box doors.
- Do not remove guards, covers, or panels.
- Do not reach into the machine housing or frame.
- Keep yourself and others off of machine.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.

WARNING 2: Entangle and Crush Hazards—Contact with moving components normally isolated by guards, covers, and panels, can entangle and crush your limbs. These components move automatically.

- Do not remove guards, covers, or panels.
- Do not reach into the machine housing or frame.
- Keep yourself and others off of machine.
- Know the location of all emergency stop switches, pull cords, and/or kick plates and use them in an emergency to stop machine motion. These may not stop certain devices such as pumps on some machines.

CAUTION 3: Burn Hazards—Contact with hot goods or machine components can burn you.

- Do not remove guards, covers, or panels.
- Do not reach into the machine housing or frame.

3. Safety Alert Messages—External Mechanical Hazards [Document BIUUUS12]

The following are instructions about hazards around the front, sides, rear or top of the machine.

4. Safety Alert Messages—Cylinder and Processing Hazards

[Document BIUUUS13]

The following are instructions about hazards related to the cylinder and laundering process.

WARNING 4: Confined Space Hazards—Confinement in the cylinder can kill or injure you. Hazards include but are not limited to panic, burns, poisoning, suffocation, heat prostration, biological contamination, electrocution, and crushing.

- Do not attempt unauthorized servicing, repairs, or modification.

WARNING 5: Explosion and Fire Hazards—Flammable substances can explode or ignite in the cylinder, drain trough, or sewer. The machine is designed for washing with water, not any other solvent. Processing can cause solvent-containing goods to give off flammable vapors.

- Do not use flammable solvents in processing.
- Do not process goods containing flammable substances. Consult with your local fire department/public safety office and all insurance providers.

5. Safety Alert Messages—Unsafe Conditions [Document BIUUUS14]

5.1. Damage and Malfunction Hazards

5.1.1. Hazards Resulting from Inoperative Safety Devices

WARNING 6: Multiple Hazards—Operating the machine with an inoperative safety device can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.

- Do not tamper with or disable any safety device or operate the machine with a malfunctioning safety device. Request authorized service.

WARNING 7: Electrocution and Electrical Burn Hazards—Electric box doors—Operating the machine with any electric box door unlocked can expose high voltage conductors inside the box.

- Do not unlock or open electric box doors.

WARNING 8: Entangle and Crush Hazards—Guards, covers, and panels—Operating the machine with any guard, cover, or panel removed exposes moving components.

- Do not remove guards, covers, or panels.

5.1.2. Hazards Resulting from Damaged Mechanical Devices

WARNING 9: Multiple Hazards—Operating a damaged machine can kill or injure personnel, further damage or destroy the machine, damage property, and/or void the warranty.

- Do not operate a damaged or malfunctioning machine. Request authorized service.

CAUTION 10: Machine Damage Hazards—Drive shaft and drive motors—Although the tunnel may operate with drive shafts disconnected between modules or units, or with a motor not functioning, the added stress on drive components will quickly damage the machine.

- Do not operate the machine with any evidence of damage or malfunction.

5.2. Careless Use Hazards

5.2.1. Careless Operation Hazards—Vital Information for Operator Personnel (see also operator hazards throughout manual)

WARNING 11: Multiple Hazards—Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.

- Do not tamper with or disable any safety device or operate the machine with a malfunctioning safety device. Request authorized service.
- Do not operate a damaged or malfunctioning machine. Request authorized service.
- Do not attempt unauthorized servicing, repairs, or modification.
- Do not use the machine in any manner contrary to the factory instructions.
- Use the machine only for its customary and intended purpose.
- Understand the consequences of operating manually.

CAUTION 12: Goods Damage and Wasted Resources—Entering incorrect cake data causes improper processing, routing, and accounting of batches.

- Understand the consequences of entering cake data.

5.2.2. Careless Servicing Hazards—Vital Information for Service Personnel (see also service hazards throughout manuals)

WARNING 13: Electrocution and Electrical Burn Hazards—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.

- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.
- Abide by the current OSHA lockout/tagout standard when lockout/tagout is called for in the service instructions. Outside the USA, abide by the OSHA standard in the absence of

any other overriding standard.

WARNING 14: Entangle and Crush Hazards—Contact with moving components normally isolated by guards, covers, and panels, can entangle and crush your limbs. These components move automatically.

- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.
- Abide by the current OSHA lockout/tagout standard when lockout/tagout is called for in the service instructions. Outside the USA, abide by the OSHA standard in the absence of any other overriding standard.

WARNING 15: Confined Space Hazards—Confinement in the cylinder can kill or injure you. Hazards include but are not limited to panic, burns, poisoning, suffocation, heat prostration, biological contamination, electrocution, and crushing.

- Do not enter the cylinder until it has been thoroughly purged, flushed, drained, cooled, and immobilized.
- Abide by the confined space entry procedures in the reference manual.

— End of BIUUUS27 —

Safety Placard Use and Placement

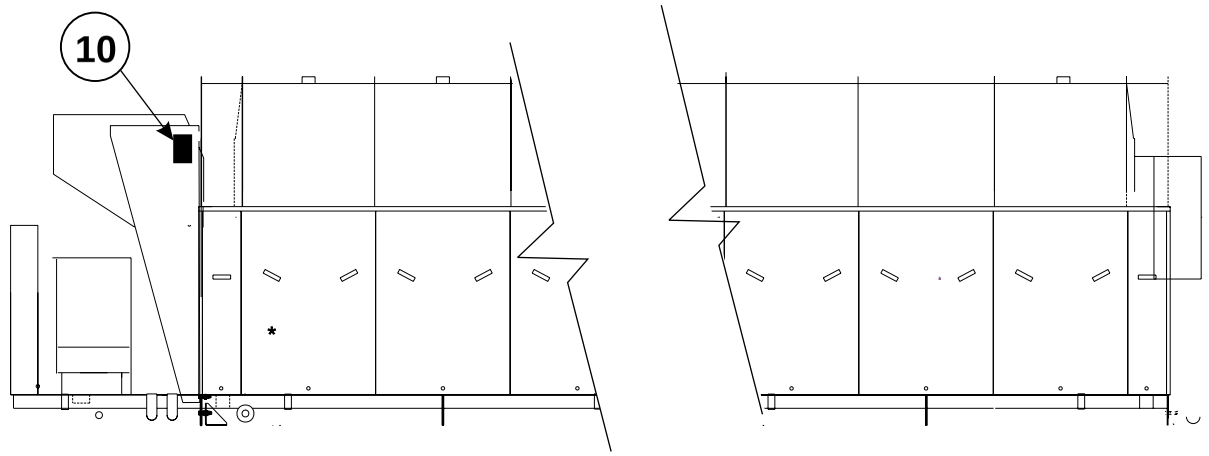
76028,76039 G3 CBW & 92048 G4 CBW

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

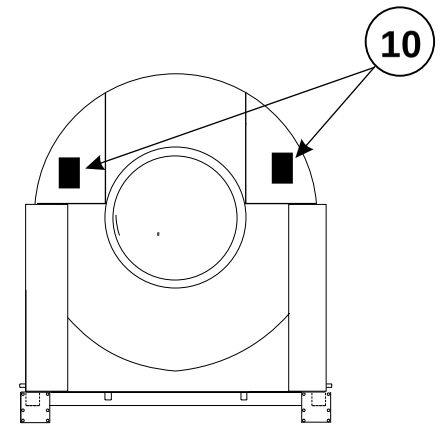
Litho in U.S.A.

Notes:

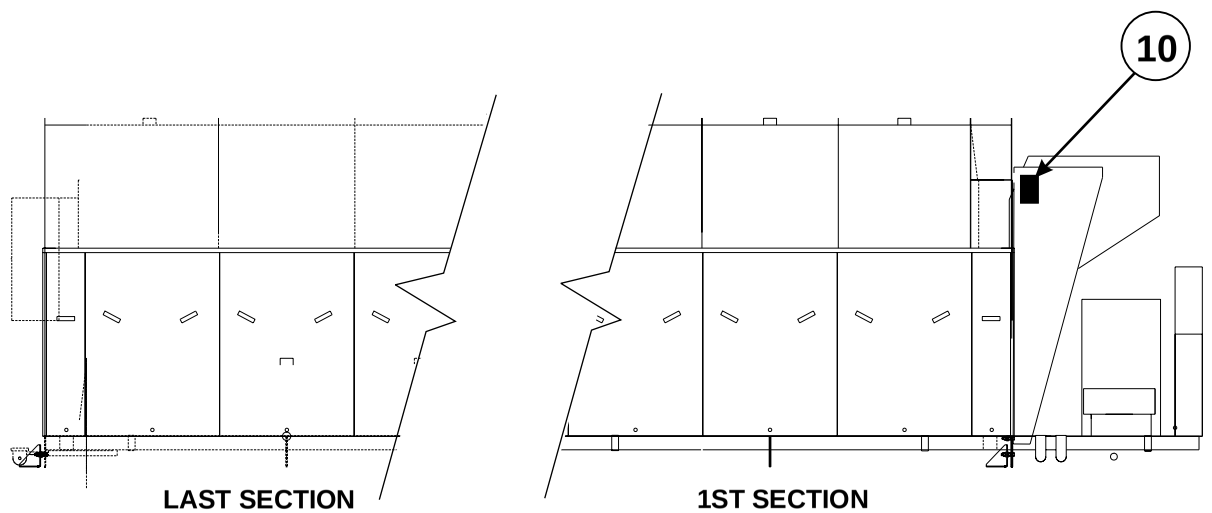
1. **Replace placard immediately, if removed or unreadable.**
2. **Approximate locations of placards are shown. Mounting holes are provided on machine. If aluminum placard use #8 self-tapping screws.**



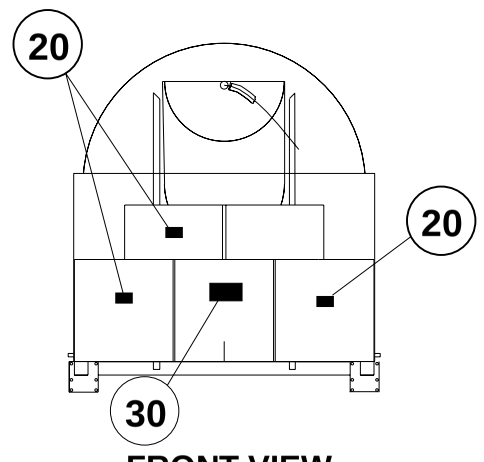
RIGHT VIEW



REAR VIEW
DISCHARGE END



LEFT VIEW



FRONT VIEW
LOAD END

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Safety Placard Placement

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------	----------	----------	----------ASSEMBLIES----------	----------
			none	
----------	----------	----------	----------COMPONENTS----------	----------
all	10	01 10511A	NPLT:CBW END HAZARD-TCATA	
all	20	01 10377A	NPLT:ELEC HAZARD LG-TCATA	
all	30	01 10699B	NPLT:SERV HZRD-ALUM-TCATA	

Safety Placard Use and Placement ISO

76028,76039 G3 CBW & 92048 G4 CBW

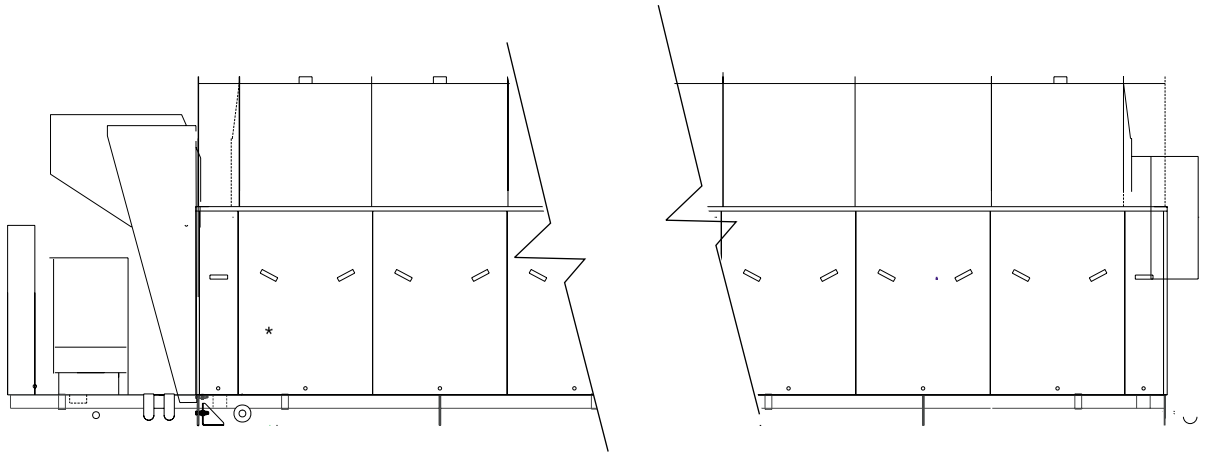
Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

ISO Placards shown on this page

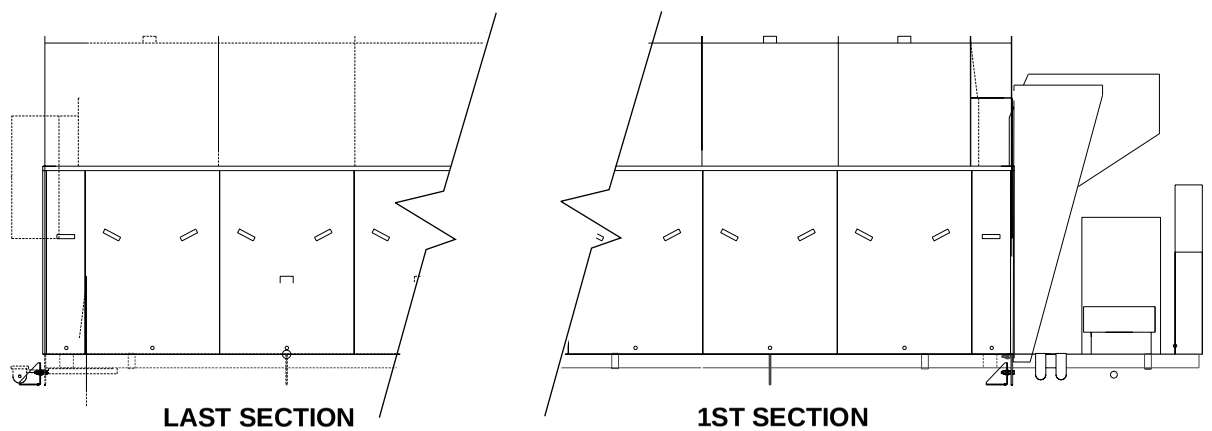
Notes:

1. **Replace placard immediately, if removed or unreadable.**
2. **Approximate locations of placards are shown. Mounting holes are provided on machine. If aluminum placard use #8 self-tapping screws.**



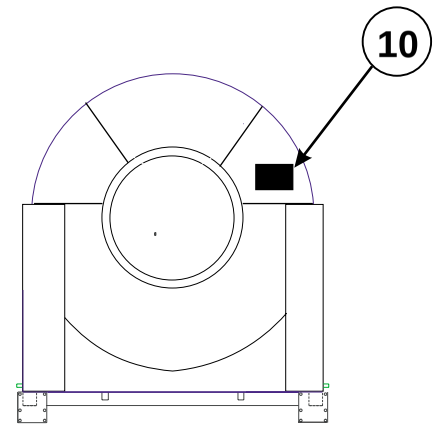
1ST SECTION LAST SECTION

RIGHT VIEW

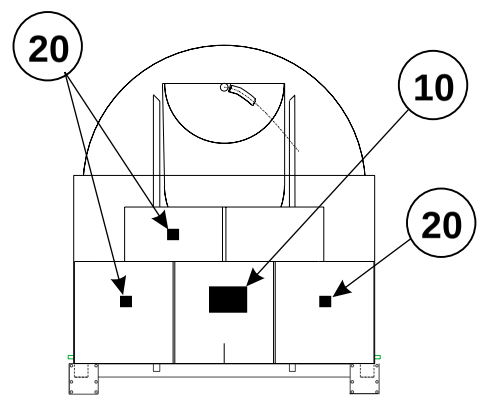


LAST SECTION 1ST SECTION

LEFT VIEW



REAR VIEW
DISCHARGE END



FRONT VIEW
LOAD END

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Safety Placard Placement

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------	----------	----------	----------ASSEMBLIES----------	----------
			none	
----------	----------	----------	----------COMPONENTS----------	----------
all	10	01 10511X	NPLT:CBW WARNINGS	
all	20	01 10377	NPLTE:"WARNING" 4X4	

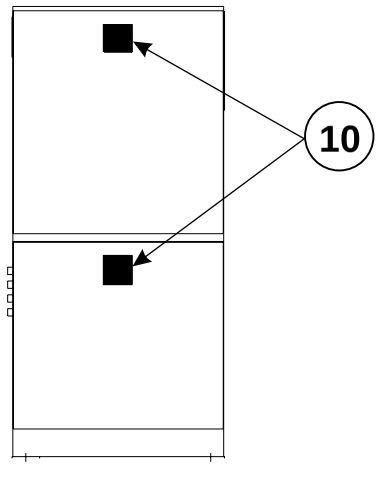
Safety Placard Use and Placement

Mentor Controller for CBW

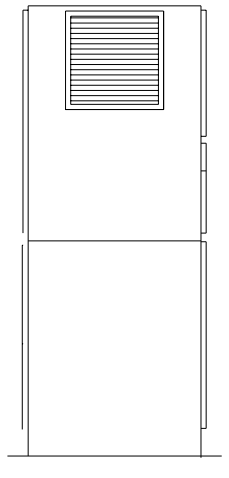
Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

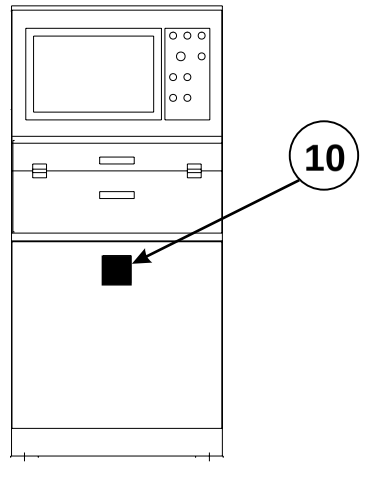
Notes:
1. **Replace placard immediately, if removed or unreadable.**
2. **Approximate locations of placards are shown. Mounting holes are provided on machine. If aluminum placard use #8 self-tapping screws.**



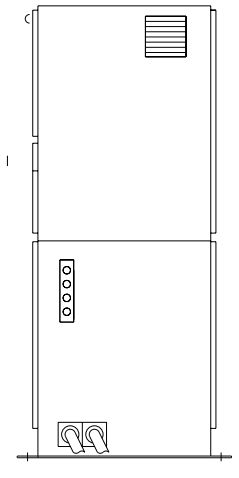
REAR VIEW



LEFT VIEW



FRONT VIEW



RIGHT VIEW

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Safety Placard Placement

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------	----------	----------	----------ASSEMBLIES----------	----------
			none	
----------	----------	----------	----------COMPONENTS----------	----------
all	10	01 10377A	NPLT:ELEC HAZARD LG-TCATA	

Safety Placard Use and Placement ISO

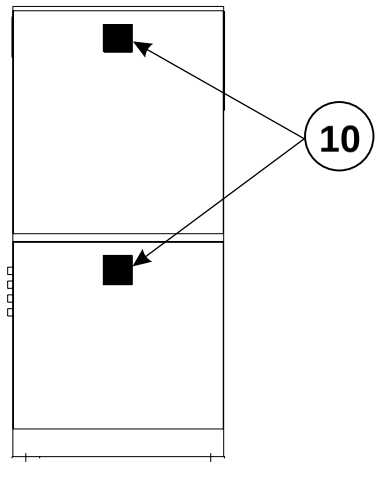
Mentor Controller for CBW

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

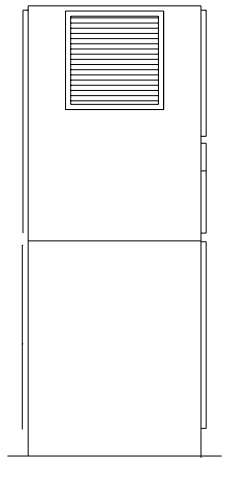
Litho in U.S.A.

ISO Placards
shown on this page

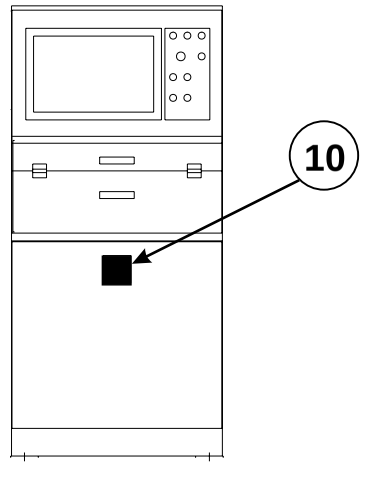
Notes:
1. **Replace placard immediately, if removed or unreadable.**
2. **Approximate locations of placards are shown. Mounting holes are provided on machine. If aluminum placard use #8 self-tapping screws.**



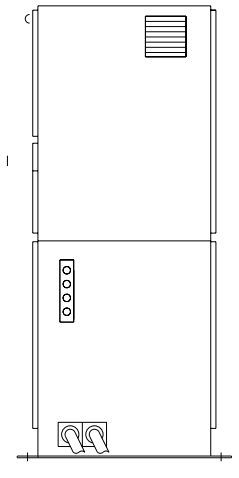
REAR VIEW



LEFT VIEW



FRONT VIEW



RIGHT VIEW

17

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Safety Placard Placement

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------	----------	----------	----------ASSEMBLIES----------	----------
			none	
----------	----------	----------	----------COMPONENTS----------	----------
all	10	01 10377	NPLTE:"WARNING" 4X4	

Safety Placard Use and Placement

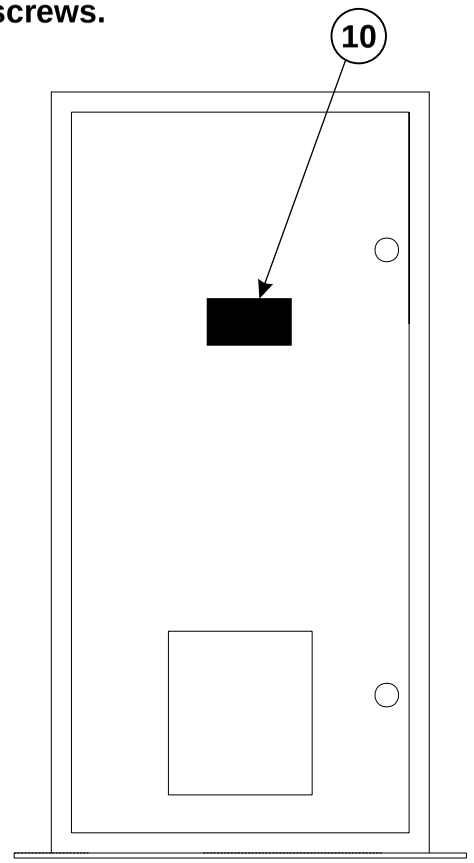
Inverter Box for CBW

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

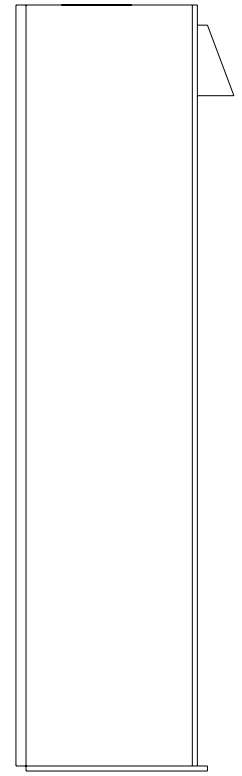
Litho in U.S.A.

Notes:

1. **Replace placard immediately, if removed or unreadable.**
2. **Approximate locations of placards are shown. Mounting holes are provided on machine. If aluminum placard use #8 self-tapping screws.**



FRONT VIEW



RIGHT VIEW

19

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Safety Placard Placement

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------	----------	----------	----------ASSEMBLIES----------	----------
			none	
----------	----------	----------	----------COMPONENTS----------	----------
all	10	01 10377A	NPLT:ELEC HAZARD LG-TCATA	

Safety Placard Use and Placement - ISO

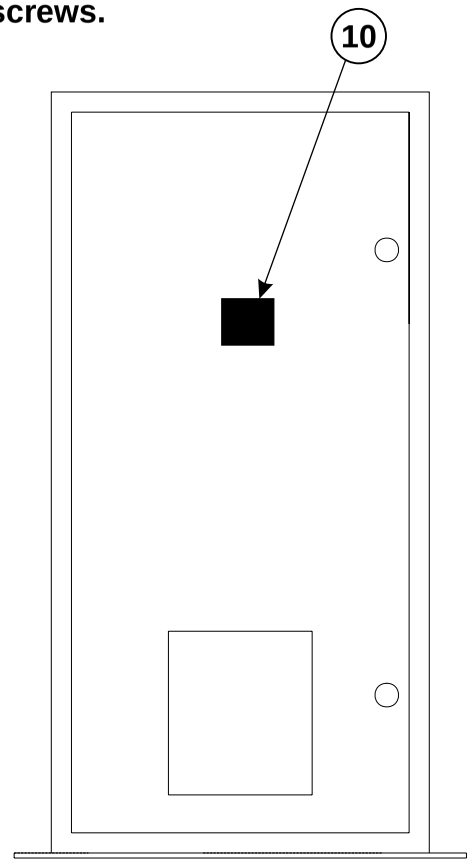
Inverter Box for CBW

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

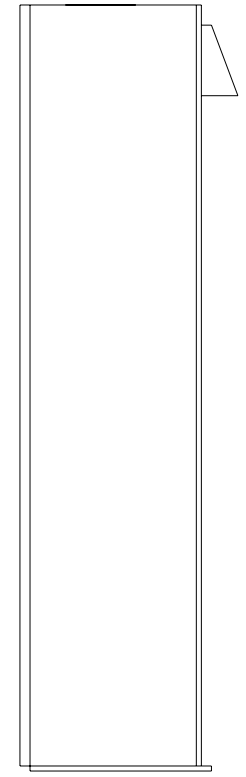
Litho in U.S.A.

ISO Placards
shown on this page

Notes:
1. **Replace placard immediately, if removed or unreadable.**
2. **Approximate locations of placards are shown. Mounting holes are provided on machine. If aluminum placard use #8 self-tapping screws.**



FRONT VIEW



RIGHT VIEW

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Safety Placard Placement

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------	----------	----------	----------ASSEMBLIES----------	----------
			none	
----------	----------	----------	----------COMPONENTS----------	----------
all	10	01 10377	NPLTE:"WARNING" 4X4	

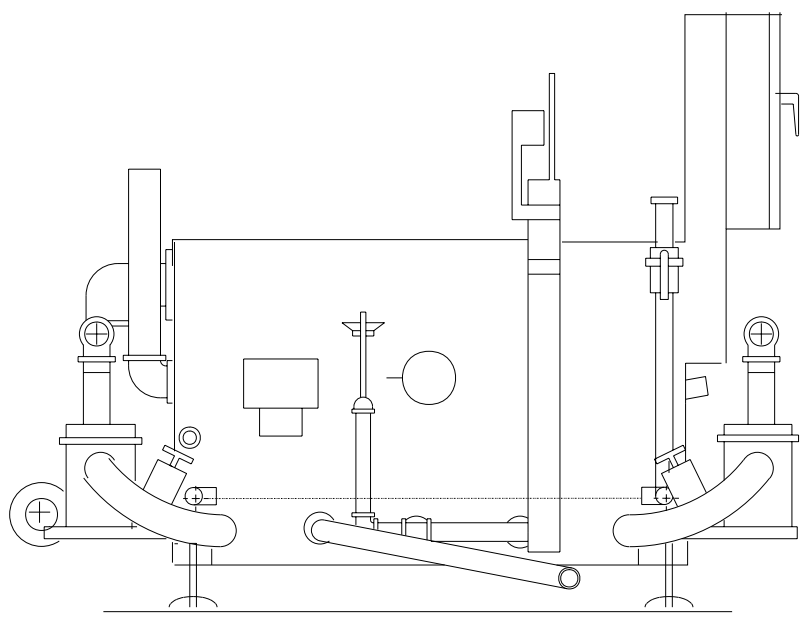
Safety Placard Use and Placement

TYPICAL ALL CBW AUXILIARY TANKS

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

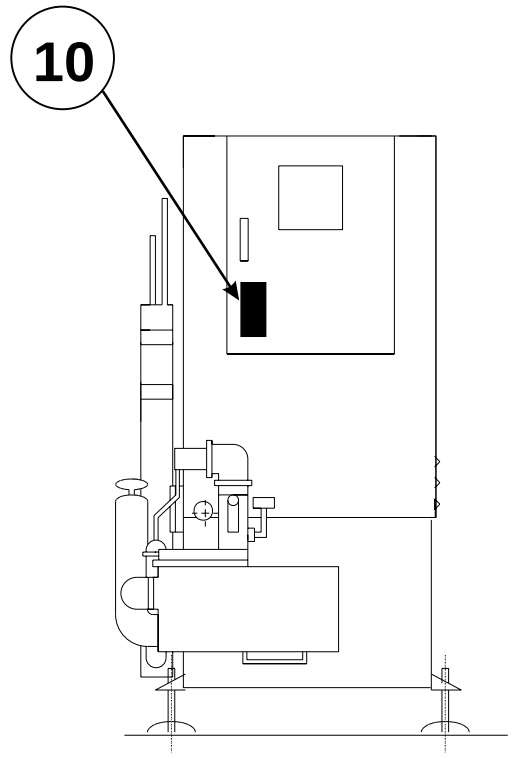
Litho in U.S.A.

Notes:
1. **Replace placard immediately, if removed or unreadable.**
2. **Approximate locations of placards are shown. Mounting holes are provided on machine. If aluminum placard use #8 self-tapping screws.**



Note:
Pumps and piping will vary dependent on function.

FRONT VIEW



RIGHT VIEW

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Safety Placard Placement

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------	----------	----------	----------ASSEMBLIES----------	----------
			none	
----------	----------	----------	----------COMPONENTS----------	----------
all	20	01 10375C	NPLT:E-HAZARD SM VERTCL-TCATA	

Safety Placard Use and Placement ISO

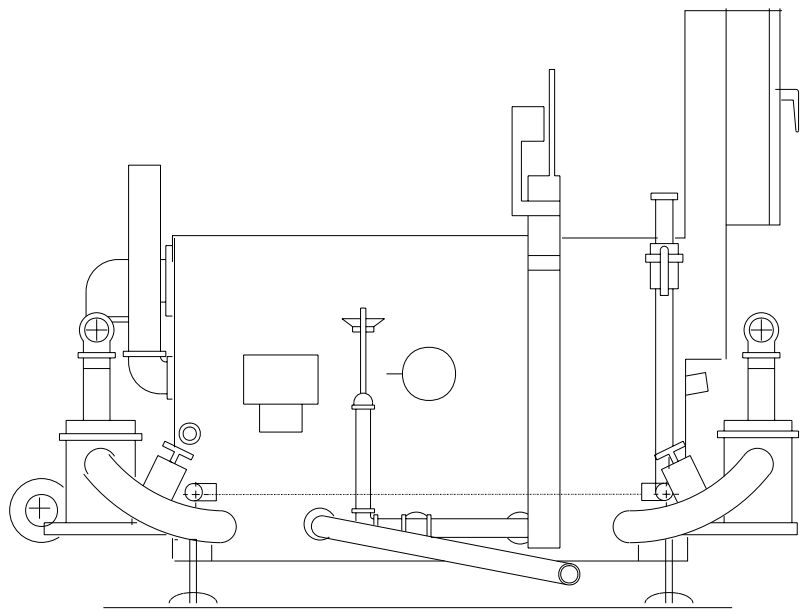
Typical All CBW Auxiliary Tanks

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

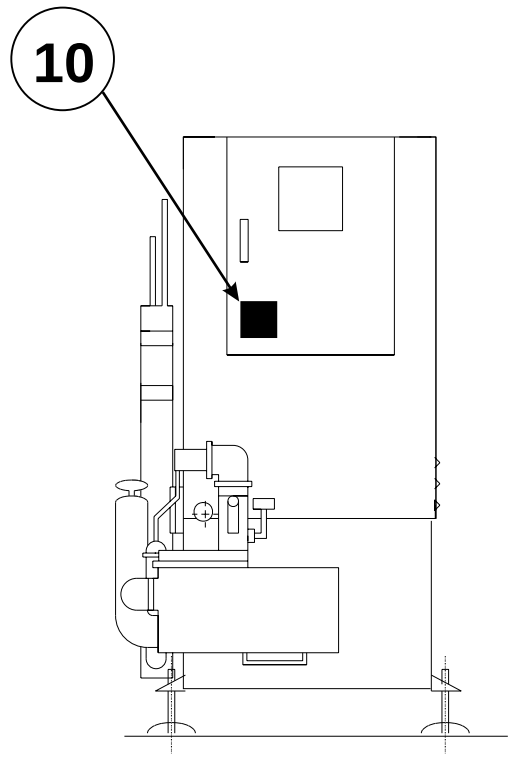
ISO Placards shown on this page

Notes:
1. **Replace placard immediately, if removed or unreadable.**
2. **Approximate locations of placards are shown. Mounting holes are provided on machine. If aluminum placard use #8 self-tapping screws.**



Note:
Pumps and piping will vary dependent on function.

FRONT VIEW



RIGHT VIEW

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Safety Placard Placement

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------ASSEMBLIES----------				
			none	
----------COMPONENTS----------				
all	20	01 10375	NPLTE:"WARNING" 2X2	

Proximity Safeguarding for Automatic Shuttle Conveyors

Proximity safeguarding—a means of preventing personnel from entering the path of a machine, such as an industrial robot, that moves within a large area.

1. Applicability

This document—

applies to Milnor® automated laundering systems with shuttle conveyors that move without operator intervention (automatic operation),

does *not* apply to shuttles that require operator input continually, such as directing all shuttle movements (manual operation).

2. References for Proximity Safeguarding

ANSI Z8.1-2016 “American National Standard for Commercial Laundry and Drycleaning Equipment and Operations - Safety Requirements”

OSHA Standard 29 CFR § 1910.212 “General Requirements for All Machines”

OSHA Directive STD 01-12-002 - Pub 8-1.3 “Guidelines for Robotic Safety”

ANSI/RIA R15.06-2012 “American National Standard for Industrial Robots and Robot Systems- Safety Requirements”

ANSI/ASME B15.1-2000 “Safety Standard for Mechanical Power Transmission Apparatus”

OSHA Publication 3067 “Concepts and Techniques of Machine Safeguarding”

ISO 10472-1 “Safety Requirements for Industrial Laundry Machinery”

3. Hazards To Personnel in Proximity to Shuttle Conveyors

Milnor automated laundering systems use automatic shuttle conveyors to transport goods among the processing machines in the system. Depending on model, an automatic shuttle conveyor may move in any of the following ways, in addition to running its conveyor belt(s):

- It may travel along (traverse) a line of machines (typically dryers).
- Its conveyor bed(s) may ascend and descend (elevate) within the machine frame.
- Its conveyor bed(s) may extend and retract within the machine frame.
- The conveyor bed and frame may pivot.
- Wet goods shuttles have a bucket that elevates and tilts.

These motions pose strike, crush, sever, and entrapment hazards to personnel in proximity to the shuttle. **For the safety of personnel, owner/users must provide proximity safeguarding that protects personnel from the moving shuttle.**

A common method of proximity safeguarding is safety fencing with interlocked gates that disable the shuttle when a gate is opened. When a shuttle is disabled, this will eventually cause other machines in the system to hold (wait for action from another machine), but it will not necessarily cause them to immediately stop moving. In the case of a tunnel system, the press or centrifugal extractor can pose additional hazards to personnel in proximity to the equipment. **Hence, the safeguards must also disable any presses or extractors.** Tunnels and dryers do not pose a significant hazard to personnel merely because they are in proximity to the equipment, and need not be automatically disabled.

WARNING 1: Multiple Hazards—Proximity safeguarding provides only partial protection and only against injury resulting from entering the shuttle path. It is not a substitute for proper

lockout/tagout procedures and good safety practices.

- Always lockout/tagout any individual machine (or follow the published maintenance procedures) when performing maintenance or clearing a fault on that machine.
- Ensure that all personnel understand the safeguards and do not attempt to defeat them.
- Inspect safeguards weekly to ensure that they are not mechanically or electrically circumvented.

4. How Milnor Accommodates Proximity Safeguarding

Milnor provides connection points on shuttles, presses and centrifugal extractors for interfacing with devices such as gate interlock switches. These connection points are tagged for easy identification. When Milnor provides equipment layout drawings for an automated laundering system, it indicates on the drawing, the perimeter of the shuttle movement area that must be guarded. The following hazard statement is displayed on connection point tags as well as equipment layout drawings prepared by Milnor:

WARNING 2: Strike, Crush, Sever, and Entrapment Hazards—Serious bodily injury or death can result to personnel in proximity to machinery/systems that traverse, elevate, extend, pivot, and/or tilt. The following mandatory minimum safety requirements must be installed with the machinery system (local codes may require additional precautions):

- Safety fence enclosing machine movement areas,
- Lockable electrical interlocks on all gates, properly interfaced as shown on machine schematics, to disable machine movement when any gate is opened,
- Signs to alert personnel to these hazards, placed prominently around the fenced area.

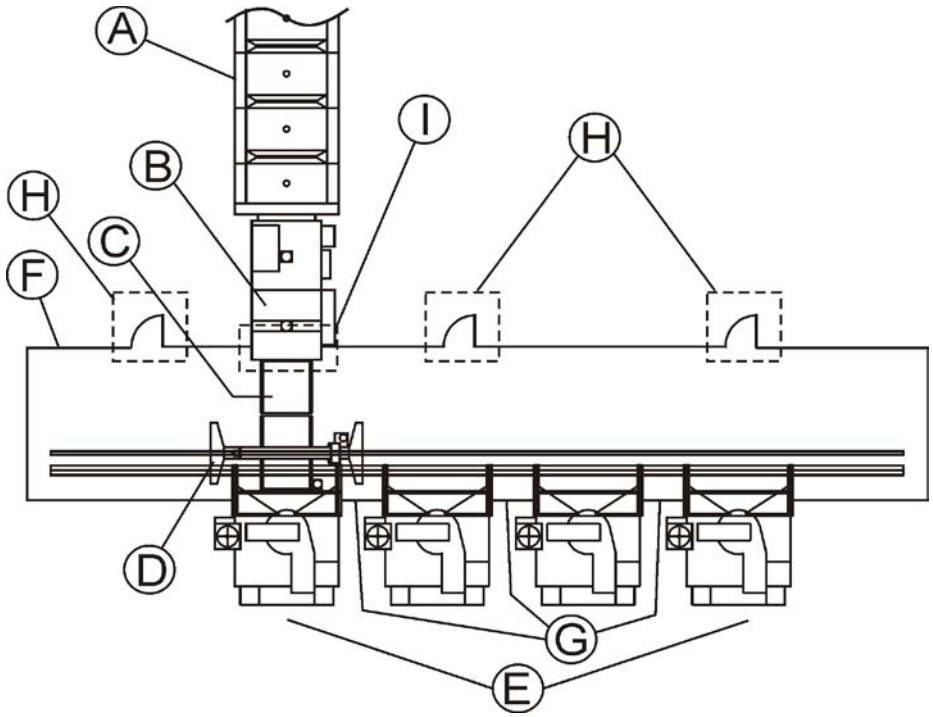
Although the objectives of proximity safeguarding are the same anywhere, design requirements vary with local codes (which occasionally change) and with the plant layout. For this reason, Milnor does not provide detailed designs or materials for proximity safeguarding. If the necessary expertise does not exist within the owner/user's organization, consult appropriate sources such as local engineers or architects specializing in industrial facility design.

5. Examples of Safety Fencing With Interlocked Gates

Fencing with interlocked gates like that depicted in Figure 1 and Figure 2, may be used to meet the proximity safeguarding requirement. Should the owner/user choose this method, the following information may be useful. However, **this information may not satisfy current or local code requirements. The owner/user must determine its suitability for his particular facility.**

Figure 1: Example Fence Layout for Automated Laundering System Where One Tunnel Serves a Bank of Dryers

Plan View of Laundering System

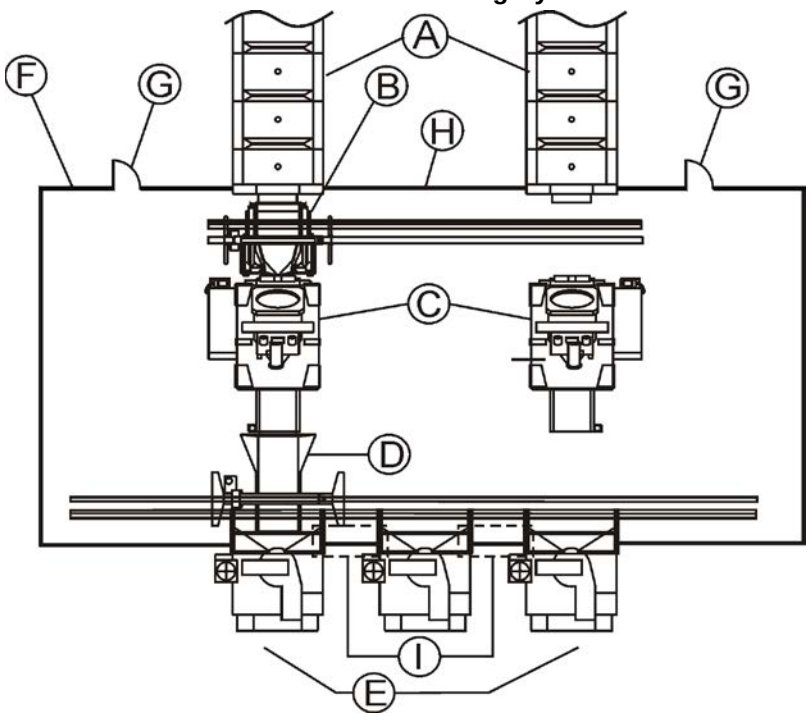


Legend

- **A.** Continuous Batch Washer (tunnel)
- **B.** Press extractor
- **C.** COINC inclined conveyor
- **D.** Traversing and elevating shuttle conveyor for pressed cakes
- **E.** Bank of dryers
- **F.** Fence enclosing path of shuttle
- **G.** Fence segments between dryers
- **H.** Electrically interlocked gates. Gates swing outward at least 90 degrees and swing area is marked on floor. Provide multiple gates for long fence runs.
- **I.** Fence restricts access to unload end of press, but does not obstruct access to press controls.

Figure 2: Example Fence Layout for Automated Laundering System Where Two Tunnels Serve a Bank of Dryers

Plan View of Laundering System



Legend

- **A.** Continuous Batch Washers (tunnels)
- **B.** Traversing and elevating shuttle conveyor for wet goods
- **C.** Centrifugal extractors
- **D.** Traversing and elevating shuttle conveyor for loose goods
- **E.** Bank of dryers
- **F.** Fence enclosing paths of both shuttles and both centrifugal extractors
- **G.** Gates interlocked with both shuttles and both centrifugal extractors.
- **H.** Fence segment between tunnels.
- **I.** Fence segments between dryers.

5.1. Fence Dimensions—The fence must discourage climbing over and prevent crawling under.

5.2. Fence Materials and Setback—The fence must be constructed of materials and located so as to prevent personnel from reaching through gaps in the fence and contacting the enclosed machinery.

5.3. Gates—Personnel gates must be held firmly closed but permit personnel to easily pass through when necessary. Gates must be equipped with a positive latching arrangement to prevent accidental opening. Adequate floor space must be provided to allow the gate to swing at least 90 degrees when fully open. Gates must open outward; that is, away from the fenced perimeter. The floor must be permanently marked to show the gate's swing area, to discourage obstructing its movement.

5.4. Control Circuitry—All gates must be electrically interlocked with any shuttle conveyors within the fenced area and with any presses or centrifugal extractors that the fence either encloses or intersects. Opening any gate must have the following effects:

1. Shuttle(s), press(es), and/or centrifugal extractor(s) stop moving immediately.
2. An audible alarm sounds.
3. Shuttle(s), press(es), and/or centrifugal extractor(s) cannot be restarted merely by closing the gate(s), but must be restarted at the machine control panel once the gate(s) are closed.

Milnor shuttles, presses and centrifugal extractors provide such functionality when properly interfaced with gate interlock switches.

5.5. System Emergency Stop Switches—The laundry must establish rules and procedures that prohibit personnel from remaining within the fenced area with machine(s) enabled, except in accordance with published maintenance procedures. System emergency stop switches (panic buttons) should be provided inside and outside the fenced perimeter. Emergency stop switches should be located so that personnel anywhere inside the fenced perimeter are only a short distance from a switch, and they should be clearly marked as to their locations and function. Connect switches in series with the gate interlocks so that pressing an emergency stop switch performs the same control function as opening a gate.

5.6. Isolating Individual Machine Controls—The interlock circuitry for each machine must be electrically isolated from that of the other machines. Hence, each gate interlock switch must provide as many pairs of dry contacts as there are machines to interface to. A pair of switch contacts must never be shared by two or more machines.

5.7. Recommended Signage—Safety placards should be posted along the fence and at each gate, alerting personnel to the hazards within. At minimum, the size of lettering and distance between placards should be such that anyone contemplating entering the fenced area will likely see and read the placard first. Wording should be provided in each native language spoken by laundry personnel.

— End of BISUUI01 —

BIPCUI02 (Published) Book specs- Dates: 20160113 / 20160113 / 20160113 Lang: ENG01 Applic: PCU

Connecting Ancillary Equipment and Services

1. Placement of Ancillary Components

Ancillary components not mounted to the tunnel must be installed close to the tunnel washer. The locations for your system should be shown on the system layout drawings. Recommended locations are also shown on the standard dimensional drawings for the tunnel and related equipment.

Set the Mentor console on a flat surface. Bolt the console to the floor if desired. The following ancillary components apply to conventional tunnels only, not PulseFlow tunnels: Install the reuse, flow-splitter, and flow lifter tanks on grout so that they are level, cannot move, and sealed against dirt and grime where the tank meets the floor. The top edge of the dam for the wire filter must be level so that water is evenly distributed over the surface of the wire filter. Additionally the flow-splitter and flow-lifter tanks must be low enough that the tank inlet is at or below the level of the weir box outlet. Set all pumps flat on the slab so that they are as low as possible.

2. Plumbing Connections

The sizes and locations of utility connections vary with machine configuration. Those for your system should be shown on the system layout drawings. The following general instructions apply to all systems.

2.1. Fresh Water—Incoming fresh water connects to the fresh water header which connects to each fresh water inlet. The following applies to 76032_ (G1) tunnels only: Although the ball valve actuators are fitted with needle valves to adjust the rate at which the valves close, there is some possibility that water hammer will be experienced if the incoming water pressure is above 50 PSI (345 Kpa) - especially if the water piping is small and/or not fastened securely. For severe conditions it may be necessary to install pressure regulators and/or shock absorbers on the water lines.

2.2. Reuse Water—On-site connections are necessary for some reuse water (example: water returned to the reuse or pulse flow tank from the extraction system). This piping is shown on the layout drawings for your system.

2.3. Steam—Connect main steam (at the steam strainer) to the tunnel washer steam header. Install a manual steam shutoff valve so the steam valves can be repaired. Discharge condensate into the tunnel drain trough. Do not return condensate to the boiler.

2.4. Compressed Air—Estimated compressed air consumption is approximately 5 SCFM per minute at a minimum of 85 PSI.

2.5. Drains for Discharged Water—Consult local codes for equipment that can be necessary (example: traps) when you connect to a sanitary sewer. In addition to the module outlets to the sewer, the machine also has drain-off connections for water that drips between modules or units.

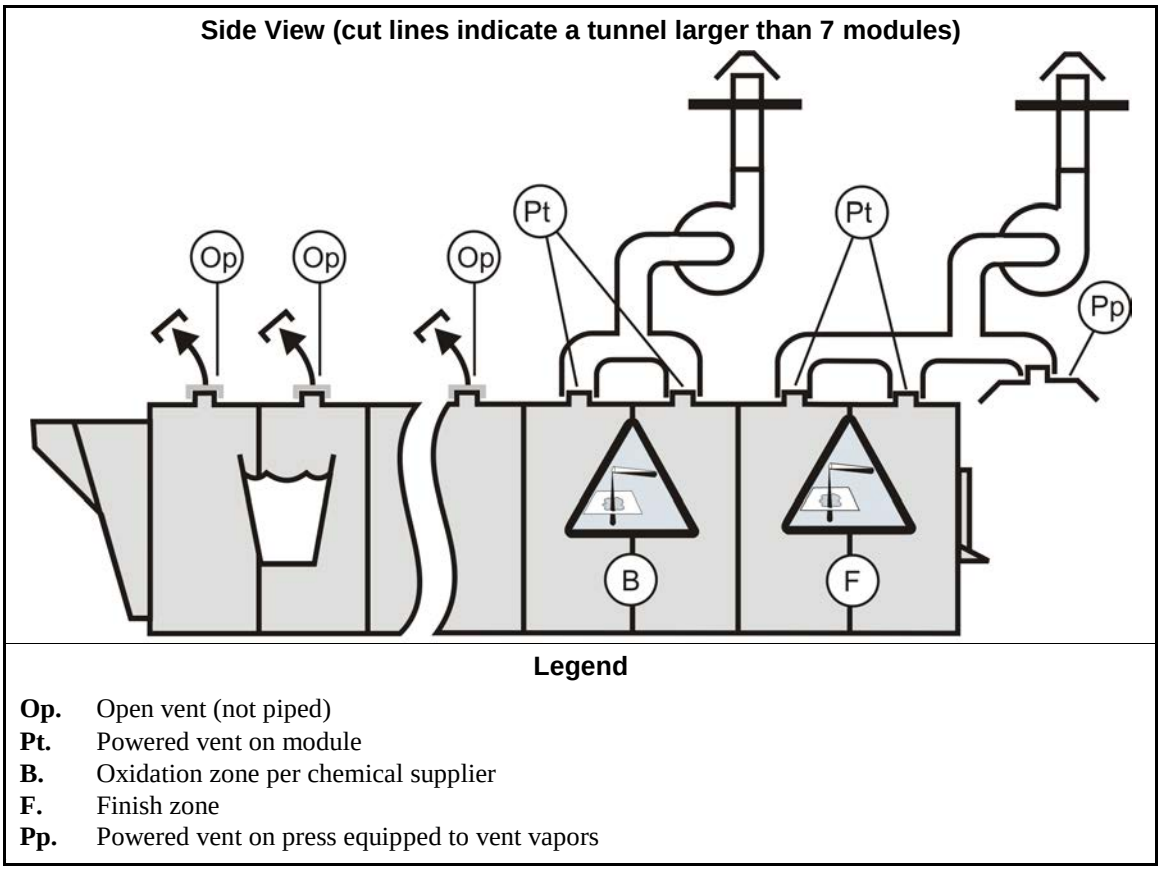
2.6. Vents for Discharged Vapors—Vapors generated in the oxidation zone and the finish zone of the tunnel can mix together, produce noxious gasses, and corrode equipment. Without adequate ventilation, these vapors will exit the tunnel discharge ring or concentrate in the discharge end of the tunnel and adjacent press enclosure. The severity varies with chemical composition and usage, but corrosion can be rapid and severe.

Each tunnel module is provided with a vent at the top of the shell. These vents are capped at the factory for shipping. **Uncap all vents at installation.** The best practice is to provide two separate, powered ventilation units that meet the following conditions:

- The two units are isolated from each other to avoid harmful chemical reactions.
- Ventilation fans have sufficient power to draw vapors away from the equipment. Milnor recommends 600 to 750 SCFM for the oxidation zone (300 to 375 per connection point, if two modules) and 600 to 750 SCFM for the finish zone plus the press enclosure (200 to 250 SCFM per connection point, if two modules plus the press). The SCFM values are based on an ambient air temperature of 68°F (20°C) and a minimal relative humidity.
- Fan motors are equipped with an alarm (example: indicator light) to alert personnel if a motor fails.

Figure 1 shows the recommended configuration for a tunnel with more than seven modules. Smaller tunnels are similar, but consult the Milnor factory.

Figure 1: Recommended Vent System for the CBW® Tunnel Washer and an Adjacent Press



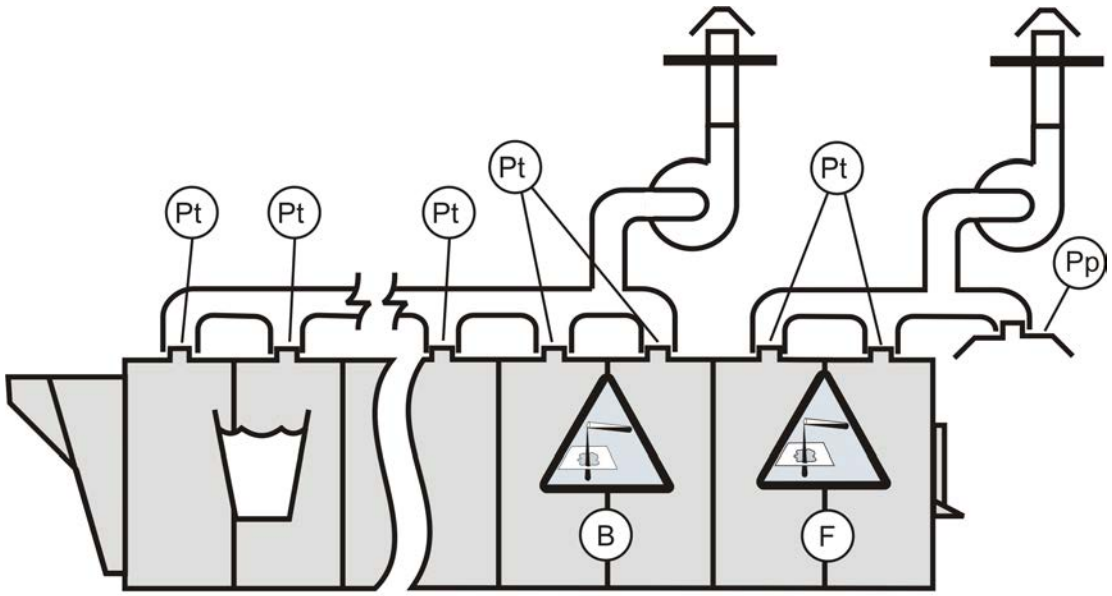
Legend

Op.	Open vent (not piped)
Pt.	Powered vent on module
B.	Oxidation zone per chemical supplier
F.	Finish zone
Pp.	Powered vent on press equipped to vent vapors

It is not recommended to connect modules ahead of the oxidation zone to a powered vent system. However, if conditions warrent this, Milnor recommends the configuration shown in Figure 2. If this configuration is needed, add 200 to 250 SCFM of powered ventilation per additional module vented.

Figure 2: Alternate Vent System for the CBW® Tunnel Washer and an Adjacent Press

Side View (cut lines indicate a tunnel larger than 7 modules)



Legend

Pt. Powered vent on module
B. Oxidation zone per chemical supplier
F. Finish zone
Pp. Powered vent on press equipped to vent vapors

2.7. Connections For Chemical Injection—Make sure that the piping or tubing used to deliver the chemicals to chemical injection points has correct characteristics (working pressure, burst pressure, temperature resistance, chemical resistance, etc.) for the purpose intended. Remember that momentary pressures two or three times the normal chemical pressure can occur as a chemical valve closes.

Be sure the chemical lines are routed such that they are not subject to damage from external heat sources, or abrasion, or any other source of mechanical damage. Inspect all chemical delivery piping daily for leaks, loose connections, frayed or abraded areas, soft or weak places.

CAUTION 1: Machine Damage Hazards—Pumped chemical systems, if not properly installed, can cause corrosion damage.

- See the installation manual for precautions and additional information before making any chemical connections.

3. Power Connections

A junction box is available at either end of the tunnel washer to supply power to the entire tunnel washer, each of the pumps (up to 5 pumps), the motor for the Conlo (or Conwa) and the power for the Mentor.

A single terminal in the inverter enclosure supplies power to the entire tunnel washer, each of the pumps (up to 5 pumps), the motor for the Conlo (or Conwa) and the power for the Mentor.

The Mentor power cable connects to terminals within the standard output box on the first module. Connect one side of the ground wire (in the Mentor power cable) to the ground terminal inside

the standard output box. Connect the other side of the ground wire to the ground terminal inside the mentor enclosure.

4. Ground (earth) Connections

A very reliable, secure, and substantial ground (earth) connection is necessary for the proper functioning of any solid state controller. If practical, the ground connection should be via means of a metal rod driven securely at least 3 feet into the earth, and connected to the MENTOR by a copper wire no less than No. 10 AWG (.05 square Millimeter cross section area). The run of copper should not be longer than 10 feet (3 meters).

When it is impossible to provide such a ground connection, the next best is a firm connection to a metal water pipe which is known to be continuous and known to go into the earth a substantial distance.

— End of BIPCUI02 —

BIUUUI02PL (Published) Book specs- Dates: 20170824 / 20170824 / 20170824 Lang: ENG01 Applic: PCL

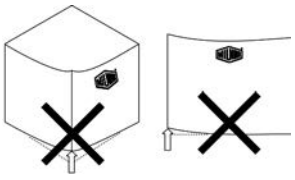
Tag Guidelines for the Models Listed Below

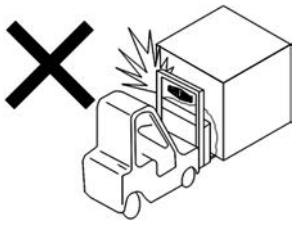
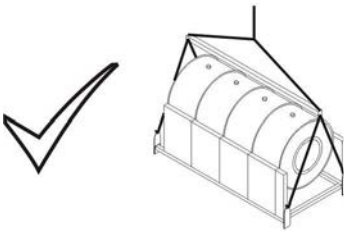
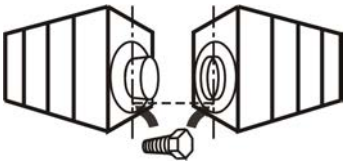
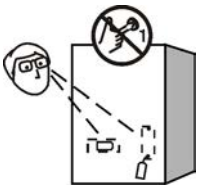
76028L3F 76028L4F 76028L4S 76028L5F 76028L5S 76039L3F 76039L3S 76039L4F 76039L4S

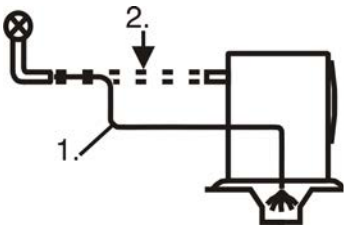
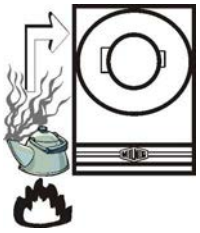
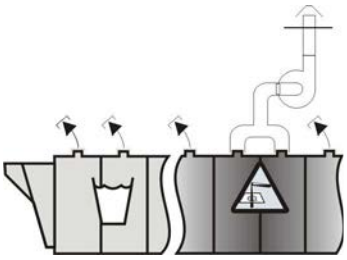
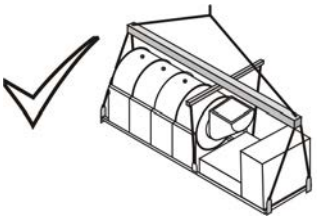
Notice 1: This information may apply to models in addition to those listed above. It applies to paper tags. It does not apply to the vinyl or metal safety placards, which must remain permanently affixed to the machine and replaced if no longer readable.

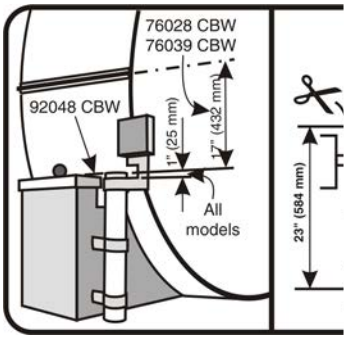
Paper tags on the machine provide installation guidelines and precautions. The tags can be tie-on or adhesive. You can remove tie-on tags and white, adhesive tags after installation. Yellow adhesive tags must remain on the machine.

The following entries explain the installation tags. Each entry includes: 1) the tag illustration, 2) the tag part number displayed st the bottom of the tag, and 3) the meaning of the tag.

Display or Action	Explanation
	Read the manuals before proceeding. This symbol appears on most tags. The machine ships with safety, operator, and routine maintenance guides for customer use. Milnor dealer manuals for installing, servicing, and commissioning this machine are also available from the Milnor Parts department.
	B2TAG88005: This carefully built product was tested and inspected to meet Milnor® performance and quality standards by (identification mark of tester).
	B2TAG94078: Do not forklift here; do not jack here; do not step here—whichever applies.
	B2TAG94081: Motor must rotate in this direction. On single motor washer-extractors and centrifugal extractors, the drive motor must turn in this direction during draining and extraction. This tag is usually wrapped around a motor housing. If the motor turns in the opposite direction when the machine is first tested, the electrical hookup is incorrect and must be reversed as explained in the schematic manual.
	B2TAG94084: Do not lift from one corner of the machine, as this can cause the frame to rack, damaging it.
	B2TAG94102 shown—others similar: Match up the components with this number. These tags are used to pair up electrical or hose connections between major components of a machine shipped dis-assembled.

Display or Action	Explanation
	B2TAG94118: Do not strike shipping container during fork-lifting. Fragile components inside.
	B2TAG94144: Lift tunnel units as shown, using the lifting eyes and spreader bar.
	B2TAG94146: Fill with oil to this level.
	B2TAG98006: Aligh top dead center bolts when mating CBW tunnel washer units.
	B2TAG99006: Do not loosen allen screws. Screws hold springs under tension which can fly out with great force.
	B2T2001028: Look for tags inside the machine. These tags may identify shipping restraints to be removed or components to be installed. Do not start the machine until these actions are completed.
	B2T2002013: Do not start the machine until shipping restraints are removed. This tag will appear on the outside of the machine to alert you to the presence of internal shipping restraints. A tag will also appear on the restraint to help identify it. Most, but not all shipping restraints display the color red. Some shipping restraints are also safety stands. Do not discard these.

Display or Action	Explanation
	B2T2002032: Flush incoming water lines before making connections.
	B2T2003014: Make sure that you use the specified hydraulic oil.
	B2T2004027: Steam connection (optional)
	B2T2008001: Read the installation instructions. Remove temporary vent covers. Install a powered vent unit on the oxidation zone modules and a separate powered vent unit on the finish zone module and adjacent press, if there is one.
	B2T2010018: Lift from all lifting points and use spreader bars as shown. (Used on PulseFlow machines only.)
	B2T2010023: Set the press frame in accordance with this instruction and the installation manual.

Display or Action	Explanation
	B2T2011014: Set clips on level float rods as shown.

— End of BIUUUI02 —

Prevent Damage from Chemical Supplies and Chemical Systems

BNUUUR02.C01 0000160549 B.3 E.3 1/2/20 2:14 PM Released

All Milnor® washer-extractors and CBW® tunnel washers use stainless steel with the ANSI 304 specification. This material gives good performance when chemical supplies are correctly applied. If chemical supplies are incorrectly applied, this material can be damaged. The damage can be very bad and it can occur quickly.

Chemical supply companies usually:

- supply chemical pump systems that put the supplies in the machine,
- connect the chemical pump system to the machine,
- write wash formulas that control the chemical concentrations.

The company that does these procedures must make sure that these procedures do not cause damage. **Pellerin Milnor Corporation accepts no responsibility for chemical damage to the machines it makes or to the goods in a machine.**

1. How Chemical Supplies Can Cause Damage

BNUUUR02.R01 0000160548 B.4 E.3 1/2/20 2:14 PM Released

Dangerous Chemical Supplies and Wash Formulas — Some examples that can cause damage are:

- a very high concentration of chlorine bleach,
- a mixture of acid sour and hypo chlorite,
- chemical supplies (examples: chlorine bleach, hydrofluosilicic acid) that stay on the stainless steel because they are not quickly flushed with water.

The book “Textile Laundering Technology” by Charles L. Riggs gives data about correct chemical supplies and formulas.

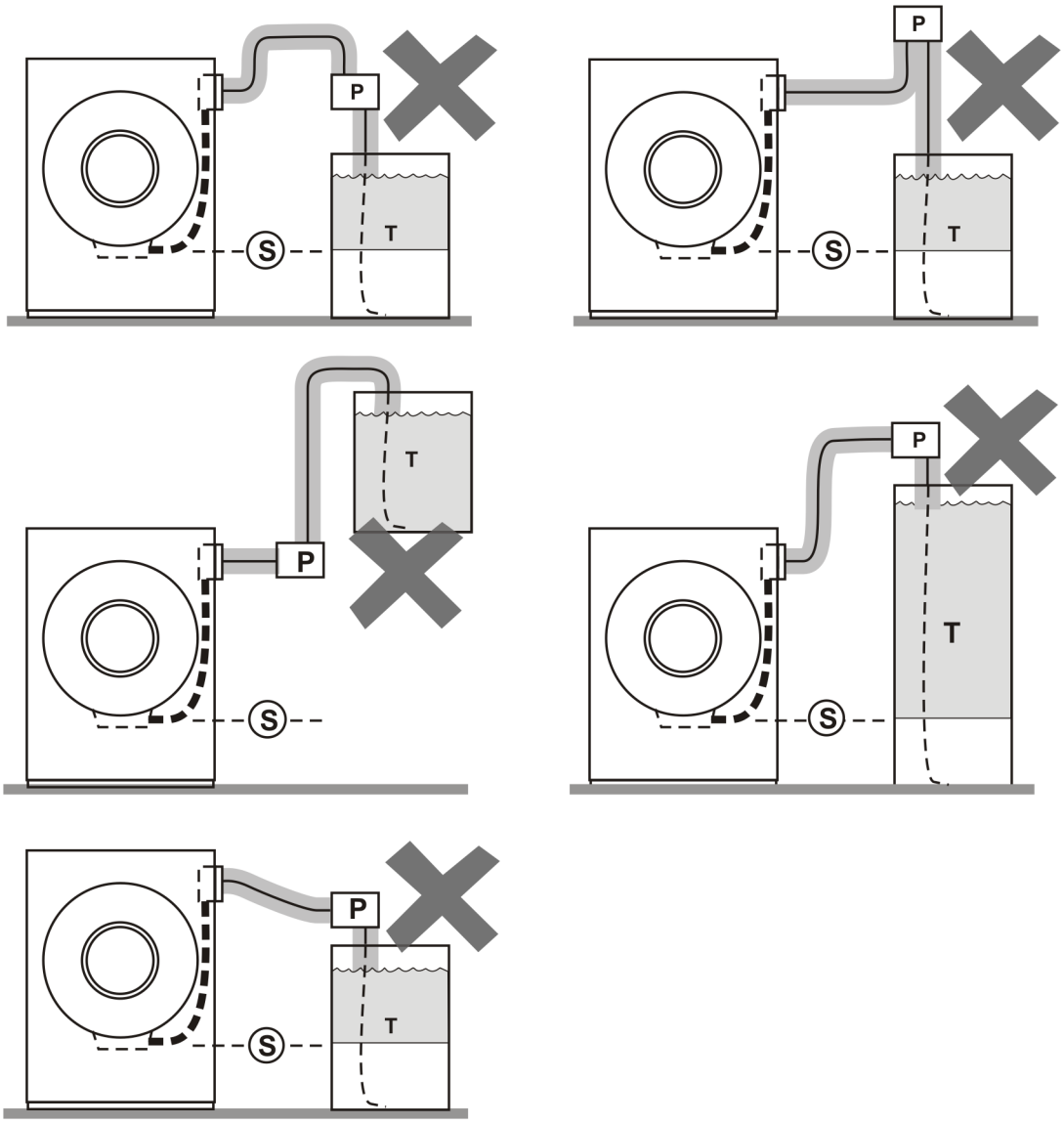
Incorrect Configuration or Connection of Equipment — Many chemical systems:

- do not prevent a vacuum in the chemical tube (for example, with a vacuum breaker) when the pump is off,
- do not prevent flow (for example, with a valve) where the chemical tube goes in the machine.

Damage will occur if a chemical supply can go in the machine when the chemical system is off. Some configurations of components can let the chemical supplies go in the machine by a siphon (Figure 1: Incorrect Configurations That Let the Chemical Supply Go In the Machine by a Siphon, page 2). Some can let chemical supplies go in the machine by gravity (Figure 2: Incorrect Configurations That Let the Chemical Supply Go In the Machine by Gravity, page 3).

Figure 1. Incorrect Configurations That Let the Chemical Supply Go In the Machine by a Siphon

Schematic Views



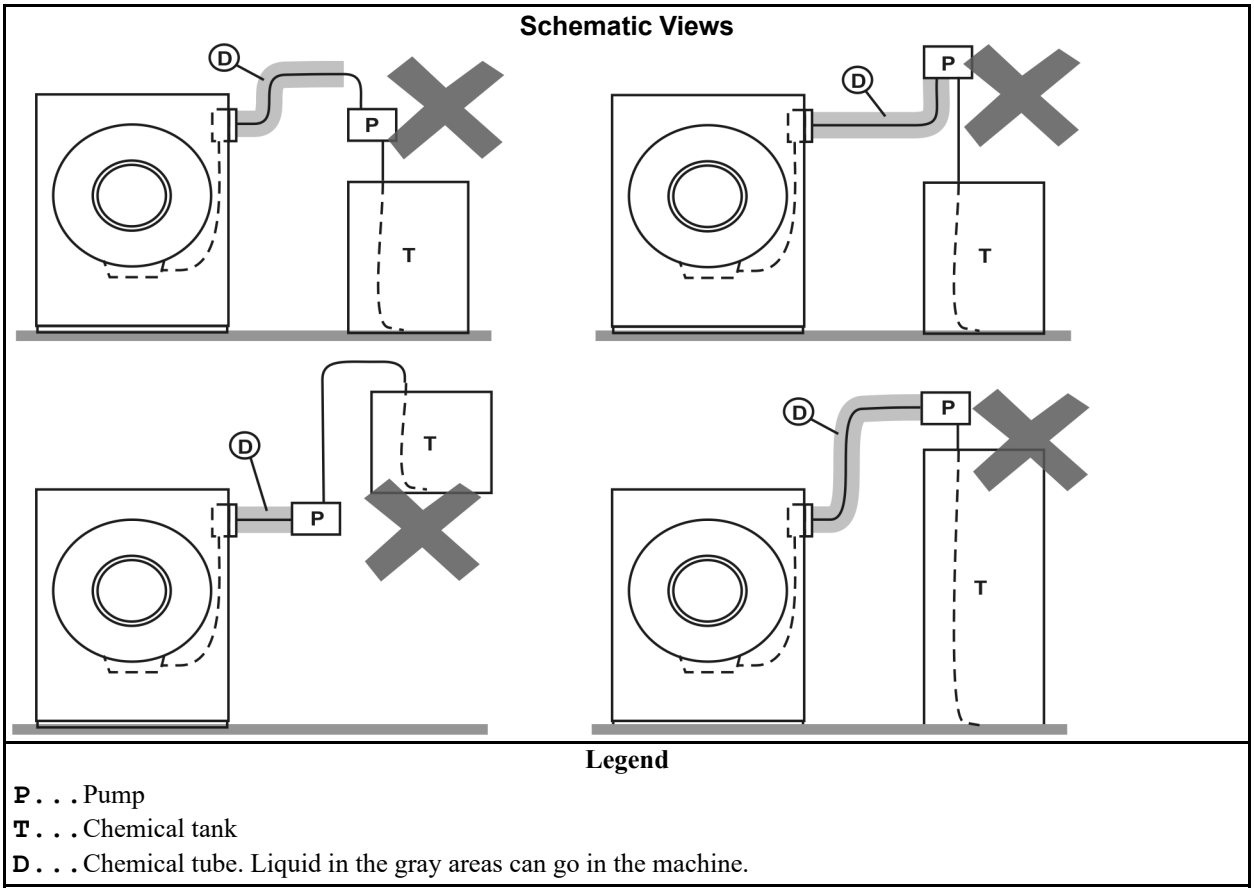
Legend

P . . . Pump

T . . . Chemical tank

S . . . The siphon occurs above here. Liquid in the gray parts of the chemical tube and tank can go in the machine.

Figure 2. Incorrect Configurations That Let the Chemical Supply Go In the Machine by Gravity



Legend

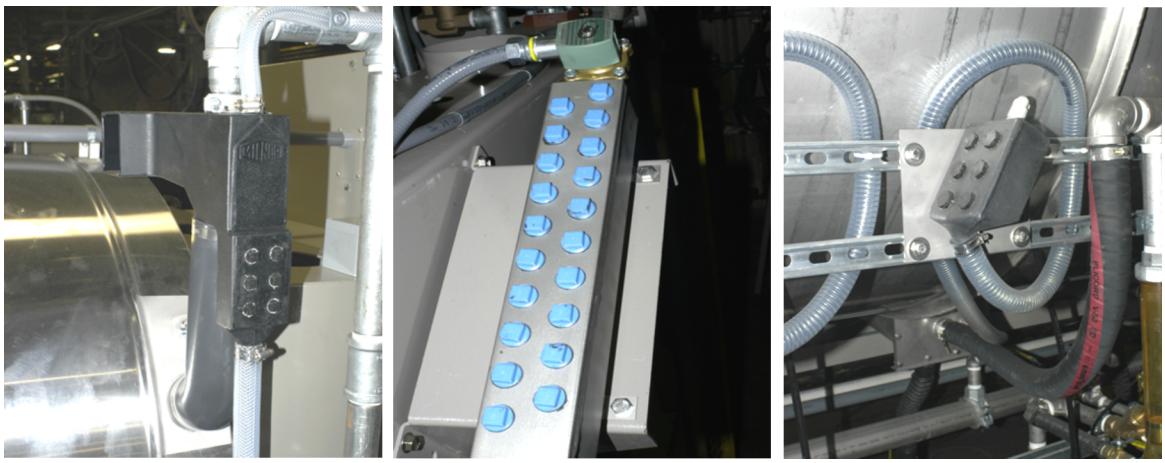
P . . . Pump
T . . . Chemical tank
D . . . Chemical tube. Liquid in the gray areas can go in the machine.

2. Equipment and Procedures That Can Prevent Damage

BNUUUR02.R02 0000160545 B.3 E.3 1/2/20 2:14 PM Released

Use the chemical manifold supplied. — There is a manifold on the machine to attach chemical tubes from a chemical pump system. The manifold has a source of water to flush the chemical supplies with water.

Figure 3. Examples of Manifolds for Chemical Tubes. Your equipment can look different.



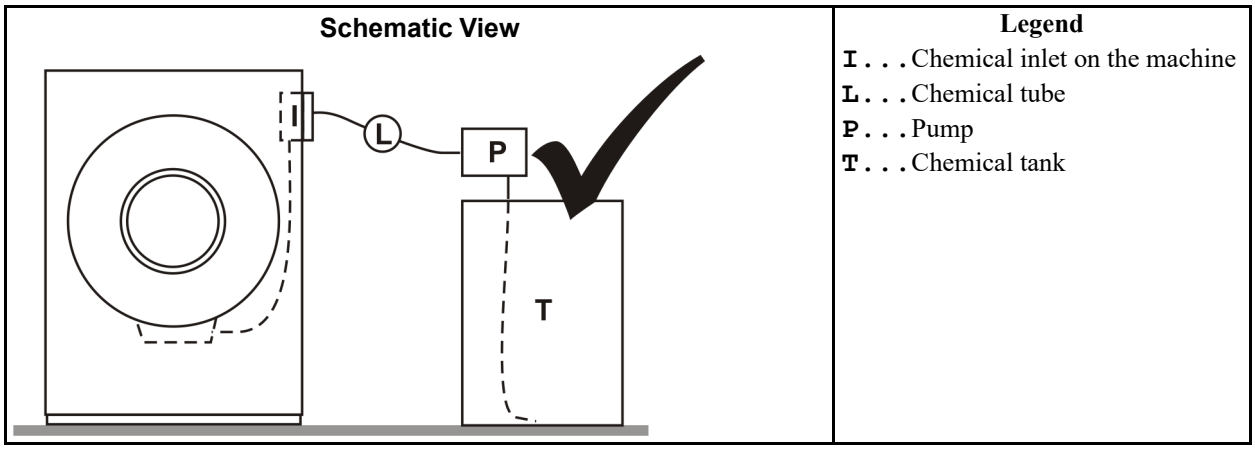
Close the line. — If the pump does not always close the line when it is off, use a shutoff valve to do this.

Do not let a vacuum occur. — Supply a vacuum breaker in the chemical line that is higher than the full level of the tank.

Flush the chemical tube with water. — If the liquid that stays in the tube between the pump and the machine can flow in the machine, flush the tube with water after the pump stops.

Put the chemical tube fully below the inlet. — It is also necessary that there is no pressure in the chemical tube or tank when the system is off.

Figure 4. A Configuration that Prevents Flow in the Machine When the Pump is Off (if the chemical tube and tank have no pressure)



Prevent leaks. — When you do maintenance on the chemical pump system:

- Use the correct components.
- Make sure that all connections are the correct fit.
- Make sure that all connections are tight.

End of document: BNUUUR02

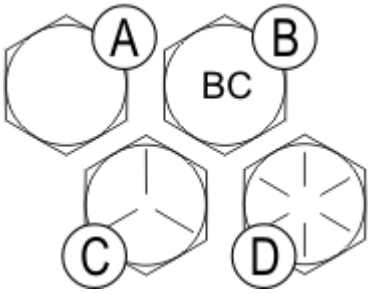
BIUUUM04 (Published) Book specs- Dates: 20180109 / 20180109 / 20180109 Lang: ENG01 Applic: UUU

Torque Requirements for Fasteners

This document uses Simplified Technical English. Learn more at http://www.asd-ste100.org.

The document about the assembly gives the torque requirements for other fasteners. **If fastener torque specifications or threadlocker requirements in an assembly document are different from this document, use the assembly document.**

Figure 1: The Bolts in Milnor® Equipment

The Marks on Bolt Heads	Legend
	**A.** SAE Grades 1 and 2, ASTM A307, and stainless steel **B.** Grade BC, ASTM A354 **C.** SAE Grade 5, ASTM A449 **D.** SAE Grade 8 and ASTM A354 BD

1. Torque Values

These tables give the standard dimension, grade, threadlocker, and torque requirements for fasteners frequently used on Milnor® equipment.

Note 1: Data from the Pellerin Milnor® Corporation “Bolt Torque Specification” (bolt_torque_milnor.xls/2002096).

1.1. Fasteners Made of Carbon Steel

1.1.1. Without a Threadlocker

Table 1: Torque Values for Standard Fasteners with Maximum 5/16-inch Diameters and No Lubricant

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-Inches	N-m	Pound-Inches	N-m	Pound-Inches	N-m	Pound-Inches	N-m
1/4 x 20	66	7	101	11	143	16	126	14
1/4 x 28	76	9	116	13	163	18	--	--
5/16 x 18	136	15	209	24	295	33	258	29
5/16 x 24	150	17	232	26	325	37	--	--

Table 2: Torque Values for Standard Fasteners Larger Than 5/16-inch Diameters and No Lubricant

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
3/8 x 16	20	27	31	42	44	59	38	52
3/8 x 24	23	31	35	47	50	68	--	--
7/16 x 14	32	43	49	66	70	95	61	83
7/16 x 20	36	49	55	75	78	105	--	--
1/2 x 13	49	66	75	102	107	145	93	126
1/2 x 20	55	75	85	115	120	163	--	--
9/16 x 12	70	95	109	148	154	209	134	182
9/16 x 18	78	106	121	164	171	232	--	--
5/8 x 11	97	131	150	203	212	287	186	252
5/8 x 18	110	149	170	231	240	325	--	--
3/4 x 10	172	233	266	361	376	510	329	446
3/14 x 16	192	261	297	403	420	569	--	--
7/8 x 9	167	226	429	582	606	821	531	719
7/8 x 14	184	249	473	641	668	906	--	--
1 x 8	250	339	644	873	909	1232	796	1079
1 x 12	274	371	704	954	994	1348	--	--
1 x 14	281	381	723	980	1020	1383	--	--
1 1/8 x 7	354	480	794	1077	1287	1745	1126	1527
1 1/8 x 12	397	538	891	1208	1444	1958	--	--
1 1/4 x 7	500	678	1120	1519	1817	2464	1590	2155
1 1/4 x 12	553	750	1241	1682	2012	2728	--	--
1 3/8 x 6	655	888	1469	1992	2382	3230	2085	2827
1 3/8 x 12	746	1011	1672	2267	2712	3677	--	--
1 1/2 x 6	869	1178	1949	2642	3161	4286	2767	3751
1 1/2 x 12	979	1327	2194	2974	3557	4822	--	--

Table 3: Torque Values for Plated Fasteners with Maximum 5/16-inch Diameters and No Lubricant

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-Inches	N-m	Pound-Inches	N-m	Pound-Inches	N-m	Pound-Inches	N-m
1/4 x 20	49	6	76	9	107	12	95	11
1/4 x 28	56	6	88	10	122	14	--	--
5/16 x 18	102	12	156	18	222	25	193	22
5/16 x 24	113	13	174	20	245	28	--	--

Table 4: Torque Values for Plated Fasteners Larger Than 5/16-inch Diameters and No Lubricant

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
3/8 x 16	15	20	23	31	33	44	29	38
3/8 x 24	17	23	26	35	37	49	--	--
7/16 x 14	24	32	37	50	52	71	46	61
7/16 x 20	27	36	41	55	58	78	--	--
1/2 x 13	37	49	56	76	80	106	70	93
1/2 x 20	41	55	64	85	90	120	--	--
9/16 x 12	53	70	81	110	115	153	101	134
9/16 x 18	59	79	91	122	128	174	--	--
5/8 x 11	73	97	113	150	159	212	139	186
5/8 x 18	83	110	127	172	180	240	--	--
3/4 x 10	129	173	200	266	282	376	246	329
3/14 x 16	144	192	223	297	315	420	--	--
7/8 x 9	125	166	322	430	455	606	398	531
7/8 x 14	138	184	355	474	501	668	--	--
1 x 8	188	250	483	644	682	909	597	796
1 x 12	205	274	528	716	746	995	--	--
1 x 14	210	280	542	735	765	1037	--	--
1 1/8 x 7	266	354	595	807	966	1288	845	1126
1 1/8 x 12	298	404	668	890	1083	1444	--	--
1 1/4 x 7	375	500	840	1120	1363	1817	1192	1590
1 1/4 x 12	415	553	930	1261	1509	2013	--	--
1 3/8 x 6	491	655	1102	1470	1787	2382	1564	2085
1 3/8 x 12	559	758	1254	1672	2034	2712	--	--
1 1/2 x 6	652	870	1462	1982	2371	3161	2075	2767
1 1/2 x 12	733	994	1645	2194	2668	3557	--	--

1.1.2. With a Threadlocker

Table 5: Threadlocker by the Diameter of the Bolt (see Note 2)

	Dimension			
LocTite Product	1/4-inch	1/4- to 5/8-inch	5/8- to 7/8-inch	1-inch +
LocTite 222	OK			
LocTite 242		OK		
LocTite 262			OK	
LocTite 272			High temperature	
LocTite 277				OK

Note 2: The acceptable bolt size ranges for various LocTite® threadlocking products is the LocTite manufacturer's **general** recommendation. Specific applications sometime require that a LocTite product is applied to a bolt size outside the ranges shown here. For example, Milnor specifies LocTite 242 for use on certain 1" bolt applications and has confirmed this usage with the LocTite manufacturer. You may see variances such as this in the documentation for specific machine assemblies.

Table 6: Torque Values if You Apply LocTite 222

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-inches	N-m	Pound-inches	N-m	Pound-inches	N-m	Pound-inches	N-m
1/4 x 20	60	7	96	11	132	15	108	12
1/4 x 28	72	8	108	12	144	16	--	--

Table 7: Torque Values if You Apply LocTite 242

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
5/16 x 18	11	15	17	23	25	34	22	30
5/16 x 24	13	18	19	26	27	37	27	37
3/8 x 16	20	27	31	42	44	60	38	52
3/8 x 24	23	31	35	47	50	68	--	--
7/16 x 14	32	43	49	66	70	95	61	83
7/16 x 20	36	49	55	75	78	106	--	--
1/2 x 13	49	66	75	102	107	145	93	126
1/2 x 20	55	75	85	115	120	163	--	--
9/16 x 12	70	95	109	148	154	209	134	182
9/16 x 18	78	106	121	164	171	232	--	--
5/8 x 11	97	132	150	203	212	287	186	252
5/8 x 18	110	149	170	230	240	325	--	--

Table 8: Torque Values if You Apply LocTite 262

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
3/4 x 10	155	210	240	325	338	458	296	401
3/4 x 16	173	235	267	362	378	512	--	--
7/8 x 9	150	203	386	523	546	740	477	647
7/8 x 14	165	224	426	578	601	815	--	--

Table 9: Torque Values if You Apply LocTite 272 (High-Temperature)

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
1 x 8	350	475	901	1222	1272	1725	1114	1510
1 x 12	383	519	986	1337	1392	1887	--	--
1 x 14	393	533	1012	1372	1428	1936	--	--
1-1/8 x 7	496	672	1111	1506	1802	2443	1577	2138
1-1/8 x 12	556	754	1247	1691	2022	2741	--	--
1-1/4 x 7	700	949	1568	2126	2544	3449	2226	3018
1-1/4 x 12	774	1049	1737	2355	2816	3818	--	--
1-3/8 x 6	917	1243	2056	2788	3335	4522	2919	3958
1-3/8 x 12	1044	1415	2341	3174	3797	5148	--	--
1-1/2 x 6	1217	1650	2729	3700	4426	6001	3873	5251
1-1/2 x 12	1369	1856	3071	4164	4980	6752	--	--

Table 10: Torque Values if You Apply LocTite 277

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
1 x 8	325	441	837	1135	1181	1601	1034	1402
1 x 12	356	483	916	1242	1293	1753	--	--
1 x 14	365	495	939	1273	1326	1798	--	--
1-1/8 x 7	461	625	1032	1399	1674	2270	1464	1985
1-1/8 x 12	516	700	1158	1570	1877	2545	--	--
1-1/4 x 7	650	881	1456	1974	2362	3202	2067	2802
1-1/4 x 12	719	975	1613	2187	2615	3545	--	--
1-3/8 x 6	851	1154	1909	2588	3097	4199	2710	3674
1-3/8 x 12	970	1315	2174	2948	3526	4781	--	--
1-1/2 x 6	1130	1532	2534	3436	4110	5572	3597	4877
1-1/2 x 12	1271	1723	2852	3867	4624	6269	--	--

1.2. Stainless Steel Fasteners

Table 11: Torque Values for Stainless Steel Fasteners 5/16-inch and Smaller

	316 Stainless		18-8 Stainless		18-8 Stainless with Loctite 767	
Dimension	Pound-Inches	N-m	Pound-Inches	N-m	Pound-Inches	N-m
1/4 x 20	79	9	76	9	45	5
1/4 x 28	100	11	94	11	56	6
5/16 x 18	138	16	132	15	79	9
5/16 x 24	148	17	142	16	85	10

Table 12: Torque Values for Stainless Steel Fasteners Larger Than 5/16-inch

	316 Stainless		18-8 Stainless		18-8 Stainless with Loctite 767	
Dimension	**Pound-feet**	**N-m**	**Pound-feet**	**N-m**	**Pound-feet**	**N-m**
3/8 x 16	21	28	20	27	12	16
3/8 x 24	23	31	22	29	13	18
7/16 x 14	33	44	31	42	19	25
7/16 x 20	35	47	33	45	20	27
1/2 x 13	45	61	43	58	26	35
1/2 x 20	47	64	45	61	27	37
9/16 x 12	59	81	57	77	34	46
9/16 x 18	66	89	63	85	38	51
5/8 x 11	97	131	93	125	56	75
5/8 x 18	108	150	104	141	62	84
3/4 x 10	132	179	128	173	77	104
3/4 x 16	130	176	124	168	75	101
7/8 x 9	203	275	194	263	116	158
7/8 x 14	202	273	193	262	116	157
1 x 8	300	406	287	389	172	233
1 x 14	271	367	259	351	156	211
1-1/8 x 7	432	586	413	560	248	336
1-1/8 x 12	408	553	390	529	234	317
1-1/4 x 7	546	740	523	709	314	425
1-1/4 x 12	504	683	480	651	288	390
1-1/2 x 6	930	1261	888	1204	533	722
1-1/2 x 12	732	992	703	953	422	572

2. Preparation

WARNING 2: Fire Hazard—Some solvents and primers are flammable.

- Use threadlocker and primers with sufficient airflow.
- Do not use flammable material near ignition sources.

1. Clean all threads with a wire brush or a different tool.
2. Remove the grease from the fasteners and the mating threads with solvent. Make the parts dry.

   Note 3: LocTite 7649 Primer™ or standard solvents will remove grease from parts.

3. Apply a spray of LocTite 7649 Primer™ or equal on the fasteners and the mating threads. Let the primer dry for one minute minimum.

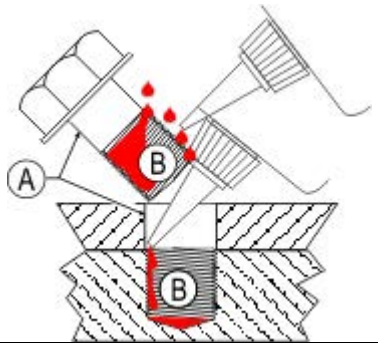
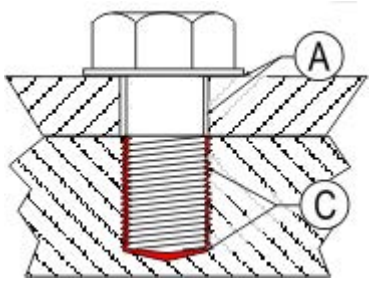
3. How to Apply a Threadlocker

CAUTION 3: Malfunction Hazard—Heat, vibration, or mechanical shocks can let the fasteners loosen if you do not apply the threadlocker correctly. Loose fasteners can cause malfunctions of the equipment.

- Read the threadlocker manufacturer's instructions and warnings. Obey these instructions.

Apply the threadlocker only to the areas where the fastener threads and the mating threads engage.

Figure 2: Blind Hole

Application	Coverage
	

Legend

A. No threadlocker here
B. Apply here
C. Fill all space with threadlocker

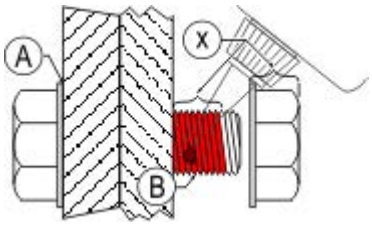
3.1. Blind Holes

1. Apply the threadlocker down the threads to the bottom of the hole.
2. Apply the threadlocker to the bolt.
3. Tighten the bolt to the value shown in the correct table (Table 5 to Table 11).

3.2. Through Holes

1. Put the bolt through the assembly.
2. Apply the threadlocker only to the bolt thread area that will engage the nut.
3. Tighten the bolt to the value shown in the correct table (Table 5 to Table 11).

Figure 3: Through Hole

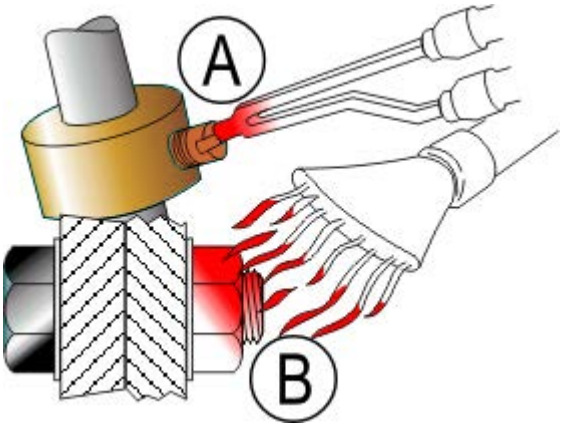
Application	Legend
	**A.** No threadlocker here **B.** Apply the threadlocker to this area **x.** Nut depth

3.3. Disassembly—For high-strength threadlocker, apply heat for five minutes. Disassemble with hand tools while the parts are hot.

For low-strength and moderate-strength threadlocker, disassemble with hand tools.

Figure 4: Disassembly

Apply Heat to a Small Area



Legend

A. How to apply heat to a small fastener
B. How to apply heat to a large fastener

— End of BIUUUM04 —

Installation

2

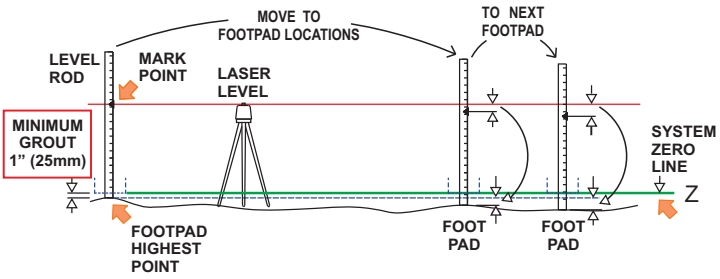
ATTENTION INSTALLERS!

PRESS MUST BE HIGH ENOUGH

If you set the press at a low area of the floor, you may not have sufficient clearance for the tunnel. It will be necessary to reinstall the press higher

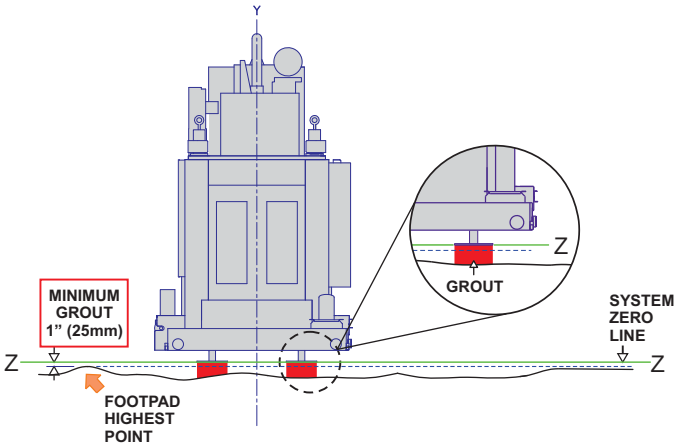
- Establish the System Zero Line or Z.
- Refer to the dimensional drawings of the various machines for required heights.

FLOOR IS UNEVEN



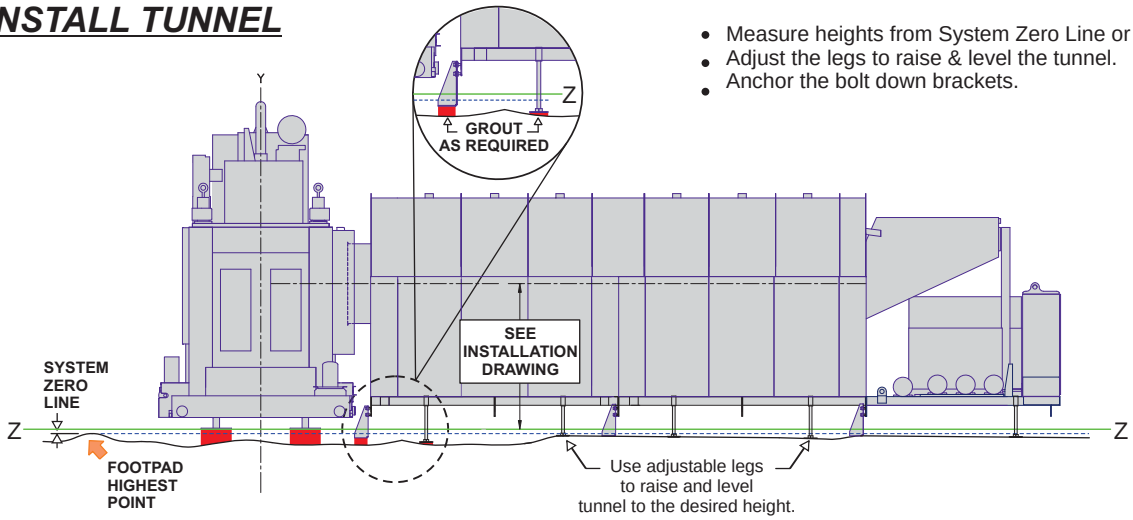
- Establish System Zero Line or Z.
- Find highest point in factory floor where footpads will be located.
- System Zero Line or Z is 1" above highest point.

INSTALL PRESS FIRST



- Shim & level to System Zero Line or Z.
- Grout & anchor all footpads.

INSTALL TUNNEL



- Measure heights from System Zero Line or Z.
- Adjust the legs to raise & level the tunnel.
- Anchor the bolt down brackets.

B2T2010023/2019193A

BIPCLI02 (Published) Book specs- Dates: 20140226 / 20140226 / 20140226 Lang: ENG01 Applic: PCL

Tips for Connecting Tunnel Units on Site

In most installations, the tunnel is composed of two or more units that you must connect together on site. Use this instruction to help prevent damage.

1. Protect the inter-unit seal.

When you connect units, the correct procedure is to establish the final position of the press or extractor, then move the tunnel units into position, from discharge end to load end. Before you move units together, apply petroleum jelly to the outer surface of the discharge chute on the load-end unit and to the surface of the inter-unit seal on the discharge-end unit. Without lubrication, the seal can tear or get pulled so that it is pointing in the wrong direction.

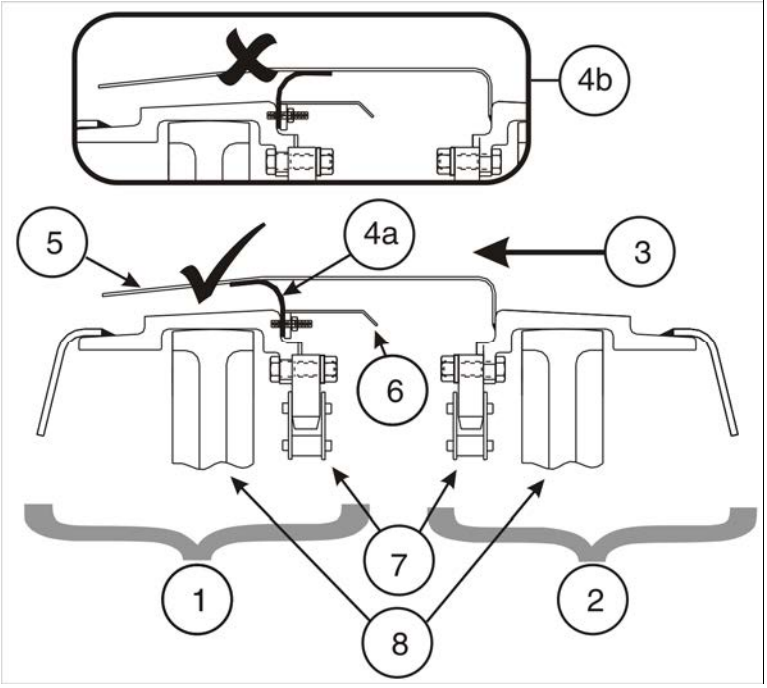
2. Align the units.

Use leveling instruments to make sure that the two units remain level horizontally when you bring the them together. When you start to insert the discharge chute, keep them aligned vertically and horizontally plus or minus 1/4" (6 mm), otherwise you can damage the inter-unit seal. When the adjacent connection flanges on the two units are close together, use the corresponding bolt holes as a guide to align the units precisely. When the flanges are touching and you can put the bolts through both holes with the units level, the units are aligned.

3. Check for correct seal orientation.

Figure 1: Inter-unit Connection

Cross-section at Bottom of Throat Between Units



Legend

1. Discharge-end unit
2. Load-end unit
3. Flow of goods
4a. Inter-unit seal in correct orientation
4b. Shows seal in wrong orientation
5. Discharge chute on load-end unit
6. Drip lip
7. Drive chains and sprockets
8. Support wheels

See Figure 1. If you had to move the load-end unit out and back in during connection, this can pull the seal to the wrong orientation. Reach into the gap where the discharge chute enters the throat of the other unit. If you feel the seal pointing outward, use a wooden stick with a smooth end to push the seal back to the correct orientation.

4. If water leaks from the inter-unit connection...

It is normal for a small quantity of water to drip from between units. If a large quantity of water comes out from between units, this indicates that the inter-unit seal is damaged. If this occurs after the machine has been in operation for a length of time, the seal may have sustained chemical damage.

It is possible to replace the inter-module seal. However, an easier alternative is to install a 6-rib seal available from the Milnor® Parts department as kit KTWDRIPR04. This seal can usually be installed in about 45 minutes. The 6-rib seal is less effective than the factory seal, but usually provides an acceptable reduction in leaking.

— End of BIPCLI02 —

Parts and Assemblies

3

3

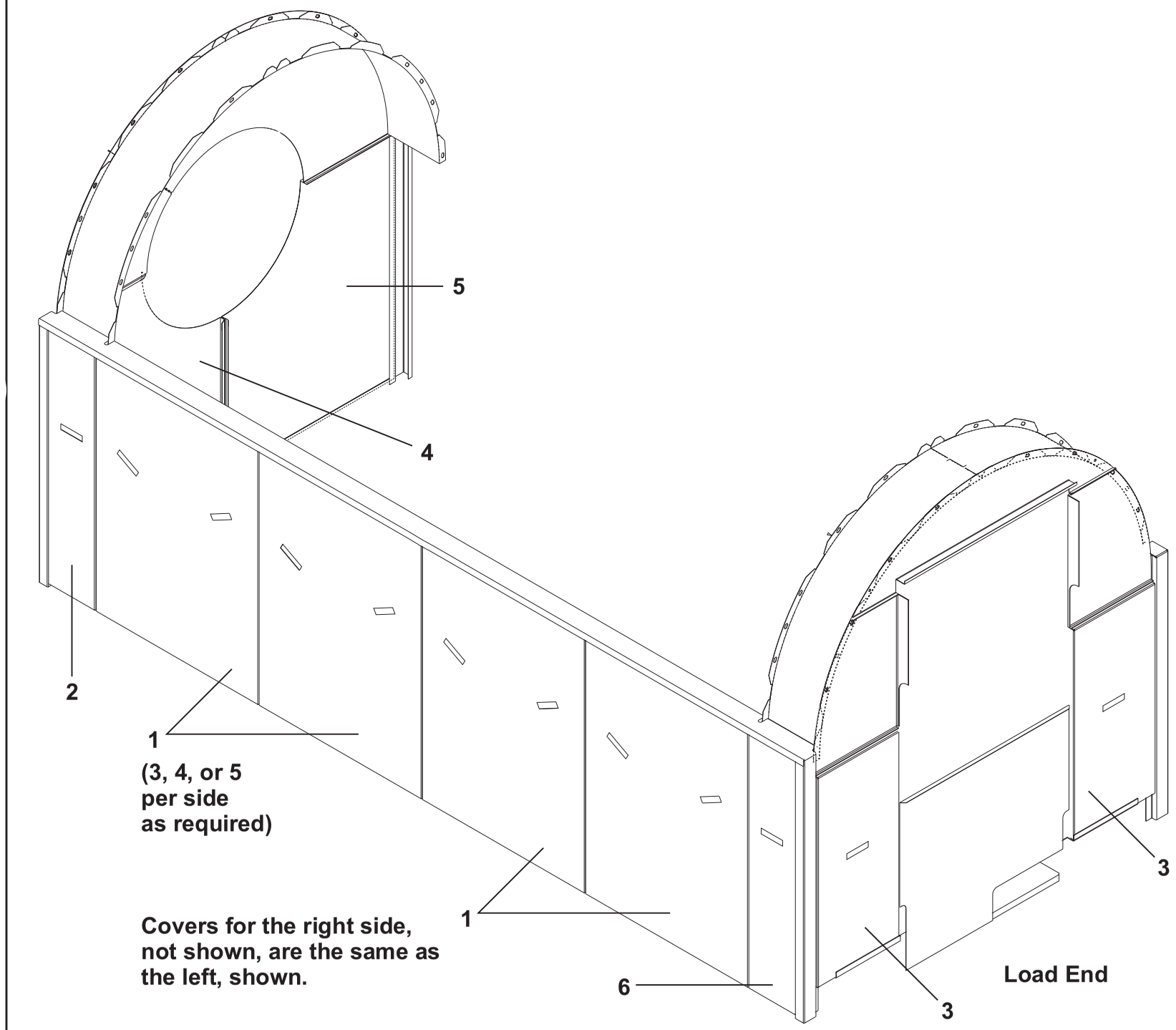
3.1 Covers and Shipping Brackets

Cover Installation

76028 & 76039 G3 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.



Parts List—Cover Installation

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------REFERENCE ASSEMBLIES----------	
	AA	G66GC003F	7628G3 INSTCOVER ALUM 4M FIRST	7628G3 FIRST SECTION
	AB	G66GC003M	7628G3 INSTCOVER ALUM 4M MID	7628G3 MID SECTIONS
	AC	G66GC003L	7628G3 INSTCOVER ALUM 4M LST	7628G3 LAST SECTION
	BA	G65GC007F	7639G3 INSTCOVER ALUM 4M FIRST	7639G3 FIRST SECTION
	BB	G65GC007M	7639G3 INSTCOVER ALUM 4M MID	7639G3 MID SECTIONS
	BC	G65GC007L	7639G3 INSTCOVER ALUM 4M LAST	7639G3 LAST SECTION
			----------COMPONENTS----------	
AA,AB,AC	1	A65GC016	ASSY=COVER VINYL 30.0X54.56	
BA,BB,BC	1	A65GC015	ASSY=COVER VINYL 39.5X54.56	
AA,AB BA,BB	2	A65GC017	ASSY=COVER VINYL 23.38X54.56	
AA,BA	3	A65GC019	ASSY=COVER VINYL 19.75X44.12	
AC,BC	4	A65GC007	ASSY=COVER ALUM LF 40.97X52.11	
AC,BC	5	A65GC006	ASSY=COVER ALUM RT 40.97X52.11	
AA,AC BA,BC	6	A65GC018	ASSY=COVER VINYL 11.06X54.56	

Tunnel Feet & Shipping Brackets

76028 & 76039 G3 Tunnels

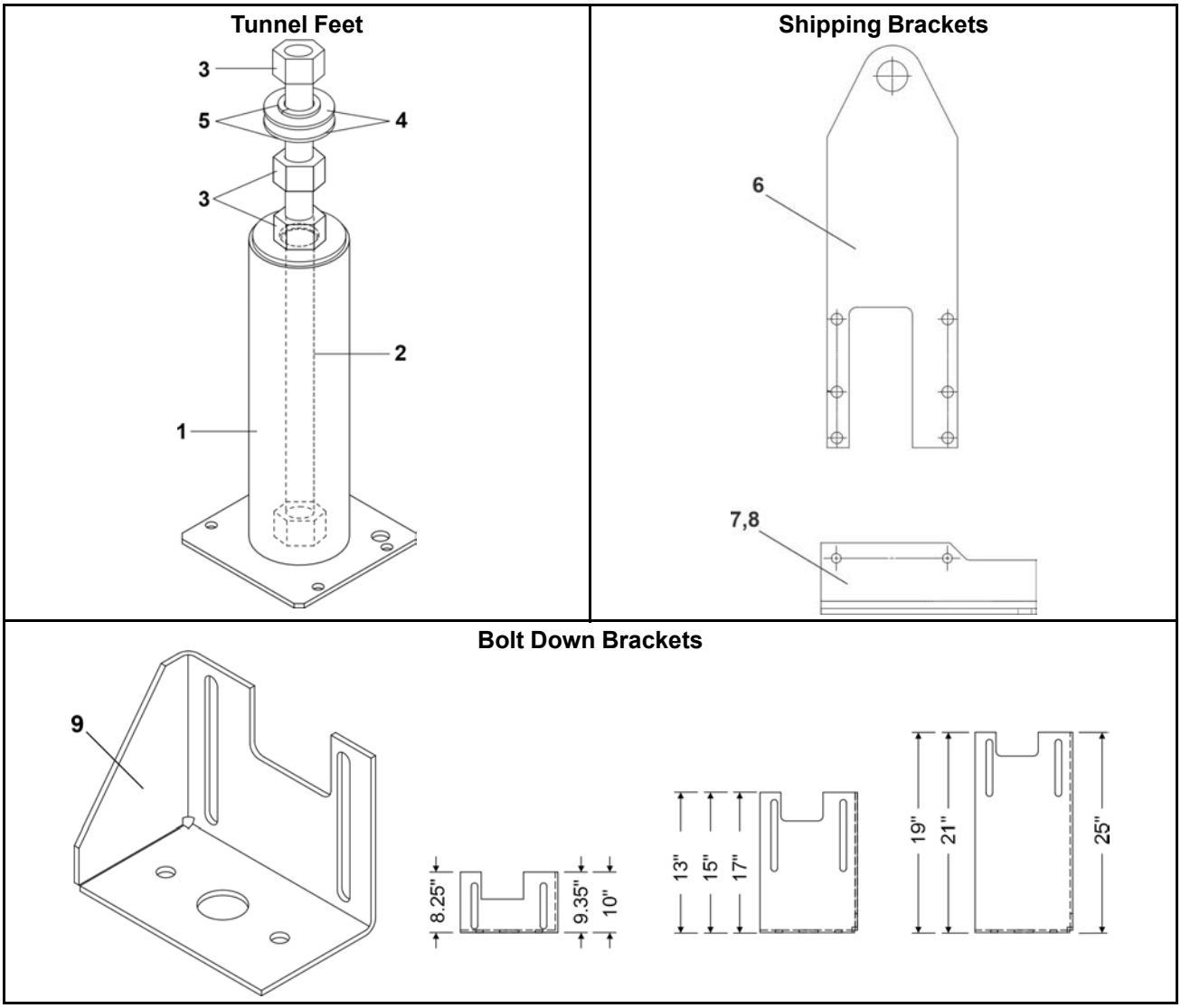


Table 1. Parts List—Tunnel Feet & Shipping Brackets

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.				
Used In	**Item**	**Part Number**	**Description/Nomenclature**	**Comments**
Components				
A	1	W6 20408	CBW FOOT WLMT 11"-17" FLOOR TO BASE	11'–17" Floor to Base Tunnel Clearance
B	1	W6 20407	CBW FOOT WLMT	17'–24" Floor to Base Tunnel Clearance
A	2	17R125A18K	ROD=1.25X-8UNX18.5 ALLTHRD. ZN	
B	2	17R125A21K	STUD 1.25-8UNX21 ALLTHRD/ZN-B7	

Tunnel Feet & Shipping Brackets

76028 & 76039 G3 Tunnels

Parts List—Tunnel Feet & Shipping Brackets (cont'd.)

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

Used In	Item	Part Number	Description/Nomenclature	Comments
all	3	15G261	HVHXNUT 1+1/4-8UNC2B ZINC GR2H	
all	4	15U440	FLATWASH(USS STD) 1+1/8" STLHD	
all	5	15U425	LOCKWASHER MEDIUM 1+1/4"ZINC P	
all	6	06 70016B	G3 SHIPPING/LIFTING PLATE	
all	7	06 70016	BOLT DOWN BKT SHIPPING-RIGHT	
all	8	06 70016A	BOLT DOWN BKT SHIPPING-LEFT	
all	9	06 70016S	7639G3 FLOOR MNT BKT SHORT S/S	8.25”
all	9	06 70016G	FLOOR MNT BKT SHORT 9.35	9.35”
all	9	06 70016J	FLOOR MNT BKT SS 9.5 LG	10”
all	9	06 70016C	7639G3 FLOOR MNT BKT LONG 14.6	13”
all	9	06 70016Z	FLOOR MNT BRKT SS 15.00 LG	15”
all	9	06 70016W	FLOOR MNT BRKT S/S 17.00 LG	17”
all	9	06 70016X	FLOOR MNT BRKT S/S 19.00 LG	19”
all	9	06 70016T	FLOOR MNT BKT SS 21.00 LG	21”
all	9	06 70016U	FLOOR MNT BKT SS 25.00 LG	25”

3

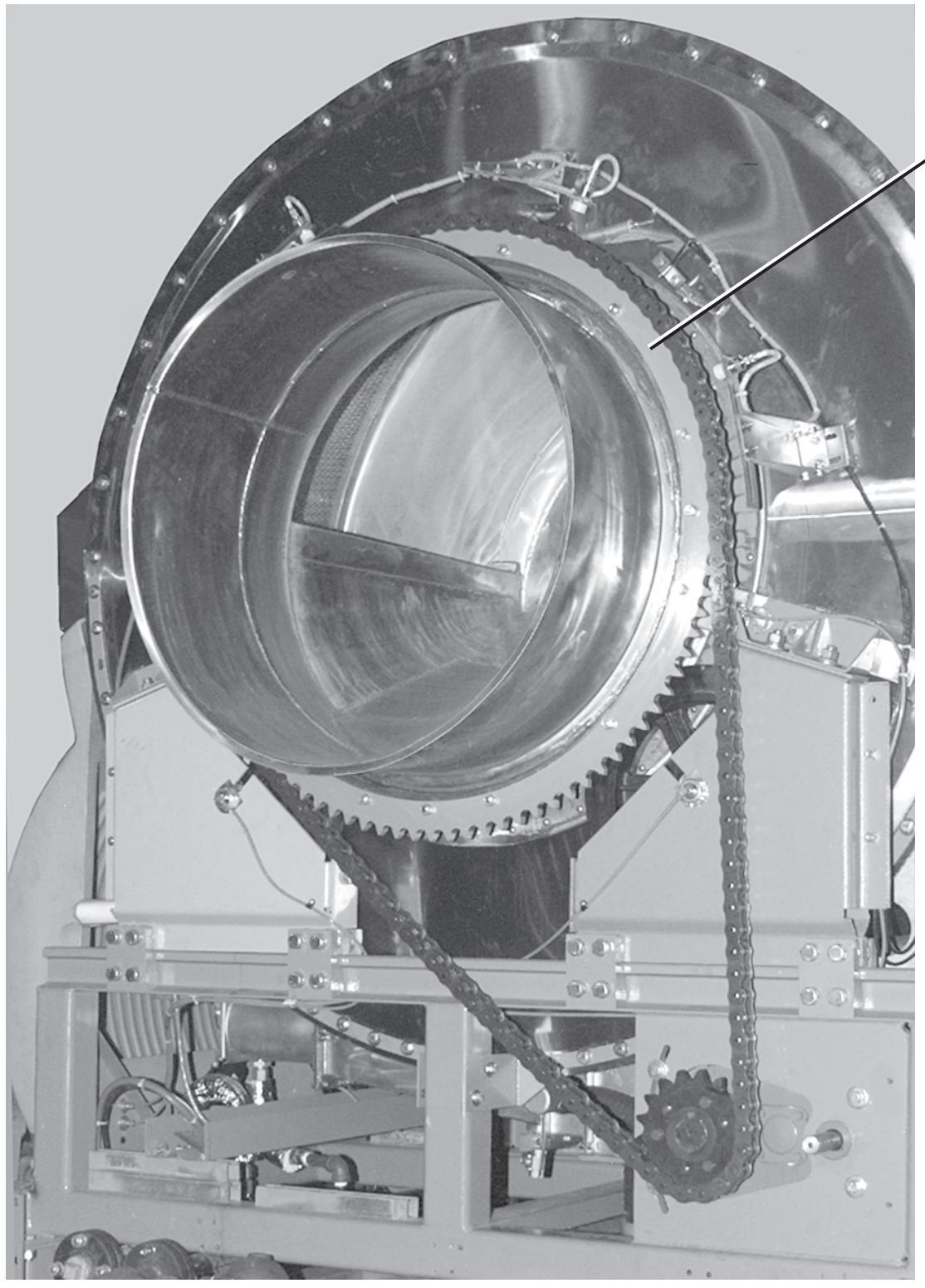
Drive Assemblies 3.2

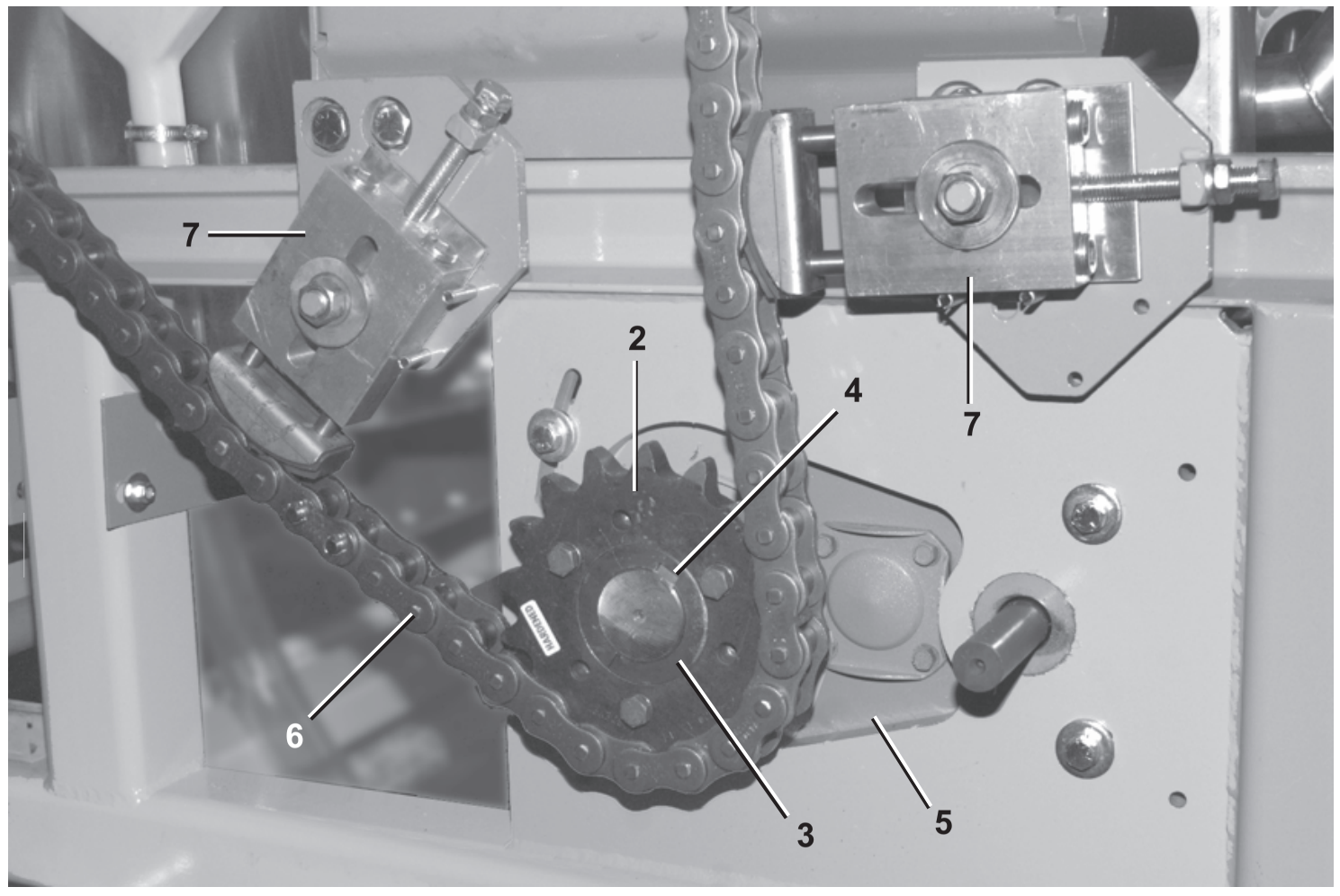
Drive Chart

76028 & 76039 G3 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.





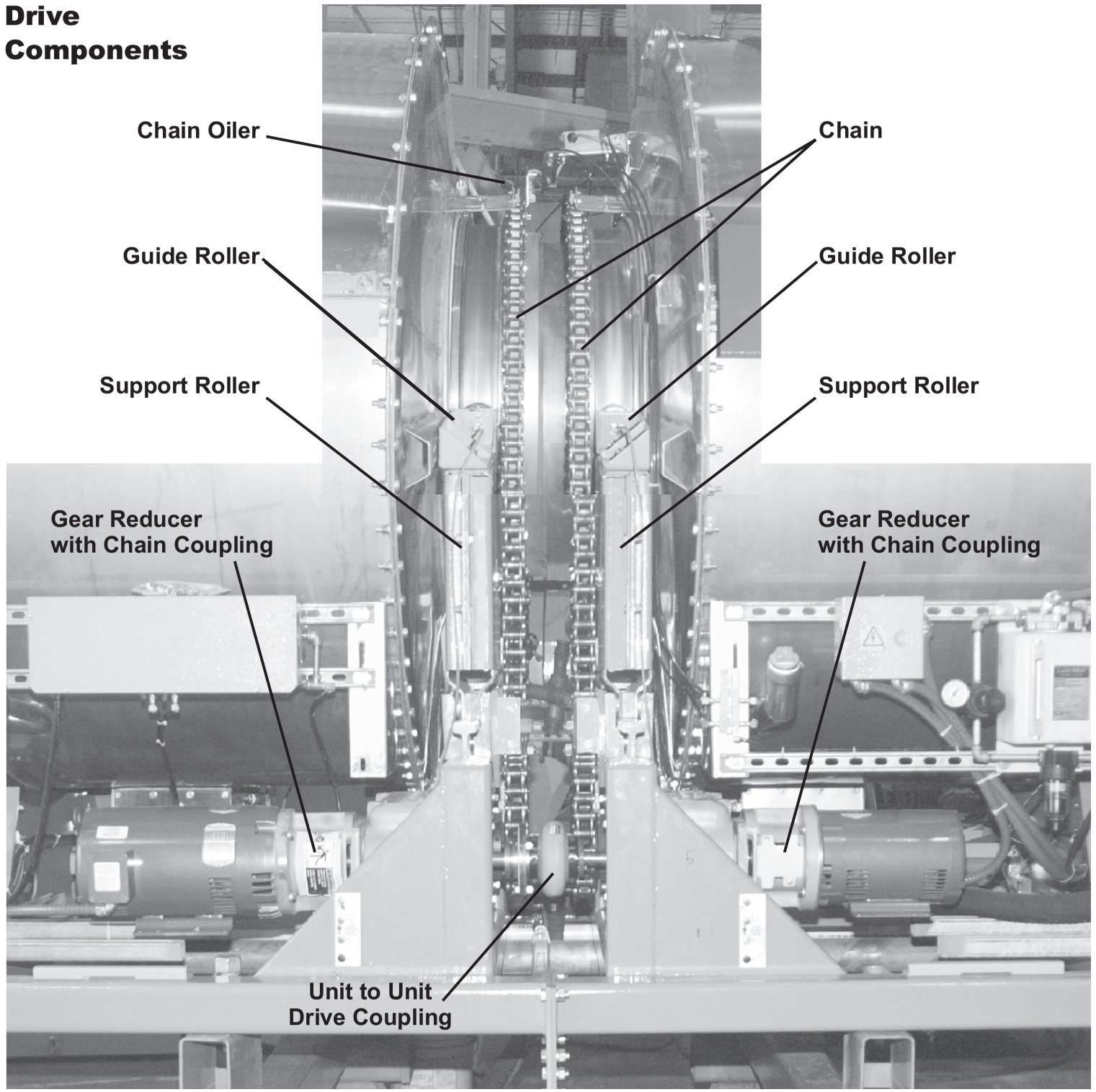
First and Last sections use one 10Hp motor with a 20Hp reducer per module.
Middle sections use two 5Hp motors each with 10Hp reducers. See parts list.

Drive Chart
76028 & 76039 G3 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Drive Components



Parts List—Drive Chart

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	D62 00560	DRIVECHART 10HP	FIRST & LAST SECTIONS
	B	D62 00660	DRIVECHART 5 HP	MIDDLE SECTIONS
			----------COMPONENTS----------	
all	1	X6 40104	MACH=7622CBW SPROCKET 120A96	
all	2	54N120E17H	SPRKT 120E17H QD HARDENEDTEETH	
all	3	56Q2KE	2+1/2" BUSH VPUL QD TYPE E	
all	4	15E241	SQMACHKEY 5/8X2+3/4	
A	5	54S029	RED 20HP 24.59:1 3325CF-CBW21	
B	5	54S027	RED 10HP.24 59:1 3325CF-CBW18	
all	6	54G120HK	ROLLCHAIN RC120HKR 15.75FT	
all	7	A65CH001	CHAIN TENSIONER ASSY	

Chain Tensioner

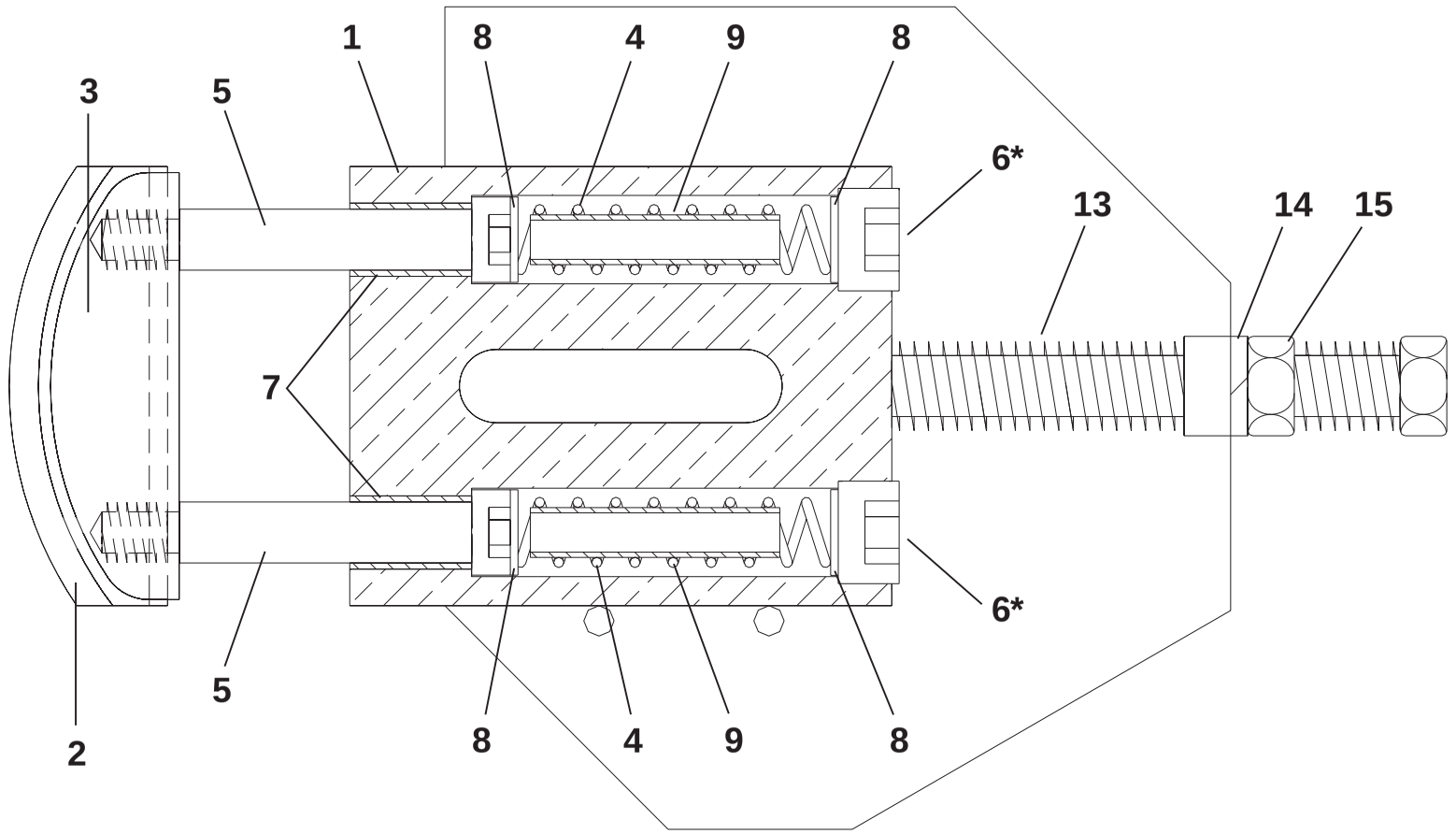
76028 & 76039 G3 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

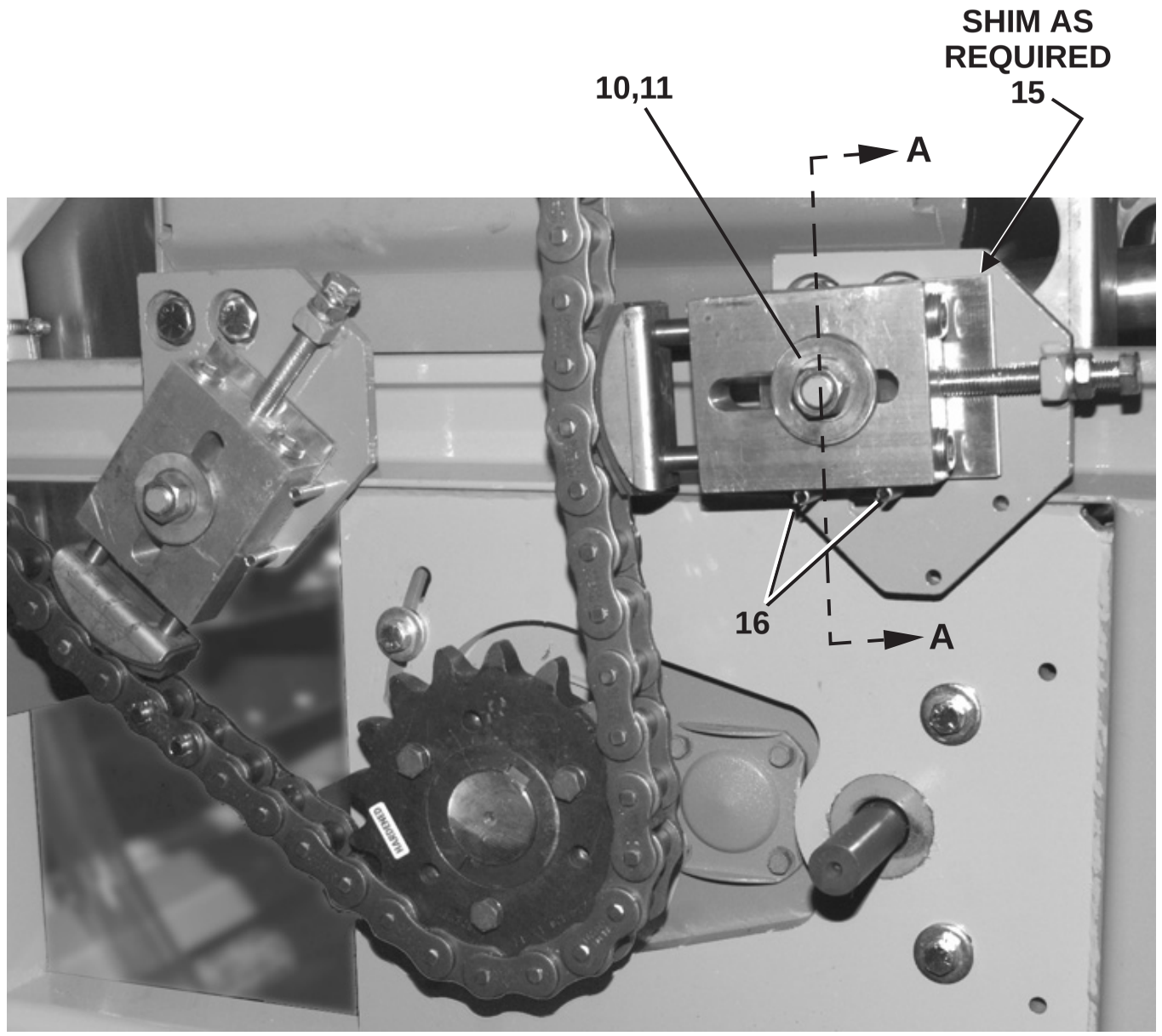
Litho in U.S.A.

99

* Note: Do not remove the plugs (item 6) while chain guide is tensioned against the chain. The spring may jump out. Loosen the nut (item 11) on the slotted adjustment and the jacking bolt (items 13,14,15) to loosen chain tension.



SECTION A-A
TYPICAL



Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Chain Tensioner

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

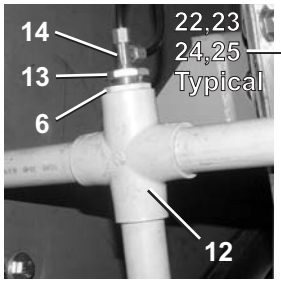
Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	A65CH001	CHAIN TENSIONER ASSY	
			----------COMPONENTS----------	
all	1	X6 70045	HOUSING=CHAIN GUIDE	
all	2	X6 70046	CHAIN GUIDE	
all	3	06 70047	SUPPORT=CHAIN GUIDE	
all	4	06 70048	SPRG/CH.GUIDE/.105 MUSIC WIRE	
all	5	15C070	HXSOCSTRIPBOLT 5/8"X3X1/2-13	
all	6	5SP0PCEHK	NPT PLUG 3/4 HEXSOCHD ZINC	
all	7	54E019	PLBRZBRG 5/8X3/4X1+1/4EP101220	
all	8	15U200	FLATWASHER(USS STD) 5/16"ZNC P	
all	9	06 70033	SPACER=CHAIN TENSIONER	
all	10	06 70032	WASHER=CHAIN TENSIONER	
all	11	15G240	HXNUT 3/4-10UNC2B SAE ZINC GR2	
all	12	15D125	HXTAPSCR 5/8-11X4CAD-FLTHRD GR	
all	13	15U315	LOKWASHER MEDIUM 5/8 ZINCPL	
all	14	15G236C	HXFINJAMNUT 5/8-11UNC2B ZINC G	
all	15	06 70049	SHIM=CHAIN GUIDE	
all	16	15H113	SPRINGPIN 3/8X2"LG ZINC	

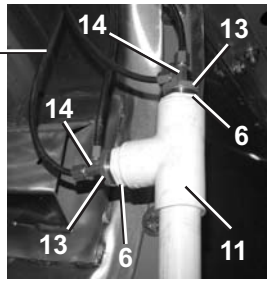
Chain Oiler

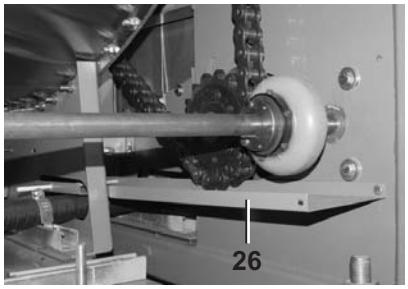
76032, 76028G3 & 76039G3 Tunnels, 92048G4 Tunnels

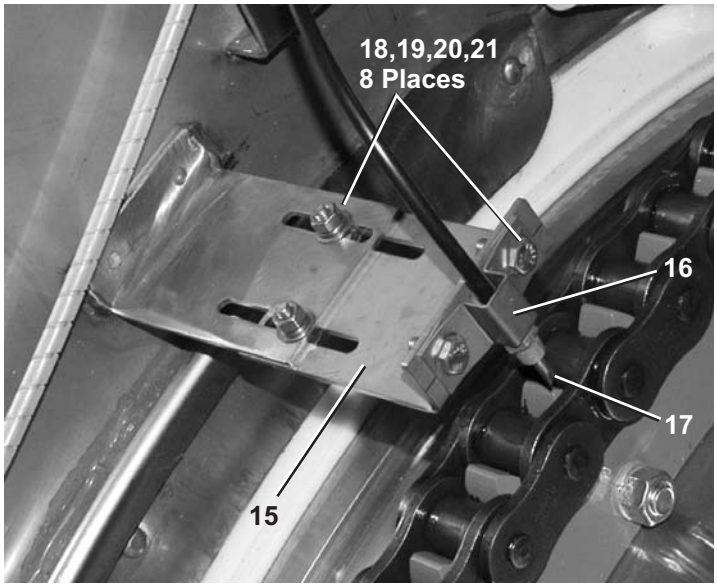
Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

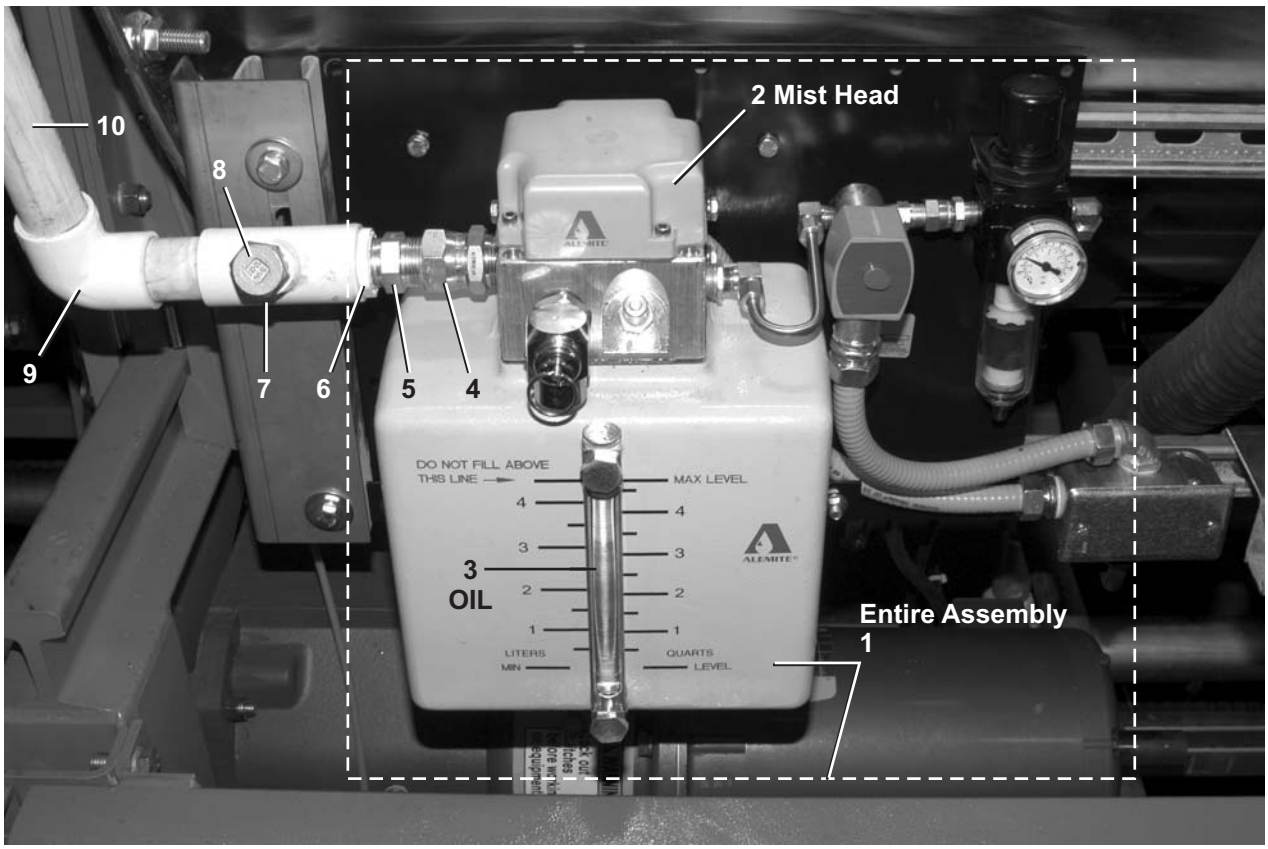
Litho in U.S.A.











Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Chain Oiler

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------			----------ASSEMBLIES----------	----------
	A	G67CL001	GEN ASSY OILER RESV G3	
	B	A67CL001	ASSY OILERRESV G3	76028G3, 76039G3 & 92048G4 TUNNELS
	C			76032 TUNNELS
----------			----------COMPONENTS----------	----------
ABC	1	27E790E	ALEMITE OILMIST SYSTEM#3943BC	
ABC	2	27E790F	REPAIR PART-ALEMITE MIST HEAD	
all	3	20H000A	MILNOR CHAIN LUBRICANT	
all	4	52ZC0PS004	TUBEFITMALESW 3/4"#1404-12-12	
all	5	52ZC0PS003	TUBEFITMALECON 3/4"#2404-12-12	
all	6	5KC1AP4D0P	SOKADAPTER 1"SX3/4"FPT PVC S40	
all	7	5K1AP4A0K	TEE 1"SX1"SX1/2"FP PVC S40	
all	8	5SP0KDEHK	NPT PLUG 1/2 HXCTRSNK GALSTL	
all	9	5KL1AP4A	SOK ELBOW 90DEG 1" PVC SCH40	
all	10	5P1AP4EN	1" PIPE PVC SK40 20RML	
all	11	5K1AP8A	SOKTEE 1" PVC SCH40	
all	12	5KX1AP4	SOK CROSS 1" PVC SK40	
all	13	5SB0P0CNFA	NPTHEXBUSH 3/4X1/8GALV150#CORD	
all	14	53A043S	TEE=TUBEXMPXTUBE 1/4"#B71A-4B	
all	15	06 40199	7626 BRKT OILER BRUSH	
all	16	06 20187	BRKT BRUSH HOLDER OILER 1/MD	
all	17	27E790D	SPRAYFITT=ALEMITE #381288-8	
all	18	15K039	HXCAPSCR 1/4-20UNC2AX3/4 GR5 Z	
all	19	15G165	HXNUT 1/4-20UNC2BSAE ZC GR2	
all	20	15U180	LOCKWASHER MEDIUM 1/4 ZINCPL	
all	21	15U185	FLATWASHER(USS STD) 1/4" ZNC P	
all	22	53A509	TUBE INSERT 5/16"OD X .53"LG.	
all	23	53A059	SLEEVE 1/4"BRASS PH#60C-4	
all	24	53A059A	NUT 1/4"BR.HOLYOKE AND #61A-4	
all	25	60E004TE	1/4"OD X.170"ID NYL(BLK)TUBING	

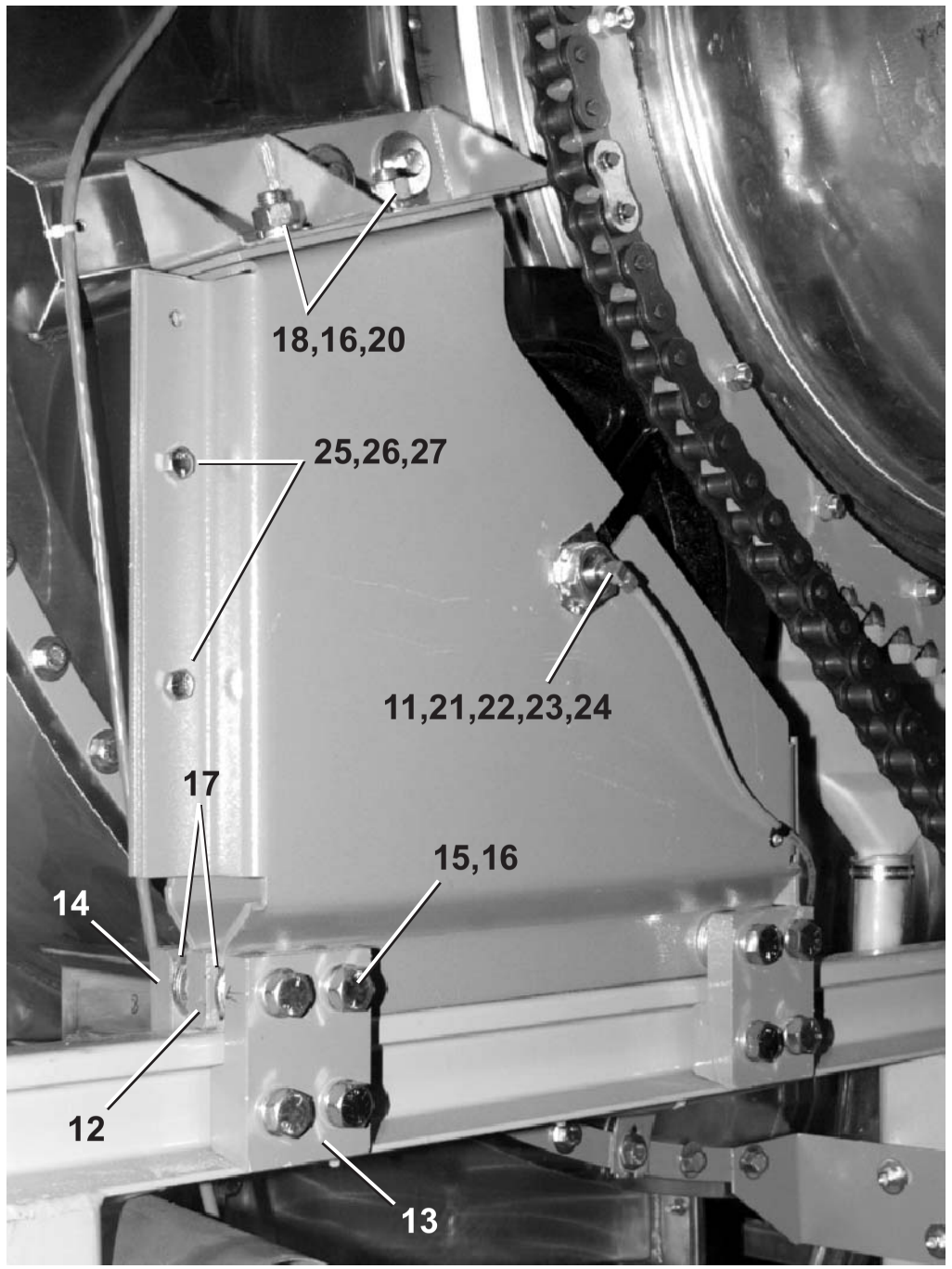
Support Roller Assembly

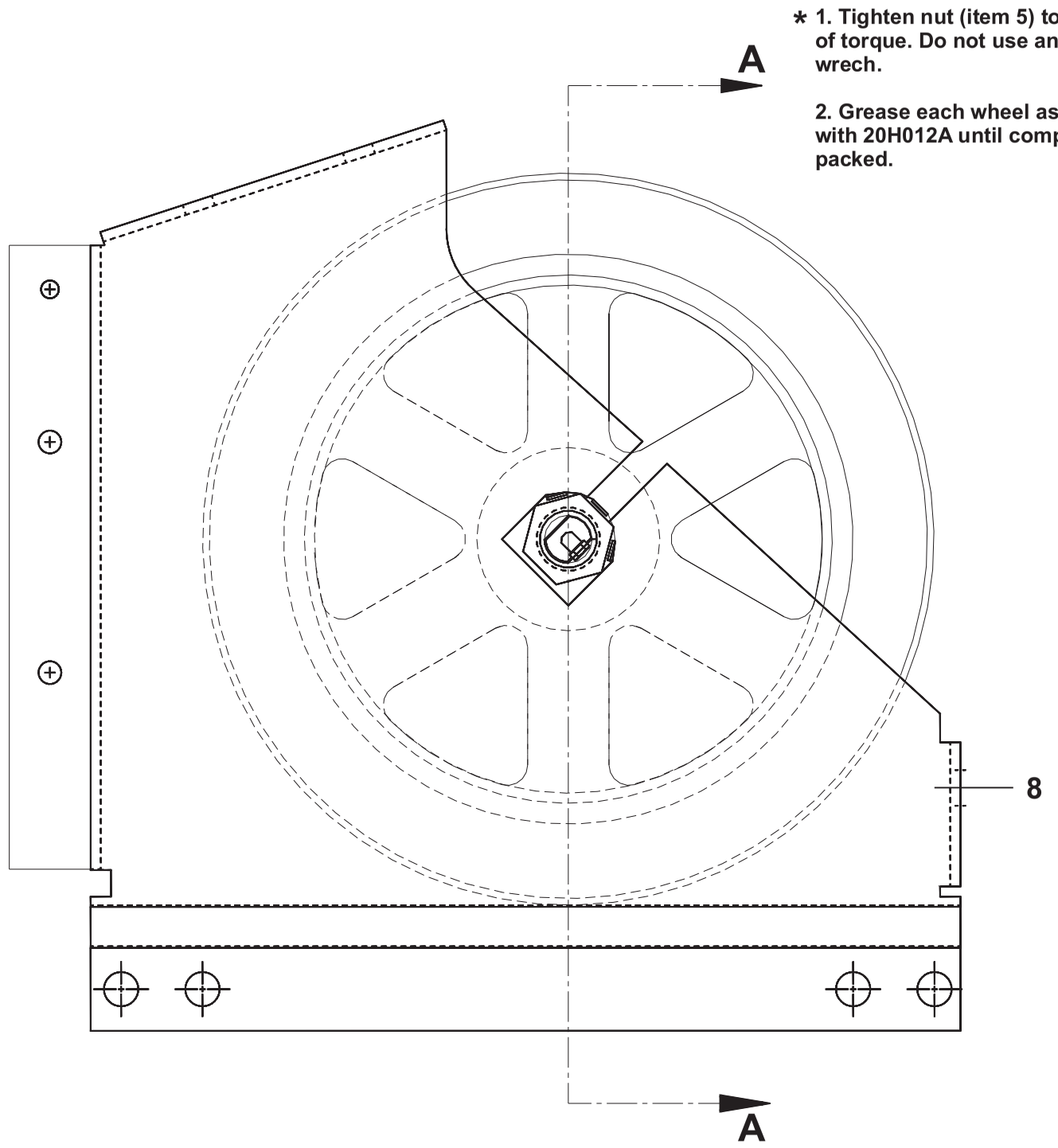
76028 & 76039 G3 Tunnels, 92048 G4 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

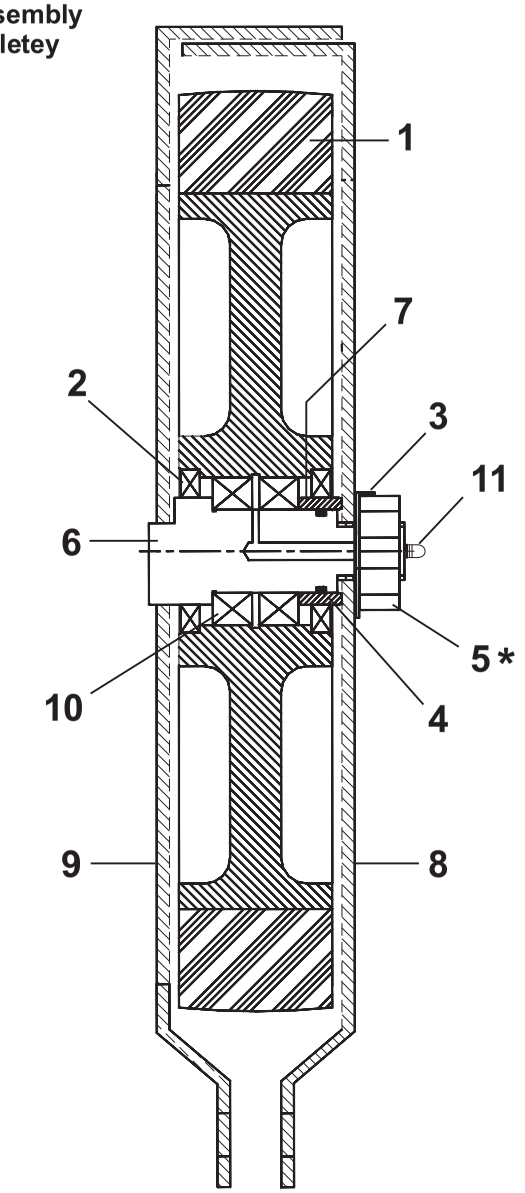
70





* 1. Tighten nut (item 5) to 50 ft/lbs of torque. Do not use an impact wrech.

2. Grease each wheel assembly with 20H012A until completey packed.



Section A-A

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Support Roller Assembly

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	A64SR002	SUPROLLER W/O TENSIONER-LF	7628G3, 7639G3
	B	A64SR002R	SUPROLLER W/O TENSIONER -RT	7628G3, 7639G3
	C	A64SR002AL	SUPROLLER W/TENSIONER FT LF	7628G3, 7639G3
	D	A64SR002BL	SUPROLLER W/TENSIONER REAR-LF	7628G3, 7639G3
	E	A63SR002	9248 SPPT RLLR ASSY LF	9248G4
	F	A63SR001	9248 SPPT RLLR ASSY RT	9248G4
			----------COMPONENTS----------	
all	1	06 40040B	ROLLER 18X3 - 2" URETHANE	
all	2	24S055	SEAL 2.09X3.189X3/8 SS BUNA	
all	3	06 40043	LOCKING WASHER 18X3 ROLLER	
all	4	60C128	ORING 1+3/8IDX1/8CS BUNA70#220	
all	5	15G251	HEXJAMNUT 1+1/8-7UNC2 ZNC GR2	
all	6	X6 40041	MACH=SHAFT 18 X 3 ROLLER	
all	7	06 40042	COLLAR=18X3 ROLLER	
ABCD	8	06 70013G	PLATE WHEEL SUPPORT INNER LF	
ABCD	8	06 70013A	PLATE WHEEL SUPPORT INNER RT	
EF	8	06 30055	9248 SPPT RLLR BRKT INNER RT	
EF	8	06 30055A	9248 SPPT RLLR BRKT INNER LF	
ABCD	9	06 70013F	PLATE WHEEL SUPPORT OUTER LF	
ABCD	9	06 70013B	PLATE WHEEL SUPPORT OUTER RT	
EF	9	06 30054	9248 SPPT RLLR BRKT OUT RT	
EF	9	06 30054A	9248 SPPT RLLR BRKT OUT LF	
all	10	54AV41201	BRG TM#LM501349 ASSY 902B6 1BX	
all	11	53A031B	BODY-EL90MALE.25X1/8 #269C-42B	
all	12	06 70013H	SPACER=SUPPORT ROLLER	
all	13	06 70030	CLAMP SUPPORT ROLLER OUTER	
all	14	06 70030A	CLAMP SUPPORT ROLLER INNER	
all	15	15K235D	HXTAPSCR 3/4-10UNC2A X 4+1/2	
all	16	15U340	LOCKWASH MEDIUM 3/4 ZINCPL	
all	17	15U320P	FLATWASHER(USS STD) 3/4" ZNC P	
all	18	15K228B	HEXCAPSCR 3/4-10 X 1+1/2 GR 5/	
all	20	15G240	HXNUT 3/4-10UNC2B SAE ZINC GR2	
all	21	60E004TE	1/4"OD X.170"ID NYL(BLK)TUBING	

Parts List, cont.—Support Roller Assembly

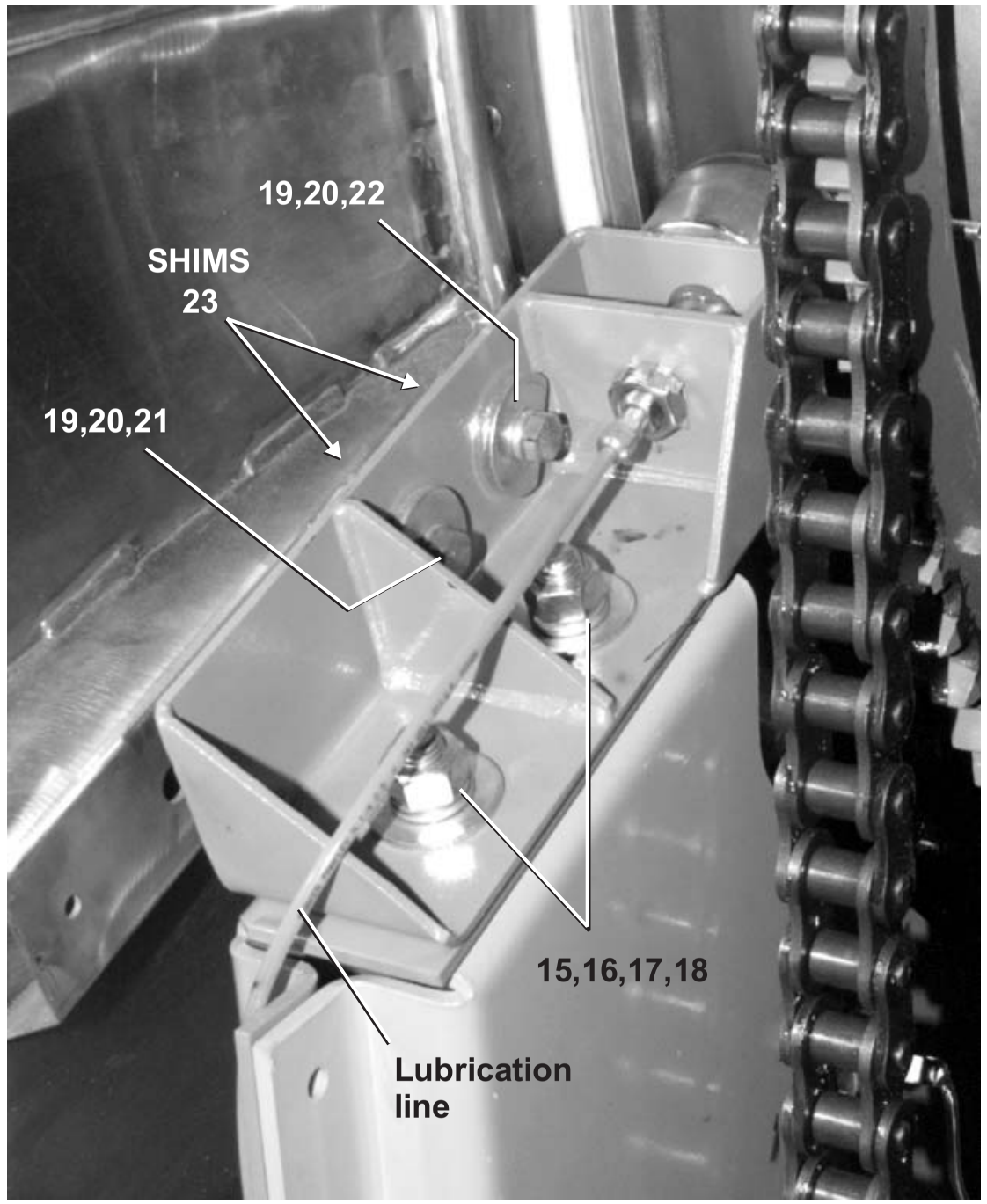
Used In	Item	Part Number	Description	Comments
all	22	53A059A	NUT 1/4"BR.HOLYOKE AND #61A-4	
all	23	53A500	SLEEVE DELRIN 1/4"OD#60PT-4	
all	24	53A501	TUBE INSERT .163"OD #63PT-4-40	
all	25	15G230	HXNUT 1/2-13UNC2B SAE ZINC GR2	
all	26	15K151	HXCAPSCR 1/2-13UNC24X1.25 GR5	
all	27	15U300	LOKWASHER REGULAR 1/2 ZINC PLT	

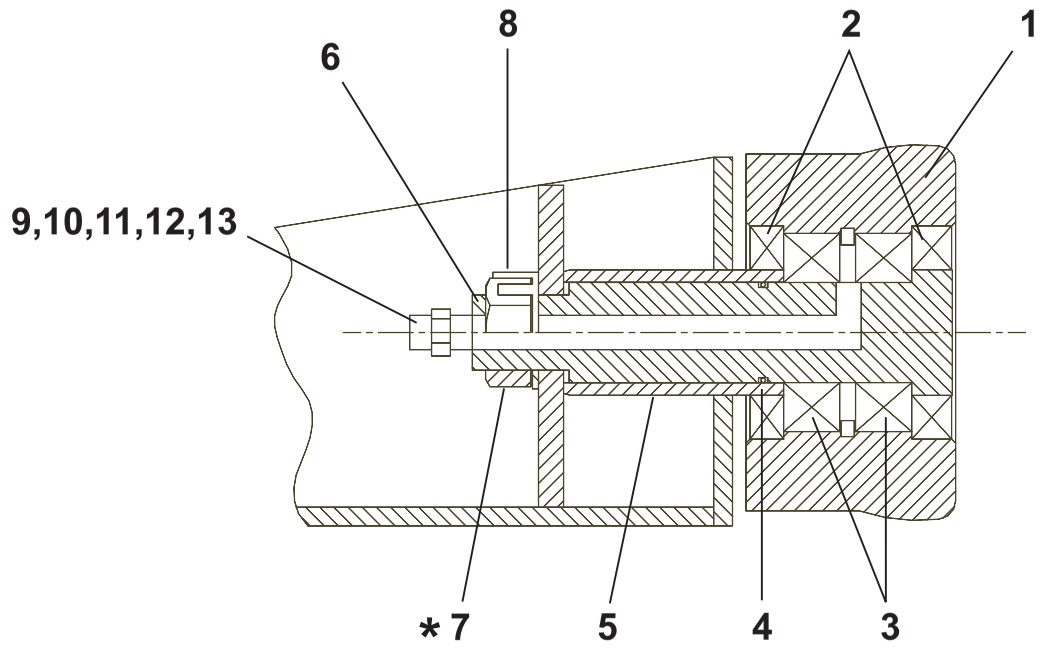
Guide Roller Assembly

76028 & 76039 G3 Tunnels, 92048G4 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

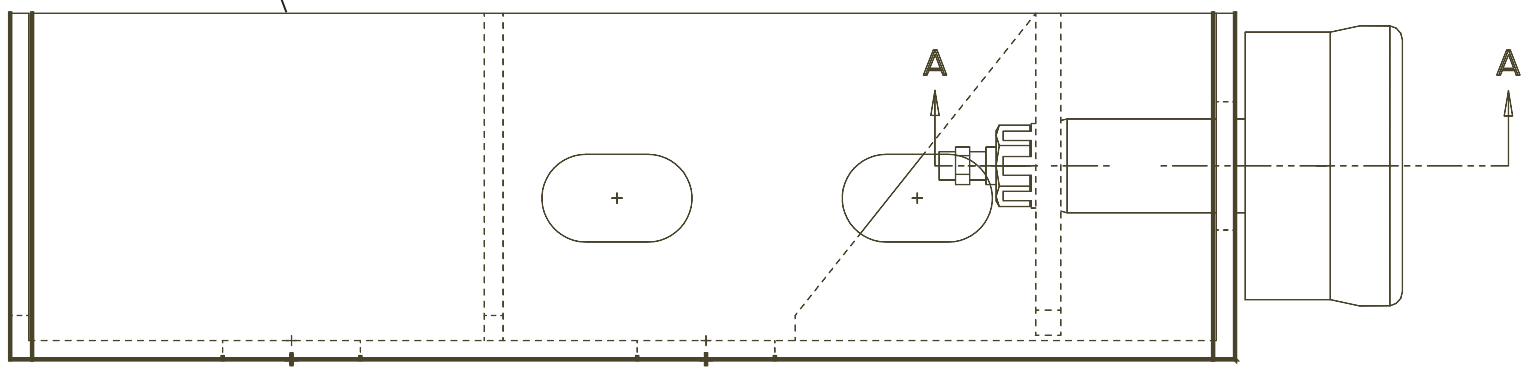
Litho in U.S.A.





14

* Torque nut (item 7) to 50 ft/lbs.



72

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Guide Roller Assembly

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	A64GR002	7639G3 GUIDE ROLLER ASSY RIGHT	7628/7639G3 RIGHT
	B	A64GR003	7639G3 GUIDE ROLLER ASSY LEFT	7628/7639G3 LEFT
	C	AGR63001	9248 GUIDE ROLLER RIGHT ASSY	9248G4 RIGHT
	D	AGR63001A	9248 GUIDE ROLLER LEFT ASSY	9248G4 LEFT
			----------COMPONENTS----------	
all	1	06 40046	ROLLER=GUIDE 3.78 WIDE TRACK	
all	2	24S033A	SEAL 1.25X2.125X.375 JM# 19653	
all	3	54AV25401	BRG TIMK#L44643 ASSY 902A8 1BX	
all	4	60C120	ORING 7/8IDX1/16CS BUNA70 #020	
all	5	06 20068A	COLLAR=7622 CBW WHEEL SUPT	
all	6	06 20020B	SHAFT=7622 CBW GUIDE ROLLER	
all	7	15G245	HXFINJAMNUT 3/4-10UNC2 SS18-8	
all	8	06 20070	LOCKING WASHER ROLLER SHAFT	
all	9	53A031B	BODY-EL90MALE.25X1/8 #269C-42B	
all	10	53A059A	NUT 1/4"BR.HOLYOKE AND #61A-4	
all	11	53A500	SLEEVE DELRIN 1/4"OD#60PT-4	
all	12	53A501	TUBE INSERT .163"OD #63PT-4-40	
all	13	20H012	ALVANIA#71125/EPLF2 35# PAIL	
A	14	W6 70014G	WELD GUIDE ROLLER MNT MID RT	
B	14	W6 70014L	WELD GUIDE ROLLER MNT MID LF	
C	14	W6 30119	GUIDE RLLR SPPT BRKT RT WLMT	
D	14	W6 30119A	GUIDE RLLR SPPT BRKT LF WLMT	
all	15	15K232A	HEXCAPSCR 3/4-10X2 GR8 ZINC	
all	16	15U320P	FLATWASHER(USS STD) 3/4" ZNC P	
all	17	15U340	LOCKWASH MEDIUM 3/4 ZINCPL	
all	18	15G240	HXNUT 3/4-10UNC2B SAE ZINC GR2	
all	19	15K162	HXCAPSCR 1/2-13UNC2AX1.5 GR5 P	
all	20	15U286	FLATWASHER 2"0DX17/32"IDX1/4"	
all	21	15U300	LOKWASHER REGULAR 1/2 ZINC PLT	
all	22	02 11603A	WASHER DBLR=2" W/CUTOFF SIDE	
all	23A	06 20327A	SPACER 14 GA STN/STL	
all	23B	06 20327B	SPACER 16 GA STN/STL	
all	23C	06 20327C	SPACER 18 GA STN/STL	

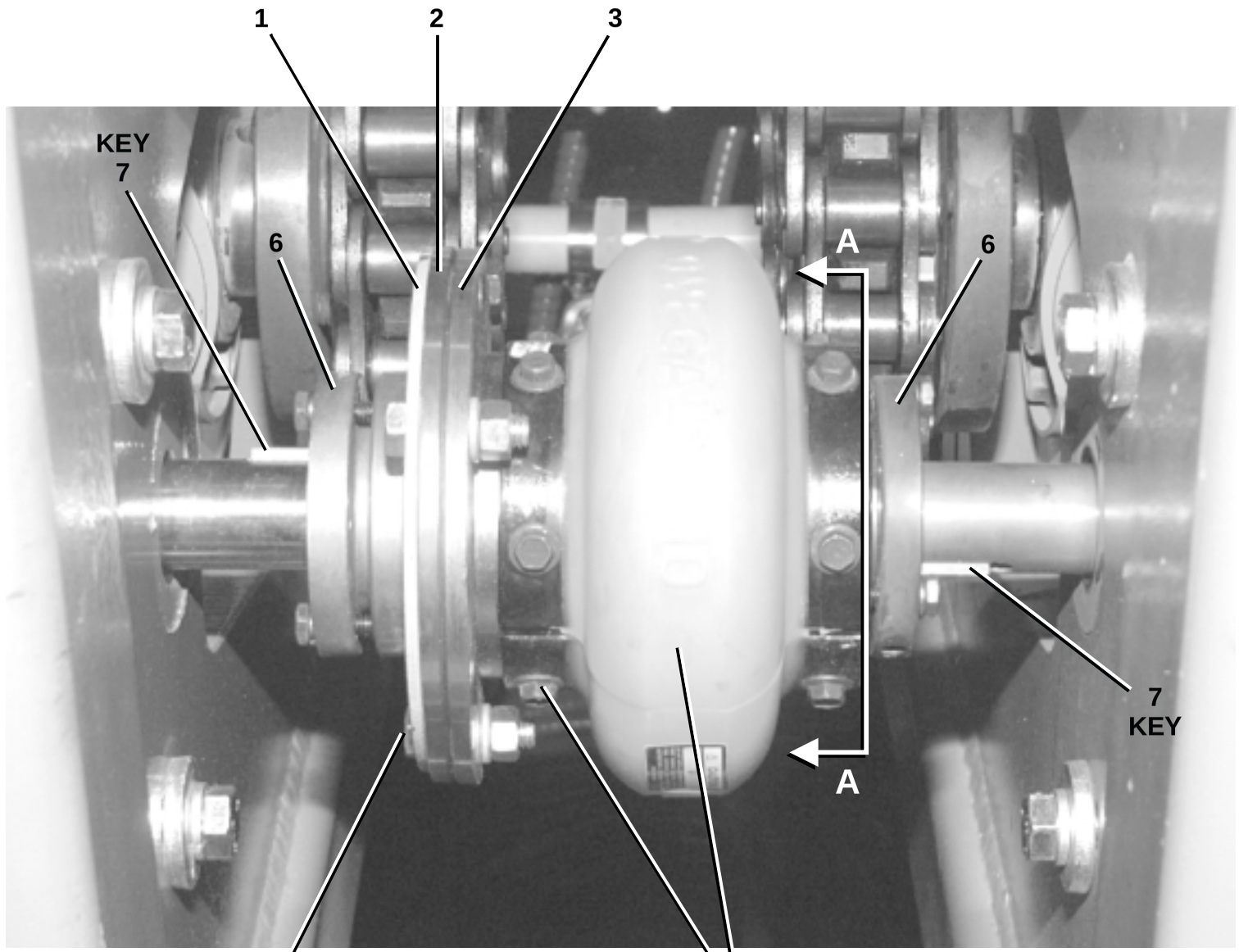
Unit to Unit Drive Coupling

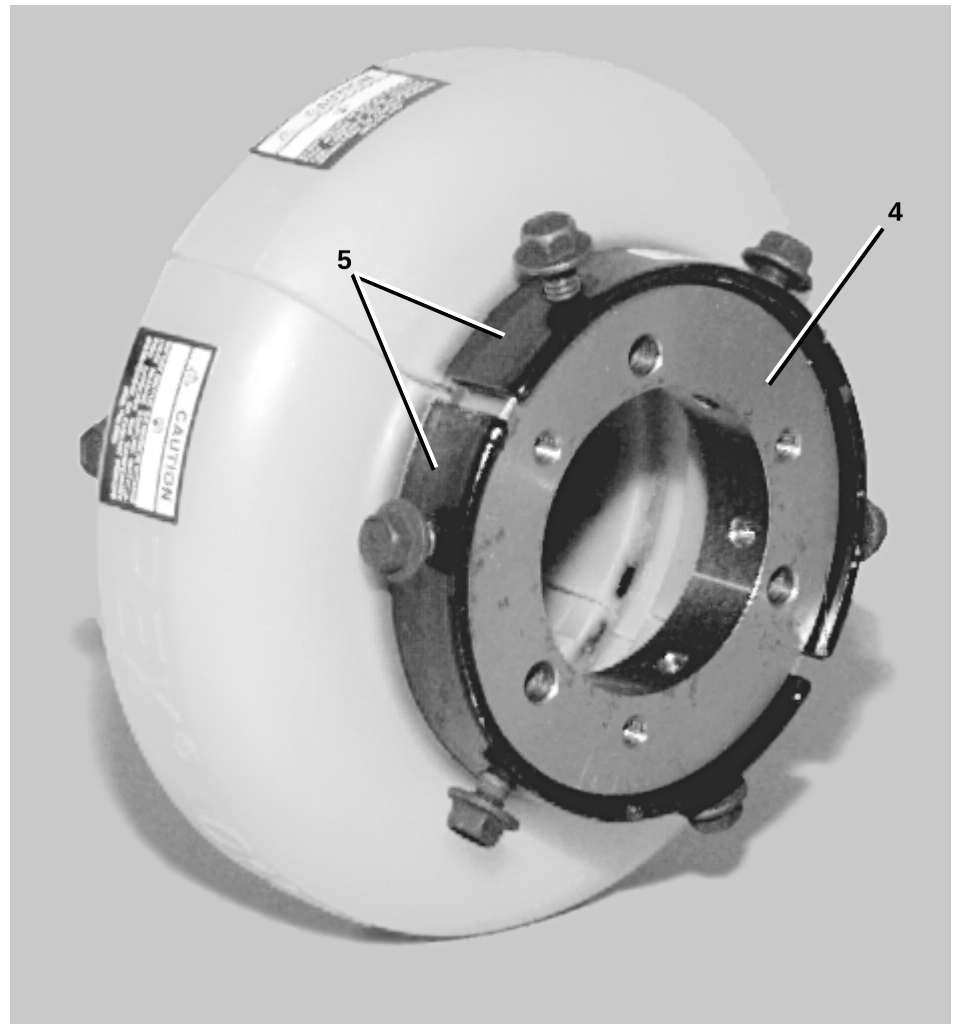
76028 & 76039 G3 Tunnel

BMP000036/2001225V
(Sheet 1 of 2)

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.





View A-A

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Unit to Unit Drive Coupling

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

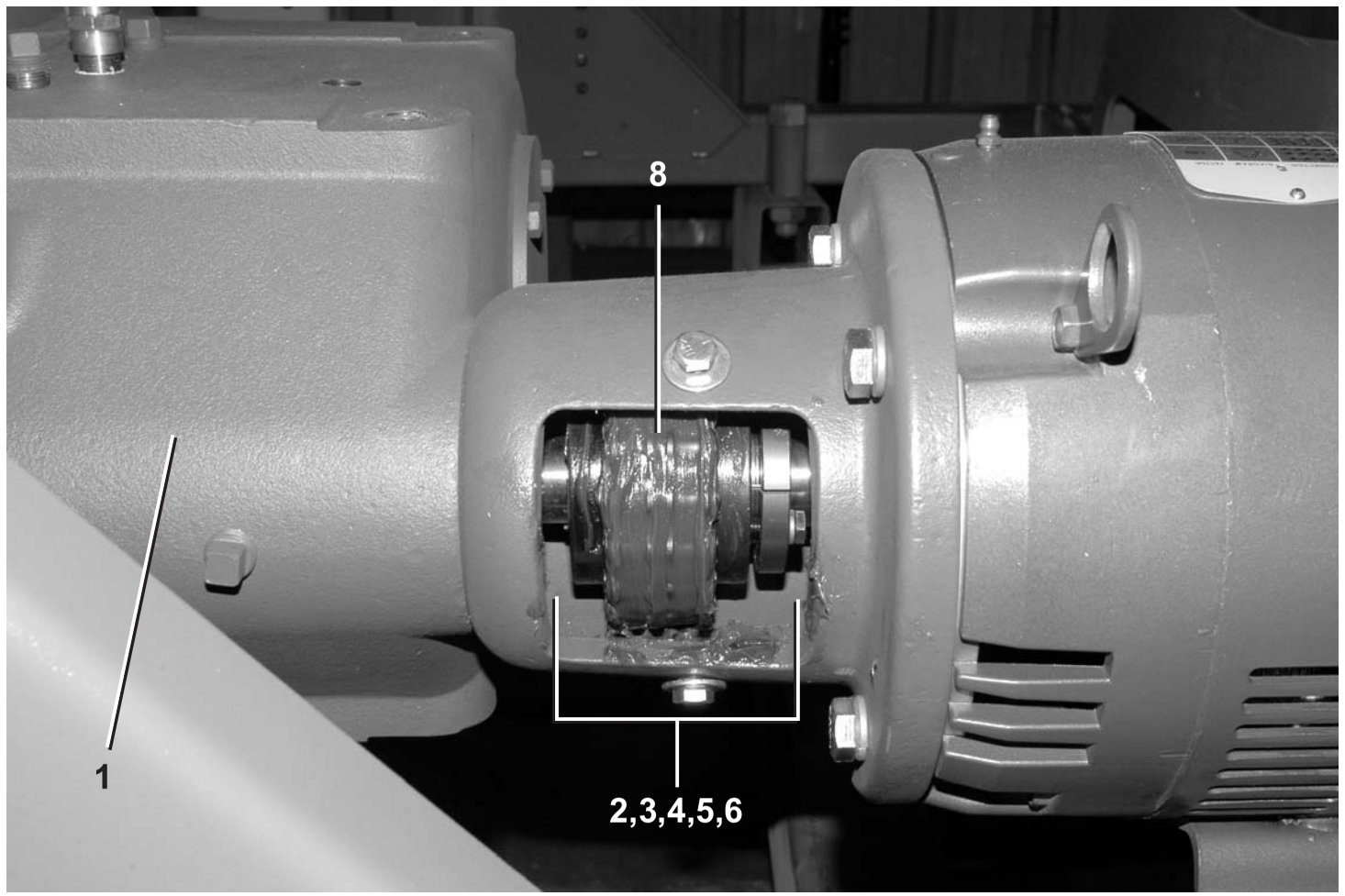
Used In	Item	Part Number	Description	Comments
----------ASSEMBLIES----------				
	A	A64DB003	ASY=UNIT/UNIT DRIVEBASE CONN	
----------COMPONENTS----------				
all	1	06 40106A	COUPLING ADJUST WASHER PLT	
all	2	X6 40106	DRIVE COUPLING ADJUST SIDE	
all	3	X6 40107	DRIVE COUPLING FIXED SIDE	
all	4	54J227A	HUB,FLEX COUPLING TUN +TILTS	
all	5	54J227	FLEXCPLG REX#E10 (EA=2 HALVES)	
all	6	56Q1ESDS	1+1/4" BUSH VPUL QD TYPE SDS	
all	7	15E210	SQMACHKEY 1/4X2 NOTAPER-NOHEAD	
all	8	15K100	HEXCAPSCR 3/8-16X1+1/4 SS18-8	
all	9	15U260	LOCKWASHER MEDIUM 3/8 SS18-8	
all	10	15G206	HEXNUT 3/8-16 UNC2 SS 18-8	

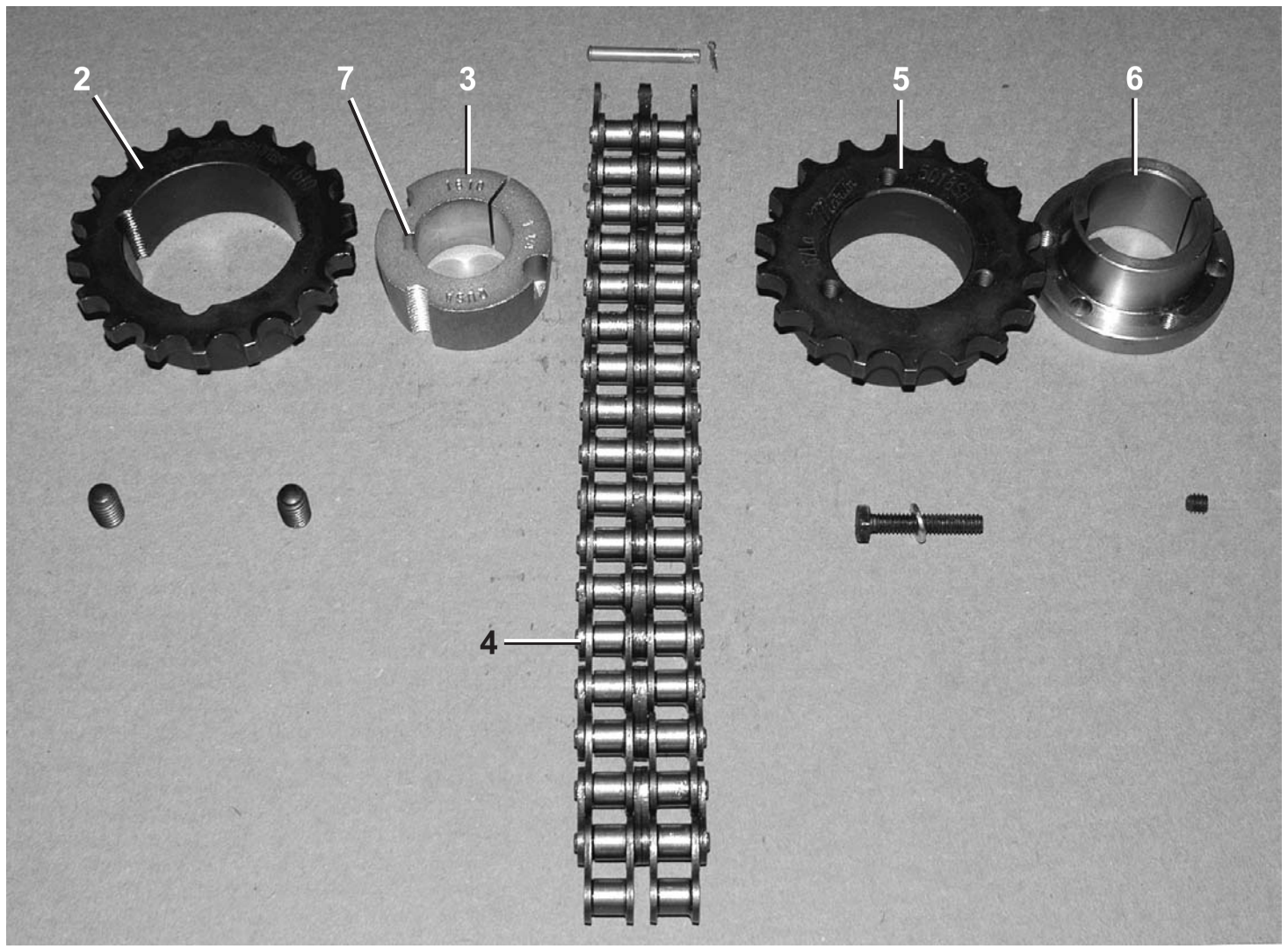
Gear Reducer with Chain Coupling

76028 & 76039 G3 **, 9248 G4** Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.





For detailed instructions of replacing the drive chain coupling, see document BIPCLM01, found within this manual.

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Gear Reducer with Chain Coupling

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			ASSEMBLIES	
	A	A67DB001	20HP REDUCER/10HP MOTOR ASSY	FIRST & LAST MODULES
	B	A67DB002	10HP REDUCER/05HP MOTOR ASSY	MIDDLE MODULES
	C	A67DB003	10HP REDUCER/06HP MOTOR ASSY	9248
			COMPONENTS	
A	1	54S029	MILNOR, 24.59:1 210TC 23HP	
BC	1	54S027	MILNOR, 24.59:1 180TC,12.5HP	
all	2	27E5511D	FLEX.COUP.=5018TBF COUPLING	
all	3	27E5511E	1610 1 1/4" BORE BUSHING	
all	4	27E5511C	FLEX.COUP.-CHAIN=5018CHN	
all	5	27E5511A	QD-FLEX.COUP.=5018SH 1+3/8MAX.	
A	6	56Q1GSH	1+3/8" BUSH VPUL QD TYPE SH	
BC	6	56Q1CSH	1+1/8" BUSH VPUL QD TYPE SH	
all	7	15E197	1/4X1/4X1SQMACHKEY N0 TAPR/HD	
all	8	20H011CG	ALVANIA CG1 GREASE EA=1 TUBE	

Instructions for Replacing G3 Drive Chain Couplings: Retrofit Kits KTG3SCR001 and KTG3SCR002

Milnor engineers recently re-engineered the motor-to-gear reducer drive chain couplings to ensure longer life and greater reliability for these components. These new couplings can be easily retrofitted to existing G3 Continuous Batch Washers as detailed below.

WARNING 1: Entangle and Crush Hazard—Gears and chains can entangle and crush body parts

- Lock OFF and tag out power at the wall disconnect before servicing.

1. Place the key in shaft. Check for proper fit. Key must fit snugly. If not, replace the key or bushing.
2. Slide the taper bushing on the motor shaft (Figure 1).
3. Position taper bushing on motor shaft as follows:
   - For 10 horsepower motors, place the bushing flush with motor shaft end (Figure 2).
   - For 5 horsepower motors, place the bushing slightly back from motor shaft end so that 1/8" (3 mm) of the motor shaft extends beyond the bushing.
4. Apply Loctite® 242 (or equivalent) to set screw (Figure 3). Tighten set screw (Figure 4).
5. Prevent the shaft key from moving by notching the edges of the keyway (Figure 5).
6. Install the motor sprocket on the bushing (Figure 6).
7. Gradually tighten the bushing bolts in an alternating pattern until the sprocket seats on the bushing. Repeat the tightening pattern at least three times. Torque bushing bolts to 108 inch-pounds (1.25 kg/cm) (Figure 7). Use a pipe wrench on the bushing to prevent the sprocket from turning during the tightening procedure.
8. Install the gear reducer sprocket. Position sprocket on shaft but do not tighten set screw. The final position is determined when the double drive chain is installed (Figure 8).
9. Place wooden boards on the machine frame to support the motor as shown in Figure 9. Slide motor into place and bolt up.
10. Install a wire wrap or wire leader through the first chain link pair (Figure 10). Note the three chain plates, and master link assembly.
11. Align motor sprocket teeth with the gear reducer sprocket teeth so that the chain links will fit between both sets of teeth.
12. Thread chain into sprockets (Figure 11). Use the leader to help feed chain around sprockets.
13. Ensure that the double drive chain is perfectly seated on both sprockets by adjusting the position of gear reducer sprockets. Tighten the set screw after determining the optimum gear reducer sprocket position (Figure 13).
14. Cut off leader and partially insert the master link (Figure 14).
15. Install the center plates between the adjoining links (Figure 15).
16. Push the master link through the center plates (Figure 16). Install end plate and lock clip.

Figure 1: Sliding taper bushing on motor sprocket

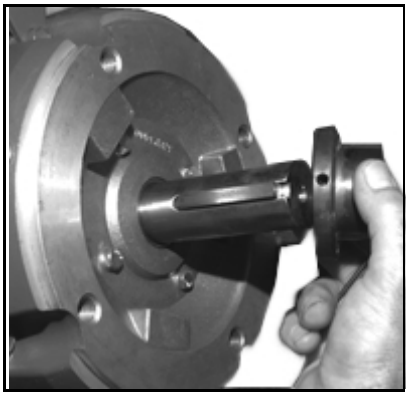


Figure 2: Aligning taper bushing with motor drive shaft (10 HP motor installation shown)

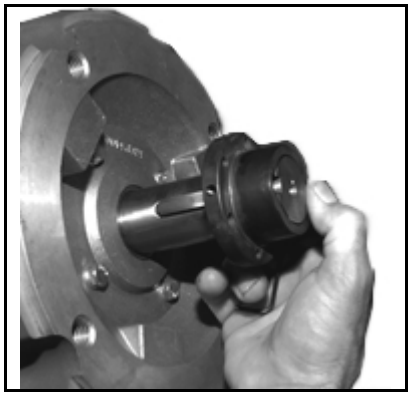


Figure 3: Applying Loctite® to taper bushing set screw

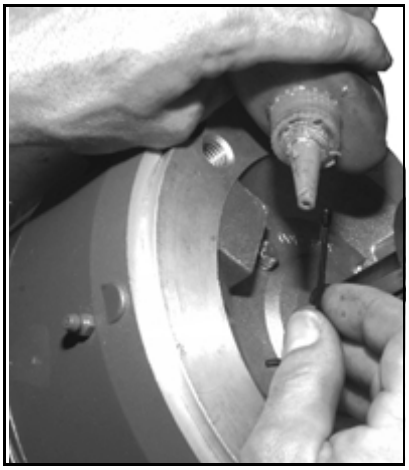


Figure 4: Securing taper bushing

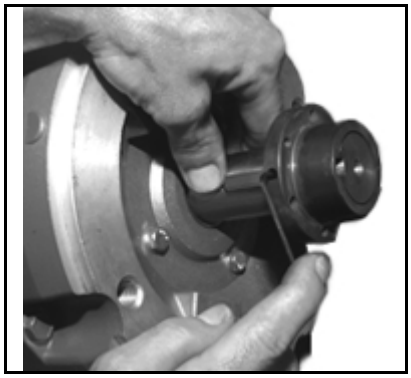


Figure 5: Notch motor shaft keyway

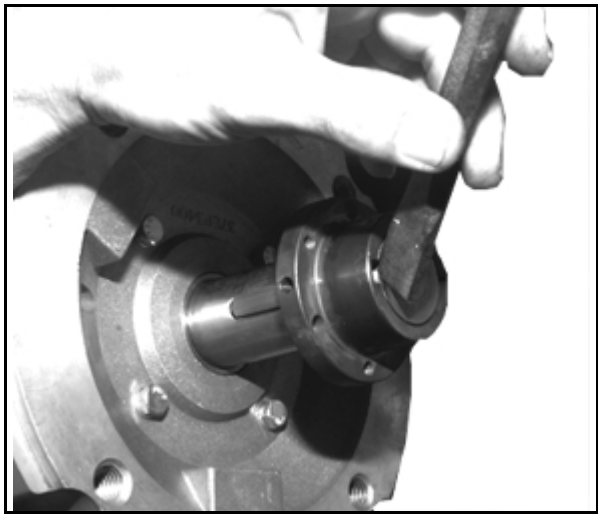


Figure 6: Fitting motor sprocket to bushing

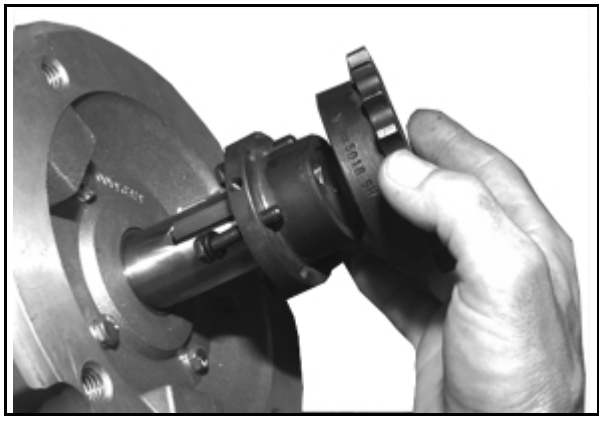


Figure 7: Tightening the motor sprocket

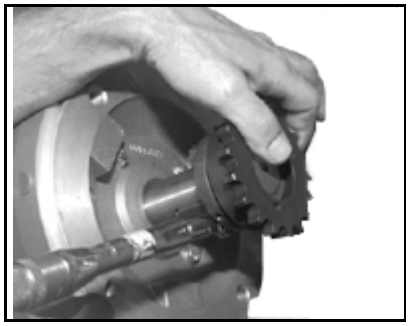


Figure 8: Positioning the gear reducer sprocket

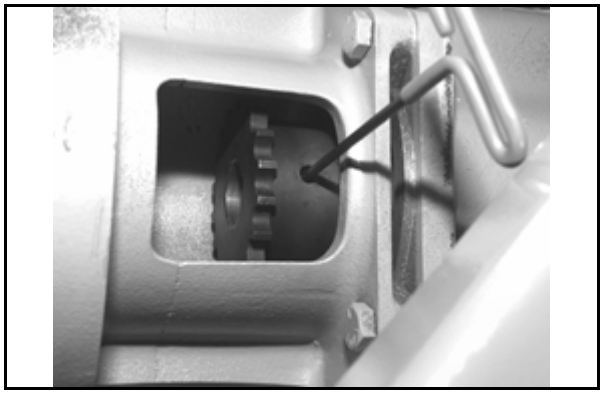


Figure 9: Sliding motor into gear reducer

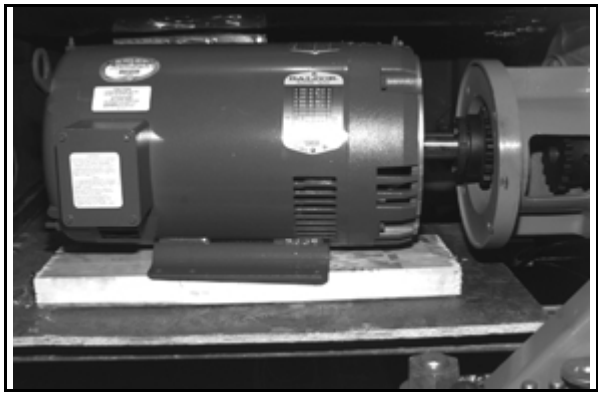


Figure 10: Attaching wire wrap leader to drive chain for threading

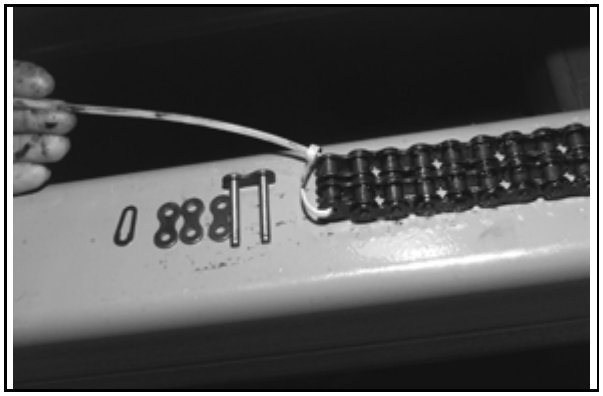


Figure 11: Starting chain into sprockets

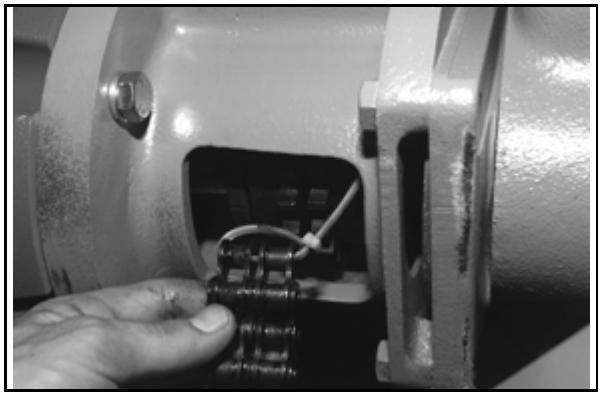


Figure 12: Feeding chain through sprockets

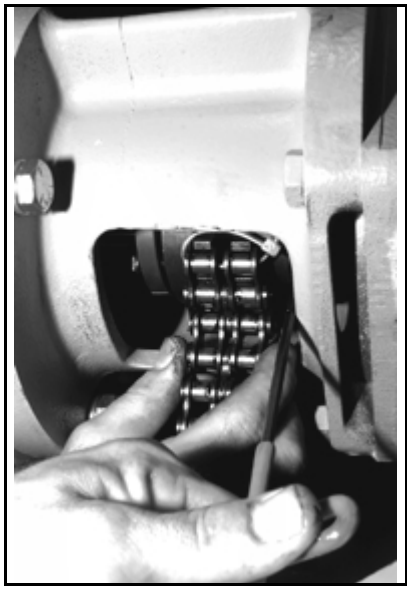


Figure 13: Double drive chain seated on sprockets

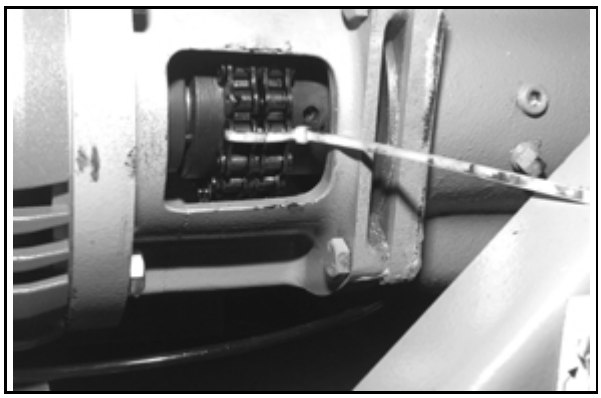


Figure 14: Partially installed master link

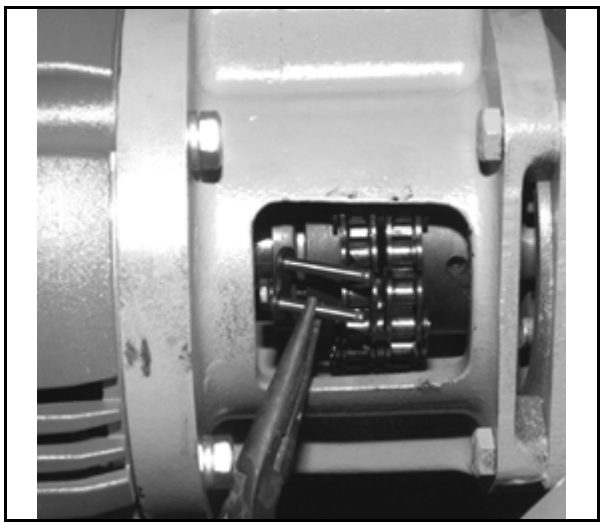


Figure 15: Installing center plates

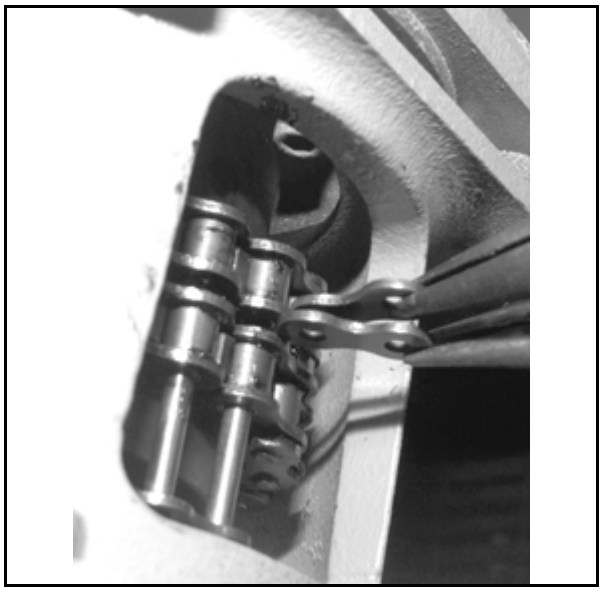
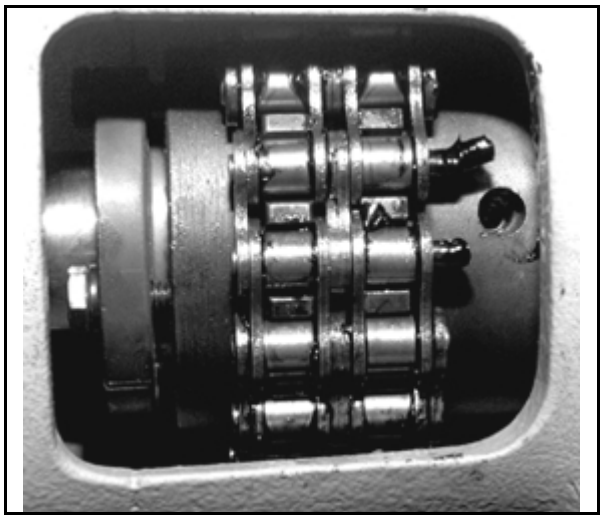


Figure 16: Center plates in position



— End of BIPCLM01 —

BIPCLM02 (Published) Book specs- Dates: 20020430 / 20020430 / 20020501 Lang: ENG01 Applic: PCL

Drive Train Service

This document covers two major areas of drive train service: drive chain adjustment and support roller replacement.

1. Drive Chains

Each section is equipped with roller chains which operate outside the wet area of the machine. If properly maintained, chains will have a long life in continuous use. Check chains periodically for proper chain tension and lubrication as called for in the preventive maintenance checklist.

As the tunnel reverses, one half of the chain tightens, while the other half goes slack. A pair of chain tensioners are fitted to each chain to keep slack at a minimum during reversals (Figure 2). All chain measurements are taken from the slack side. An Oiler and Drive Test Panel (Figure 1, located on the electric box door under the load chute), is provided with a switch that allows manual actuation of the drive motors, so slack can be measured at each tensioner in turn.

The key switch on this panel allows the chain oiler to be checked and adjusted. See “ABOUT THE OIL MIST SYSTEM...MSSMD401BE” in the Table of Contents for additional information.

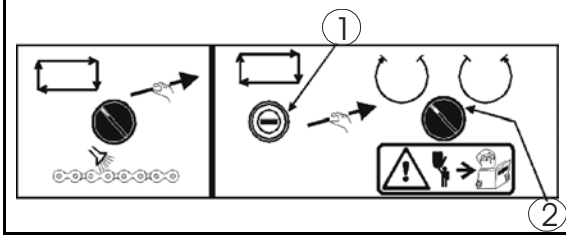
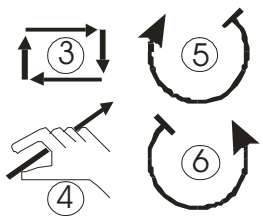
> **Note 1:** All chains must have the same amount of tension. If a chain is tighter than an adjacent chain, it will drive the adjacent cylinder and could lead to premature failure of chains, support rollers, or gear reducers.

1.1. Preparations for Testing Chain Tension

WARNING 1: Crush and Entrap Hazards—Guards, covers, and panels—Operating the machine with any guard, cover, or panel removed exposes moving components.

- Lock out and tag out power at the main machine disconnect before reaching into the cylinder.

Figure 1: Manual Chain Controls

Oiler and Drive Test Panel	Symbol Key	Legend
		**1.** Key switch **2.** Jog switch **3.** Automatic operation **4.** Test position **5.** Clockwise rotation **6.** Counterclockwise rotation

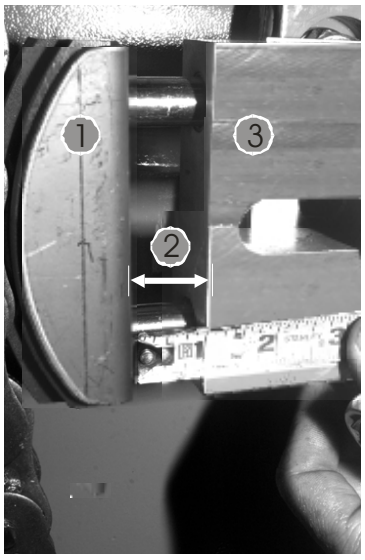
1.2. Chain Tension Testing Procedure—Follow instructions carefully to prevent the tunnel washer from starting while testing or adjusting chain tension. At the Mentor™ console, provide power to the drive test system by turning console power ON and tunnel power ON. Do not start rotation.

1. At the Oiler and Drive Test Panel, disable Mentor control of the drive motors and prevent inadvertent manual drive motor actuation as follows:
2. Turn key switch to the position. This disables the drive motor contactors, preventing personnel from starting the machine from the Mentor™ console during testing or adjustment.
3. Turn the rotation switch momentarily to the position.
4. Lock out and tag out power at the wall disconnect.

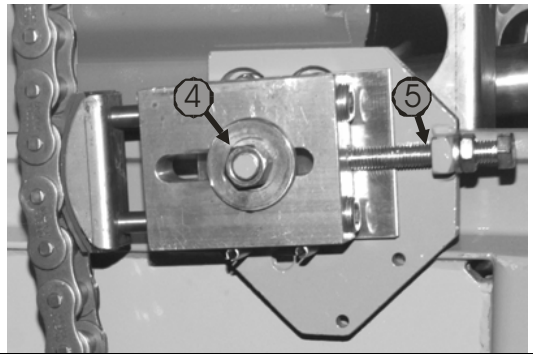
5. Measure the distance between the chain guide and the chain guide housing at the slack side of the chain (Figure 2). This span should measure 3/4" (19) - 1" (25).
6. Restore power to machine.
7. Turn the rotation switch momentarily to the ↻ position.
8. Repeat steps 4 and 5 above.
9. If both measurements are between 3/4" (19) - 1" (25):
   - Chain tension is within specifications.
   - Check chain oiler nozzle function and aim. See “ABOUT THE OIL MIST SYSTEM.”
10. If one (or both) measurements are greater than 3/4" (19) - 1" (25):
   - Chain tension is not within specifications.
   - See “Adjusting Chain Tension” below.

Figure 2: Chain Tensioner Assembly

Measuring the distance between chain guide and housing



Tensioner Fastener and Adjusting Bolt



Legend

1. Chain guide
2. 3/4" (19) - 1" (25)
3. Chain guide housing
4. Chain tensioner nut
5. Adjustment bolt

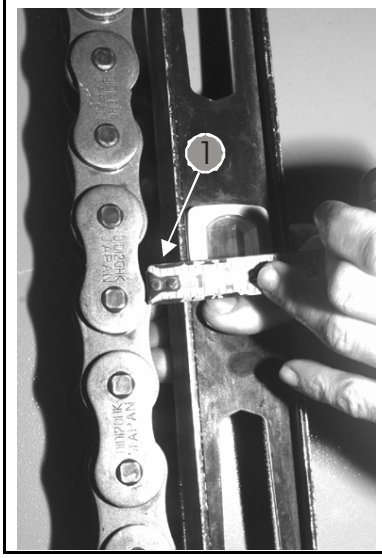
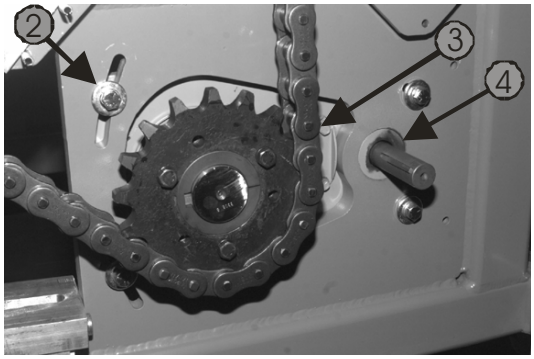
2. Adjusting Chain Tension

After determining that chain slack exceeds specifications:

1. Lock out and tag out power at the wall disconnect.
2. Loosen the chain tensioner nuts, back out the adjusting bolts and slide both tensioners away from chain (Figure 2).
3. Remove coupling flange bolts (Figure 4).
4. Loosen the four gear reducer mounting bolts (Figure 3). This frees the gear reducer to pivot about the coupling shaft.
5. Insert a lever between the coupling and sprocket shaft (Figure 3). Carefully pry between these shafts to adjust chain slack to between 3/4" (19) - 1" (25).
6. Temporarily tighten one of the gear reducer mounting bolts to hold the reducer in place.

7. Recheck chain tension, then tighten the rest of the gear reducer mounting bolts.
8. Locate the Top Dead Center bolt on the large cylinder sprocket (Figure 5). This is the only cap head bolt on the sprocket and is usually installed under a target.
9. Rotate cylinder as necessary to align the Top Dead Center bolt with the Top Dead Center bolt on the adjacent sprocket. If adjusting an end chain in an multi-section unit, align the Top Dead Center bolt on the other end of the unit with the Top Dead Center bolt on the adjacent unit.
10. Reinstall flange coupling bolts (Figure 4).
11. Reinstall chain tensioners. Set guide-to-housing clearance for 3/4"-1" (Figure 2).

Figure 3: Checking Chain Tension

Checking chain tension using a 48" level	Gear reducer mounting bolts
	

Legend

1. 3/4" (19) - 1" (25) slack
2. Gear reducer mounting bolt (4 locations)
3. Sprocket shaft
4. Coupling shaft

Figure 4: Coupling Flange Bolts

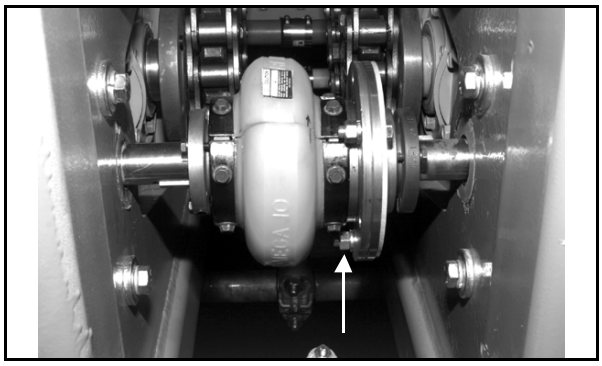
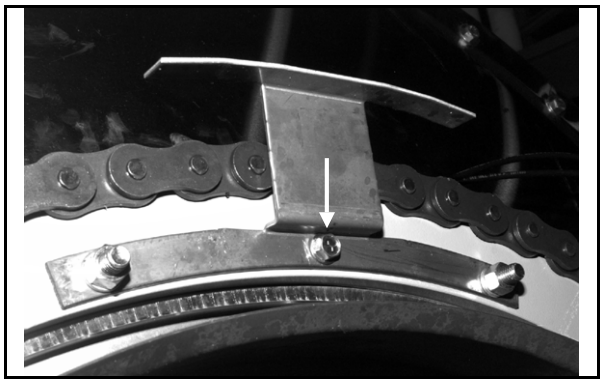


Figure 5: Top Dead Center Bolt



3. Replacing a Support Roller Assembly

Note 2: Support roller assemblies weigh approximately 110 pounds (43 Kg). Use at least two technicians and/or suitable lifting aids (forklifts or chain hoists) to lift and install assemblies.

The support roller assemblies on every batch washer are factory set for correct alignment and weight distribution. With proper lubrication, these components should provide long service life under continuous use. The following procedure requires at least two technicians and/or suitable lifting aids (forklifts or chain hoists) to remove and install assembly. To replace support roller assembly:

1. Loosen the drive chain (see “Adjusting Chain Tension”).
2. Remove drip tray and drain. Use a hydraulic jack under the cylinder (shown in Figure 6) and raise the cylinder until it is suspended just above the rollers. The rollers should turn freely.
3. Remove the grease fitting attached to the center of the roller and secure it out of the way.
4. Remove the clamp-to-rail fasteners (Figure 6).
5. After taking appropriate weight precautions, slide assembly off the rail.
6. Remove clamp-to-plate fasteners from the old support roller plate after carefully noting the number of alignment flat washers used between the clamps and each side of the support roller plate (Figure 6). These alignment flat washers determine where the wheel tracks on the cylinder and must be reinstalled exactly as removed. See “Support Roller Assembly...BMP000030,” in this manual, for additional information.
7. Install the grease fitting on the roller. Slowly lower the cylinder and remove the jack. Check that the cylinder makes contact with the roller.
8. Tighten chain to specifications (see “Adjusting Chain Tension”).
9. After installation is complete, run the batch washer and observe the rollers as the cylinder rotates (Figure 7). The rollers should not rub the sides of the support track, the shell front, or drip tray. If rubbing occurs, then add or subtract alignment flat washers between the clamps and wheel support plate, as necessary.
10. It is not necessary to lubricate the new support rollers after installation. They were pre-lubricated at the factory. However, after one week of operation they should be re-lubricated as explained in “PREVENTIVE MAINTENANCE FOR CONTINUOUS BATCH WASHERS.” Check all bolts for tightness.

Figure 6: Support Roller Assembly Installation

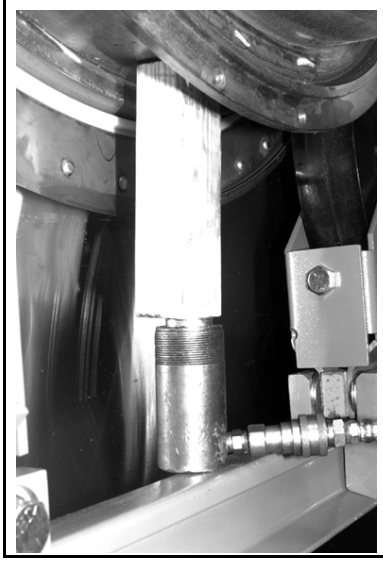
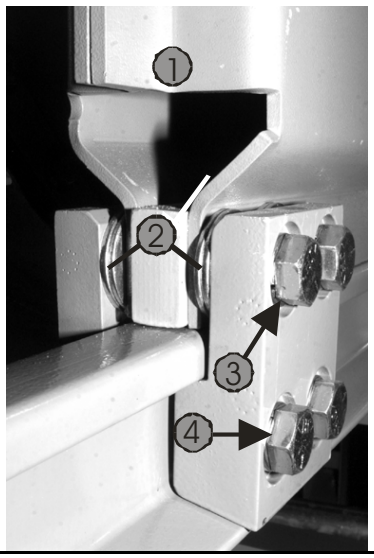
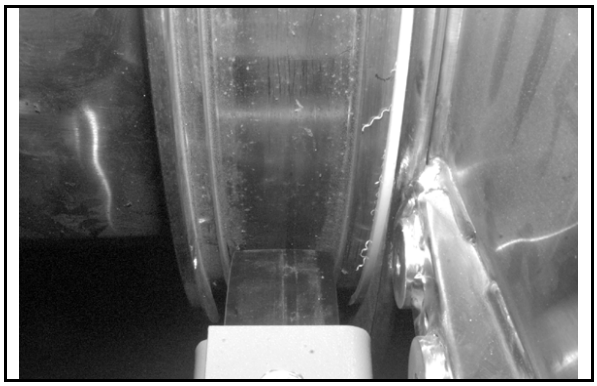
Jacking up cylinder	Support roller flat washers and clamp bolts	Legend
		**1.** Support roller plate **2.** Alignment flat washer **3.** Clamp-to-plate fasteners **4.** Clamp-to-rail fasteners

Figure 7: Support Wheel Tracking



— End of BIPCLM02 —

Proximity Switch & Target Settings

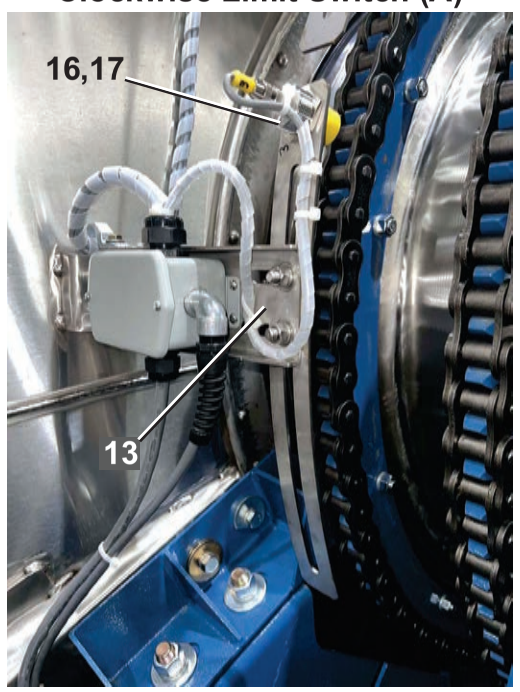
76028 & 76039 G3 Tunnels

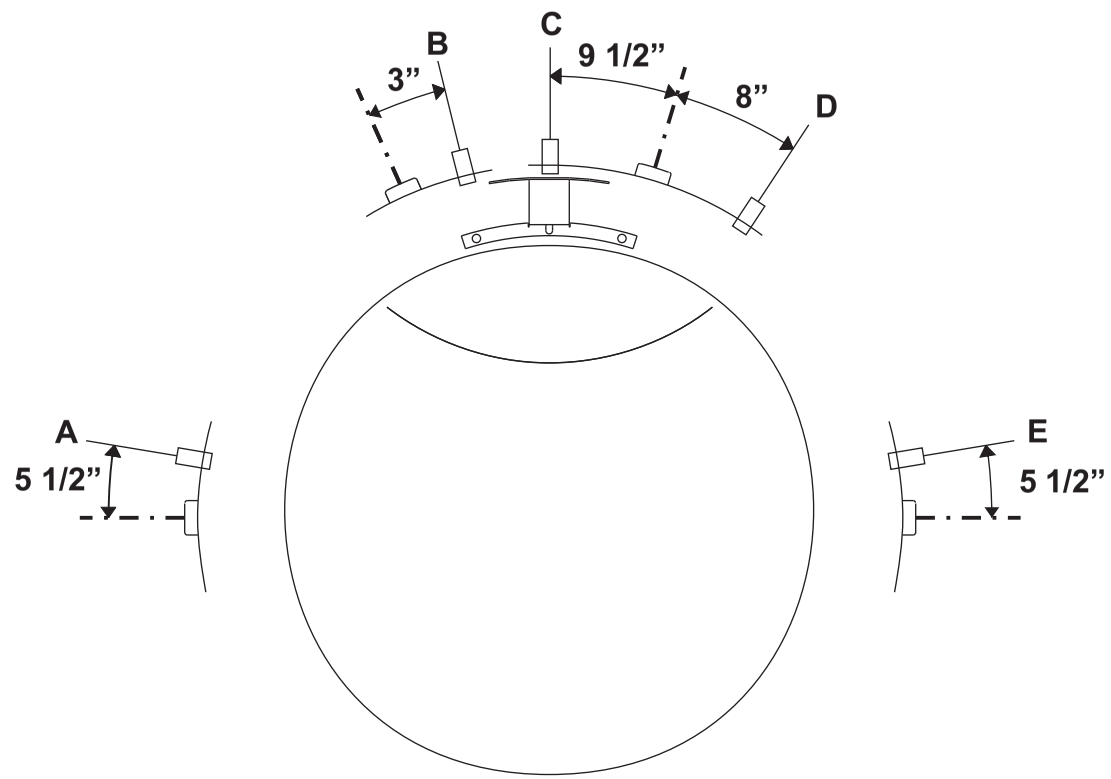
Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Safety Limit Switch (B)

Clockwise Limit Switch (A)





Proximity Switch Settings:

All of the switch settings above reference the center line of their shell bracket. The shell bracket is welded to the shell. The holding bracket is bolted to the shell bracket and holds the proximity switch adjustment bracket.

A) Clockwise Limit Switch is set approximately 5-1/2” above the center line of the bracket.

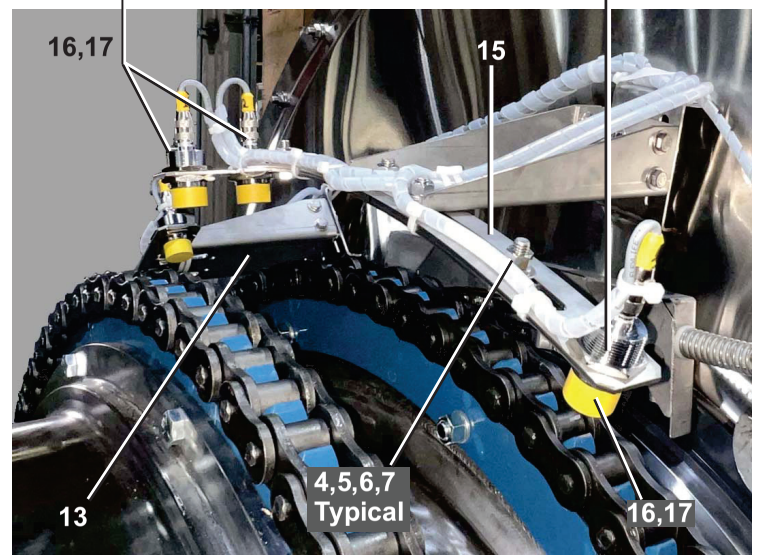
B) Safety Switch is 3-1/2" above the center line of the bracket.

C) Alignment Proximity Switches are 9-1/2” to the left of the center of the bracket.

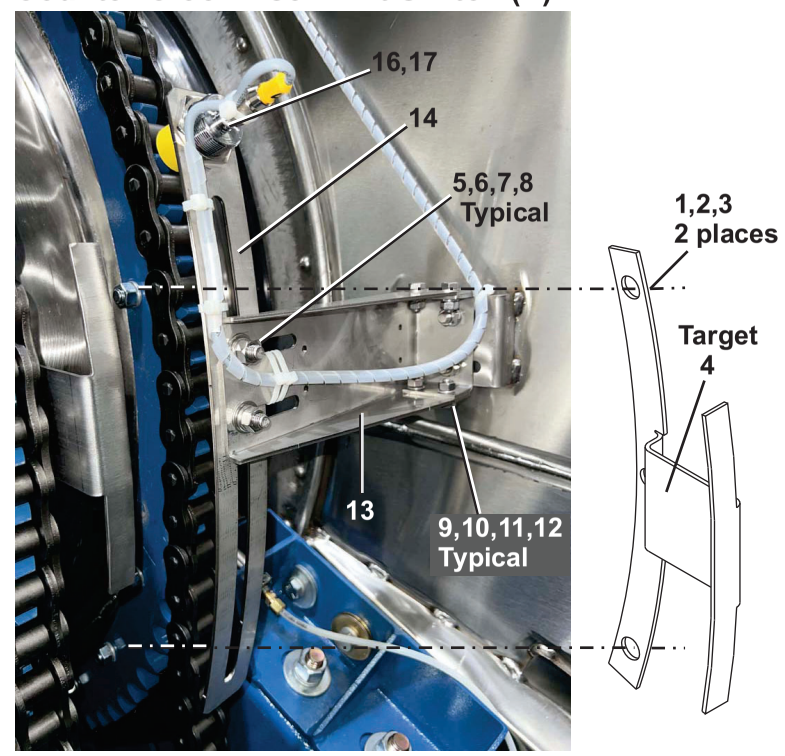
D) Top-Dead-Center Switch is 8" to the right of the bracket.

E) Counter Clockwise Limit Switch is set approximately 5-1/2” above the centerline of the bracket.

Alignment Proximity Switches (C) **Top-Dead-Center Limit Switches (C)**



Counter-Clockwise Limit Switch (E)



Proximity Switch & Target Settings

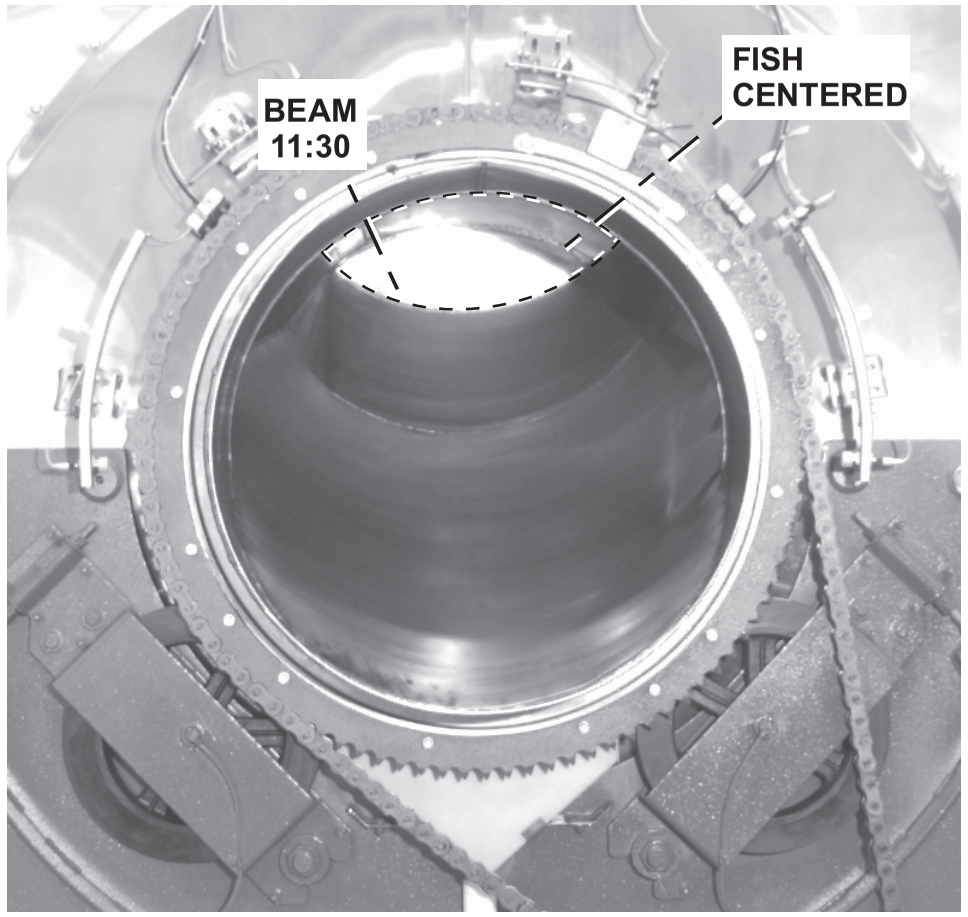
76028 & 76039 G3 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

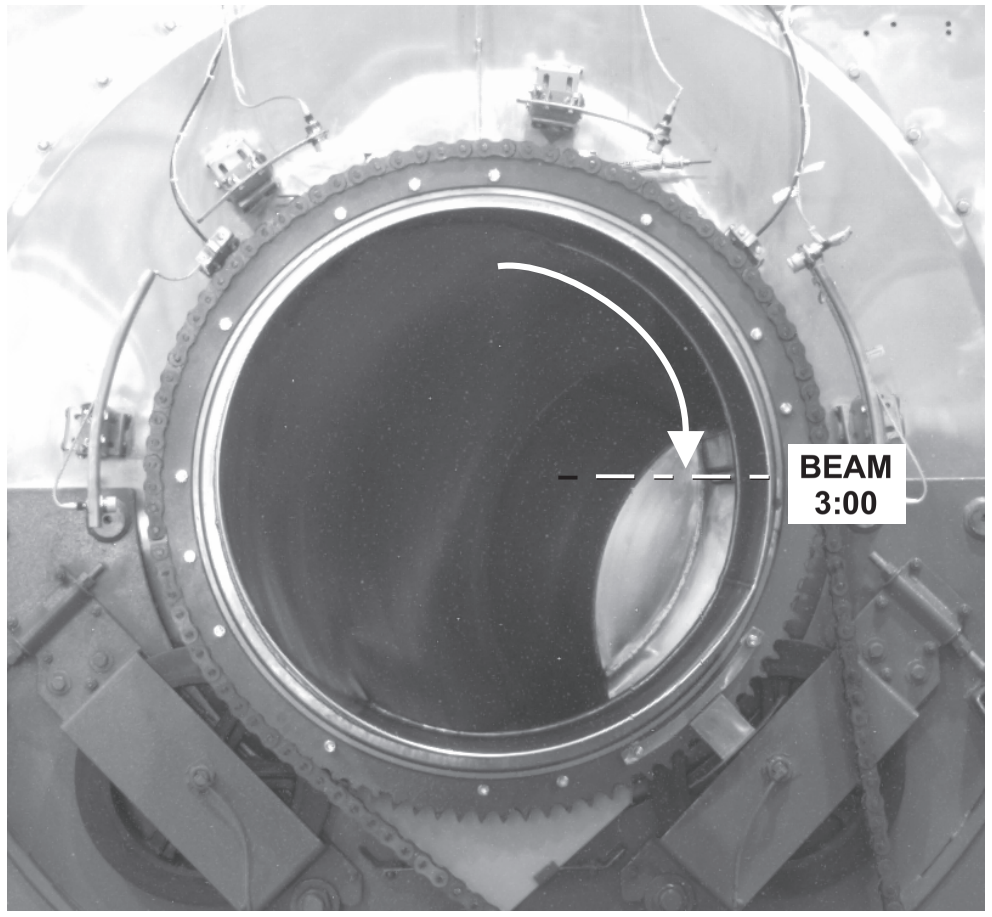
Litho in U.S.A.

ALL POSITIONS ARE VIEWED FROM REAR (DISCHARGE END)

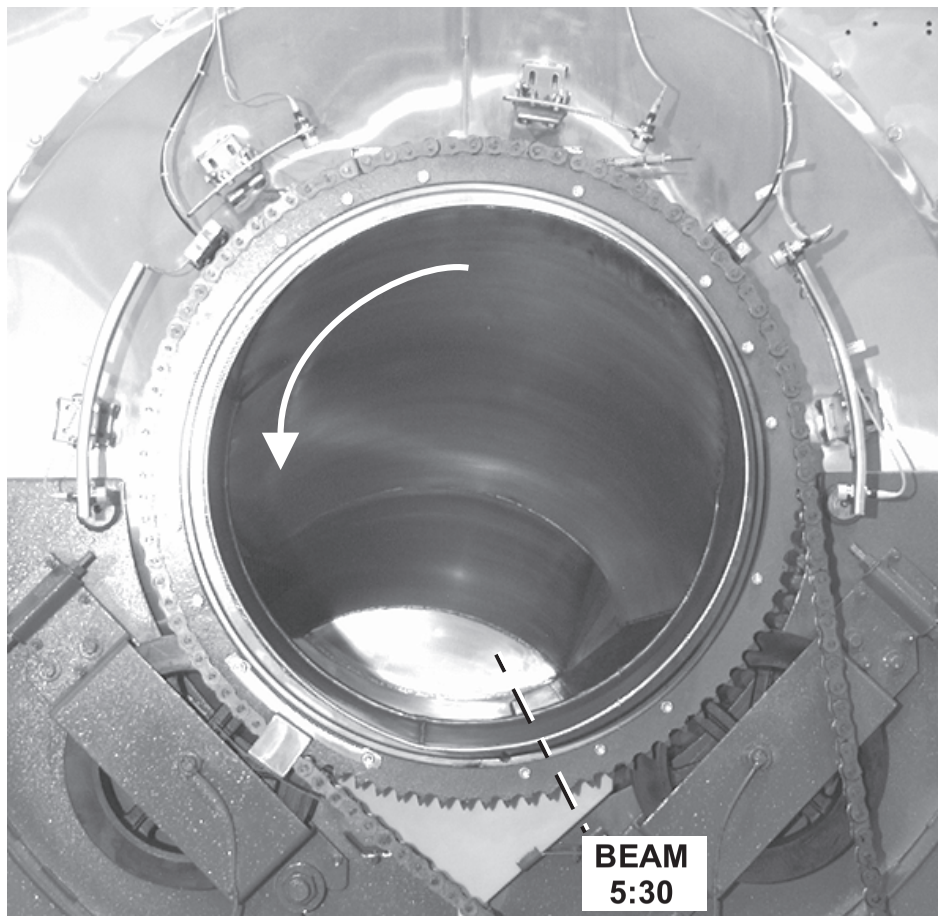
(NOTE: PHOTOS OF G2 WELDED TUNNEL, NOT G3 TUNNEL)



TOP DEAD CENTER
(11:30 POSITION)



MAXIMUM COUNTERCLOCKWISE ROTATION
(3:00 POSITION)



MAXIMUM CLOCKWISE ROTATION
(5:30 POSITION)

Proximity Switch & Target Settings

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Proximity Switch & Target Installation

Used In	Item	Part Number	Description	Comments
----------REFERENCE ASSEMBLIES----------				
	A	G64PS002	PROX SW&TARGET INST EXIT G2	
	B	G64PS003	ALIGNMENT SWITCH INST 1ST SECT	
	C	G64PS003A	ALIGNMENT SWITCH INST MIDSECT	
----------COMPONENTS----------				
all	1	15K173A	HXCAPSCR 1/2-13UNC2AX1.75 GR5	
all	2	15U300	LOKWASHER REGULAR 1/2 ZINC PLT	
all	3	15G230	HXNUT 1/2-13UNC2B SAE ZINC GR2	
all	4	06 20619	TARGET:ENTRY&EXIT PROX SW II	
all	5	15K095	HXCPSCR 3/8-16UNC2AX1 GR5 ZINC	
all	6	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	7	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	8	15U245	FLTWASH 3/8 STD COMM 18-8 SS	
all	9	15K055	SOKCAPSCR 5/16-18X3/4 SS18-8	
all	10	15G186	HEXNUT 5/16-18UNC2 SS18-8	
all	11	15U200S	FLATWASHER US STD 5/16 SS18-8	
all	12	15U205	LOCKWASHER MEDIUM 5/16" 18-8SS	
all	13	06 40149	PROX SWITCH LATERAL ADJUSTER	
all	14	06 20644	PROX SW MTG RING-EXIT END	
all	15	06 20644A	PROX SW BRKT=TIMING	
all	16	09RPS30ADU	PRXSW.QK CONN.30M NO-DC UNSHLD	
all	17	09RPSDC003	CONN.STR FEMALE DC 3A 300V 3M RK4T-3 -	

SETTING ROTATION LIMIT SWITCH POSITIONS ON 76028 AND 76039 TUNNEL WASHERS

Four limit switches control tunnel cylinder rotation angle and additional switches monitor the rotational alignment of adjoining tunnel units. Slotted switch mounting brackets permit adjusting the angular position of each switch. However, fixed switch locations have been established for the models covered by this instruction and it is merely necessary to assure that the switches are located at these positions. These models use an inverter with a controlled deceleration time, which substantially eliminates variations in cylinder coast times due to varing load sizes and other factors.

⚠ DANGER ⚠

ENTANGLE AND SEVER HAZARDS—Contact with moving components normally isolated by guards, covers, and panels, can entangle and crush your limbs. These components move automatically. Even with power off, the tunnel cylinder can rotate by gravity.

- ☞ **Do not service machine unless qualified and authorized.**
- ☞ **Lock off and tag out power at the main machine disconnect before servicing.**
- ☞ **Immobilize the cylinder (see MSSM0921AE in the reference manual).**

NOTE: These switches have the same angular relationship as those on 76032 tunnel models (covered by MSSMD410AE). All models share the same rotation control circuitry.

When Switch Positions Must be Checked—Switches are properly positioned at the factory and should not need to be adjusted in the field unless symptoms indicate an improper rotation angle. Symptoms include portions of separate loads becoming intermixed in the tunnel and/or a large volume of water splashing out of the discharge end during transfer. Verify that switches are located in the positions specified herein. If resetting the switch positions does not correct the problem, contact the factory.

Switch Function and Identification—On these models, all four rotation-control switches and one alignment-monitoring switch are operated by the same target. Each additional alignment switch has its own target. The *clockwise limit switch* (RPX1) and *counterclockwise limit switch* (RPX2) control the angle of rotation of the cylinders during reversals. The *transfer limit switch* (RPX4) controls the angle of rotation during transfer. The *safety limit switch* (RPX3) is a backup to the *transfer limit switch*. Should the Miltron controller detect any of these switches operating out of sequence, it will immediately stop tunnel rotation and display an error message.

Additional limit switches (one per tunnel unit) are furnished on these models to ensure all units are turning synchronously. Two of these switches (RPX5 and RPX6) are installed at the same location (between the same two units) as the rotational limit switches. One additional switch is installed at every other location where units mate together. Since the alignment switches function in series, all such switches (and their targets) must be located at the same angular position so that all inputs are made at the same time. Should the Miltron controller detect a misalignment between units, it will immediately stop tunnel rotation and display an error message.

FIGURE 1, next page, identifies all limit switches.

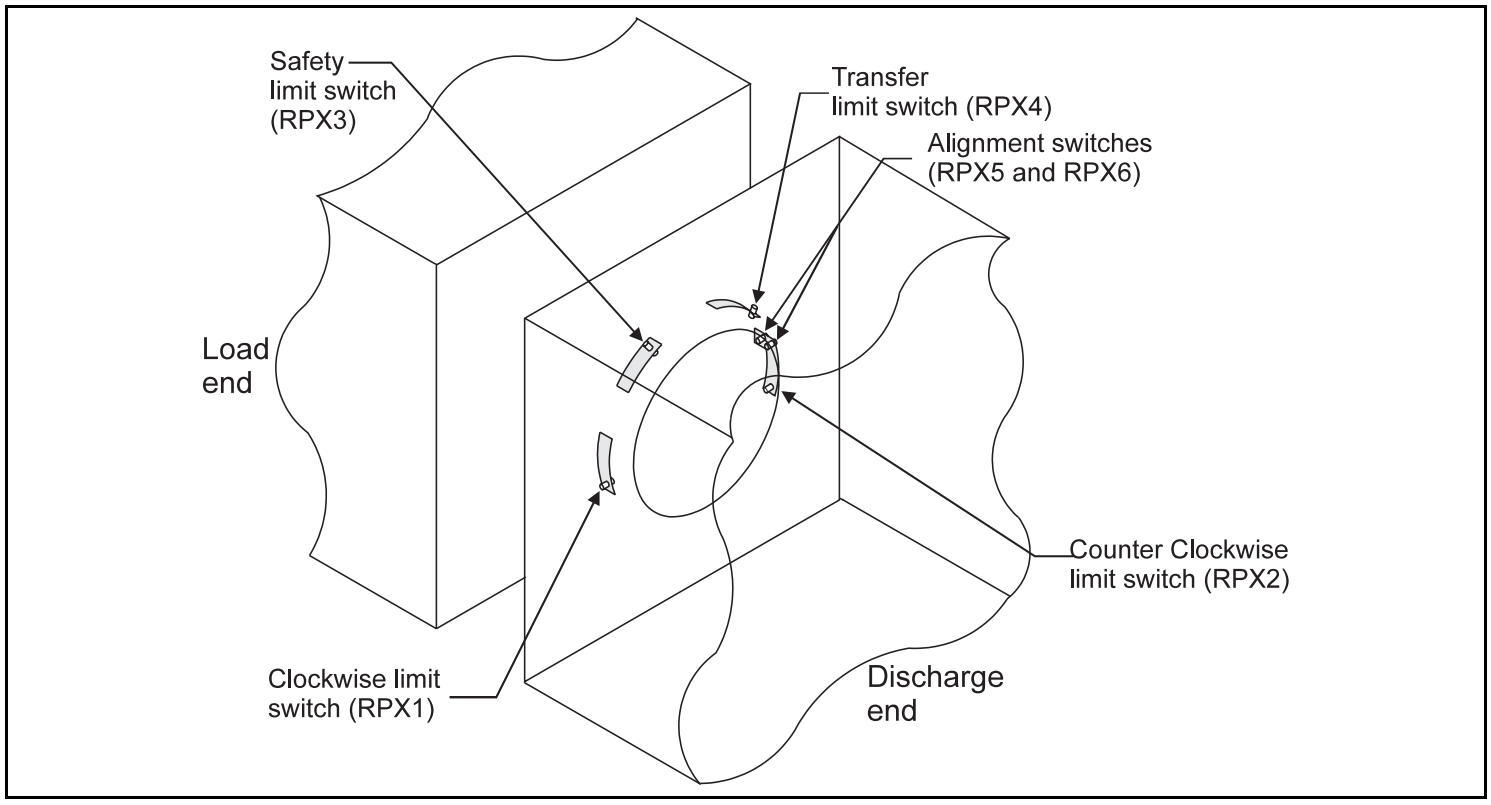


FIGURE 1 (MSSMD446AE)
Switch Locations

Adjusting Switch Positions

—Switches are mounted on slotted brackets. Move the slotted bracket on its support bracket to achieve the specified switch position, as shown in FIGURES 2 through 5. Make certain that switches, switch wires and brackets are secure and cannot become entangled when the cylinder is turning.

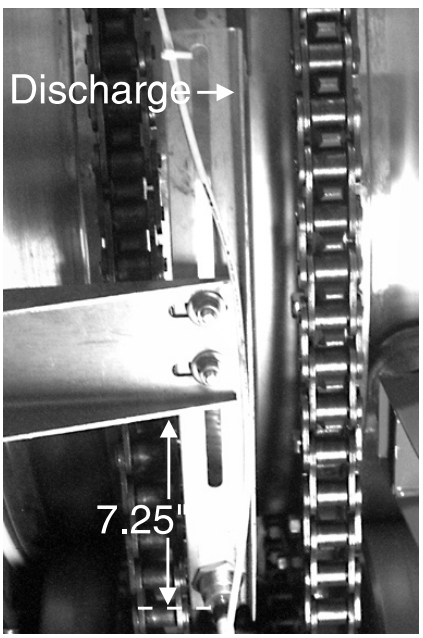


FIGURE 2 (MSSMD446AE)
Clockwise Limit Switch(RPX1)

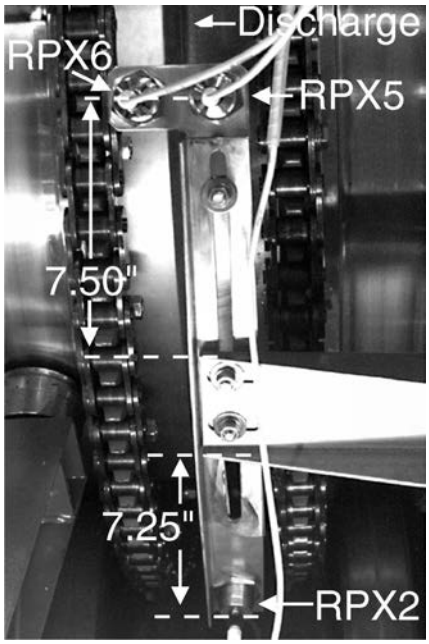


FIGURE 3 (MSSMD446AE)
Counterclockwise Limit Switch (RPX 2). Alignment Switches (RPX5 and RPX6)

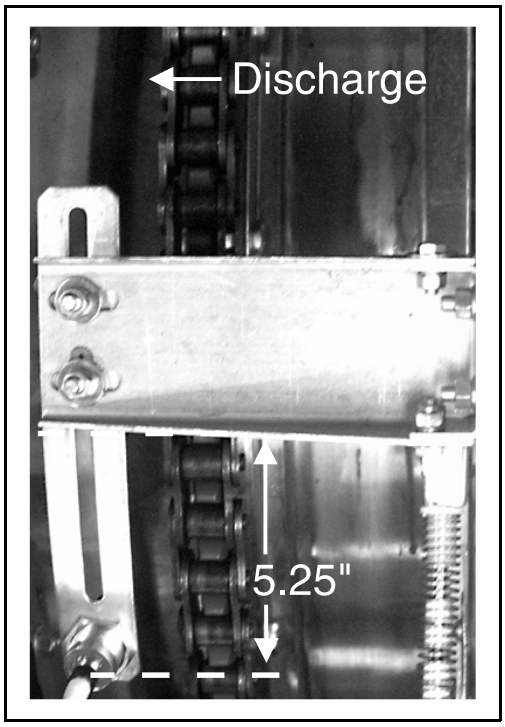


FIGURE 4 (MSSMD446AE)
Transfer Limit Switch (RPX4)

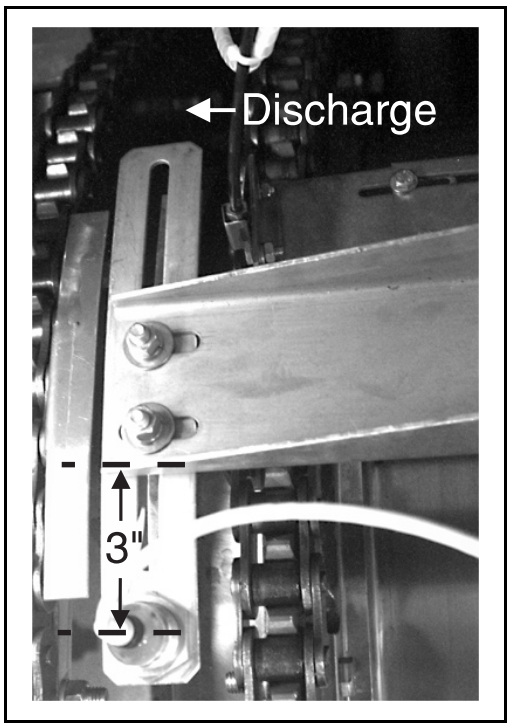


FIGURE 5 (MSSMD446AE)
Safety Limit Switch (RPX3)

3

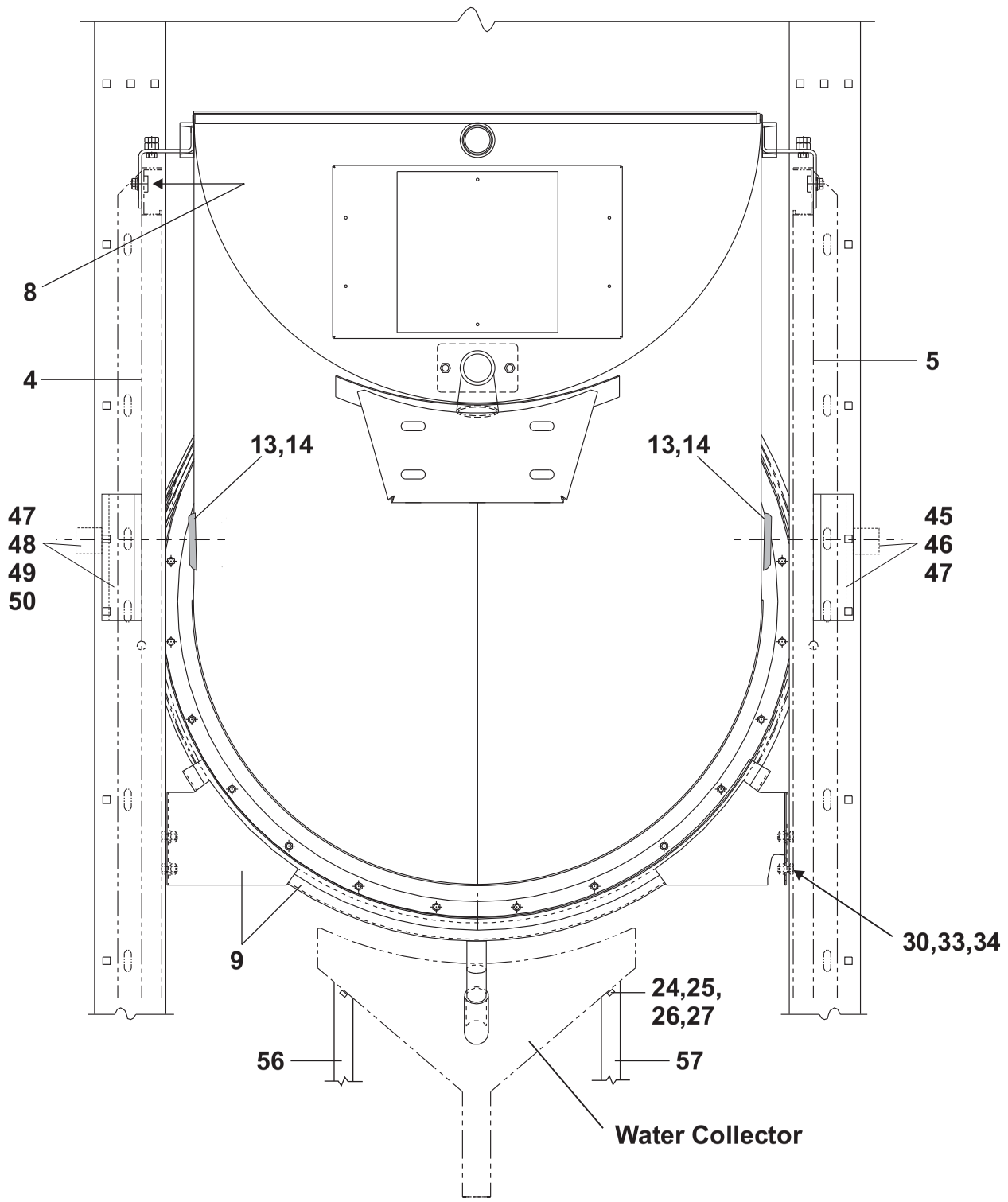
Load Chute and Seals 3.3

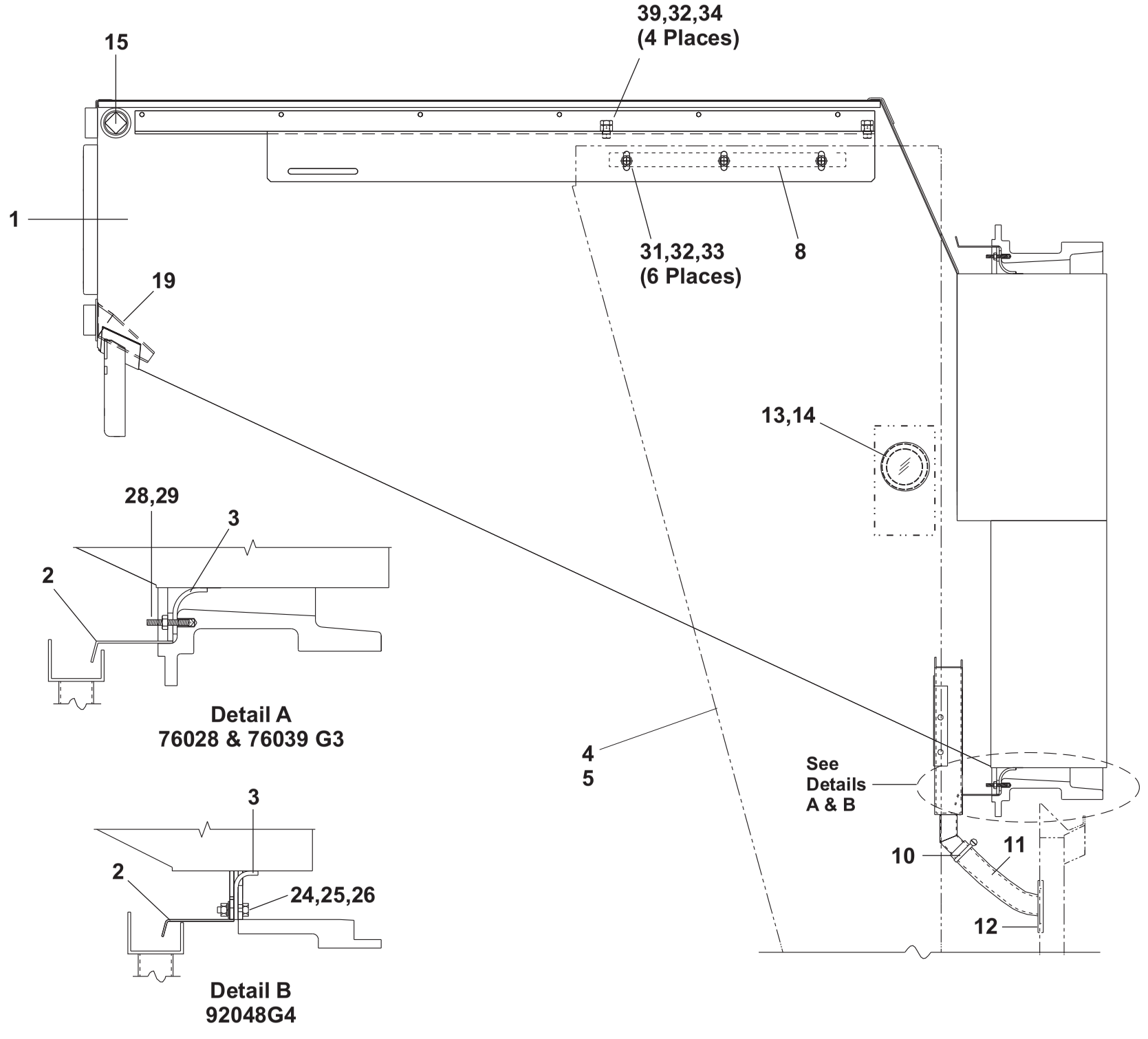
Load Chute and Seal Installation

76028G3, 76039G3, & 92048G4 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.





Detail A
76028 & 76039 G3

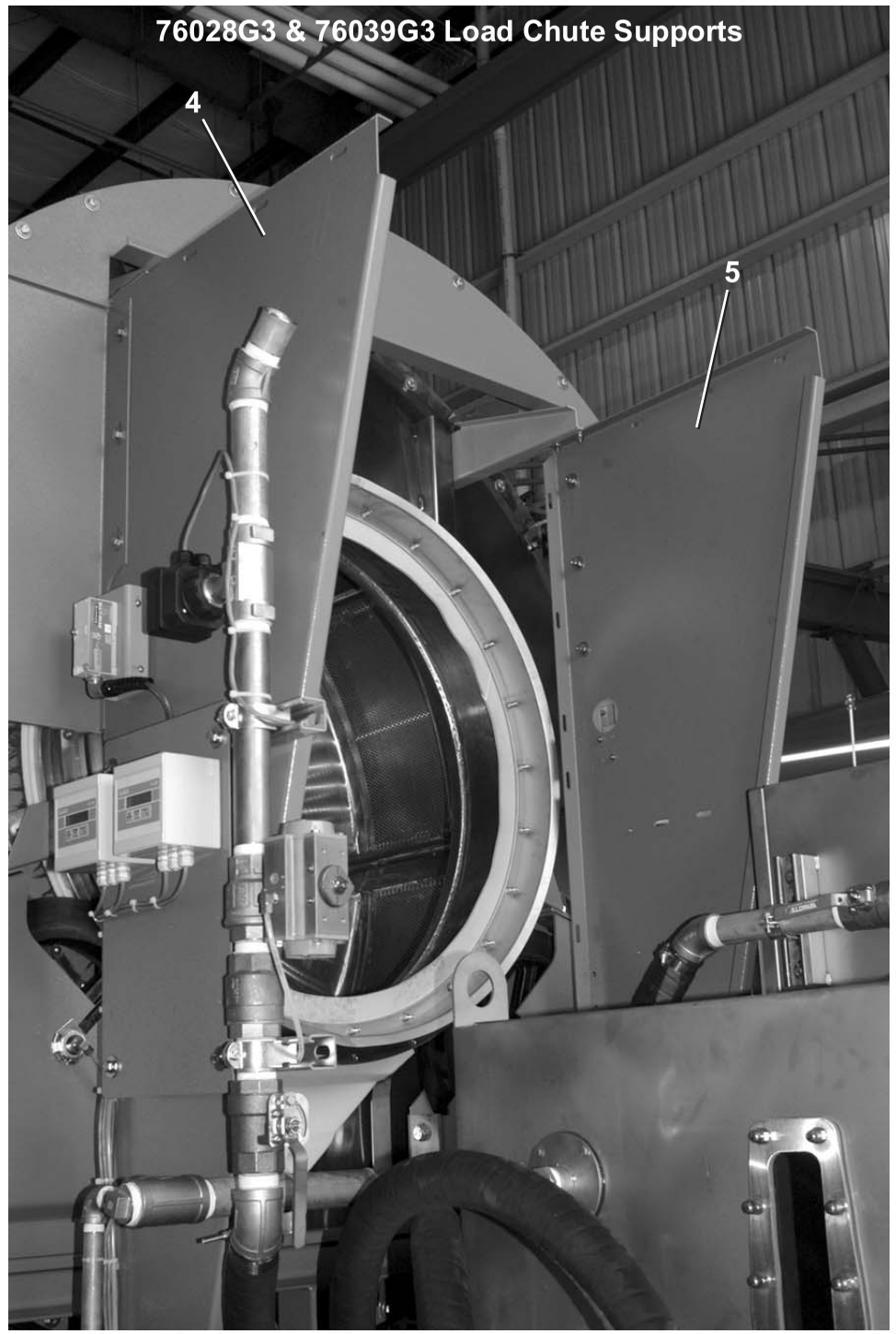
Detail B
92048G4

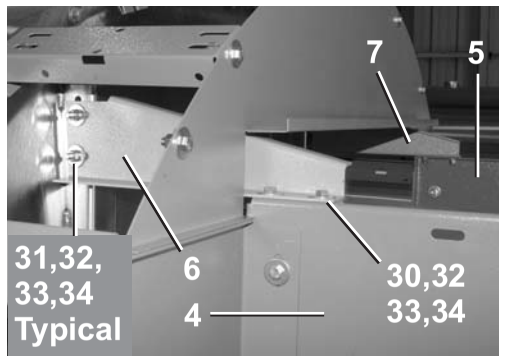
Load Chute and Seal Installation

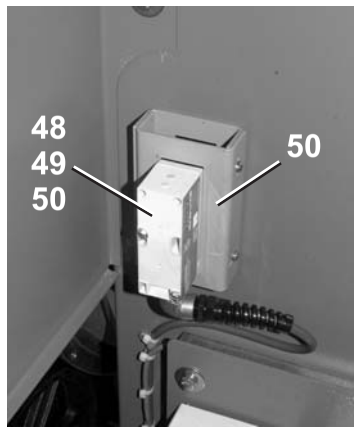
76028G3, 76039G3, & 92048G4 Tunnels

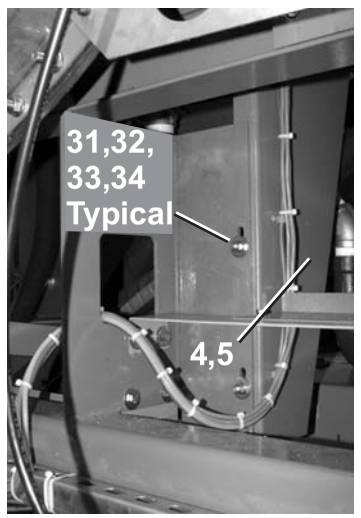
Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

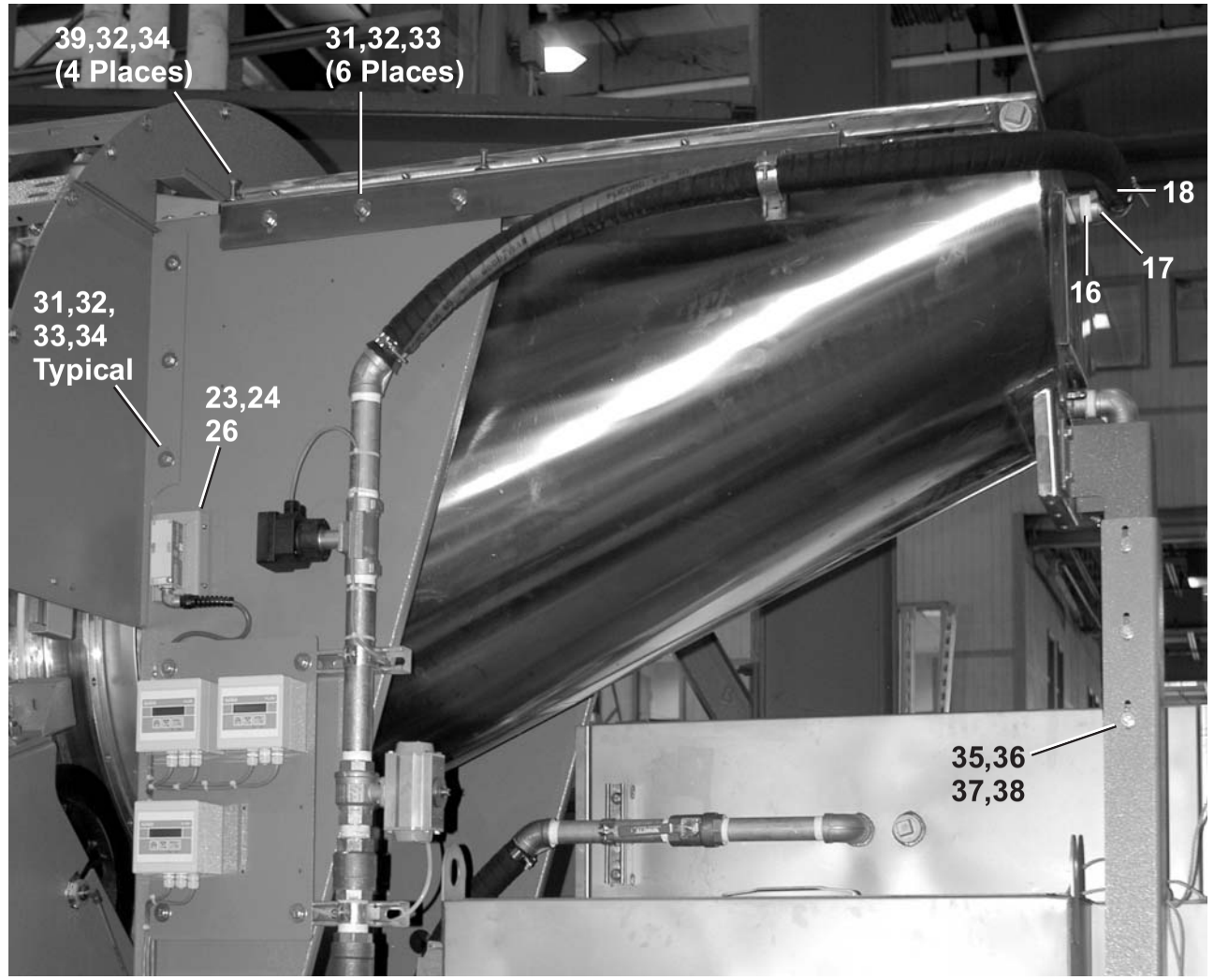
Litho in U.S.A.



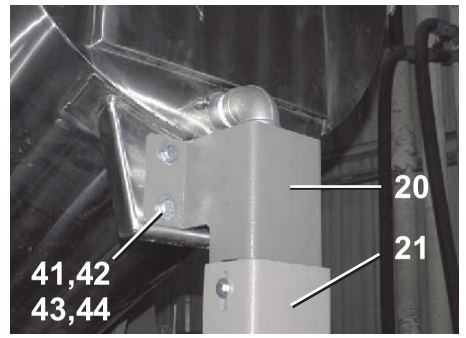








Typical Hardware Connections

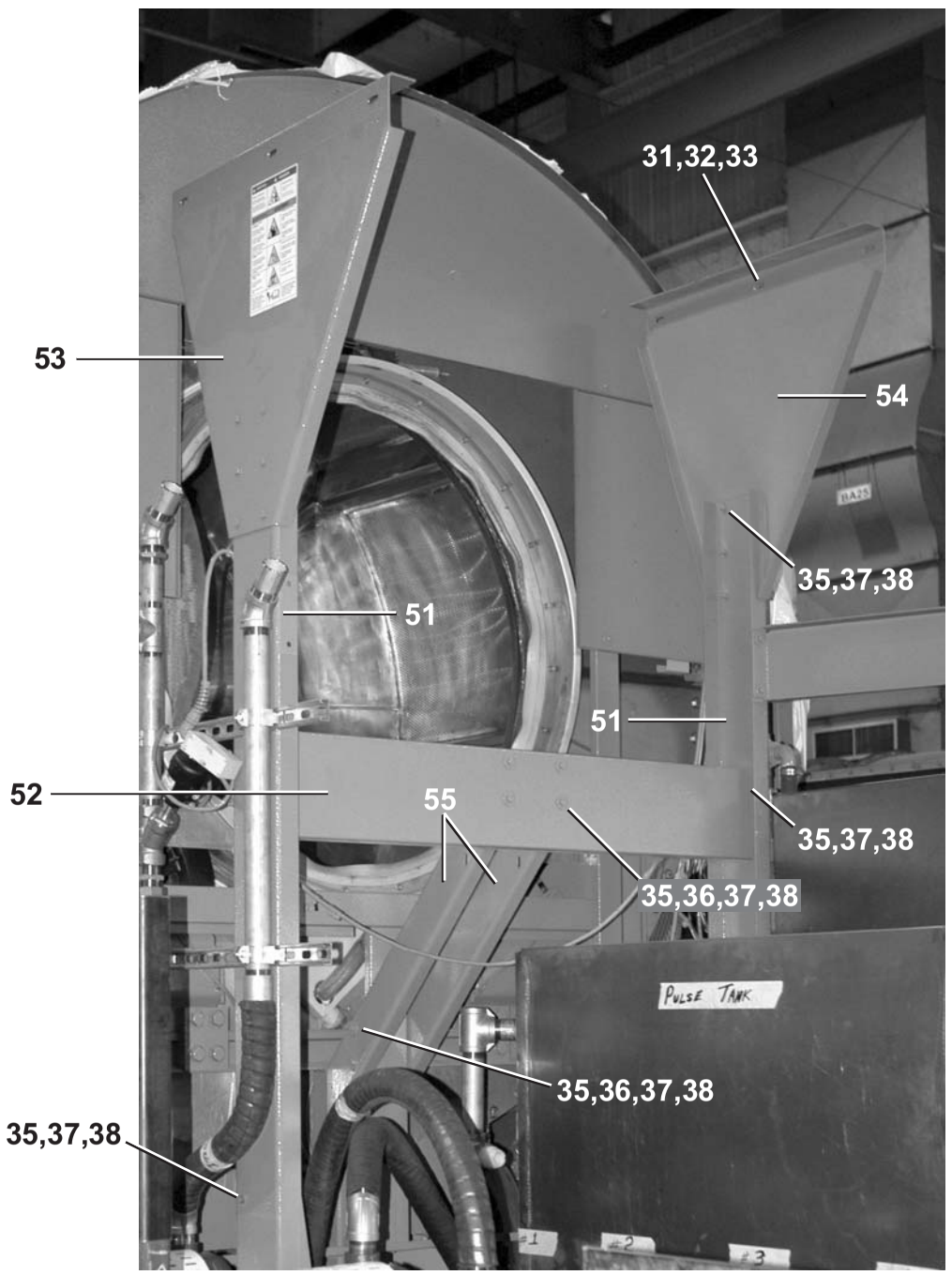


Load Chute and Seal Installation

76028G3, 76039G3, & 92048G4 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.



92048G4 Tunnel Load Chute Supports

Parts List—Load Chute and Seal Installation

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	G65GC002	LG-LD SCOOP/SEAL INSTALL=Y2KCB	76028G3, 76039G3
	B	GLC63001A	9248 W/PULSEFLOW LOAD CHUTE INSTALL	92048G4
			----------COMPONENTS----------	
A	1	W6 20731B	BAG LOAD CHUTE WLMT	
B	1	W6 30071B	9248 W/PULSEFLOW LOAD CHUTE WLMT	
A	2	W6 20732	*LG CHUTE FLARE-RING WLMT	
B	2	06 30112	9248 LOAD CHUTE FLARE RING	
A	3	06 20212U	LG CBW-LOAD CHUTE SEAL	
B	3	06 30088	LOAD CHUTE SEAL	
A	4	06 40132C	LOAD COS SCOOP SIDE LF G3	
A	5	06 40132D	LOAD COS SCOOP SIDE RT G3	
A	6	06 40132G	BRKT=LOAD SCOOP SUPPORT-LFT	
A	7	06 40132H	BRKT=LOAD SCOOP SUPPORT-RGT	
A	8	06 20316	TAP BAR LOAD FUNNEL 2/TUNNEL	
B	8	06 30089	LOAD CHUTE SUPT TAP BAR	
A	9	W6 40117E	G3 H20 CATCHER/CHAIN PROT WLT	
B	9	W6 30145	LOAD CHUTE H20 CATCHER WLMT	
all	10	27A060	HOSECLAMP1+5/16-2.25CADSC#HS28	
all	11	60E014R	TUBING NYLOBRAID 1.25X1.75	
all	12	60E010	TUBINGPOLYBRAID 1"X1.312	
all	13	06 20739	EXTRUSION GLASS PROXSW	
all	14	06 20739A	GLASS=3.06 DIA PROXSW	
all	15	5SP1EDESC	NPT PLUG 1.25 SQCORED GALV CI	
all	16	5N1ECLSG42	NPT NIP 1.25XCLS TBE GALSTLS40	
A	17	5SL1ENFA	NPT ELB 90DEG 1.25 GALMAL 150#	
B	17	5SL1KNFA1E	NPTELB 90D 1.5X1.25GALMAL 150#	
all	18	5N1E02KG41	NPT NIP 1.25X2.5 TOE GALSTL S4	
all	19	W6 70262	CBW LOAD CHUTE FLUSH PIPE	
A	20	06 70247	7639 PULSEFLOW CHUTE SUPPORT	
B	20	06 70249	9248 CHUTE SUPPORT W/PULSEFLOW	
A	21	06 70246	G3 LOADCHUTE SUPPORT BRKT	
B	21	06 70255	LOADCHUTE SUPPORT BRKT	

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Load Chute and Seal Installation

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

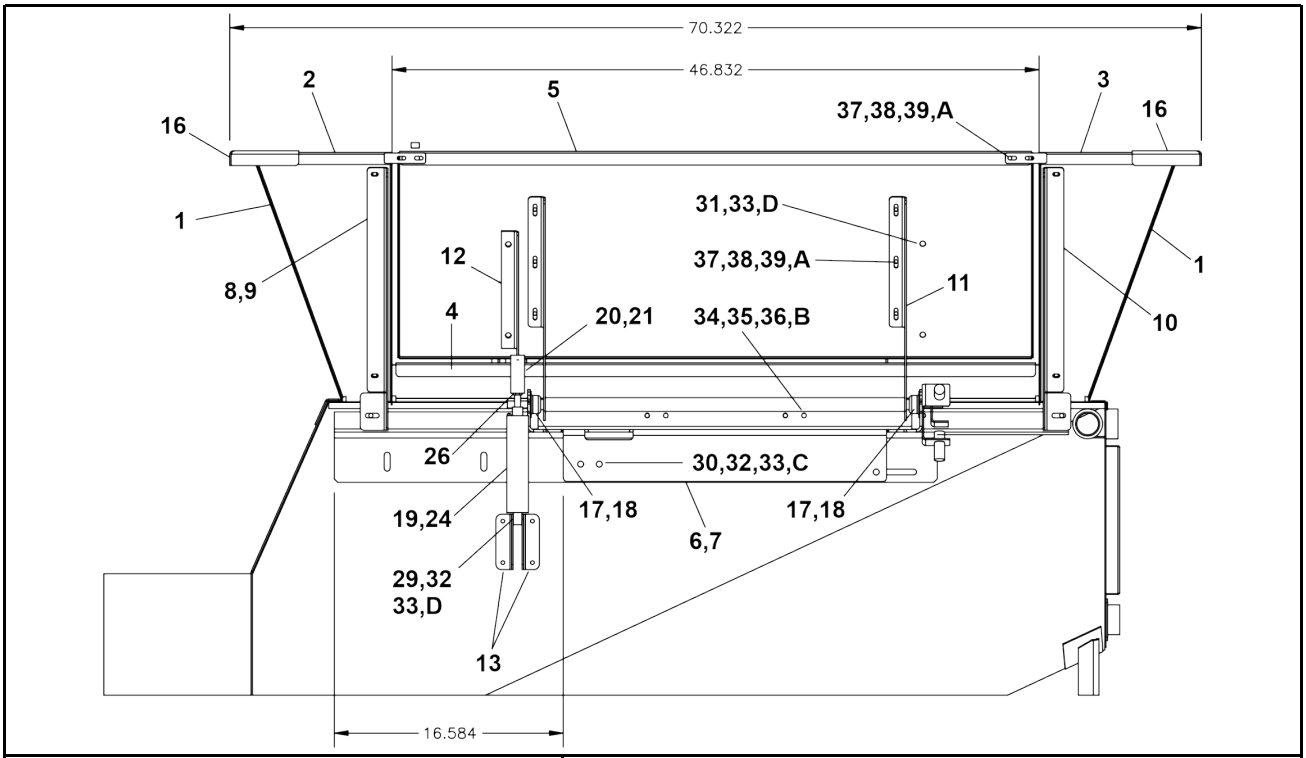
Used In	Item	Part Number	Description	Comments
all	22	06 20737	FLUSH COVER PLATE	
all	23	15N186	HXCAPSCR 1/4-20X3/4 SS18-8	
all	24	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	25	15U188	FLTWASH 1/4 STD COMM SS18-8	
all	26	15G170	HEXNUT 1/4-20UNC2 SS18-8	
all	27	15K033	BUTSOKCAPSCR 1/4-20X5/8 SS18-8	
all	28	15Q041	SOKSETSCR 5/16-18X1+3/4 SS18-8	
all	29	15G188	HEXLOKNUT 5/16-18 BRASS	
all	30	15K096	HEXCAPSCR 3/8-16UNC2X1SS18-8	
all	31	15K100	HEXCAPSCR 3/8-16X1+1/4 SS18-8	
all	32	15U245A	FLTWASH 25/64IDX1.25ODX3/32 S/	
all	33	15U260	LOCKWASHER MEDIUM 3/8 SS18-8	
all	34	15G206	HEXNUT 3/8-16 UNC2 SS 18-8	
all	35	15K105	HXCAPSCR 3/8-16UNC2A1.25 GR5 P	
all	36	15U240	FLATWASHER(USS STD) 3/8" ZNC P	
all	37	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	38	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	39	15K122A	HEXCAPSCREW 3/8-16X2.25 SS FT	
all	41	15K162	HXCAPSCR 1/2-13UNC2AX1.5 GR5 P	
all	42	15U280	FL+WASHER(USS STD)1/2 ZNC PL+D	
all	43	15U300	LOKWASHER REGULAR 1/2 ZINC PLT	
all	44	15G230	HXNUT 1/2-13UNC2B SAE ZINC GR2	
all	45	09RPE006A	PHOTOEYE EMITTER 24/120V AC	
all	46	09RPE007A	P.E. PWR.BLK. NO-OUT 120V-IN	
all	47	03 BC6X66	BRKT: CBW PHOTOEYE-LOAD SCP	
all	48	09RPE006B	PHOTOEYE RECEIVER 24/120V AC	
all	49	09RPE007B1	P.E. PWR.BLK. 120V-OUT 120V-IN	
all	50	09RPE006B2	PHOTOEYE ON/OFF LOGICMOD #LM3	
B	51	06 30079	LOAD CHUTE VERTICAL MOUNT	
B	52	06 30081	LD CHUTE HORZ BRACE	
B	53	06 30090	LD CHUTE TOP MOUNT BRKT LF	

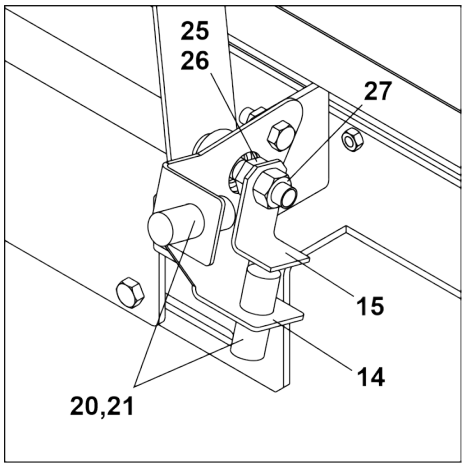
Parts List, cont.—Load Chute and Seal Installation

Used In	Item	Part Number	Description	Comments
B	54	06 30090A	LD CHUTE TOP MNT BRKT RT	
B	55	06 30169	LOAD CHUTE ANGLE SPPT BRKT	
.				

G3 Retractable Load Chute Option

76028 & 76039 G3 Tunnels





Legend

A . . . 44 instances
B . . . 20 instances
C . . . 12 instances
D . . . 8 instances
E . . . 2 instances

Table 1. Parts List—G3 Retractable Load Chute

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.				
Used In	**Item**	**Part Number**	**Description/Nomenclature**	**Comments**
Components				
all	1	04 20196	LDCHT FLAIRSIDE FR/BK-G3 SLING	
all	2	04 20197C	RETRACTABLE LDCHT-LF	
all	3	04 20197D	RETRACTABLE LDCHT-RT	

G3 Retractable Load Chute Option

76028 & 76039 G3 Tunnels

Parts List—G3 Retractable Load Chute (cont'd.)

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

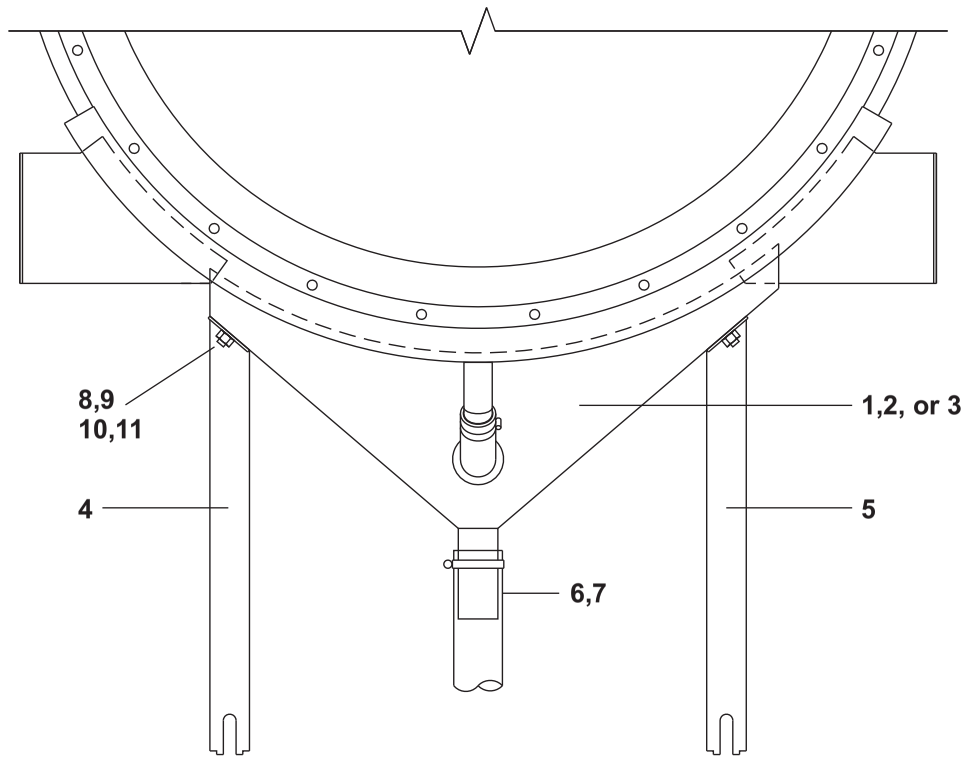
Used In	Item	Part Number	Description/Nomenclature	Comments
all	4	04 20197E	RETRACTABLE LDCHT-BOTTOM	
all	5	04 20197F	RETRACTABLE LDCHT-PANEL	
all	6	04 24203	RETRACTABLE LDCHT TILT BRKT-LT	
all	7	04 24203A	RETRACTABLE LDCHT TILT BRKT-RT	
all	8	04 20198B	RETRACTABLE LDCHT STFNR-LF	
all	9	04 20198C	RETRACTABLE LDCHT STFNR-RT	
all	10	04 24497	FOLDING DOOR STOP BAR	
all	11	W4 24202	RETRACTABLE LDCHT SHAFT WLMT	
all	12	04 24573	DOOR ACTUATOR-CBW CHUTE	
all	13	04 24201A	RETRACTABLE LDCHT AIRCYL BRKT	
all	14	04 24201C	PROX SWTCH BRKT	
all	15	04 24201D	PROX SWTCH TARGET	
all	16	04 24200	RETRACTABLE LDCHT CORNER COVER	
all	17	54E015BM	FLMTBRG 3/4"ALL BRZ T#FL7190.	
all	18	15U348	FLTWASH 101NYL 1.25"ODX.781"ID	
all	19	27C104A	AIRCYL 1.5"BORE X 4"STROKE(PIVOT)	
all	20	17A018	7/16-20 ADJ YOKE END DROPFORGE	
all	21	17A011	7/16X1+11/32"OAL CLEVISPIN SAE	
all	22	09RPS18ADU	PRXSW QK CONN 18M NO-DC UNSHLD EUROFAST	
all	23	09RPSDC095	CON.90DEG FEMALE DC 3A300V 5M WK4T-6	
all	24	96J026	3/8"FLOW REG-SMC AS3000-N03	
all	25	15U285	FLATWASHER 1/2 STD COMM SS18-8	
all	26	15G231S	HXFINJAMNUT 1/2-13UNC2B SS18-8	
all	27	15G234NS	HXLOCKNUT NYL 1/2-13UNC2 SS18-	
all	29	15K122	HEXCAPSCR 3/8-16UNCX2 SS18-8	
all	30	15K112	HXCAPSCR 3/8-16X1+1/2 SS18-8	
all	31	15K091E	BUTSOKCAPSCR 3/8-16NCX 1" SS18	
all	32	15U245	FLTWASH 3/8 STD COMM 18-8 SS	
all	33	15G207	HEXLIGHTLOKNUT 3/8-16 18-8SS N	
all	34	15U200S	FLATWASHER US STD 5/16 SS18-8	
all	35	15U205	LOCKWASHER MEDIUM 5/16" 18-8SS	
all	36	15G186	HEXNUT 5/16-18UNC2 SS18-8	
all	37	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	38	15U188	FLTWASH 1/4 STD COMM SS18-8	
all	39	15G170	HEXNUT 1/4-20UNC2 SS18-8	

Water Collectors

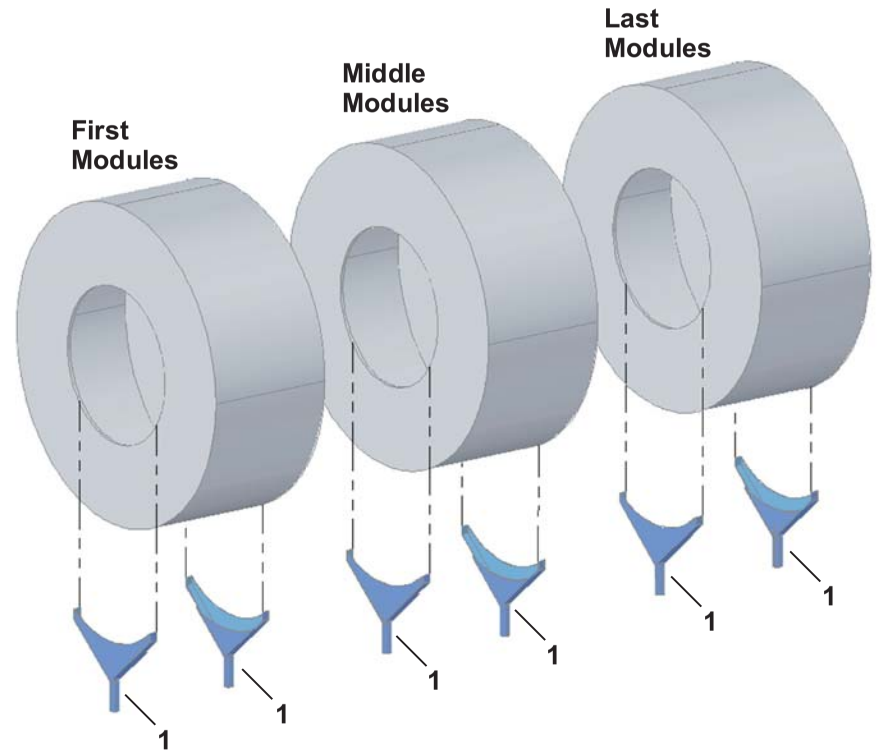
76028G3, 76039G3, & 92048G4

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

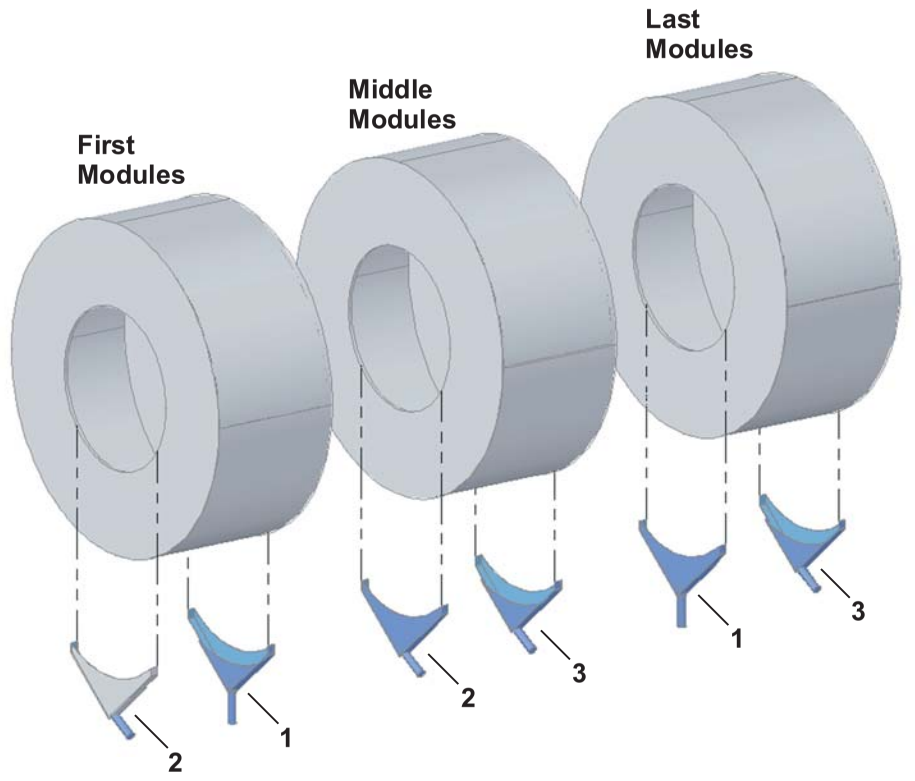
Litho in U.S.A.



76028G3
76039G3
Water
Collectors



92048G4
Water
Collectors



Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400
Litho in U.S.A.

Parts List—Water Collectors

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

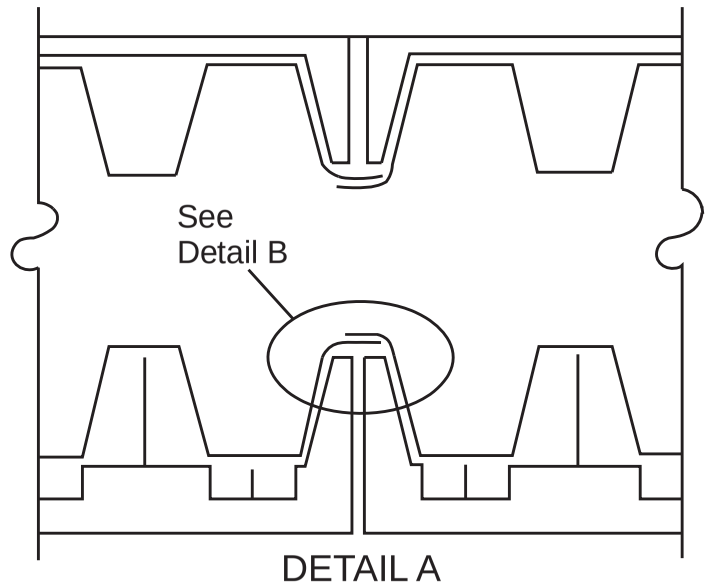
Used In	Item	Part Number	Description	Comments
.				
			----------ASSEMBLIES----------	
	A	G67WC001	G3 WATER COLLECTOR ASSY	76028G3, 76039G3 92048G4
	B	G63WC003	9248 LOAD CHUTE H20 CATCH INST	92048G4
	C	G63WC002A	WATER CATCHER ANGLE OUT RT INS	92048G4
	D	G63WC002	WATER CATCHER ANGLE OUT INST	92048G4
			----------COMPONENTS----------	
all	1	06 20629D	ENTRY&EXIT H20 COLLECT-TARG	SEE ILLUSTRATION
all	2	06 20629C	INLET WATER COLLECT NO-TARG	SEE ILLUSTRATION
all	3	06 20629B	EXIT SIDE-WATER COLL NO-TARG	SEE ILLUSTRATION
AB	4	06 20632B	SCUPPER BRKT LEFT SIDE	G3
AB	4	06 20232D	SCUPPER BRKT LEFT 9248	G4
AB	5	06 20632A	SCUPPER BRKT RIGHT SIDE	G3
AB	5	06 20232C	SCUPPER BRKT RIGHT 9248	G4
all	6	60E016B	CLEAR TUBING 1.75"ID X 2.25"OD	
all	7	27A065S	HOSECLAMP 1.56"-2.5"SSSCR#32	
all	8	15K033	BUTSOKCAPSCR 1/4-20X5/8 SS18-8	
all	9	15U188	FLTWASH 1/4 STD COMM SS18-8	
all	10	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	11	15G170	HEXNUT 1/4-20UNC2 SS18-8	

Unit To Unit Transition Seal Installation

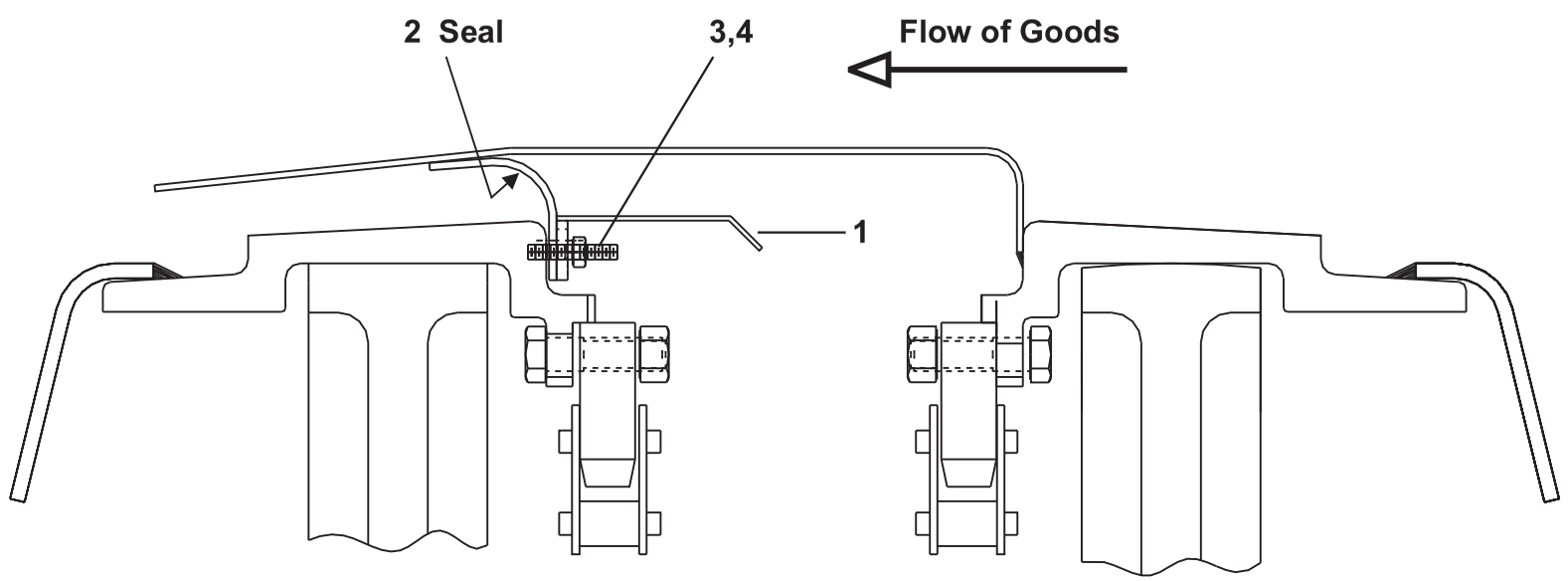
76028 & 76039 CBW (G2 & G3)

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.



DETAIL A



DETAIL B: Unit-Unit Seal

Parts List—Unit To Unit Transition Seal Installation

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	00A	G64TS001	96232C 7628 CONNECT TRANS SEAL ASSY	REFERENCE ASSEMBLY
	001	W6 40048G	96241E*WLMT=DRIP RING M/M CONN RETR	
	002	06 40048A	96273B UNIT/UNIT TRANS RING SEAL	
	003	15Q041	SOKSETSCR 5/16-18X1+3/4 SS CUP PNT	
	004	15G188	HEXLOKNUT 5/16-18 BRASS	

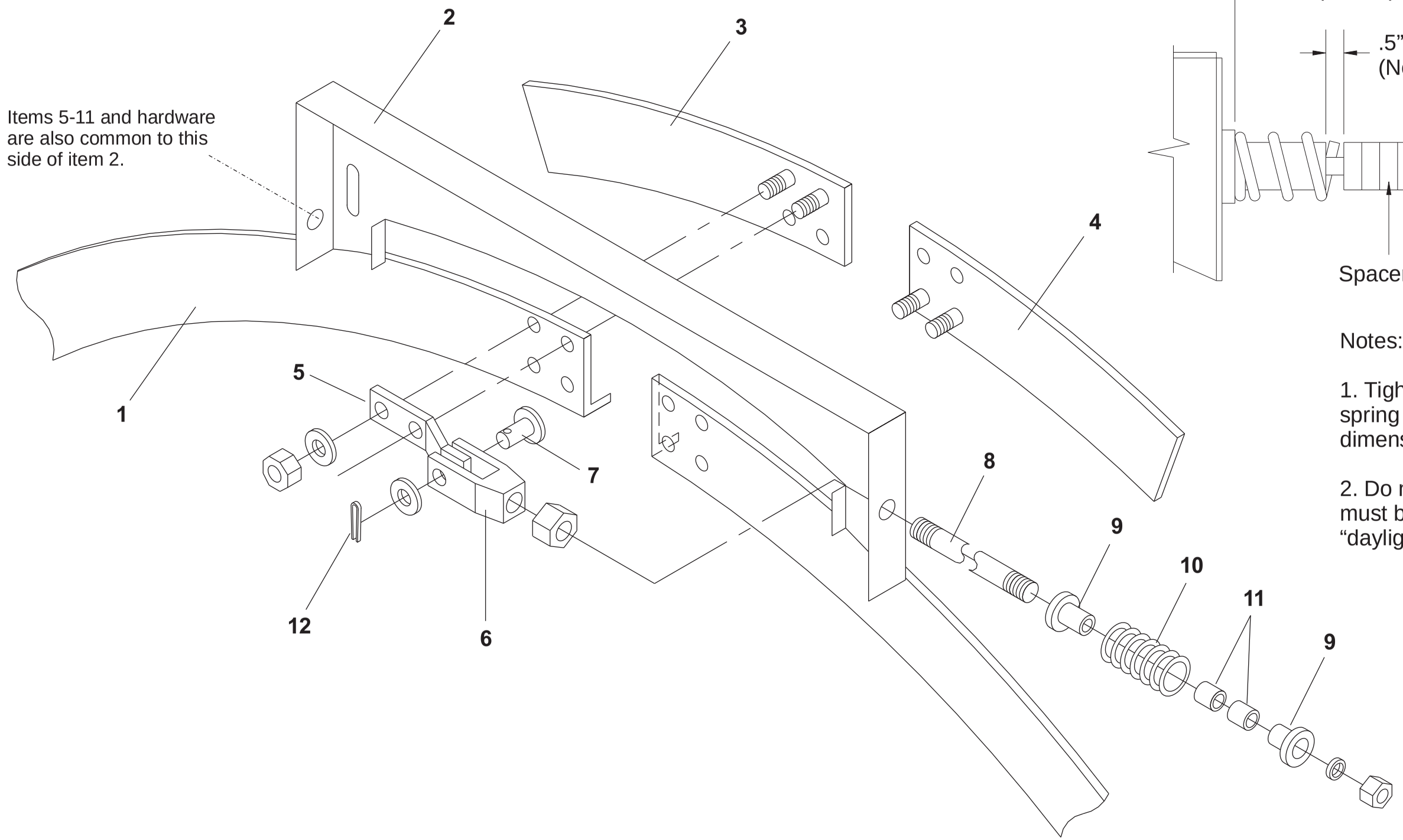
Tension Seal Assembly

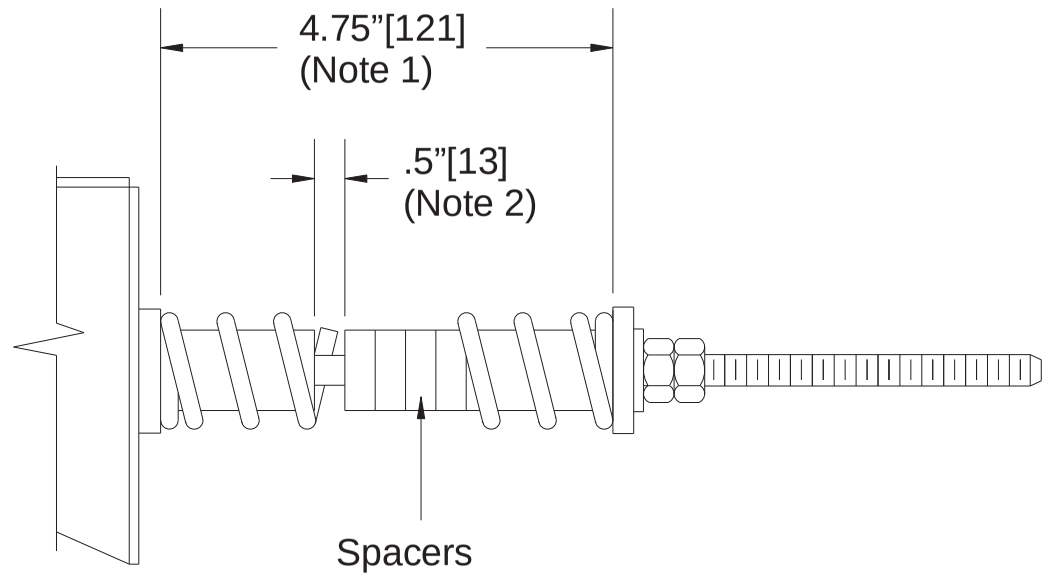
76028G2/G3 & 76039G2/G3 Tunnels, 92048G4 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

103





Notes:

1. Tighten nuts until the spring is compressed to the dimension shown.

2. Do not over-toghten. There must be approximately .5”[13] “daylight”as shown.

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Tension Seal Assembly

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	G62 00400H	INST SPLIT SEAL-ENTRY&EXIT	76028G2/G3 76039G2/G3
	B	GSS63001	SPLIT -LSEAL INSTALL	92048G4
			----------COMPONENTS----------	
A	1	X6 20615	SEAL=OPEN CUT&DRILL	
B	1	X6 30038	SEAL OPEN,CUT&DRILL-8648CBW	
all	2	W6 20639	*L-SEAL CVR IN-LIP EXIT WLMT	
all	3	W6 20638	PLT=REINF-SPLT-SL-LG-LF-WLMT	
all	4	W6 20637	PLT=REINF-SPLT-SL-LG-RT-WLMT	
all	5	06 20416A	BRKT YOKE CONN.SPLIT SEAL	
all	6	17A004	ADJ YOKE END 1/4-28 XYLAN COAT	
all	7	17A004A	CLEVIS PIN 1/4"X3/4"DRILLED SS	
all	8	06 20416C	ROD=SPRING TENSION SPLITSEAL	
all	9	06 20416D	BUSHING=SPRING ALIGNMENT	
all	10	06 20162B	SPRING COMP.SPLIT SEAL TENS	
all	11	27B17006HN	SPCR .281ID.613OD.500L	
all	12	15H019	STDCOTTERPIN 1/16X1/2 SS18-8	

3

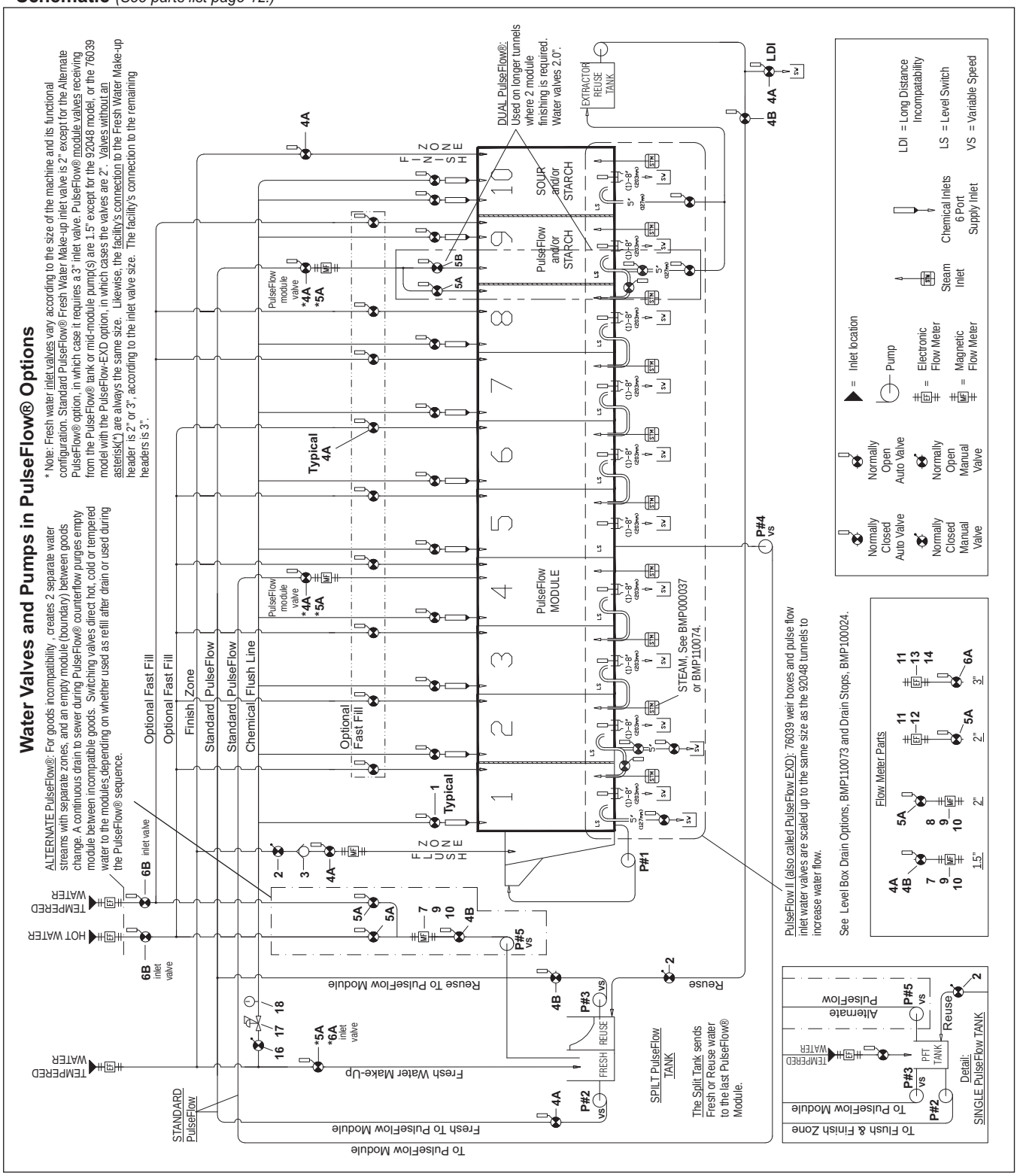
Water, Steam and Peristaltic

3.4

PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

Schematic *(See parts list page 12.)*



PulseFlow® Water Options: Schematic and Piping

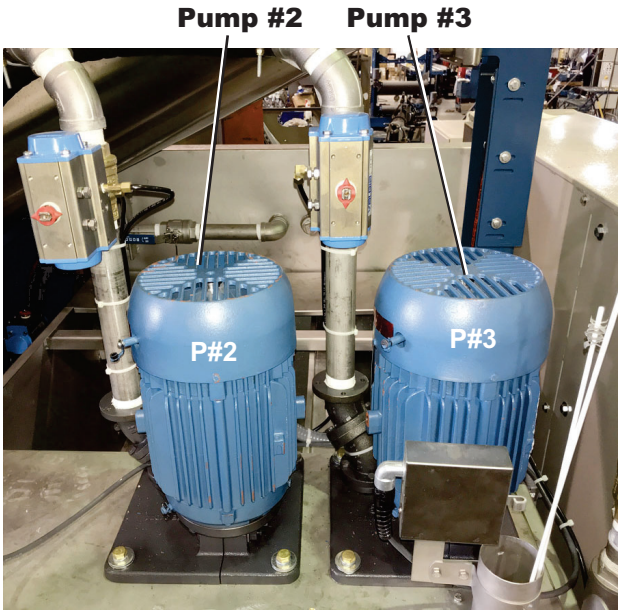
76028, 76039, 92048 Pulse Flow Tunnels

Pump Chart

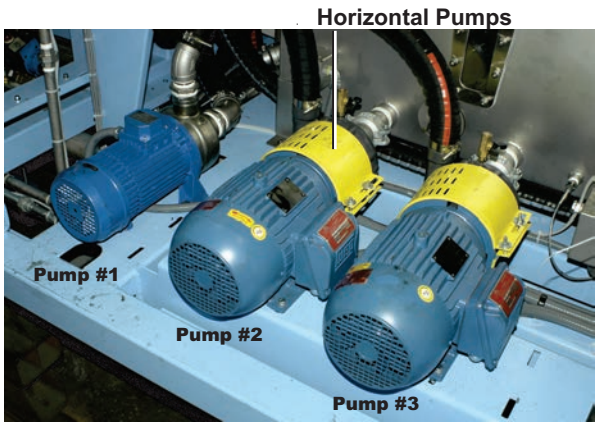
Pumps that vary with Tank and PulseFlow® Option: *Use with parts list.*					
	HP Pumps with Single PulseFlow® Tank				
Pump Locations	P#1	P#2	P#3	P#4	P#5
Pulse Flow Options:					
Standard Pulse Flow	3HP	3HP	5HP	7.5HP	—
Alternate Pulse Flow	3HP	3HP	5HP	7.5HP	5HP
PulseFlow II or PulseFlow EXD	3HP	3HP	7.5HP	7.5HP	—
Alternate Pulse Flow with PulseFlow II or PulseFlow EXD	3HP	3HP	7.5HP	7.5HP	7.5HP
HP Pumps with Split PulseFlow® Tank					
		VERTICAL PUMPS (greyed)			
Standard Pulse Flow	3HP	5HP	5HP	7.5HP	—
Alternate Pulse Flow	3HP	5HP	5HP	7.5HP	5HP
PulseFlow II or PulseFlow EXD	3HP	7.5HP	7.5HP	7.5HP	—
Alternate Pulse Flow with PulseFlow II or PulseFlow EXD	3HP	7.5HP	7.5HP	7.5HP	7.5HP

**P#4 is the Mid-Module Pump.
All pumps not greyed are horizontal.

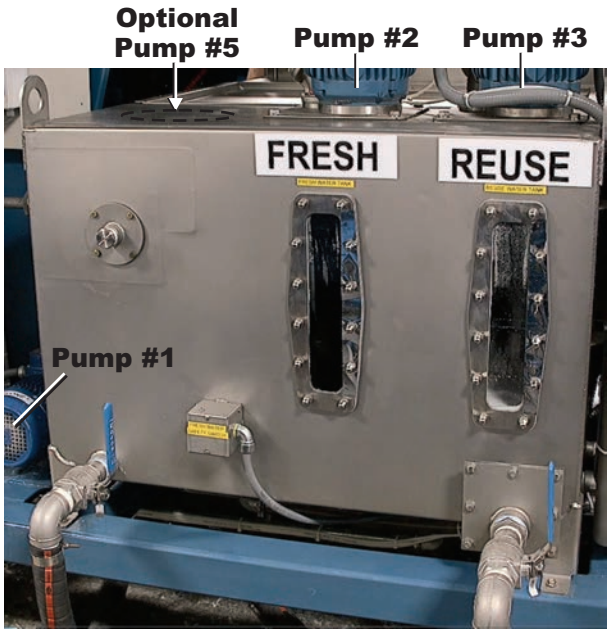
Vertical Pumps



Horizontal Pumps
(horizontal mounting before 01/2018)



Pumps for Single PulseFlow® Tank



Split Tank (Optional 10/2017, Standard 1/2018)

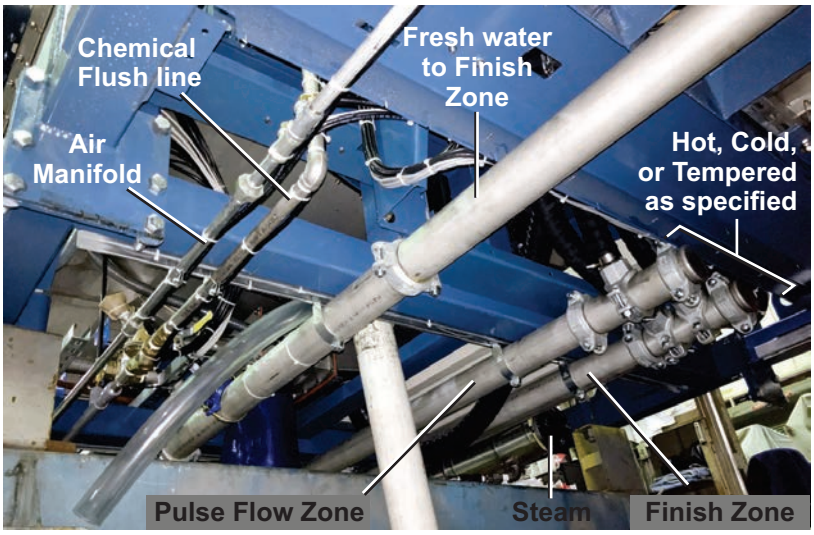
PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

Inlets and Manifolds

Water Inlets
(One fresh water inlet to tank is standard; maximum is four.)

Bottom View Manifolds

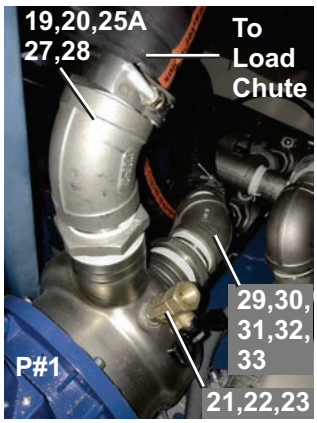


Bottom View Manifolds

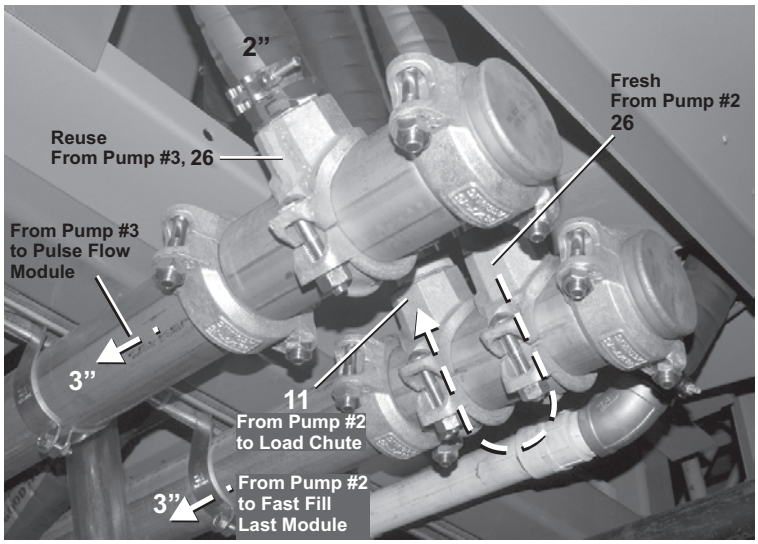
PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

Pump Fittings



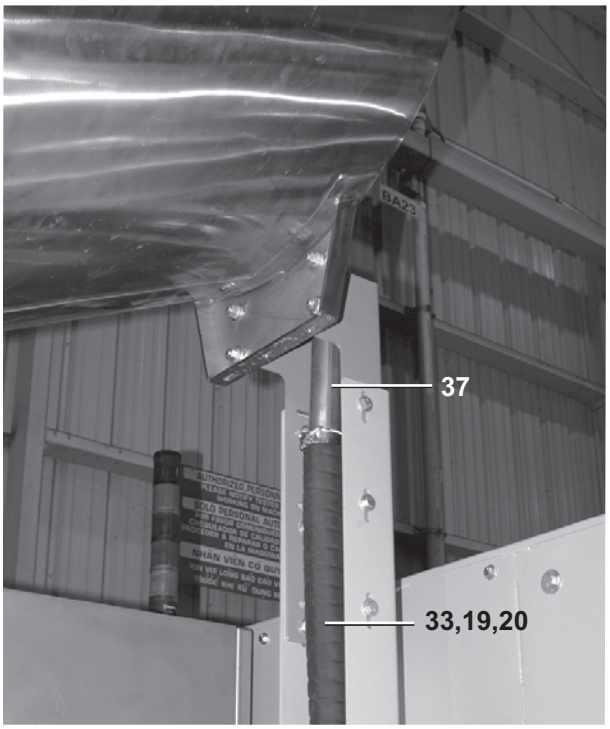
Pulse Flow Manifolds

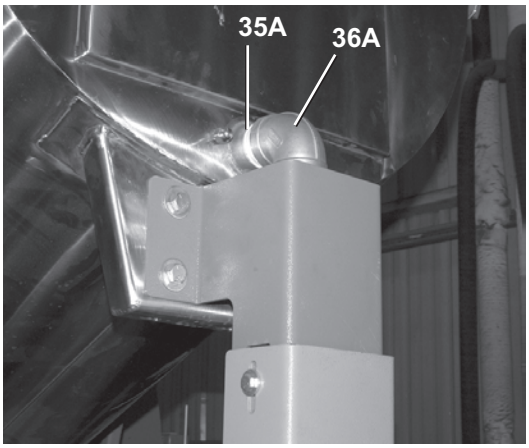


PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

Load Chute Recirculation

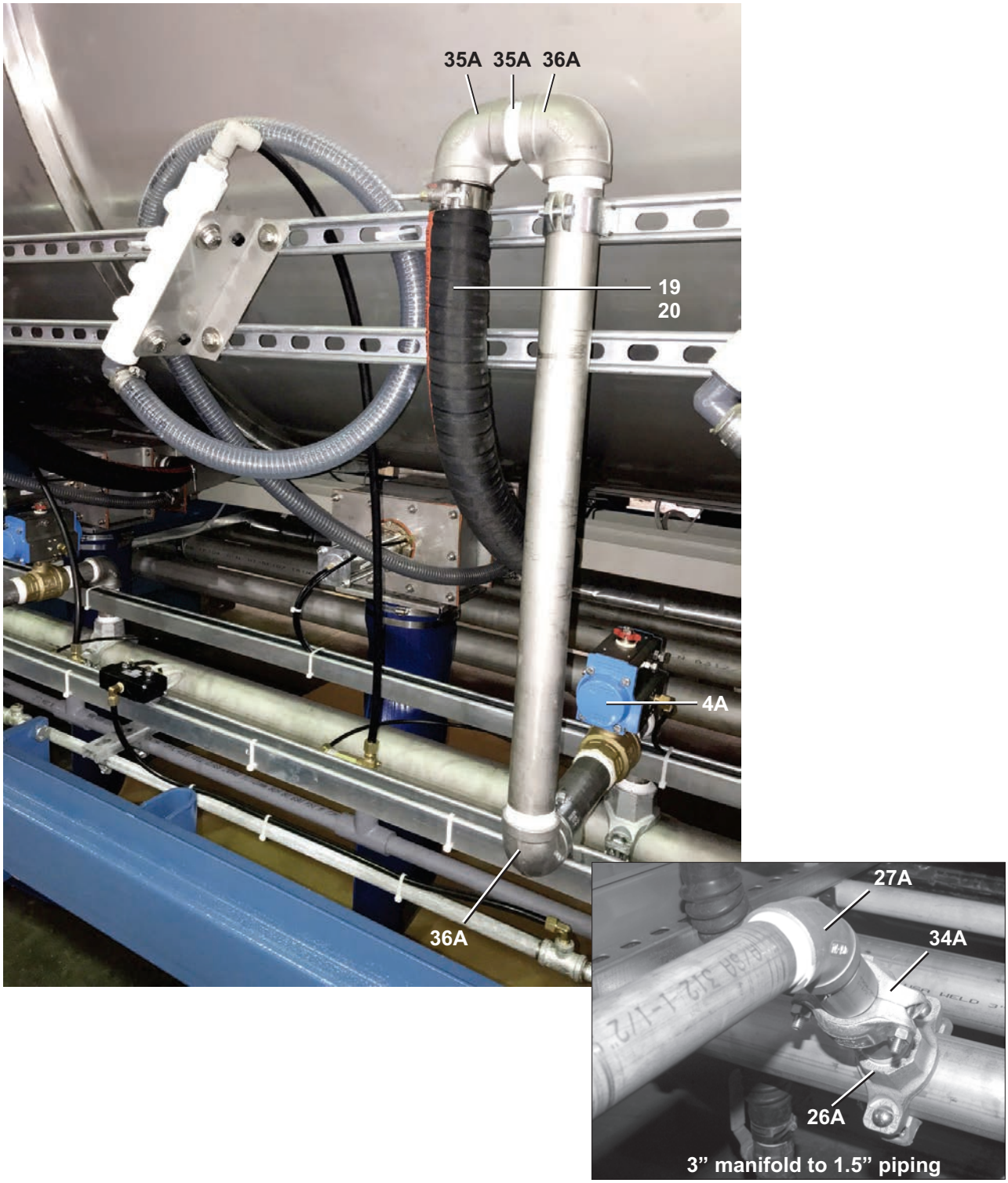




PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

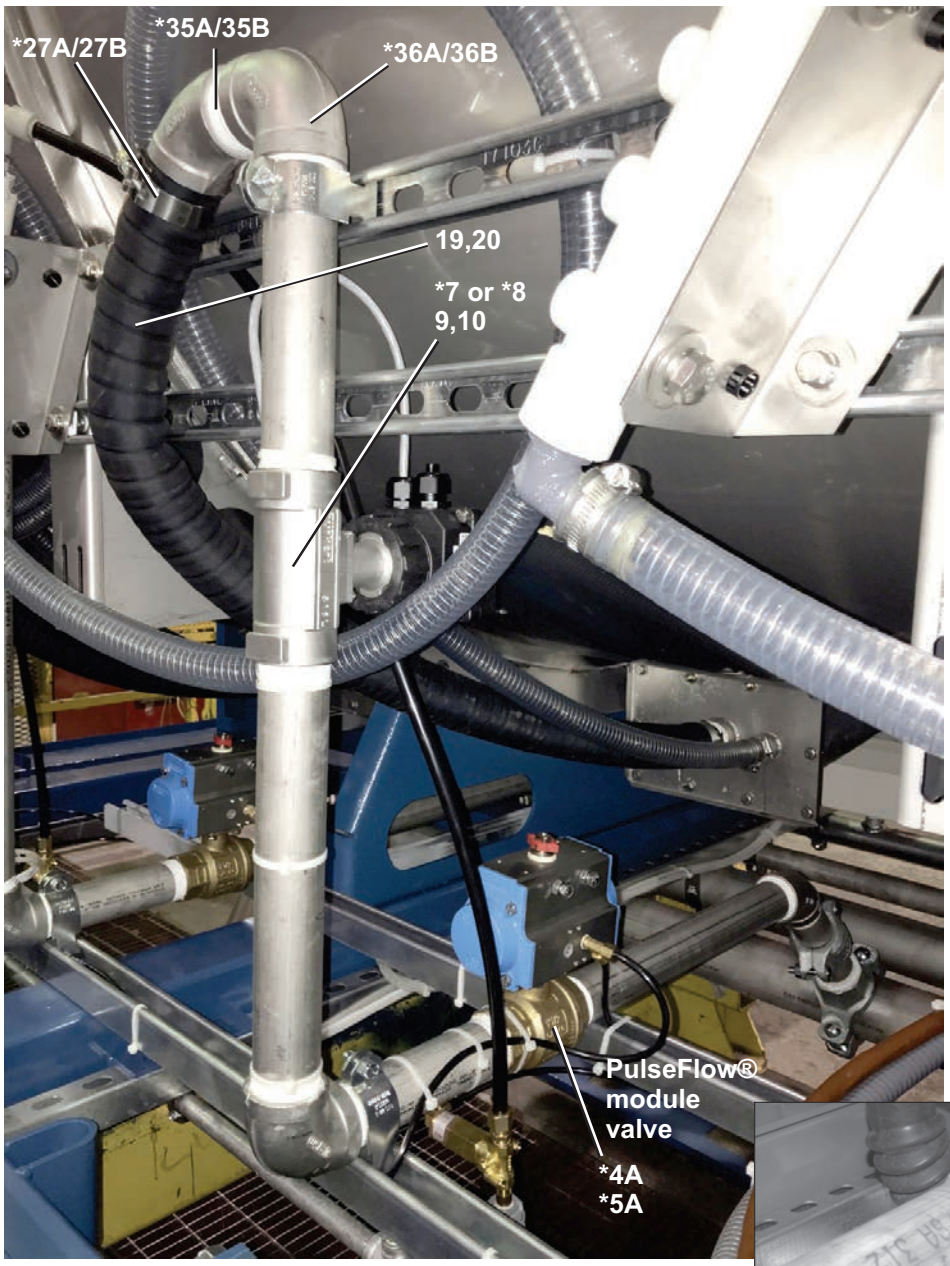
Fast Fill, typical



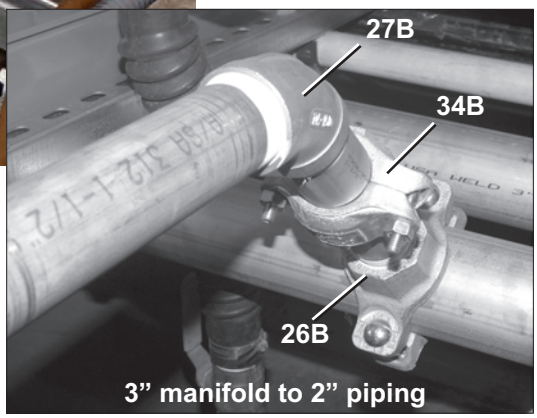
PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

PulseFlow® Module Inlet, typical



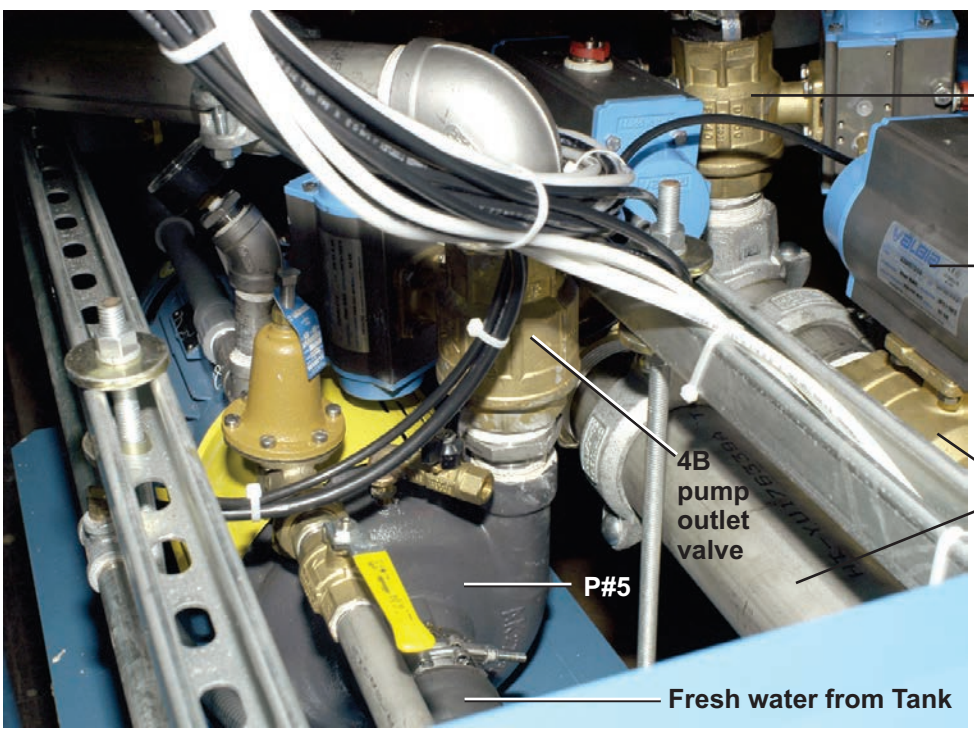
***PulseFlow® Module valve and piping may be 1.5” or 2”, see parts list.**



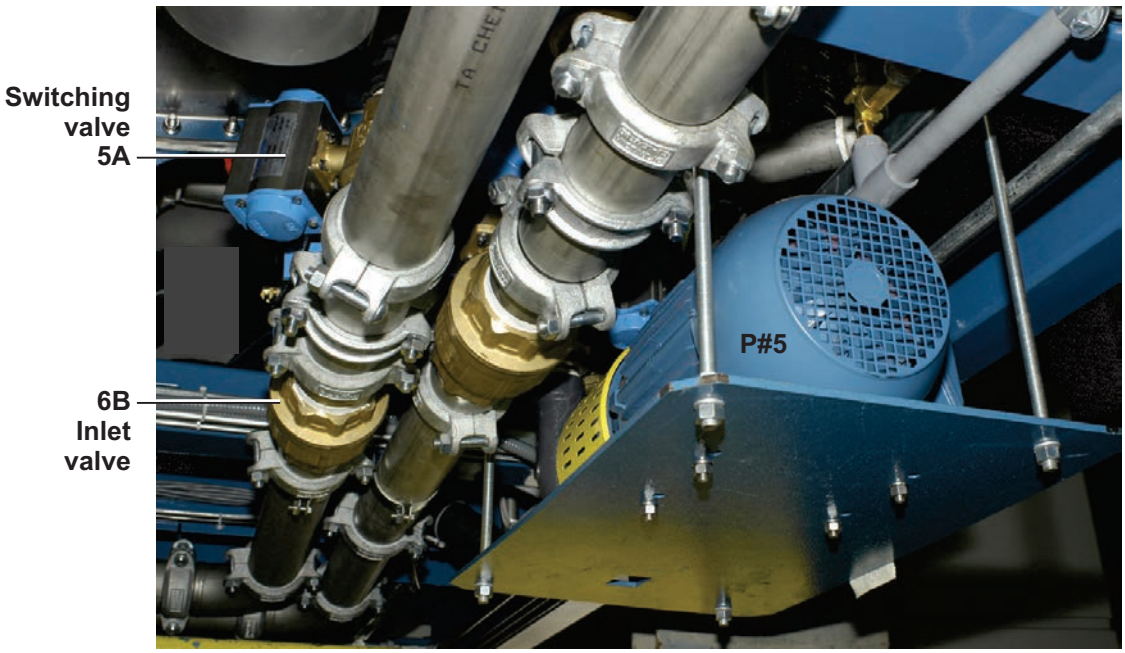
PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

Alternate PulseFlow® Valves



View A-A

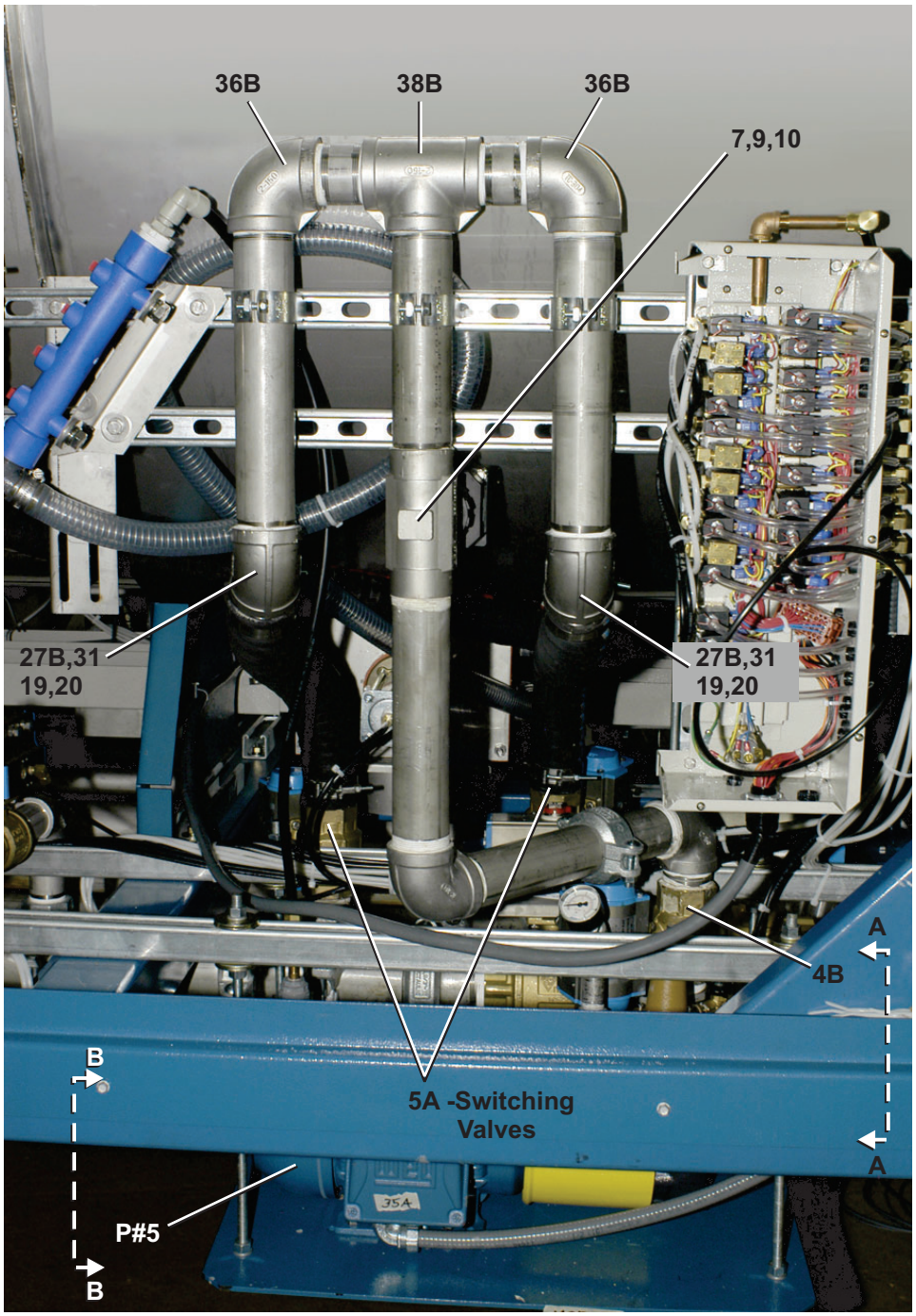


View B-B

PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

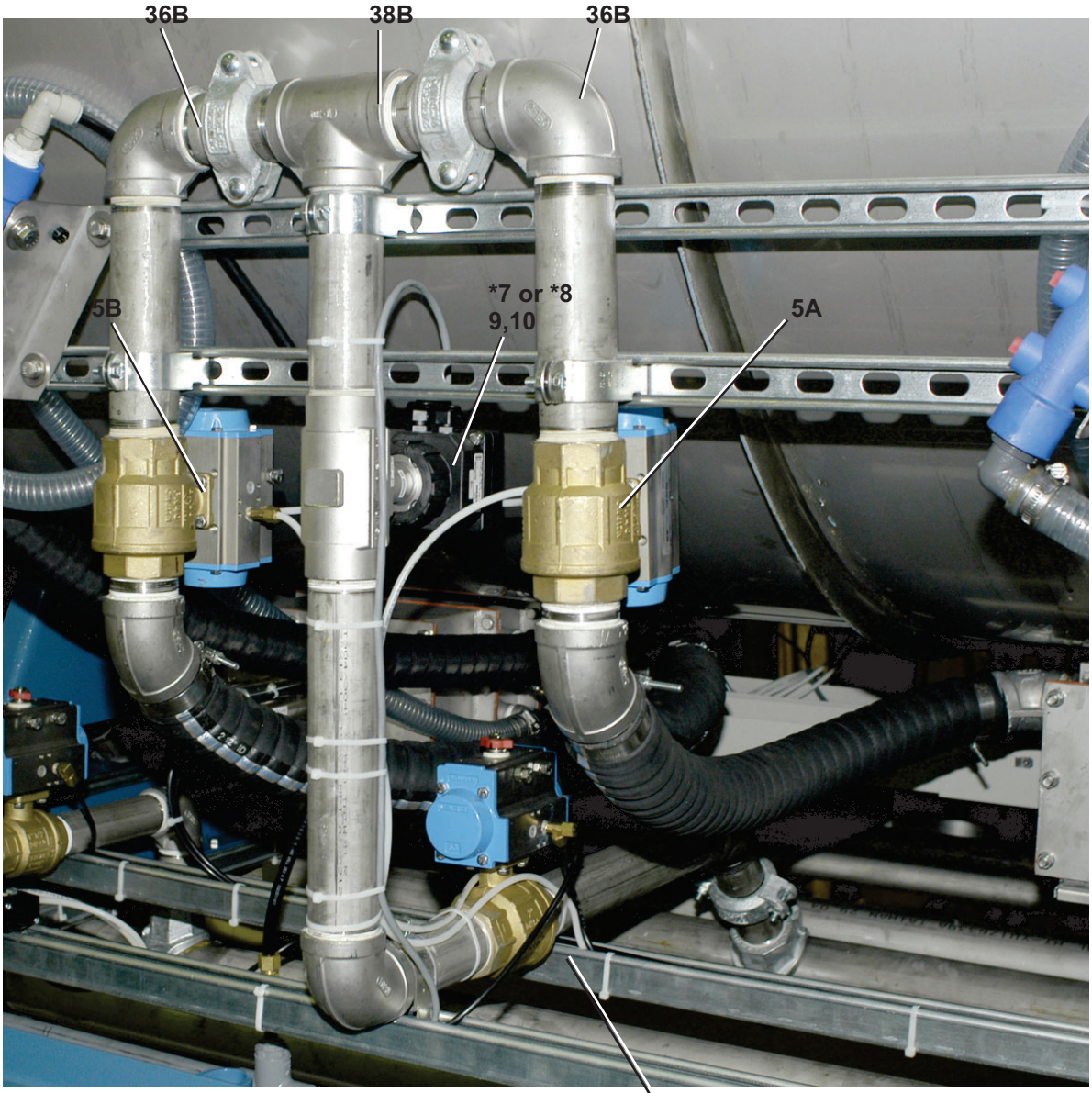
Alternate PulseFlow® Valves



PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

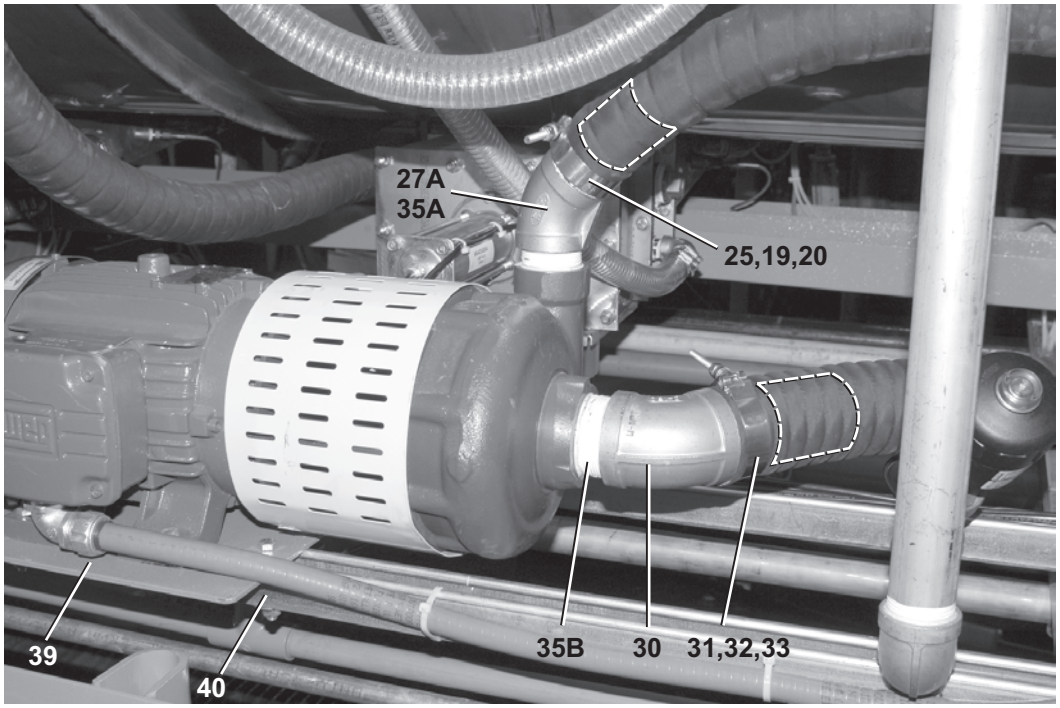
Dual PulseFlow® Valves



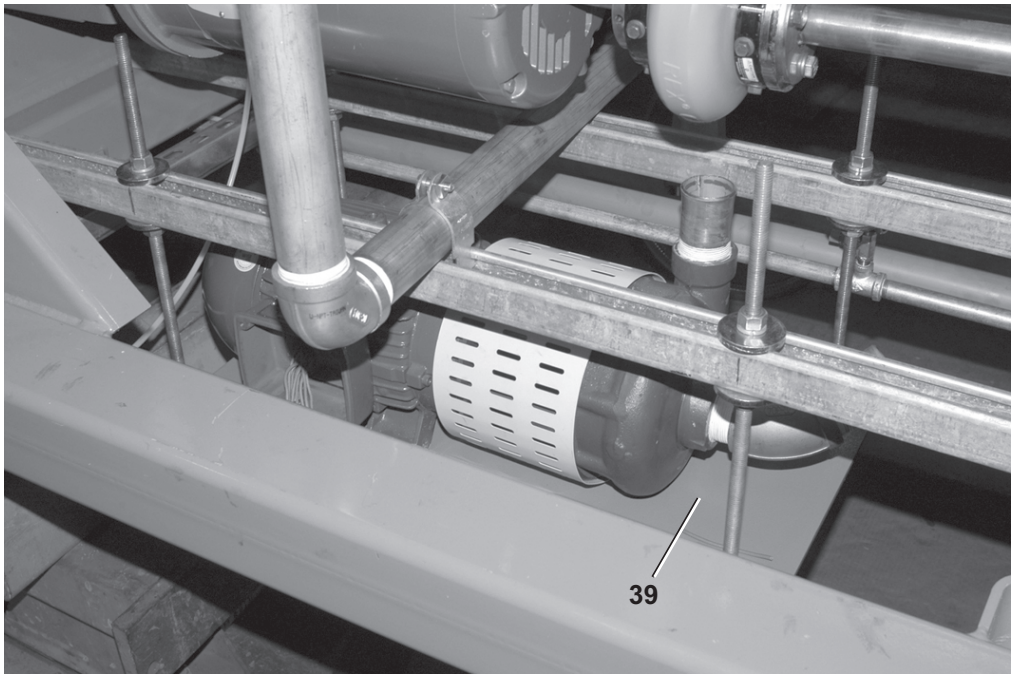
PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

Mid-Module Pump(P#4) & Alternate Pulse Flow Pump(P#5)



Pump Rail Mounting



Pump Suspended Mounting

PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

Parts List

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
	(H)		REFERENCE	Horizontal Pump
	(V)		REFERENCE	Vertical Pump
			----------PUMPS SINGLE TANK----------	
	P#1 (H)	27E935G96	PUMP EBARA DWO 3006 3HP 230/460	3HP HORIZONTAL
	P#2 (H)	27E934A96	PUMP 2"X1.5" W/ 4.25" IMPELLER 3HP	3HP HORIZONTAL
	P#3,5 (H)	27E935A96	PUMP 2X1 1/2 W/4.75 IMPELLER 5HP	5HP HORIZONTAL
	P#3,5 (H)	27E936A96	PUMP 2"X1.5" W/5.25" IMPELLER 7.5 HP	7.5HP HORIZONTAL
	P#4 (H)	27E936B96	PUMP S/S VORTEX 2"X1.5" W/ 6.25" IMPELLER 7.5HP	7.5HP VORTEX HORIZ.
			----------PUMPS SPLIT OR DUAL TANK----------	
	P#1	27E935G96	PUMP EBARA DWO 3006 3HP 230/4603	3HP HORIZONTAL
	P#2,3,5(V)	27E935A96V	PUMP VERTICAL 2X1 1/2 W/4.75 IMPELLER 5HP	5HP VERTICAL
	P#2,3,5(V)	27E936A96V	PUMP VERTICAL 2"X1.5" W/5.25 IMPELLER 7.5HP	7.5HP VERTICAL
	P#4(H)	27E936B96	PUMP S/S VORTEX 2"X1.5" W/6.25" IMPELLER 7.5HP	7.5HP VORTEX HORIZ.
			----------VALVES----------	
all	1	96TBC2AA01	1/4" N/C 1WAY AIR-OP VLV POLYPRO(NO COIL)	
all	2	96D087FSHL	1.5" BALVAL S/S LLHDL BONOMI #700LL-1.5	
all	3	96D087BCK	CK VAL 1.5"WATTS#600-Z3 W/S/S DISH(SPECIAL)	
	4A	96D087FBA	1.5"BALVAL+ACT BRS N/C BONOMI (SPRING RET)	
	4A	96D087FSB	1.5" BALVAL+ACT S/S BONOMI SPRING RETURN N/C	STAINLESS OPTION
	4B	96D087FBAO	1.5"BALVAL+ACT BRS N/O BONOMI (SPRING RETURN)	
	4B	96D087FSAO	1.5" BALVAL+ACT SPRING RETURN S/S BONOMI N/O	STAINLESS OPTION
	5A	96D088FBA	2" BALVAL+ACT BRS N/C BONOMI (SPRING RET)	
	5A	96D088FSAS	2" BALVAL+ACT S/S N/C BONOMI (SPRING RETURN)	
	5B	96D088FBAO	2"BALVAL+ACT BRS N/O BONOMI (SPRING RETURN)	
	6	96D090FBA	3"BALVAL+ACT BRS N/C SPRING RET BONOMI	
	6	96D090FBAO	3"BALVAL+ACT BRS N/O SPRING RET BONOMI	
all	7	30F568	MAGMETER FITTING 316SS 1.5"	
all	8	30F570	MAGMTR FITTING 316S/S 2"	
all	9	30F580	8041 BLIND UNIT MAG SENSOR SHORT FINGER	
all	10	30F580A	8025 LOWFLOW WALL-MNT TRANSMIT	
all	11	30F515	FLOW SENSOR SIGNET #P51530-PO	
all	12	30F519A	2" SADDLE FITTING #IR8S020 PADDELWHEEL	
all	13	5R3A1ECI	NPT SADDLE 3X1.25 CI 300# SB	
all	14	30F516	ADFOR 2.5" + 3" SADDLE SIGNET	
all	16	96D050A	3/4"BALLVALVE BRZ = BONOMI 171N	BRASS
all	16	96D055FSH	3/4" BALVAL S/S BONOMI#700023	STAINLESS OPTION
all	17	96J031D	3/4"PRESSREG SET 28#	
all	18	30N100	PRESSGAUGE 1/8"BACKCN.0-30PSI	
all	19	27A072	T-BOLT HOSECLAMP2.16-2.47CADSC	
all	20	60E255	HOSE 2" ID X 2.45" OD WATER CORRUGATED 50 FEET	

PulseFlow® Water Options: Schematic and Piping

76028, 76039, 92048 Pulse Flow Tunnels

Parts List

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
all	20	60E255E	HOSE 2" EPDM WATER CORRUGATED(V50)50'	EPDM FOR REUSE WATER
all	21	96D021	1/4" BALVLV BRZ-BONOMI #172N-1/4" W /T-HANDLES	
all	21	96D021S	1/4" BALVLV 304SS W /T-HANDLE	
all	22	5SB0E0CBEO	NPTHEXBUSH 1/4X1/8 BRASS 125#	
all	23	5N0CCLSB42	NPT NIP 1/8XCLS TBE BRASS STD	
all	25	5N1K03AS41	NPT NIP 1.5X3 TOE 304SS SK40	
all	25	5N2A04AS41	NPT NIPPLE 2X4 TOE 304SS	
all	26	51V352	MECH-T 3X1.5FEM #920N GALV	
all	26	51V353	MECH-T 3X2 #920N FEM GALV	
all	27	5SL1KSFK	NPT ELBOW 45DEG 1.5" 304SS 150	
all	27	5SL2ASFK	NPT ELBOW 45DEG 2" 304SS 150#	
all	28	5SB2A1KSFO	NPTHEXBUSH 2X1.5 304SS 150#	
all	29	5SB2K1KSFO	NPTHEXBUSH 2.5X1.5 304SS 150#	
all	31	5N2A03AS41	NPT NIPPLE 2X3 TOE 304SS Sk40	
all	32	27A075	T-BOLT HOSECLAMP 2.78-3.09"	
all	32	27A075B	T-BOLT HOSE CLAMP-2.66-2.94 (STBC288)	
all	33	60E301	HOSE 2.5"WATER CORRUGATED(V50)	
all	33	60E301E	HOSE 2.5" EPDM WATER CORRUGATED(V50) 50'	EPDM FOR REUSE WATER
all	34	27E971D	VICT COUP 1.5"GALV #75	
all	34	27E971C	VICT COUP 2"GALV #75W/E GASKET	
all	34BG	27E971CG	E GASKET FOR 2" # 75 COUPLING	
all	34	27E972A	VICT COUP 3"GALV#75 W/"E"GSKT	
all	34CG	27E972AG	E GASKET FOR 3" #75 COUPLING	
all	35	5N1KCLSS42	NPT NIP 1.5XCLS TBE 304SS SK40	
all	35	5N2ACLSS42	NPT NIP 2XCLS TBE 304SS Sk40	
all	36	5SL1KSFA	NPT ELB 90DEG 1.5 304SS 150#	
all	36	5SL2ASFA	NPT ELBOW 90DEG 2" 304SS 150#	
all	37	5N1K12KS41	NPT NIPPLE 1.5X12.5 TOE 304SS	
all	38	5S2ASFA	NPT TEE 2" 304SS 150#	
all	39	06 30215	PUMP MNT MID MOD 7639	
all	39	06 30216	MID MOD PUMP MNT 9248	
all	40	27A0200	CLP-RGDSTL PS#1100-2 10/BAG	

Standard Large Split PulseFlow® Tank

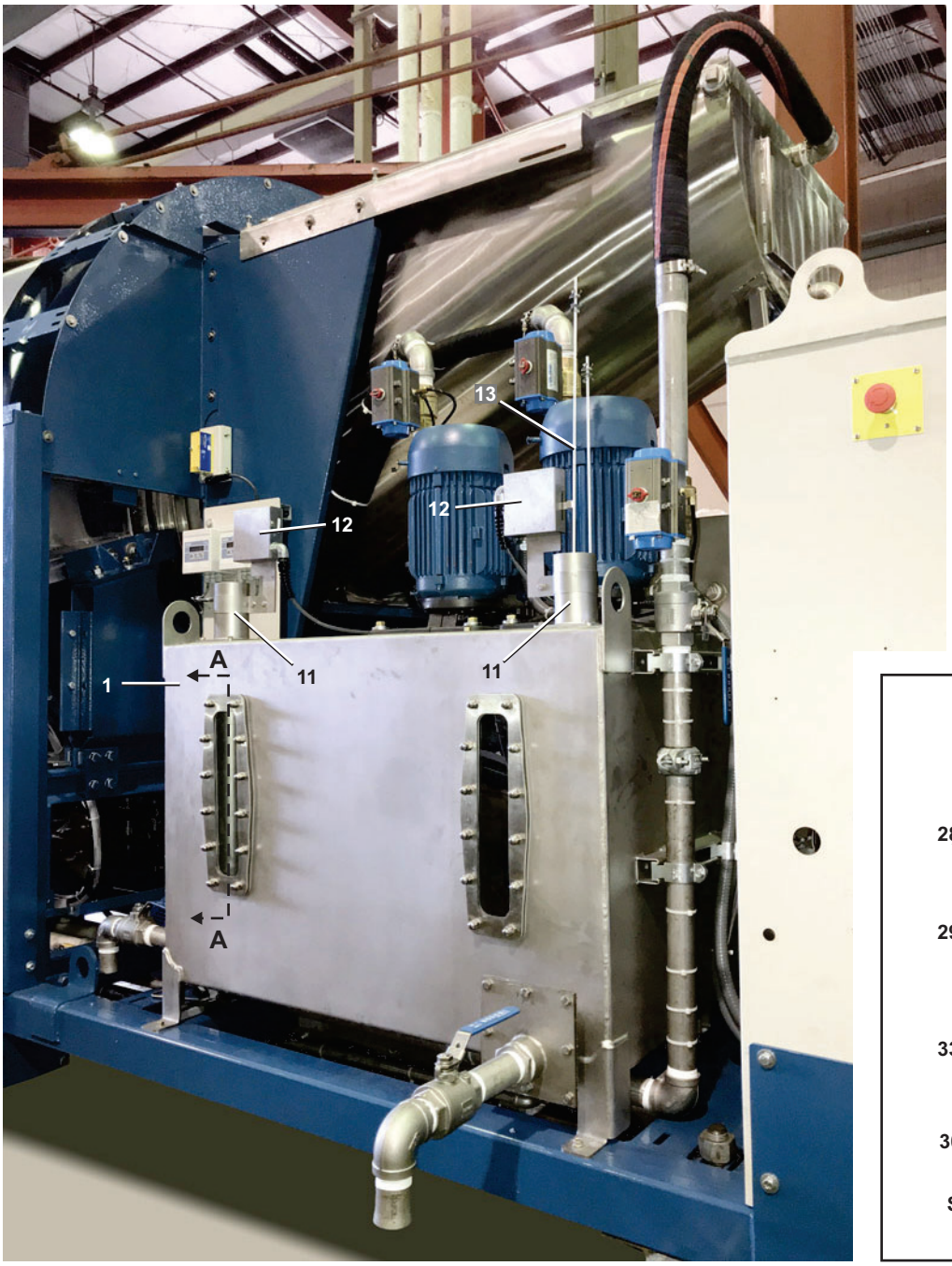
76028, 76039, 92048 PulseFlow® Tunnels

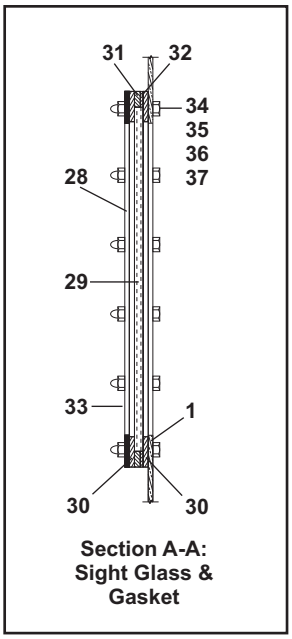
Figure 1: Tank Components

Standard Large Split PulseFlow® Tank

76028, 76039, 92048 PulseFlow® Tunnels

Figure 2: Tank Components

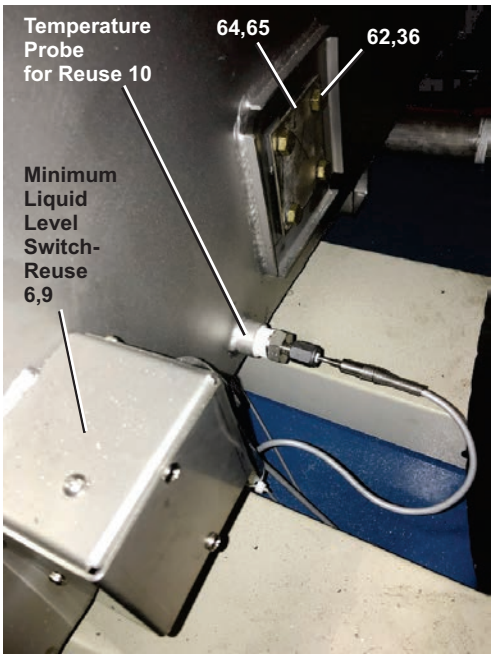




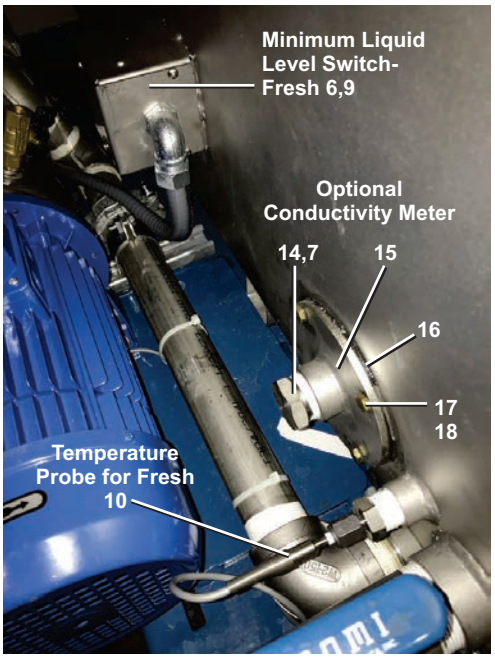
Standard Large Split PulseFlow® Tank

76028, 76039, 92048 PulseFlow® Tunnels

Figure 4: Pumps, Valves, Probes, and Sensors



View B-B

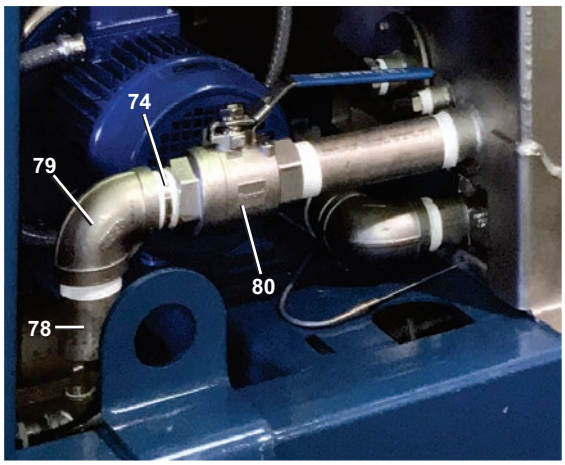


View C-C

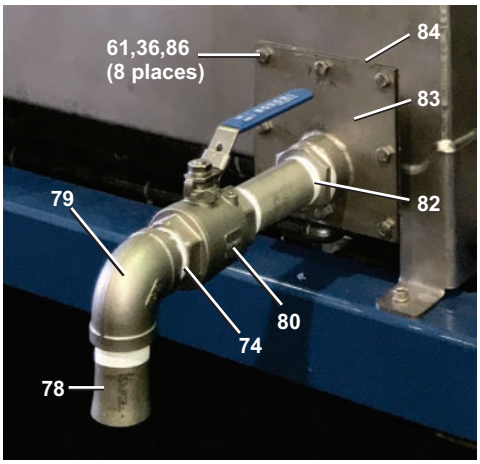
Standard Large Split PulseFlow® Tank

76028, 76039, 92048 PulseFlow® Tunnels

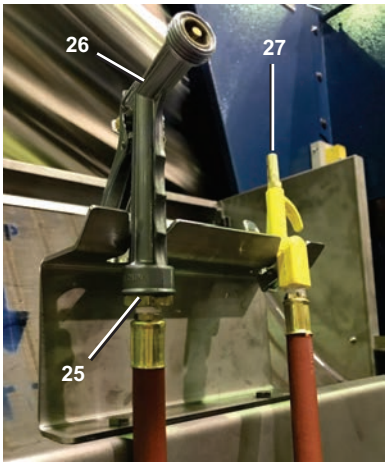
Figure 5: Drains, Water and Air Nozzels



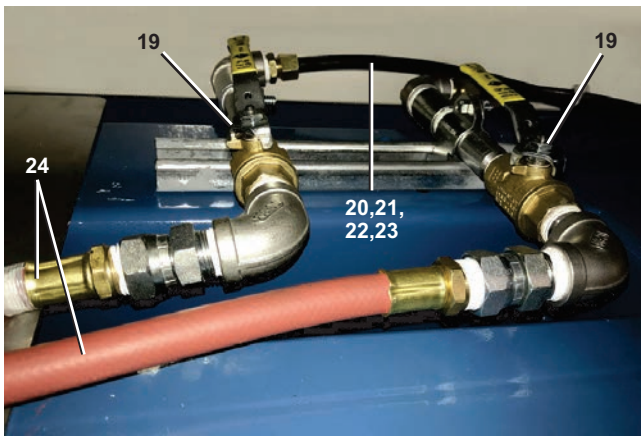
Standard Manual Drain - Fresh



Optional Manual Drain - Reuse

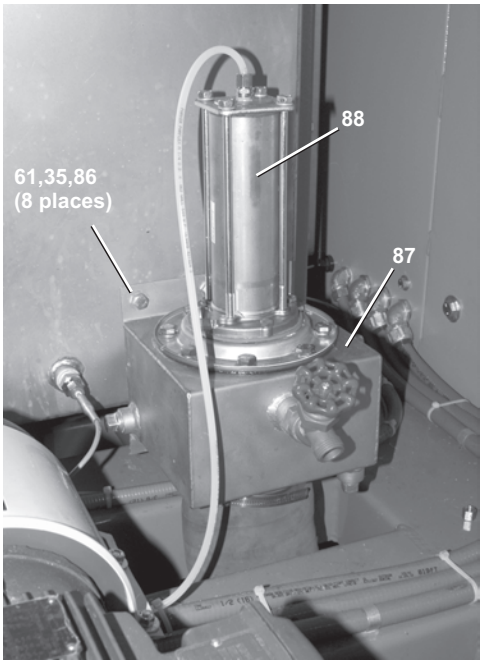


Water and Air Nozzles



View D-D

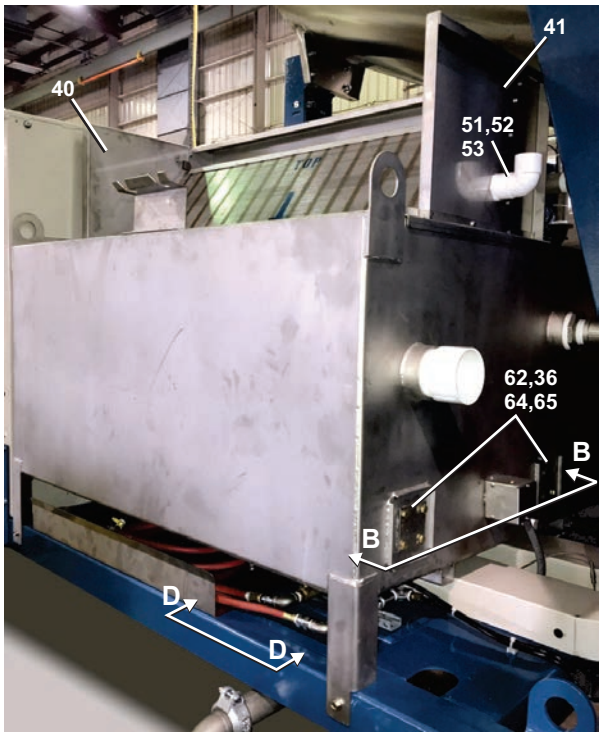
Optional 4” Auto Drain - Reuse

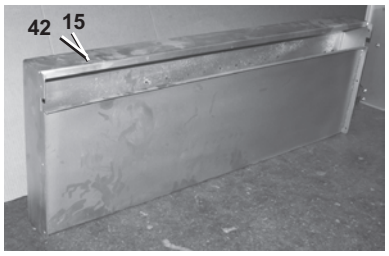


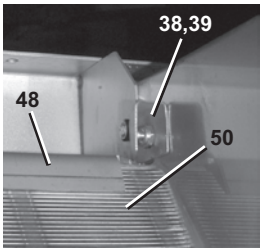
Standard Large Split PulseFlow® Tank

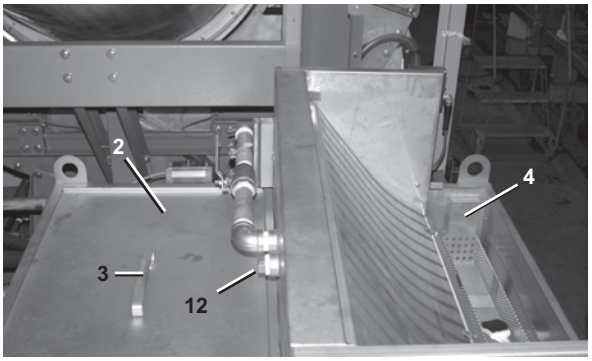
76028, 76039, 92048 PulseFlow® Tunnels

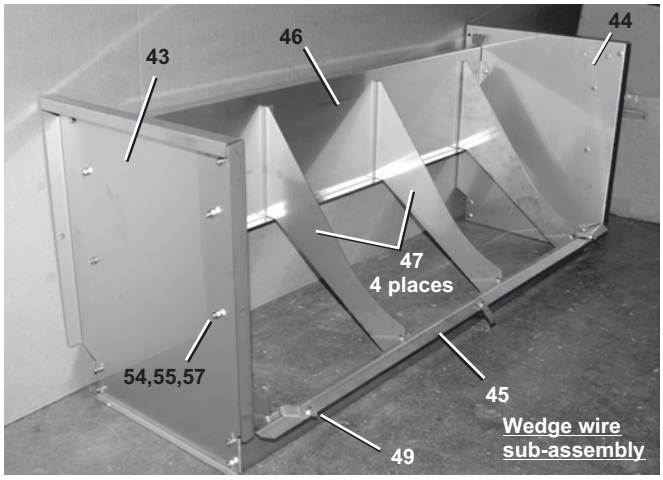
Figure 3: Wedge Wire Sub-assembly

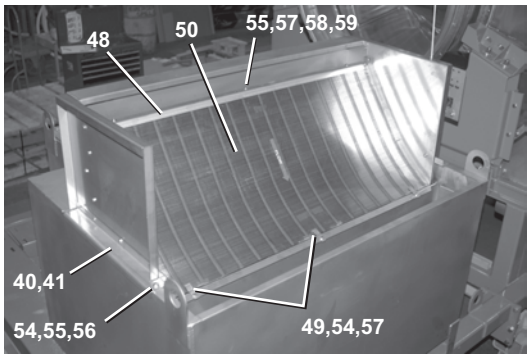












Standard Large Split PulseFlow® Tank

76028, 76039, 92048 PulseFlow® Tunnels

Parts List—Standard Large Split PulseFlow Tank

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------REFERENCE ASSEMBLIES----------	
	A	A62 03900Z	ASSY=PULSEFLOW DUAL TANK LARGE	
	B	A62 03900ZS	ASSY=PULSEFLOW DUAL TANK LARGE SS VALVES	
	C	A62 03902Z	ASSY=PULSEFLOW DUAL TANK-9248	
	D	A62 03901Y	PULSEFLOW TANK WEDGEWIRE DUAL TANK	
	E	G65WV009	INTS=G3 DUAL PULSEFLOW TANK PUMP PIPING	
	F	G67CL009	INST=AIR/WATER NOZZLES DUAL PULSEFLOW	
	G	A67CL008	ASSY=AIR/WATER NOZZLES PULSEFLOW SCREEN	
	H	G62 03900B	INST=SIGHT GLASS DUAL TANK LARGE	
			----------COMPONENTS----------	
A,B	1	W6 70234C	WLMT=PULSEFLOW DUAL TANK LARGE	
C	1	W6 70234D	WLMT=PULSEFLOW DUAL TANK-9248	
A,B	2	W6 70245A	WLMT=PULSEFLOW DUAL TANK COVER-LARGE	
C	2	W6 70245B	WLMT=PULSEFLOW DUAL TANK COVER-9248	
all	3	02 175037	HANDLE=SHELDOR=WED-SS	
all	4	W6 20579	LINT TRAY WMT-250G SURGE TNK	
all	6	03 E32EP	COVER=SAFETY LEVEL SWITCH-DEEP	
all	7	09XSCD0001	ROSEMOUNT 226 CONDUCTIVITY TOROIDAL	
all	8	09XSPH0001	ROSEMOUNT PH 3900VP	
all	9	09RL001	LIQUID LEVEL SW. SIDE MOUNT-- GEMS #131100	
all	10	30R0043PSA	TEMPERATURE PROBE ASSY=S/S	
all	11	A67LS003A	LEVEL SW ASSY - DUAL TANK	
all	12	ELL000MK2	*WATER LEV SW ASSY: 1 UP+ 1LO	
all	13	SA 02 011A	*FLOAT ASSY L=44"	
all	14	5SP1ASFSS	NPT PLUG 1" HEXSOLID 304SS	
all	15	W6 70286	WLMT=CONDUCT METER FLANGE	
all	16	06 40069G	N/C DBL ACT DYE DMP VLV GSKT	
all	17	24G020N	ROLLED WASH.252ID NYLTITE 25W	
all	18	15K035A	HEXCAPSCR 1/4-20 X 3/4 BRASS	
all	19	96D034	BALL VLV - BONOMI 1/2" 171S SS BALL/STEM	
all	20	60E005F	TUBING NYL.BLK.1/2"ODX.375ID	
all	21	53A10SSKB	.5T COMPNUT 11/16-20 AND#61A-8	
all	22	53A3000KB	SLEEVE 1/2"OD TUBE #60AP-8	
all	23	53A4000KB	TUBE INSERT 1/2"OD #60AE-8	
all	24	60E077B068	HOSE ASSY 3/8"X68"+ENDS	
all	25	51E513A	3/4"MHX1/4"FP PARKER#78GH-12-4	
all	26	27A012N	WATER NOZZLE-PULSE FLOW SCREEN	
all	27	97Q200T	AIR GUN,1/4"NPT INLET,OSHA APP	
all	28	02 19128	CLAMPRING=LEVEL IND	
all	29	02 18657	SIGHTGLASS=LEVELINDICATOR	
all	30	02 18940D	LEVEL IND GASKET-OUTER DYA	
all	31	02 18941	GASKET=SIGHT GLASS-INNER 1/8	
all	32	02 18941A	GASKET=SIGHT GLASS-INNER 3/3	
all	33A	03 06122A	MARKER LEVEL PULSE FL GALS/LITER	
all	33B	03 06122B	MARKER LVL PULSE FRESH GALS/LITER	
all	33C	03 06122C	MARKER LVL PULSE REUSE GALS/LITER	
all	34	15G200SS	HEXCAPNUT HIGH-CR 3/8-16 SS 1	
all	35	15U260	LOCKWASHER MEDIUM 3/8 SS18-8	
all	36	24G030N	ROLLED WASH.379ID NYLTITE 37W	
all	37	15G206	HEXNUT 3/8-16 UNC2 SS 18-8	
all	38	W6 20414	*WLDMT=DEFLECTOR WW LF HAND	
all	39	W6 20415	*WLDMT=DEFLECTOR WW RT HAND	
all	40	06 70264	WEDGEWIRE TANK MOUNT BRKT	

Standard Large Split PulseFlow® Tank

76028, 76039, 92048 PulseFlow® Tunnels

Parts List

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

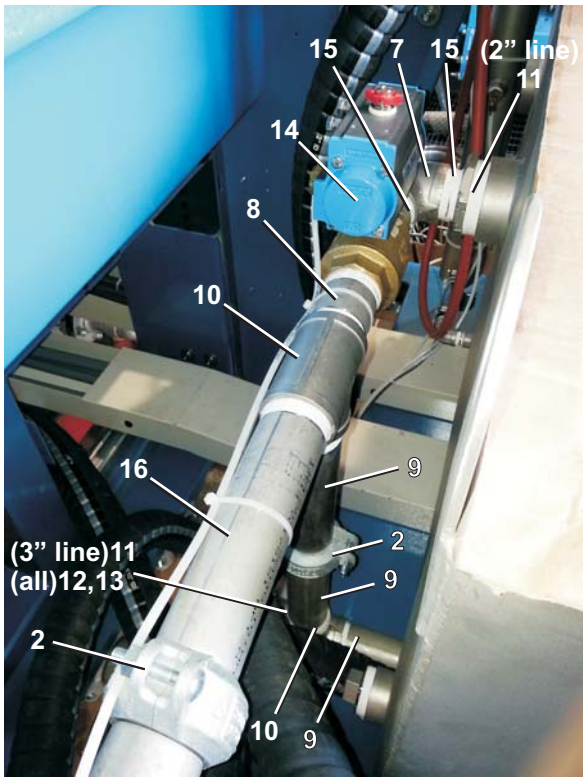
Used In	Item	Part Number	Description	Comments
all	41	06 70264A	WEDGEWIRE TANK MOUNT BRKT OPP	
all	42	W6 70238	PULSEFLOW TANK WEDGEWIRE SUBASSEMBLY	
all	43	06 70268B	TANK INLET PARTITION LEFT DUAL TANK	
all	44	06 70268C	TANK INLET PARTITION RIGHT DUAL TANK	
all	45	06 70210	WEDGE WIRE FRAME LOWER SUPP	
all	46	06 70211	WEDGE WIRE FRAME UPPER SUPP	
all	47	06 70213	WEDGE WIRE GUSSET	
all	48	06 70214	WEDGE WIRE HOLD DOWN BAR	
all	49	06 20404L	48" LINT TANK FILTER HOLDER	
all	50	06 20404B	SCREEN=48" LINT WEDGE WIRE	
all	51	12M043L150	LOCKNUT 1-1/2" NPT PVC	
all	52	5KL1KP4N	SOC STREET EL 1.5" 90 DEG SLIPXSLIP	
all	53	5KC1KP4E	ADAPTER 1.5 SXMPT PVC SCH40	
all	54	15N158	HEXCAPSCR 1/4-20NCX1/2SS18-8	
all	55	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	56	15G170	HEXNUT 1/4-20UNC2 SS18-8	
all	57	15G164	HX THIN LOCKNUT NYL1/4-20 SS	
all	58	15K142	HXCAPSCR 3/8-16X6 GR8ZC	
all	59	15U188	FLTWASH 1/4 STD COMM SS18-8	
all	60	15P200	TRDCUT-F HXWASHD 3/8-16X3/4NIK	
all	61	15K096	HEXCAPSCR 3/8-16UNC2X1SS18-8	
all	62	15K096A	HXCPSCR.3/8-16X1SS18-8.123HD.H	
all	64	06 20297B	GASKET=DYE CBW STEAM FLANGE	
all	65	06 20298A	PLATE FLANGE NO STEAM	
all	66	06 70320	VERTICAL PUMPP MNT COVER	
all	67	27E936A96V	PUMP VERTICAL 2"X1.5" W/5.25" IMPELLER 7.5 HP	
all	68	15K190B	HEXCAPSCR 1/2-13X2.5 FULLTHRD BRASS	
all	69	15U310S	FLATWASH-SS .53 X 1.37 .187T	
all	70	15U315S	LOKWASHER MEDIUM 5/8 18-8 S/S	
all	71	5N1K13AS42	NPT NIPPLE 1.5X13 TBE 304SS SK	
all	72	96D087FBA	1.5"BALVAL+ACT BRS N/C BONOMI (SPRING RET)	N/C BRASS
all	72	96D087FSB	1.5" BALVAL+ACT S/S BONOMI SPRING RETURN N/C	N/C STAINLESS
all	73	96D087FBAO	1.5"BALVAL+ACT BRS N/O BONOMI (SPRING RETURN)	N/O BRASS
all	73	96D087FSAO	1.5" BALVAL+ACT SPRING RETURN S/S BONOMI N/O	N/O STAINLESS
all	74	5N1KCLSS42	NPT NIP 1.5XCLS TBE 304SS SK40	
all	75	5N1K03AS41	NPT NIP 1.5X3 TOE 304SS SK40	
all	76	5SL1KSFK	NPT ELBOW 45DEG 1.5" 304SS 150	
all	77	6.00E+256	HOSE 2" ID X 2.45" OD WATER CORRUGATED 50 FEET	
all	78	27A072	T-BOLT HOSECLAMP2.16-2.47CADSC	
all	79	5SL1KSFA	NPT ELB 90DEG 1.5 304SS 150#	
all	80	96D087FSHL	1.5" BALVAL S/S LLHDL BONOMI #700LL-1.5	
all	82	5SB2A1KSFO	NPTHEXBUSH 2X1.5 304SS 150#	
all	83	W6 70295	WLMT=PULSE FLOW DRAIN	
all	84	02 15026	GASKET-7"SQ=4"FLGDUMP VALVE	
all	86	15G206B	HEXNUT 3/8-16UNC2 BRASS	
all	87	W2 15997	* BODY=4"DUMPVALVE=4231WE+SG	
all	88	A64DV009	ASSY=4" DUMP VALVE N/C PULSE FLOW	

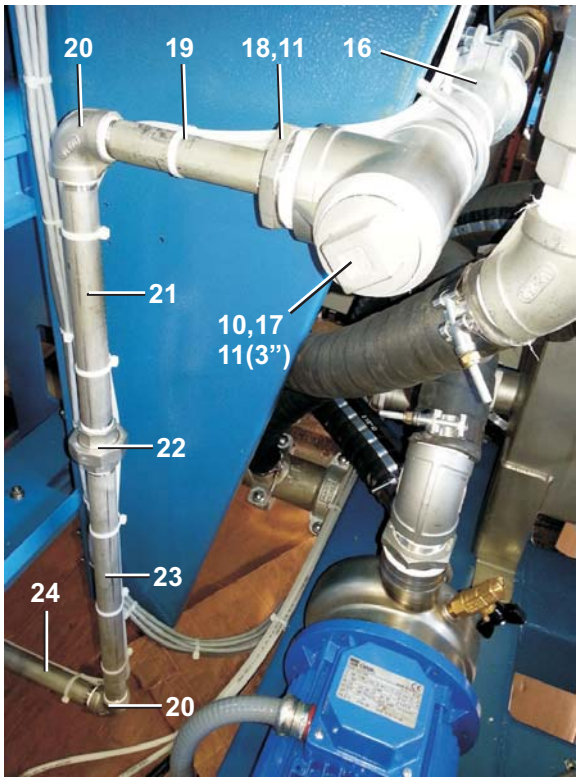
Pulse Flow Tank Fresh Water Piping

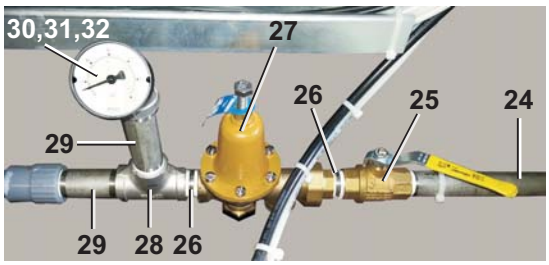
76028G3, 76039G3, 92048G4

Figure 1: Fresh Water to Tank

Fresh Water Inlet





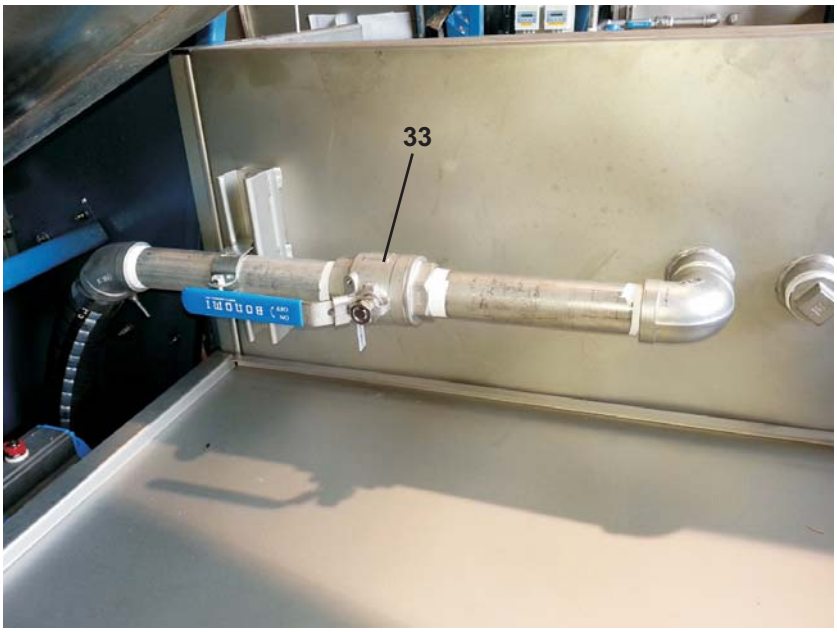


Chemical Flush Line

Pulse Flow Tank Fresh Water Piping

76028G3, 76039G3, 92048G4

Figure 2: Reuse Water from Press to Tank



Press Reuse Water to Pulse Flow Tank

Parts List

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	A67PF001	G3 2" PULSE FLOW TANK FRESH WATER INLET	REFERENCE
	B	A63PF001	G4 2" PULSE FLOW TANK WATER INLET ASSY	REFERENCE
	C	A67PF001A	G3 3" PULSE FLOW TANK WATER INLET ASSY	REFERENCE
	D	A63PF002	G4 3" PULSE FLOW TANK WATER INLET ASSY	REFERENCE
			----------COMPONENTS----------	
AB CD	1 1	51J120STS 51J145BSPS	ELB PIPE 90DEG 2"VICT#18 304S EL90DEG 3"VICT#18/304BRITISHTH	
AB CD 	2A 2AA 2B 2BB	27E971C 27E971CG 27E972A 27E972AG	VICT COUP 2"GALV #75W/E GASKET E GASKET FOR 2" # 75 COUPLING VICT COUP 3"GALV#75 W/"E"GSKT E GASKET FOR 3" #75 COUPLING	
AB CD	3 3	5N2A52AS41 5N3A52AS41	NPT NIP 2X52 TOE 304SS SK40 NPT NIP 3X52 TOE 304 S/S SK40	
all	4	30F515	FLOW SENSOR SIGNET #P51530-PO	
all	5	30F519A	2" SADDLE FITTING #IR8S020	
all	5	5R3A1ECI	NPT SADDLE 3X1.25 CI 300# SB	
all	6	15N101	SEMPANSLOTSCR 10-24X1/4 GR-2	
all	7	5SL2ASFA	NPT ELBOW 90DEG 2" 304SS 150#	

Pulse Flow Tank Fresh Water Piping

76028G3, 76039G3, 92048G4

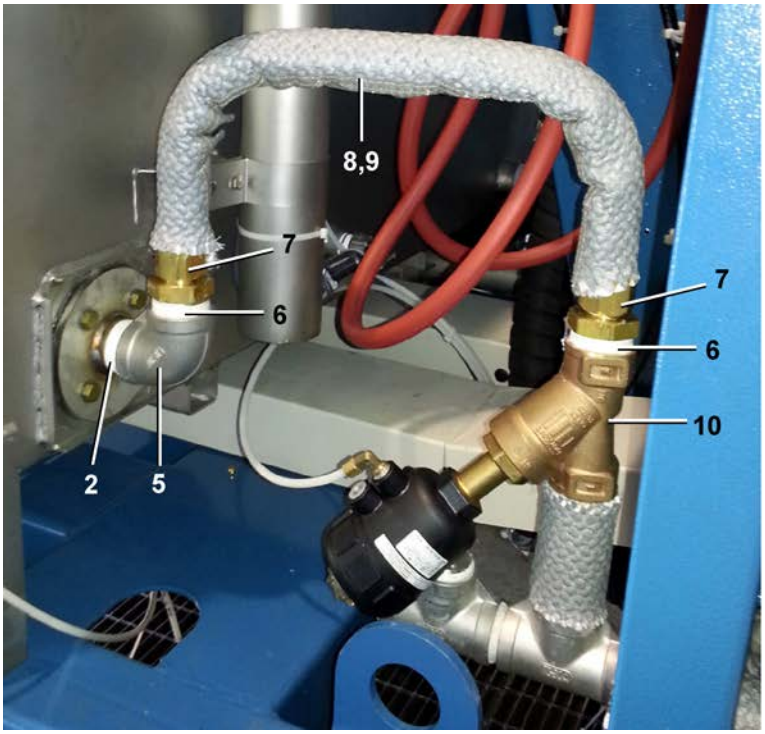
Parts List

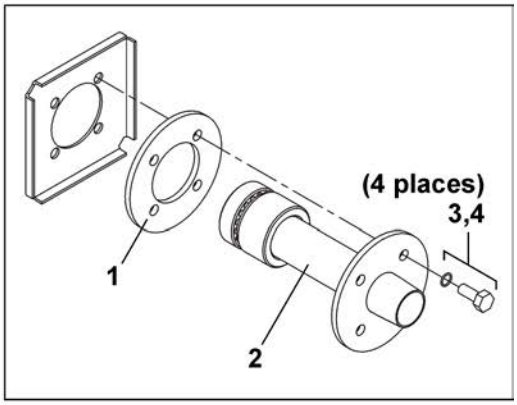
Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
all	7	5SL3ASFA	NPT ELBOW 90DEG 3" 304SS 150#	
AB	8	5N2A04AS42	NPT NIP 2X4 TBE 304SS	
CD	8	5N3A03AS42	NPT NIP 3X3 TBE 304 SS SK40	
AB	9	5N2A13AS42	NPT NIP 2X13 TBE 304SS SK40	
CD	9	5N3A13AS42	NPT NIP 3X13 TBE 304 S/S SK40	
AB	10	5S2ASFA	NPT TEE 2" 304SS 150#	
CD	10	5S3ASFA	NPT TEE 3" 304S/S 150#	
all	11	5SB3A2ASFO	NPTHEXBUSH 3X2 304SS 150#	
all	12	5SB2A0KUFO	NPTHEXBUSH 2X1/2 316SS 150#	
all	13	53ACM0KKB	ASSY MALECON.5TX .5MP BRASS 68	
AB	14	96D088FBA	2" BALVAL+ACT BRS N/C BONOMI	
CD	14	96D090FBA	3"BALVAL+ACT BRS N/C SPRING RET BONOMI	
AB	15	5N2ACLSS42	NPT NIP 2XCLS TBE 304SS SK40	
CD	15	5N3ACLSS42	NPT NIP 3XCLS TBE 304SS SK40	
AB	16	5N2A21AS42	NPT NIP 2X21 TBE 304SS SK40	
CD	16	5N3A12AS41	NPT NIP 3X12 TOE 304S/S SK40	
all	17	5SP2ASFSC	NPT PLUG 2" SQ CORED 304SS	
all	18	5SB2A0PSFO	NPTHEXBUSH 2X3/4 304SS 150#	
all	19	5N0P04AS42	NPT NIP 3/4X4 TBE 304SS S40	
all	19	5N0P06AS42	NPT NIP 3/4X6 TBE 304SS SK40	
all	20	5SL0PSFA	NPTELB 90DEG 3/4 304SS 150#	
all	21	5N0P10AS42	NPT NIP 3/4X10 TBE 304SS SK40	
all	22	5SU0PSF	NPT UNION 3/4" 304SS 150#	
all	23	5N0P16AS42	NPT NIPPLE 3/4X16 TBE 304SS SK	
all	24	5N0P23AS42	NPT NIP 3/4X23 TBE 304SS SK40	
all	25	96D050A	3/4"BALLVALVE BRZ BONOMI 171N	
all	26	5N0PCLSS42	NPT NIP 3/4XCLS TBE 304SS SK40	
all	27	96J031D	3/4"PRESSREG SET 28# FEMXUN	
all	28	5S0PSFA	NPT TEE 3/4" 304SS 150#	
all	29	5N0P03AS42	NPT NIP 3/4X3 TBE 304SS SK40	
all	30	5SL0PSFK	NPTELB 45DEG 3/4 304SS 150#	
all	31	5SB0P0CSF0	NPTHEXBUSH 3/4X1/8 304SS 150#	
all	32	30N100	PRESSGAUGE 1/8"BACKCN.0-30PSI	
all	33	96D087FSHL	1.5" BALVAL S/S LLHDL BONOMI #700LL-1.5	

Steam to Pulse Flow Tank

BPTPUS01.R01 0000158939 7/28/17 8:33 AM Released





Sparger to Tank

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "All" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

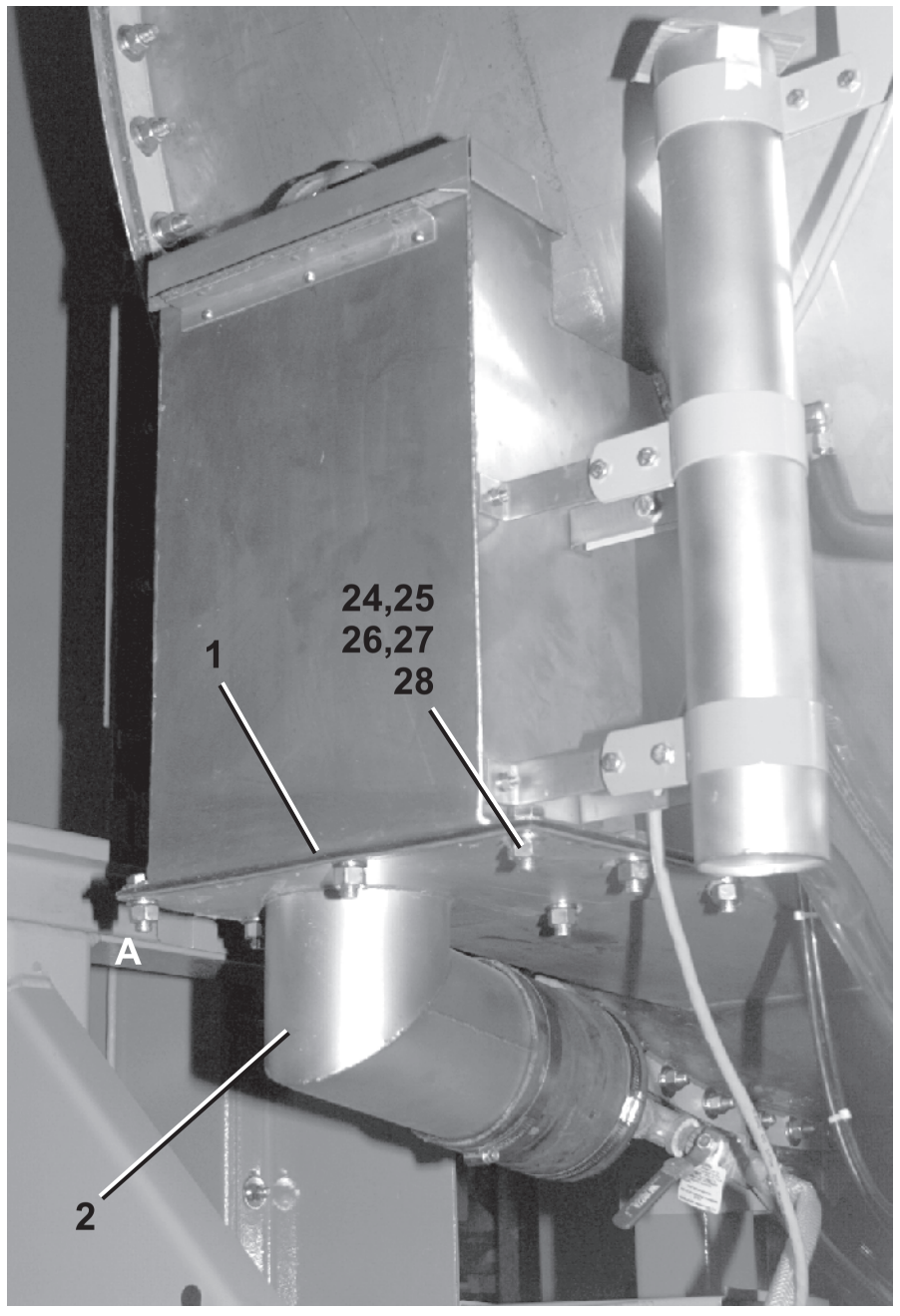
Used In	Item	Part Number	Description/Nomenclature	Comments
			Components	
	1	06 20297B	GASKET=DYE CBW STEAM FLANGE	
	2	W6 20298D	WLMT=7639 STEAM SPARGER	
	3	15K095A	HEXCAPSCR 3/8-16X1" BRASS	
	4	24G030N	ROLLED WASH.379ID NYLTITE 37W	
	5	5SL1ESFA	NPT ELB 90DEG 1.25 304SS 150#	
	6	5N1ECLSS42	NPT NIP 1.25XCLS TBE 304SS S40	
	7	52ZK00S001	TUBEFITMALCN7/8X1.25#14-20FTXB	
	8	06 40095B	7/8 TUBE=STEAM DUAL TANK REUSE	
	9	98P451	INSUL.STEAM 1+1/4"OD SPEEDWRAP	
	10	96D0011E	1.25"NPTBRZ N/C STEAMVALANGBD	

Level Box Drain Options

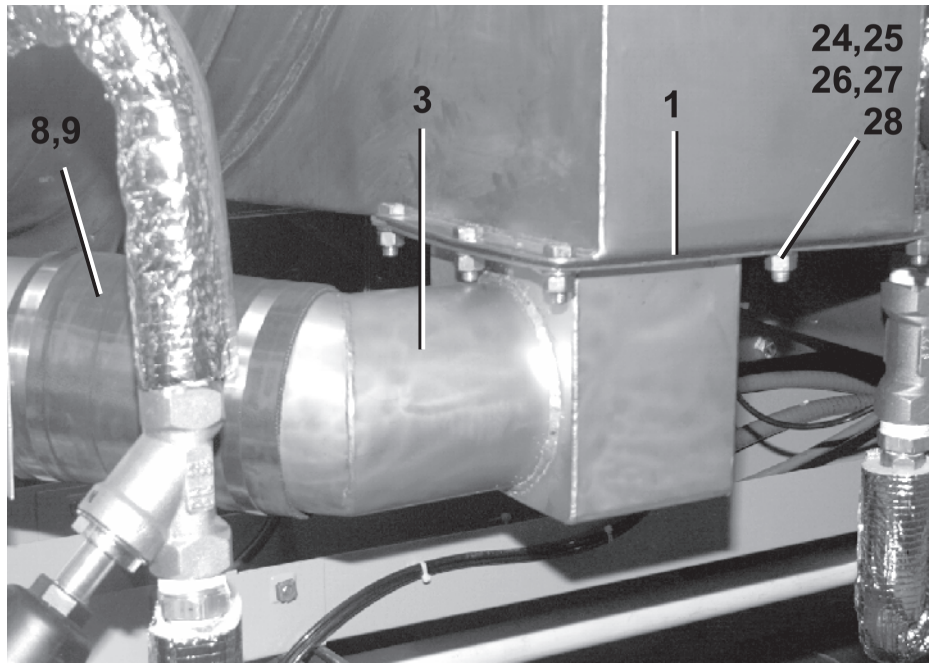
76028 & 76039 G3 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

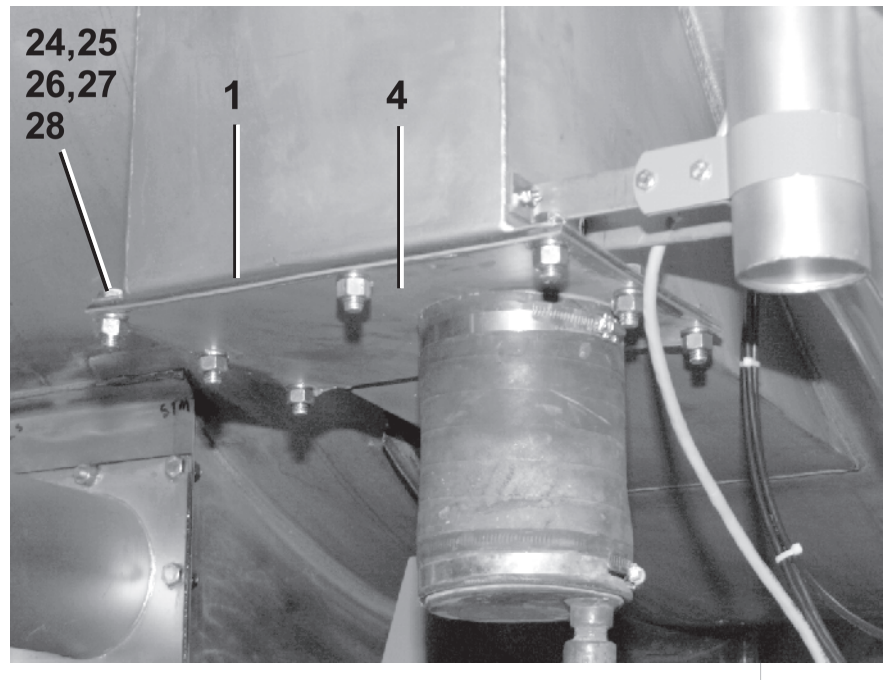
Litho in U.S.A.



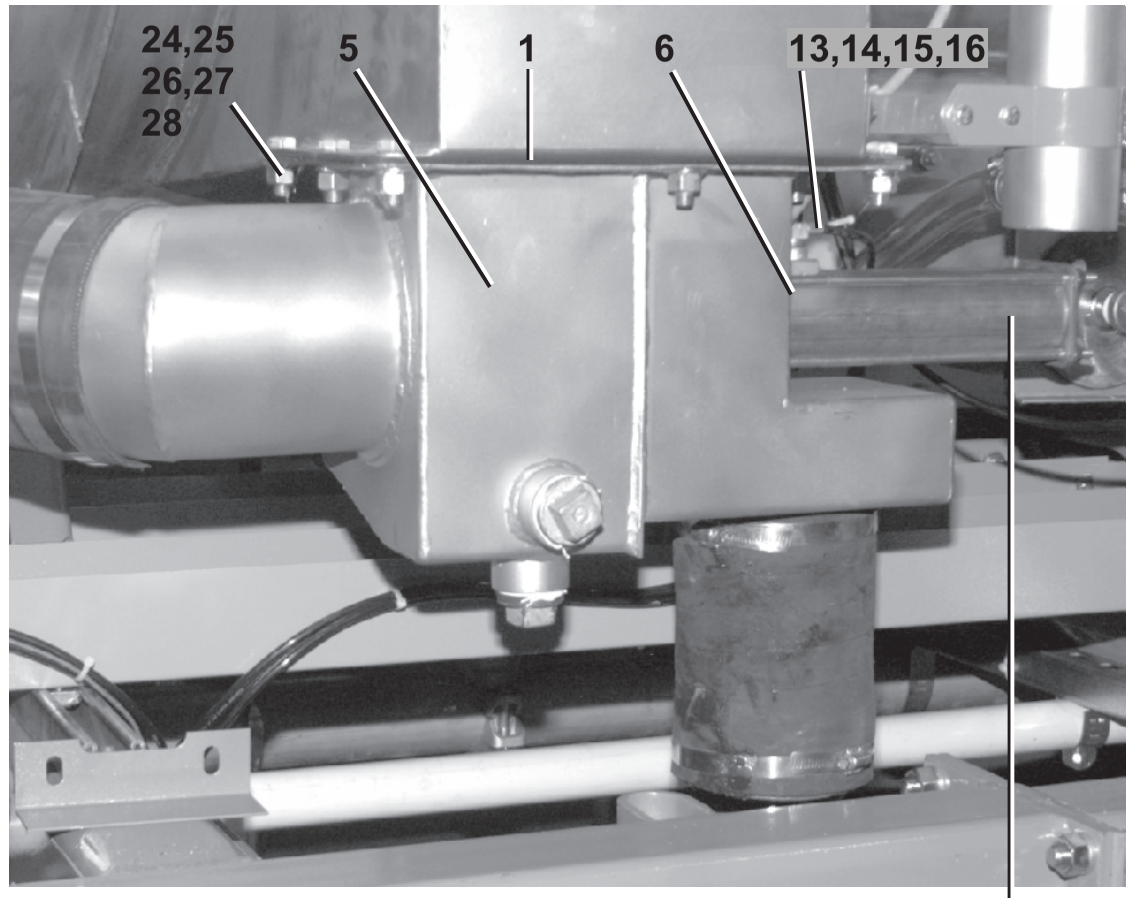
Flow to Sewer Load



Level Box Flow to Next



Level Box Flow to Flowsplitter



Flow Not Valve at Load

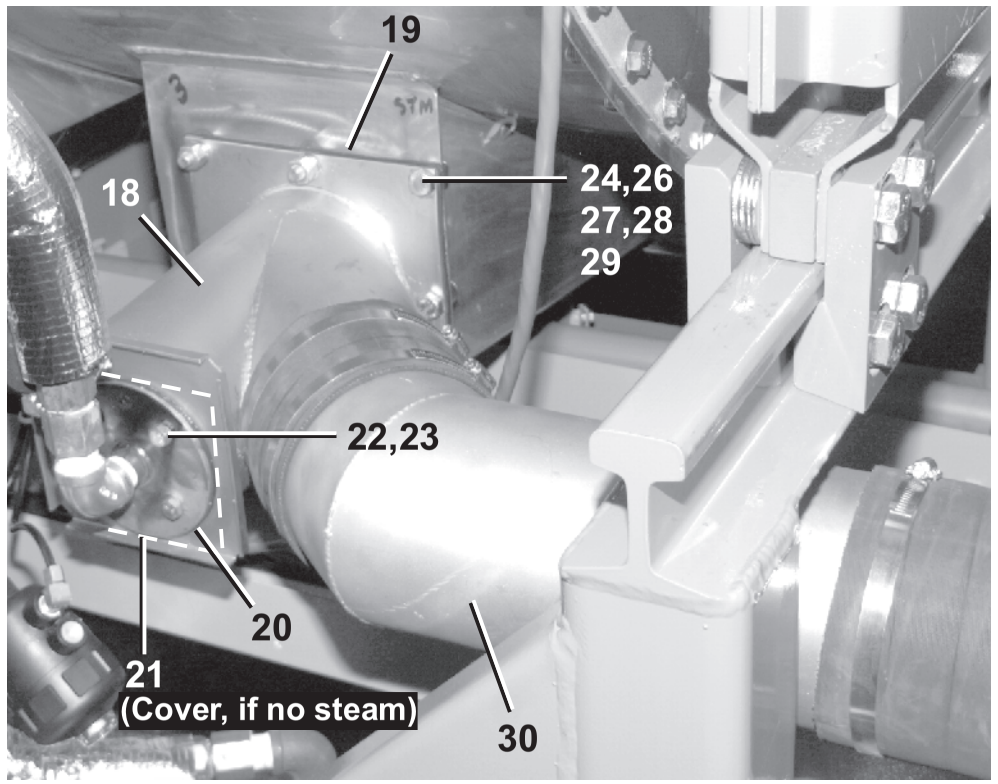
7
Air Cylinder
See BMP970001.

Level Box Drain Options

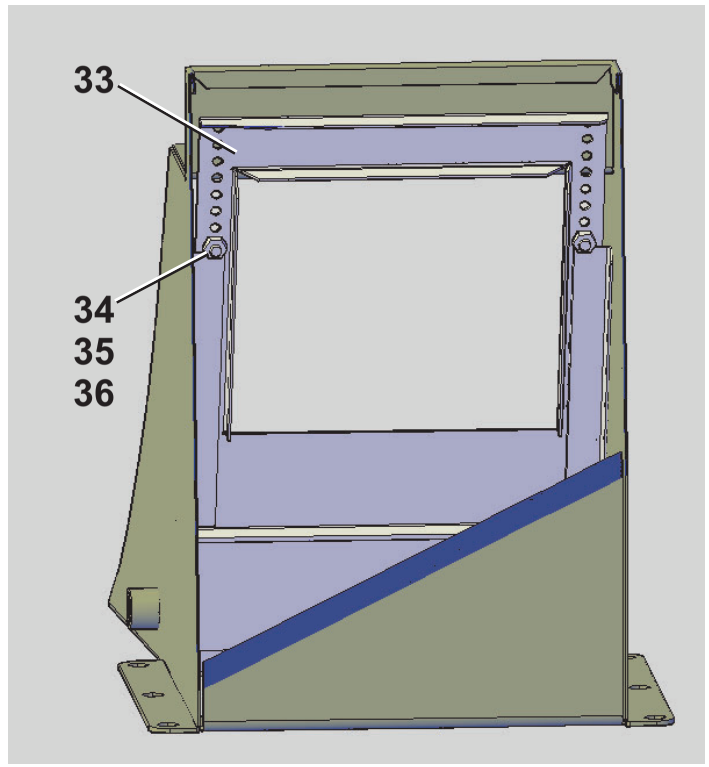
76028 & 76039 G3 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

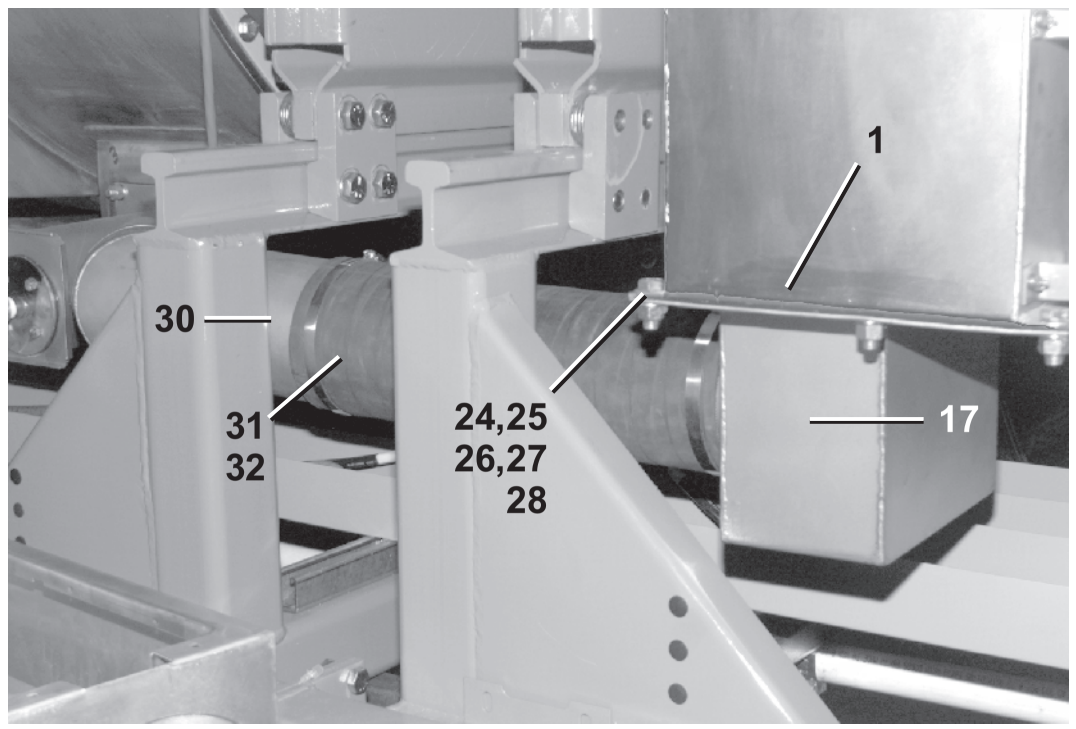


Steam & Water
Y-branch

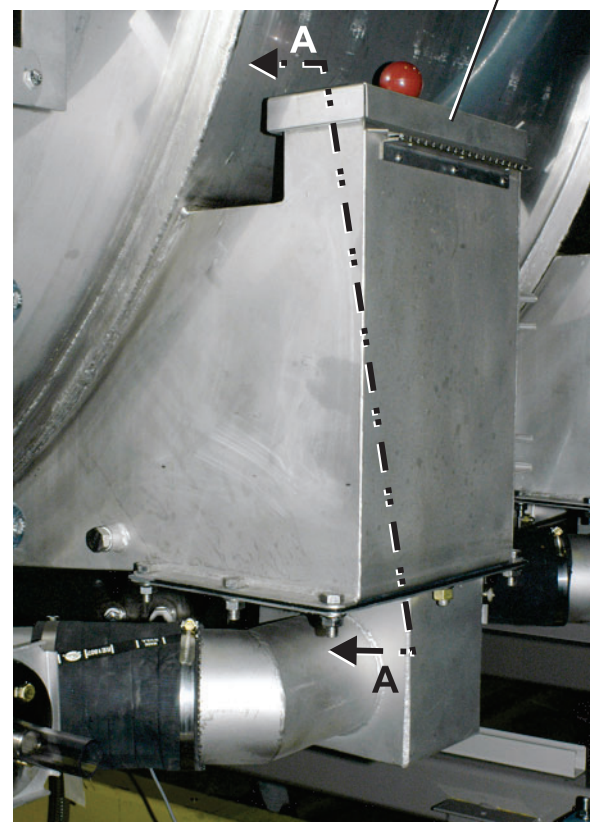


Level Box Adjusting Plate
Section A-A

Unit-to-unit Counter flow



Level Box Lid
See BMP000079.



Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Level Box Drain Options

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

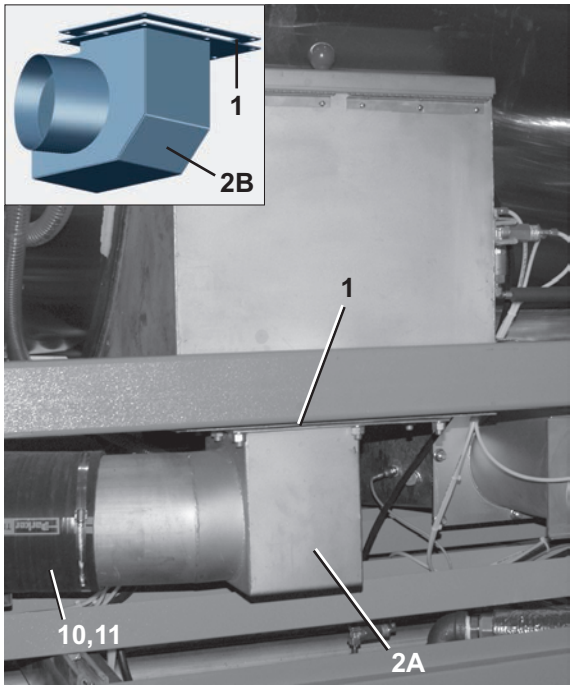
Used In	Item	Part Number	Description	Comments
.				
			----------ASSEMBLIES----------	
	A	A67LB005	7639=LEVBX FLOWTOSEW LD ASY G3	76028 & 76039
	B	A66LB001	LEVBOX FLOTONMOD LD	76028
	C	A67LB001	LEVEL BOX FLOTONMOD LD ASSY G3	76039
	D	A67LB006	7639=LEVBX FLWTOSPLT LD AS G3	76028 & 76039
	E	A66FN001	G3 ASSY=FLOWNOT VALVE AT LOAD	76028
	F	A66FN002	ASSY=7639 FLOWNOT @ LOAD G3	76039
	G	G66FN001	G3 FLOWNOT VALVE AT LOAD	76028
	H	G66FN002	INST=7639 FLOWNOT @ LOAD G3	76039
	J	G65CF001	7639=UNIT/UNIT COUNTRFLW INS	76028 & 76039
			----------COMPONENTS----------	
all	1	06 50092	7639=FLOWNOT VLV. LEVBX GSKT	
A	2	W6 70022	WELD=DRAIN TO SEWER	
B	3	W6 40525	7628G3 FLOW/NEX WELD	
C	3	W6 70025	7639 FLOW/NEXMOD	
D	4	W6 70022E	WELD=FLO/WEIR EAGLE	
E	5	W6 40168B	7628G3 FLONOT VAL WELDMENT	
F	5	W6 50039A	7639G3 FLONOT VAL WELD	
all	6	02 18660A	DUMP VALVE AIR CYL GASKET	
E	7	A62 06000	AIR CYL FLOW NOT VALVE	76028
F	7	A65AC001	AIR CYL FLOW NOT VLV ASY	76039
C	8	60E319A08K	HOSE=6"ID X 8.5"LG GATES #4175	
C	9	27A083	HOSECLAMP 5+1/8-7"CADSCR#HS104	
G	10	60E312A95	HOSE=5"ID X 9.5"LG GATES 75W;4	
H	10	60E319A08K	HOSE=6"ID X 8.5"LG GATES #4175	
G	11	27A086S	HOSECLAMP 3+1/8-6"SSSCR#HSS88	
H	11	27A083	HOSECLAMP 5+1/8-7"CADSCR#HS104	
all	12	5SP1EDESC	NPT PLUG 1.25 SQCORED GALV CI	
all	13	60E004TE	1/4"OD X.170"ID NYL TUBING	
all	14	53A059A	NUT 1/4"BR.HOLYOKE AND #61A-4	
all	15	53A500	SLEEVE DELRIN 1/4"OD#60PT-4	
all	16	53A501	TUBE INSERT .163"OD #63PT-4-40	
all	17	W6 70027	FLOW BOX UNIT/UNIT G3	
all	18	W6 50055C	6"Y-BRANCH 42.5 SIDEOUT	
all	19	06 20348K	GSKT=FLNG MTG DYE LEVEL BOX	
all	20	06 20297B	GASKET=DYE CBW STEAM FLANGE	
all	21	06 20298A	PLATE FLANGE NO STEAM	
all	22	15K095A	HEXCAPSCR 3/8-16X1" BRASS	
all	23	24G030N	ROLLED WASH.379ID NYLTITE 37W	
all	24	15G225	HEXNUT 1/2-13UNC2 SS18-8	
all	25	15K146	HEX CAP SCR 1/2-13 UNC2 X 1 SS	
all	26	15U310	LOKWASHER REGULAR 1/2 SS18-8	
all	27	15G234B	HEXNUT 1/2-13UNC2B BRASS	
all	28	24G032N	ROLLED WASH.50ID NYLTITE 50W	
all	29	15K153	HXPSCR 1/2 WCX1.25S.S.	
all	30	W6 50057	*7639=UNIT/UNIT CONNECT WLMT	
all	31	60E319A19A	HOSE=6"ID X 19"LG GATES #4175-	
all	32	27A089	HOSECLAMP 6+5/8-8.5CAD#611-128	
	33	06 70008E	BAFFEL LEVEL BOX EURO CBW	Standard Baffle
	33	06 50097	BAFFLE=LEVEL BOX G3 PF2	PulseFlow®II - Baffle
all	34	15K032	BUTSOKCAPSCR 1/4-20X3/8 SS18-8	
all	35	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	36	15G170	HEXNUT 1/4-20UNC2 SS18-8	
.				

Level Box & Flow Options

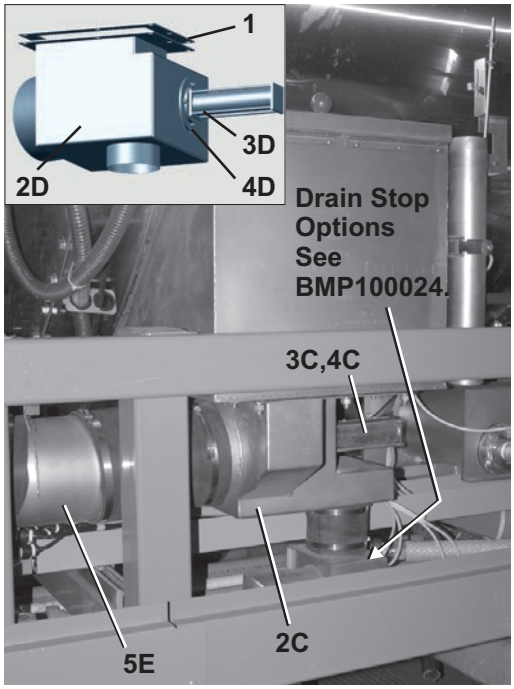
92048G4 PulseFlow® Tunnels, 76039G3 PulseFlow®II(EXD) Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

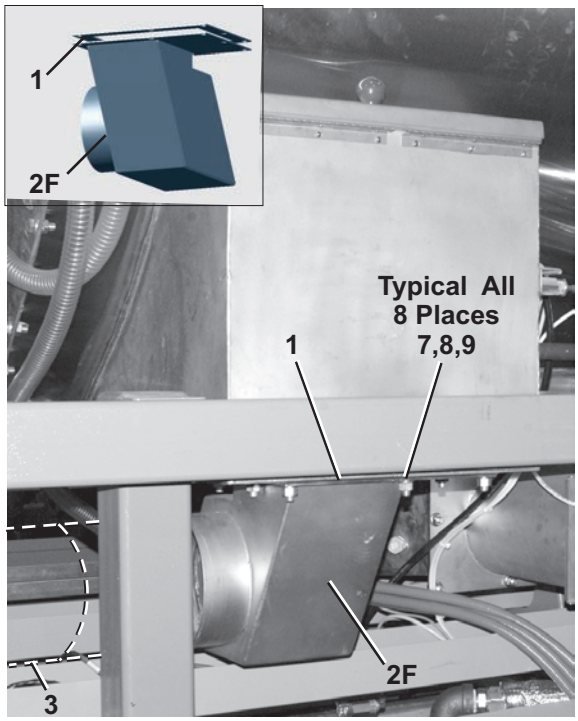
Litho in U.S.A.



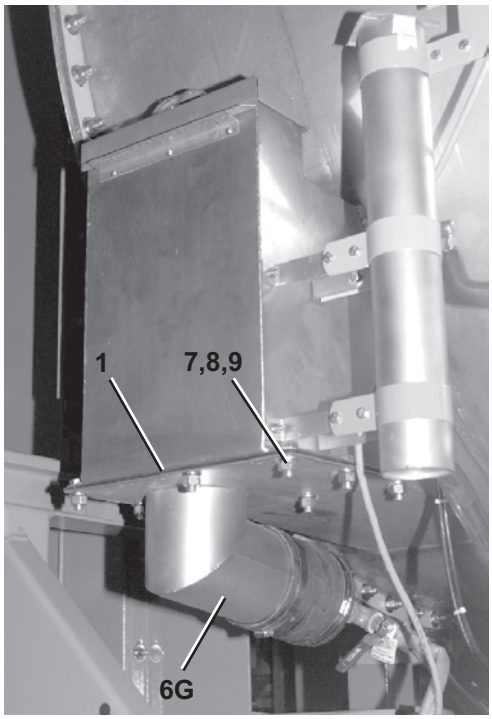
Flow to Next Module (00A,00B)



Flow to Next Module or Sewer



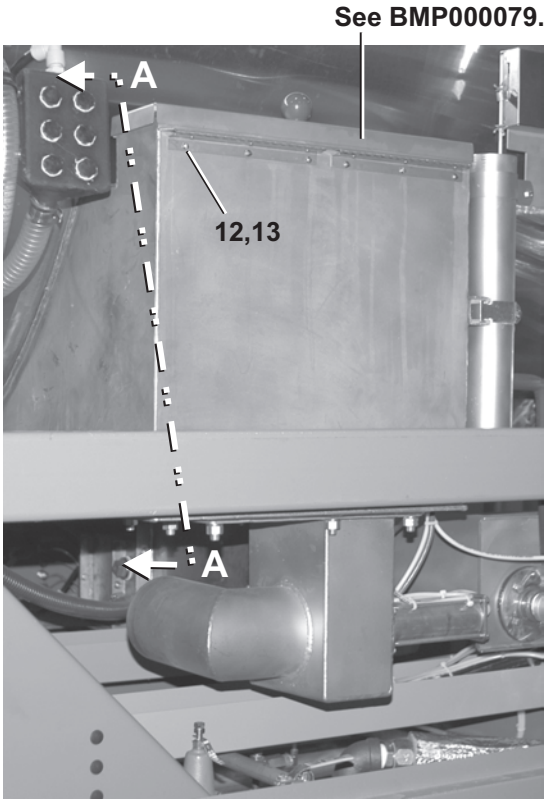
Flow to Load Offset

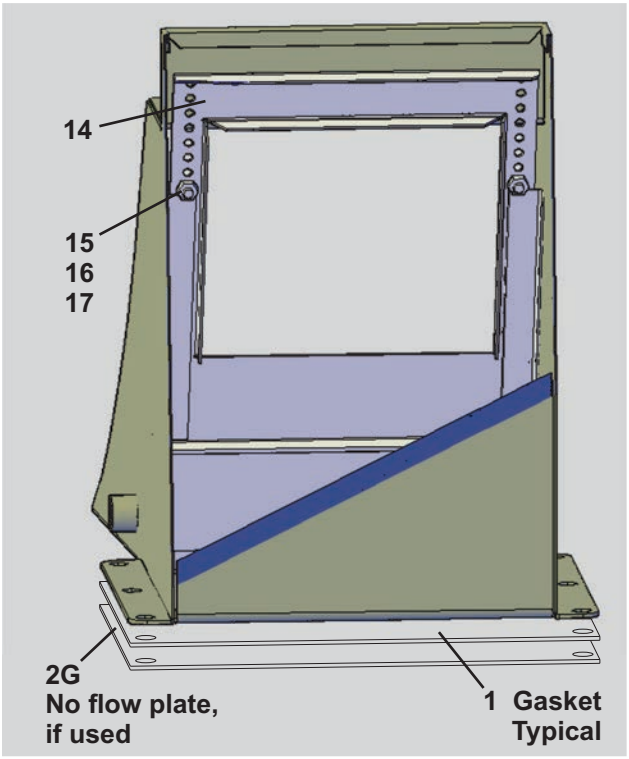


Flow to Sewer

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.





Level Box Adjusting Plate
Section A-A

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Level Box & Flow Options

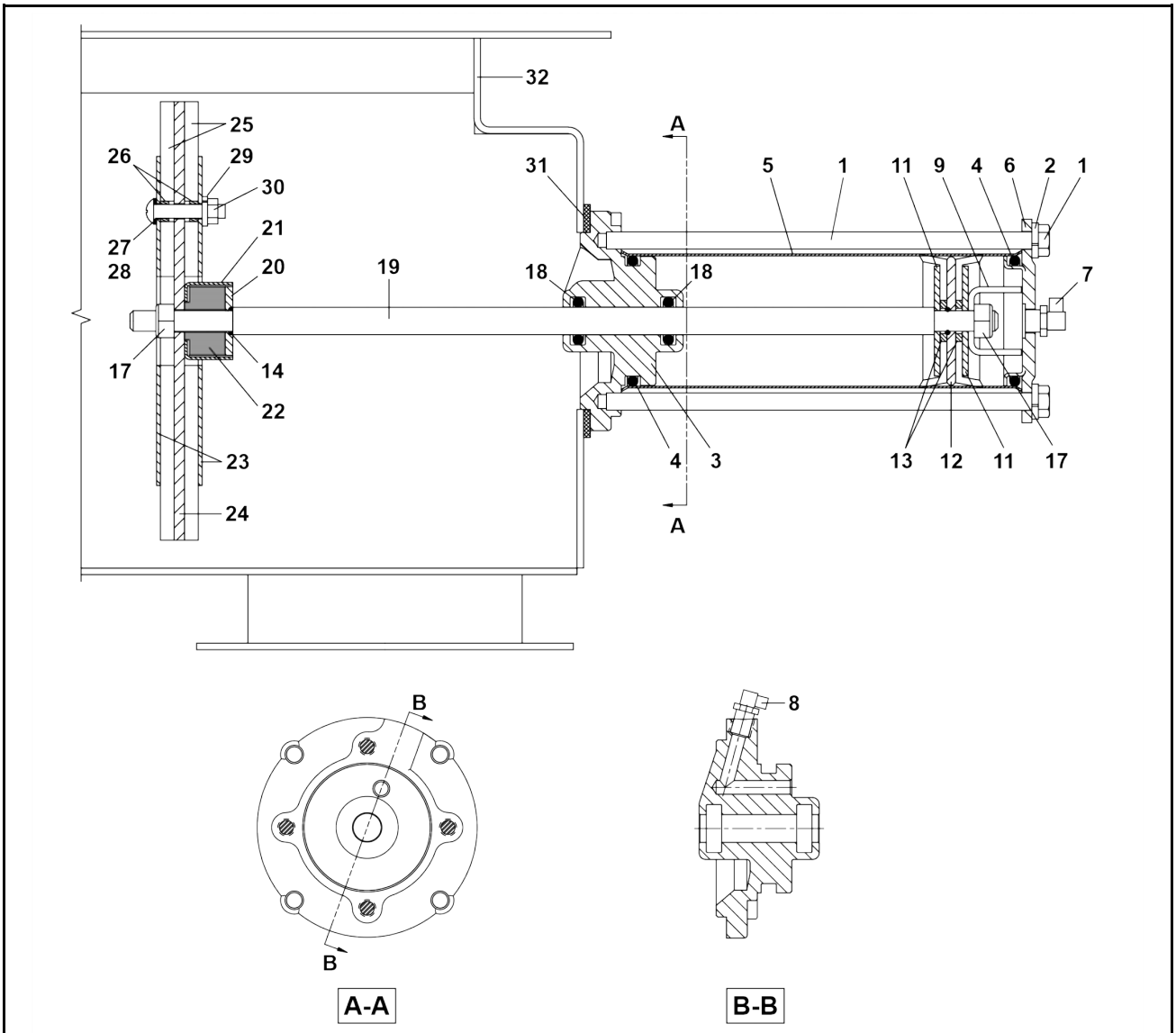
Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	GLB63001	9248 LEVELBOX FLO NEXT MOD INS	92048 Tunnels
	B	G67LB001A	INST=LEVEL BOX FLOTONEXT MOD PF2	76039 PFII/EXD Tunnels
	C	GLB63002	INST=9248 FLOWNOT @ LOAD	92048 Tunnels
	D	G66FN002A	INST=7639 PF2 FLOWNOT @LOAD	76039 PFII/EXD Tunnels
	E	GLB63003A	FLOW TO LOAD AT UNIT CONN 7639 PF2	76039 PFII/EXD Tunnels
	F	GLB63003	FLOW TO LOAD AT UNIT CONNECT	92048 Tunnels
	G	GLB63005	INST=9248 FLOW TO SEWER @LD RHT	92048 Tunnels
			----------COMPONENTS----------	
all	1	06 50092	7639=FLOWNOT VLV. LEVBX GSKT	
A	2A	W6 30124	9248 FLO NEXT MOD BOX WLMT	
B	2B	W6 50200	WLMT=7639 FLOW TO NEXT MOD-PF2	
C	2C	W6 50039D	9248 FLOWNOT AT BREAK WELD	
D	2D	W6 30272	WLMT=8" FLOW/FLOWNOT	
F	2F	W6 30131	9248 FLO NEXT MOD WLMT OFFSET	
G	2G	06 40528	G3 LEVEL BOX PLATE	
C	3C	A66AC001	AIR CYLINDER	92048 Tunnels
D	3D	A65AC003	AIR CYLINDER	76039 PFII/EXD Tunnels
C	4C	02 18660A	DUMP VALVE AIR CYL GASKET	
D	4D	02 18931F	GASKET=DUMPVALVE-1/60+72WEHU	
E	5E	W6 30126	8" FLO TO NEXT MOD OFFSET PIPE	
G	6G	W6 70022	WELD=DRAIN TO SEWER	
all	7	15G234B	HEXNUT 1/2-13UNC2B BRASS	
all	8	15U310	LOKWASHER REGULAR 1/2 SS18-8	
all	9	24G032N	ROLLED WASH.500ID NYLTITE 50W	
all	10	60E328A04K	HOSE+8"IDX4+1/2"LONG -4.5	4.5” LONG
all	10	60E328A07K	HOSE+8"IDX7+1/2"LONG -7.5	7.5” LONG
all	10	60E328A10A	HOSE+8"IDX10"LONG -10	10” LONG
all	10	60E328A12A	HOSE+8"IDX12"LONG -12	12” LONG
all	10	60E328A18A	HOSE-8"1DX18"LONG -18	18” LONG
all	10	60E328A22A	HOSE+8"IDX22"LONG -22	22” LONG
all	10	60E328A32A	HOSE+8"IDX32"LONG -32	32” LONG
all	11	27A092	HOSECLAMP S.S.SCR 7+1/8-10"	
all	12	15N130	RDMACSCR 10-24UNC2A X 1/2 SS18	
all	13	15G126	HXLOCKNUT NYLON 10-24 UNC SS N	
all	14	06 30130	BAFFEL LEVEL BOX 9248 CBW	92048 Tunnels
all	14	06 50097	BAFFLE=LEVEL BOX G3 PF2	76039 PFII/EXD Tunnels
all	15	15K031	BUTSOKCAPSCR 1/4-20X1/2 SS18-8	
all	16	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	17	15G170	HEXNUT 1/4-20UNC2 SS18-8	

Air Cylinder Flow-Not Valve

76039PF2, 92048PF

Figure 1. Double Acting Air Cylinder



Legend

A–A . . Rear View of Double Acting Bonnet
B—B . . Section View of Air Port

Air Cylinder Flow-Not Valve

76039PF2, 92048PF

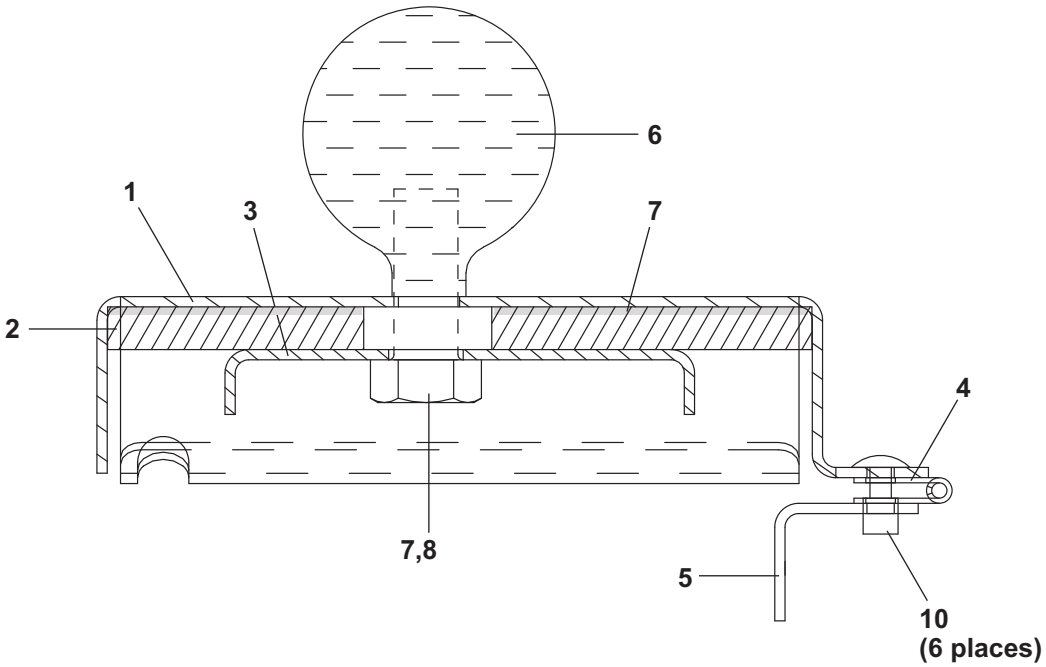
Table 1. Parts List—Air Cylinder Flow-Not Valve

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.				
Used In	**Item**	**Part Number**	**Description/Nomenclature**	**Comments**
Reference Assemblies				
	A	ALB63006	ASSY=8" FLOW/NOT PF2	
	B	ALB63006A	ASSY=7639 PF2 FLOWNOT @LOAD	
	C	A65AC003	ASSY=9248 AIR CYL FLOW/NOT VALVE+7639 PF2	ASSEMBLY, ITEMS 1–30
Components				
all	1	02 10585	TIE BOLT=5/16-18X7.875LG SS	
all	2	15U205	LOCKWASHER MEDIUM 5/16" 18-8SS	
all	3	X6 20708A	DOUBLE ACTING VALVE BONNET	
all	4	60C132	ORING 2"IDX3/16CS BUNA70 #329	
all	5	02 02068	AIRCYL-STAINLESS=DUMP VALVE	
all	6	02 02101S	CYLINDER HEAD TAP.HOLE (SS)	
all	7	96PVQC24249	QUICK CONNECT FITTING 1/4"" NPT X 1/4" TUBING 90	
all	8	96PVQC18249	QUICK CONNECT FITTING 1/8" NPT X 1/4" TUBING 90	
all	9	03 01313S	+STOP=AIRCYL W/2+11/16STR.SS	
all	10	02 02194	PISTON CUP=DUMPVALVE 2+3/8"	
all	11	02 02085	UP WASHER=2"OD=PISTON CUP	
all	12	02 02105B	2.38"ACYL BRASS PISTONCUP WSHR	
all	13	02 02185	WASHER=PISTON CUP COMP LIMIT	
all	14	60C106	ORING 5/16ID 1/16CSBUNA70#011	
all	17	15G220	NUTLOK THINHX 3/8-24 SS/NYL	
all	18	60C108	ORING 1/2IDX3/16CS BUNA70#310	
all	19	06 50082B	9248 FLOW/NOT VALVE STEM	
all	20	02 16021E	WASHER 3/8IDX1.250D DUMPVAL	
all	21	02 16021D	DUMP VALVE BUMPER RETAINER	
all	22	02 16021C	BUMPER=DUMP VALVE BONNET	
all	23	06 50083C	9248 FLOW/NOT GASKET RETAINER	
all	24	06 50084A	9248 FLOW NOT CUP	
all	25	06 50083B	9248 FLOW/NOT GASKET	
all	26	27B260156S	SPCRSLD.26ID.375OD.156L 316SS	
all	27	24G020N	ROLLED WASH.252ID NYLTITE 25W	
all	28	15N196	PHILRDMACSCR 1/4-20UNC2X1+1/4S	
all	29	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	30	15G164	HX THIN LOCKNUT NYL1/4-20 SS	
all	31	02 18931F	GASKET=DUMPVALVE-1/60+72WEHU	
all	32	W6 30272	WLMT=8" FLOW/FLOWNOT	

Level Box Lid & Latches

76028G3, 76039G3, 92048G4 Tunnels

Two Latches per Lid



Level Box Lid & Latches

76028G3, 76039G3, 92048G4 Tunnels

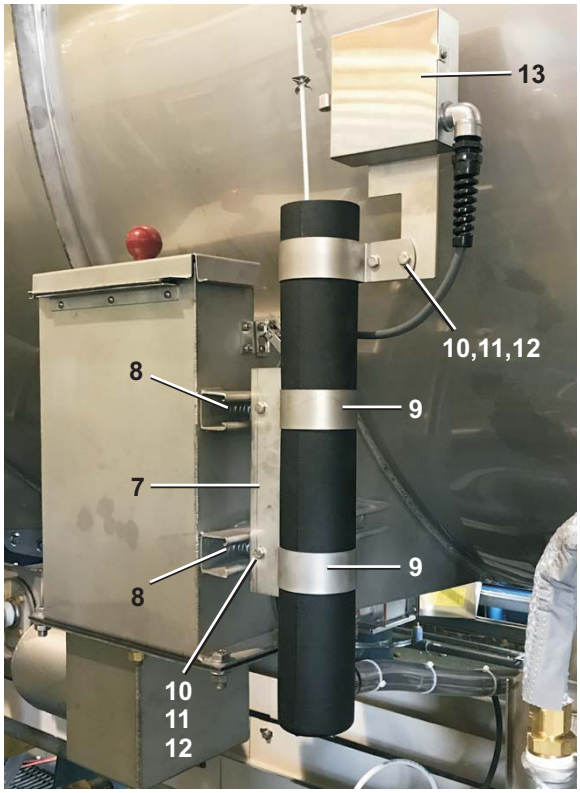
Parts List

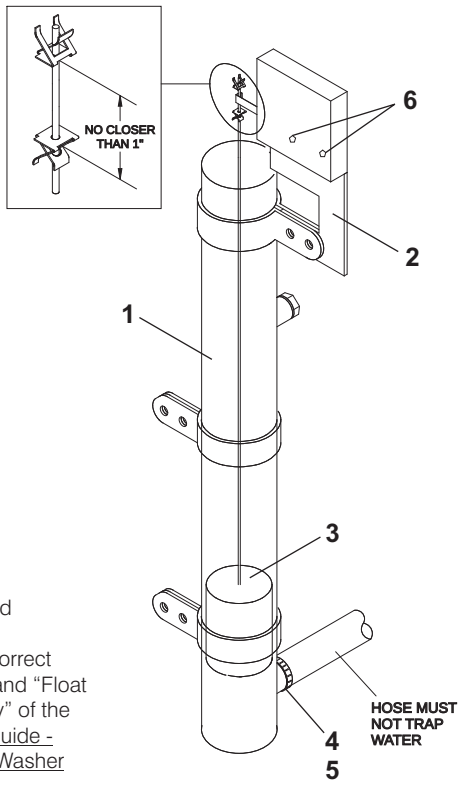
Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	A65LL001A	7639 LEVELBOX LID ASSY W/LATCH	76028 & 76039 Tunnels
	B	A65LL002	7639=PF2 LEVELBOX LID ASSY W/LATCH	76039 PulseFlow® II(EXD)
	C	ALL63001A	9248 LEVELBOX LID ASSY W/LATCH	92048 Tunnels
			----------COMPONENTS----------	
A	1	06 50135	7639 LEVELBOX LID W/LATCH	
B	1	06 50130	7639=PF2 LEVELBOX LID W/LATCH	
C	1	06 30110	9248 LEVEL BOX LID COVER W/LATCH	
A	2	06 50105	7639=LEVELBOX LID GASKET	
B	2	06 50132	7639=PF2 LEVELBOX LID GASKET	
C	2	06 30104	9248 LEVEL BOX LID GASKET	
A	3	06 50117	7639 LVL BOX GASKET SUPPT	
B	3	06 50131	7639 PF2 LVL B0X GASKET SUPPORT	
C	3	06 30114	9248 LEVEL BOX GASKET SPPT	
all	4	06 50104	7639=SOAP CHUTE HINGE	
AB	5	06 50103	7639=BRACKET=SOAP CHUTE HNGE	
C	5	06 50110	9248=BRKT=SOAPCHUTE HINGE	
all	6	12P100	BALLKNOB RD PLASTIC DAVIES#45H	
all	7	15K086A	HEXCAPSCR 3/8-24 UNFX3/4 SS18-	
all	8	15U245	FLTWASH 3/8 STD COMM 18-8 SS	
all	9	20C018	ADHESIVE-3M #1357-QT CN	
all	10	15J004	TUBULAR RIVET TRS#40988 3/16"	
all	11	27A009C	LATCH-ADJUSTABLE 304 S/S	
all	12	15N117	RDMACSCR 10-24UNC2X3/8SS18-8	
all	13	15G126	HXLOCKNUT NYLON 10-24 UNC SS N	
all	14	06 70008W	LEVEL BOX LATCH MNT	

Level Switch

76028G3, 76039G3, 92048G4 Tunnels





For Settings and Maintenance-
See topics: " Correct Water Levels" and "Float Level Assembly" of the Maintenance Guide - CBW® Tunnel Washer

Parts List

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

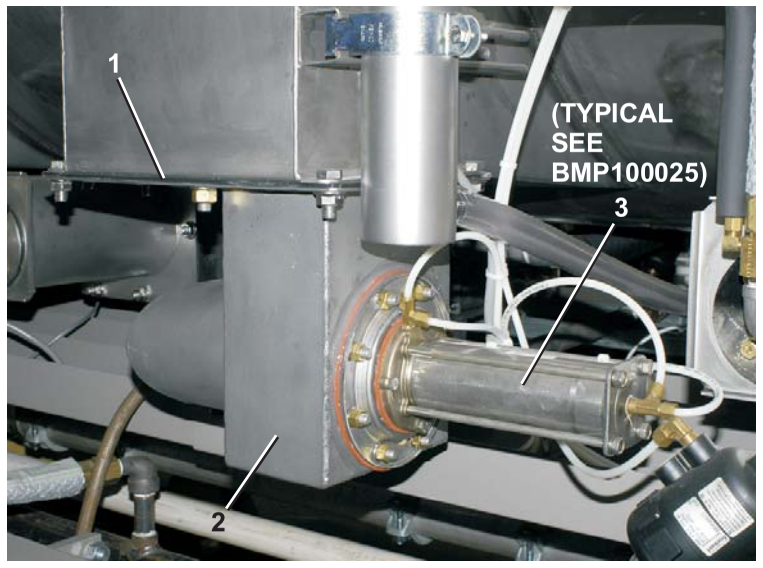
Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	G67LS003	ADD LEVEL SW BLACK POLY	
			----------COMPONENTS----------	
all	1	02 14450	TUBE=FLOAT CHAMBER	
all	2	02 15097C	BRACKET LEVCONT PER PRINT	
all	3	SA 02 011	*FLOAT ASSY L=25"-STD LEVEL	
all	4	60E013	TYGON TUBING 1"IDX1.25"OD	
all	5	27A090S	HOSECLAMP 13/16-1.5"SS#64016B	
all	6	15P175	TRDCUT-F HXHD 1/4-20UNC2AX1/2	
all	7	06 70380	LEVEL TUBE MNT BRKT	
all	8	27A0625NUT	CLAMPNUT 1/4-20 W/SHORT SPRING	
all	9	02 15642S	CLAMP=3"FLOAT CHAMBER DAS	
all	10	15K039	HXCAPSCR 1/4-20UNC2AX3/4 GR5 Z	
all	11	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	12	15G165	HXNUT 1/4-20UNC2BSAE ZC GR2	
all	13	ELL000MK2	WATER LEV SW ASSY: 1 UP+ 1LO	

Drain Stops

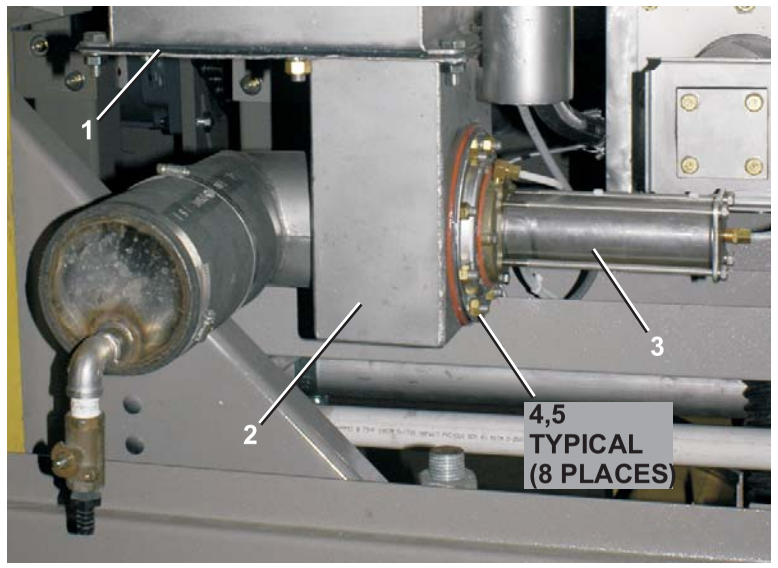
76028 & 76039 G3 Tunnels, 92048 G4 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.



(A) Drain Stop: Flow to Sewer



(B) Drain Stop: Flow to Flow Splitter

(C) Drain Stop: Flow Not to Sewer

Parts List—Drain Stops

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

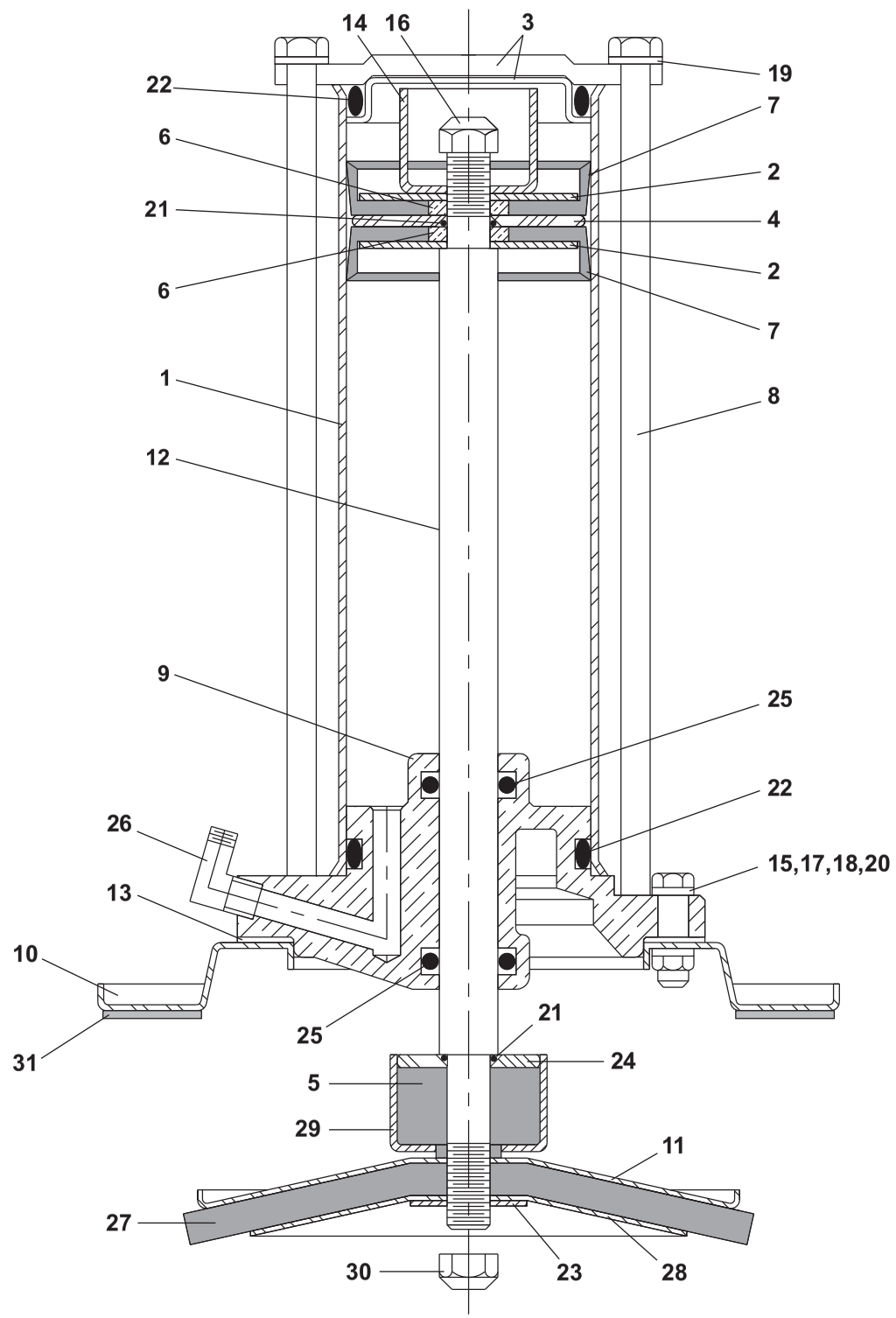
Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	G64DV005	INST=DRAIN/STOP WEIR TO SEWER	
	AA	A64DV005	ASSY=DRAIN/STOP WEIR TO SEWER	
	B	G64DV006	INST=DRAIN/STOP WEIR TO FLOWSP	
	BB	A64DV006	ASSY=DRAIN/STOP WEIR TO FLOWSP	
	C	G64DV007	INST=DRAIN/STOP F/N TO SEWER	
	CC	A64DV007	ASSY=DRAIN/STOP F/N TO SEWER	
			----------COMPONENTS----------	
all	1	06 50092	7639=FLOWNOT VLV. LEVBX GSKT	
AA	2	W6 70021A	WLMT=DRAIN/WEIR TO SEWER	
BB	2	W6 70021	WLMT=DRAIN/WEIR TO SPLITTER	
CC	2	W6 70020	WLMT=DRAIN STOP F/N TO SEWER	
all	3	AVD48701	4"DUMP BONNET&AIRCYL DBL-ACT	
all	4	15G206B	HEXNUT 3/8-16UNC2 BRASS	
all	5	15U260	LOCKWASHER MEDIUM 3/8 SS18-8	
all	6	60E312A75	HOSE 5"IDX7.5"LG GATES75W4175E	
all	7	27A077D	T-BOLT HOSECLAMP 5.31-5.62"SS	

Drain Stop Bonnet, 4” Double Acting

76028G3, 76039G3, 9248G4

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.



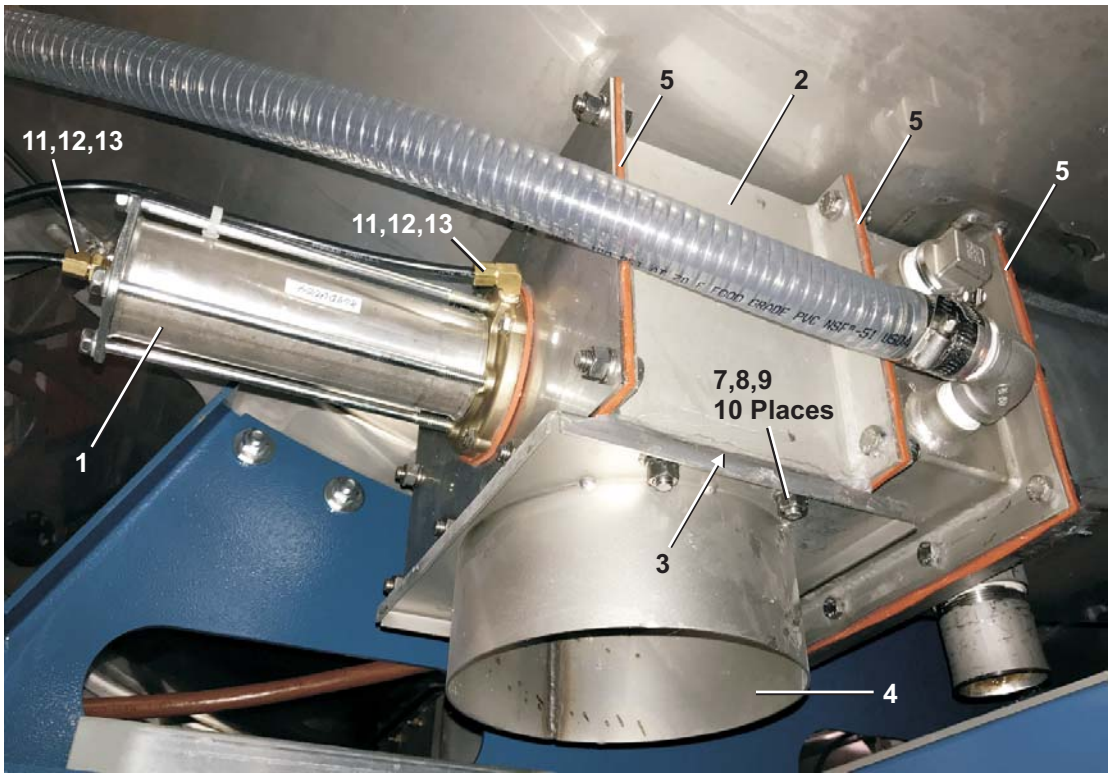
Parts List—Drain Stop Bonnet, 4” Double Acting

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

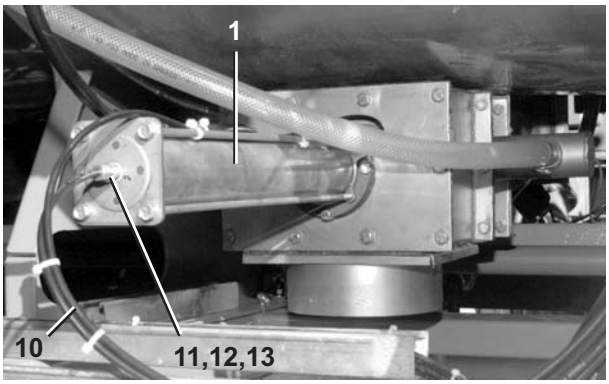
Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	AVD48701	4"DUMP BONNET&AIRCYL DBL-ACT	
			----------COMPONENTS----------	
All	1	02 02068	AIRCYL-STAINLESS=DUMP VALVE	
all	2	02 02085	UP WASHER=2"OD=PISTON CUP	
all	3	02 02101S	CYLINDER HEAD TAP.HOLE (SS)	
all	4	02 02105B	2.38"ACYL BRASS PISTONCUP WSHR	
all	5	02 16021H	BUMPER=DMPVAL BON'T RED SILC	
all	6	02 02185	WASHER=PISTON CUP COMP LIMIT	
all	7	02 02194	PISTON CUP=DUMPVALVE 2+3/8"	
all	8	02 10585	TIE BOLT=5/16-18X7.875LG SS	
all	9	X6 20708A	DOUBLE ACTING VALVE BONNET	
all	10	02 14447	BONNET=4"S/S DUMP VALVE	
all	11	02 14446	DISC-4"S/S DUMP VALVE	
all	12	02 16021I	DUMPVAL STEM-4"+8"316SS	
all	13	02 18932B	GASKET=DUMPVAL 1/8"RED SILIC	
all	15	15G168	SQNUT 1/4-20UNC2 SS18-8	
all	16	15G220	NUTLOK THINHX 3/8-24 SS/NYL	
all	17	15K041S	HEXCAPSCR 1/4-20UNC2AX1 SS18-8	
all	18	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	19	15U205	LOCKWASHER MEDIUM 5/16" 18-8SS	
all	20	24G020N	ROLLED WASH.252ID NYLTITE 25W	
all	21	60C106V	ORING 5/16IDX1/16CSVITON#011	
all	22	60C132V	ORING 2"ID3/16CS VITON75 #329	
all	23	15U245	FLTWASH 3/8 STD COMM 18-8 SS	
all	24	02 16021E	WASHER 3/8IDX1.250D DUMPVAL	
all	25	60C108V	ORING 1/2IDX3/16CS VITON #310	
all	26	53A031B	BODY-EL90MALE.25X1/8 #269C-42B	
all	27	02 11740D	SEAT=4"S/S VENT=RED SILICONE	
all	28	02 14446B	DISC=4"S/S DV=VENT	
all	29	02 16021D	DUMP VALVE BUMPER RETAINER	
all	30	15G219A	LOKNUT 3/8-24 NF2 18-8 SS	
all	31	02 14447B	GASKET=BON 4"S/S DPVAL RED	

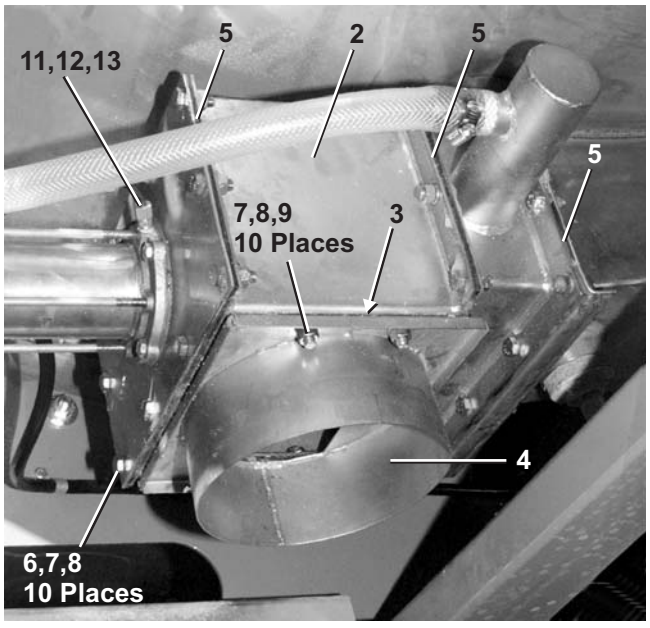
Dump Valve Installation

76032, 76028, 76039, 92048 Tunnels



76028, 76039, 92048 Tunnels





76032 Tunnels

Dump Valve Installation

76032, 76028, 76039, 92048 Tunnels

Parts List

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	G64DV001A	N/C 4+1/2X8 DUMP VALVE ASSY	76032 G1 NORMALLY CLOSED
	B	G64DV004	8"DUMPVAL NC SHORT G3	76028G3, 76039G3 & 92048G4 TUNNELS NORMALLY CLOSED-SHORT
			----------COMPONENTS----------	
A	1	A64AC001A	N/C DUMP VAL AIR CYL 4+1/2X8	
B	1	A64DV004	BONNET DUMPVAL NC G3	
A	2	W6 40055	*DUMP VALVE BODY WLDT 4+1/2X8	
B	2	W6 40055A	DUMP VALVE WLMT SHORT G3CBW	
A	3	06 40069F	DYE DUMPVALVE ADAPT GASKET G1	
B	3	06 40069J	DUMPVAL ADAPT GASKET G3	
A	4	W6 40076	*STRAIGHT DUMP V.ADAPT WLMT	
B	4	W6 40072	WLMT=DUMP VALVE HOSE CONN ADAPT	
A	5	06 40069E	4-1/2X8 DYE DUMPVALVE GASKET	
B	5	06 40069K	4+1/2 X 8 DUMP VALVE GASKET RED SILICONE	
all	6	15K096	HEXCAPSCR 3/8-16UNC2X1SS18-8	
all	7	15U260	LOCKWASHER MEDIUM 3/8 SS18-8	
all	8	15G206	HEXNUT 3/8-16 UNC2 SS 18-8	
all	9	15K086D	HXCAPSCR 3/8-16 UNC2A X 7/8"	
all	10	15G206	HEXNUT 3/8-16 UNC2 SS 18-8	
all	11	15U260	LOCKWASHER MEDIUM 3/8 SS18-8	
all	12	60E004TE	1/4"OD X.170"ID NYL(BLK)TUBING	
all	13	53A059A	NUT 1/4"BR.HOLYOKE AND #61A-4	
all	14	53A500	SLEEVE DELRIN 1/4"OD#60PT-4	
all	15	53A501	TUBE INSERT .163"OD #63PT-4-40	

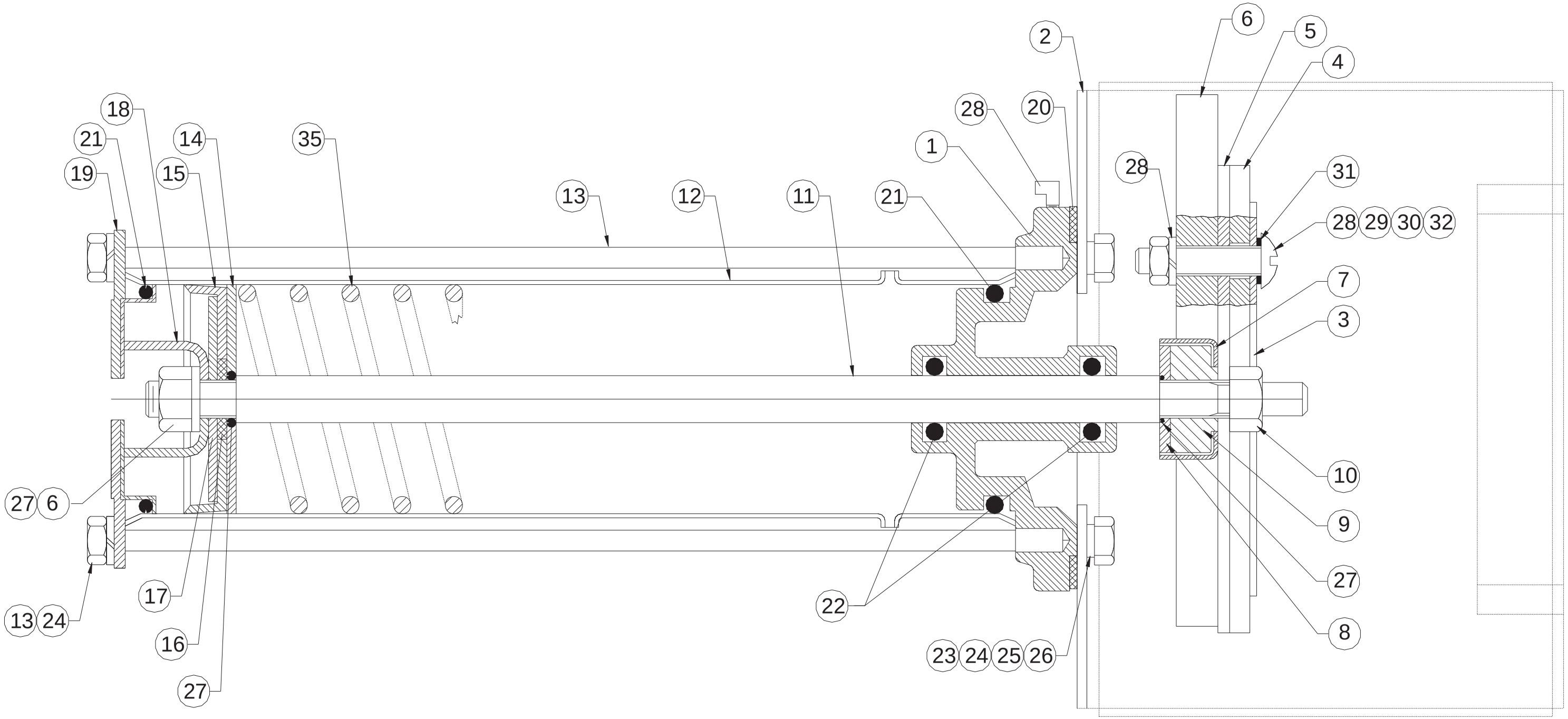
Dump Valve Bonnet

76028G3, 76039G3, & 92048G4 Tunnel

BMP000073/2011494B
(Sheet 1 of 2)

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.



Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Dump Valve Bonnet

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------	----------	----------	----------ASSEMBLIES----------	----------
	A	A64DV004	BONNET DUMPVAL NC G3	
----------	----------	----------	----------COMPONENTS----------	----------
all	1	X6 20708A	DOUBLE ACTING VALVE BONNET	
all	2	06 40063B	DUMP VALVE COVER PLT G3CBW	
all	3	06 40064	DUMP VALVE GASKET RETAINER	
all	4	06 40065	DUMP VALVE CUP GASKET	
all	5	06 40066	DUMP VALVE CUP	
all	6	06 40067	CUP ALIGNMENT STRIP	
all	7	02 16021D	DUMP VALVE BUMPER RETAINER	
all	8	02 16021E	WASHER 3/8IDX1.250D DUMPVAL	
all	9	02 16021C	BUMPER=DUMP VALVE BONNET	
all	10	15G220	NUTLOK THINHX 3/8-24 SS/NYL	
all	11	02 16021K	DUMPVAL STEM 9" G3	
all	12	02 02068	AIRCYL-STAINLESS=DUMPVALVE	
all	13	02 10585D	TIE BOLT=5/16-18X7.875 PLTD	
all	14	02 02105B	2.38"ACYL BRASS PISCUP WASHR	
all	15	02 02194	PISTONCUP=DUMPVALVE 2+3/8"	
all	16	02 02185	WASHER=PISTON CUP COMP LIMIT	
all	17	02 02085	UP WASHER=2"OD=PISTON CUP	
all	18	03 01313	STOP=AIR CYL W/2+11/16STROKE	
all	19	02 02101	CYLHEAD W/TAPPED HOLE	
all	20	02 18931F	GASKET=DUMPVALVE-1/60+72WEHU	
all	21	60C132	ORING 2"IDX3/16CS BUNA70 #329	
all	22	60C108V	ORING 1/2IDX3/16CS VITON #310	
all	23	15K042K	BUTSOKCAPSCR 1/4-20UNCX1+1/4 S	
all	24	15U210	LOKWASHER MEDIUM 5/16 ZINCPL	
all	25	15G168	SQNUT 1/4-20UNC2 SS18-8	
all	26	24G020N	ROLLED WASH.252ID NYLTITE 25W	
A	27	60C106V	ORING 5/16IDX1/16CSVITON 11011	
B	27	60C106	ORING 5/16ID 1/16CS BUNA70#011	
all	28	53A031B	BODY-EL90MALE.25X1/8 #269C-42B	
all	29	15G164	HX THIN LOCKNUT NYL1/4-20 SS	
all	30	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
all	31	15N196S	RDMACHSCR 1/4-2OUNC2 X 1-1/2 S	
all	32	24G020N	ROLLED WASH.252ID NYLTITE 25W	
all	33	53A031	MALE90ELL 1/4X1/8 COMPFIT WH#6	
all	34	15U205	LOCKWASHER MEDIUM 5/16" 18-8SS	
all	35	03 06429	SPRING=2.11ODX6.5FL 64#/"	

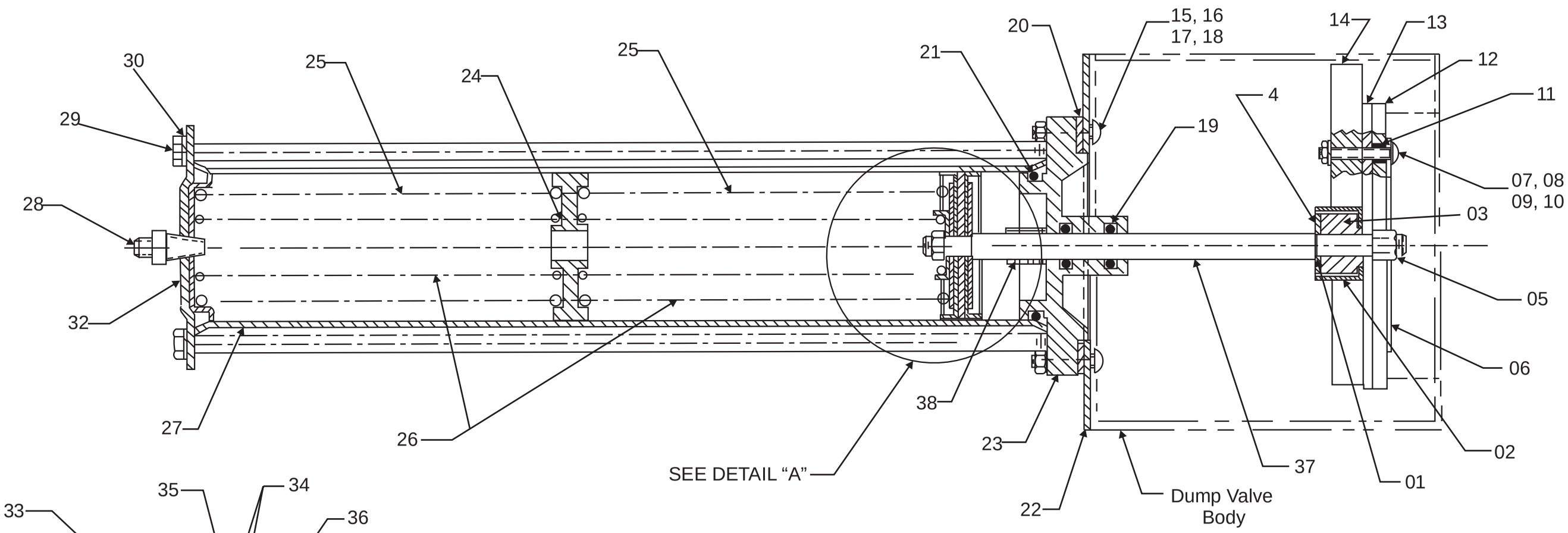
Dump Valve Bonnet - Normally Closed

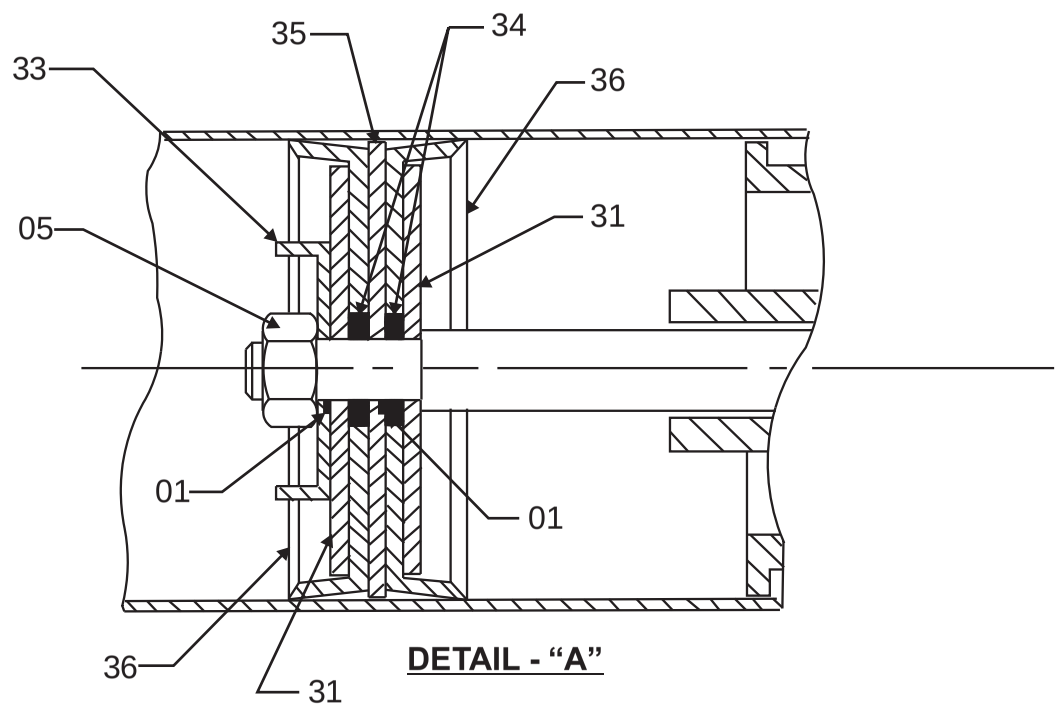
76032 G1 Tunnels

BMP970067/2023103B
(Sheet 1 of 2)

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.





DETAIL - "A"

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Dump Valve Bonnet - Normally Closed

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
----------	----------	----------	----------ASSEMBLIES----------	----------
	A	A64AC001A	91183C N/C DUMP VAL AIR CYL 4+1/2X8	
----------	----------	----------	----------COMPONENTS----------	----------
all	1	60C106	ORING 5/16ID 1/16CS BUNA70#011	
all	2	02-16021D	92632B DUMP VALVE BUMPER RETAINER	
all	3	02-16021C	92051B BUMPER=DUMP VALVE BONNET	
all	4	02-16021E	94323B WASHER 3/8IDX1.250D DUMPVAL	
all	5	15G220	02Z LTHX THIN LOKNUT 3/8-24 SSNTE	
all	6	06-40064	87037B DUMP VALVE GASKET RETAINER	
all	7	15G164	01Z HX THIN LOCKNUT NYL1/4-20 SS	
all	8	15U181	LOCKWASHER MEDIUM ¼ SS18-8	
all	9	15N196S	RDMACHSCR 1/4-2OUNC2 X 1-1/2 SS18-8	
all	10	24G020N	ROLLED WASH.252ID NYLTITE 25W	
all	11	27B260156S	SPCRSLD.26ID.375OD.156L 316SS	
all	12	06-40065	92371B DUMP VALVE CUP GASKET	
all	13	06-40066	94271B DUMP VALVE CUP	
all	14	06-40067	96372B CUP ALIGNMENT STRIP	
all	15	15K062	HEXCAPSCR 5/16-18X1 18-8SS	
all	16	15G186	HEXNUT 5/16-18UNC2 SS18-8	
all	17	15U205	LOCKWASHER MEDIUM 5/16” 18-8SS	
all	18	24G027N	ROLLED WASH.312ID NYLTITE 31W	
all	19	60C108	ORING 1/2IDX3/16CS BUNA70 #310	
all	20	06-40069G	91441B N/C DBL ACT DYE DMP VLV GSKT	
all	21	60C134	ORING 2.5ID3/16CS BUNA70 #333	
all	22	06-40063A	91142B N/C DUMP VALVE COVER PLATE	
all	23	X6-20708B	90516#-C DBLE ACTING VALVE BONNET	
all	24	06-20537	91183B 2+7/8 AIR CYL SPRING DIVIDER	
all	25	06-20529S	96471#C DRAIN VALVE-INNER SPRINGSS	
all	26	06-20528S	96471#C DRAIN VALVE-OUTER SPRINGSS	
all	27	03-01621A	94266# TUBE 2+7/8 AIR CYL 16.63”	
all	28	53A008B	BODYMALECON .25X.25 COMP #B68A-4B	

Parts List, cont.—Normally Closed - Dump Valve Assembly

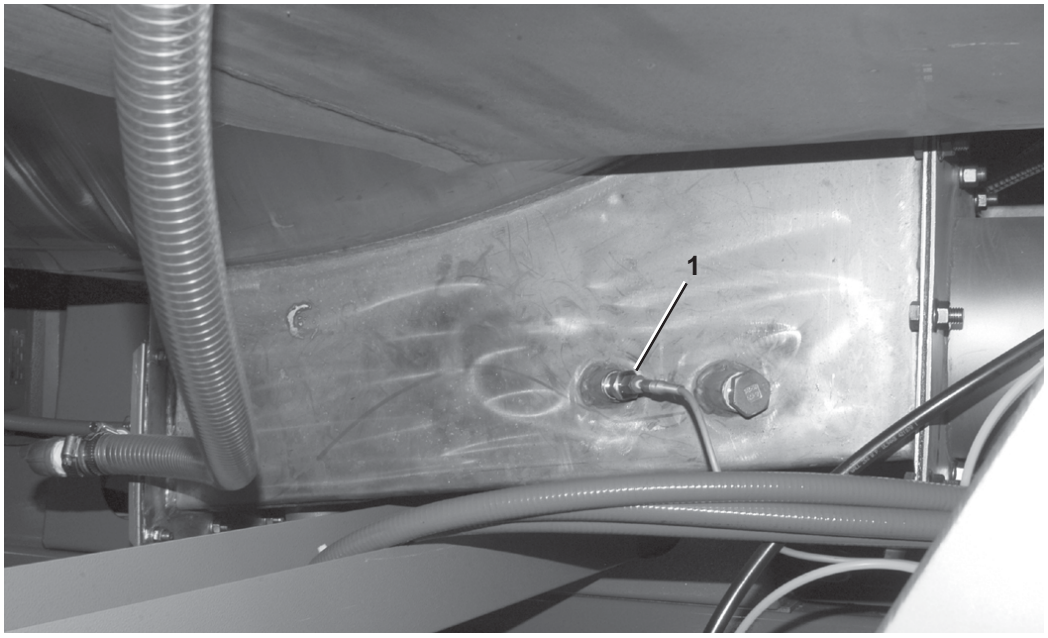
Used In	Item	Part Number	Description	Comments
all	29	02-10585I	91142#TIE BOLT=5/16-18X17 .188 S/S	
all	30	15U205	LOCKWASHER MEDIUM 5/16” 18-8SS	
all	31	03-01618	91522B PISTON CUP WASHER 3”AIR CYL	
all	32	03-01622A	88531# CYLHEAD TAPHOLE - 3” ARCYL S/S	
all	33	02-18651	73171A WASHER=2 WAY BRAKE CYL	
all	34	03-01630	87506B 3” AIRCYL PSTN CUP COMPLMTWSH	
all	35	X3-01619A	92066#MACH=3” ACYL BRASS PISCUP WSH	
all	36	02-19302	97327B PISTON CUP 2+7/81D CYLINDER	
all	37	06-40068A	96426B N/C DBL ACT DUMP VALVE STEM	
all	38	27B240SS	SPACERROLL .51ID .813L.062T SS	

Temperature Probe

76039G3 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.



Parts List—Temperature Probe

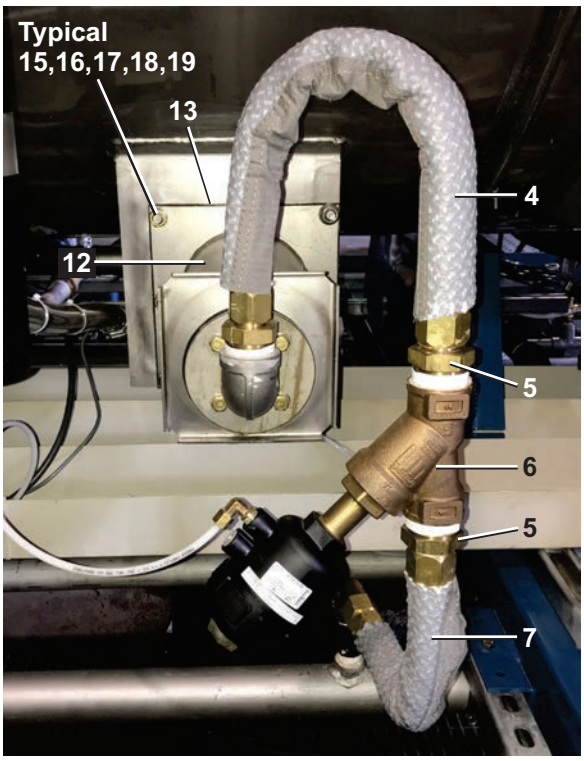
Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

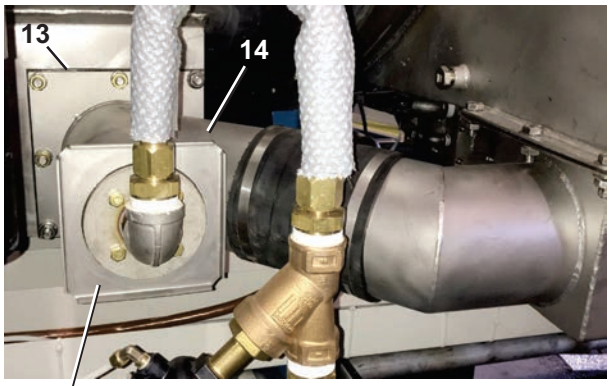
Used In	Item	Part Number	Description	Comments
----------			----------COMPONENTS----------	----------
all	1	30R0043PSA	TEMPERATURE PROBE ASSY=S/S	

Steam Components with No-Air Sparger

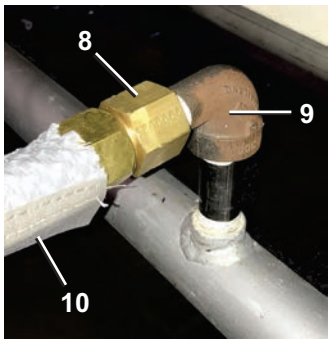
76028G3, 76039G3 Tunnels

Figure 1: Steam Inlet with 1.25” No-Air Sparger

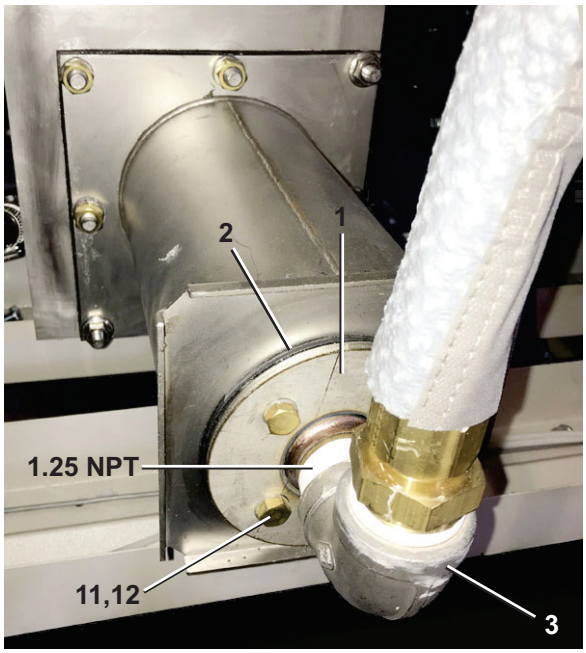




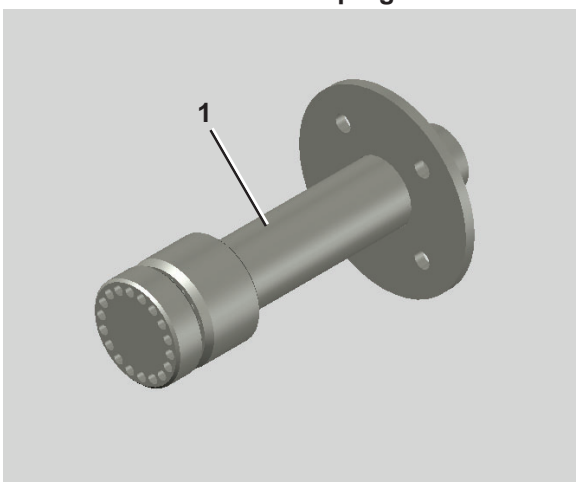
20,21
Cover here
if no steam



2” Manifold



1.25” No-Air Sparger

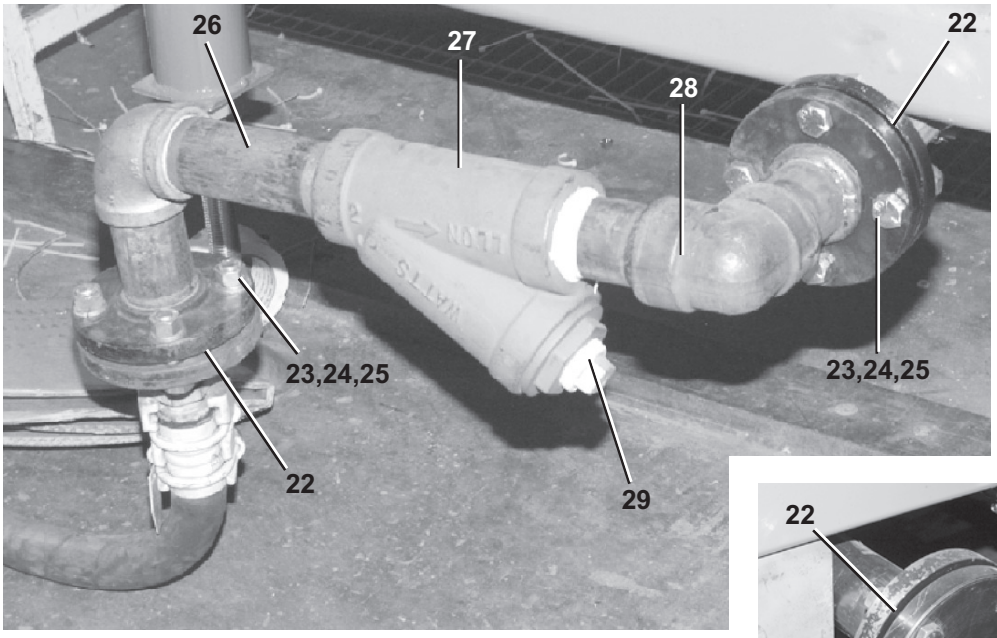


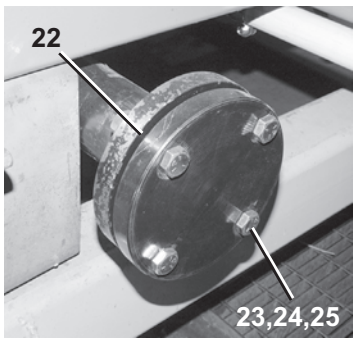
Steam Components with No-Air Sparger

76028G3, 76039G3 Tunnels

Figure 2: Steam Manifold Inlet and Steam Trap

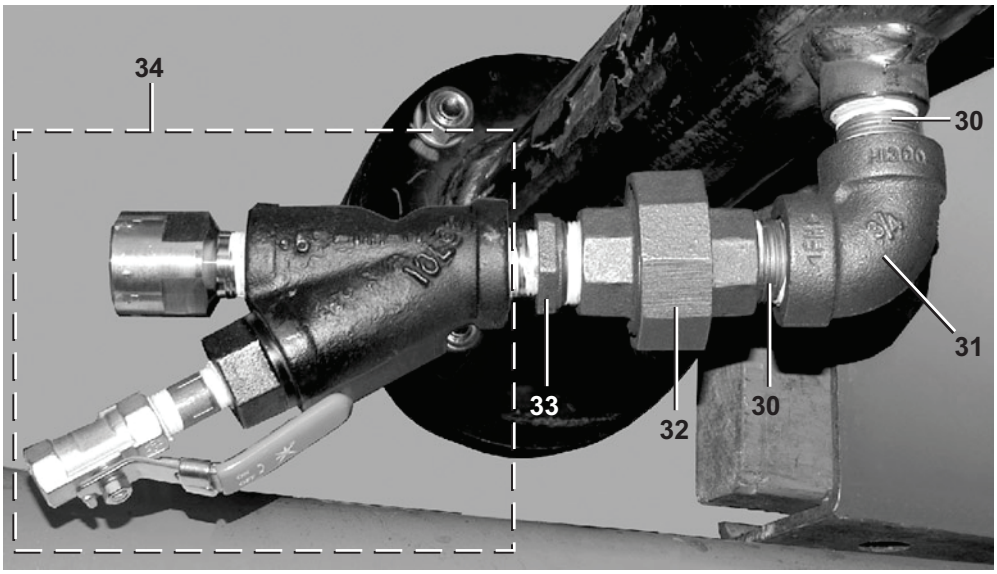
Steam Manifold Inlet 2”





Steam Manifold - Last Module

1/2” Steam Trap Assembly (under last module)



Steam Components with No-Air Sparger

76028G3, 76039G3 Tunnels

Parts List

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------REFERENCE ASSEMBLIES----------	
	A	G67SV001J	G3 STM INLET NON AIR STEAM SPARGER	BRASS COMPONENTS
	B	G67VS001A	INST=7639 PF2 CAP FLOWINLET W/STEAM	
	C	G67VS002	INST=PF2 STM+H2O Y-BRANCH	
	D	A67SV005	7639/28G3 STM INLET ASSY	
	E	A67SV004B	7628/39G3 STM TRAP ASSY	
	F		REFERENCE	STEAM OPTION
			----------COMPONENTS----------	
all	1	W6 20298D	WLMT=7639 STEAM SPARGER	
all	2	06 20297C	GASKET=CBW SPRGR INLET FLNG	
all	3	5SL1ESFA	NPT ELB 90DEG 1.25 304SS 150#	
all	4	06 40093D	7/8 TUBE=U-SHAPE STEAM	
A	5	52ZK00S001	TUBEFITMALCN7/8X1.25 #14-20 FTX-B	
F	5	52ZK00S002	TUBEFITMLCN7/8X1.25 #14-20 FTX-SS	
all	6	96D0011E	1.25"NPTBRZ N/C STEAMVALANGBD	
all	6	96D0011S	1.25"NPT S/S N/C STEAMVAL ANGBODY	
all	7	06 40093C	7/8 TUBE=90 DEG STEAM	
all	8	52ZL00S001	TUBEFITFEMCN7/8 X 3/4#14-GTX-B	
all	9	5SL0PFSC	NPTELB 90DEGSTRT 3/4BLKSTL3000	
all	10	98P450	INSUL.STEAM 7/8"OD SPEEDWRAP	
A	11	15K095	HXCPSCR 3/8-16UNC2AX1 GR5 ZINC	
F	11	15K095A	HEXCAPSCR 3/8-16X1" BRASS	
all	12	24G030N	ROLLED WASH.379ID NYLTITE 37W	
all	13	06 50095	FLANGE GASKET=8" TUBE 7639 PF2	
all	14	W6 80095A	8" Y-BRANCH SPARGER TUBE WLMT-PF2	
all	15	15K153	HXCAPSCR 1/2 -13 X 1 +1/4 SS	
all	16	24G032N	ROLLED WASH.500ID NYLTITE 50W	
all	17	15U310	LOKWASHER REGULAR 1/2 SS18-8	
all	18	15G234B	HEXNUT 1/2-13UNC2B BRASS	
all	19	15G225	HEXNUT 1/2-13UNC2 SS18-8	
all	20	06 20298A	PLATE FLANGE NO STEAM	
all	21	06 20297B	GASKET=DYE CBW STEAM FLANGE	
all	22	51KE2ANASA	2" SPIRAL GASKET #FGCCG-1GG	
all	23	15K225	HEXCAPSCR 5/8-11X2+1/2	
all	24	15U315	LOKWASHER MEDIUM 5/8 ZINCPL	
all	25	15G238	HXNUT 5/8-11UNC2B SAE ZINC GR2	
A	26	W6 40442	2" MAIN STM MNFLD INLET	

Steam Components with No-Air Sparger

76028G3, 76039G3 Tunnels

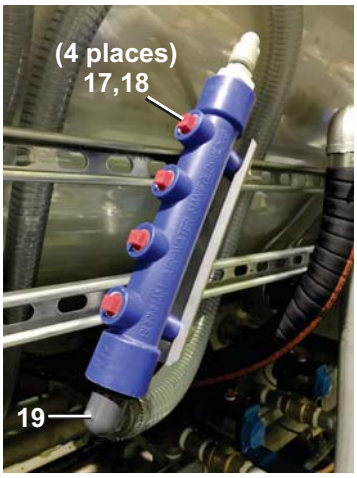
Parts List

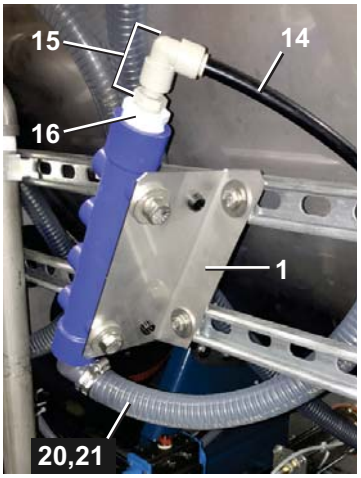
Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

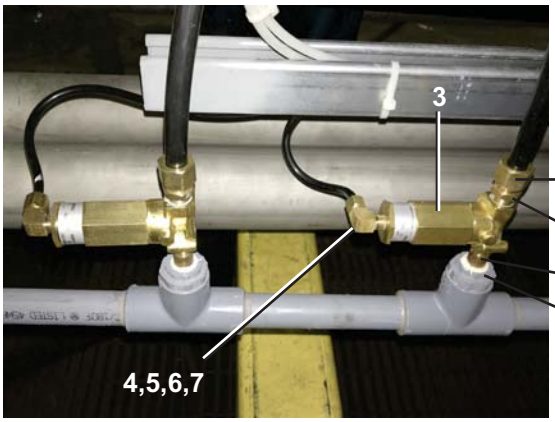
Used In	Item	Part Number	Description	Comments
F	26	W6 40442S	2" MAIN STM INLET S/S	
all	27	51T062	Y-STRAINER 2" NPT CAST IRON	
A	28	W6 20740B	ADPT=Y-STRAINER	
F	28	W6 20740S	ADPT=Y-STRAINER S/S	
all	29	5SP1ESFSS	NPT PLUG 1.25 SQ SOLID 304SS	
all	30	5N0PCLSF82	NPT NIP 3/4XCLS TBE BLKSTL S80	
A	31	5SL0PMIA	NPTELB 90DEG 3/4 BLKMAL 300#	
F	31	5SL0KSFA	NPTELB 90DEG 1/2 304SS 150#	
all	32	5SU0PMI	NPT UNION 3/4" BLKMAL 300#	
A	33	5SB0P0KMFO	NPTHEXBUSH 3/4X1/2 BLKMAL 150#	
F	33	5SB0P0KSFO	NPTHEXBUSH 3/4X1/2 SS304 150#	
all	34	51T60B00QJ	1/2"STMTRP LPA-MILNOR-05 VENTURI	

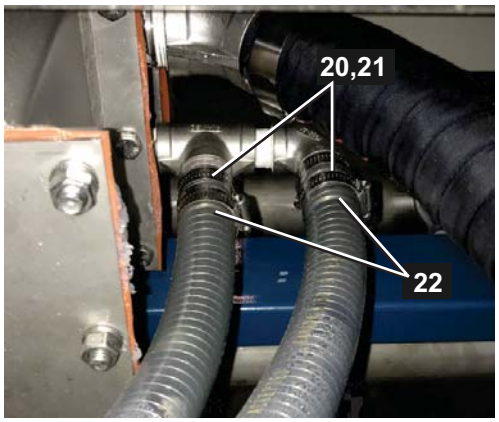
Peristaltic Chemical Inlets

76028G3, 76039G3, 92048G4 Tunnels









Peristaltic Chemical Inlets

76028G3, 76039G3, 92048G4 Tunnels

Parts List

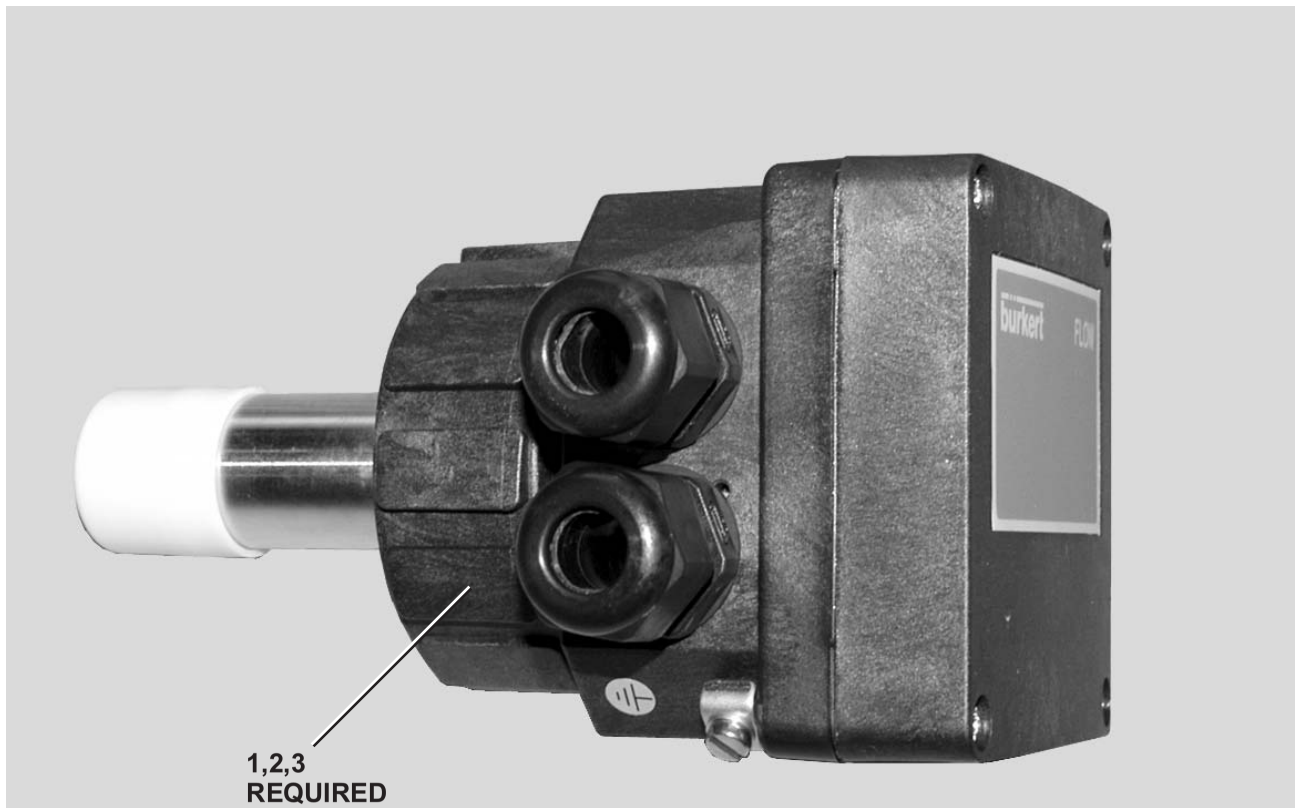
Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------COMPONENTS----------	
all	1	06 70196	PERISTALTIC TUBE MNT	
all	2	02 03590C	CHEM INJ MANIFOLD 4-PORT MOLDED	
all	3	96TBC2AA01	1/4" N/C 1WAY AIR-OP VALVE POLYPRO (NO COIL)	
all	4	60E004TE	1/4"OD X.170"ID NYL(BLK)TUBING	
all	5	53A059A	NUT 1/4"BR.HOLYOKE AND #61A-4	
all	6	53A500	SLEEVE DELRIN 1/4"OD#60PT-4	
all	7	53A501	TUBE INSERT .163"OD #63PT-4-40	
all	8	5KB0K0EP82	BUSHING 1/2"SOKX1/4FPT CPVCS80	
all	9	5N0ECLSBE2	NPT NIP 1/4XCLS TBE BRASS 125#	
all	10	53ACM0KEB	ASSY MALECON.5TX.25MP BRASS 68	
all	11	53A3000KB	SLEEVE 1/2"OD TUBE #60AP-8	
all	12	53A4000KB	TUBE INSERT 1/2"OD #60AE-8	
all	13	53A10SSKB	.5T COMPNUT 11/16-20 AND#61A-8	
all	14	60E005F	TUBING NYL.BLK.1/2"ODX.375ID	
all	15	53AEM9KKBC	MAL90ELSW1/2"TXM PARK#A8MES8MG	
all	16	5SB1A0KP4O	NPTHEXBUSH 1X1/2 PVC SK40	
all	17	51PB0GNA	3/8" PVDF THRD PLUG	
all	18	20C005EA	LOCTITE TREAD SEALANT #1537780	
all	19	51ET1AE02	HOSEADAPT PVC 1"X1" INSERT 90 DEG	
all	20	60E010B	TUBING,POLYWIRECLR 1"IDX1.375"	
all	21	27A090S	HOSECLAMP 13/16-1.5"SS#64016B	
all	22	5N0P02GS41	NPT NIP 3/4X2.375TOE 304SS SK4	
all	23	27A0626NUT	CLAMP NUT 3/8-16 W/SPRING	
all	24	15K096	HEXCAPSCR 3/8-16UNC2X1SS18-8	
all	25	15U260	LOCKWASHER MEDIUM 3/8 SS18-8	
all	26	15U245A	FLTWASH 25/64IDX1.25ODX3/32 S/	
all	27	15K145D	HXCAPSCR 1/2-13UNC2AX3/4 SS18-	
all	28	15U310S	FLATWASH-SS .53 X 1.37 .187T	
all	29	15U310	LOKWASHER REGULAR 1/2 SS18-8	

Magmeter

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.



Parts List—Magmeter

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
			----------COMPONENTS----------	
all	1	30F580	8041 BLIND UNIT MAG SENSOR	
all	2	30F580A	8025 LOWFLOW WALL-MNT TRANSMIT	
all	3	30F568	MAGMETER FITTING 316SS 1.5" S.S.TEE	

Optional De-Linting Tank

Optional De-Linting Tank

Parts List

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	G62 03900V	SURGE TANK 250GAL WDGEWRE INST	BASE TANK
			----------COMPONENTS----------	
all	1	27E935B96S	PUMP VORTEX 2"X1.5" W/ 5" IMPELLER 5HP/7/8 SPACER	
all	2	96D087FBA	1.5"BALVAL+ACT BRS N/C BONOMI (SPRING RET)	
all	3	96D021	1/4" BALVLV BRZ-BONOMI #172N-1/4" W /T-HANDLES	
all	4	30F580	8041 BLIND UNIT MAG SENSOR SHORT FINGER	
all	5	30F580A	8025 LOWFLOW WALL-MNT TRANSMIT	

3

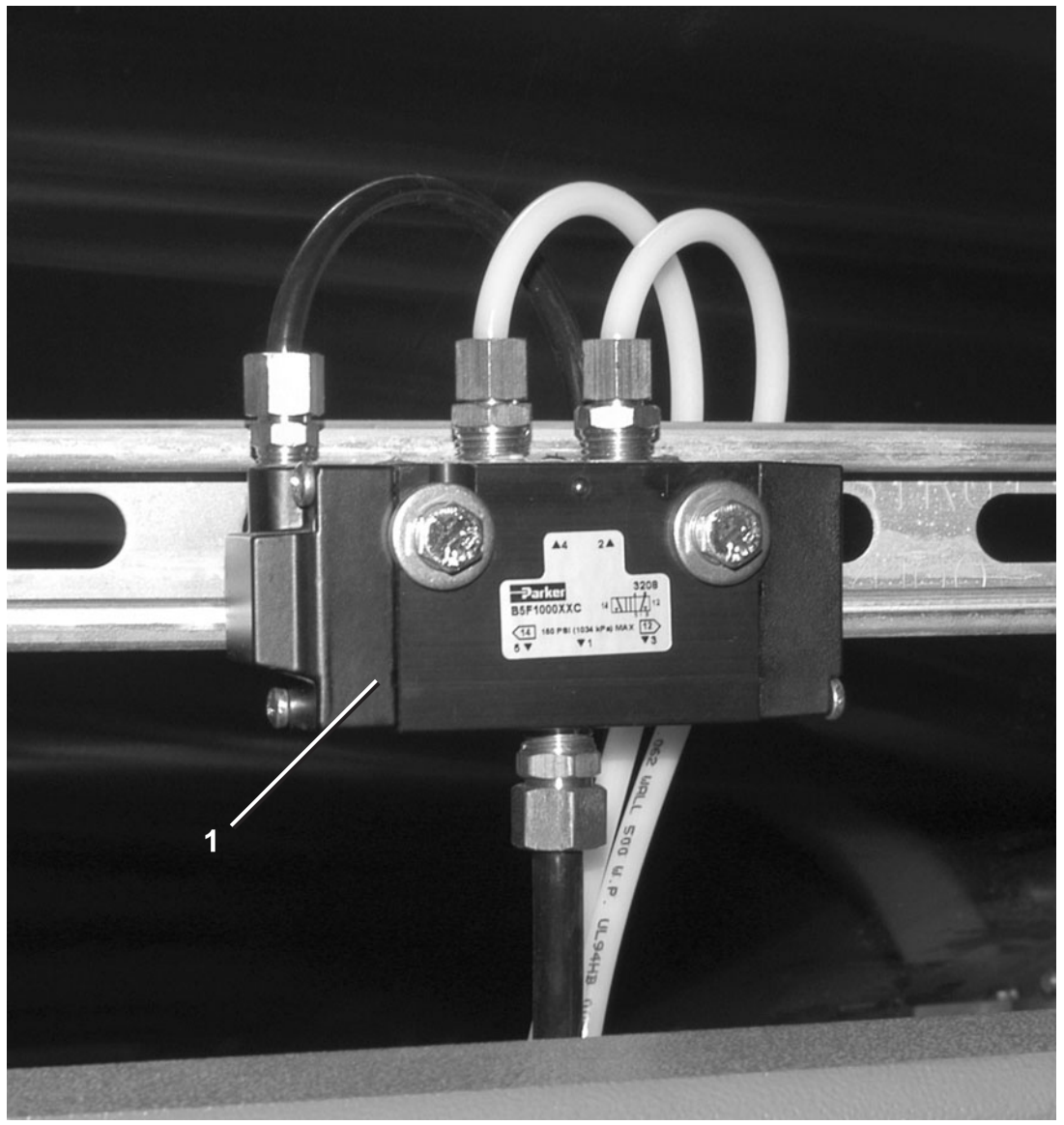
Pneumatics 3.5

Pneumatic Shuttle Valve

76028, 76039 G3 Tunnels & 9248 G4 Tunnels

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.



5 Port, 4 Way, 2 Position, Spring Return Valve

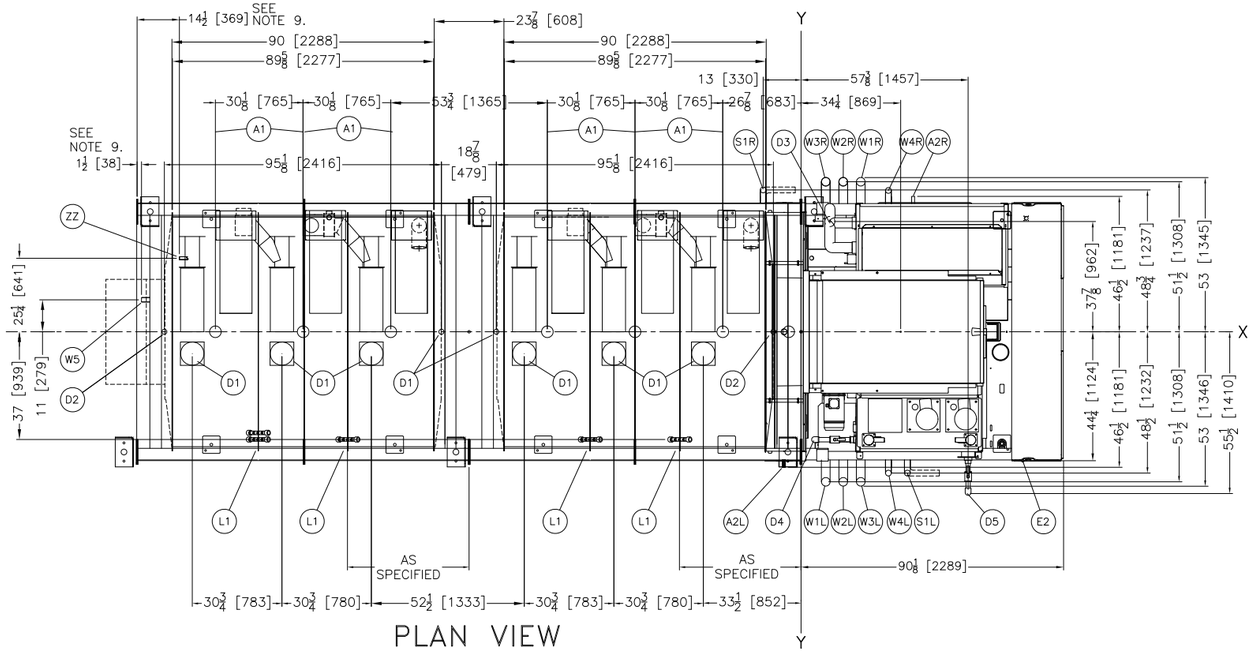
Parts List—Pneumatic Shuttle Valve

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

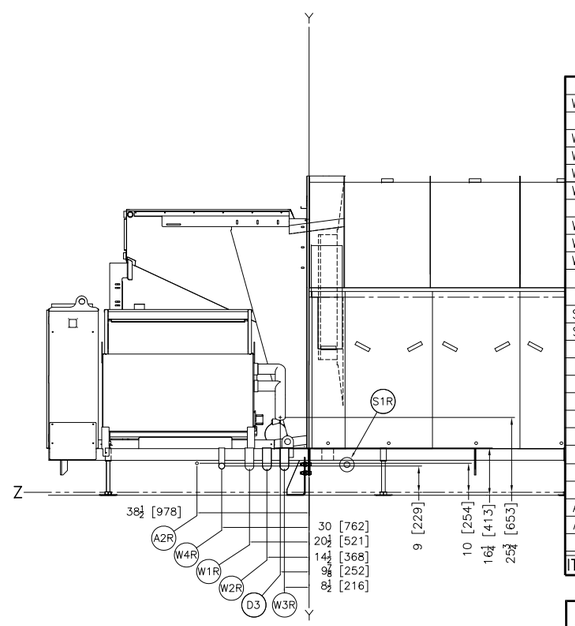
Used In	Item	Part Number	Description	Comments
			----------COMPONENTS----------	
all	1	96N0011H	SHUTLVLV 1/4" 4WAY MECHSPRING	

Dimensional Drawings

4

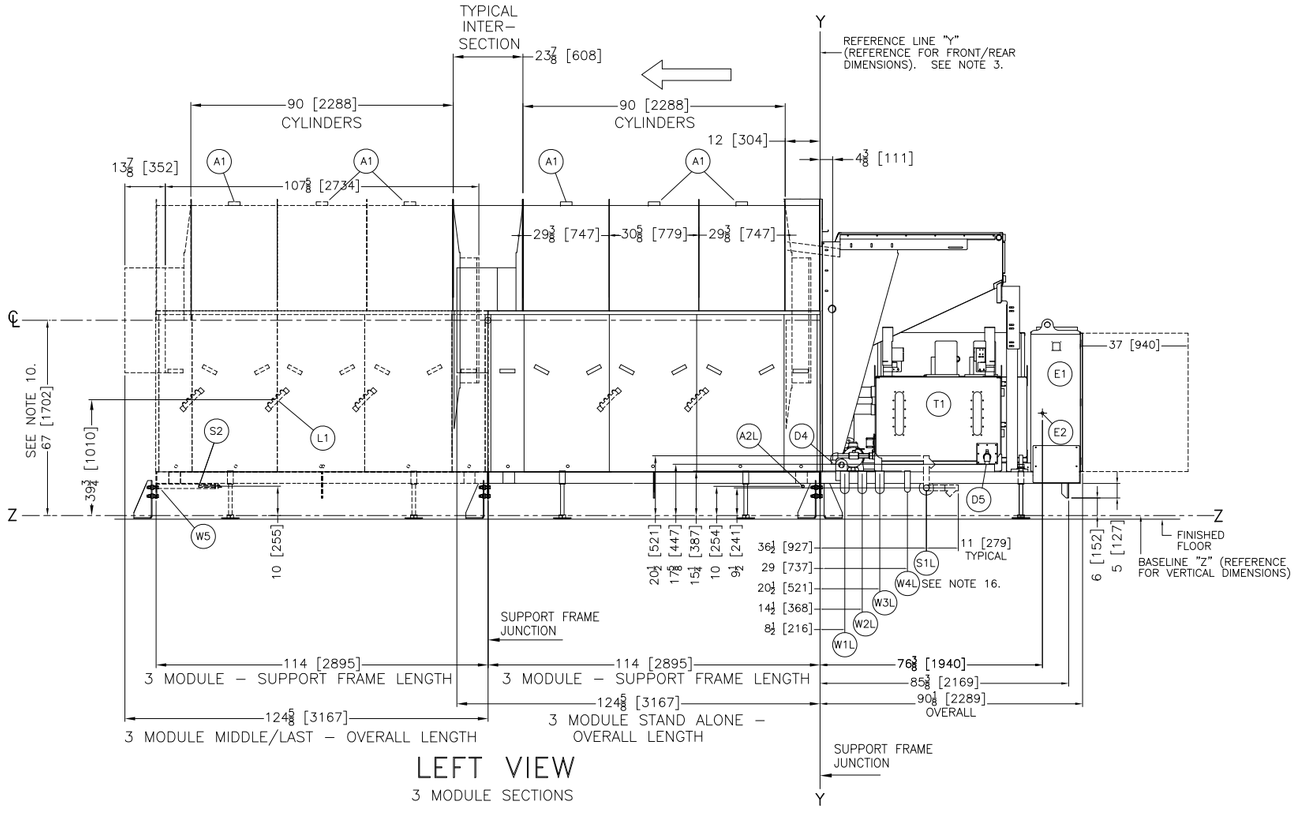


PLAN VIEW
(DRAINS AND CONNECTIONS)

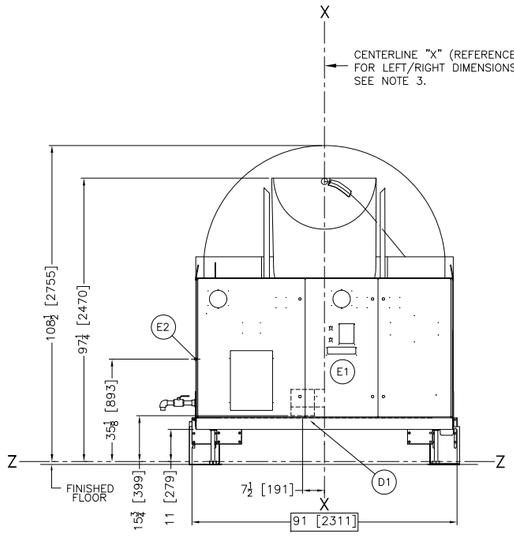


RIGHT VIEW
3 MODULE SECTIONS

ITEM	LEGEND
W5	PRESS WATER TO PULSE FLOW TANK 1–1/2" NPT.
W4R	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES RIGHT, SEE NOTE 16.
W3R	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W2R	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W1R	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES RIGHT
W4L	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES LEFT, SEE NOTE 16.
W3L	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W2L	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W1L	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES LEFT
T1	REUSE TANK
S2	STEAM TRAP, STEAM CONDENSATE OUTLET, 1/2" NPT
S1R	STEAM INLET 2" NPT, UTILITIES RIGHT
S1L	STEAM INLET 2" NPT, UTILITIES LEFT
L1	LIQUID SUPPLY INLETS, SEE NOTE 13.
E2	MAIN ELECTRICAL CONNECTION
E1	ELECTRICAL CONTROL BOX
D5	REUSE TANK MANUAL DRAIN (OPTIONAL), 2" HOSE SUPPLIED
D4	FRESH WATER MANUAL DRAIN(STANDARD), 2" HOSE SUPPLIED
D3	PF OVERFLOW TO SEWER, 4" PVC OUTLET (5" HOSE TO SEWER NOT SUPPLIED.)
D2	DRIP DRAIN 1–3/4" ID TUBING SUPPLIED. SEE NOTE 11.
D1	8" DIAMETER DRAIN VALVE, ON SPECIFIED MODULES
A2R	RIGHT MAIN AIR CONNECTION 1/2" NPT
A2L	LEFT MAIN AIR CONNECTION 1/2" NPT
A1	TYPICAL EXHAUST VENT 4[102] DIAMETER.



LEFT VIEW
3 MODULE SECTIONS



FRONT VIEW
LOAD END

NOTES

16 REUSE TANK HEADER INLET, W4_, IS NOT ALWAYS USED. IT MAY CONNECT DIRECTLY TO W1_, W2_, OR W3_.

15 DIRECT THE STEAM CONDENSATE TO THE DRAIN TROUGH. DO NOT RETURN STEAM CONDENSATE TO THE BOILER BECAUSE OF POSSIBLE CONTAMINATION FROM CHEMICALS IN THE WASH WATER.

14 UTILITY INLETS (WATER,STEAM,AIR) WILL ALWAYS BE OPPOSITE THE LOAD CONVEYOR. IF NOT SPECIFIED, THE INLETS WILL BE ON THE LEFT (W1L,W2L,W3L,W4L,A1L,S1L). IF LOAD CONVEYOR IS ON THE LEFT, USE RIGHT INLETS(W1R,W2R,W3R,W4R,A1R,S1R).

13 LIQUID SUPPLY INLETS, THE PVDF MANIFOLDS HAVE (4) 3/8" PORTS WITH (4) PVDF THREADED 3/8" PLUGS PER MANIFOLD, SHIPPED WITH THE MACHINE.

12 BACK FLOW PREVENTERS MUST BE INSTALLED IF LOCAL PLUMBING CODES REQUIRE. RECOMMENDED MODELS ARE WATTS SERIES 009. THEY CAN BE PURCHASED LOCALLY OR THROUGH MILNOR. CONTACT MILNOR FACTORY.

11 LEAK OFF FROM DRIP DRAINS MUST BE ROUTED TO DRAIN SUMP. THESE CONNECTIONS ARE SUPPLIED WITH TUBING, MAKING THIS A FLEXIBLE CONNECTION POINT.

10 THIS DRAWING SHOWS THE G3 TUNNEL AT 67"[1702] CENTERLINE. SEE ADDITIONAL TUNNEL DRAWINGS FOR THE INTERFACE DIMENSIONS OF THE TUNNEL WHEN USED WITH SPECIFIC EXTRACTING EQUIPMENT.

9 STEAM CONDENSATE OUTLET AND PRESS WATER TO REUSE TANK ARE MEASURED OFF THE LAST SUPPORT FRAME, REGARDLESS OF HOW LONG THE TUNNEL IS.

8 FOR SIZE AND LOCATION OF ADJUSTABLE FEET AND BOLT DOWN BRACKETS, SIZE OF 4 AND 5 MODULE SUPPORT FRAMES, SEE BDPF28G3FBDDE.

7 FOR 5" WEIR DRAIN OPTIONS AND DIMENSIONS, SEE BDPF28G3OPDDE.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE–PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

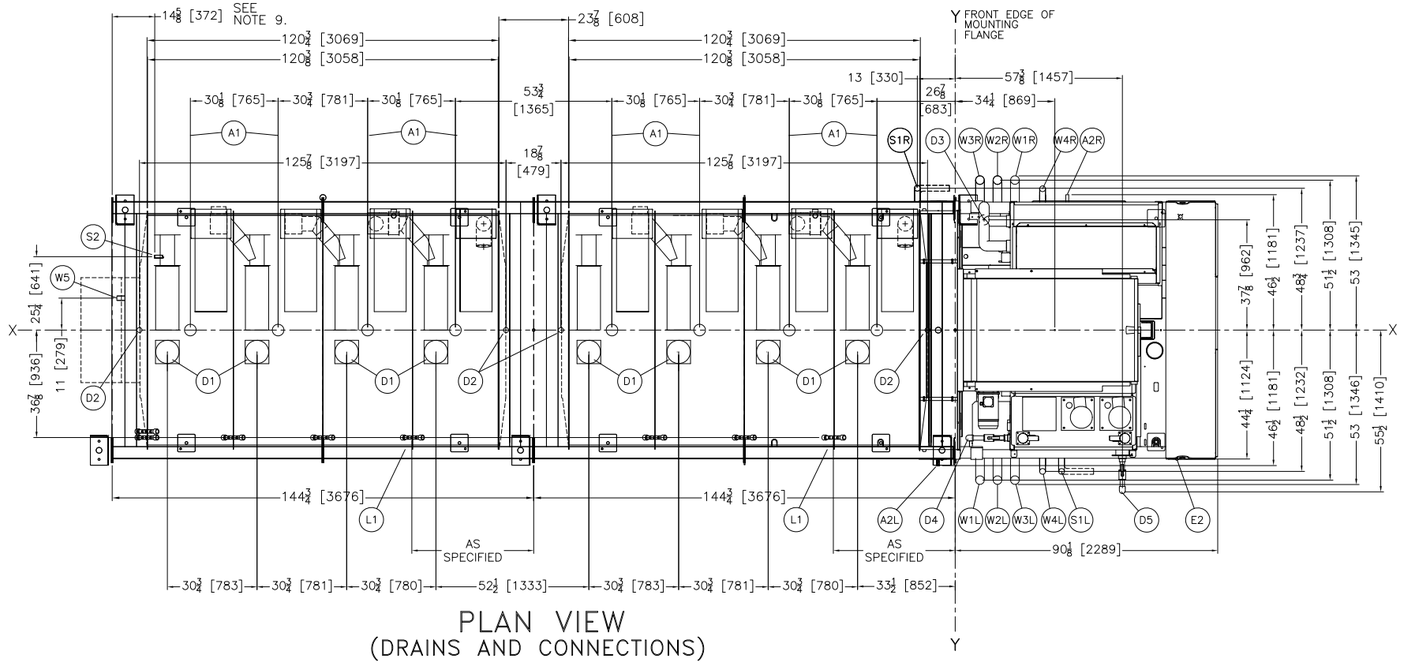
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76028G3 PF TUNNEL–3 MODULE

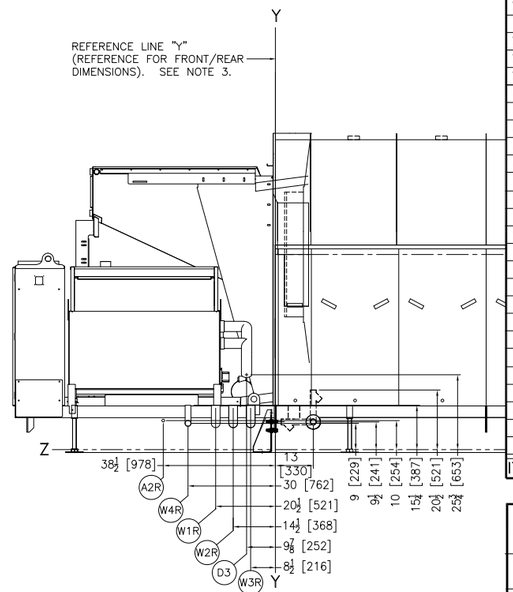
DM 0 0.5M
INCHES 0 12 24

DWG# BDPF28G3M3DDE 2024095D

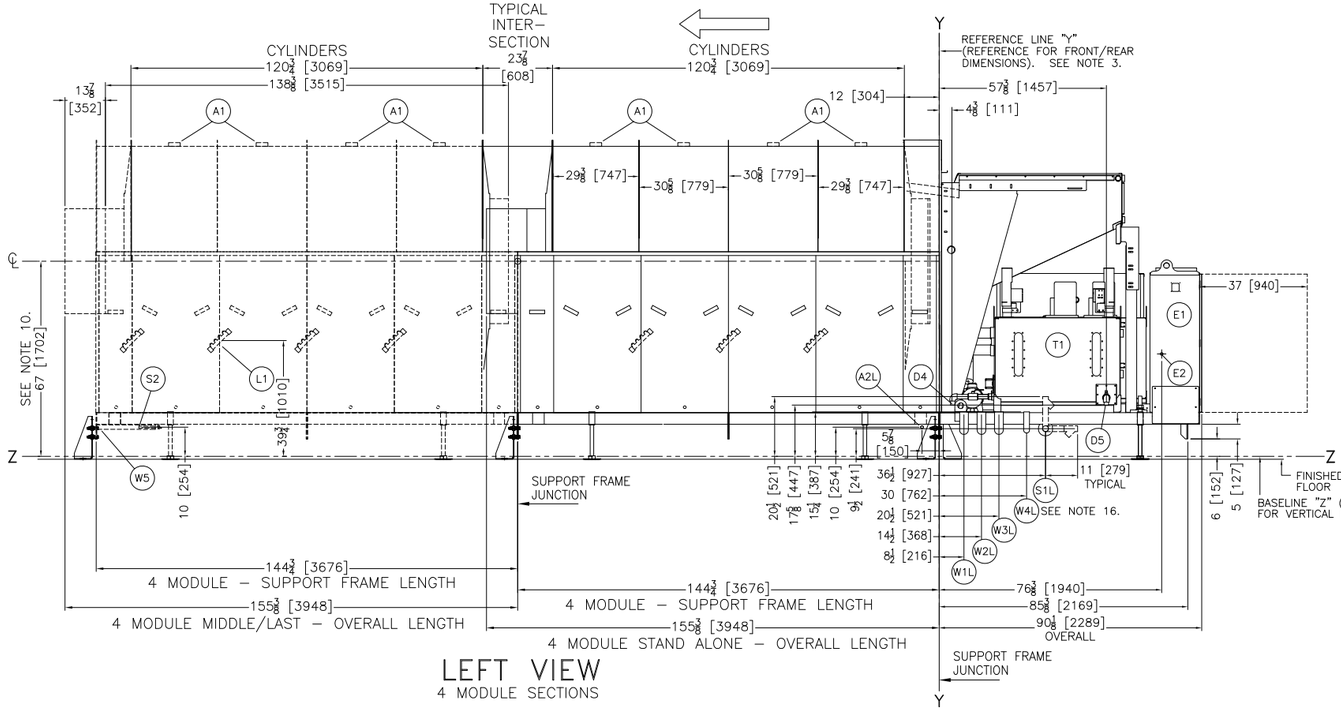
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467–9591,
FAX 504/468–3094, Email: milnorinfo@milnor.com



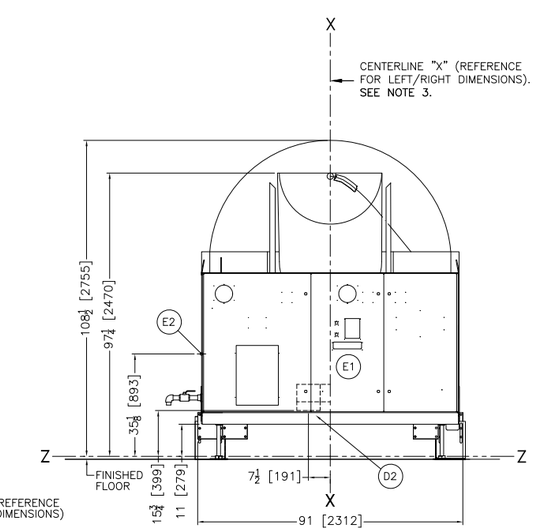
PLAN VIEW
(DRAINS AND CONNECTIONS)



RIGHT VIEW



LEFT VIEW
4 MODULE SECTIONS



FRONT VIEW
LOAD END

ITEM	LEGEND
A1	TYPICAL EXHAUST VENT 4[102] DIAMETER.
A2L	LEFT MAIN AIR CONNECTION 1/2" NPT
A2R	RIGHT MAIN AIR CONNECTION 1/2" NPT
D1	8" DIAMETER DRAIN VALVE, ON SPECIFIED MODULES
D2	DRIP DRAIN 1–3/4" ID TUBING SUPPLIED. SEE NOTE 11.
D3	PF OVERFLOW TO SEWER, 4" PVC OUTLET (5" HOSE TO SEWER NOT SUPPLIED.)
D4	FRESH WATER MANUAL DRAIN(STANDARD), 2" HOSE SUPPLIED
D5	REUSE TANK MANUAL DRAIN (OPTIONAL), 2" HOSE SUPPLIED
E1	ELECTRICAL CONTROL BOX
E2	MAIN ELECTRICAL CONNECTION
L1	LIQUID SUPPLY INLETS, SEE NOTE 13.
S1L	STEAM INLET 2" NPT, UTILITIES LEFT
S1R	STEAM INLET 2" NPT, UTILITIES RIGHT
S2	STEAM TRAP, STEAM CONDENSATE OUTLET, 1/2" NPT
T1	REUSE TANK
W1L	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES LEFT
W2L	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W3L	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W4L	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES LEFT, SEE NOTE 16.
W1R	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES RIGHT
W2R	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W3R	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W4R	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES RIGHT, SEE NOTE 16.
W5	PRESS WATER TO PULSE FLOW TANK 1–1/2" NPT.

NOTES

16 REUSE TANK HEADER INLET, W4_, IS NOT ALWAYS USED. IT MAY CONNECT DIRECTLY TO W1_, W2_, OR W3_.

15 DIRECT THE STEAM CONDENSATE TO THE DRAIN TROUGH. DO NOT RETURN STEAM CONDENSATE TO THE BOILER BECAUSE OF POSSIBLE CONTAMINATION FROM CHEMICALS IN THE WASH WATER.

14 UTILITY INLETS (WATER,STEAM,AIR) WILL ALWAYS BE OPPOSITE THE LOAD CONVEYOR. IF NOT SPECIFIED, THE INLETS WILL BE ON THE LEFT (W1L,W2L,W3L,W4L,A1L,S1L). IF LOAD CONVEYOR IS ON THE LEFT, USE RIGHT INLETS(W1R,W2R,W3R,W4R,A1R,S1R).

13 LIQUID SUPPLY INLETS, THE PVDF MANIFOLDS HAVE (4) 3/8" PORTS WITH (4) PVDF THREADED 3/8" PLUGS PER MANIFOLD, SHIPPED WITH THE MACHINE.

12 BACK FLOW PREVENTERS MUST BE INSTALLED IF LOCAL PLUMBING CODES REQUIRE. RECOMMENDED MODELS ARE WATTS SERIES 009. THEY CAN BE PURCHASED LOCALLY OR THROUGH MILNOR. CONTACT MILNOR FACTORY.

11 LEAK OFF FROM DRIP DRAINS MUST BE ROUTED TO DRAIN SUMP. THESE CONNECTIONS ARE SUPPLIED WITH TUBING, MAKING THIS A FLEXIBLE CONNECTION POINT.

10 THIS DRAWING SHOWS THE G3 TUNNEL AT 67"[1702] CENTERLINE. SEE ADDITIONAL TUNNEL DRAWINGS FOR THE INTERFACE DIMENSIONS OF THE TUNNEL WHEN USED WITH SPECIFIC EXTRACTING EQUIPMENT.

9 STEAM CONDENSATE OUTLET AND PRESS WATER TO REUSE TANK ARE MEASURED OFF THE LAST SUPPORT FRAME, REGARDLESS OF HOW LONG THE TUNNEL IS.

8 FOR SIZE AND LOCATION OF ADJUSTABLE FEET AND BOLT DOWN BRACKETS, SIZE OF 4 AND 5 MODULE SUPPORT FRAMES, SEE BDPF28G3FBDDE.

7 FOR 5" WEIR DRAIN OPTIONS AND DIMENSIONS, SEE BDPF28G3OPDDE.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

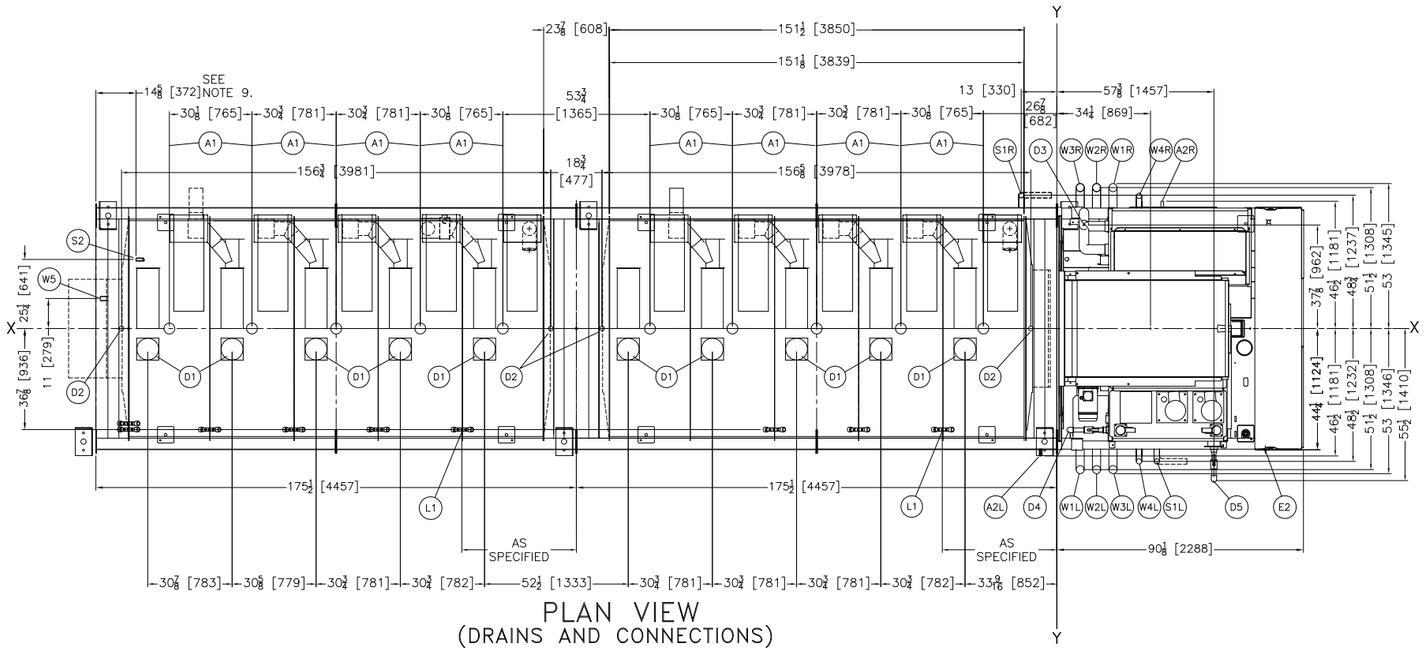
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76028G3 PF TUNNEL – 4 MODULE

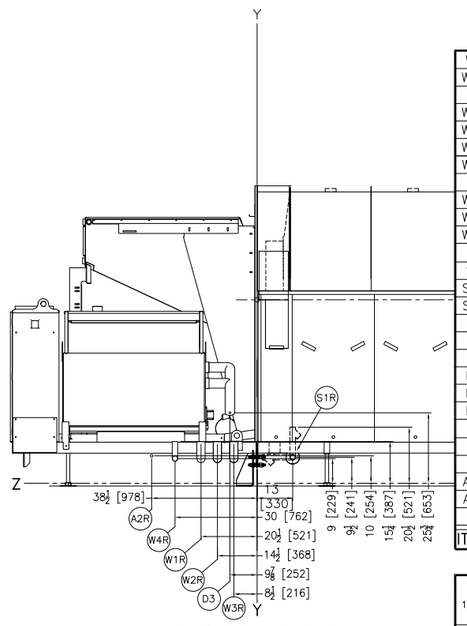
DM 0 0.5M
INCHES 0 12 24

DWG# BDPF28G3M4DDE 2024095D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com

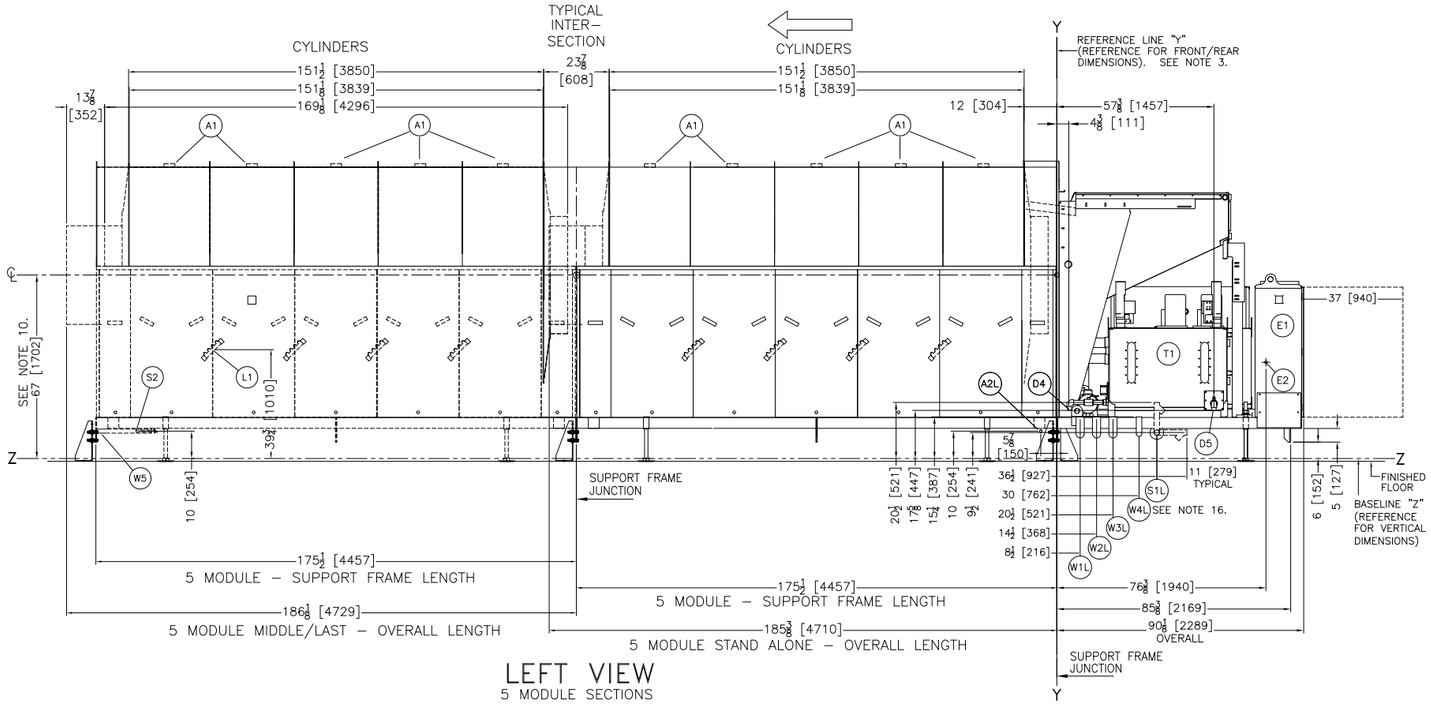


PLAN VIEW
(DRAINS AND CONNECTIONS)

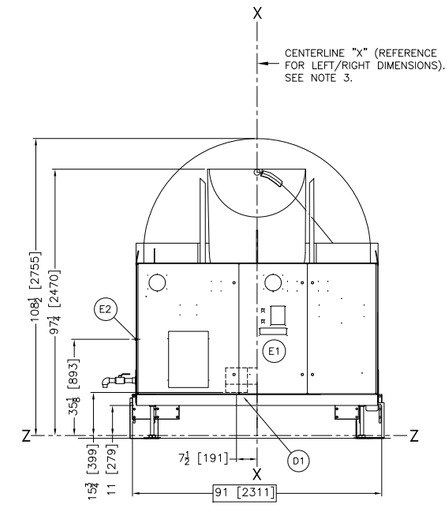


RIGHT VIEW

ITEM	LEGEND
W5	PRESS WATER TO PULSE FLOW TANK 1-1/2" NPT.
W4R	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES RIGHT, SEE NOTE 16.
W3R	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W2R	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W1R	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES RIGHT
W4L	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES LEFT, SEE NOTE 16.
W3L	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W2L	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W1L	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES LEFT
T1	REUSE TANK
S2	STEAM TRAP, STEAM CONDENSATE OUTLET, 1/2" NPT
S1R	STEAM INLET 2" NPT, UTILITIES RIGHT
S1L	STEAM INLET 2" NPT, UTILITIES LEFT
L1	LIQUID SUPPLY INLETS, SEE NOTE 13.
E2	MAIN ELECTRICAL CONNECTION
E1	ELECTRICAL CONTROL BOX
D5	REUSE TANK MANUAL DRAIN (OPTIONAL), 2" HOSE SUPPLIED
D4	FRESH WATER MANUAL DRAIN(STANDARD), 2" HOSE SUPPLIED
D3	PF OVERFLOW TO SEWER, 4" PVC OUTLET (5" HOSE TO SEWER NOT SUPPLIED.)
D2	DRIP DRAIN 1-3/4" ID TUBING SUPPLIED. SEE NOTE 11.
D1	8" DIAMETER DRAIN VALVE, ON SPECIFIED MODULES
A2R	RIGHT MAIN AIR CONNECTION 1/2" NPT
A2L	LEFT MAIN AIR CONNECTION 1/2" NPT
A1	TYPICAL EXHAUST VENT 4[102] DIAMETER.



LEFT VIEW
5 MODULE SECTIONS



FRONT VIEW
LOAD END

NOTES

16 REUSE TANK HEADER INLET, W4_, IS NOT ALWAYS USED. IT MAY CONNECT DIRECTLY TO W1_, W2_, OR W3_.

15 DIRECT THE STEAM CONDENSATE TO THE DRAIN TROUGH. DO NOT RETURN STEAM CONDENSATE TO THE BOILER BECAUSE OF POSSIBLE CONTAMINATION FROM CHEMICALS IN THE WASH WATER.

14 UTILITY INLETS (WATER,STEAM,AIR) WILL ALWAYS BE OPPOSITE THE LOAD CONVEYOR. IF NOT SPECIFIED, THE INLETS WILL BE ON THE LEFT (W1L,W2L,W3L,W4L,A1L,S1L). IF LOAD CONVEYOR IS ON THE LEFT, USE RIGHT INLETS(W1R,W2R,W3R,W4R,A1R,S1R).

13 LIQUID SUPPLY INLETS, THE PVDF MANIFOLDS HAVE (4) 3/8" PORTS AND COME WITH (4) PVDF THREADED 3/8" PLUGS PER MANIFOLD, SHIPPED WITH THE MACHINE.

12 BACK FLOW PREVENTERS MUST BE INSTALLAED IF LOCAL PLUMBING CODES REQUIRE. RECOMMENDED MODELS ARE WATTS SERIES 009. THEY CAN BE PURCHASED LOCALLY OR THROUGH MILNOR. CONTACT MILNOR FACTORY.

11 LEAK OFF FROM DRIP DRAINS MUST BE ROUTED TO DRAIN SUMP. THESE CONNECTIONS ARE SUPPLIED WITH TUBING, MAKING THIS A FLEXIBLE CONNECTION POINT.

10 THIS DRAWING SHOWS THE G3 TUNNEL AT 67"[1702] CENTERLINE. SEE ADDITIONAL TUNNEL DRAWINGS FOR THE INTERFACE DIMENSIONS OF THE TUNNEL WHEN USED WITH SPECIFIC EXTRACTING EQUIPMENT.

9 STEAM CONDENSATE OUTLET AND PRESS WATER TO REUSE TANK ARE MEASURED OFF THE LAST SUPPORT FRAME, REGARDLESS OF HOW LONG THE TUNNEL IS.

8 FOR SIZE AND LOCATION OF ADJUSTABLE FEET AND BOLT DOWN BRACKETS, SIZE OF 4 AND 5 MODULE SUPPORT FRAMES, SEE BDPF28G3FBDDE.

7 FOR 5" WEIR DRAIN OPTIONS AND DIMENSIONS, SEE BDPF28G3OPDDE.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

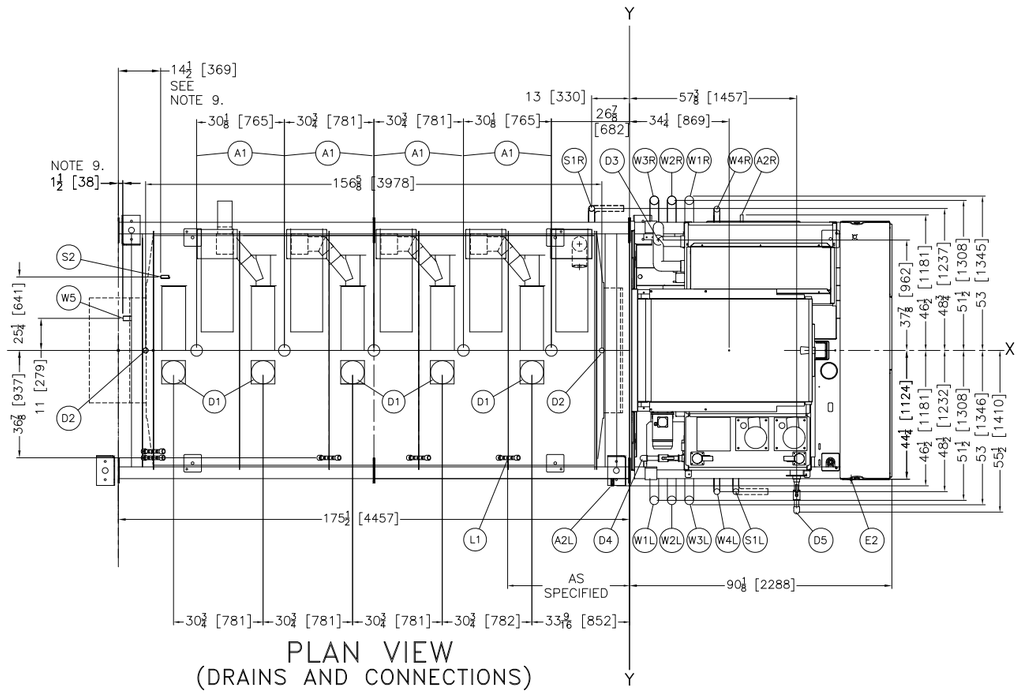
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76028G3 PF TUNNEL-5 MODULE

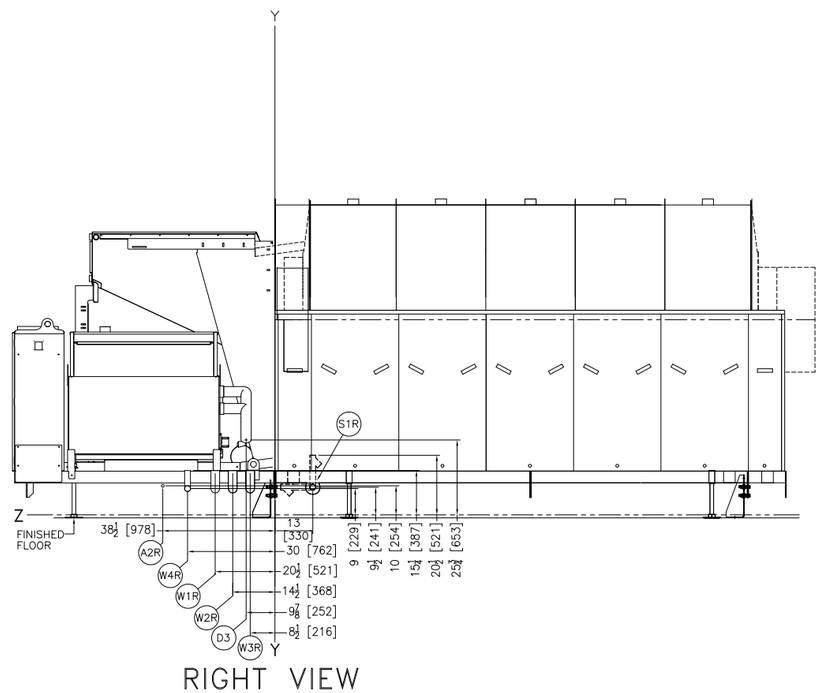
DM 0 0.5M
INCHES 0 12 24

DWG# BDPF28G3M5DDE
2024095D

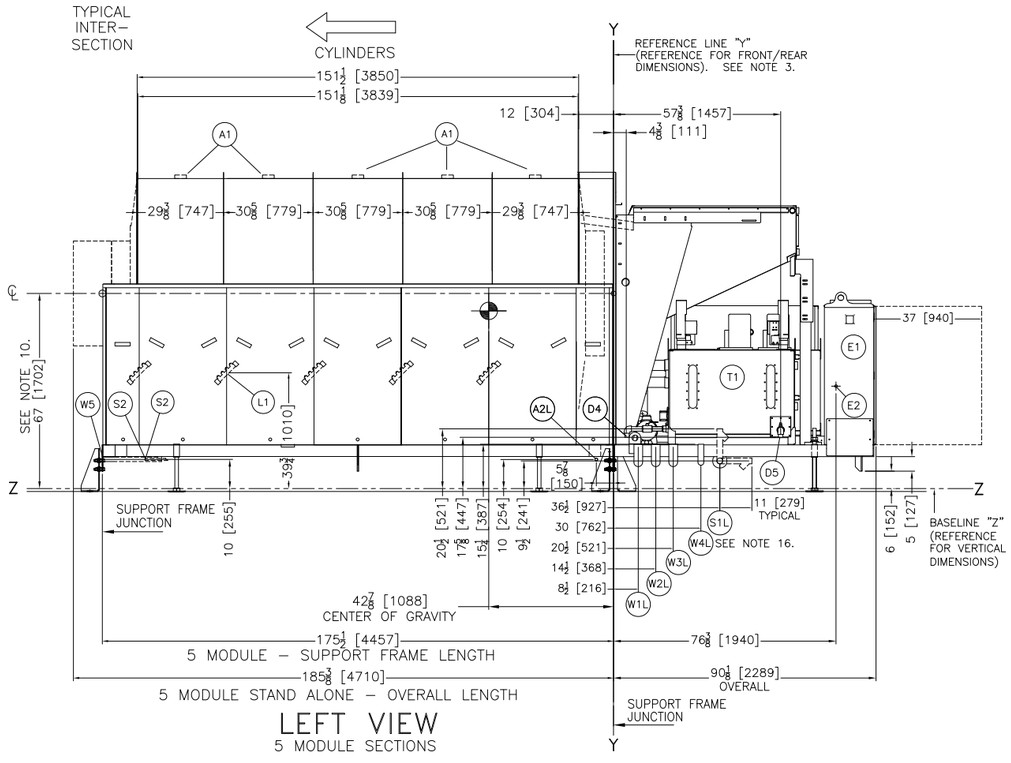
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com



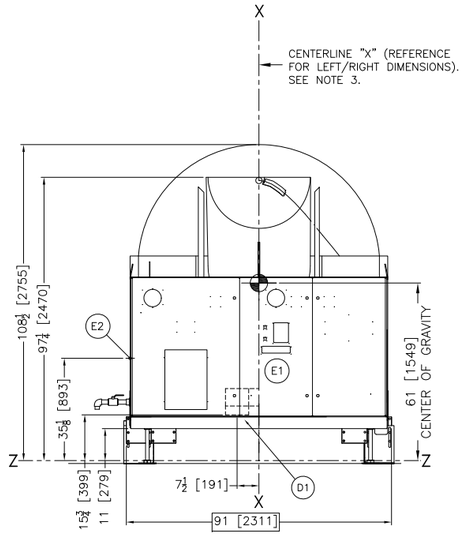
PLAN VIEW
(DRAINS AND CONNECTIONS)



RIGHT VIEW



LEFT VIEW
5 MODULE SECTIONS



FRONT VIEW
LOAD END

ITEM	LEGEND
W5	PRESS WATER TO PULSE FLOW TANK 1–1/2" NPT.
W4R	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES RIGHT, SEE NOTE 16.
W3R	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W2R	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W1R	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES RIGHT
W4L	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES LEFT, SEE NOTE 16.
W3L	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W2L	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W1L	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES LEFT
T1	REUSE TANK
S2	STEAM TRAP, STEAM CONDENSATE OUTLET, 1/2" NPT
S1R	STEAM INLET 2" NPT, UTILITIES RIGHT
S1L	STEAM INLET 2" NPT, UTILITIES LEFT
L1	LIQUID SUPPLY INLETS, SEE NOTE 13.
E2	MAIN ELECTRICAL CONNECTION
E1	ELECTRICAL CONTROL BOX
D5	REUSE TANK MANUAL DRAIN (OPTIONAL), 2" HOSE SUPPLIED
D4	FRESH WATER MANUAL DRAIN(STANDARD), 2" HOSE SUPPLIED
D3	PF OVERFLOW TO SEWER, 4" PVC OUTLET (5" HOSE TO SEWER NOT SUPPLIED.)
D2	DRIP DRAIN 1–3/4" ID TUBING SUPPLIED. SEE NOTE 11.
D1	8" DIAMETER DRAIN VALVE, ON SPECIFIED MODULES
A2R	RIGHT MAIN AIR CONNECTION 1/2" NPT
A2L	LEFT MAIN AIR CONNECTION 1/2" NPT
A1	TYPICAL EXHAUST VENT 4[102] DIAMETER.

NOTES

16 REUSE TANK HEADER INLET, W4_, IS NOT ALWAYS USED. IT MAY CONNECT DIRECTLY TO W1_, W2_, OR W3_.

15 DIRECT THE STEAM CONDENSATE TO THE DRAIN TROUGH. DO NOT RETURN STEAM CONDENSATE TO THE BOILER BECAUSE OF POSSIBLE CONTAMINATION FROM CHEMICALS IN THE WASH WATER.

14 UTILITY INLETS (WATER,STEAM,AIR) WILL ALWAYS BE OPPOSITE THE LOAD CONVEYOR. IF NOT SPECIFIED, THE INLETS WILL BE ON THE LEFT (W1L,W2L,W3L,W4L,A1L,S1L). IF LOAD CONVEYOR IS ON THE LEFT, USE RIGHT INLETS(W1R,W2R,W3R,W4R,A1R,S1R).

13 LIQUID SUPPLY INLETS, THE PVDF MANIFOLDS HAVE (4) 3/8" PORTS AND COME WITH (4) PVDF THREADED 3/8" PLUGS PER MANIFOLD, SHIPPED WITH THE MACHINE.

12 BACK FLOW PREVENTERS MUST BE INSTALLAED IF LOCAL PLUMBING CODES REQUIRE. RECOMMENDED MODELS ARE WATTS SERIES 009. THEY CAN BE PURCHASED LOCALLY OR THROUGH MILNOR. CONTACT MILNOR FACTORY.

11 LEAK OFF FROM DRIP DRAINS MUST BE ROUTED TO DRAIN SUMP. THESE CONNECTIONS ARE SUPPLIED WITH TUBING, MAKING THIS A FLEXIBLE CONNECTION POINT.

10 THIS DRAWING SHOWS THE G3 TUNNEL AT 67"[1702] CENTERLINE. SEE ADDITIONAL TUNNEL DRAWINGS FOR THE INTERFACE DIMENSIONS OF THE TUNNEL WHEN USED WITH SPECIFIC EXTRACTING EQUIPMENT.

9 STEAM CONDENSATE OUTLET AND PRESS WATER TO REUSE TANK ARE MEASURED OFF THE LAST SUPPORT FRAME, REGARDLESS OF HOW LONG THE TUNNEL IS.

8 FOR SIZE AND LOCATION OF ADJUSTABLE FEET AND BOLT DOWN BRACKETS, SIZE OF 4 AND 5 MODULE SUPPORT FRAMES, SEE BDPF28G3FBDDE.

7 FOR 5" WEIR DRAIN OPTIONS AND DIMENSIONS, SEE BDPF28G3OPDDE.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE–PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

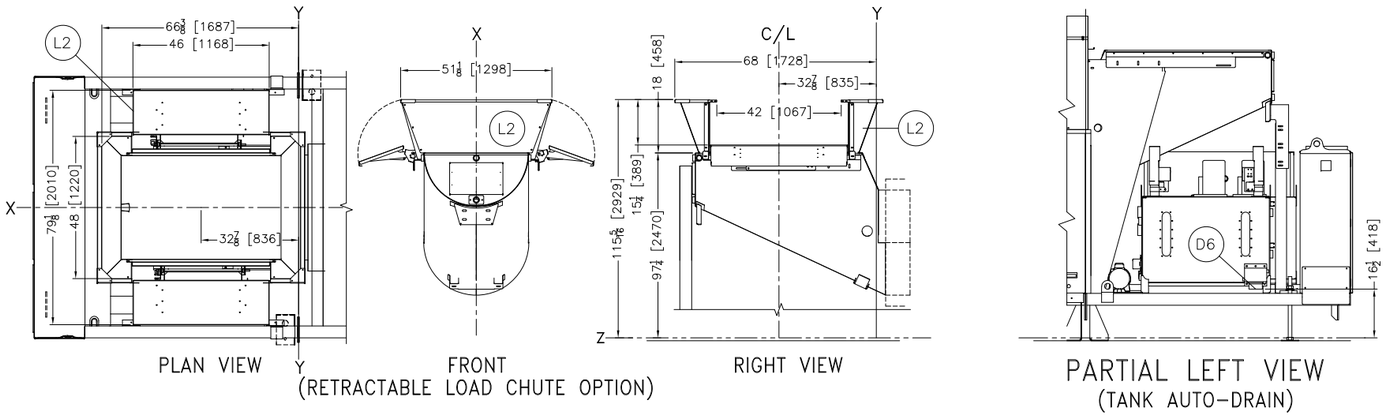
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

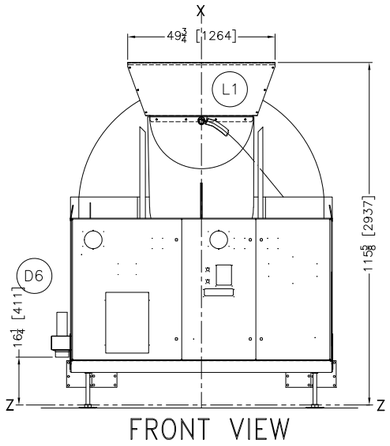
76028G3 PF 5 MODULE STANDALONE

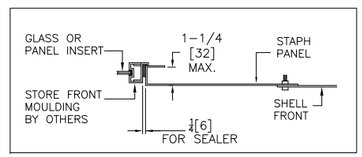
DM 0 0.5M
INCHES 0 12 24

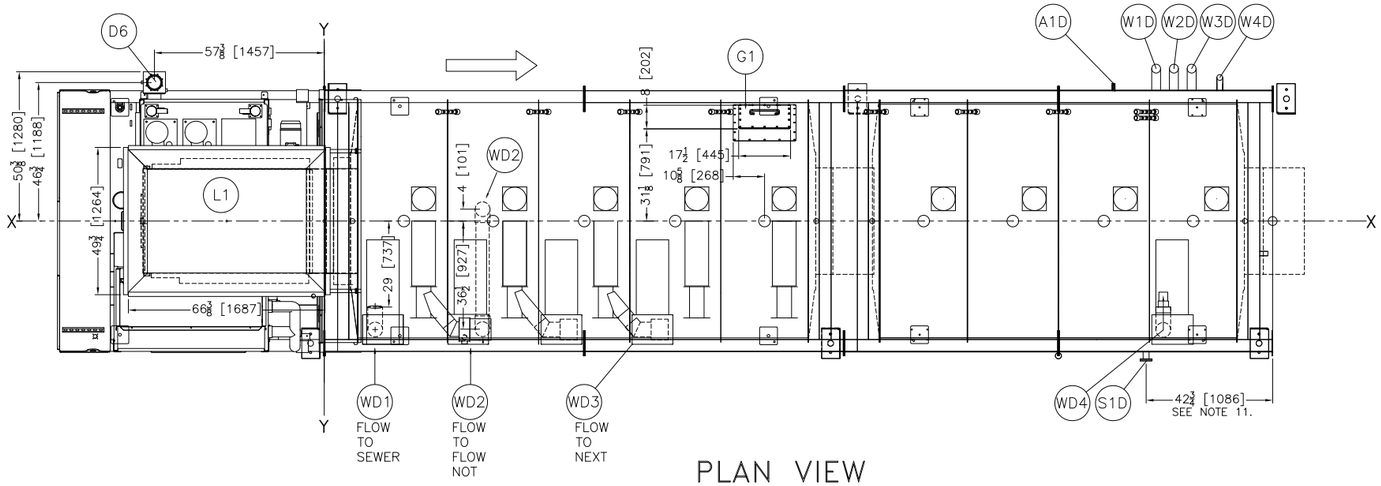
DWG# BDPF28G3M5DDE
2024125D

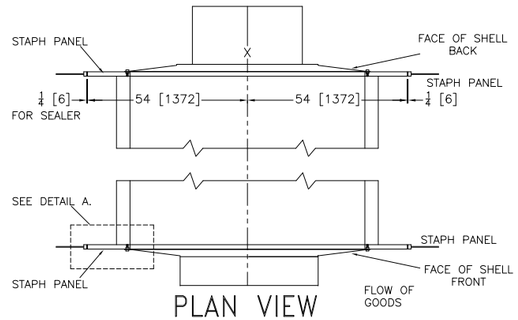
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467–9591,
FAX 504/468–3094, Email: milnorinfo@milnor.com

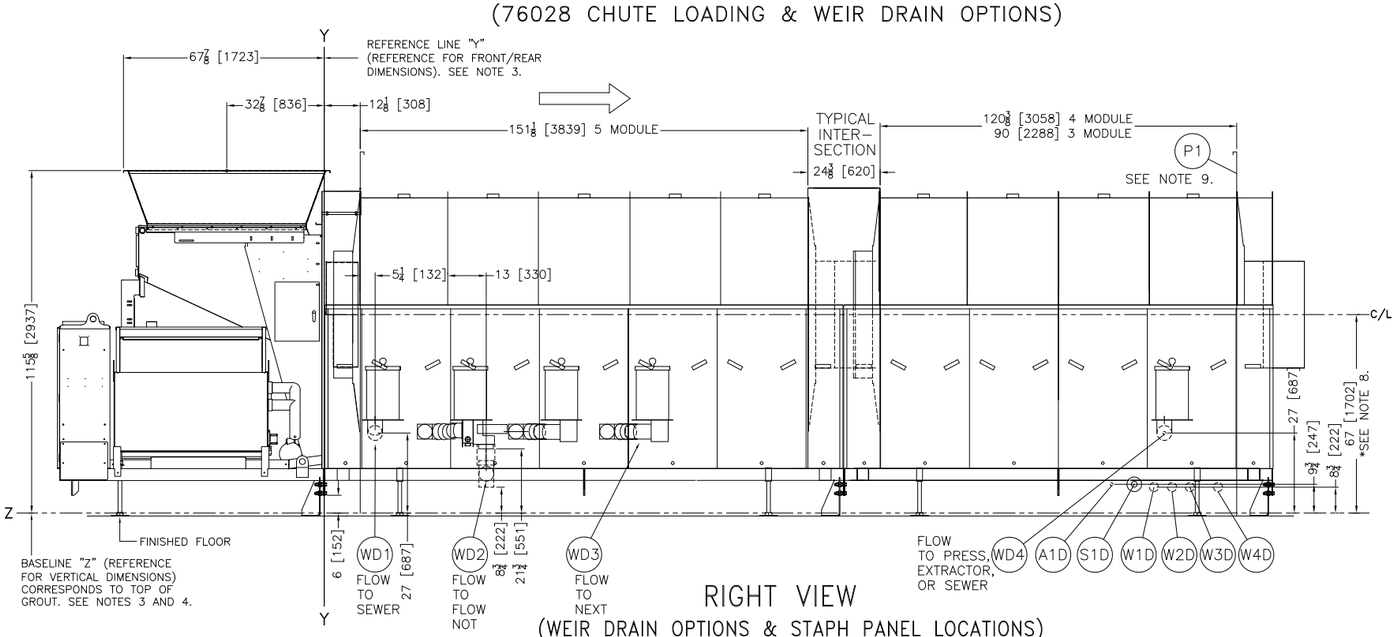


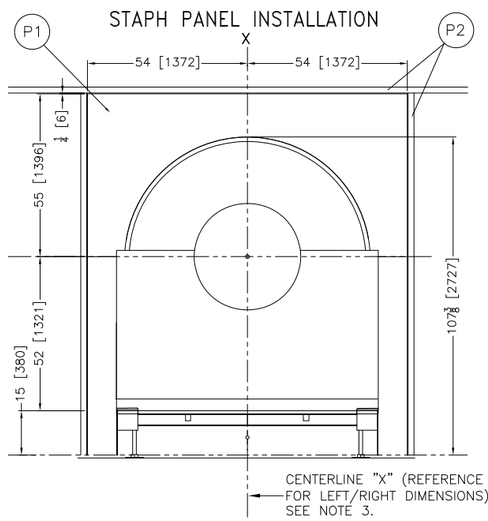












ITEM	LEGEND
W4D	UTILITIES DISCHARGE END, MODULE WATER HEADER #4
	(IF SPECIFIED) 2"NPT, SEE NOTE 11.
W3D	UTILITIES DISCHARGE END, MODULE WATER HEADER #3
	(IF SPECIFIED) 3"NPT, SEE NOTE 11.
W2D	UTILITIES DISCHARGE END, MODULE WATER HEADER #2
	(IF SPECIFIED) 3"NPT, SEE NOTE 11.
W1D	UTILITIES DISCHARGE END, MODULE WATER HEADER #1,
	2" OR 3"NPT, SEE NOTE 11.
S1D	UTILITIES DISCHARGE END, STEAM INLET RIGHT, 2" NPT
	4 BOLT, FLANGED. SEE NOTE 11.
P2	STORE FRONT MOLDINGS BY OTHERS, SEE DETAIL.
P1	OPTIONAL STAPH GUARD PANEL, SEE NOTE 9.
L2	OPTIONAL RETRACTABLE LOAD CHUTE FOR SLING LOADING
L1	OPTIONAL LARGER LOAD CHUTE FOR SLING/BAG LOADING
	WITH FLAIRSIDES
G1	OPTIONAL VIEWPORT ON SPECIFIED MODULES. DIMENSIONED
	FROM CENTER OF MODULE.
D6	OPTIONAL PF TANK REUSE AUTO-DRAIN, 4-1/2"OD
	(5" HOSE NOT SUPPLIED).
WD4	WEIR FLOW TO PRESS OR EXTRACTOR, TYPICAL OF THE LAST
	TUNNEL MODULE, 3" TOE CONNECTION, FOR 3-1/2" HOSE
	SUPPLIED BY PMC.
WD3	WEIR FLOW TO NEXT MODULE, SEE NOTE 10.
WD2	WEIR 5" NPT FLOW TO FLOWNOT, 4" PVC SUPPLIED TO
	SEWER CAN BE MODIFIED AT INSTALLATION, SEE NOTE 10.
WD1	WEIR 5" NPT FLOW TO SEWER, SEE NOTE 10.
A1D	UTILITIES DISCHARGE END, MAIN AIR CONNECTION, 1/2" NPT,
	SEE NOTE 11.

NOTES

11 OPTIONAL DISCHARGE END UTILITIES ARE ON THE LAST MODULE. WATER AND AIR MUST BE ON THE LEFT. STEAM MUST BE ON THE RIGHT. DIMENSIONS ARE APPROXIMATE.

10 WEIR DRAIN OPTIONS ARE SHOWN DIMENSIONED OFF THE FRONT EDGE OF EACH MODULE. THESE MEASUREMENTS ARE GOOD FOR EITHER 3, 4 OR 5 MODULE UNITS.

9 STAPH GUARD PANELS MAY ONLY BE INSTALLAED ON ENTRY SHELLFRONT OR EXIT SHELLBACK. STAPH PANELS MAY NOT BE LOCATED IN THE MIDDLE OF THE TUNNEL. THE DIMENSIONS AND LOCATIONS SHOWN ARE SUBJECT TO NORMAL MANUFACTURING TOLERANCE AND MAY VARY BETWEEN MACHINES.

8 THIS DRAWING SHOWS THE G3 TUNNEL AT 67"[1702] CENTERLINE. SEE ADDITIONAL TUNNEL DRAWINGS FOR THE INTERFACE DIMENSIONS OF THE TUNNEL WHEN USED WITH SPECIFIC EXTRACTING EQUIPMENT. THE TUNNEL MAY REQUIRE A VERTICAL ADJUSTMENT TO INTERFACE WITH ADJACENT MACHINES.

7 FOR OVERALL DIMENSIONS AND STANDARD CONNECTIONS, SEE BDPF28G3M3DDE, BDPF28G3M4DDE, OR BDPF28G3M5DDE.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

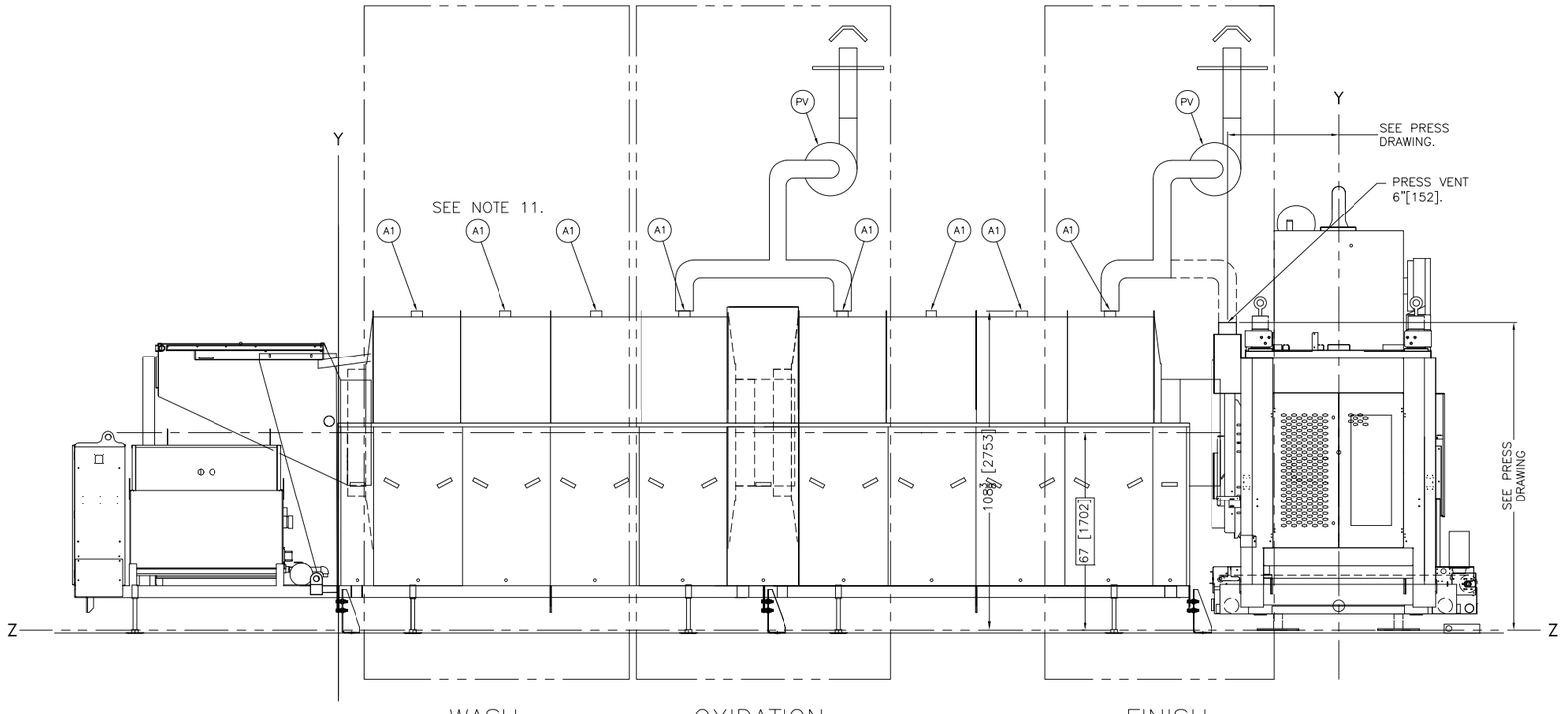
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76028G3 PF TUNNEL OPTIONS

DM 0 0.5M
INCHES 0 12 24

DWG# BDPF28G30PDDE
2024095D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnorinfo@milnor.com



RECOMMENDED VENT SYSTEM FOR THE TUNNEL WASHER AND ADJACENT PRESS

ITEM	LEGEND
PV	POWERED VENTILATOR & PIPING BY OTHERS, SEE NOTE 10.
A1	VENT, 4[102] DIAMETER. SEE NOTES 8, 9 & 10.

NOTES

11 IT IS NOT RECOMMENDED TO CONNECT MODULE VENTS AHEAD OF THE OXIDATION ZONE TO THE POWER VENT SYSTEM. IF THIS IS NEEDED, ADD 200 TO 250 SCFM OF POWERED VENTILATION PER ADDITIONAL MODULE VENTED.

10 THE BEST PRACTICE IS TO PROVIDE TWO SEPARATE, POWERED VENTILATION UNITS THAT MEET THE FOLLOWING CONDITIONS:
A) THE TWO UNITS ARE ISOLATED FROM EACH OTHER TO AVOID HARMFUL CHEMICAL REACTIONS.
B) VENTILATION FANS HAVE SUFFICIENT POWER TO DRAW VAPORS AWAY FROM THE EQUIPMENT. MILNOR RECOMMENDS:
OXIDATION ZONE: 600–750 SCFM
(300 TO 375 PER CONNECTION POINT, IF TWO MODULES)
FINISH ZONE PLUS THE PRESS ENCLOSURE: 600–750 SCFM
(200 TO 250 SCFM PER CONNECTION POINT, IF TWO MODULES PLUS THE PRESS).
THE SCFM VALUES ARE BASED ON AMBIENT AIR TEMPERATURE OF 68°F(20°C) AND A MINIMAL RELATIVE HUMIDITY.
C) FAN MOTORS ARE EQUIPPED WITH AN ALARM (EXAMPLE: INDICATOR LIGHT) TO ALERT PERSONNEL IF A MOTOR FAILS.
D) FOR TUNNELS WITH LESS THAN SEVEN MODULES, CONSULT MILNOR FACTORY.

9 VAPORS GENERATED IN THE OXIDATION ZONE AND THE FINISH ZONE OF THE TUNNEL CAN MIX TOGETHER, PRODUCE NOXIOUS GASSES, AND CORRODE EQUIPMENT. WITHOUT ADEQUATE VENTILATION, THESE VAPORS WILL EXIT THE TUNNEL DISCHARGE RING OR CONCENTRATE IN THE DISCHARGE END OF THE TUNNEL AND ADJACENT PRESS ENCLOSURE. THE SEVERITY VARIES WITH CHEMICAL COMPOSITION AND USAGE, BUT CORROSION CAN BE RAPID AND SEVERE.

8 ALL VENTS ARE CAPPED FOR SHIPMENT. UNCAP ALL VENTS AT INSTALLATION.

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

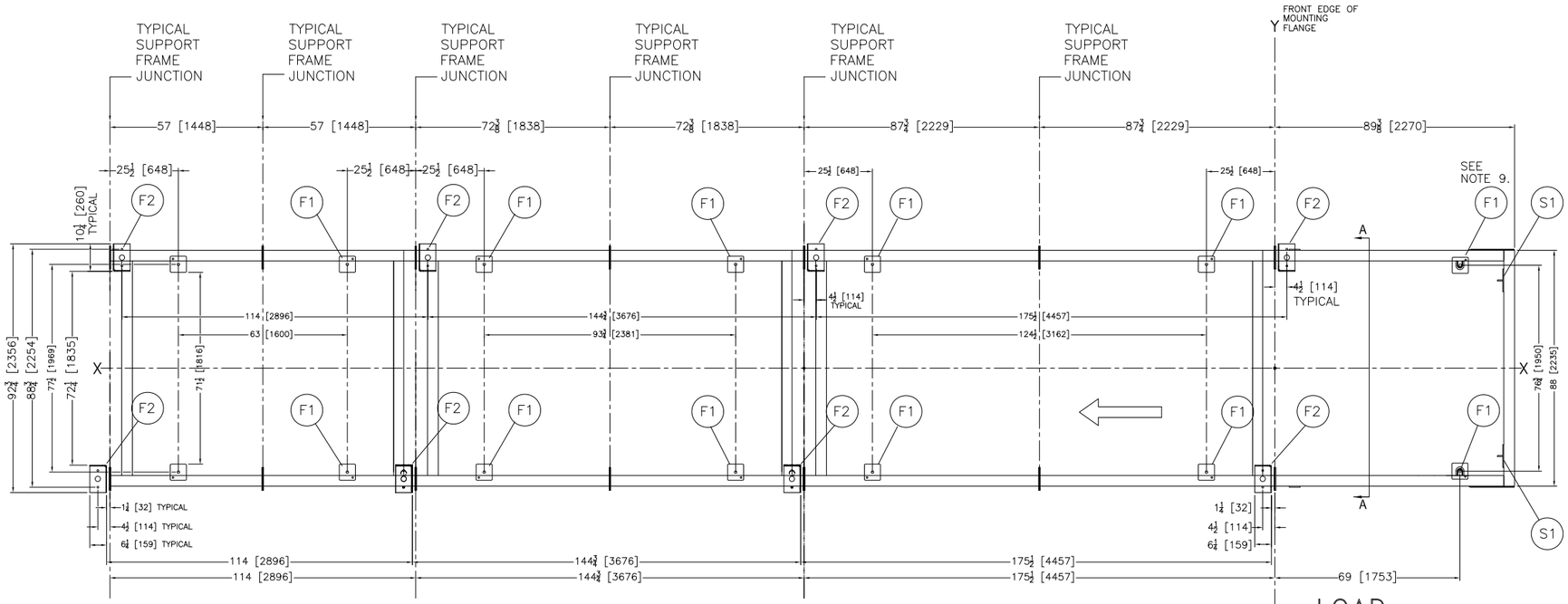
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76028G3 PF – VENTING

DM 0 0.25M
INCHES 0 12

DWG# BDPF28G3VTDDE
2018125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467–9591,
FAX 504/469–1849, Email: milnorinfo@milnor.com

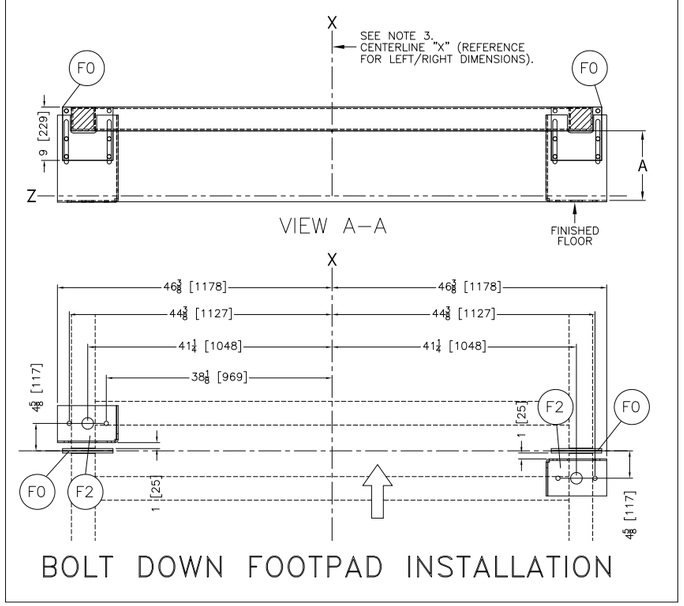


TYPICAL 3 MODULE
SUPPORT FRAME & FEET
SEE NOTE 7 & 8.

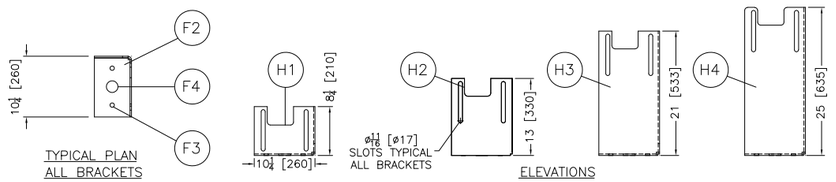
TYPICAL 4 MODULE
SUPPORT FRAME & FEET
SEE NOTE 7 & 8.

TYPICAL 5 MODULE
SUPPORT FRAME & FEET
SEE NOTE 7 & 8.

LOAD SUPPORT FRAME
SEE NOTE 7 & 8.



BOLT DOWN FOOTPAD INSTALLATION



DETAIL: BOLT DOWN BRACKETS & TYPICAL FOOTPAD DETAIL.

TUNNEL CENTERLINE	BOLT DOWN BRACKETS	DIMENSION "A"
61" [1549]	H1	5 1/2" [139] MINIMUM– 8 3/4" [223] MAXIMUM
67" [1702]	H2 (STANDARD BRACKET)	10 1/4" [259] MINIMUM– 13 1/2" [343] MAXIMUM
>74 1/4" [1885]– 77 1/2" [1969]	H3	18 1/4" [462] MINIMUM– 21 1/2" [547] MAXIMUM
>78 1/4"[1986]– 81 1/2"[2070]	H4	21 1/2" [564] MINIMUM– 25 1/2" [648] MAXIMUM

ITEM	LEGEND
S1	LIFTING BRACKET MOUNTING PLATE, SEE BDPF28G3SBDDE.
H4	25" TALLEST BOLT DOWN BRACKET, CONSULT FACTORY
H3	21" TALL BOLT DOWN BRACKET, TYPICALLY FOR USE WITH M9V4840
H2	STANDARD BOLT DOWN BRACKET, TYPICALLY FOR USE WITH MP2601, MP1550, MP1603, MP1604 & MP1656.
H1	SHORTEST BOLT DOWN BRACKET, TYPICALLY FOR USE WITH MP2501 AND M7V4232.
F4	GROUT HOLES, 2" DIAMETER
F3	ANCHOR BOLT HOLES, 3/4" DIAMETER
F2	PLAN VIEW OF ALL BOLT DOWN FEET. SEE DETAIL & NOTE 8.
F1	ADJUSTABLE FLAT FEET 6"[152] SQUARE, MUST BE SUPPORTED, ANCHORING NOT REQUIRED FOR G3 TUNNEL
F0	TYPICAL SUPPORT FRAME JUNCTION
E1	CONTROL BOX MOUNTED TO FRONT LOAD SUPPORT FRAME

NOTES

9 THE RIGHT FRONT ADJUSTABLE FLAT FOOT, LOCATED UNDER THE PULSE FLOW TANK, MAY REQUIRE THE TOP OF THE THREADED ROD CUT OFF AT INSTALLATION TO CLEAR THE BOTTOM OF THE TANK.

8 BOLT DOWN FEET ARE USED TO PREVENT THE TUNNEL FROM "WALKING" AND MUST BE INSTALLED IN ADDITION TO ADJUSTABLE FLAT FEET WHICH SUPPORT THE MACHINE. A PAIR OF BOLT DOWN FEET MUST BE INSTALLED ON THE END OF EACH SECTION, AND ONE PAIR OF BOLT DOWN FEET USED AT THE JUNCTION OF TWO SECTIONS, SEE PLAN VIEW.

7 7628 G3 TUNNELS CAN BE ORDERED IN VARIOUS COMBINATIONS OF 3, 4 & 5 MODULE SECTIONS; SEE BDPF28G3CFCE. THIS DRAWING SHOWS 3, 4 & 5 MODULE SUPPORT FRAMES AND THE LOAD SUPPORT FRAME. CONSULT THE SPECIFICATIONS OF YOUR MACHINE BEFORE DETERMINING THE LOCATION OF ADJUSTABLE FEET AND BOLT DOWN BRACKETS.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

FOUNDATION 76028G3 PF TUNNELS

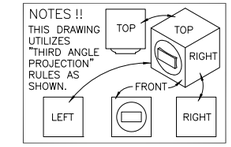
DM 0 0.5M
INCHES 0 12 24

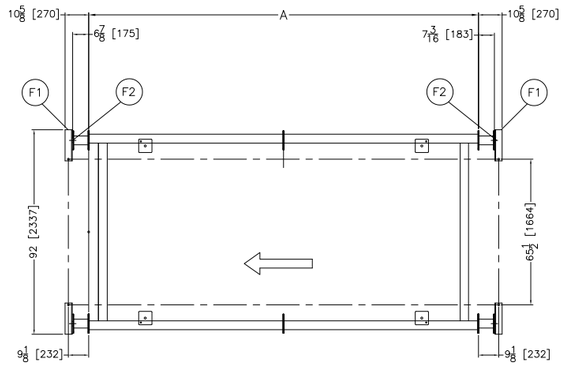
DWG# BDPF28G3FBDDE
2024095D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnorinfo@milnor.com

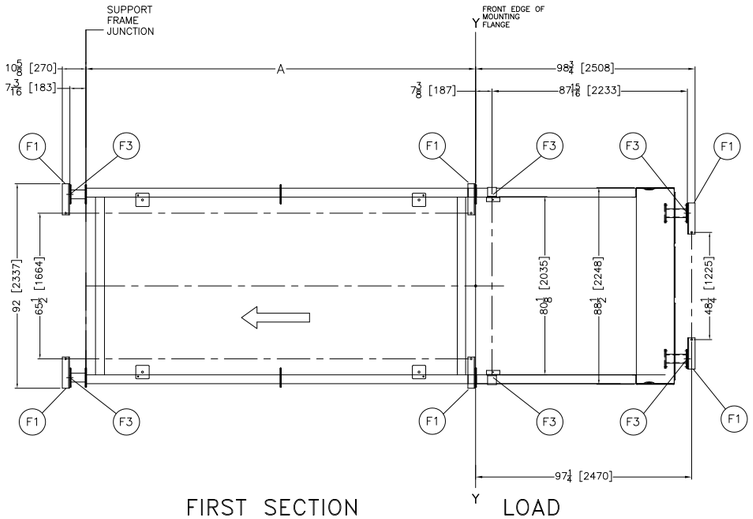
DIMENSIONS THAT VARY WITH NUMBER OF MODULES		
76028G3 PF TUNNELS	DIMENSION "A" INCHES	mm
3 MODULE	114	2896
4 MODULE	144 3/4	3676
5 MODULE	175 1/2	4457

NOTES !!
THIS DRAWING UTILIZES "THIRD ANGLE PROJECTION" RULES AS SHOWN.



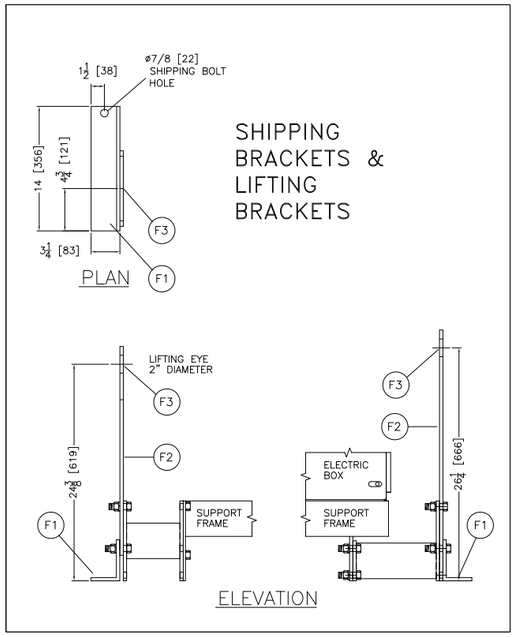


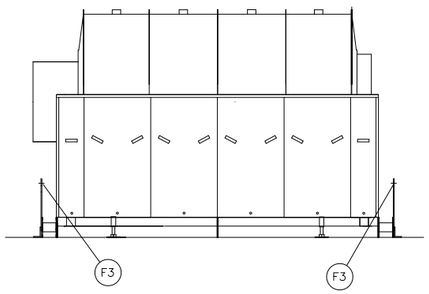
INDIVIDUAL TUNNEL SECTIONS
SUPPORT FRAME SHOWING
LIFTING EYES & SHIPPING BRACKETS



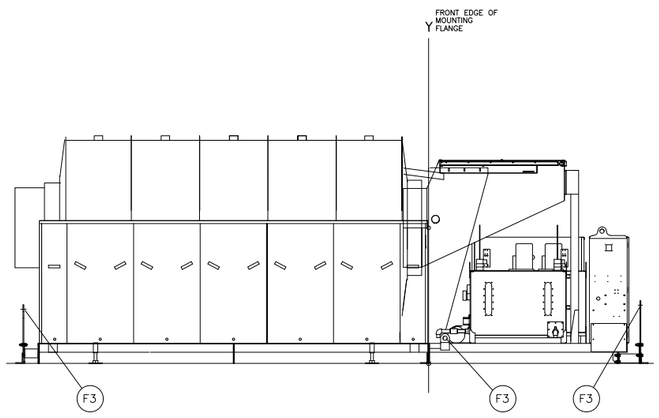
FIRST SECTION
SUPPORT FRAME SHOWING
LIFTING EYES & SHIPPING BRACKETS

LOAD
SHIPPED ATTACHED TO FIRST SECTION
SEE NOTE 7.

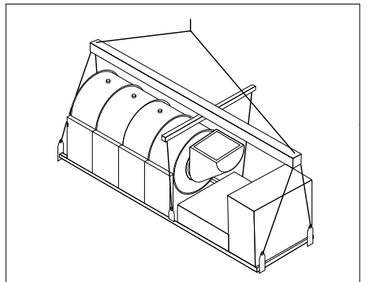




USE 4 POINT LIFTING
FOR INDIVIDUAL SECTIONS



USE 6 POINT LIFTING FOR LOAD AND 1ST SECTION



ITEM	LEGEND
F3	LIFTING EYE, 2"[51] DIAMETER
F2	LIFTING BRACKET
F1	SHIPPING BRACKET FOR EXPORT, 7/8"[22] DIAMETER BOLT HOLE

NOTES

8 THIS DRAWING SHOWS 3, 4 & 5 MODULE SUPPORT FRAMES , AND THE LOAD SUPPORT FRAME. G3 TUNNELS CAN BE ORDERED IN VARIOUS COMBINATIONS OF 3, 4 & 5 MODULE SECTIONS. CONSULT THE SPECIFICATIONS FOR YOUR MACHINE BEFORE LOCATING THE SHIPPING BRACKETS.

7 MID AND END TUNNEL SECTIONS ARE SEPARATED BEFORE SHIPMENT. FIRST SECTIONS ARE SHIPPED WITH THE LOAD SUPPORT FRAME, TANK, & CONTROL BOX ATTACHED.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

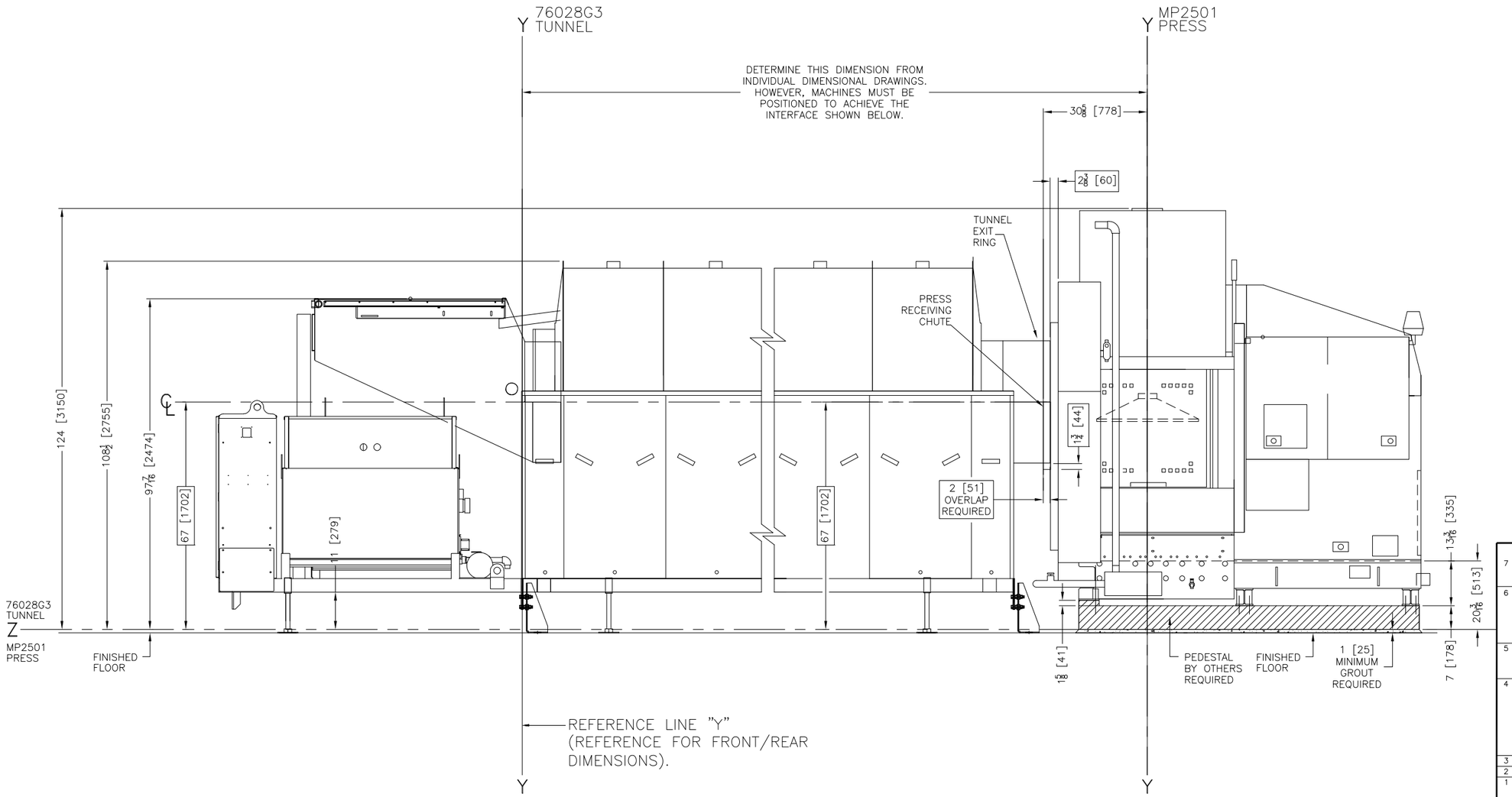
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

SHIPPING BRACKETS 28G3 PF

DM 0 0.5M 1M
INCHES 0 12 24 36

DWG# BDPF28G3SBDDE 2018125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnorinfo@milnor.com



76028G3 PF TUNNEL/MP2501(50KG) 2 STAGE PRESS

NOTES

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

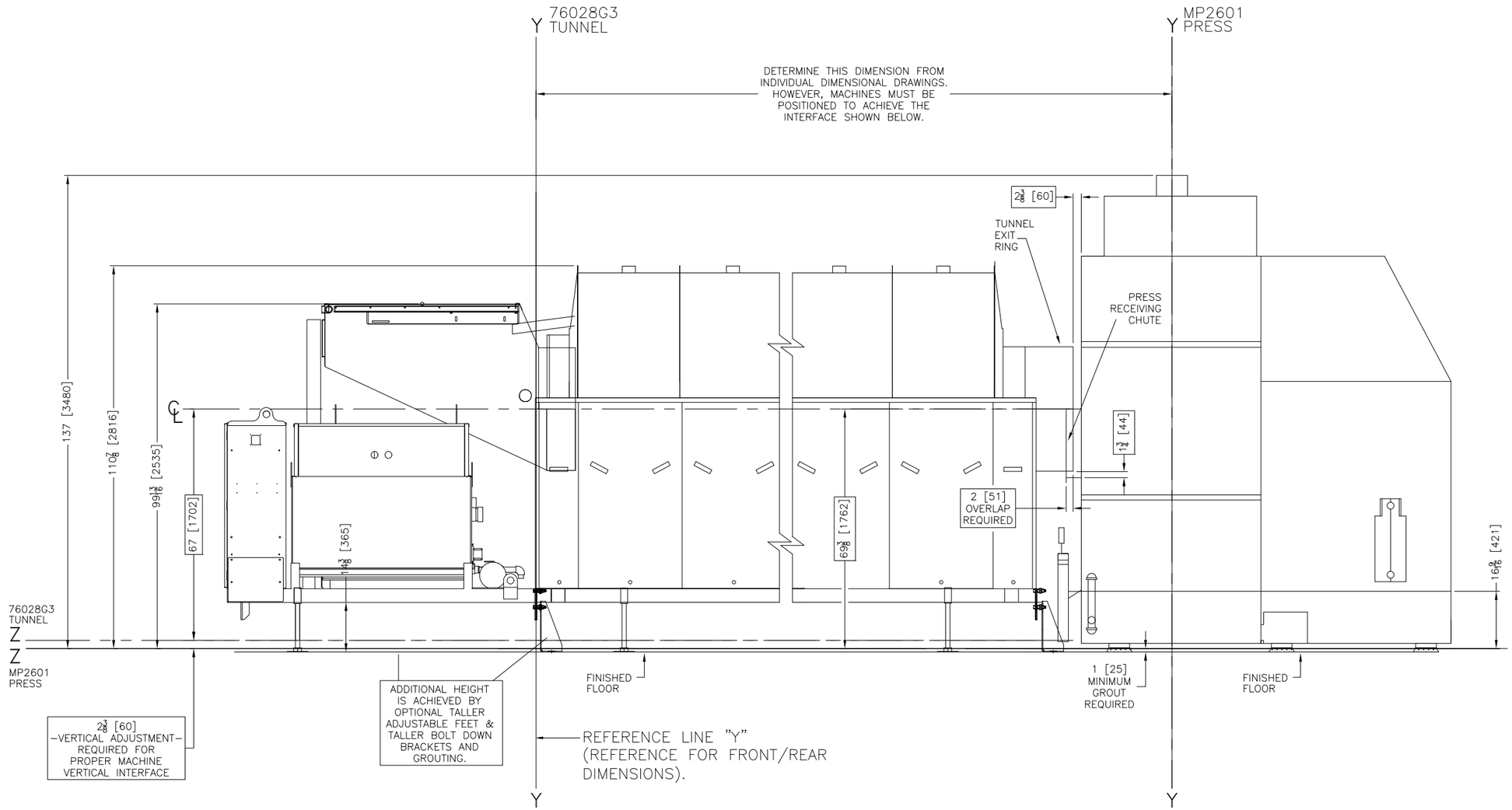
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

7628G3 PF /MP2501

DM 0 0.25M
INCHES 0 12

DWG# BDPF28G3INDDA
2018125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: mktg@milnor.com



76028G3 PF TUNNEL/MP2601(60KG) 2 STAGE PRESS

NOTES

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

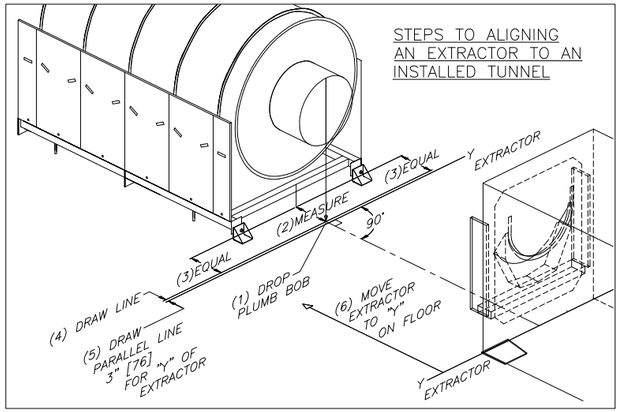
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

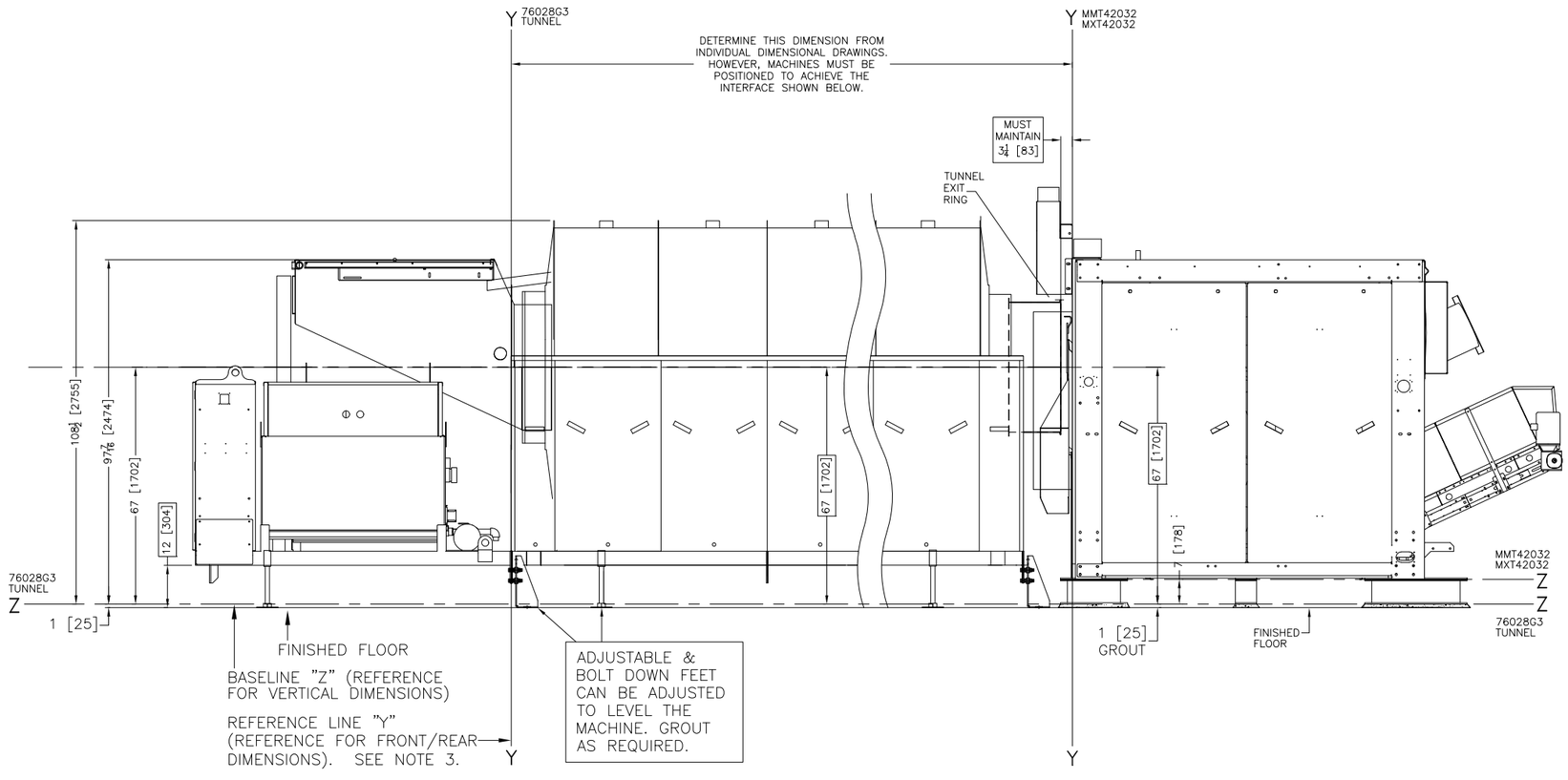
7628G3 PF /MP2601

DM 0 0.5M
INCHES 0 12 24

DWG# BDPF28G3INDDB 2018125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnorinfo@milnor.com





76028G3 PF TUNNEL/MMT,MXT42032

NOTES

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

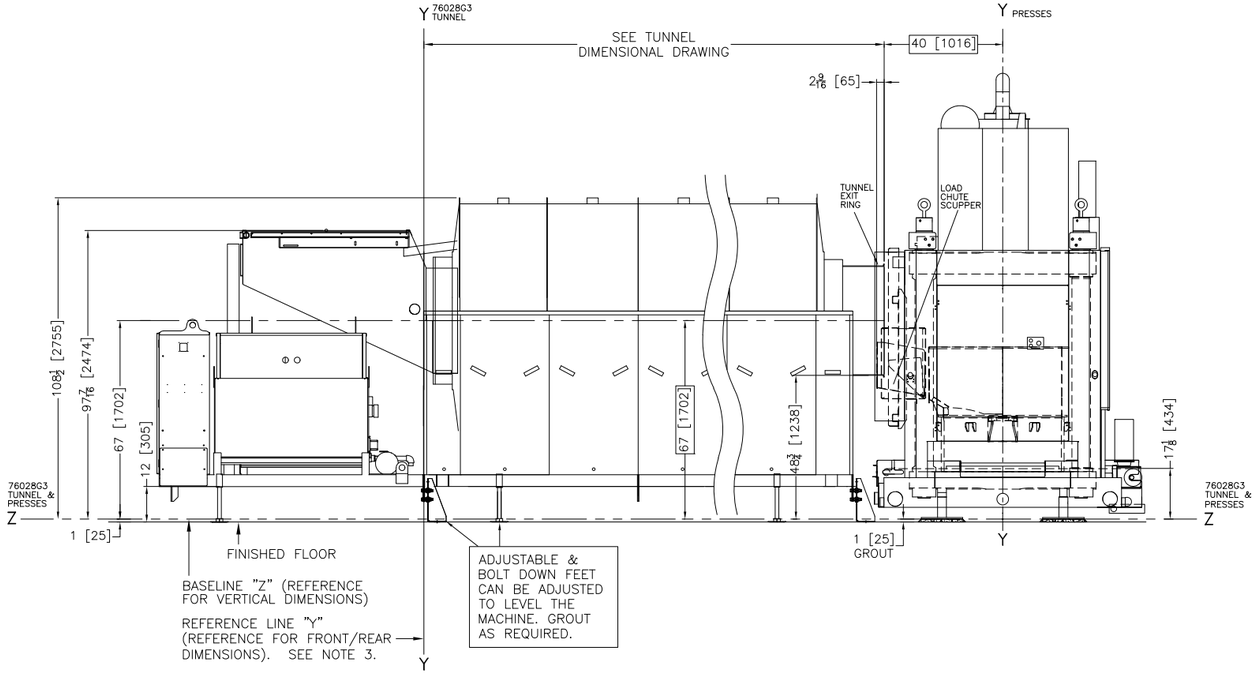
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76028G3 PF/MMT,MXT42032

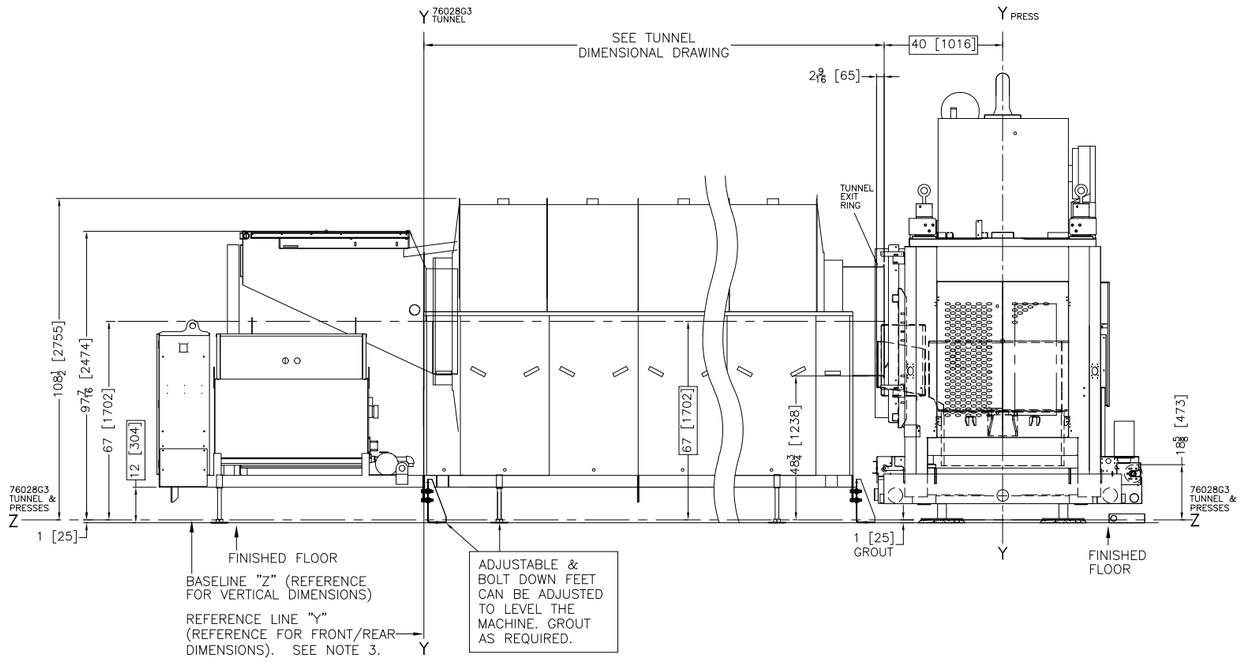
DM 0 0.5M
INCHES 0 12 24

DWG# BDPF28G3INDDE
2018125D

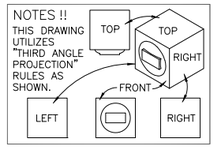
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com



76028G3 PF TUNNEL/MP1540 SINGLE STAGE PRESSES



76028G3 PF TUNNEL/MP1556, MP1640, MP1656 SINGLE STAGE PRESSES



NOTES

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

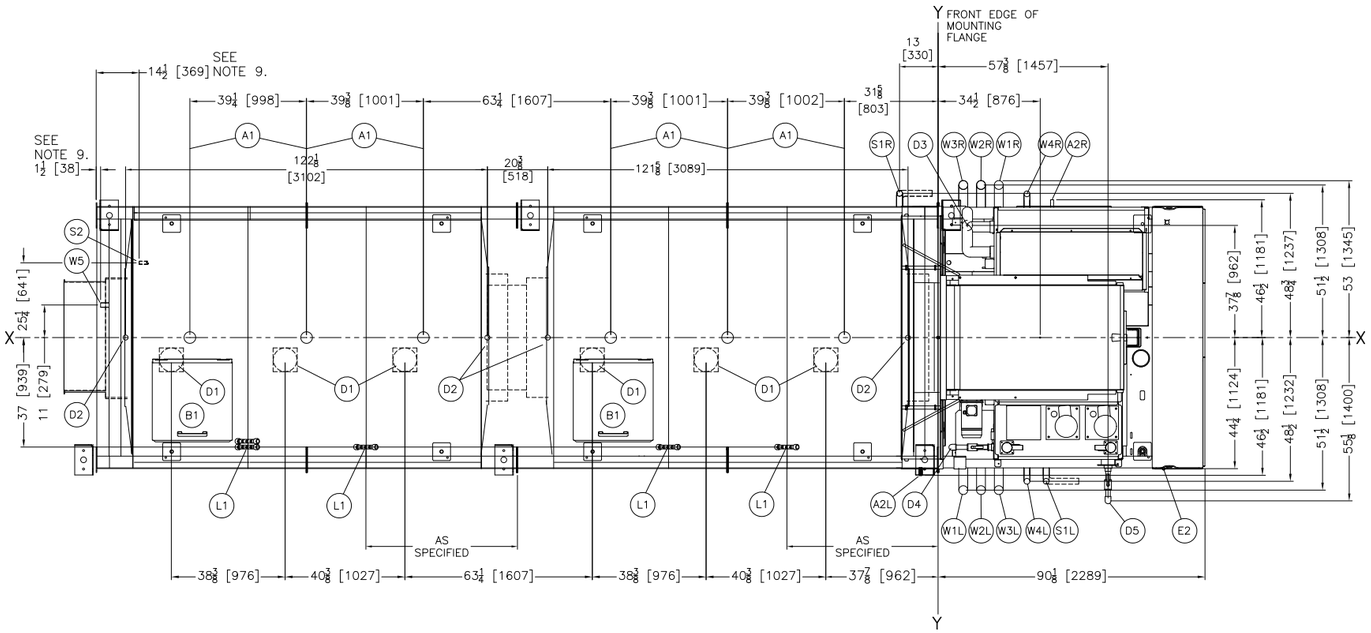
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76028G3 PF/MP1540/MP1556/MP1640/MP1656

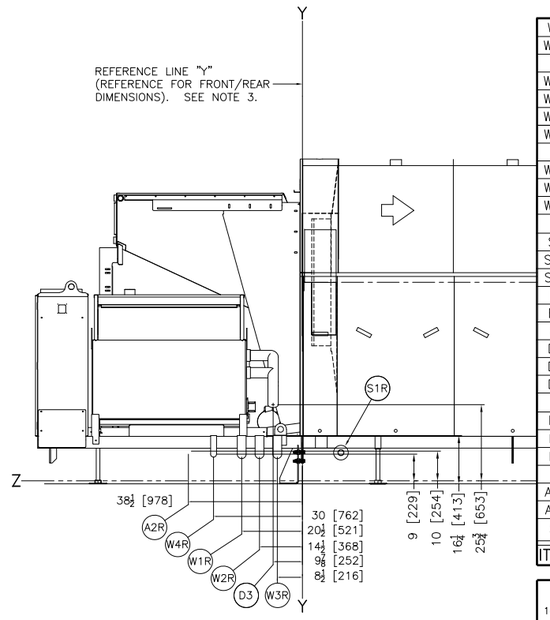
DM 0 0.5M 1M
INCHES 0 12 24 36

DWG# BDPF28G3INDGC 20181125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnorinfo@milnor.com

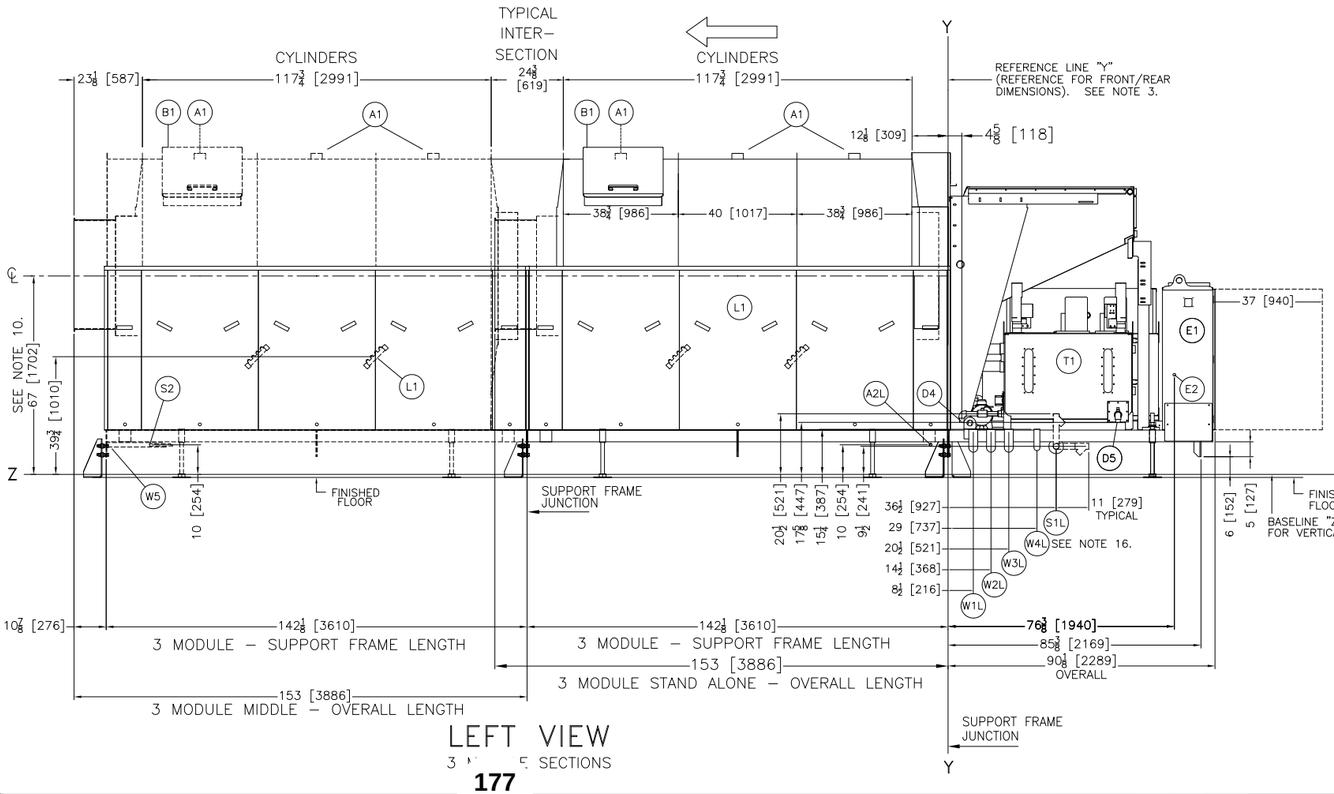


PLAN VIEW
(DRAINS AND CONNECTIONS)

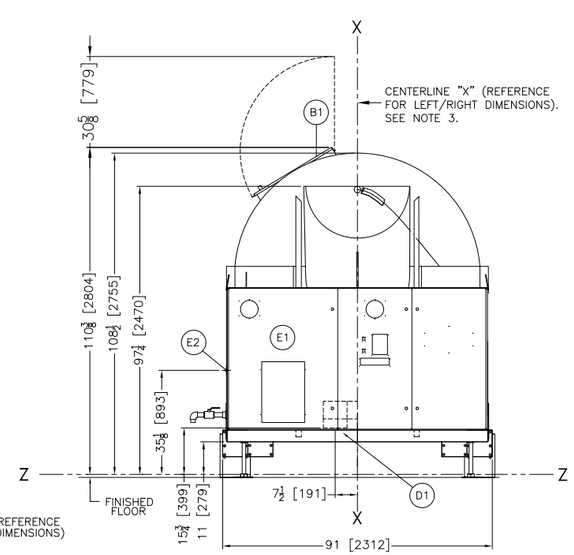


RIGHT VIEW
3 MODULE SECTIONS

W5	PRESS WATER TO PULSE FLOW TANK 1–1/2" NPT.
W4R	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES RIGHT, SEE NOTE 16.
W3R	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W2R	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W1R	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES RIGHT
W4L	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES LEFT, SEE NOTE 16.
W3L	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W2L	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W1L	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES LEFT
T1	REUSE TANK
S2	STEAM TRAP, STEAM CONDENSATE OUTLET, 1/2" NPT
S1R	STEAM INLET 2" NPT, UTILITIES RIGHT
S1L	STEAM INLET 2" NPT, UTILITIES LEFT
L1	LIQUID SUPPLY INLETS, SEE NOTE 13.
E2	MAIN ELECTRICAL CONNECTION
E1	ELECTRICAL CONTROL BOX
D5	REUSE TANK MANUAL DRAIN (OPTIONAL), 2" HOSE SUPPLIED
D4	FRESH WATER MANUAL DRAIN(STANDARD), 2" HOSE SUPPLIED
D3	PF OVERFLOW TO SEWER, 4" PVC OUTLET (5" HOSE TO SEWER NOT SUPPLIED.)
D2	DRIP DRAIN 1–3/4" ID TUBING SUPPLIED. SEE NOTE 11.
D1	8" DIAMETER DRAIN VALVE, ON SPECIFIED MODULES
B1	MODULE ACCESS HATCHES, APPROXIMATELY EVERY 3RD MODULE PER LENGTH, 76039 MODELS.
A2R	RIGHT MAIN AIR CONNECTION 1/2" NPT
A2L	LEFT MAIN AIR CONNECTION 1/2" NPT
A1	TYPICAL EXHAUST VENT 4[102] DIAMETER.
ITEM	LEGEND



LEFT VIEW
3 MODULE SECTIONS



FRONT VIEW
LOAD END

NOTES

16 REUSE TANK HEADER INLET, W4_, IS NOT ALWAYS USED. IT MAY CONNECT DIRECTLY TO W1_, W2_, OR W3_.

15 DIRECT THE STEAM CONDENSATE TO THE DRAIN TROUGH. DO NOT RETURN STEAM CONDENSATE TO THE BOILER BECAUSE OF POSSIBLE CONTAMINATION FROM CHEMICALS IN THE WASH WATER.

14 UTILITY INLETS (WATER,STEAM,AIR) WILL ALWAYS BE OPPOSITE THE LOAD CONVEYOR. IF NOT SPECIFIED, THE INLETS WILL BE ON THE LEFT (W1L,W2L,W3L,W4L,A1L,S1L). IF LOAD CONVEYOR IS ON THE LEFT, USE RIGHT INLETS(W1R,W2R,W3R,W4R,A1R,S1R).

13 LIQUID SUPPLY INLETS, THE PVDF MANIFOLDS HAVE (4) 3/8" PORTS WITH (4) PVDF THREADED 3/8" PLUGS PER MANIFOLD, SHIPPED WITH THE MACHINE.

12 BACK FLOW PREVENTERS MUST BE INSTALLAED IF LOCAL PLUMBING CODES REQUIRE. RECOMMENDED MODELS ARE WATTS SERIES 009. THEY CAN BE PURCHASED LOCALLY OR THROUGH MILNOR. CONTACT MILNOR FACTORY.

11 LEAK OFF FROM DRIP DRAINS MUST BE ROUTED TO DRAIN SUMP. THESE CONNECTIONS ARE SUPPLIED WITH TUBING, MAKING THIS A FLEXIBLE CONNECTION POINT.

10 THIS DRAWING SHOWS THE G3 TUNNEL AT 67"[1702] CENTERLINE. SEE ADDITIONAL TUNNEL DRAWINGS FOR THE INTERFACE DIMENSIONS OF THE TUNNEL WHEN USED WITH SPECIFIC EXTRACTING EQUIPMENT.

9 STEAM CONDENSATE OUTLET AND PRESS WATER TO REUSE TANK ARE MEASURED OFF THE LAST SUPPORT FRAME, REGARDLESS OF HOW LONG THE TUNNEL IS.

8 FOR SIZE AND LOCATION OF ADJUSTABLE FEET AND BOLT DOWN BRACKETS, SIZE OF 4 AND 5 MODULE SUPPORT FRAMES, SEE BDPF28G3FBDDE.

7 FOR 5" WEIR DRAIN OPTIONS AND DIMENSIONS, SEE BDPF28G3OPDDE.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE–PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

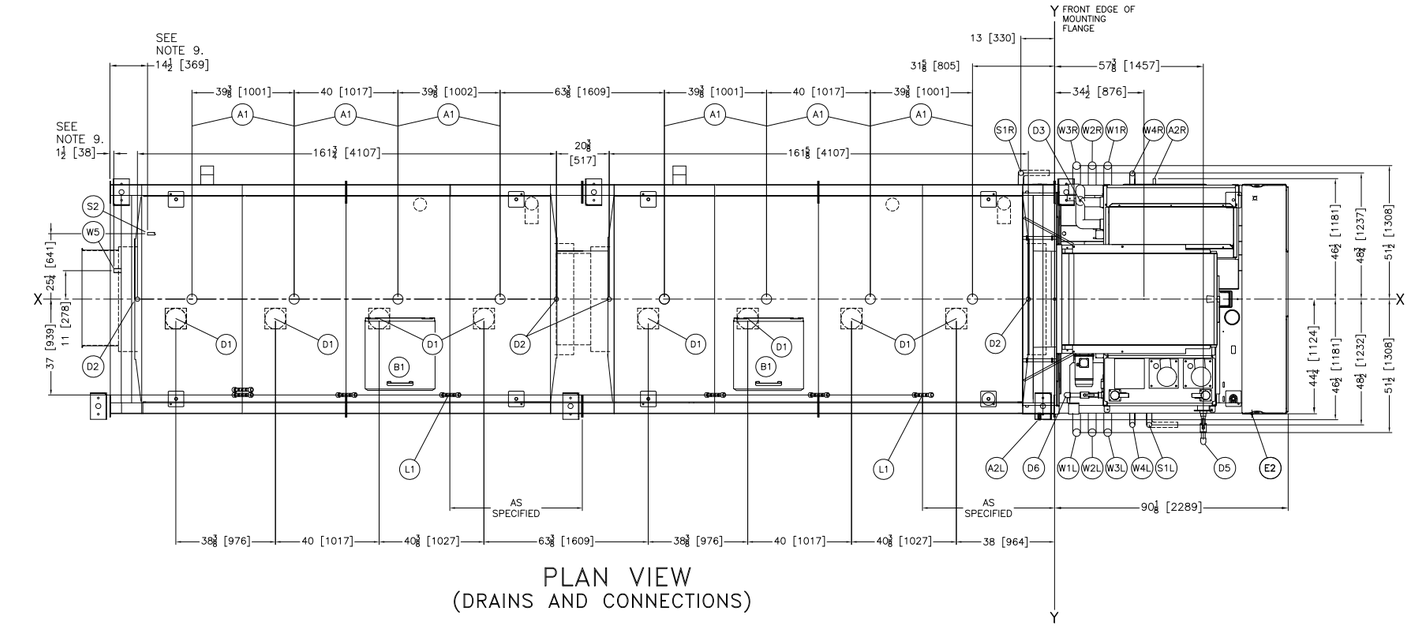
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76039G3 PF TUNNEL–3 MODULE

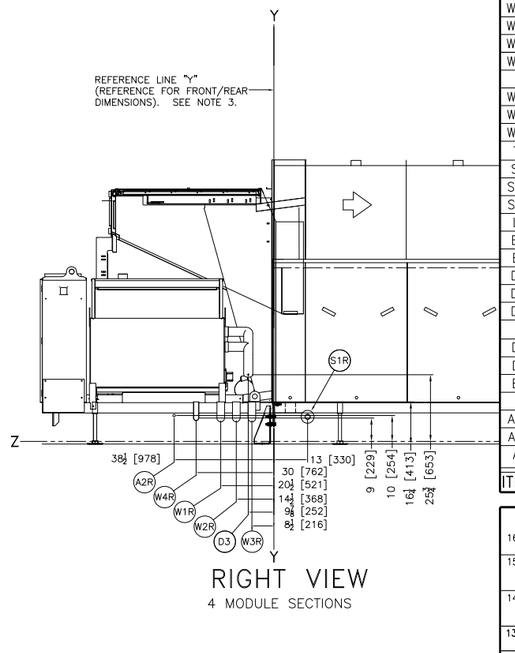
DM 0 0.5M
INCHES 0 12 24

DWG# BDPF39G3M3DDE
2024095D

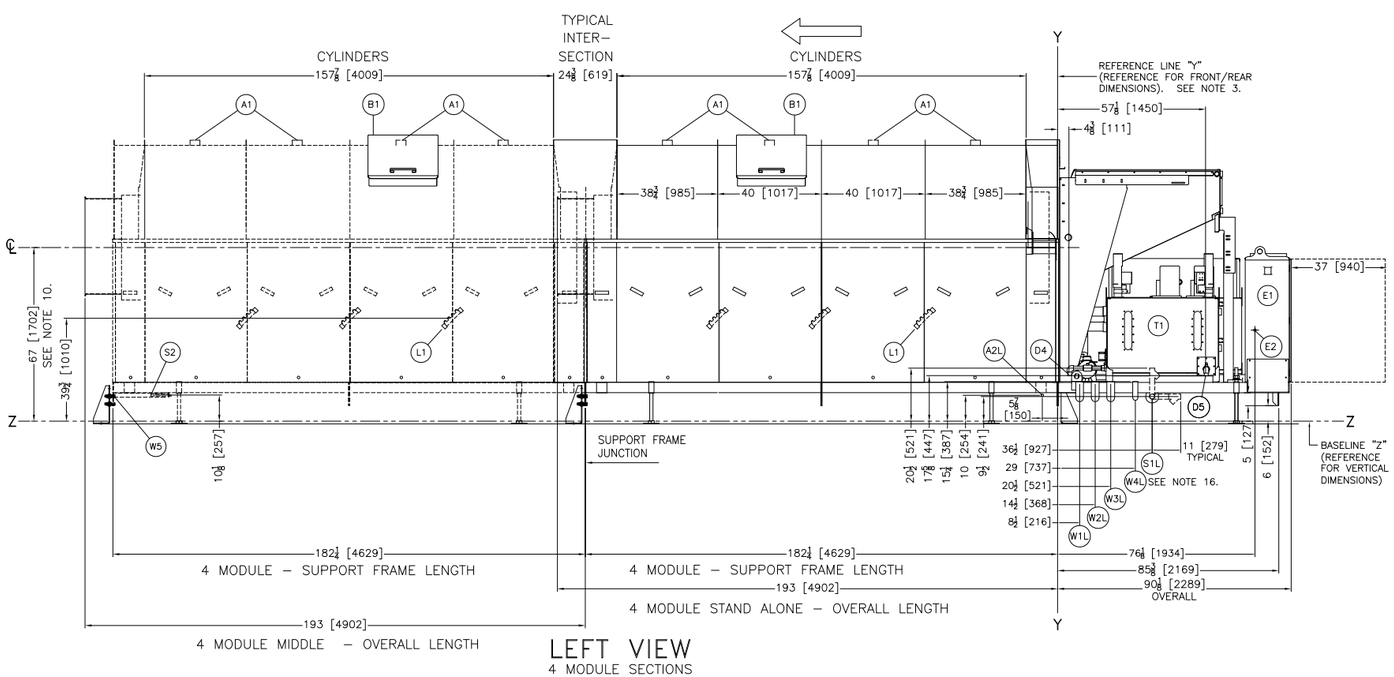
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467–9591,
FAX 504/468–3094, Email: milnorinfo@milnor.com



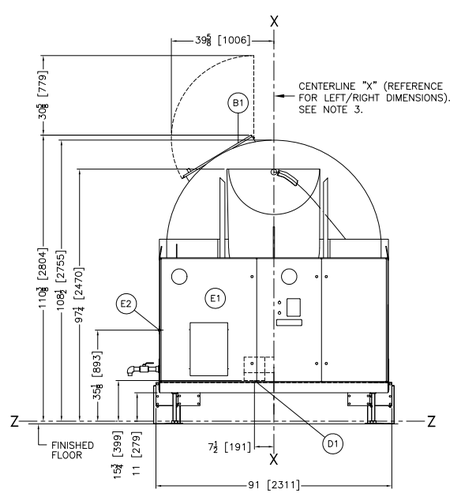
PLAN VIEW
(DRAINS AND CONNECTIONS)



RIGHT VIEW
4 MODULE SECTIONS



LEFT VIEW
4 MODULE SECTIONS



FRONT VIEW
LOAD END

ITEM	LEGEND
W5	PRESS WATER TO PULSE FLOW TANK 1–1/2" NPT.
W4R	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES RIGHT, SEE NOTE 16.
W3R	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W2R	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES RIGHT
W1R	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES RIGHT
W4L	REUSE/PULSEFLOW TANK HEADER, 2"NPT, UTILITIES LEFT, SEE NOTE 16.
W3L	MODULE WATER HEADER #3, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W2L	MODULE WATER HEADER #2, 3"NPT, IF SPECIFIED, UTILITIES LEFT
W1L	MODULE WATER HEADER #1, 2" OR 3"NPT, UTILITIES LEFT
T1	REUSE TANK
S2	STEAM TRAP, STEAM CONDENSATE OUTLET, 1/2" NPT
S1R	STEAM INLET 2" NPT, UTILITIES RIGHT
S1L	STEAM INLET 2" NPT, UTILITIES LEFT
L1	LIQUID SUPPLY INLETS, SEE NOTE 13.
E2	MAIN ELECTRICAL CONNECTION
E1	ELECTRICAL CONTROL BOX
D5	REUSE TANK MANUAL DRAIN (OPTIONAL), 2" HOSE SUPPLIED
D4	FRESH WATER MANUAL DRAIN(STANDARD), 2" HOSE SUPPLIED
D3	PF OVERFLOW TO SEWER, 4" PVC OUTLET (5" HOSE TO SEWER NOT SUPPLIED.)
D2	DRIP DRAIN 1–3/4" ID TUBING SUPPLIED. SEE NOTE 11.
D1	8" DIAMETER DRAIN VALVE, ON SPECIFIED MODULES
B1	MODULE ACCESS HATCHES, APPROXIMATELY EVERY 3RD MODULE PER LENGTH, 76039 MODELS.
A2R	RIGHT MAIN AIR CONNECTION 1/2" NPT
A2L	LEFT MAIN AIR CONNECTION 1/2" NPT
A1	TYPICAL EXHAUST VENT 4[102] DIAMETER.

NOTES

16 REUSE TANK HEADER INLET, W4_, IS NOT ALWAYS USED. IT MAY CONNECT DIRECTLY TO W1_, W2_, OR W3_.

15 DIRECT THE STEAM CONDENSATE TO THE DRAIN TROUGH. DO NOT RETURN STEAM CONDENSATE TO THE BOILER BECAUSE OF POSSIBLE CONTAMINATION FROM CHEMICALS IN THE WASH WATER.

14 UTILITY INLETS (WATER,STEAM,AIR) WILL ALWAYS BE OPPOSITE THE LOAD CONVEYOR. IF NOT SPECIFIED, THE INLETS WILL BE ON THE LEFT (W1L,W2L,W3L,W4L,A1L,S1L). IF LOAD CONVEYOR IS ON THE LEFT, USE RIGHT INLETS(W1R,W2R,W3R,W4R,A1R,S1R).

13 LIQUID SUPPLY INLETS, THE PVDF MANIFOLDS HAVE (4) 3/8" PORTS WITH (4) PVDF THREADED 3/8" PLUGS PER MANIFOLD, SHIPPED WITH THE MACHINE.

12 BACK FLOW PREVENTERS MUST BE INSTALLAED IF LOCAL PLUMBING CODES REQUIRE. RECOMMENDED MODELS ARE WATTS SERIES 009. THEY CAN BE PURCHASED LOCALLY OR THROUGH MILNOR. CONTACT MILNOR FACTORY.

11 LEAK OFF FROM DRIP DRAINS MUST BE ROUTED TO DRAIN SUMP. THESE CONNECTIONS ARE SUPPLIED WITH TUBING, MAKING THIS A FLEXIBLE CONNECTION POINT.

10 THIS DRAWING SHOWS THE G3 TUNNEL AT 67"[1702] CENTERLINE. SEE ADDITIONAL TUNNEL DRAWINGS FOR THE INTERFACE DIMENSIONS OF THE TUNNEL WHEN USED WITH SPECIFIC EXTRACTING EQUIPMENT.

9 STEAM CONDENSATE OUTLET AND PRESS WATER TO REUSE TANK ARE MEASURED OFF THE LAST SUPPORT FRAME, REGARDLESS OF HOW LONG THE TUNNEL IS.

8 FOR SIZE AND LOCATION OF ADJUSTABLE FEET AND BOLT DOWN BRACKETS, SIZE OF 4 AND 5 MODULE SUPPORT FRAMES, SEE BDPF28G3FBDDE.

7 FOR 5" WEIR DRAIN OPTIONS AND DIMENSIONS, SEE BDPF28G3OPDDE.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE–PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

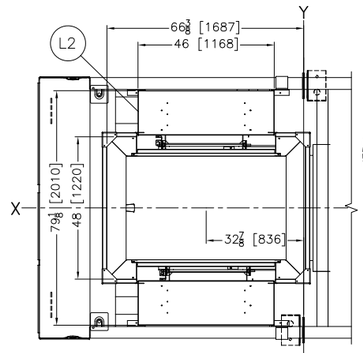
ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

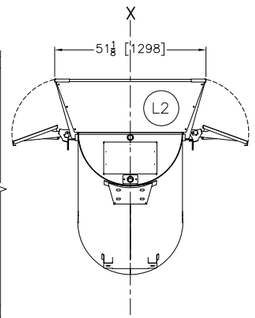
76039G3 PF TUNNEL–4 MODULE

DWG# BDPF39G3M4DDE 2024095D

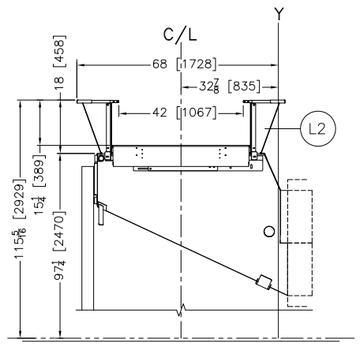
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467–9591,
FAX 504/468–3094, Email: milnorinfo@milnor.com



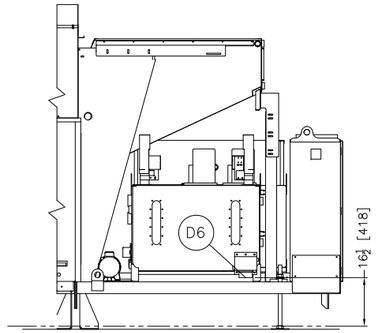
PLAN VIEW



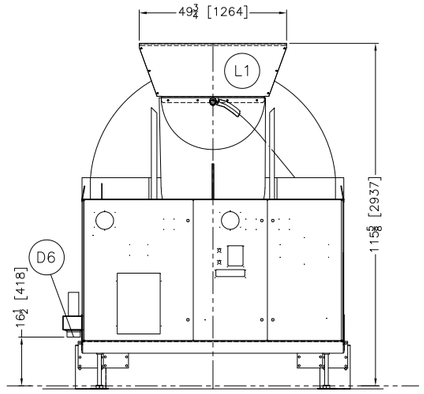
FRONT
(RETRACTABLE LOAD CHUTE OPTION)



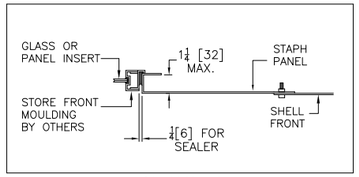
RIGHT VIEW



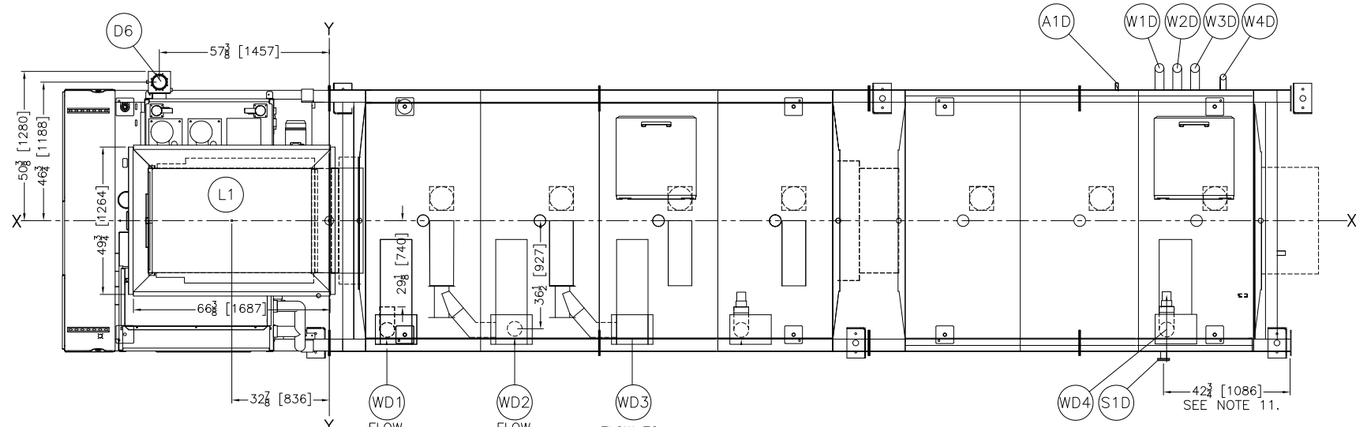
PARTIAL LEFT VIEW
(TANK AUTO-DRAIN)



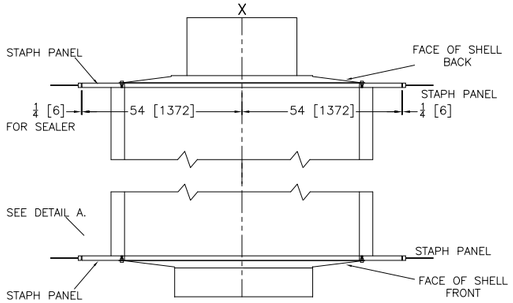
FRONT VIEW



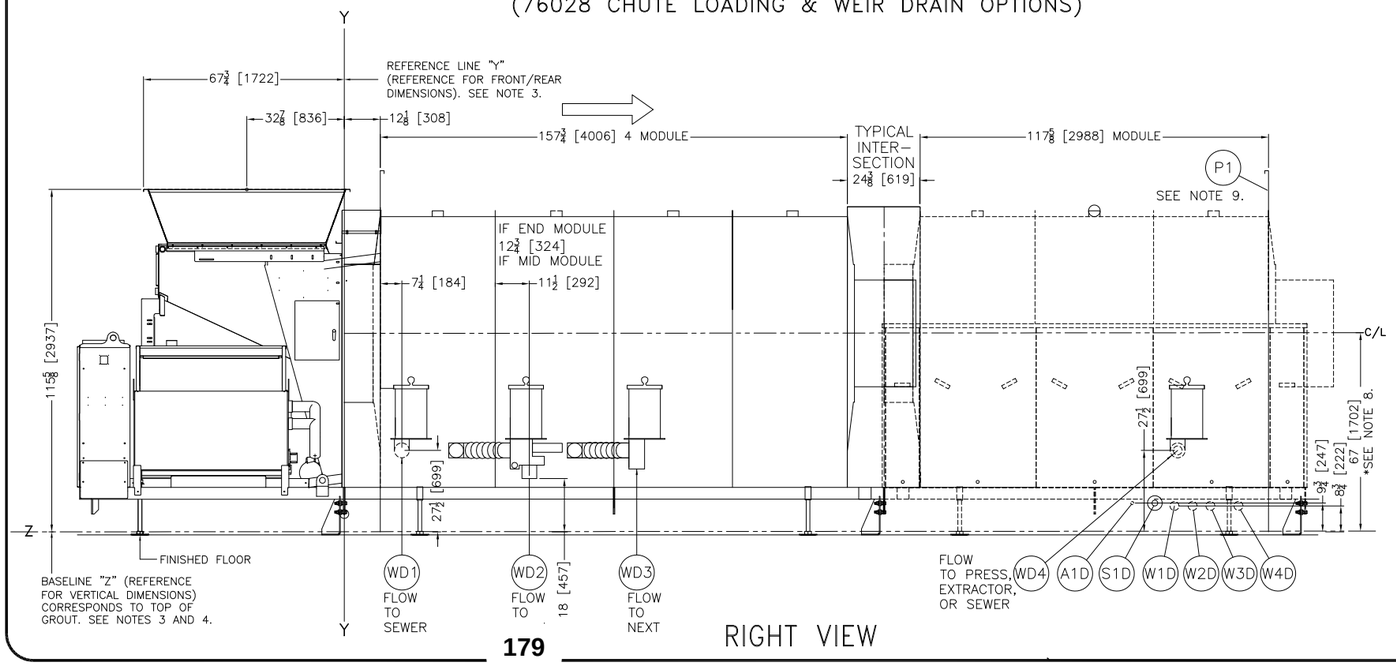
DETAIL A



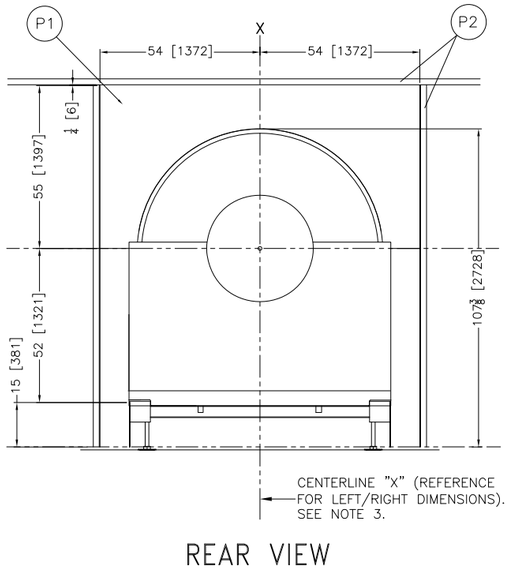
PLAN VIEW
(76028 CHUTE LOADING & WEIR DRAIN OPTIONS)



PLAN VIEW
STAPH PANEL INSTALLATION



RIGHT VIEW



CENTERLINE "X" (REFERENCE
FOR LEFT/RIGHT DIMENSIONS).
SEE NOTE 3.

REAR VIEW

ITEM	LEGEND
W4D	UTILITIES DISCHARGE END, MODULE WATER HEADER #4
	(IF SPECIFIED) 2"NPT, SEE NOTE 11.
W3D	UTILITIES DISCHARGE END, MODULE WATER HEADER #3
	(IF SPECIFIED) 3"NPT, SEE NOTE 11.
W2D	UTILITIES DISCHARGE END, MODULE WATER HEADER #2
	(IF SPECIFIED) 3"NPT, SEE NOTE 11.
W1D	UTILITIES DISCHARGE END, MODULE WATER HEADER #1,
	2" OR 3"NPT, SEE NOTE 11.
S1D	UTILITIES DISCHARGE END, STEAM INLET RIGHT,
	2" NPT, 4 BOLT, FLANGED. SEE NOTE 11.
P2	STORE FRONT MOLDINGS BY OTHERS, SEE DETAIL.
P1	OPTIONAL STAPH GUARD PANEL, SEE NOTE 9.
L2	OPTIONAL RETRACTABLE LOAD CHUTE FOR SLING LOADING
L1	OPTIONAL LARGER LOAD CHUTE FOR SLING/BAG LOADING
	WITH FLAIRSIDES
G1	OPTIONAL VIEWPORT ON SPECIFIED MODULES. DIMENSIONED
	FROM CENTER OF MODULE.
D6	OPTIONAL PF TANK REUSE AUTO-DRAIN, 4-1/2"OD
	(5" HOSE NOT SUPPLIED).
D4	FLOW TO PRESS OR EXTRACTOR, TYPICAL OF THE LAST
	TUNNEL MODULE, 3" TOE CONNECTION, FOR 3-1/2" HOSE
	SUPPLIED BY PMC.
D3	FLOW TO NEXT MODULE, SEE NOTE 10.
D2	5" NPT FLOW TO FLOWNOT, 4" PVC SUPPLIED TO SEWER,
	CAN BE MODIFIED AT INSTALLATION, SEE NOTE 10.
D1	5" NPT FLOW TO SEWER, SEE NOTE 10.
A1D	UTILITIES DISCHARGE END, MAIN AIR CONNECTION, 1/2" NPT,
	SEE NOTE 11.

NOTES

11 OPTIONAL DISCHARGE END UTILITIES ARE ON THE LAST MODULE. WATER AND AIR MUST BE ON THE LEFT. STEAM MUST BE ON THE RIGHT. DIMENSIONS ARE APPROXIMATE.

10 WEIR DRAIN OPTIONS ARE SHOWN DIMENSIONED OFF THE FRONT EDGE OF EACH MODULE. THESE MEASUREMENTS ARE GOOD FOR EITHER 3 OR 4 MODULE UNITS.

9 STAPH GUARD PANELS MAY ONLY BE INSTALLAED ON ENTRY SHELLFRONT OR EXIT SHELLBACK. STAPH PANELS MAY NOT BE LOCATED IN THE MIDDLE OF THE TUNNEL. THE DIMENSIONS AND LOCATIONS SHOWN ARE SUBJECT TO NORMAL MANUFACTURING TOLERANCE AND MAY VARY BETWEEN MACHINES.

8 THIS DRAWING SHOWS THE G3 TUNNEL AT 67"[1702] CENTERLINE. SEE ADDITIONAL TUNNEL DRAWINGS FOR THE INTERFACE DIMENSIONS OF THE TUNNEL WHEN USED WITH SPECIFIC EXTRACTING EQUIPMENT. THE TUNNEL MAY REQUIRE A VERTICAL ADJUSTMENT TO INTERFACE WITH ADJACENT MACHINES.

7 FOR OVERALL DIMENSIONS AND STANDARD CONNECTIONS, SEE BDPF39G3M3CE, BDPF39G3M4CE.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

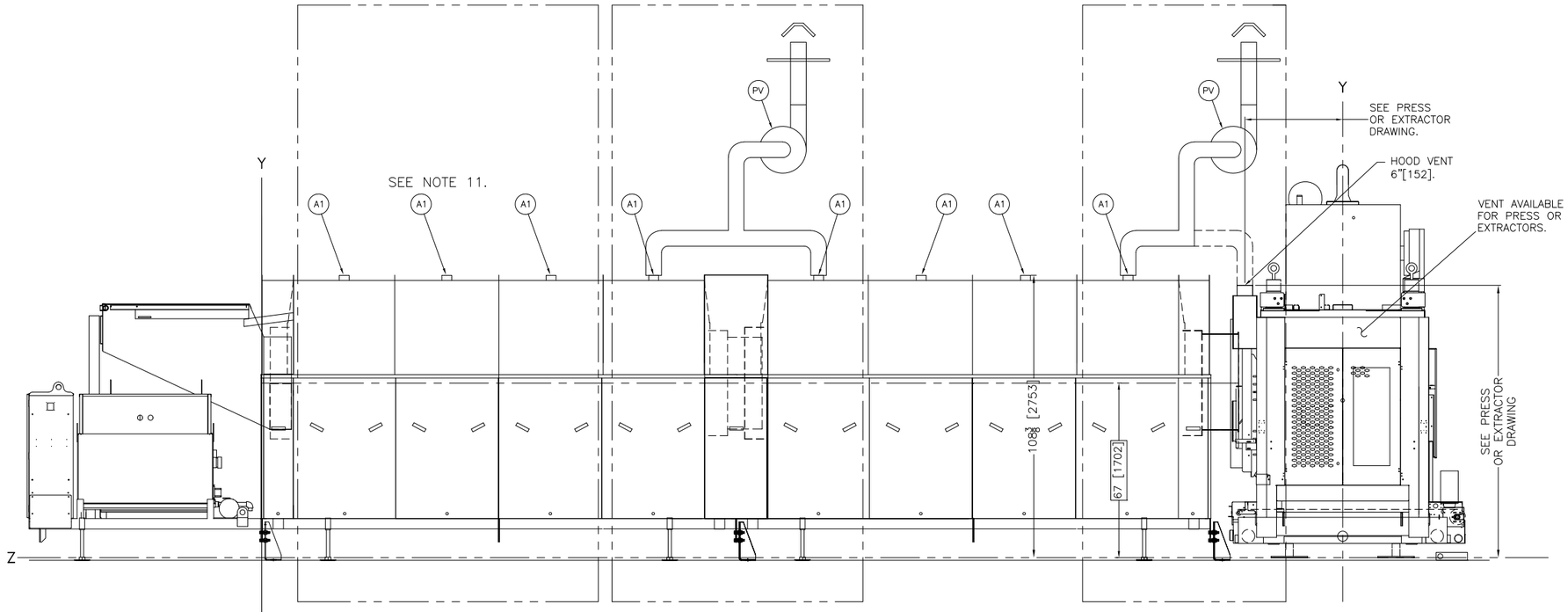
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76039 G3 PF TUNNEL OPTIONS

DM 0 0.5M
INCHES 0 12 24

DWG# BDPF39G3OPDDE 2024095D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com



RECOMMENDED VENT SYSTEM FOR THE TUNNEL WASHER AND ADJACENT PRESS OR EXTRACTOR

ITEM	LEGEND
PV	POWERED VENTILATOR & PIPING BY OTHERS, SEE NOTE 10.
A2	HOOD VENT, 6[152] DIAMETER, ON PRESS OR EXTRACTOR
A1	VENT, 4[102] DIAMETER. SEE NOTES 8, 9 & 10.

NOTES

11 IT IS NOT RECOMMENDED TO CONNECT MODULE VENTS AHEAD OF THE OXIDATION ZONE TO THE POWER VENT SYSTEM. IF THIS IS NEEDED, ADD 200 TO 250 SCFM OF POWERED VENTILATION PER ADDITIONAL MODULE VENTED.

10 THE BEST PRACTICE IS TO PROVIDE TWO SEPARATE, POWERED VENTILATION UNITS THAT MEET THE FOLLOWING CONDITIONS:
A) THE TWO UNITS ARE ISOLATED FROM EACH OTHER TO AVOID HARMFUL CHEMICAL REACTIONS.
B) VENTILATION FANS HAVE SUFFICIENT POWER TO DRAW VAPORS AWAY FROM THE EQUIPMENT. MILNOR RECOMMENDS:
OXIDATION ZONE: 600–750 SCFM
(300 TO 375 PER CONNECTION POINT, IF TWO MODULES)
FINISH ZONE PLUS THE PRESS ENCLOSURE: 600–750 SCFM
(200 TO 250 SCFM PER CONNECTION POINT, IF TWO MODULES PLUS THE PRESS).
THE SCFM VALUES ARE BASED ON AMBIENT AIR TEMPERATURE OF 68°F(20°C) AND A MINIMAL RELATIVE HUMIDITY.
C) FAN MOTORS ARE EQUIPPED WITH AN ALARM (EXAMPLE: INDICATOR LIGHT) TO ALERT PERSONNEL IF A MOTOR FAILS.
D) FOR TUNNELS WITH LESS THAN SEVEN MODULES, CONSULT MILNOR FACTORY.

9 VAPORS GENERATED IN THE OXIDATION ZONE AND THE FINISH ZONE OF THE TUNNEL CAN MIX TOGETHER, PRODUCE NOXIOUS GASSES, AND CORRODE EQUIPMENT. WITHOUT ADEQUATE VENTILATION, THESE VAPORS WILL EXIT THE TUNNEL DISCHARGE RING OR CONCENTRATE IN THE DISCHARGE END OF THE TUNNEL AND ADJACENT PRESS ENCLOSURE. THE SEVERITY VARIES WITH CHEMICAL COMPOSITION AND USAGE, BUT CORROSION CAN BE RAPID AND SEVERE.

8 ALL VENTS ARE CAPPED FOR SHIPMENT. UNCAP ALL VENTS AT INSTALLATION.

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE–PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

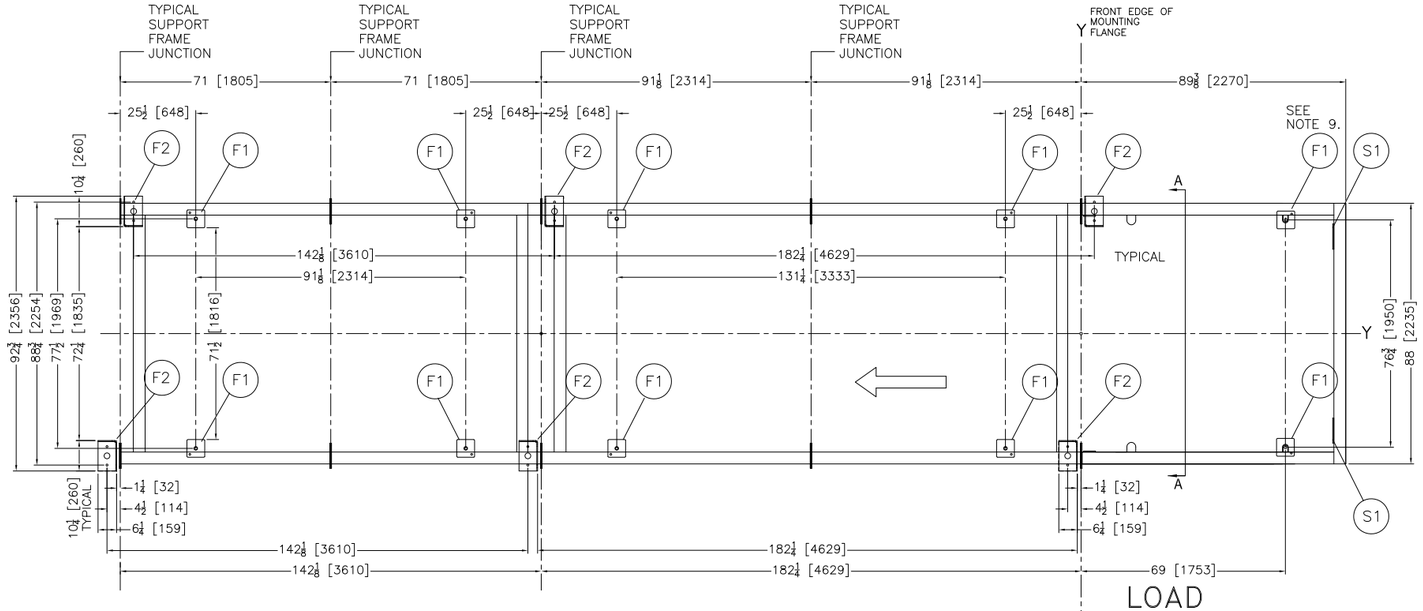
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76039G3 PF – VENTING

DM 0 0.25M
INCHES 0 12

DWG# BDPF39G3VTDDE
2018125D

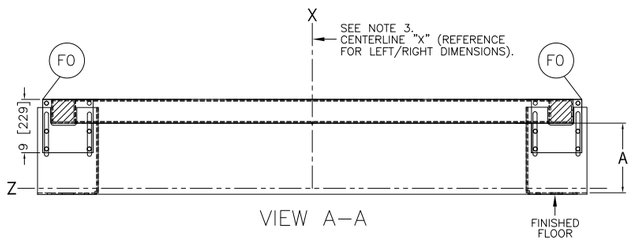
PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467–9591,
FAX 504/469–1849, Email: milnorinfo@milnor.com



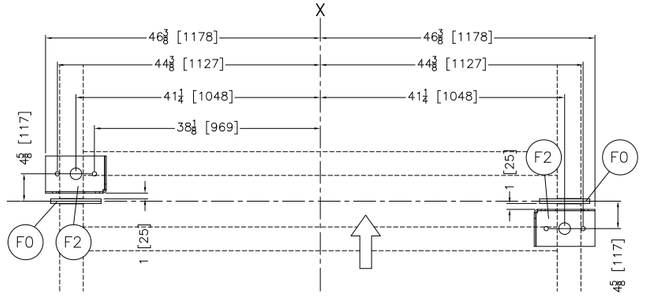
TYPICAL 3 MODULE
SUPPORT FRAME & FEET
SEE NOTES 7 & 9.

TYPICAL 4 MODULE
SUPPORT FRAME & FEET
SEE NOTES 7 & 9.

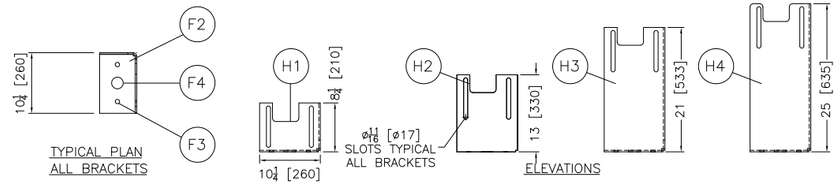
LOAD SUPPORT FRAME
SEE NOTES 7 & 9.



VIEW A–A



BOLT DOWN FOOTPAD INSTALLATION



DETAIL: BOLT DOWN BRACKETS & TYPICAL FOOTPAD DETAIL.

TUNNEL CENTERLINE	BOLT DOWN BRACKETS	DIMENSION "A"
61" [1549]	H1	5 1/2" [139] MINIMUM– 8 3/4" [223] MAXIMUM
67" [1702]	H2 (STANDARD BRACKET)	10 1/4" [259] MINIMUM– 13 1/2" [343] MAXIMUM
>74 1/4" [1885]– 77 1/2" [1969]	H3	18 1/4" [462] MINIMUM– 21 1/2" [547] MAXIMUM
>78 1/4"[1986]– 81 1/2"[2070]	H4	21 1/2" [564] MINIMUM– 25 1/2" [648] MAXIMUM

ITEM	LEGEND
S1	LIFTING BRACKET MOUNTING PLATE, SEE BDPF39G3SBDDE.
H4	25" TALLEST BOLT DOWN BRACKET, CONSULT FACTORY
H3	21" TALL BOLT DOWN BRACKET, TYPICALLY FOR USE WITH M9V4840
H2	STANDARD BOLT DOWN BRACKET, TYPICALLY FOR USE WITH MP2601, MP1550, MP1603, MP1604 & MP1656.
H1	SHORTEST BOLT DOWN BRACKET, TYPICALLY FOR USE WITH MP2501 AND M7V4232.
F4	GROUT HOLES, 2" DIAMETER
F3	ANCHOR BOLT HOLES, 3/4" DIAMETER
F2	PLAN VIEW OF ALL BOLT DOWN FEET. SEE DETAIL & NOTE 9.
F1	ADJUSTABLE FLAT FEET 6"[152] SQUARE, MUST BE SUPPORTED, ANCHORING NOT REQUIRED FOR G3 TUNNEL
F0	TYPICAL SUPPORT FRAME JUNCTION
E1	CONTROL BOX MOUNTED TO FRONT LOAD SUPPORT FRAME

NOTES

9 THE RIGHT FRONT ADJUSTABLE FLAT FOOT, LOCATED UNDER THE PULSE FLOW TANK, MAY REQUIRE THE TOP OF THE THREADED ROD CUT OFF AT INSTALLATION TO CLEAR THE BOTTOM OF THE TANK.

8 BOLT DOWN FEET ARE USED TO PREVENT THE TUNNEL FROM "WALKING" AND MUST BE INSTALLED IN ADDITION TO ADJUSTABLE FLAT FEET WHICH SUPPORT THE MACHINE. A PAIR OF BOLT DOWN FEET MUST BE INSTALLED ON THE END OF EACH SECTION, AND ONE PAIR OF BOLT DOWN FEET USED AT THE JUNCTION OF TWO SECTIONS, SEE PLAN VIEW.

7 G3 TUNNELS CAN BE ORDERED IN VARIOUS COMBINATIONS OF 3 & 4 MODULE SECTIONS; SEE BDPF39G3CFCE. THIS DRAWING SHOWS 3 & 4 MODULE SUPPORT FRAMES AND THE LOAD SUPPORT FRAME. CONSULT THE SPECIFICATIONS FOR YOUR MACHINE BEFORE DETERMINING THE LOCATION OF ADJUSTABLE FEET AND BOLT DOWN BRACKETS.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

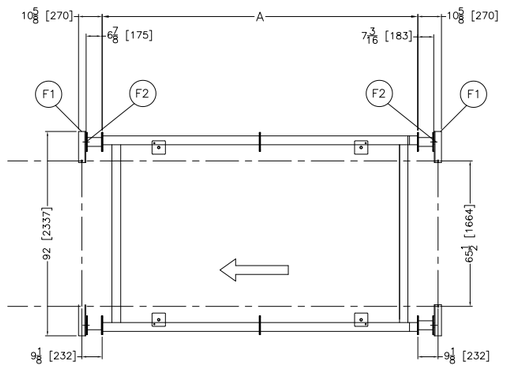
FOUNDATION 76039G3 PF TUNNELS

DM 0 0.5M 1M
INCHES 0 12 24 36

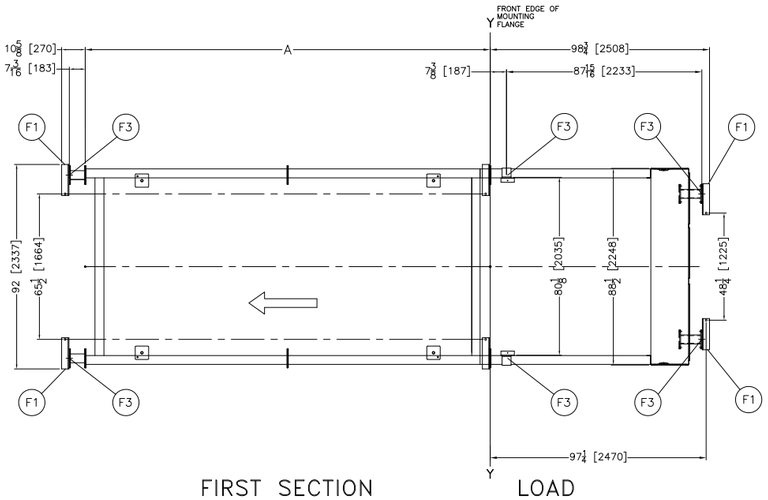
DWG# BDPF39G3FBDDE 2024095D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnorinfo@milnor.com

DIMENSIONS THAT VARY WITH NUMBER OF MODULES		
76039G3 PF TUNNELS	DIMENSION "A" INCHES	mm
3 MODULE	142 1/8	3610
4 MODULE	182 1/4	4629

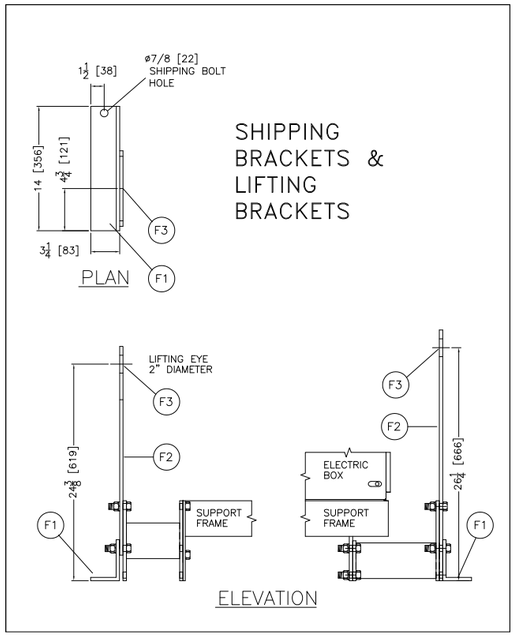


INDIVIDUAL TUNNEL SECTIONS
SUPPORT FRAME SHOWING
LIFTING EYES & SHIPPING BRACKETS



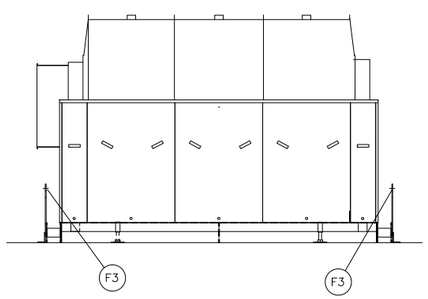
FIRST SECTION
SUPPORT FRAME SHOWING
LIFTING EYES & SHIPPING BRACKETS

LOAD
SHIPPED ATTACHED
TO FIRST SECTION
SEE NOTE 7.

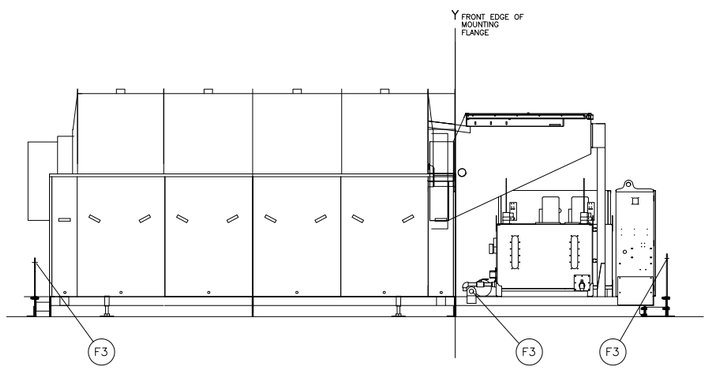


SHIPPING BRACKETS & LIFTING BRACKETS

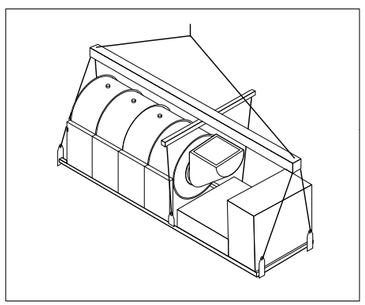
ITEM	LEGEND
F3	LIFTING EYE, 2"[51] DIAMETER
F2	LIFTING BRACKET
F1	SHIPPING BRACKET FOR EXPORT, 7/8"[22] DIAMETER BOLT HOLE



USE 4 POINT LIFTING
FOR INDIVIDUAL SECTIONS



USE 6 POINT LIFTING FOR LOAD AND 1ST SECTION



NOTES

8 THIS DRAWING SHOWS 3, 4 & 5 MODULE SUPPORT FRAMES AND THE LOAD SUPPORT FRAME. G3 TUNNELS CAN BE ORDERED IN VARIOUS COMBINATIONS OF 3, 4 & 5 MODULE SECTIONS. CONSULT THE SPECIFICATIONS FOR YOUR MACHINE BEFORE LOCATING THE SHIPPING BRACKETS.

7 MID AND END TUNNEL SECTIONS ARE SEPARATED BEFORE SHIPMENT. FIRST SECTIONS ARE SHIPPED WITH THE LOAD SUPPORT FRAME, TANK, & CONTROL BOX ATTACHED.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76039G3 PF SHIPPING BRACKETS

DM 0 0.5M
INCHES 0 12 24

DWG# BDPF39G3SBDDE
2018125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnorinfo@milnor.com

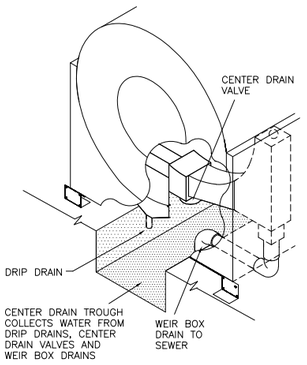


FIGURE 1: CENTER DRAIN TROUGH TUNNELS WITH DRAIN VALVES
SEE NOTES 9 & 10.

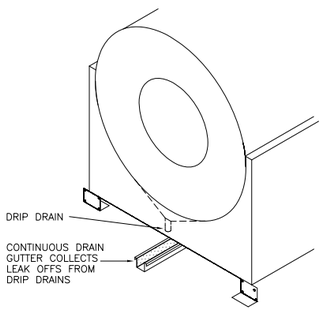


FIGURE 2: CENTER DRAIN TROUGH TUNNELS WITH NO DRAIN VALVES
SEE NOTE 8.

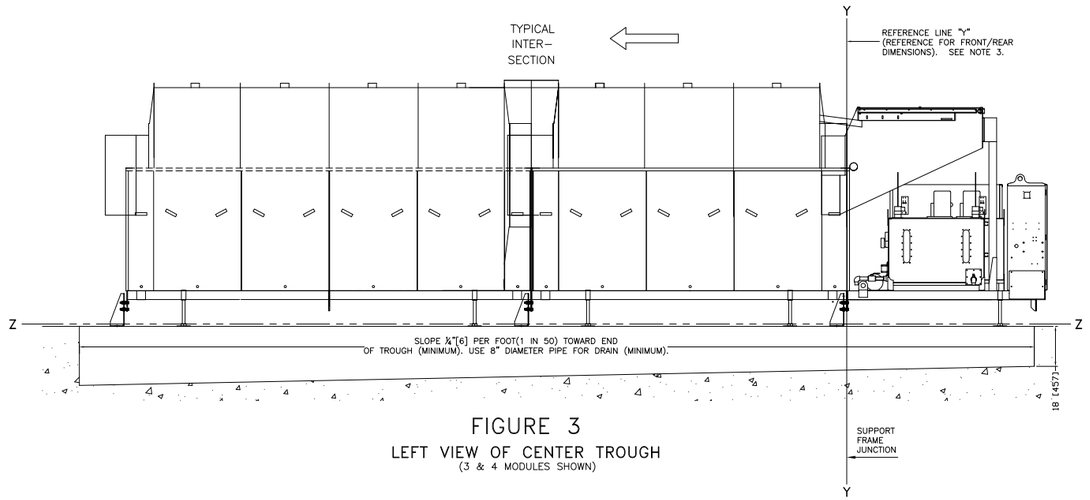
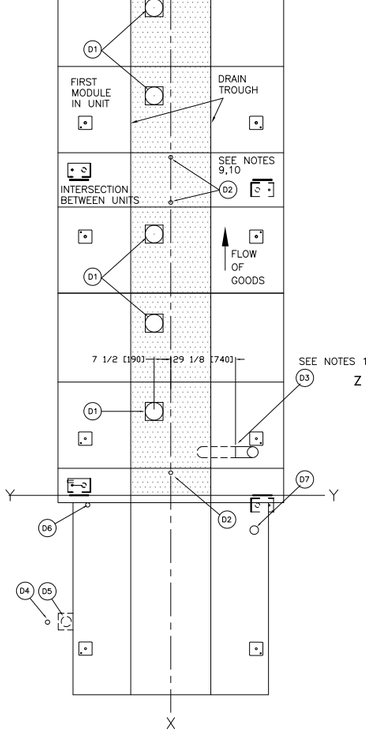
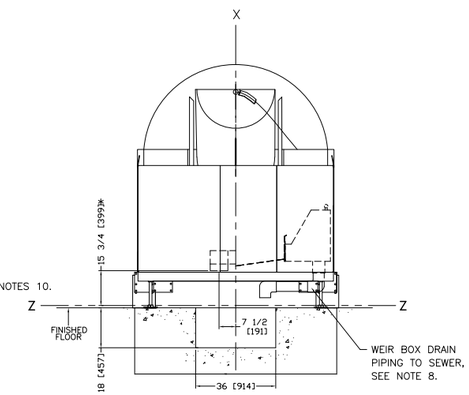


FIGURE 3
LEFT VIEW OF CENTER TROUGH
(3 & 4 MODULES SHOWN)

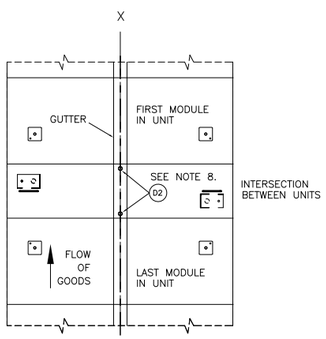


PLAN VIEW

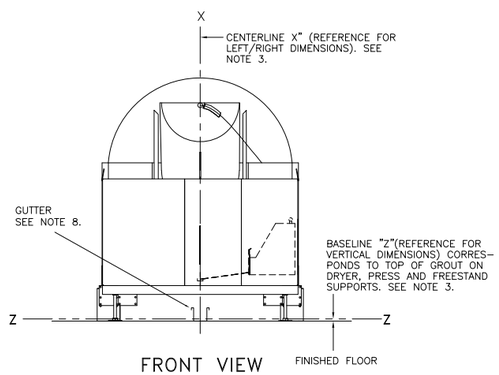


FRONT VIEW

CENTER DRAIN TROUGH
(SEE NOTES 9 & 10. SEE FIGURE 1.)



PLAN VIEW



FRONT VIEW

GUTTER FOR DRIP DRAINS
(SEE NOTE 6. SEE FIGURE 2.)

* SLOPE 1/4 [6] PER FOOT (1 IN 50) TOWARD END OF TROUGH (MINIMUM). USE 8" DIAMETER PIPE FOR DRAIN (MINIMUM).

TUNNEL DRAINS WHICH MUST BE ACCOMMODATED:

- PF TANK DRAIN –
  (MANUAL DRAIN, 2" HOSE CONNECTION OR OPTIONAL AUTO DRAIN 4–1/2" HOSE CONNECTION)
- PF TANK OVERFLOW –
  (3" PVC CONNECTION)
- DRIP DRAINS –
  (TWO PER MODULE UNIT, 1–3/4 TUBING)
- CENTER DRAIN VALVES –
  (OPTIONAL 1–2 DRAIN VALVES PER MODULE)
- WEIR BOX DRAINS TO SEWER –
  (OPTIONAL)

ITEM	LEGEND
D7	PF TANK OVERFLOW TO SEWER, 3" PVC CONNECTION
D6	PF TANK FRESH, MANUAL DRAIN 1–1/2" TOE FOR 2" HOSE.
D5	PF TANK REUSE, OPTIONAL AUTO DRAIN TO SEWER, 4–1/2" HOSE CONNECTION
D4	PF TANK REUSE, MANUAL DRAIN 1–1/2" TOE FOR 2" HOSE.
D3	WEIR BOX, FLOW TO SEWER, 5" NPT
D2	DRIP DRAINS, 1–3/4" ID TUBING SUPPLIED
D1	CENTER DRAIN VALVES, 8"DIAMETER, ON SPECIFIED MODULES

NOTES

11 PF TANK DRAIN AND OVERFLOW PIPING TO SEWER SUPPLIED BY PMC.

10 WEIR BOX DRAIN PIPING TO SEWER SUPPLIED BY PMC.

9 A CENTER DRAIN TROUGH OR ITS EQUIVALENT IS NECESSARY TO COLLECT THE LEAK OFFS FROM THE DRIP DRAINS AND THE WATER FROM UNITS WITH A CENTER DRAIN VALVE.

8 WHEN THERE ARE NO CENTER DRAIN VALVES OR WEIR BOX DRAINS, A CONTINUOUS OPEN DRAIN GUTTER FABRICATED OF STAINLESS STEEL, COPPER OR PLASTIC IS REQUIRED TO COLLECT THE LEAK OFFS FROM THE DRIP DRAINS. **THESE DRIP DRAINS ABSOLUTELY MUST NOT BE PIPED WITH CLOSED PIPING WHICH WILL COLLECT LINT AND BLOCK.**

7 NOTE THIS DRAWING SHOWS THE RECOMMENDED DRAIN TROUGH DESIGN. DRAIN TROUGH CONSTRUCTION IS THE RESPONSIBILITY OF OTHERS. THIS DRAWING CONVEYS NO EXPRESS OR IMPLIED WARRANTY WITH REGARD TO THE CONSTRUCTION AND/OR SUITABILITY OF THESE DESIGNS FOR YOUR SPECIFIC INSTALLATION.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE–PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

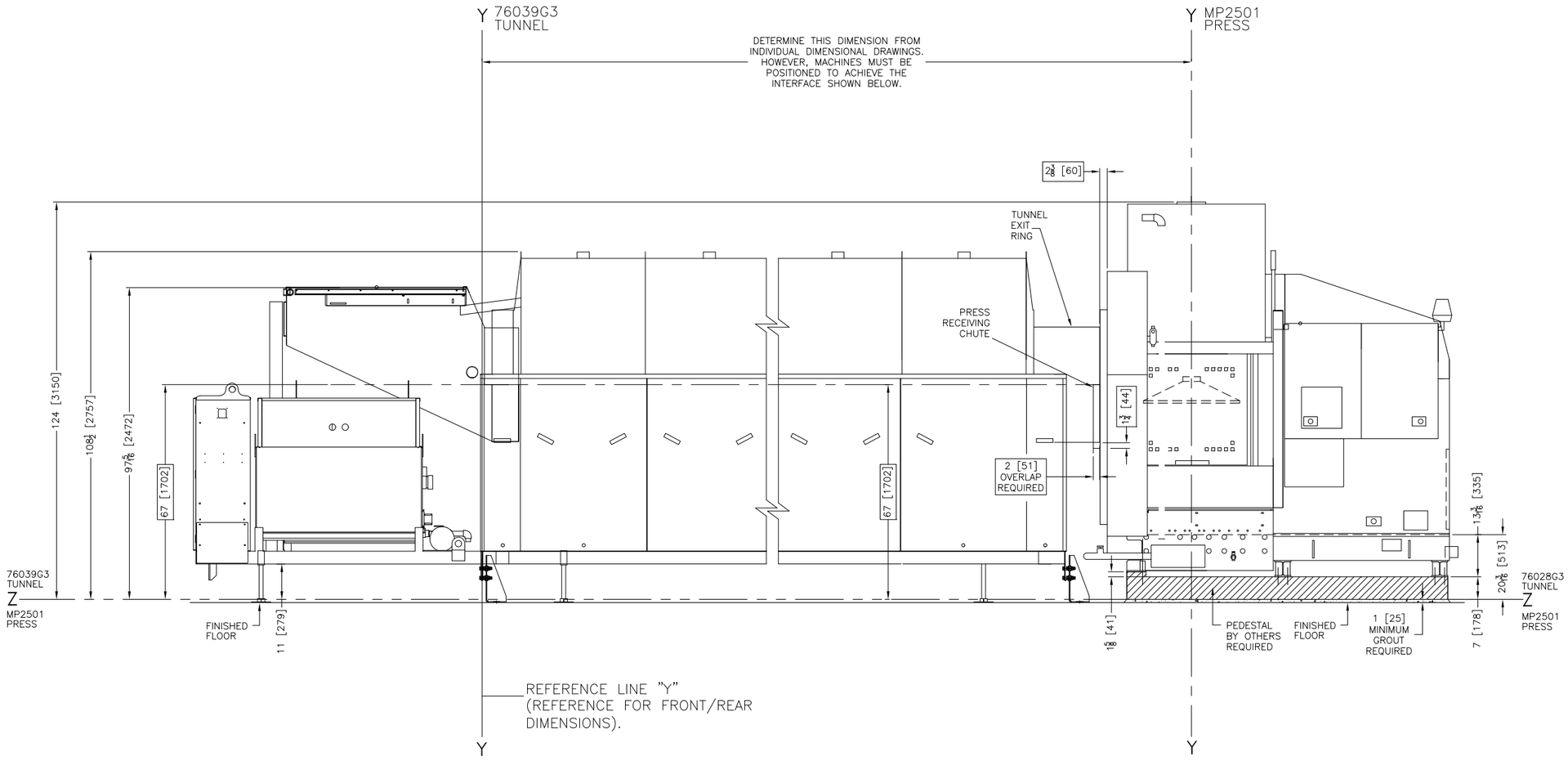
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

DRAIN TROUGH 7628/39G3 PF TUNNEL

DM 0 0.5M 1M
INCHES 0 12 24 36

DWG# BDPF39G3DTDDE 2018125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467–9591,
FAX 504/469–1849, Email: milnorinfo@milnor.com



76039G3 PF TUNNEL/MP2501(50KG) 2 STAGE PRESS

NOTES

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

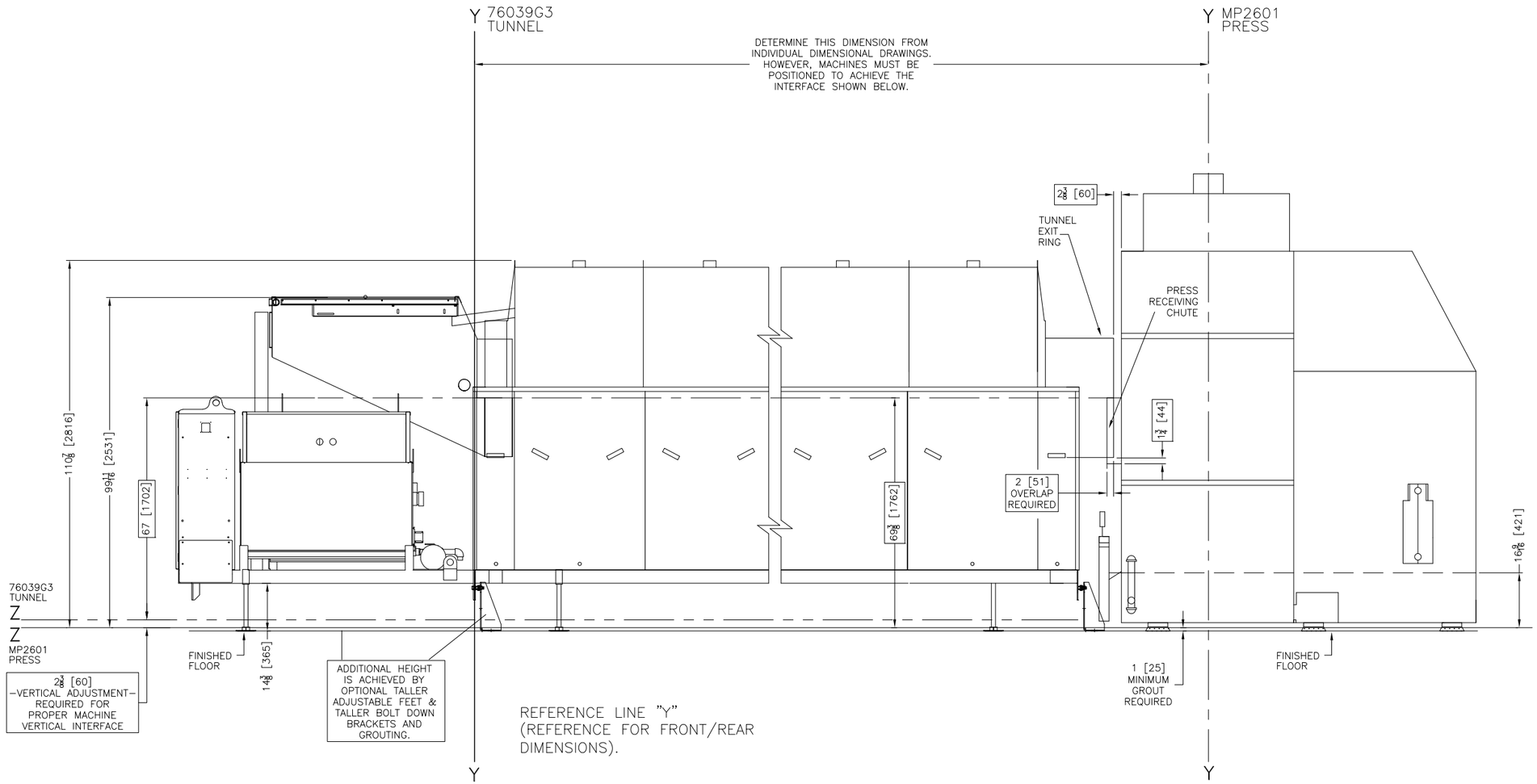
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

7639G3 PF/MP2501

DM 0 0.25M
INCHES 0 12

DWG# BDPF39G3INDDA
2018125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnorinfo@milnor.com



76039G3 PF TUNNEL/MP2601(60KG) 2 STAGE PRESS

NOTES

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

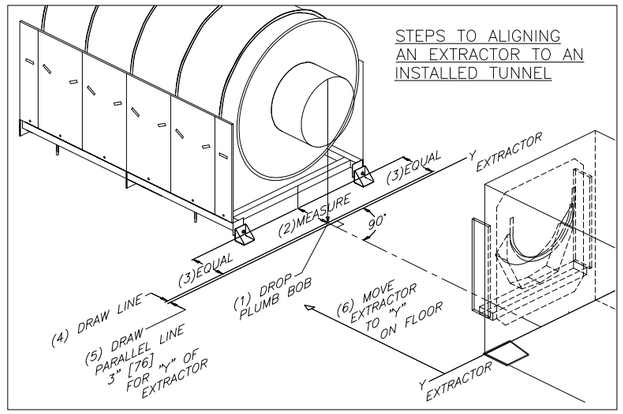
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

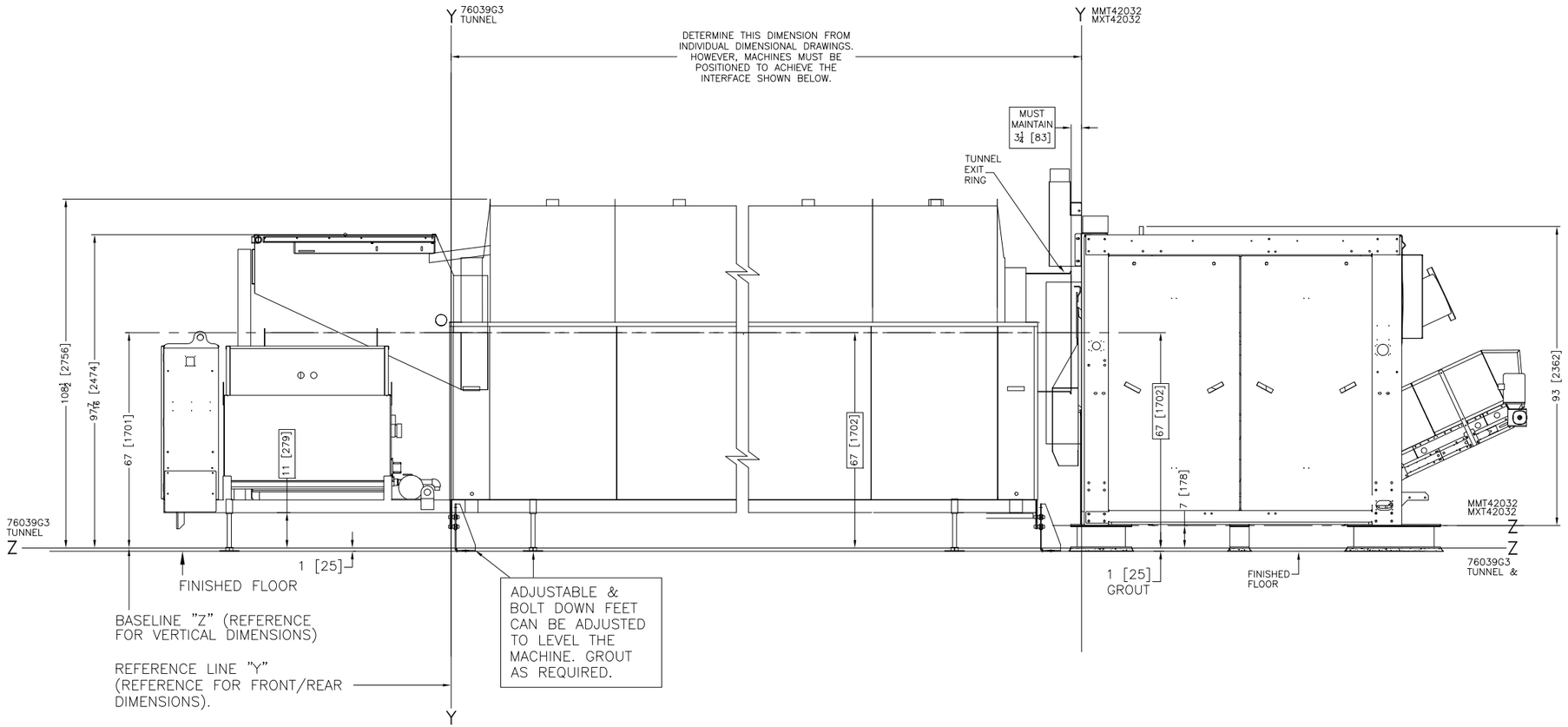
7639G3 PF/MP2601

DM 0 0.25M
INCHES 0 12

DWG# BDPF39G3INDDB 2018125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnorinfo@milnor.com





76039G3 PF TUNNEL/MMT,MXT42032

NOTES

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

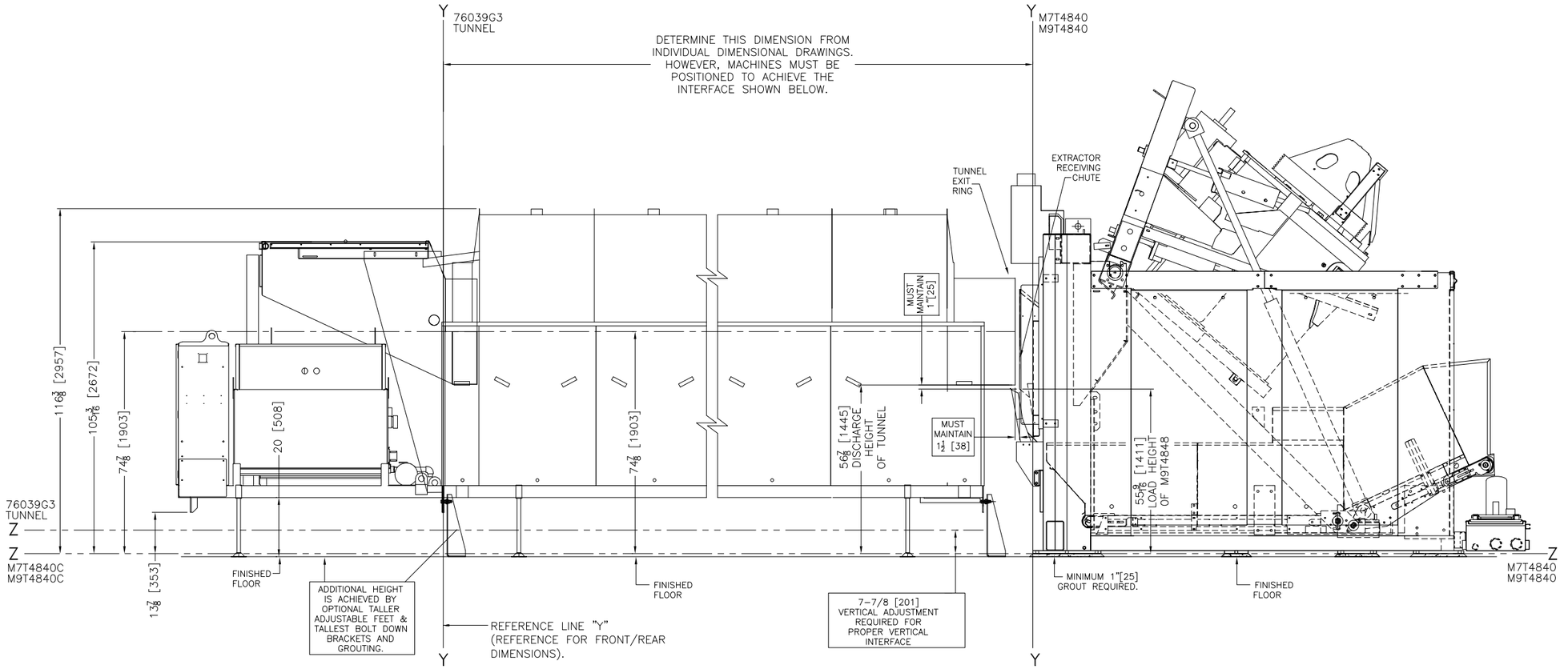
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76039G3 PF/MMT,MXT42032

DM 0 0.5M
INCHES 0 12 24

DWG# BDPF39G3INDDE
2018125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com



76039G3 TUNNEL/M7T,M9T4840 EXTRACTOR

NOTES

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

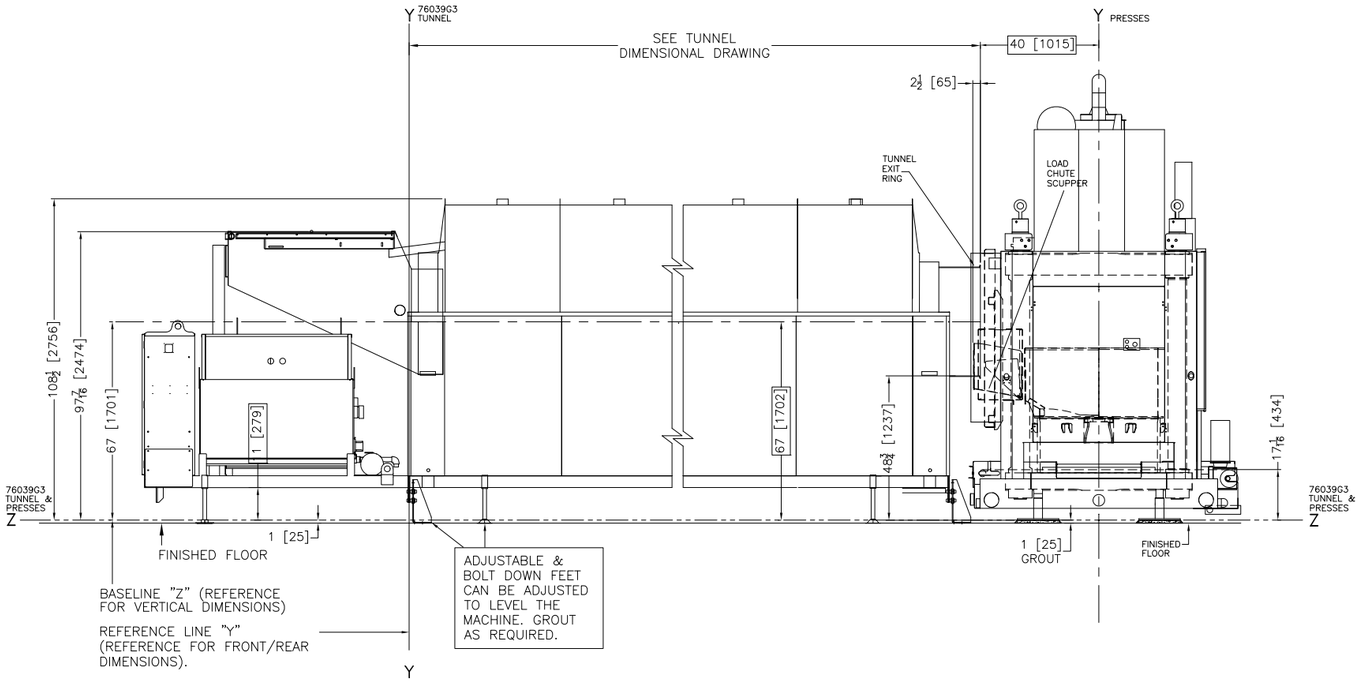
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

76039G3 PF/M7T,M9T4840

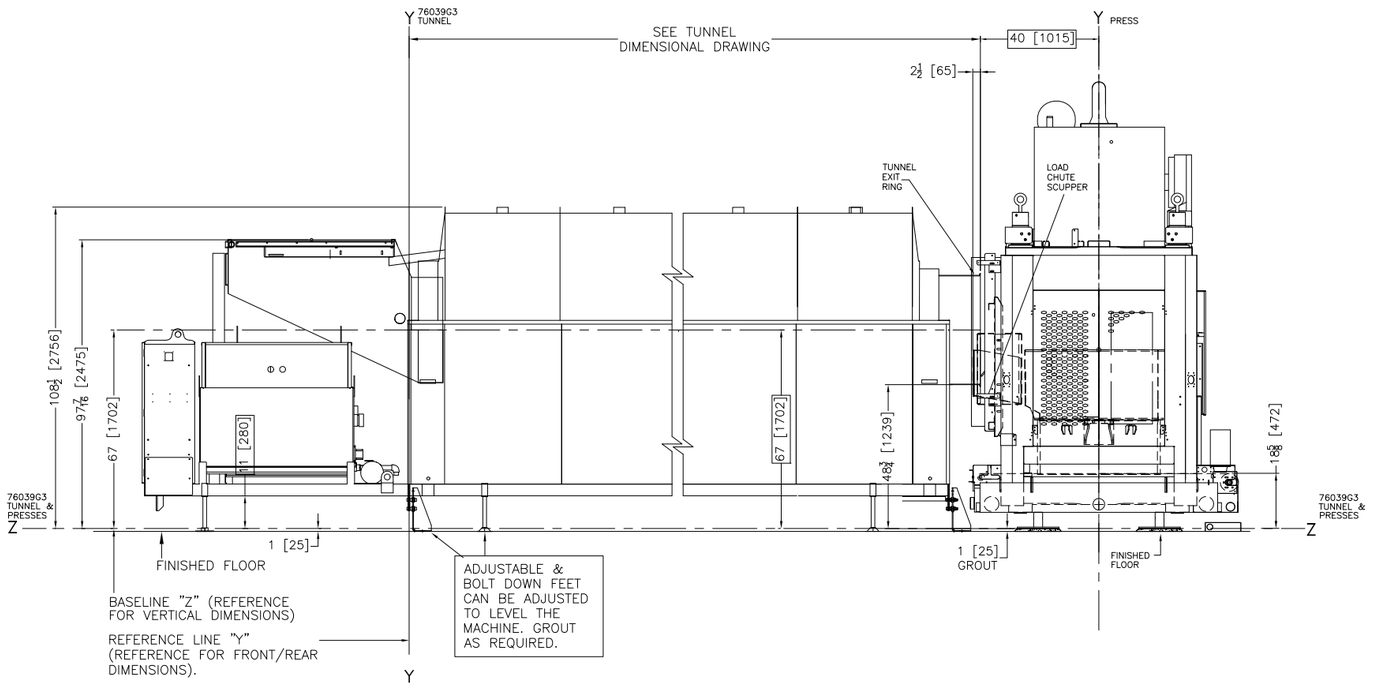
DM 0 0.5M
INCHES 0 12 24

DWG# BDPF39G3INDDF 2018125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/468-3094, Email: milnorinfo@milnor.com



76039G3 PF TUNNEL/MP1540 SINGLE STAGE PRESSES



76039G3 PF TUNNEL/MP1556, MP1640, MP1656 SINGLE STAGE PRESSES

NOTES

7 SEE INDIVIDUAL DIMENSIONAL DRAWINGS FOR ADDITIONAL DIMENSIONS FOR ALL MACHINES, INCLUDING HEIGHT. MATCH THIS DRAWING WITH THE INDIVIDUAL MACHINE DIMENSIONAL DRAWINGS USING REFERENCE LINE "Y" AND BASELINE "Z".

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

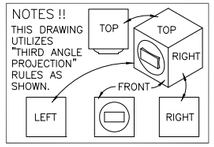
THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

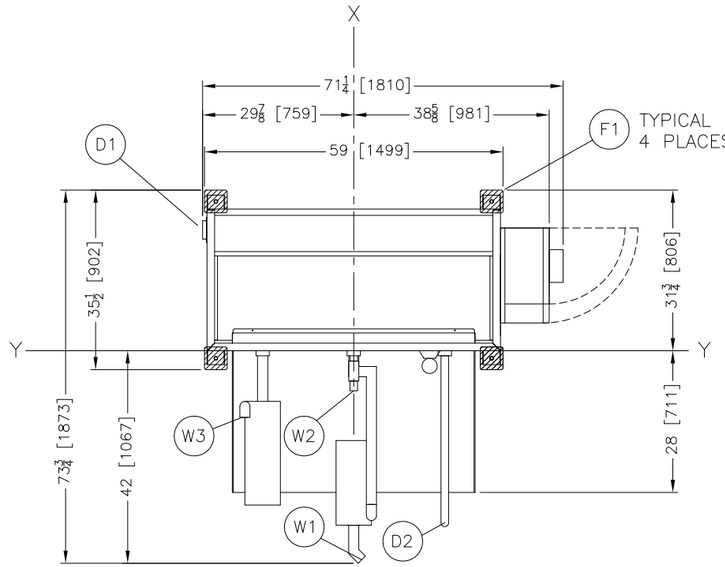
76039G3 PF/MP1540/MP1556/MP1640/MP1656

DM 0 0.25M
INCHES 0 12

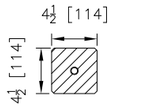
DWG# BDPF39G3INDGC 20181125D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: milnorinfo@milnor.com

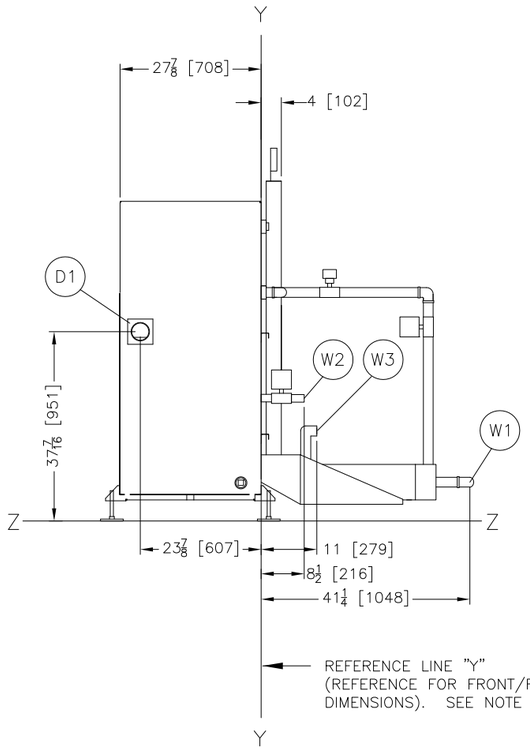




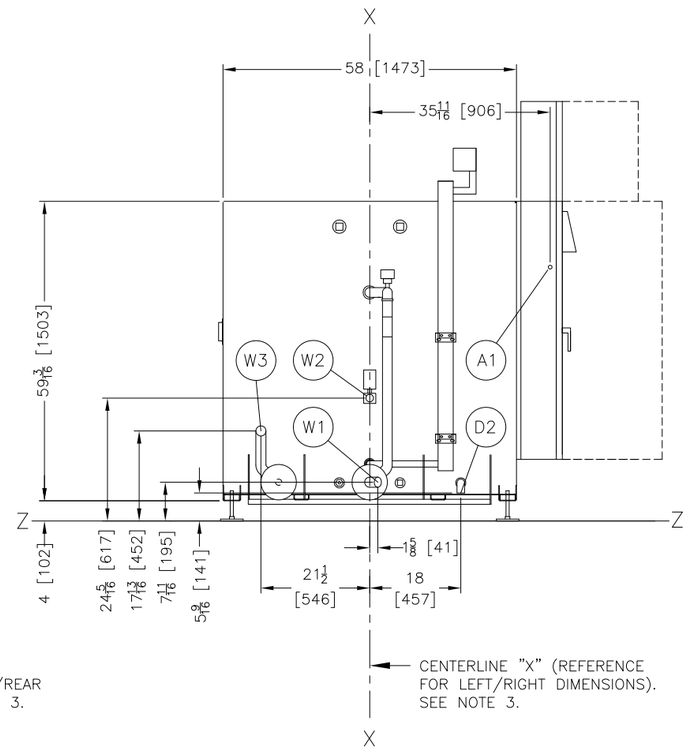
PLAN VIEW



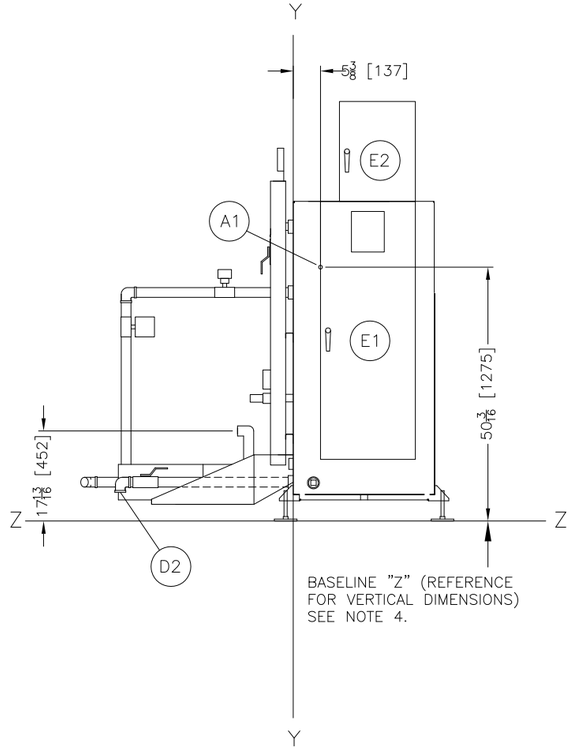
DETAIL LEVELING FOOT



LEFT VIEW



FRONT VIEW



RIGHT VIEW

ITEM	LEGEND
W3	TO CBW MODULE, 2" HOSE CONNECTION
W2	FRESH WATER MAKE-UP, 2" HOSE CONNECTION
W1	FROM MODULE, 2-1/2" HOSE CONNECTION
F1	LEVELING FEET
E2	LINT CONTROLLER PROCESSOR BOX
E1	LINT CONTROLLER BOX
D2	TO SEWER, 1-1/2" NPT
D1	DRAIN TO SEWER, 3" NPT, (3 PVC ELBOWS AND 2 LENGTHS OF PIPE, SUPPLIED BY PMC.)
A1	AIR FROM TUNNEL

NOTES

7 ALL COMPONENTS SHOWN RECEIVE ELECTRICAL POWER FROM THE CBW. NO EXTERNAL POWER IS REQUIRED FOR ANCILLARY COMPONENTS.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
36 [914] IF OBJECT IS AN UNGROUNDED (INSULATED) WALL.
42 [1067] IF OBJECT IS A GROUNDED WALL (ie. BARE CONCRETE, BRICK, ETC.)
48 [1219] IF OBJECT IS ANY LIVE PART.
CHECK LOCAL ELECTRIC CODES FOR FURTHER RESTRICTIONS.

5 CUSTOMER TO SUPPLY CIRCUIT BREAKER OR FUSED BRANCH CIRCUIT DISCONNECT (SAFETY) SWITCHES WITH LAG TYPE FUSES FROM POWER SOURCE TO MACHINE. A SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE REFERENCE FOR ALL VERTICAL DIMENSIONS. ON MACHINES WITH WITH FIXED BASE PADS, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BASE PAD. ON MACHINES WITH ADJUSTABLE FEET, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE FEET WHEN ADJUSTED SO THAT THE MACHINE IS AT ITS MINIMUM ACCEPTABLE HEIGHT. ON TRAVERSING SHUTTLES, BASELINE "Z" CORRESPONDS TO THE BOTTOM OF THE BOTTOM RAIL. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR WILL VARY AS REQUIRED TO ENSURE BASELINE "Z" IS HORIZONTAL AND ANY INTERFACING MACHINES REQUIRING GROUT ARE SET ON A MINIMUM 1"[25] THICK GROUT BED.

3 USE REFERENCE LINES "X", "Y", AND "Z" TO LOCATE ALL SERVICE CONNECTIONS.

2 NUMBERS IN BRACKETS [] DENOTE DIMENSIONS IN MILLIMETERS.

1 ALL DIMENSIONS SHOWN ARE APPROXIMATE, SUBJECT TO NORMAL MANUFACTURING TOLERANCES, AND TO OCCASIONAL CHANGES WITHOUT NOTICE THROUGH REDESIGN AND/OR RELOCATION OF COMPONENTS, ETC. DO NOT USE FOR CONSTRUCTION UNLESS CERTIFIED, AND IN NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. FACTORY MUST BE CONSULTED FOR DIMENSIONS IF MACHINE IS TO BE MOVED THROUGH NARROW OR LOW CORRIDORS OR OPENINGS.

ATTENTION

MOST REGULATORY AUTHORITIES (INCLUDING OSHA IN THE USA) HOLD THE OWNER/USER ULTIMATELY RESPONSIBLE TO MAINTAIN A SAFE WORKING ENVIRONMENT. ACCORDINGLY, THE OWNER/USER MUST RECOGNIZE ALL FORESEEABLE SAFETY HAZARDS, FURNISH SAFETY INSTRUCTIONS AND GUIDANCE TO ALL PERSONNEL WHO MAY COME IN CONTACT WITH THE INSTALLATION, AND PROVIDE ALL NECESSARY ADDITIONAL SAFETY GUARDS, FENCES, RESTRAINTS, DEVICES, ETC., NOT FURNISHED BY THE EQUIPMENT MANUFACTURER OR VENDOR.

ATTENTION

THE FLOOR AND/OR OTHER SUPPORT COMPONENTS MUST HAVE SUFFICIENT STRENGTH (AND RIGIDITY WITH DUE CONSIDERATION FOR NATURAL OR RESONANT FREQUENCY THEREOF) TO WITHSTAND THE FULLY LOADED WEIGHT OF THE MACHINE INCLUDING THE GOODS, THE WATER, AND ANY REPEATED SINUSOIDAL (ROTATING) FORCES GENERATED DURING ITS OPERATION. WRITE THE FACTORY FOR ADDITIONAL MACHINE DATA FOR USE BY A COMPETENT SOIL AND/OR STRUCTURAL ENGINEER.

MODULE RECIRC LINT TANK

DWG# BDMRLTNKAE
20111473D

PELLERIN MILNOR CORPORATION
P.O. Box 400 Kenner, LA 70063, USA, Phone 504/467-9591,
FAX 504/469-1849, Email: mktg@milnor.com