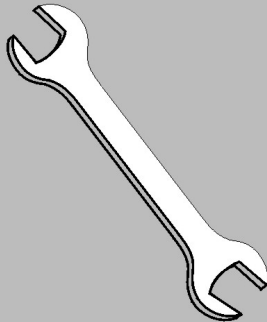


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Kit Instruction— KYA0000110



Please Read

About the Manual Identifying Information on the Cover

The front cover displays pertinent identifying information for this manual. Most important, are the published manual number (part number) /ECN (date code). Generally, when a replacement manual is furnished, it will have the same published manual number, but the latest available ECN. This provides the user with the latest information applicable to his machine. Similarly all documents comprising the manual will be the latest available as of the date the manual was printed, **even though older ECN dates for those documents may be listed in the table of contents.**

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References to Yellow Troubleshooting Pages

This manual may contain references to "yellow pages." Although the pages containing troubleshooting procedures are no longer printed on yellow paper, troubleshooting instructions, if any, will be contained in the easily located "Troubleshooting" chapter or section. See the table of contents.

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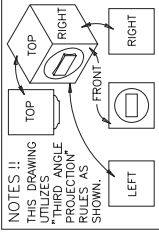
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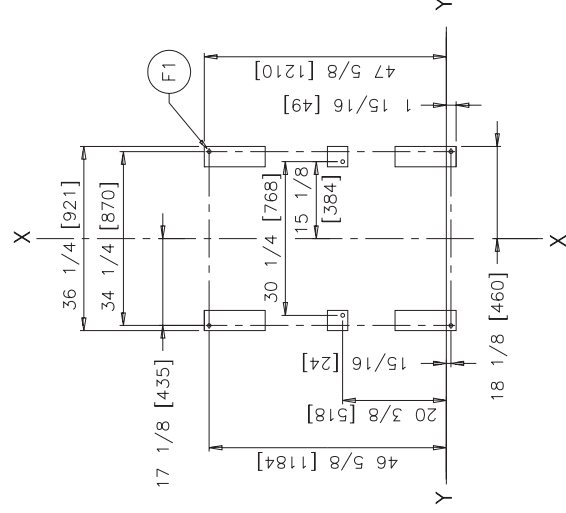
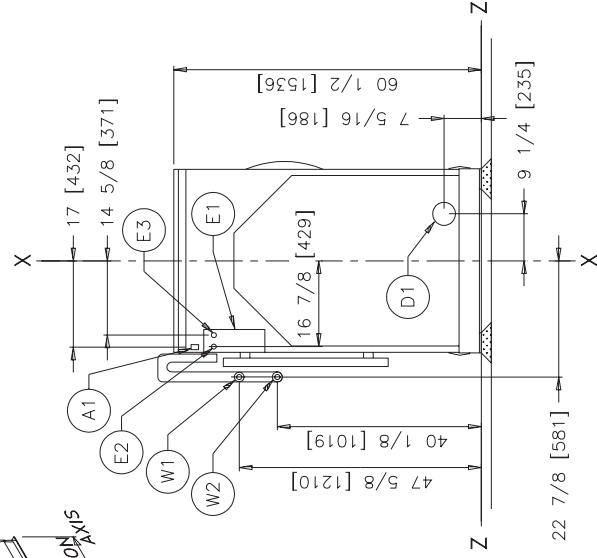
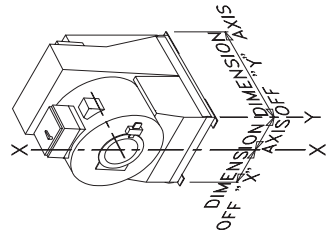
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NOTES !!
THIS DRAWING UTILIZES THIRD ANGLE PROJECTION RULES AS SHOWN.

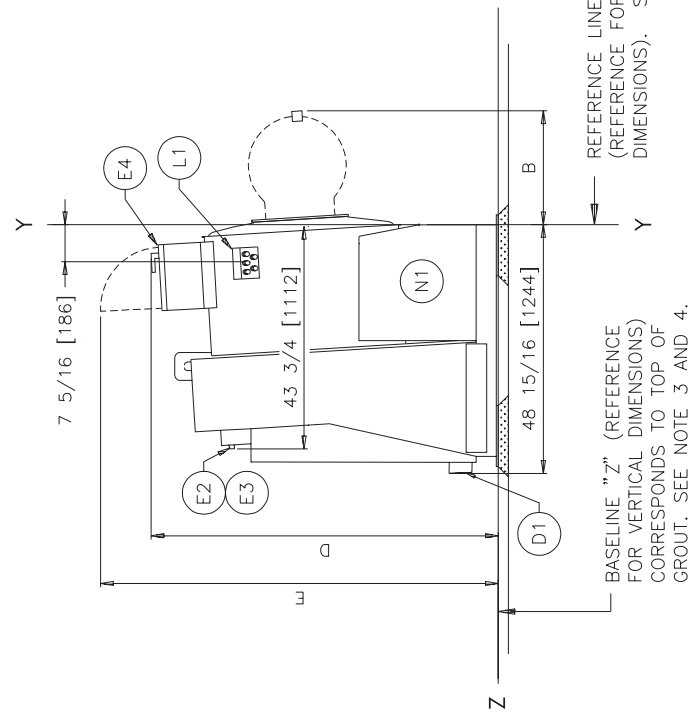
MODEL SIZE	DIMENSION "A"		DIMENSION "B"		DIMENSION "C"		DIMENSION "D"		DIMENSION "E"	
	INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM
36021	3 1/2	89	22 3/8	568	31 1/8	791	68 5/16	1735	78 1/4	1988
36026	8 1/2	216	27 3/8	695	31 7/16	799	68 5/8	1743	78 9/16	1995

CONNECTIONS THAT VARY WITH MACHINE SIZE	
WATER INLETS	3/4 [19] NPT
ELECTRIC	3/4 [19] NPT
AIR OPERATED	1 [25] NPT

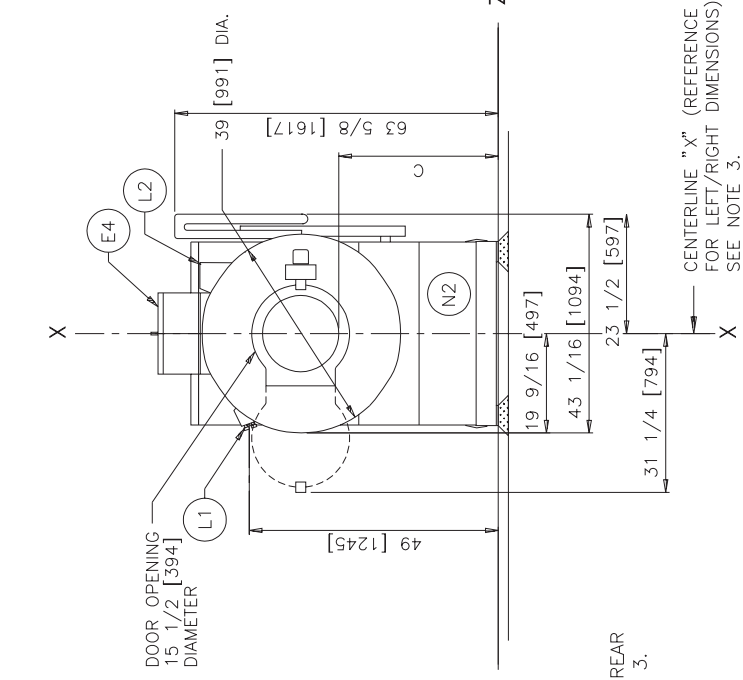


REAR VIEW

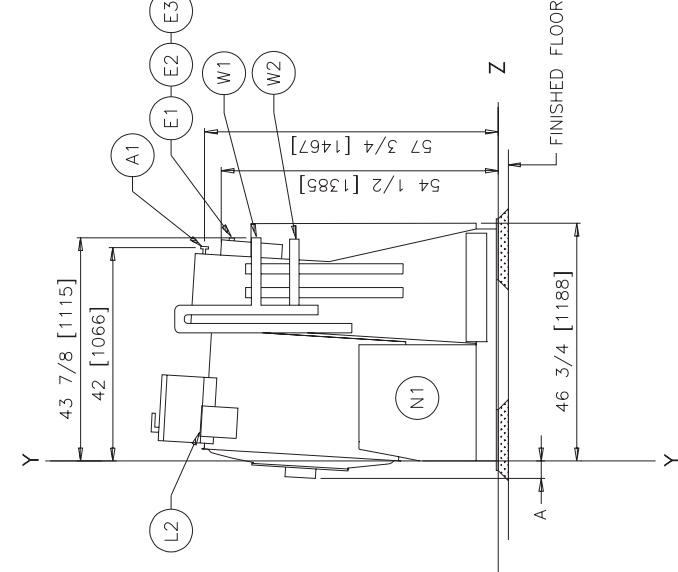
FOUNDATION PLAN VIEW



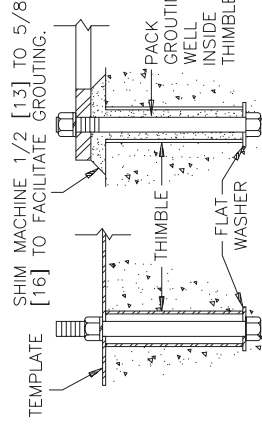
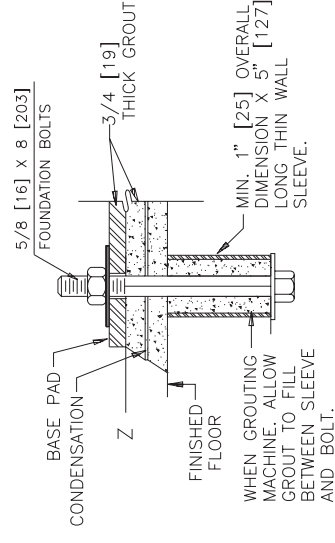
LEFT VIEW



FRONT VIEW



RIGHT VIEW



FASTENING DETAILS

ITEM	DESCRIPTION
W2	COLD WATER INLET (SEE TABLE).
W1	HOT WATER INLET (SEE TABLE).
N2	REMOVABLE FRONT PANELS
N1	REMOVABLE SIDE PANELS
L2	SOAP CHUTE
L1	LIQUID SUPPLY INLETS. SEE NOTE 11.
F1	SIX ANCHOR BOLTS, 3/4 [19] DIAMETER FOR 5/8" DIAMETER ANCHOR BOLTS. SEE NOTE 9 AND FASTENING DETAILS.
E4	MICROPROCESSOR CONTROL PANEL AND BOX
E3	HIGH VOLTAGE CONTROL CONNECTION
E2	LOW VOLTAGE CONTROL CONNECTION
E1	ELECTRICAL CONNECTION BOX
D1	DRAIN, 4 1/2" DIAMETER PIPE.
A1	MAIN AIR INLET, 1/4" NPT.

NOTES

11 STANDARD LIQUID SUPPLY INLETS COMES WITH THREE SETS OF FIVE FITTINGS. ONE SET OF 3/8" FITTINGS, ONE SET OF 1/2" FITTINGS, AND ONE SET OF PLUGS WHICH ARE SHIPPED ON MACHINE.

9 WHEN INSTALLING ANCHOR BOLTS IN THE SOAP CHUTE, THE ANCHOR BOLTS AND MACHINE IS INSTALLED. A SHEET METAL BASE TEMPLATE FOR ANCHOR BOLT POSITIONING IS AVAILABLE FROM THE MILNOR FACTORY.

8 WATER INLET PIPING AND BRACKETRY CAN BE EASILY REMOVED TEMPORARILY TO REDUCE OVERALL MACHINE WIDTH FOR PASSAGE THROUGH DOOR WAYS.

7 NEVER REDUCE DRAIN PIPING BELOW NPT SIZE OF CONNECTION.

6 AS OF THIS WRITING, THE MINIMUM CLEARANCE REQUIRED BY U.S. NATIONAL ELECTRIC CODES, FROM ELECTRIC BOX TO ANY OBJECT IS:
 6 [152] IF OBJECT IS A GROUTED WALL (INSULATED WALL).
 42 [1067] IF OBJECT IS ANY LIVE PART.

48 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. SEPARATE GROUND WIRE MUST BE CONNECTED FROM DISCONNECT TO EQUIPMENT.

4 BASELINE "Z" IS THE SAME FOR ALL MILNOR MACHINES AND IS SHOWN ON ALL DIMENSIONAL DRAWINGS. THE DISTANCE BETWEEN BASELINE "Z" AND THE FINISHED FLOOR MAY VARY (WITH CHANGES IN FLOOR HEIGHT) AS REQUIRED TO INSURE THAT BASELINE "Z" IS APPROXIMATELY 5 FEET ABOVE THE FINISHED FLOOR.

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 NO EVENT PRE-PIPE CLOSER THAN FIVE FEET FROM MACHINE. ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE SPECIFIED. 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, AND TAKE APPROPRIATE PRECAUTIONS TO AVOID THEM. ALL NECESSARY SAFETY 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 SURFACES MUST HAVE SUFFICIENT STRENGTH AND RIGIDITY TO SUPPORT THE MACHINE. THE USER MUST BE AWARE OF THE 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.

36021Q4x, 36026Q4x

INCHES: 0 12 24 36

MILNOR

BD36Q4G1AE 95017D

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HANDLING AND SETTING PROCEDURES FOR CPE, NPE, Qxx and Vxx WASHER-EXTRACTORS

Handling Precautions

1. Remove the protective coverings (leaving the machine on shipping skids) and carefully examine for possible shipping damage. **If machine is damaged, notify the transportation company immediately.**

NOTE: Once the machine is given to the carrier for delivery, it is the sole responsibility of the carrier to ensure that no damage occurs in transit. In addition to readily apparent damage, carriers are liable for concealed damage. **Do not hesitate to file a claim with the carrier if the machine is damaged in any way during shipment.** Milnor[®] will be glad to assist you in filing your claim, but is not responsible for any shipping damage to the machine once it has been delivered to the carrier in good condition.

2. Permanent lifting rings are provided on some rigid mount machines. Always use these rings for crane lifting. For machines without permanent lifting rings, consult Milnor[®] for instructions if crane lifting is required.
3. Use skids with the forklift. If possible, leave the machine on the shipping skids until it is about to be placed in its final position. Once the skids are removed, take care in placing forks under the machine. **Do not allow the forks to come in contact with valves, piping, motors, etc., located under the machine.**
4. Never push, pull, or exert pressure on any components which protrude from the machine frame (shell front, door, supply injector, electric boxes, controls, belt guards, conduits, inlet piping, etc.).
5. Ensure that the shell door is closed and secured.
6. After installation and before operation, remove the tie wrap that secures the *vibration safety switch* (located in the electric control box).

Site Requirements

Space Requirements

1. All openings and corridors through which equipment must pass during installation must be large enough to accommodate the width and the height of the machine (as shown on the dimensional drawing). It is occasionally possible to reduce the overall dimensions by removing piping or other special modifications. Consult Milnor[®] for additional information.
2. Sufficient clearance must be provided for normal operation and maintenance procedures.

Operational Requirements

1. Allow sufficient ventilation for heat and vapors of normal operation to dissipate.
2. Provide easy access to controls. Operators must be able to reach and view all status lights, machine controls, and any additional controls associated with the machine (e.g., electrical power connections, water and steam shut-offs, etc.).

Foundation Requirements—The machine must be anchored in accordance with the dimensional drawing. The floor and/or all other support components must have sufficient strength (and rigidity with due consideration for the natural or resonant frequency thereof) to withstand the fully loaded weight of the machine, including the wet goods and any repeated sinusoidal (rotating) forces generated during its operation. Determining the suitability of floors, foundations, and other supporting structures normally requires analysis by a qualified structural engineer. See “ABOUT THE FORCES TRANSMITTED BY MILNOR[®] WASHER-EXTRACTORS” (see Table of Contents) for more information.

Anchoring Requirements

Machines must be securely anchored to an adequate foundation. Anchor bolt locations and foundation specifications are provided on the dimensional drawing (see Table of Contents). **However, never install anchor bolts firmly in the foundation using only the dimensional drawing or template.** Approximate anchor bolt locations may be determined from a foundation template (standard equipment on some machines, optional on others). Recommended anchor bolt installation (see dimensional drawing) calls for each anchor bolt to be set in a pipe sleeve. The foundation template or dimensional drawing will only locate the foundation bolts accurately enough that the play of the bolt within the pipe sleeve permits the machine to fit anchor bolts. **If another bolt installation procedure is used, do not install the anchor bolts until the machine is on site and bolt locations can be determined.** Consult Milnor[®] if any obstruction prevents the installation of any anchor bolt. **Anchor bolts cannot be indiscriminately omitted.**

▲ CAUTION ▲



ranty.

STRIKE AND MACHINE DAMAGE HAZARDS—A machine can “rip” away from position on foundation if the machine is not anchored and grouted in strict accordance with the dimensional drawing and setting instructions provided in this manual. Damage resulting from improper installation is not covered by war-

- ☞ **Strictly follow setting instructions and dimensional drawing guidelines when anchoring and setting this machine.**
- ☞ **Properly install anchor bolts at ALL anchor bolt holes on the machine.**

Setting Procedures

See FIGURE 1 during the following procedures:

1. With the machine near the final location, unbolt the shipping skids. Observing all precautions, lift the machine off its skids and apply a light coat of grease to the underside of the right and left side base plates (so machine can be lifted off of the grout to remove temporary blocking). Lower machine onto temporary blocking as shown in FIGURE 1. Install anchor bolts, taking care to align the bolts with the base plates to avoid bolt thread damage.
2. **Determine that the minimum clearance between each base plate and floor is as specified (see dimensional drawing).** Use a carpenter's level to determine if the machine is level. If necessary, level the machine from right to left and front to back by shimming at temporary blocking.

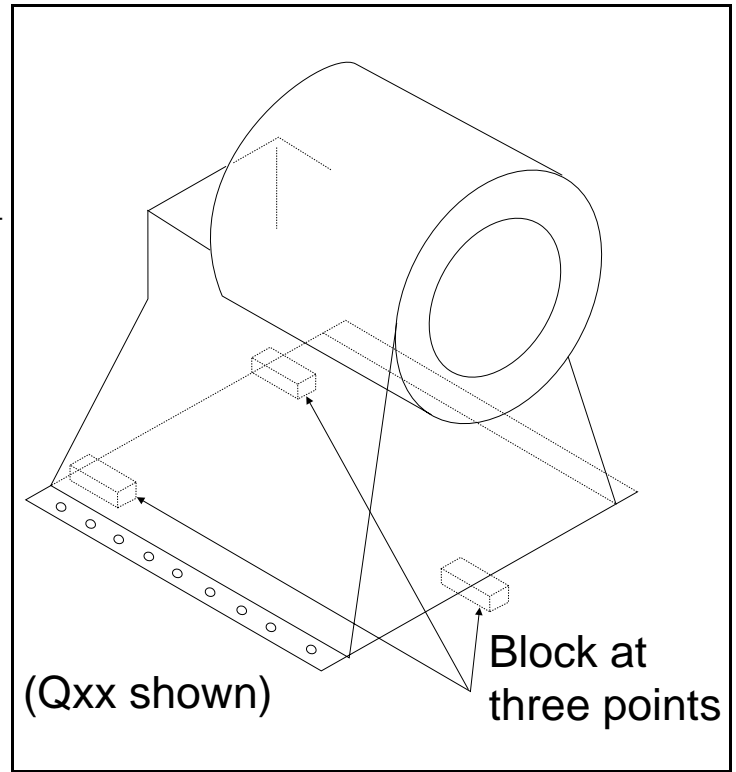


FIGURE 1 (MSIN0206AE)
Blocking Up Rigid Mount Washer-Extractors

▲ CAUTION ▲

MACHINE DAMAGE AND MALFUNCTION HAZARDS—Never tighten anchor bolt fasteners before grouting.

- ☞ Place temporary blocking at the three locations shown in FIGURE 1, not at four locations to avoid a “teeter-totter” condition.
- ☞ Tightening anchor bolt fasteners onto spacers (without grout) twists the machine frame and causes cylinder misalignment.

Preparing to Grout

All machines are designed to be grouted under the full length of the right and left side base plates (except the portion that falls over the drain sump). Grout prevents the anchor bolts from distorting the frame when the fasteners are tightened. Total area under each base plate must be completely filled with grout. Voids under base plates can magnify vibration, causing unsatisfactory operation. Use only industrial strength non-shrinking grout. Permanently install the foundation template (if supplied) under the machine as a vapor barrier if the machine is installed over a drain trough (see the dimensional drawing for additional information). After determining the final position of the machine, apply grout between the existing foundation floor and base plates, (if utilizing template, see dimensional drawing for details) while observing the following considerations:

▲ CAUTION ▲

Grout must displace total clearance between base plates and existing foundation floor.

☞ **VOIDS must not exist!**

☞ **If the grout (after mixing) is too thin (causing it to flow from under the base plates) install temporary cardboard framing around the plates to retain the grout until it cures.**

☞ **If the grout (after mixing) is of proper consistency, pack or trowel it in by hand.**

- 1.** After the grout has cured completely, raise the machine sufficiently to remove all temporary blocking and shims. **Be careful to avoid disturbing or damaging grout.**
- 2.** Tighten all fasteners until they contact the top of the base plate.
- 3.** Tighten all fasteners evenly, using only one-quarter turn on each fastener before moving to the next one. While tightening, frequently skip from front to back and right to left to insure uniform tension. After tightening all fasteners, check each fastener at least twice.