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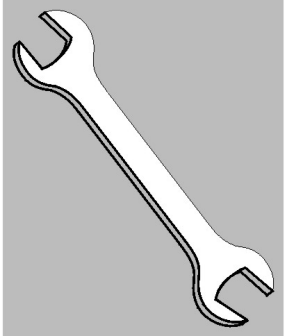
Kit Instruction—KTWDRIPR01



Read the Safety Manual

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

Please Read

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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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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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Unit To Unit Transition Seal Installation

76028 & 76039 CBW

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

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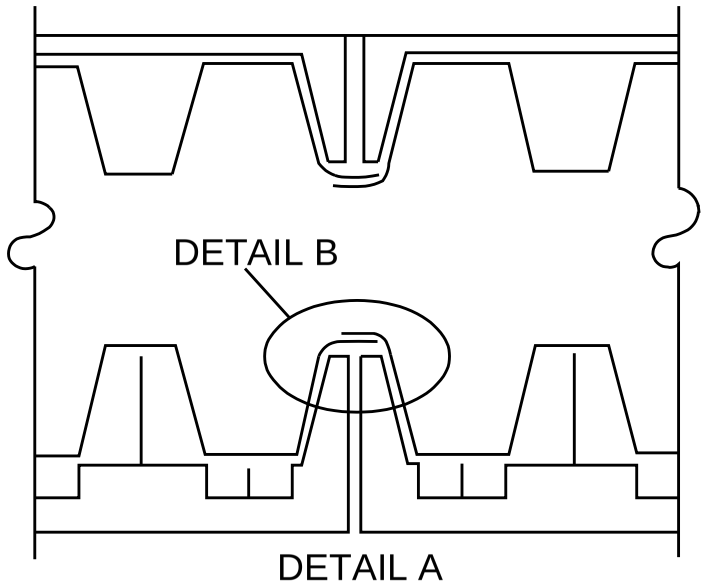
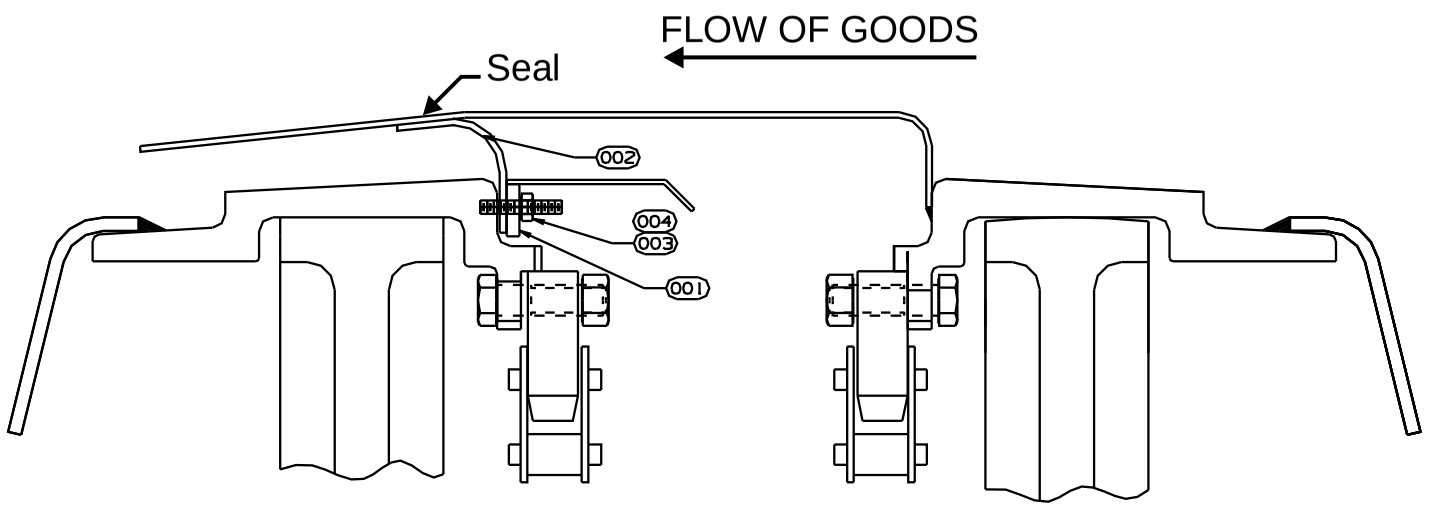




DETAIL B: INTER-UNIT SEAL

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	

Drip Lip Retrofit

NOTIFY CUSTOMER THE TUNNEL MUST BE EMPTY PRIOR TO HAVING SERVICE PEOPLE ARRIVE

INSTRUCTION FOR INSTALLING DRIP LIPS

IN ORDER TO PERFORM RETROFIT IT IS NECESSARY FOR PERSONNEL TO ENTER THE TUNNEL. PROVIDED BELOW ARE SAFETY PRECAUTIONS REPRODUCED FROM YOUR CBW REFERENCE MANUAL.

IF IT BECOMES NECESSARY TO ENTER THE TUNNEL

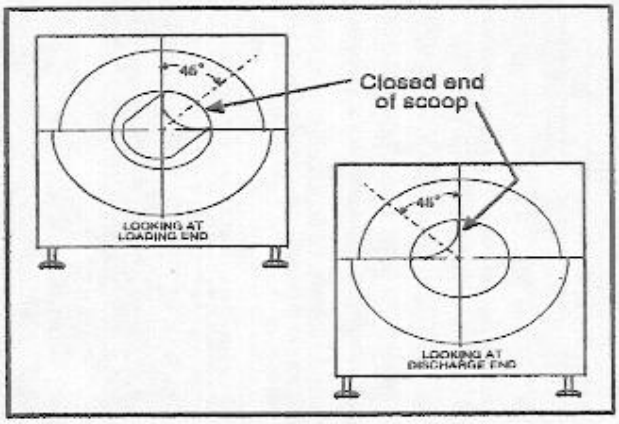


FIGURE 1
Positioning the Cylinders

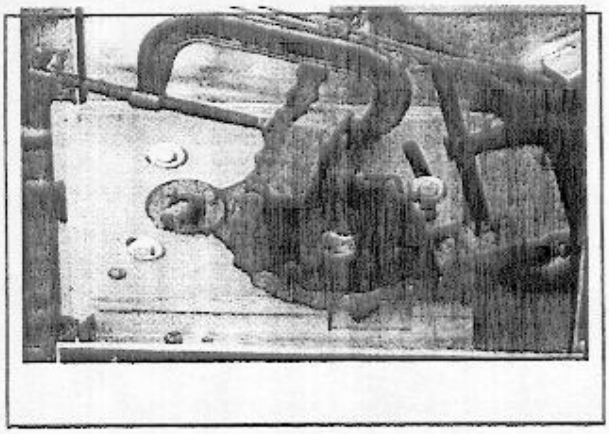


FIGURE 2
Blocking the Cylinders

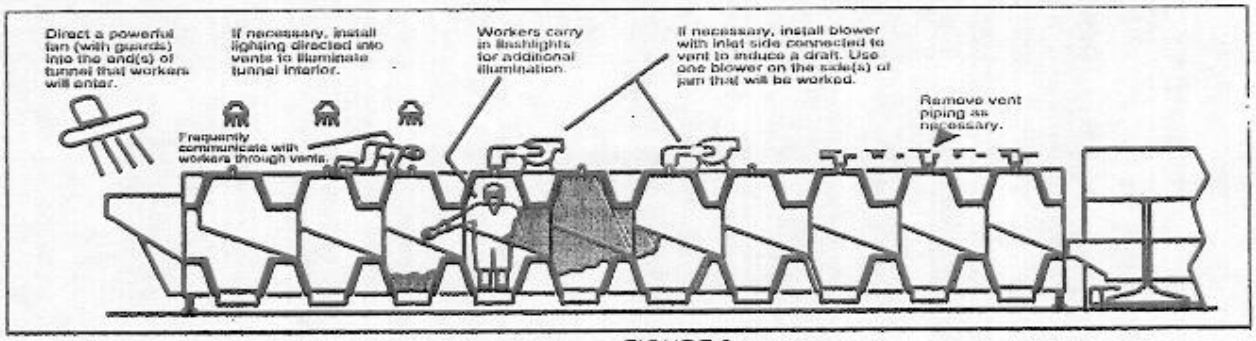


FIGURE 3
Clearing a Tunnel Jam

IF IT BECOMES NECESSARY TO ENTER THE TUNNEL

⚠ DANGER ⚠

DO NOT ENTER THE TUNNEL UNTIL ALL SAFETY HAZARDS ARE ELIMINATED. SUPERVISOR MUST BE PRESENT OUTSIDE THE TUNNEL AT ALL TIMES. POTENTIAL SAFETY HAZARDS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, THE FOLLOWING:

PANIC AND ISOLATION HAZARDS—Confined space, dampness, heat, odor, darkness, etc., can induce panic. Workers cannot be readily evacuated.
- Take measures to minimize adverse working conditions.
- Permit only smaller, agile, completely healthy, non-claustrophobic workers to enter the tunnel.

CHEMICAL BURN HAZARDS—If not thoroughly purged, flushed, cooled, and drained, modules may contain toxic substances that can burn your skin or eyes.
- Before permitting anyone to enter, thoroughly purge, flush, cool, and drain the tunnel as explained herein.

POISON AND SUFFOCATION HAZARDS—If not thoroughly purged, flushed, cooled, and drained, modules may contain toxic gases that can kill or injure you if inhaled.
- Test for and purge gases.
- Ventilate tunnel continuously.

BURN AND HEAT PROSTRATION HAZARDS—If modules are not thoroughly purged, flushed, cooled, and drained, cylinder surfaces, goods, and bath may be hot enough to burn you on contact. You can become ill while working in a hot tunnel.
- Do not enter the tunnel unless all goods and surfaces are cool.

BIOLOGICAL HAZARDS—Even if thoroughly purged, flushed, cooled, and drained, modules may contain disease organisms carried in with the goods.
- Never enter the tunnel with open wounds.
- Beware of sharp objects carried in with the goods.

ELECTROCUTION HAZARD—Use only air or battery-powered tools and lights.
- Never attempt to illuminate the tunnel by carrying in any non-battery-powered electrical devices.
- Never carry in plug-in electric tools.

CRUSH HAZARD—Unless electrically disabled and mechanically restrained, tunnel cylinder can rotate without warning, entrapping and even crushing you.
- Lock main fusible disconnect and MILTRON fusible disconnect in OFF position.
- Use wood or metal restraints held by C-clamps to block chain drives on both sides of the small sprocket, so an off-center weight distribution in the cylinder will not cause it to drift or turn by itself in either direction. See FIGURE 2.

OTHER UNKNOWN HAZARDS—There may be additional hazards, perhaps (but not necessarily) peculiar to a particular installation, that are unknown as of this writing. It is solely the owner/user's responsibility to recognize and cope with any such hazards.

IF IT BECOMES NECESSARY TO ENTER THE TUNNEL

What to Do Before Entering the Tunnel

1. **DISABLE ALL HOT WATER AND CHEMICAL FEEDS TO THE TUNNEL.**

2. **PROVIDE NATURAL LIGHT AND VENTILATION TO EACH MODULE.** Remove any vent covers or vent piping, etc. on the top of each module to provide natural light and ventilation inside each module. Open all weir box covers. These measures will provide ventilation and communication benefits and a means to monitor any odors in each module. See item 7 below.

3. **DRAIN, PURGE, FLUSH, AND COOL THE TUNNEL.**

   a. First drain each module completely, including both sides of each drain trough in each module. A pipe plug in the bottom of each drain trough is provided for this purpose when the module has no drain valves (or only one drain valve). If the tunnel has been in service a long time, the pipe plug drains may be blocked with sediment. If water does not come out, use a screwdriver or small rod to penetrate the blockage.

   Drain any overhead tanks that can feed the tunnel.

   b. Reinstall the pipe plugs (hand tight), and close the module drain valves.

   c. Flush the tunnel with cold water, ensuring every module is sufficiently flushed. (If necessary, use water hoses directed into each weir box to accomplish this.) The tunnel and its contents must be totally flushed and cooled. All chemicals in the water and goods must be completely removed before anyone can be allowed to enter the tunnel. (Permitting the tunnel to turn normally—without transferring—should expedite this process without worsening the jam; but the tunnel must not transfer.) Place the TUNNEL RUN-HOLD switch on the MILTRON controller at HOLD to command the tunnel not to transfer. Now start the tunnel in the normal way and observe that it reverses normally. **Stop the tunnel at once if it turns only in one direction!**

   d. Once the goods are cold and all chemicals have been purged from every module, again drain both sides of each drain trough in each module per 3a above. Ensure each module is fully drained and totally empty of all water before entering the tunnel. No water must remain standing in any module. If any drain valve or module overflow is connected directly to a sewer without a "P-trap," special ventilation measures must be employed so that sewer gases cannot enter the tunnel. These ventilation measures can vary depending upon local conditions and are solely the responsibility of the owner/user.

4. **POSITION THE CYLINDER FOR EASIEST TRANSIT.** See FIGURE 1.

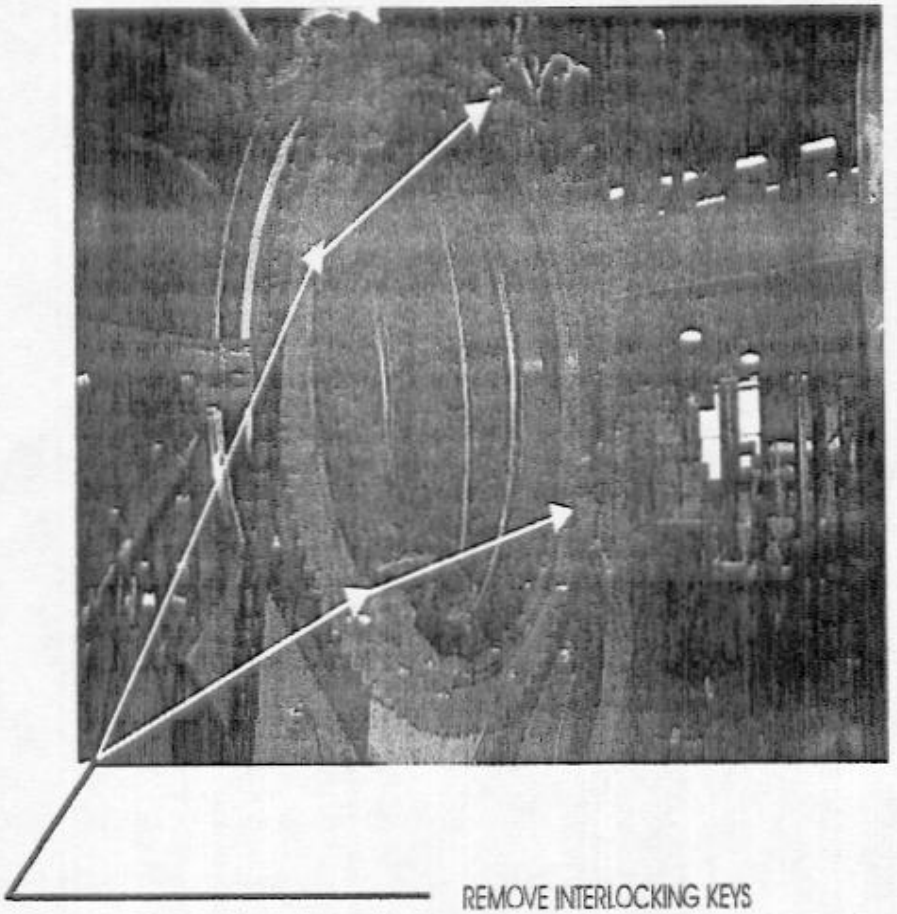
5. **RESTRAIN THE TUNNEL CHAIN DRIVES SO THE TUNNEL CANNOT DRIFT OR TURN BY IT SELF IN EITHER DIRECTION.** See FIGURE 2.

6. **DISABLE MAIN ELECTRICAL POWER TO THE TUNNEL, TO THE MILTRON AND TO ALL APPROPRIATE ELECTRICALLY OPERATED DEVICES (E.G., THE PRESS, ETC.) DIRECTLY BEFORE AND AFTER THE TUNNEL.** Open (disconnect), lock open, and tag all electrical services to the above-indicated devices.

7. **PROVIDE ADDITIONAL LIGHTING AND VENTILATION FOR THE WORKER(S) WHO WILL ENTER.** See FIGURE 3.

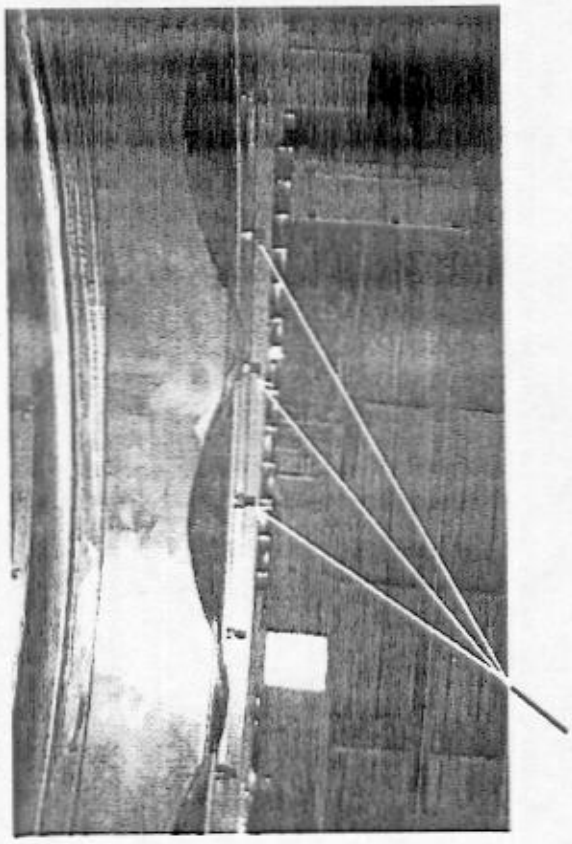
Instructions for Drip Lip Retrofit

1.) REMOVE TIMING BLOCKS. (BLUE INTERLOCKING KEYS)



THE CBW MODULE GROUPS ARE SEPARATED IN THIS PICTURE FOR CLARITY ONLY. DO NOT SEPARATE IN FIELD TO PERFORM RETROFIT.

2.) REMOVE NUTS FROM STUDS AND SLIDE EXISTING RING OFF OF STUDS.



3.) GRIND/CUT RING INTO TWO PIECES AND REMOVE.

4.) REMOVE OLD SEAL FROM OUTSIDE OF CBW

5.) ENTER TUNNEL WITH NEW SEAL AND TOOLS FOR PUSHING SEAL THROUGH OPENING. (TWO PIECES OF PLYWOOD OR SIMILAR MATERIAL WITH APPROXIMATE DIMENSIONS OF 2 INCHES (51 MM) BY 13 INCHES (330 MM) BY 1/4 INCH (25 MM) COULD BE USED AS TOOLS FOR INSERTING SEAL).

6.) BEGIN PUSHING SEAL THROUGH OPENING WITH HOLES FACING OUTWARD. BEGIN THIS PROCESS OPPOSITE THE SCOOP (180 DEGREES

AROUND OPENING FROM SCOOP).USING PLYWOOD STRIPS PUSH SEAL OUT OF OPENING. ONE STRIP HOLDS THE SEAL IN PLACE THE OTHER STRIP IS USED TO SLIDE SEAL AROUND CIRCUMFERENCE. THIS PROCEDURE IS SIMILAR TO INSTALLING A BICYCLE TUBE ON TO A RIM. A SECOND WORKER IS NEEDED ON THE EXTERIOR OF THE TUNNEL. AS THE SEAL PROTRUDES THROUGH THE OPENING, THE SECOND WORKER LOCATES THE SEAL MOUNTING HOLES OVER THE STUDS.

7.) ONCE SEAL IS SITUATED ON STUDS INSTALL DRIP LIP HALVES. THE TWO ENDS OF THE DRIP LIPS SHOULD BE ALIGNED AT THE 3 O'CLOCK AND 9 O'CLOCK POSITIONS. INSTALL NUTS ON TO STUDS AND TORQUE (HAND TIGHT).

Retrofit for CBWs modified with drip lips

IT IS RECOMMENDED TO CLEAR THE TUNNEL BEFORE WORK IS PERFORMED.

Objective: The drip lips were added to the CBWs to further protect the chains from excess water leakage. When drip lips are retrofitted to the CBW the locking keys are removed from the tunnel. When these are removed there is no longer a mechanical device to hold the alignment of the system. This retrofit is needed to determine if the system becomes misaligned, which could lead to the tunnel jamming.

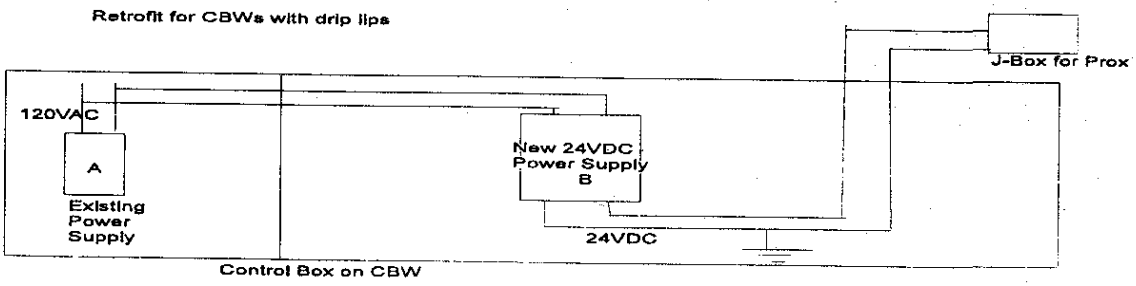
Caution: The majority of this work is performed near the chains on the CBW. When this is done the system should be shut off and locked out during the time working on the machine.(refer to CBW service manual MSSMD444AE page 1 for warning) Read all instructions and make sure the instructions are understood before starting. It is recommended to backup the Miltron so the memory is not lost during this retrofit.

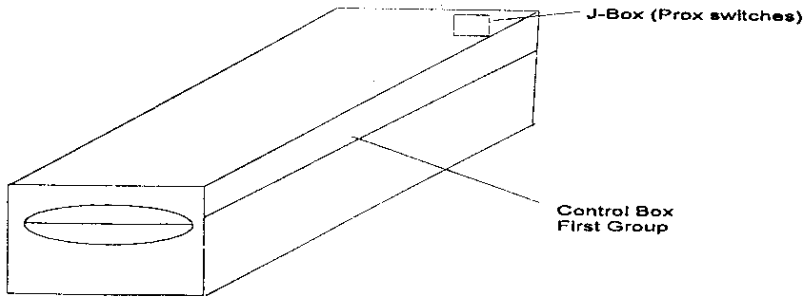
Tools required:

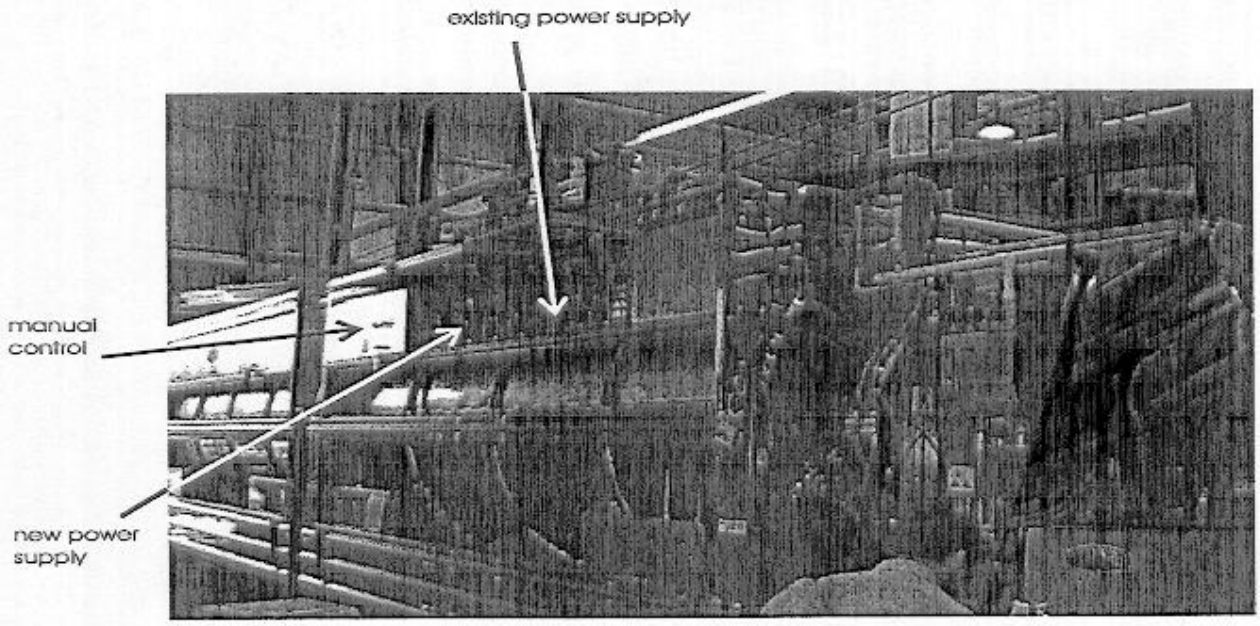
Assorted wrenches and sockets
Screwdrivers
MTA gun
Crimp and striping tools

1. Mount the power supply in the first group control box. Connect new power supply.
    A. 110V to new power supply
    B. 24VDC to proximity switches

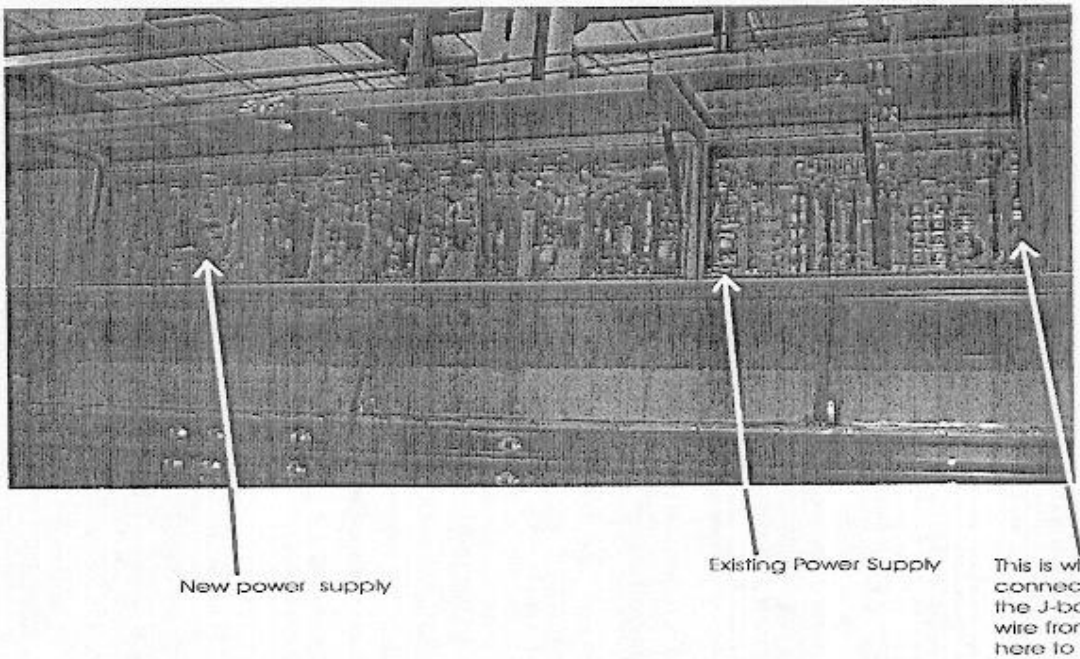
This is a diagram to show where to mount the power supply and how to make the connections to the power supply and the j-box.

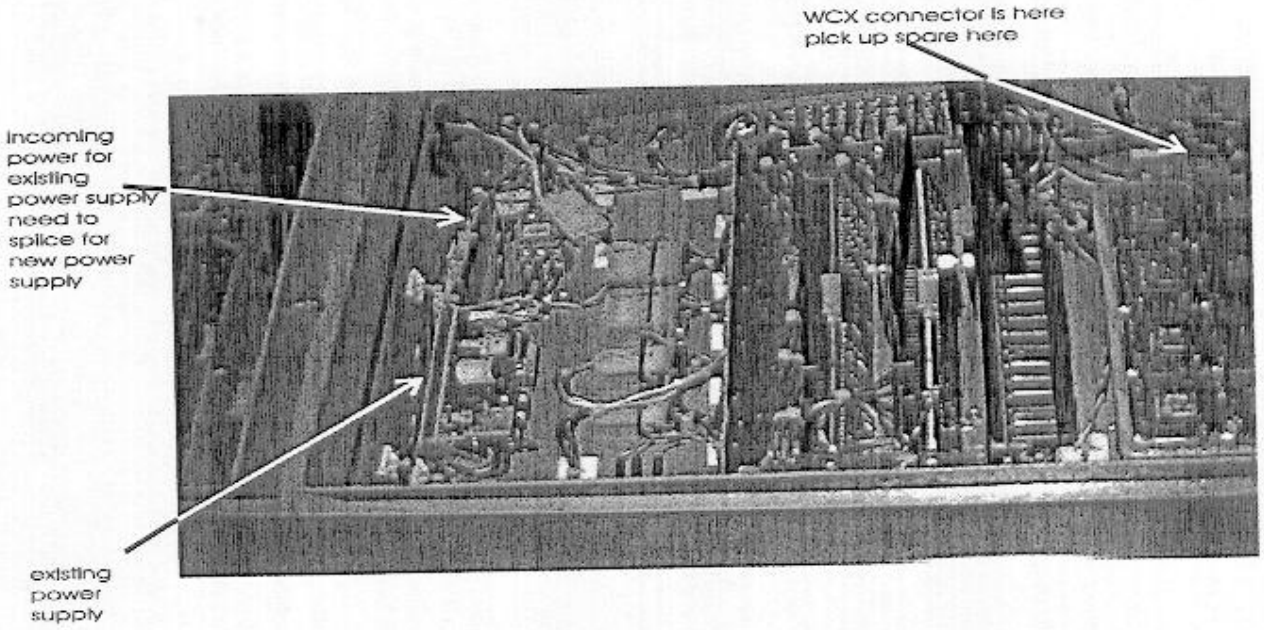




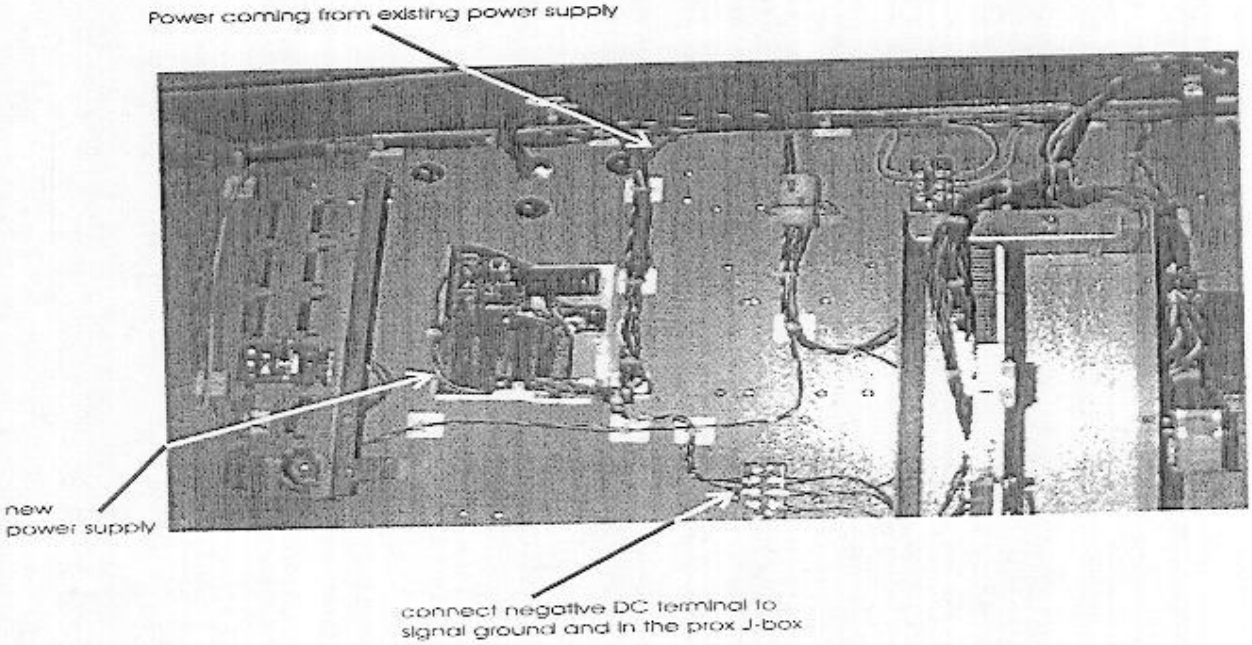


View of CBW with first group control boxes open





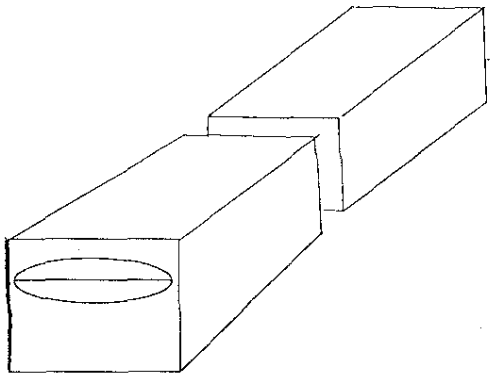
View of control box



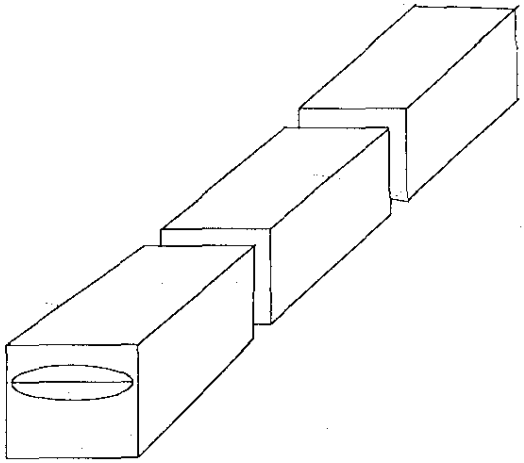
View in control box

2 Determine system set-up

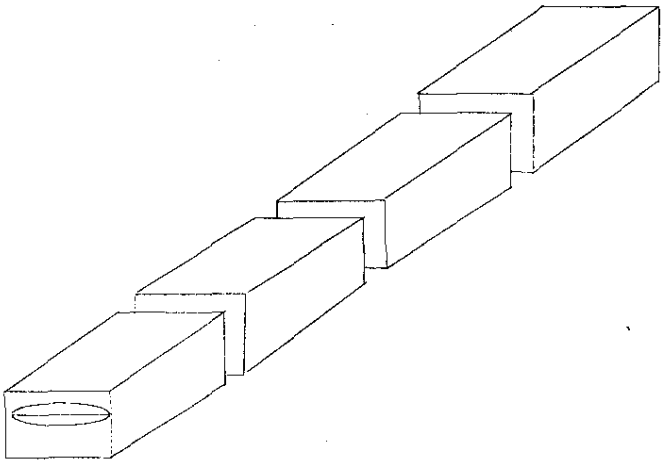
A. 2 group



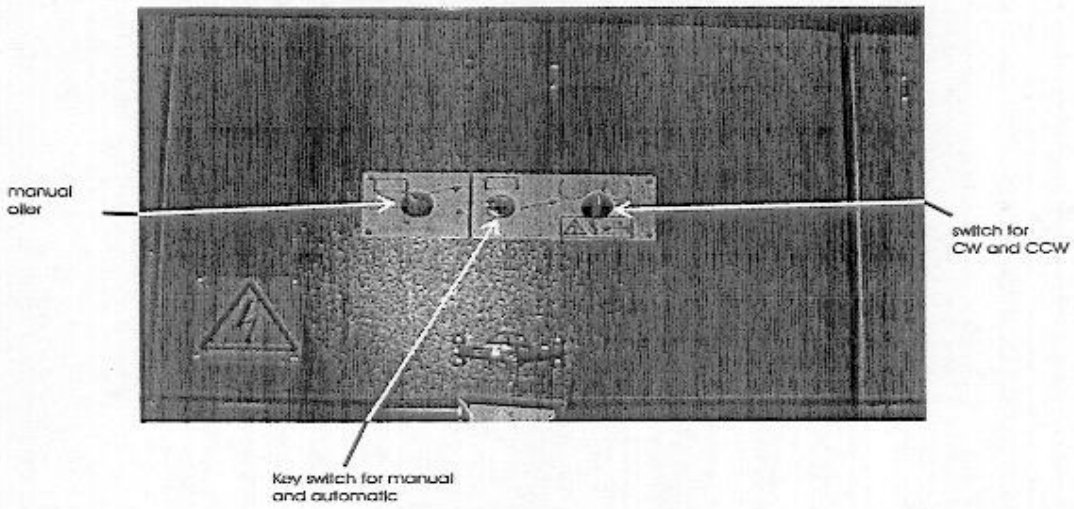
B. 3 group



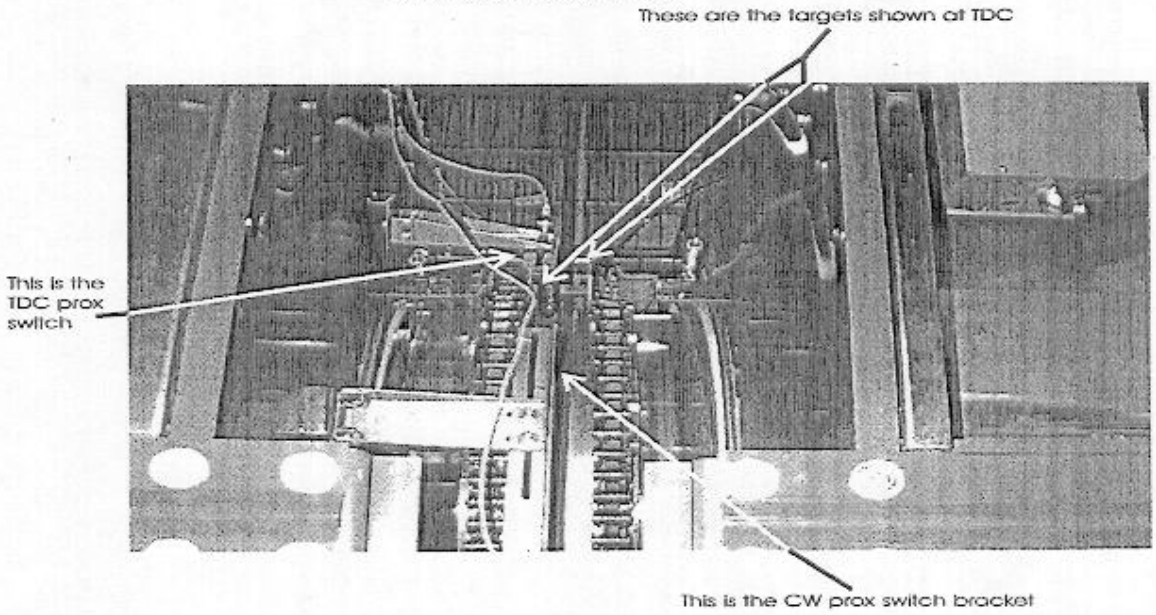
C. 4 group



Locate existing target on machine. It is located on the sprocket in the rear of the first group. Using the manual control, a key activated switch on the first group control box, put the located target under the top dead center proximity switch. The machine must be turned on to do this but turn the machine off and lock the power out when completed.

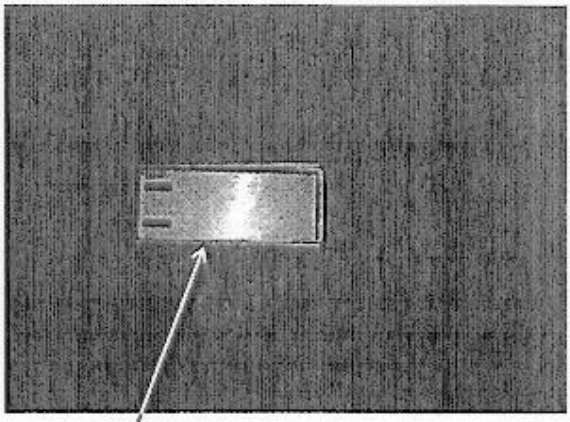


View of manual control of the CBW

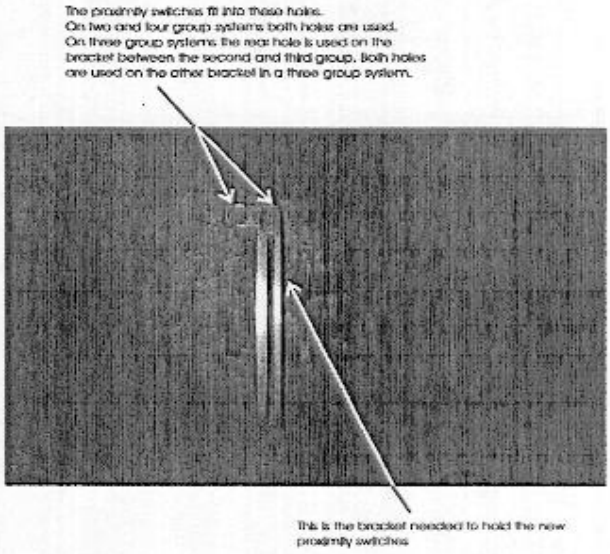


View of the TDC and CW brackets

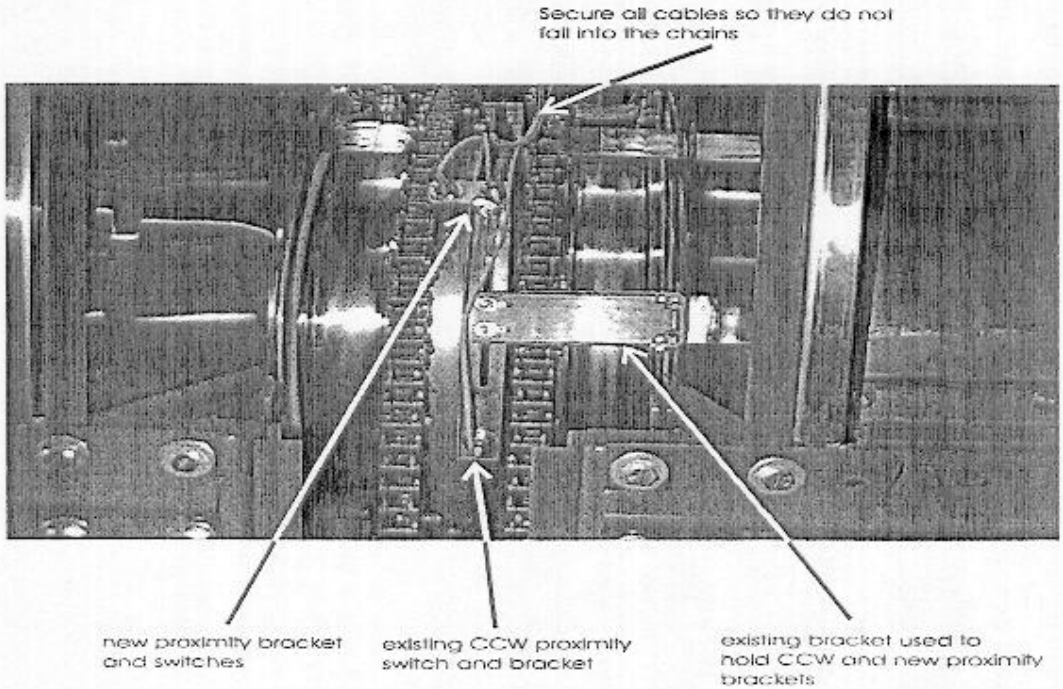
3. Install hardware as shown



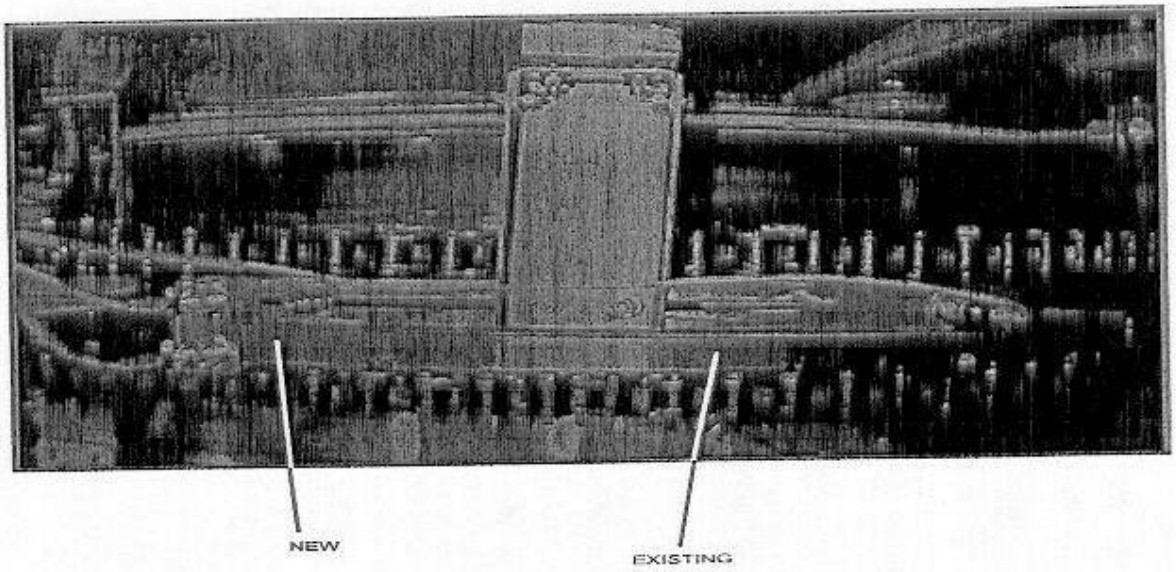
This bracket will attach to the shell ton in three and four group systems. The new proximity bracket will attach to this.



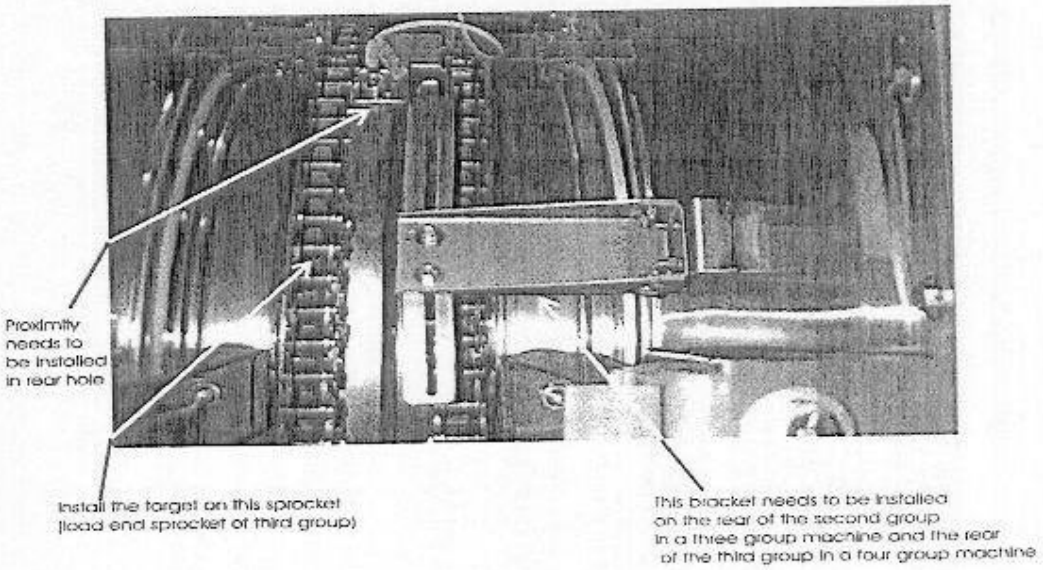
A. 2 group



View of proximity switches between groups 1 and 2

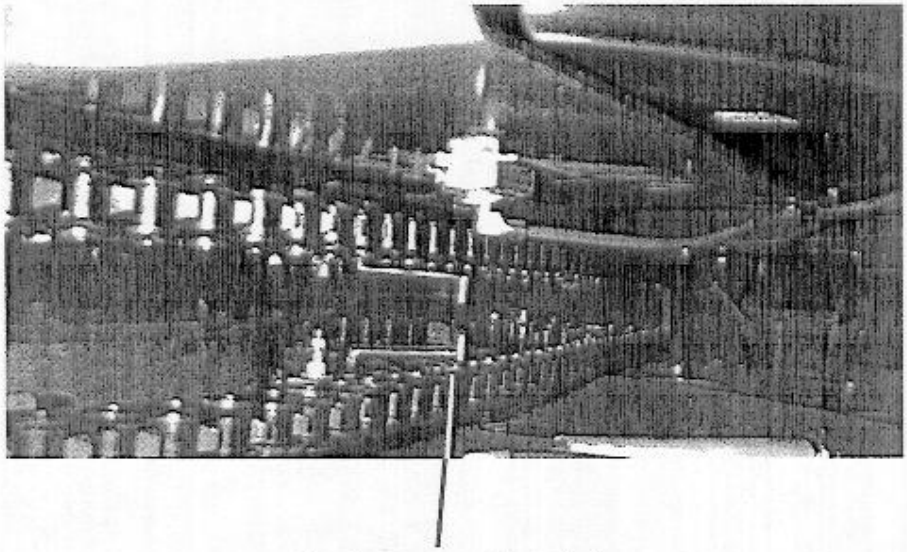


B. 3 group



View between groups 2 and 3 on a three group machine

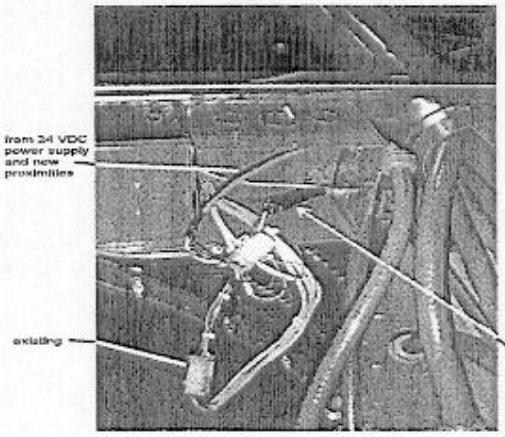
C. 4 group
Targets will be installed on the sprockets between groups 3 and 4 and the proximity brackets will have two prox switches apiece.



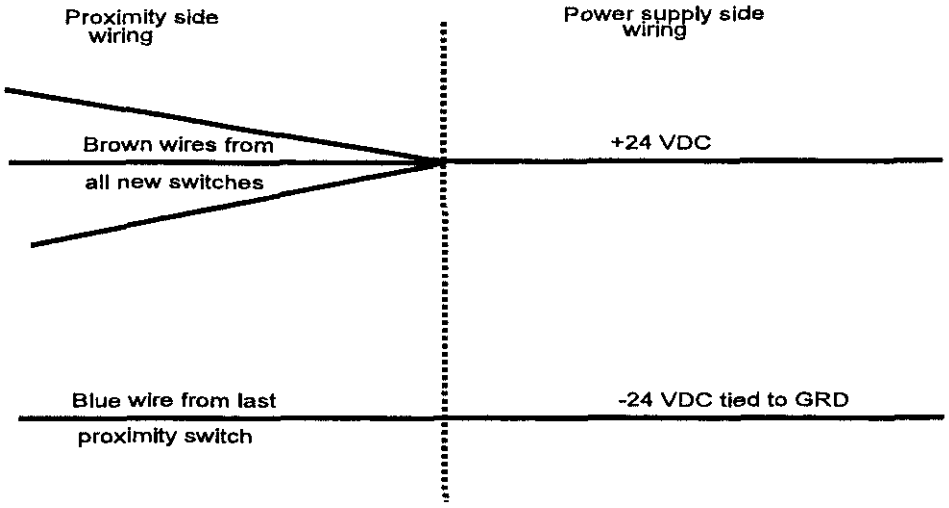
Note the targets next to each other

Install the new targets on the sprockets for your type configuration(shown above). These targets must be installed on top dead center on the required sprocket(see above). The brackets for the prox switches must be installed next(see picture). Once the brackets are in place install the proxs in the holes required(see above). **Do not** put the prox switches too low so the targets hit them when the machine is restarted. Too low would be in the direct line of the target. These switches can be adjusted to the proper height at a later time. If they are in the line of the target, and the target hits the switches, the switches will break.

4. Start electrical Connections

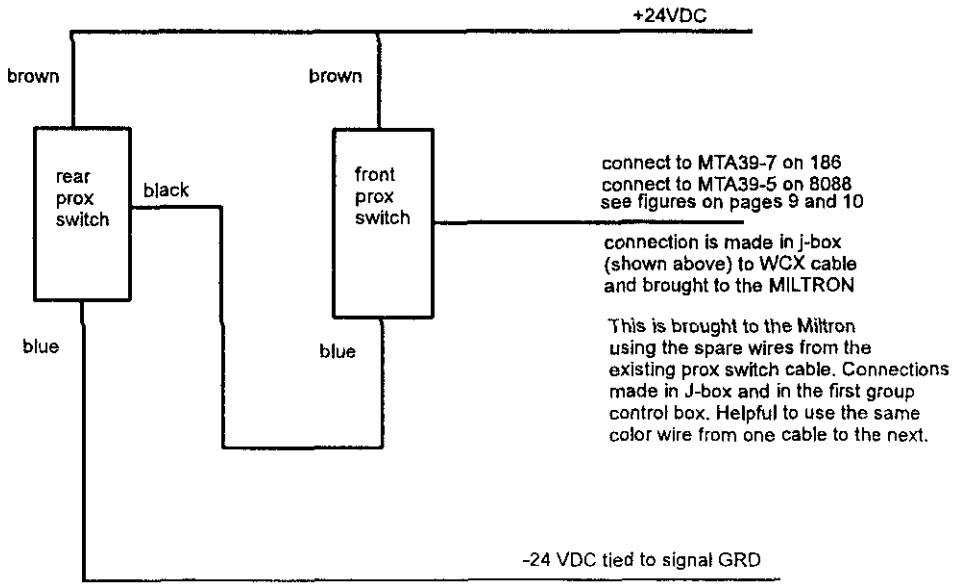


A. Make power connections

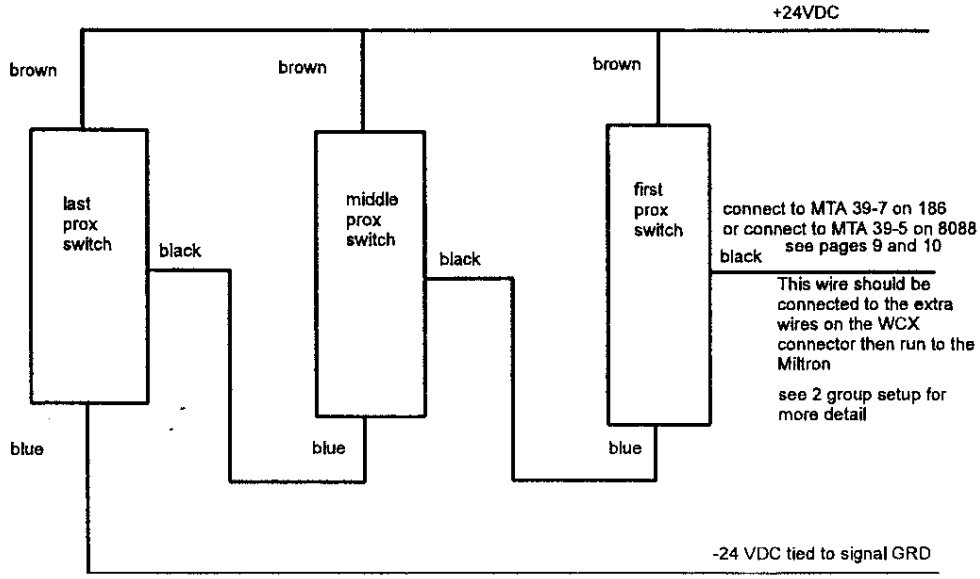


B. Connections for prox switches

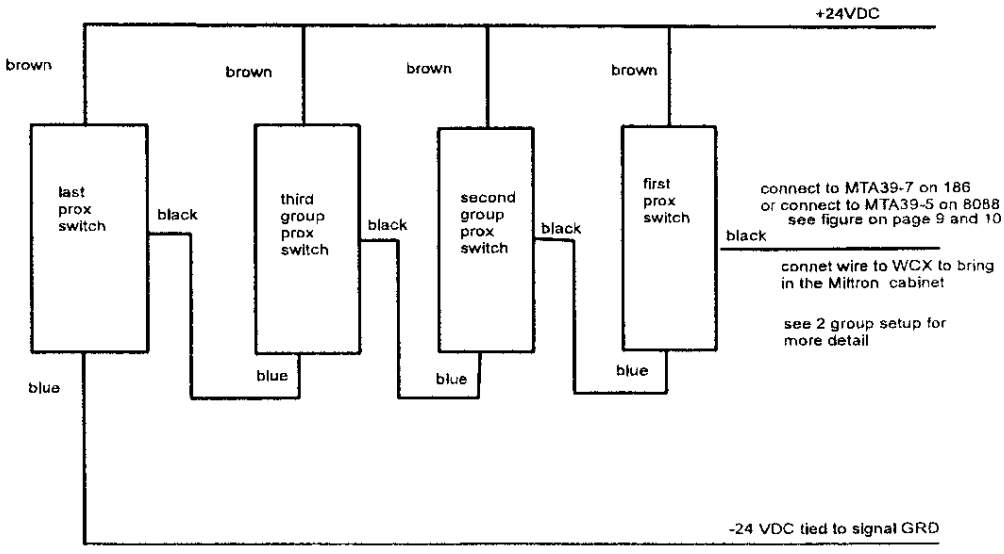
a. Two group



b. Three group



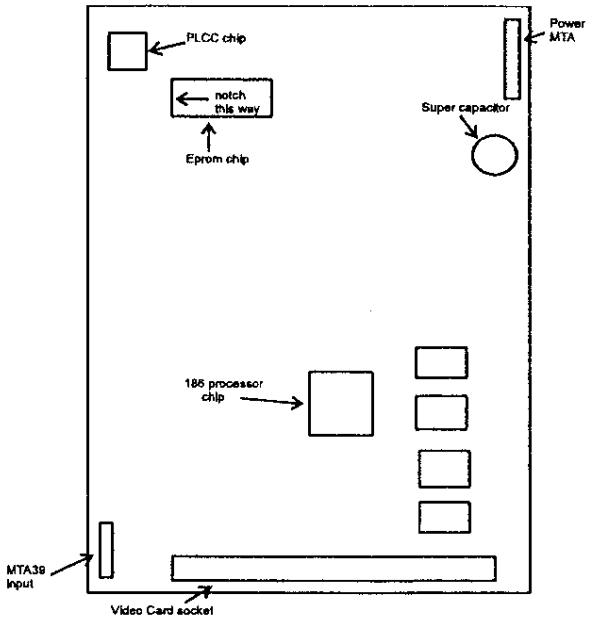
c. Four group



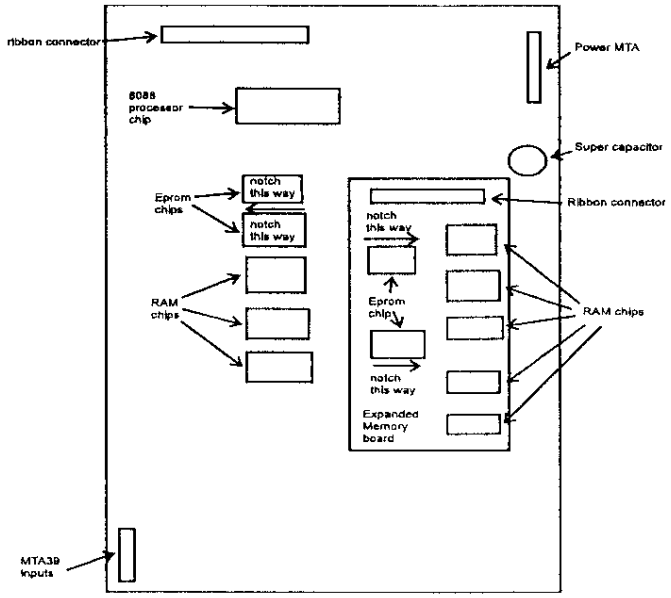
5. Change EPROMS

Please refer to the section of reference manual on how to change EPROMS in Microprocessors

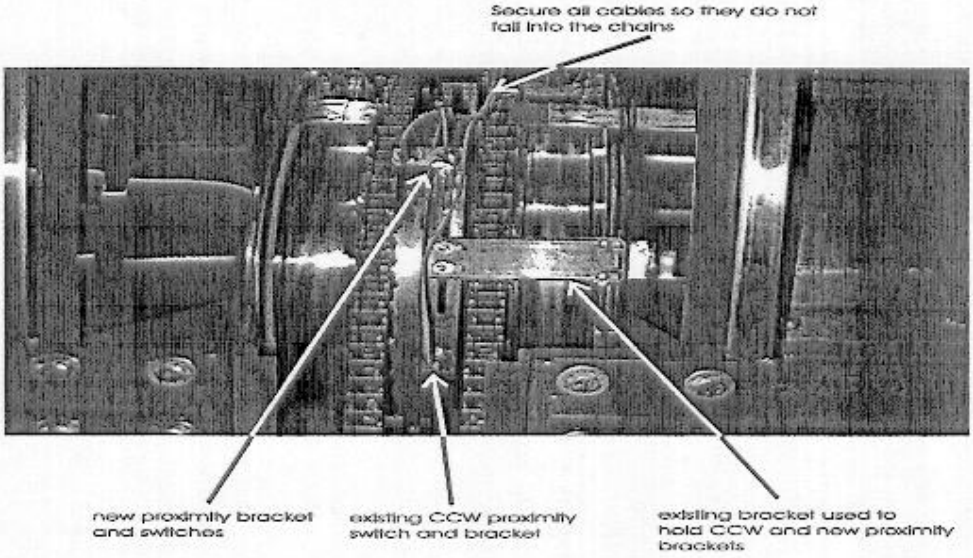
A. On 186 board



B. On 8088 board



6. Before turning the tunnel power back on make sure the new and old cables are fastened out of the chains. Secure new cables to the oiler piping from the rear modules to the J-box.



View of proximity switches between groups 1 and 2

7. Turn tunnel power back on.
   1. Again using manual control, rotate the tunnel so the new and existing targets are under the new proximity switches.
   2. Turn the power off again.
3. Adjust the proximity switches so the end of the switch is approximately 1/4"(6.5 mm) from the top of the target.

8. Test retrofit by turning on the tunnel and running a "mock" tunnel run. If error occurs the Miltron display will read 'Modules not aligned'.

Problems if error occurs:

. 1) Move targets in front of new proximity switches, using manual control.
2) Look on proximity switches to see if they activate(indicated by an LED on back of proximity)
   a. If no LEDs check electrical connections
   b. Have LEDs check page F-01 to see if direct input 11 is made
      If not made then check wiring to the input. Make sure the negative side of the power supply is grounded