

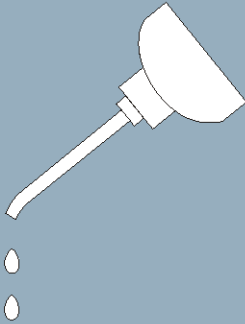
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Service & Mechanical Parts

50040TS1, TT1, CS1, SA1, SB1, & TG1 Dryers



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

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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 repaired or 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, NEGLIGENCE, 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.

BMP720097/19036

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 —

Safety—Dryers, Conditioners, and Shakers

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.



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.



DANGER 4: Entangle and Sever Hazards—Contact with goods being processed can cause the goods to wrap around your body or limbs and dismember you.

- Do not attempt to open the door or reach into the cylinder until the cylinder is stopped.
- Do not touch goods inside or hanging partially outside the turning cylinder.
- Know the location of all emergency stop switches, pull cords, and/or kick plates and use them in an emergency to stop machine motion.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.



WARNING 5: Crush Hazards—Contact with the turning cylinder can crush your limbs. The cylinder will repel any object you try to stop it with, possibly causing the object to strike or stab you.

- Do not attempt to open the door or reach into the cylinder until the cylinder is stopped.
- Do not place any object in the turning cylinder.



WARNING 6: 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 7: Explosion and Fire Hazards—Petroleum and latex materials are flammable. They can produce explosive fumes when heated.

- Do not use flammable solvents in processing.
- Do not load machine with goods containing dry cleaning materials.
- Do not use the machine in the presence of solvent fumes.



WARNING 8: Poison and Corrosion Hazards—Synthetic solvents such as perchloroethylene are toxic. They can produce poisonous phosgene gas (mustard gas) and/or corrosive hydrochloric acid when heated.

- Do not load machine with goods containing dry cleaning materials.
- Do not use the machine in the presence of solvent fumes.



WARNING 9: Fire Hazards—Overheated goods can catch fire spontaneously in the machine or after discharge.

- Verify the overheat control system and plant fire extinguishers are functioning before operating the machine. Be sure to turn water supply on after testing.
- In the event of a fire, thoroughly wet all goods.
- Test or inspect the system after every automatic actuation, or monthly.



CAUTION 10: 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.
- Use care when handling recently-processed goods.

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

5.1. Damage and Malfunction Hazards

5.1.1. Hazards Resulting from Inoperative Safety Devices



WARNING 11: 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 12: 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 13: 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.



WARNING 14: Fire Hazards—Sprinkler and overheat control—Failure to supply water to the sprinkler or to open the manual valve, or failure of the overheat control, eliminates the machine's internal fire protection. Normally the machine stops and water is sprayed into the cylinder if outlet temperature reaches 240 degrees Fahrenheit (116 degrees Celsius).

- Verify the overheat control system and plant fire extinguishers are functioning before operating the machine. Be sure to turn water supply on after testing.
- Keep the manual shut-off test valve open except when testing.
- Test or inspect the system after every automatic actuation, or monthly.



WARNING 15: Explosion and Fire Hazards—Gas train—Operating the machine with damaged or malfunctioning gas valves, safeties, controls, or piping can permit gas to escape into the fire box, cylinder, or laundry room. The enclosure will explode if gas comes in contact with any spark or flame.

- Do not operate the machine with any evidence of damage or malfunction.
- Stop the machine immediately and alert authorities if you smell gas.

5.1.2. Hazards Resulting from Damaged Mechanical Devices



WARNING 16: 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.

5.2. Careless Use Hazards

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



WARNING 17: 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 18: 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 19: 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 20: 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 21: 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.

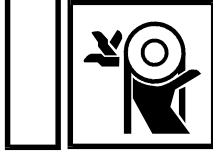
- Do not enter the cylinder until it has been thoroughly purged, flushed, drained, cooled, and immobilized.

— End of BIUUUS27 —

50040 PREVENTIVE MAINTENANCE

Lubrication Requirements

To achieve optimum performance and service life from your Milnor[®] machine and as a warranty requirement, your machine must be lubricated in strict accordance with the instructions in this section.



▲ WARNING ▲

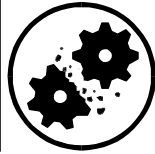
ENTANGLE AND CRUSH HAZARD—Belts and pulleys can entangle and crush body parts.

- ☛ Lock OFF and tag out power at the wall disconnect before servicing, except where specifically instructed otherwise in this section.

- ☛ Insure belt and pulley guards are in place during service procedures.

- ☛ Permit only qualified maintenance personnel to perform these procedures.

9



▲ CAUTION ▲

BEARING AND SEAL DAMAGE—Mixing different base greases can cause bearing and seal damage. Consult lubricant manufacturer before using non-specified lubricants.

1. **Do not use a pneumatic grease gun.** Take 10-12 seconds to complete each stroke. A grease gun can build up extremely high pressure, forcing seals out of position, resulting in bearing contamination and failure. Lubricate bearings while the shaft is rotating. When grease appears at the seal, the bearing contains the correct amount of lubricant.
2. **Apply the quantity of grease called for in the checklist.** Over-lubrication can be as damaging as under-lubrication. Where quantities are stated in strokes, one stroke of the grease gun is assumed to provide .0624 fluid ounce (by volume) (1.77 grams) of grease. Therefore, one fluid ounce (28.3 grams) of grease would be provided by 16 strokes of the grease gun. Determine the flow rate of your grease gun by pumping one ounce into a calibrated container. If fewer than 16 strokes are required, all quantities of strokes should be reduced accordingly, and if more than 16 strokes are required, the number of strokes should be increased. Before starting lubrication, make sure grease gun is working and that you get a full charge of grease with every stroke.
3. **Do not over-lubricate motors.** Over-lubrication can force grease into motor, causing serious damage.

Preventive Maintenance

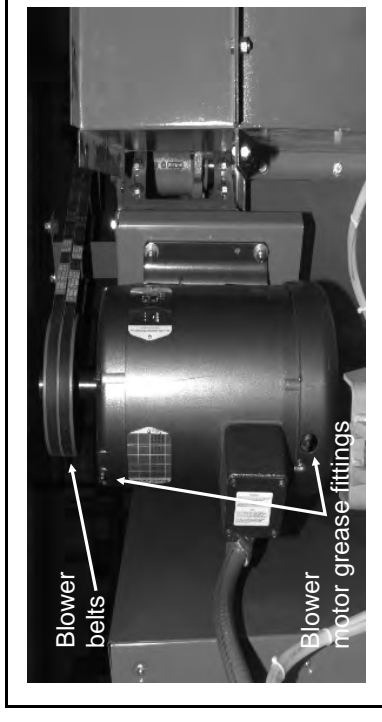


FIGURE 1 (MSSM0134AE)
Blower Motor Maintenance Points

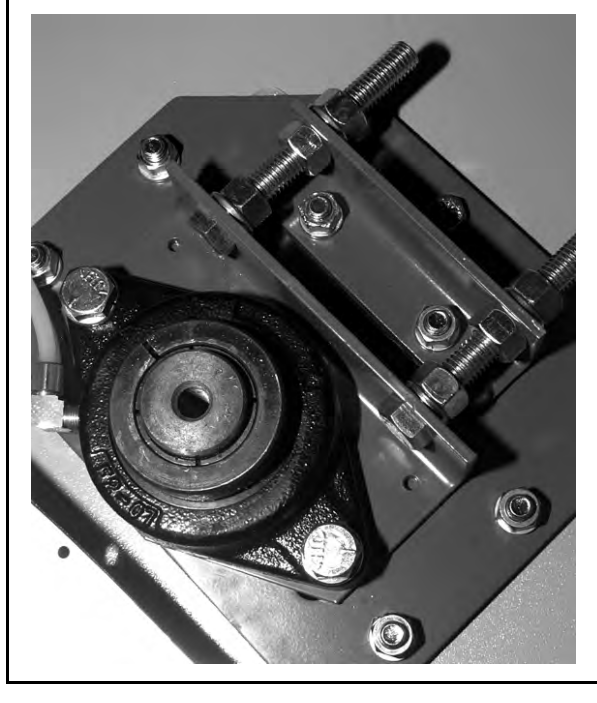


FIGURE 2 (MSSM0134AE)
Drive and Support Roller Adjustment

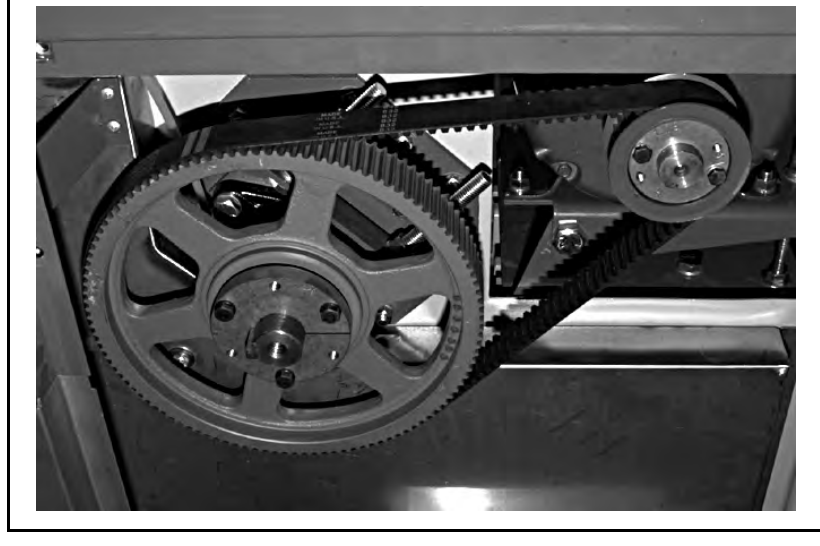


FIGURE 3 (MSSM0134AE)
Drive Belt



FIGURE 4 (MSSM0134AE)
Basket Felt Seal

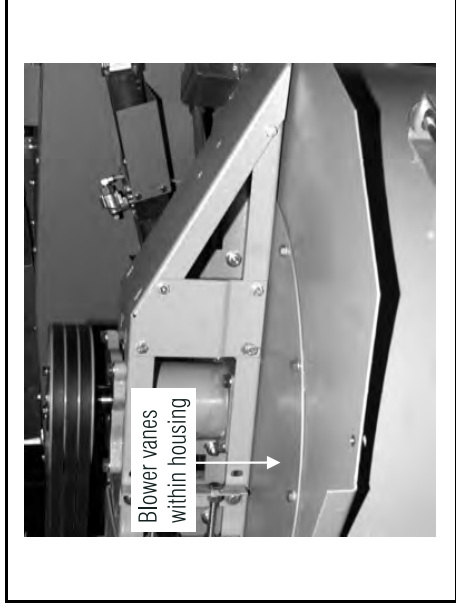


FIGURE 5 (MSSM0134AE)
Blower Maintenance Points



FIGURE 6 (MSSM0134AE)
Guide Rollers



FIGURE 7 (MSSM0134AE)
Unload-Door Felt Seal

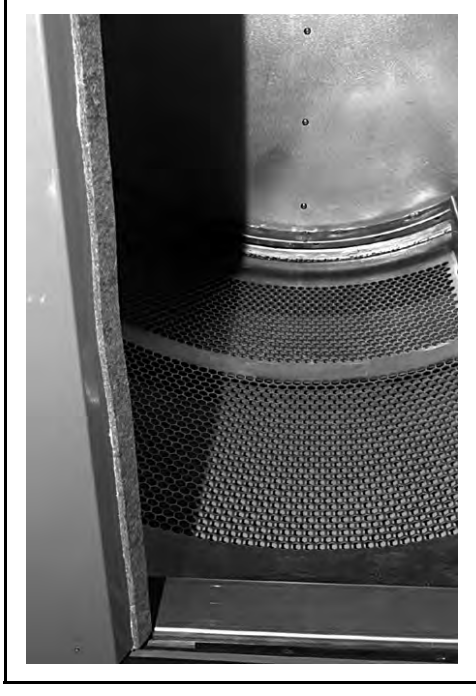


FIGURE 8 (MSSM0134AE)
Load-Door Felt Seal



FIGURE 9 (MSSM0134AE)
Front Drive/Support Wheel Grease Point (two places)



FIGURE 10 (MSSM0134AE)
Rear Drive/Support Wheel Grease Point (two places)



FIGURE 11 (MSSM0134AE)
T-Seal Assembly

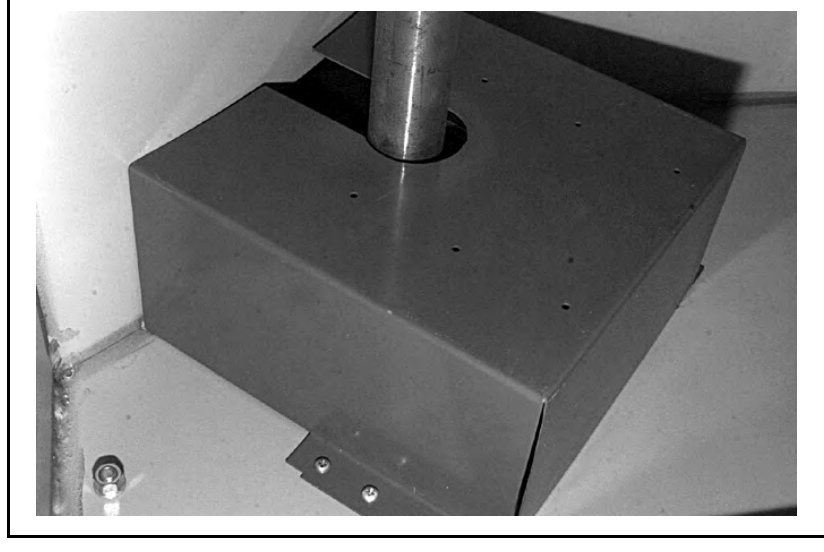


FIGURE 12 (MSSM0134AE)
Drive and Support Roller Covers



FIGURE 13 (MSSM0134AE)
Inlet Temperature Probe
(cover removed)

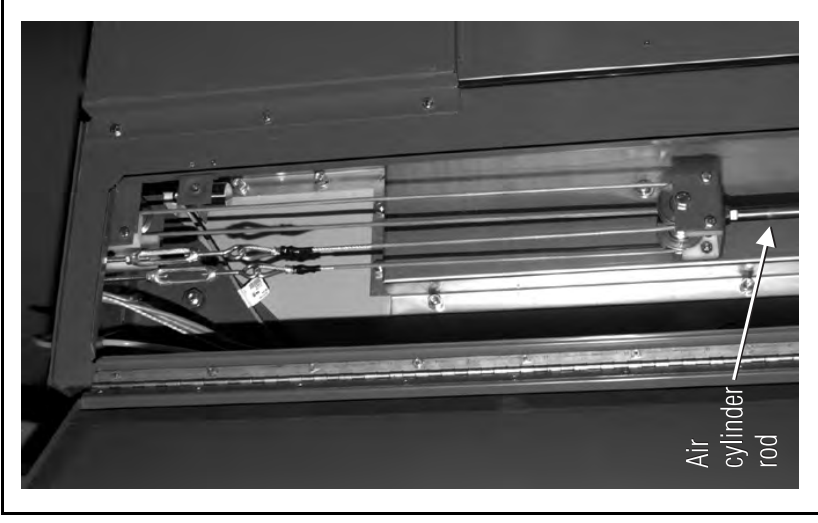


FIGURE 14 (MSSM0134AE)
Load-Door Cables

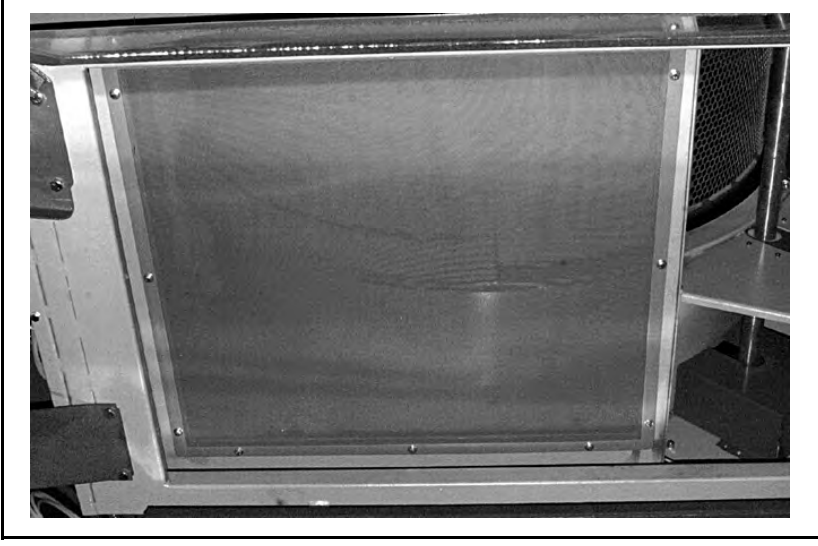


FIGURE 15 (MSSM0134AE)
Dryer Lint Screen

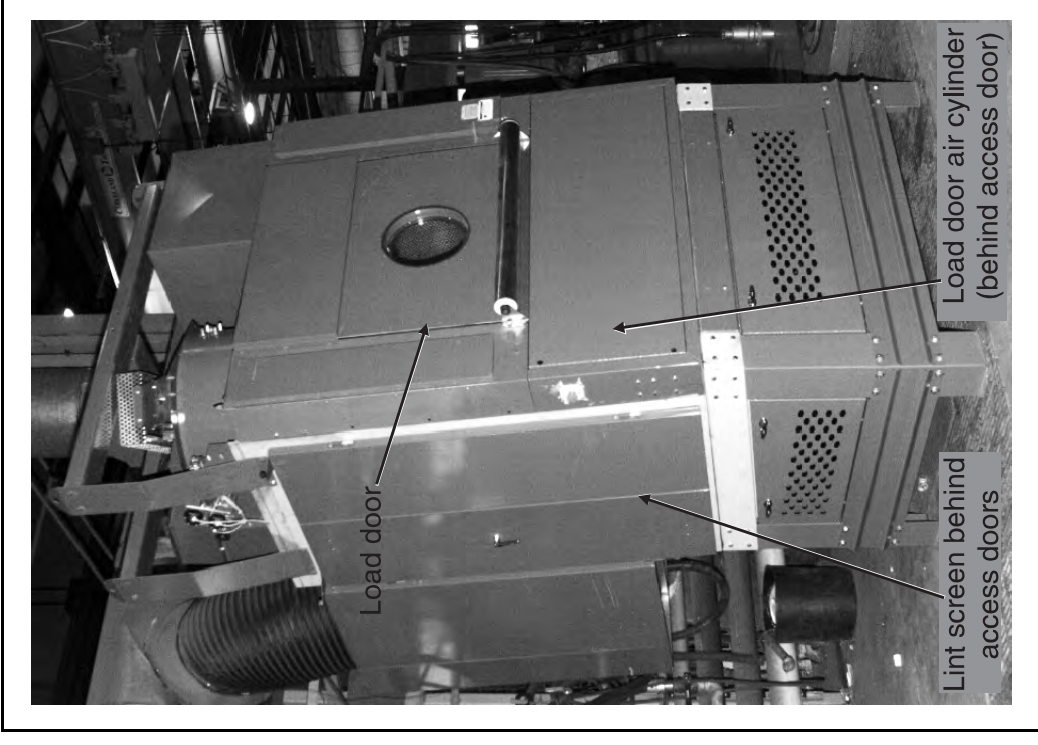


FIGURE 16 (MSSM0134AE)
Dryer Maintenance Points

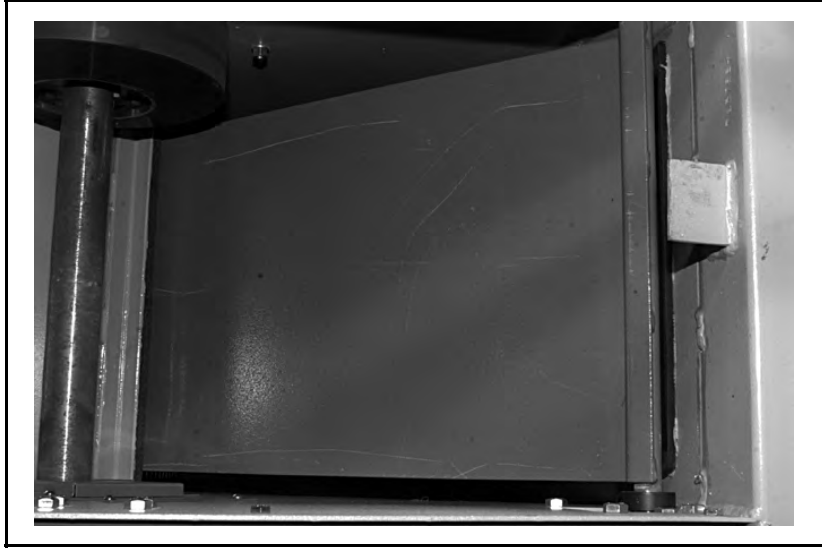


FIGURE 17 (MSSM0134AE)
Cooldown Bypass Damper

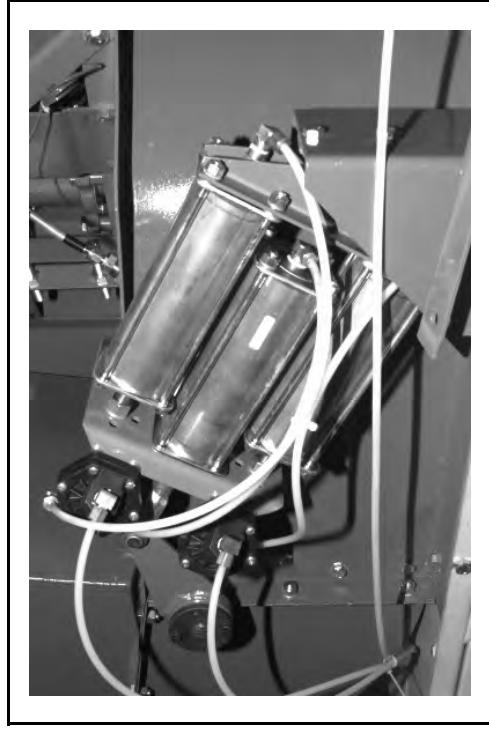


FIGURE 18 (MSSM0134AE)
Main Air Damper Cylinders

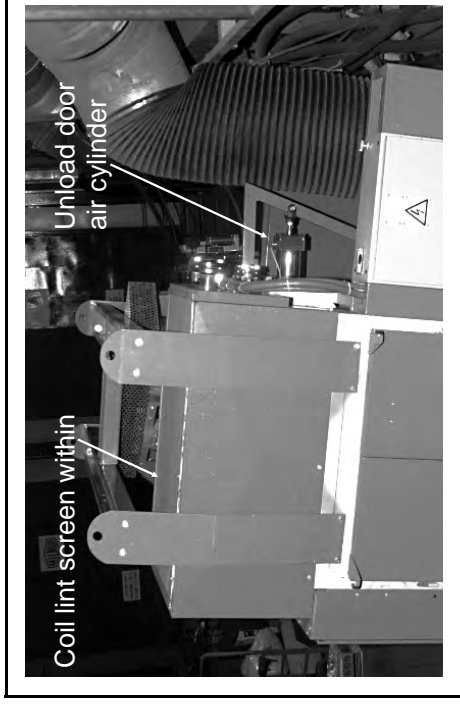


FIGURE 19 (MSSM0134AE)
Dryer Maintenance Points

Preventive Maintenance Checklist

COMPONENT	ACTION	FREQUENCY D=DAILY W=WEEKLY M=MONTHLY/200 Hours* Q=QUARTERLY/500 Hours* S=SEMI-ANNUALLY A=ANNUALLY (*See NOTES 1 and 2)	LUBRICANT SPECIFICATIONS
GENERAL		FIGURE	
• Dryer area	Inspect and verify that dryer area is clear and free from combustible materials, gasoline and other flammable vapors and liquids.		D
	Check for obstructions to the combustion and ventilation air.		D
MOTORS AND DRIVE COMPONENTS			
• Blower motor	See "BALDOR MOTOR MAINTENANCE..." MSSM0274AE, in this manual. See NOTE 3 below.	FIGURE 1	Q Use Shell Dolium R [®] (or equivalent)
ALL DRIVE AND BASKET COMPONENTS			
• Guide, drive, and support rollers	Check for alignment and wear. If service is required, see Milnor [®] dealer.	FIGURES 2 and 6	M
• Belts and pulley surfaces	Check for wear, belt tension, alignment.	FIGURES 1 and 3	M
• Check felt seal at front of basket	Check for wear and tight fit. If service is required, see Milnor [®] dealer.	FIGURE 4	Q
• Basket surfaces	Remove melted plastic.	FIGURE 4	W
BEARINGS			
• Drive and support roller bearings	Slowly grease: 0.12 oz. (3.54g), (2 strokes at 2 places)	FIGURES 2, 9 and 10	M Shell Darina [®] EP-2 (or equivalent)
DOORS			
• Unload-door felt seal	Verify no air leakage	FIGURE 7	M
• Unload-door air cylinder	Check for wear. Replace if required.	FIGURE 19	M
• Access doors	Vacuum interiors, check seals for wear. Replace if required.	FIGURE 16	M
• Load-door bottom felt seal	Check for wear. Replace if required.	FIGURE 8	M
• Load-door air cylinder and cables	Verify no air leakage. Inspect cables and replace as required.	FIGURE 14	M
AIR VANES, DUCTS, PLENUMS, SENSORS, FELTS, COVERS, AND SEALS			
• Main air damper	Test full open and full closed positions using the manual keypad functions.	FIGURE 18	Q
• Shaft seals, T-seal, and T-seal tension spring	Check for wear and tight fit. If service is required, see Milnor [®] dealer.	FIGURE 11	M
• Blower vanes	Clean out with industrial vacuum.	FIGURE 5	W
• Temperature probe sensor	Check for melted plastic build-up. Clean or replace if required.	FIGURE 13	M
• Drive and support wheel covers	Remove covers and vacuum wheels and covers thoroughly.	FIGURE 12	Q
• Cooldown bypass damper air cylinder and seals	Verify no air leakage. Check seals for wear. Vacuum interior.	FIGURE 17	S
FILTERS, SCREENS, LINKAGE STRAINERS			
• Coil lint screen	Clean with broom or industrial vacuum.	FIGURE 19	W
• Lint screen	Clean with broom or industrial vacuum.	FIGURE 15	D

NOTE 1: MONTHLY/200 Hours=Once a month or once every 200 operating hours, whichever comes first.

NOTE 2: QUARTERLY/500 Hours=Once every three months, or every 500 operating hours, whichever comes first.

NOTE 3: If motor manufacturer's instructions conflict with manual section MSSM0274AE, follow manufacturer's instructions. Motors are warranted by their manufacturers, not by Milnor[®].

Gas and Air Adjustments

This instruction provides the procedures and settings required to set/verify gas pressures, pilot flame/pressure, replace pressure switches, and adjust the minimum fire temperature. These procedures require manometer kits KWGP030100 and KWGP150100 (available from MILNOR) or equivalent equipment. Each kit includes a differential pressure gauge, fittings and tubing.

Removal of the temperature probe is not normally a part of this procedure. However, in the event that the probe is found to be defective, observe the following caution.









CAUTION 1: Machine Damage—Incorrect removal (or insertion) of the temperature probe may bend it, damaging the probe.




- Remove probe by unscrewing clamp nut first, then unscrew pipe bushing.

1. About the Flame Control

Flame control provides both flame and ignition safeguards. After fire is desired by the microprocessor, these devices check that all safety switches are made, then switch on pilot gas, spark ignition, and main gas. While the burner is lit, the flame control monitors the flame rod voltage and, if that voltage drops below the set point, the pilot and main gas valves shut off.

1.1. Identifying the Type of Flame Control—MILNOR dryers are supplied standard with a Fireye™ flame safety control or optionally with a Landis & Gyr™ control (marked on control), where required by local code. The type of flame control supplied must be determined before any gas and air adjustments are made.

1.2. How the Fireye Flame Control Works—After loading is complete, the dryer control turns on the **main and combustion air blowers**. If all safety requirements are satisfied, power is provided to the Fireye **flame control**. The flame control opens the **pilot gas valve** and powers the spark ignition for a maximum of 4 seconds. When the pilot flame is sensed by the flame control, the flame control turns off the spark ignition and turns on the two **main gas valves**. If the pilot flame is not detected after 4 seconds, the flame control turns off the **pilot gas valve** and the spark ignition, then locks out. This lock out energizes the fire eye tripped relay, then illuminates the  status light and the alarm light on the flame control. Wait two minutes, then sequentially push ,  (dryer control panel), and the **fireye reset button** to clear the error. Observe the flame control lamps during the restart. If the flame control fails to automatically reset, press **fireye reset** immediately after the Operator control lamp illuminates (before the alarm lamp illuminates). Any other errors illuminate the  status light and the related error status light. Push  and  to clear these errors.

1.3. How the Landis & Gyr Flame Control Works—After the dryer is loaded, the dryer control sets the **modulating gas valve** to the minimum fire position and tells the flame control that fire is desired. The flame control turns on the **main and combustion air motor contactors**, checks that all safety requirements are satisfied, then turns on the spark ignition and opens the **pilot gas valves**. After the **pilot valves** are opened and the flame control receives an input from the flame rod, it opens the two **main gas valves**. If the pilot flame or any safety is not satisfied, the flame control locks out. The lock out trips the **fire eye relay** and illuminates the  status light. Push either the  or the **flame control reset** and  to clear any error.

1.4. How the Closed Position Indicator Switch Works (IRI or 50 cycle models with a Landis & Gyr flame control)—Both IRI and 50 cycle (with the Landis & Gyr flame control) dryer models are equipped with visual and electronic devices on the bottom of the main gas valve block. These devices indicate if the main gas valves are open or closed.

The visual device on both models consists of a mechanical sight glass (BB, Figure 1 and Figure 2). This sight glass shows a white color when the valve is closed. As the valve opens, the sight glass color changes to red.

On IRI models, the front gas valve is equipped with mechanically operated closed position indicator switch (Y), which makes an input to the microprocessor when the valve opens. A yellow lamp inside this switch illuminates when the microprocessor calls for fire. A green bulb illuminates inside the switch when the valve opens fully.

On 50 cycle models, the rear valve is fitted with a mechanically operated electronic switch (EE, Figure 2) which provides an input to the microprocessor when the valve opens fully.

Figure 1: Main Gas Valve Visual Indicators (IRI Models)

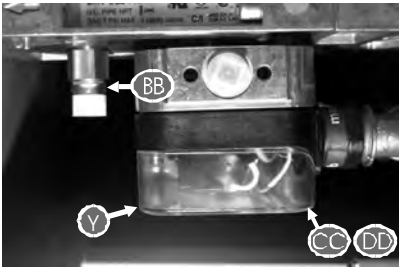
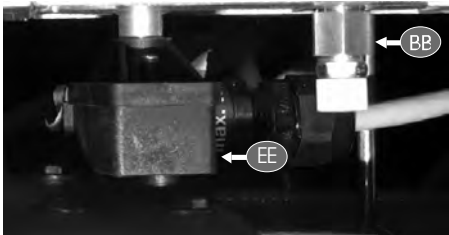
Sight Glass and Closed Position Indicator Switch For Main Gas Valves	Legend
	<p>BB. Sight glass (white closed, red open)</p> <p>CC. Yellow lamp inside switch (indicating microprocessor desires fire)</p> <p>DD. Green lamp inside switch (indicating gas valve is open)</p> <p>Y. Closed Position Indicator Switch</p>

Figure 2: Main Gas Valve Visual and Electronic Indicators (50 cycle with Landis & Gyr Flame controls)

Sight Glass and Closed Position Switch for Main Gas Valves	Legend
	<p>BB. Sight glass (white closed, red open)</p> <p>EE. Closed position switch</p>

- 1.5. How the Valve Proving System Works (IRI models only)**—The valve proving system checks that both main gas valves in the gas train are fully closed before a system startup, and will halt the start-sequence to the burner if it detects an open valve, preventing ignition. The valve proving system energizes after all safeties are satisfied and fire is called for. An internal motor pumps gas from the upstream side of the main gas valves into the manifold between the two valves for a 26 second test period. An amber lamp on top of the valve proving system unit illuminates during this test period. The pump is turned off by an integrated differential pressure sensor switch when manifold gas pressure reaches approximately 8" of water column. If the manifold has no detectable leak, then the RUN contact is energized, and the amber lamp stays lit. If the 8" of water column is not attained within 26 seconds, then the manifold between the two main gas valves has a detectable leak. The amber switch light extinguishes, the red reset switch illuminates (Figure 4), and the unit locks out. Manually reset the unit by pressing the reset switch. This starts the valve proving process over again.

- 1.6. Dryer Gas Train Components and Settings**—When testing and adjusting the gas train, the technician will proceed through a sequence of steps, each containing various sub-steps. During a typical step, the technician will perform the following general tasks:
- Measure the pressure differential between a specified gauge point and reference point.
 - Verify that various valves and components are in the proper state.
 - Adjust certain components to achieve the expected results.

The information needed to perform these tasks is presented in two ways:

1. Table 1 provides a quick reference to the steps, test locations, and component states for Fireye equipped machines. Table 2 specifies the required values. The general steps are the same for both types of flame controls.
2. Section 2 (for Fireye flame control) and Section 3 (for Landis and Gyr flame control) provide detailed explanations. Although the major steps are the same for each type of flame control, the sub-steps vary somewhat.
3. You will need to refer to both the summarized and the detailed information when testing and adjusting the system.

Table 1: Gas Train Adjustment Procedure (Fireye flame control)

Step	Device/Function	Gauge Point	Reference Point	Component States					
				Setup Mode (Fireye type)	Shut-Off Valve	Test Valve	Modulating Gas Valve	Pilot Firing	Burner Firing
1	Static Gas Pressure	(X)	Atmosphere	0	ON	OFF	OFF	NO	NO
2	Low Combustion Air Pressure Switch	(B)	(P)	A	ON	OFF	OFF	NO	NO
3	Main Air Pressure Switch	(M)	Atmosphere	B	ON	OFF	OFF	NO	NO
4A	Pilot Gas Pressure	(U)	Atmosphere	C	ON	OFF	OFF	YES	NO
4B	Pilot Gas Flame	(U)	Atmosphere		ON	OFF	OFF	YES	NO
5	Regulated Gas Pressure	1	Atmosphere	D	ON	ON	100 (255 for CSA models)	YES	YES
8	Low Gas Pressure	2	Atmosphere	E	ON	ON	0	YES/NO	YES/NO

Table 2: Model-Specific Settings

Natural Gas	Standard 50040		IRI 50040		50 cycle 50040 with Landis + Gyr Flame Control	
	Inches H2O	mm H2O	Inches H2O	mm H2O	Inches H2O	mm H2O
Static Gas Pressure	13.5	343	13.5	343	13.5	343
Low Combustion Air Pressure Switch	0.4	10.2	0.4	10.2	0.2	5
Low Main Air	0.8	20	0.4	10.2	0.6	15.2
Pilot Gas Pressure	1.6	41	1.6	41	1	25
Pilot Gas Flame	1	25	1	25	0.5	12.7
Regulated Gas Pressure	4.5	114.3	4.5	114.3	4.5	114.3
Burner Minimum Fire (above ambient temperature)	70-80 F	21-27 C	70-80 F	21-27 C	70-80 F	21-27 C
High Gas Pressure	5.6	142.2	5.6	142.2	5.6	142.2
Low Gas Pressure	2.25	56.3	2.25	56.3	2.25	56.3

Figure 3: 50040 Standard Gas Train

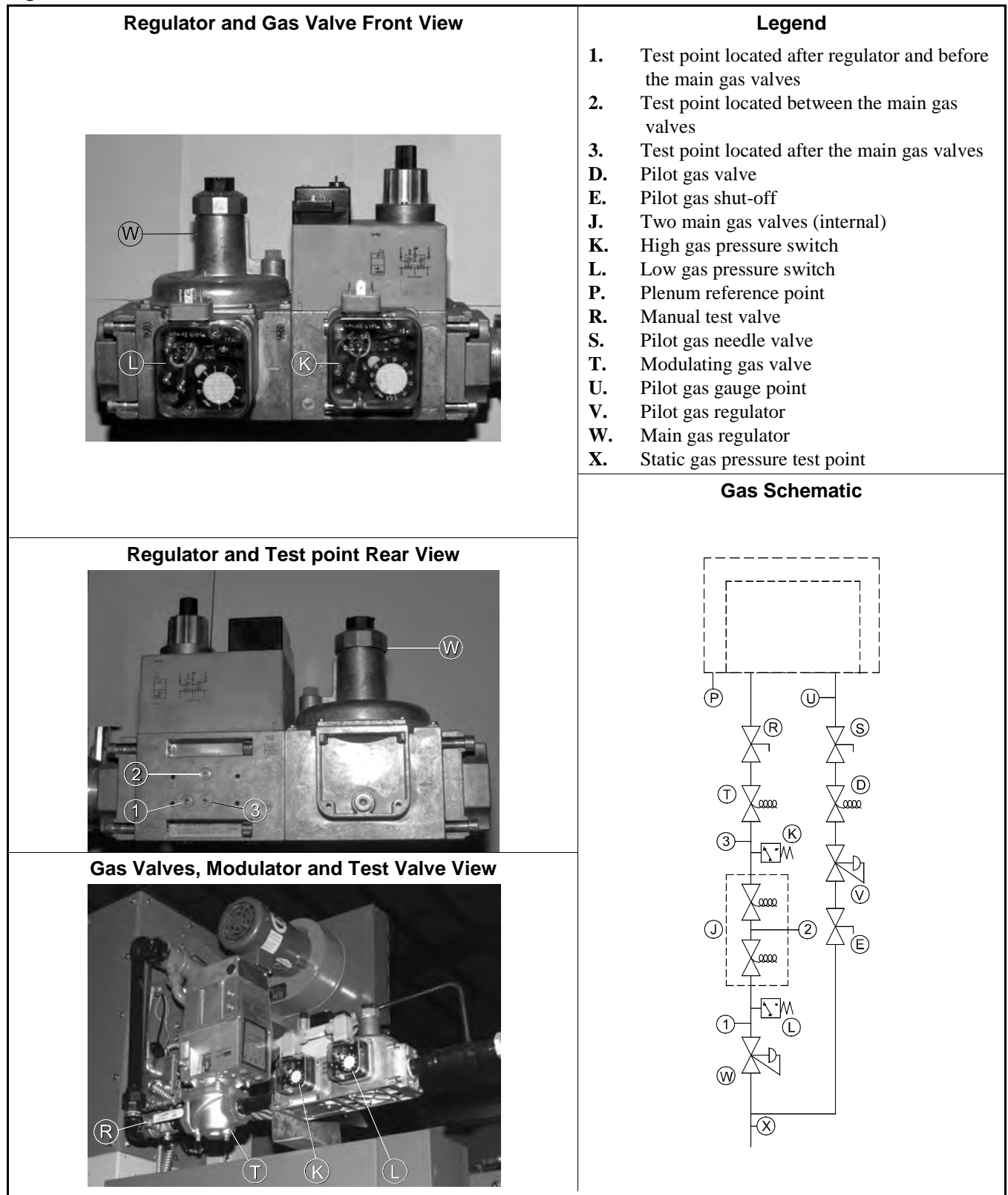


Figure 4: 50040 IRI Gas Train

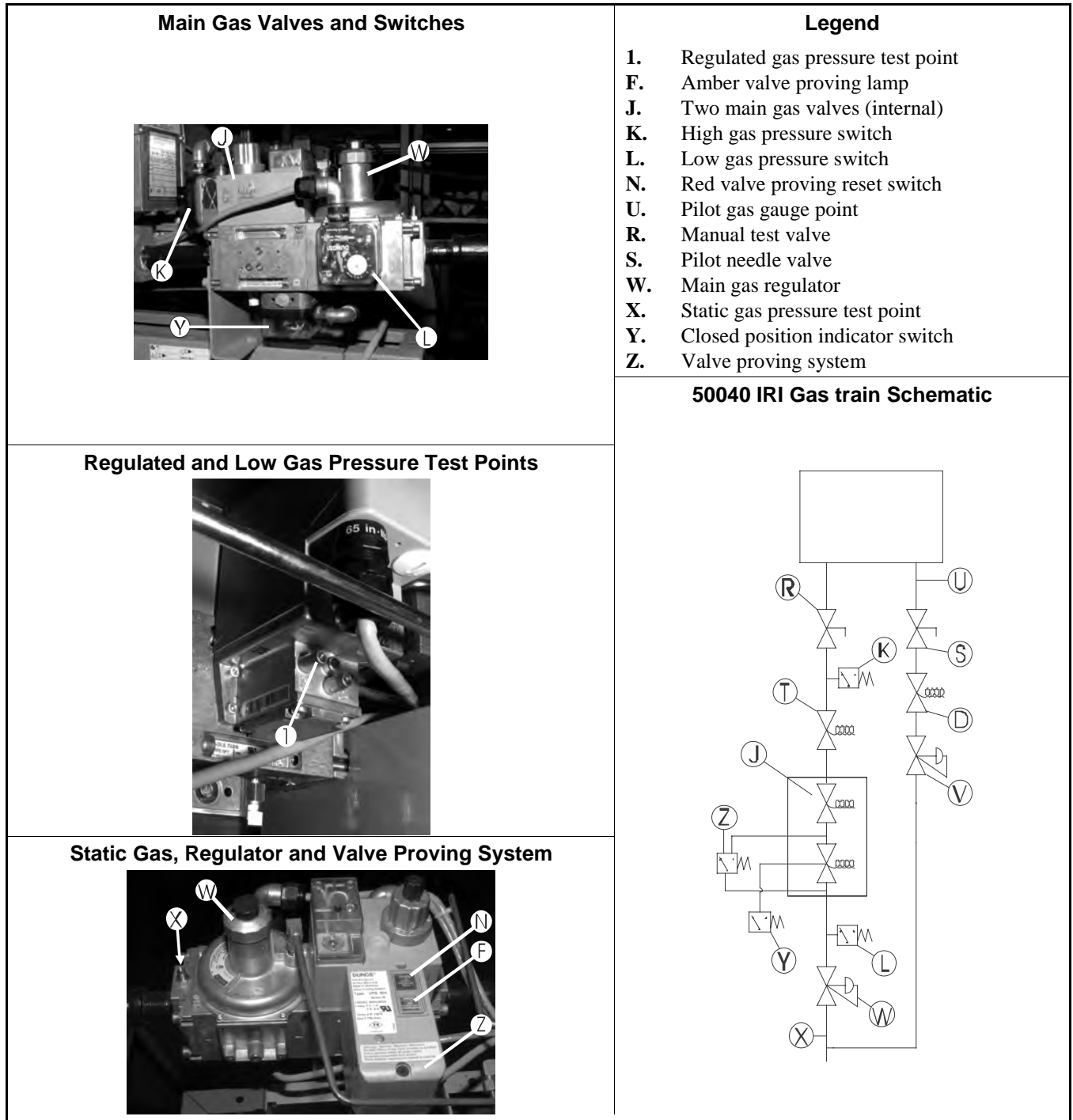


Figure 5: 50040 TG1 50-Cycle Landis & Gyr Flame Control

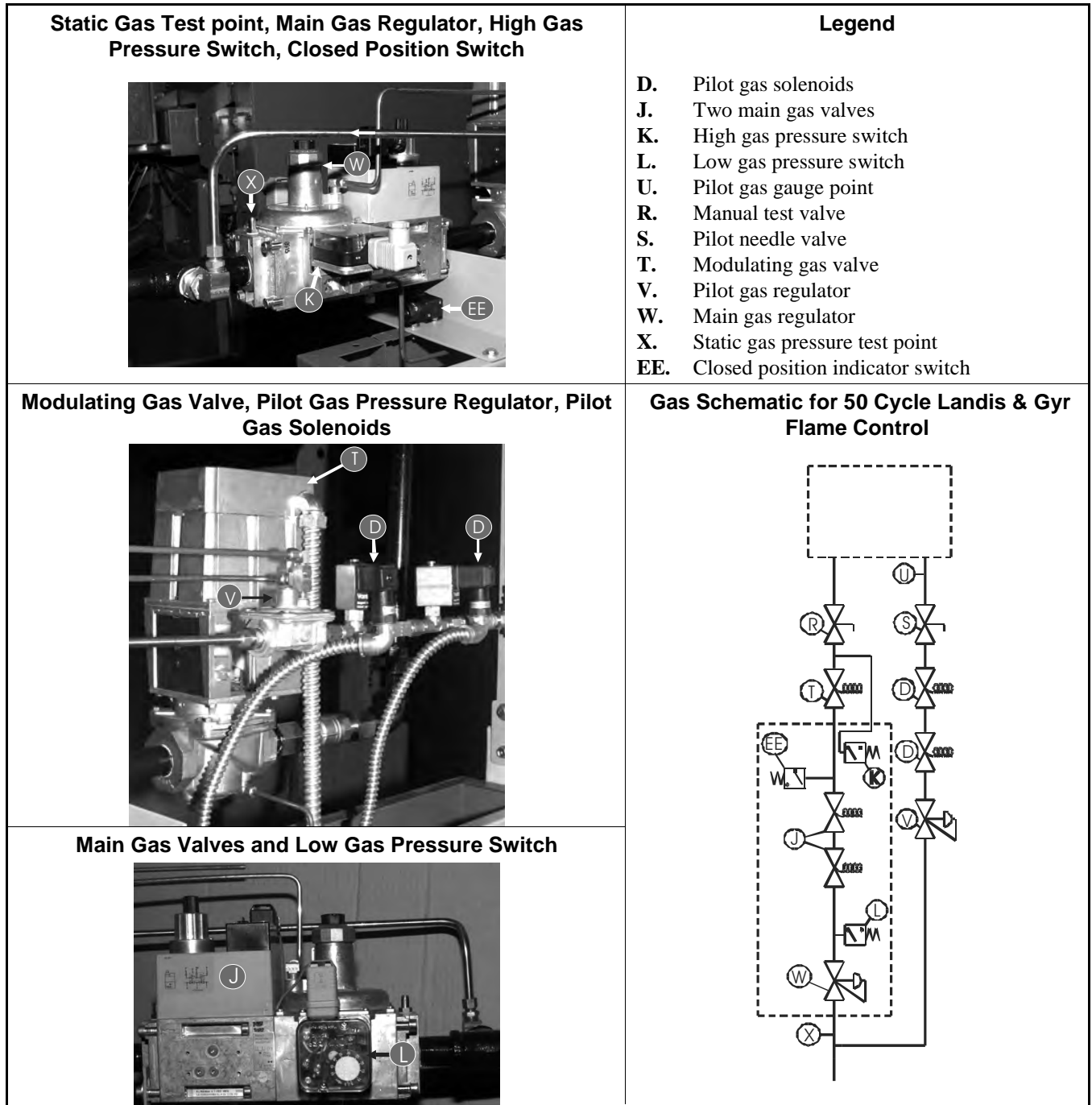


Figure 6: Gas Pressure Test Points (50 Cycle with Landis & Gyr Flame Control)


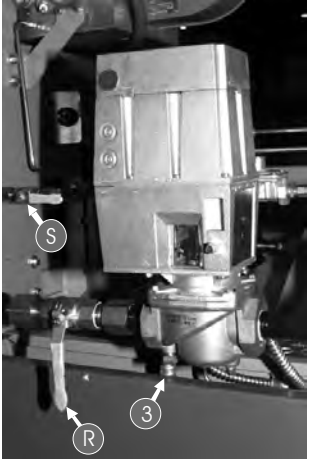
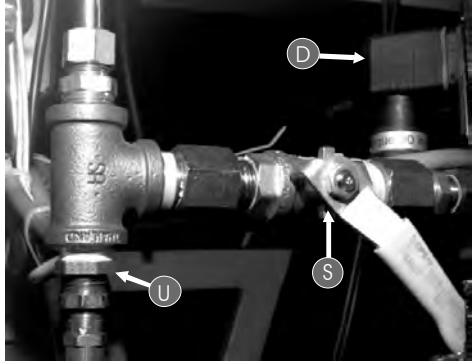
<p style="text-align: center;">Low gas pressure test point</p> 	<p style="text-align: center;">High gas pressure test point, manual test valve and pilot gas pressure test point</p> 
<p style="text-align: center;">Pilot gas test point, manual test valve and pilot gas solenoid</p> 	<p style="text-align: center;">Legend</p> <ul style="list-style-type: none"> 2. Low gas pressure test point 3. High gas pressure test point D. Pilot gas solenoid R. Manual test valve S. Pilot gas pressure setting valve (handle removed after setting) U. Pilot gas test point

Figure 7: Fireye Flame Control Test Jacks (Cover removed for clarity)

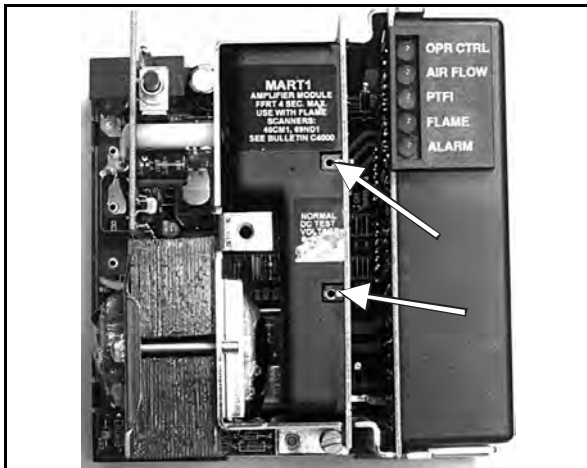


Figure 8: 50040 Pilot Gas Test Points

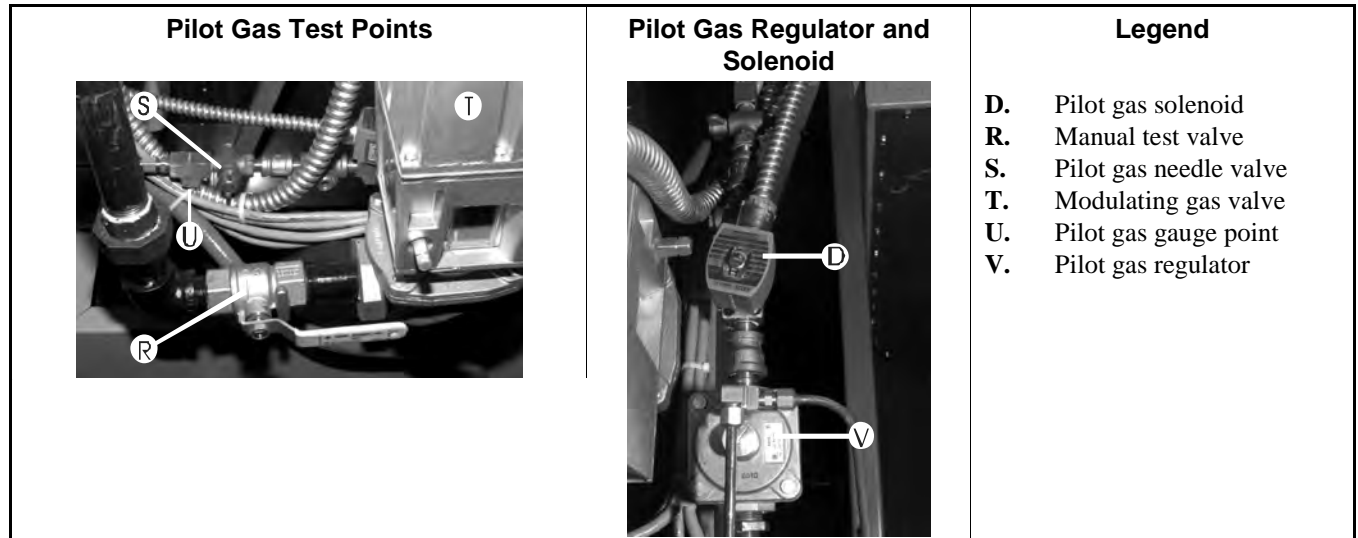


Figure 9: 50040 Combustion and Main Air Pressure Switches

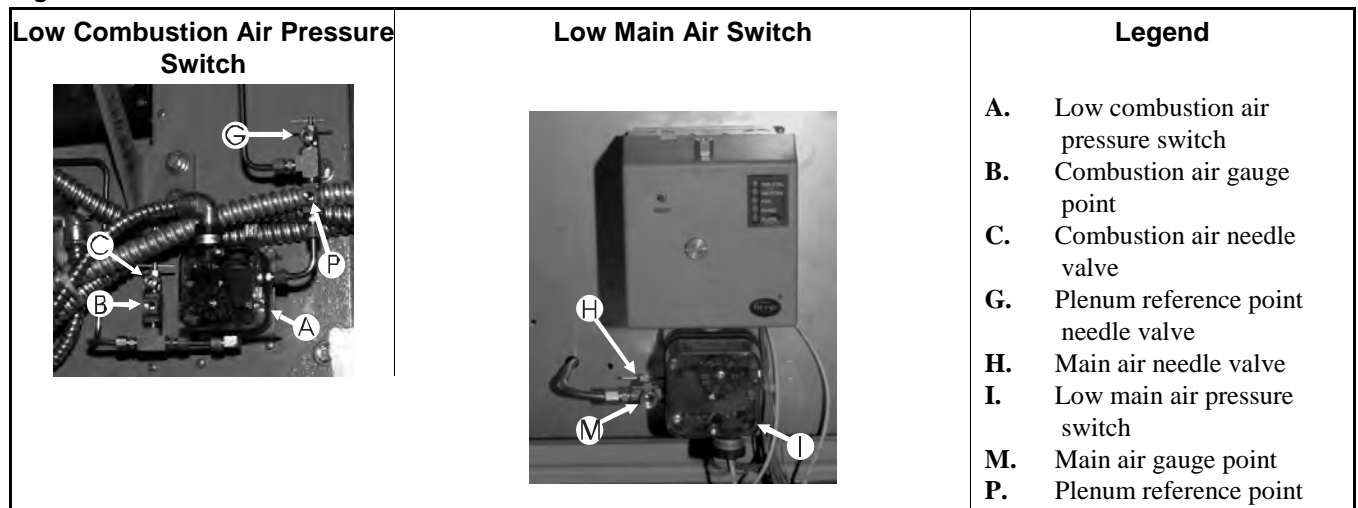


Figure 10: Combustion and Main Air Pressure Switches and Test Points (50 Cycle with Landis & Gyr Flame Control)

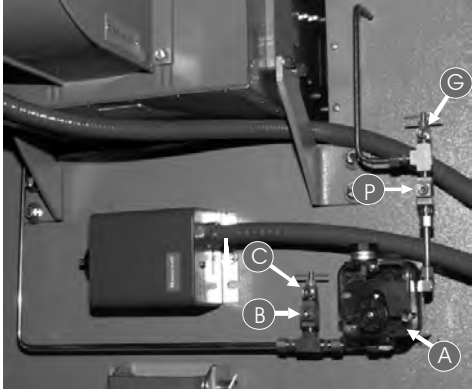

<p>Low combustion air pressure switch and plenum test point</p> 	<p>Landis & Gyr flame control reset, low main air switch and test point</p> 
<p>Legend</p> <ul style="list-style-type: none"> A. Low combustion air pressure switch B. Combustion air gauge point C. Combustion air needle valve G. Plenum reference point needle valve H. Main air needle valve I. Low main air pressure switch M. Main air gauge point (shown connected to manometer) P. Plenum reference point FF. Landis & Gyr flame control reset 	

Figure 11: 50040 Gas Train Test Points

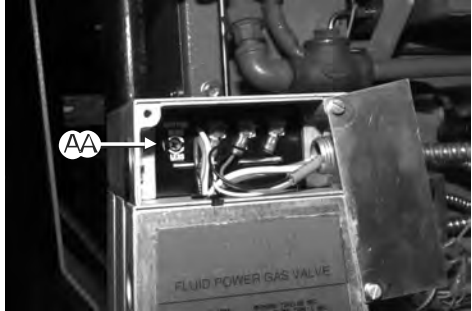
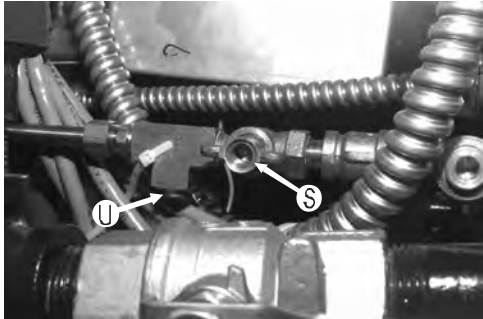
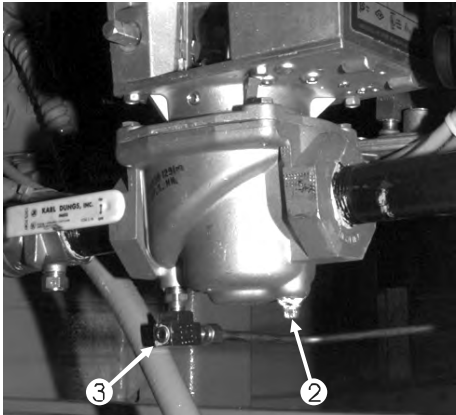
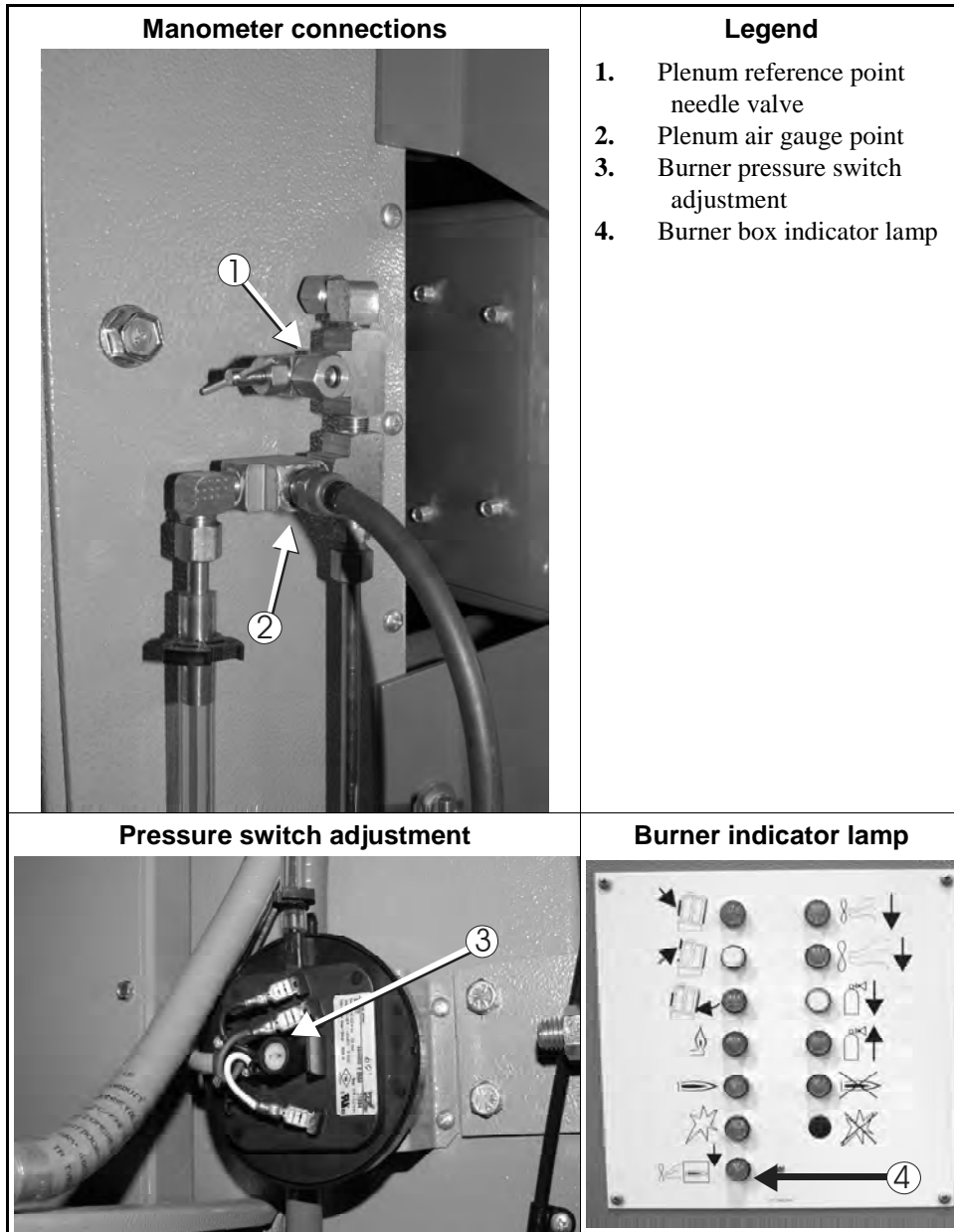
<p>Minimum Fire Adjustment on Modulating Gas Valve</p> 	<p>Legend</p> <ul style="list-style-type: none"> AA. Minimum fire adjustment U. Pilot gas gauge point S. Pilot gas pressure set screw 2. Low gas pressure test point 3. High gas pressure test point
<p>Pilot Gas Pressure Test Point and Set Screw</p> 	<p>High Gas Pressure and Low Gas Pressure Test Points on IRI machines only</p> 

Figure 12: Burner box pressure switch



2. Adjustment Procedures for Fireye Equipped Dryers

2.1. Step 1: Setting Static Gas Pressure



WARNING [2]: Entangle and Crush Hazard —Moving parts can entangle and crush body parts

- Lock out and tag out power before servicing.

1. Turn machine **off**.
2. Attach one side of manometer (high pressure side of differential pressure gauge) to **static inlet gas pressure gauge point (X)** and leave the other side open to atmosphere.

3. Open external gas shut-off valve.
4. Check the status of the following components
 - **External gas shut-off valve is open**
 - **Manual test valve and modulating gas valve are closed**
 - **Pilot and burner are not firing**
 - **Combustion air blower and main blower are off.**
5. Adjust pressure of incoming gas (upstream from dryer) to achieve value listed in Table 2. Incoming gas pressure must be at this value before further adjustments can be made. Pressures exceeding specified range will damage regulator.

2.2. Using the Setup Mode—After the static gas pressure is set, all of the other gas train settings are made with power restored and the dryer in setup mode as described below.

For dryers with Fireye control, the Dryer control has a built-in setup procedure to aid in making the remaining adjustments described herein. Specific setup modes are provided to accommodate most adjustments. Once the setup procedure is accessed, **ENTER** advances the control through each of the setup modes in the order they are needed.

Display or Action	Explanation
WAITING FOR LOAD *****	The display after the power up sequence
MANUAL	Accesses <i>manual mode</i> menu (press CANCEL to return to automatic).
RETURN TO AUTOMATIC 00	Shows the display in manual mode
1 2	Selects the setup procedure
SETUP PROCEDURE 12	
ENTER	Accesses setup mode A (or the next mode in sequence)

Whenever the next setup mode is required, press **ENTER** and resulting display will be shown.

For a **quick return to run mode from setup procedure**

ENTER, ENTER, etc. Advances through each of the six setup modes. Note, however, that the control requires waiting eight seconds in **mode C** and five seconds in **mode D**.


SETUP PROCEDURE 12	Resulting display
0 0	Selects “RETURN TO AUTOMATIC”
ENTER	Returns to the run mode




WARNING 3: Entangle and Crush Hazard —Moving parts can entangle and crush body parts

- Lock **out** and tag **out** power before servicing.

2.3. Step 2: Setting the Low Combustion Air Pressure Switch

Display or Action	Explanation
<div style="border: 1px solid black; padding: 2px;"> SETUP PROCEDURE 12 </div>	This step turns on the combustion air motor contactor. The main air pressure switch, modulating gas valve and the two main gas valves are disabled.
	Accesses setup mode A
<div style="border: 1px solid black; padding: 2px;"> SETUP MODE A SET COMBUSTION AIR </div>	


Note 1: If replacing the **low combustion air pressure switch**, set it at the highest setting before installing, then adjust as below.


1. Attach one end of the manometer (high pressure side of differential pressure gauge) to gauge point (B), near the **low combustion air pressure switch** (A, Figure 9). Connect other side to the **plenum reference point** (P).
2. Adjust the **plenum reference point needle valve** (G) until the manometer achieves the value shown in Table 2. If this value can't be obtained with the **plenum reference needle valve** wide open, then slowly open the **combustion air needle valve** (C), until the desired value is achieved.
3. Slowly rotate the low combustion air pressure switch dial until the  light is **on**.
4. Close the needle valve(s) fully.

2.4. Step 3: Setting the Main Air Pressure Switch

Note 2: Adjust the **main air pressure switch** very slowly, allowing time for pressure to drop.

Note 3: Verify that the damper is fully open during step.

Display or Action	Explanation
	Accesses setup mode B
<div style="border: 1px solid black; padding: 2px;"> SETUP MODE B SET COMBUSTION AIR </div>	

1. Connect one side of the manometer (low pressure side of differential pressure gauge) to the **main air gauge point** (M, Figure 9); leave the other side open to atmosphere.
2. Adjust the **main air needle valve** (H) to achieve the value shown in Table 2. Slowly turn the **low main air switch dial** (I, Figure 9) clockwise until the  status light is **on**. Next, slowly turn the pressure switch dial counterclockwise until the light goes **off**, then again turn slowly clockwise until light just comes **on**.
3. Close the needle valve fully.

2.5. Step 4A: Setting Pilot Gas Pressure

Display or Action



Explanation

Accesses setup mode C used to set pilot gas pressure. This mode turns on the **pilot gas valve**. After eight seconds, the dryer calls for fire.

```



SETUP MODE C
SET PILOT VALVE
    
```



WARNING 4: Explosion and Fire Hazard—Pilot gas pressure/pilot gas flame procedure has potential for gas release.

- Follow instructions carefully
1. Connect one side of manometer (high pressure side of differential pressure gauge) to the **pilot gas gauge point** (U, Figure 11) upstream of the **pilot gas valve**, leave the other side open to atmosphere.
 2. Back the **pilot gas valve set screw** out several turns (S, Figure 11). Stop when the screw is about 1/8th of an inch from the top of the valve. Do not back the needle valve completely out of the valve as this will allow gas to escape.
 3. Adjust pilot gas regulator (V, Figure 8) to achieve **pilot gas pressure** value listed on Table 2.

2.6. Step 4B: Setting Pilot Gas Flame

Note 4: If the flame control trips during the procedure, press flame control Reset, , and  to reset.

Note 5: Procedure “B” requires an analog or digital AC-DC multimeter.

Milnor provides two separate pilot gas flame setting procedures. Procedure A is preferred under normal circumstances. Use procedure B only if the machine is experiencing intermittent cycling problems due to gas pressure extinguishing the pilot flame.

Procedure A: Turn **pilot gas needle valve screw** to achieve pilot gas flame value listed on Table 2.

Procedure B: Shut off **manual test valve**. Remove Fireeye flame control cover. Set the test meter to the DC scale and insert the meter leads into the test jacks (Figure 7). The meter should read a steady 6 - 18 VDC after the pilot gas flame is established. Adjust the **pilot gas needle valve screw** to obtain the highest voltage.

2.7. Step 5 For Non-CSA Models: Setting Regulated Gas Pressure

Display or Action



Explanation

This mode turns on the **two main gas valves**. The **modulating gas valve** opens and modulates to position 100.

```
SETUP MODE D
CHECK REG. GAS PRESS
```

Note 6: Make adjustment quickly. Machine will reach the maximum permitted temperature quickly and shut-off the burner.

Note 7: If the **high gas pressure switch** trips during this procedure, then press and to clear the safety.

Note 8: If the **low gas pressure switch** trips during this procedure, press and to clear the safety.

1. Connect one side of manometer (high pressure side of differential pressure gauge) to **test point 1**; leave the other side open to atmosphere.
2. Open **manual test valve** (R), valve fully.
3. Adjust **main gas regulator** (W) to value listed in Table 2.

2.8. Step 5 For CSA models: Setting Regulated Gas Pressure—CSA models require the regulated gas pressure be set with the dryer firing, the damper position at 2 and the modulating valve at the 255 position. Since the modulating valve cannot be adjusted in the set-up mode, manually run any dry code that calls for fire and manually set the damper position and modulating valve. See “Setting Conditions” under “Adjustment Procedures for Landis and Gyr Equipped Dryers,” for additional information on running manual dry codes,

Note 9: Make adjustment quickly. Machine will reach the maximum permitted temperature quickly and shut-off the burner.

Note 10: If the **high gas pressure switch** trips during this procedure, then press and to clear the safety.

Note 11: If the **low gas pressure switch** trips during this procedure, press and to clear the safety.

1. Connect one side of manometer (high pressure side of differential pressure gauge) to **test point 1**; leave the other side open to atmosphere.
2. Open **manual test valve** (R), valve fully.
3. Adjust **main gas regulator** (W) to value listed in Table 2.

2.9. Step 6: Setting Burner Minimum Fire

Display or Action



Explanation

This mode sets the **modulating gas valve** to 000 and displays the inlet temperature (Fahrenheit shown).

```

SETUP MODE E 079F
MIN FIRE ROD GAS SW
    
```

Turn the **modulating gas valve minimum fire potentiometer** (AA, Figure 11) fully counterclockwise. Slowly turn clockwise until value calculated from data in Table 2 appears on control panel display. After making an adjustment, wait for the dryer display to settle.

2.10. Step 7: Setting High Gas Pressure Switch

Note 12: When the **high gas pressure switch** trips during this procedure, press and to clear the safety.

1. Attach one side of manometer (high pressure side of differential pressure gauge) to **test point 3** (Figure 3 or Figure 11); leave the other side open to atmosphere.
2. Start with the **manual test valve** open. Close this valve slowly until value shown in Table 2 is read on manometer. Turn **high gas pressure adjustment** switch dial until switch trips and the burner extinguishes. The status light illuminates briefly, then blinks. Open the manual test valve again. The machine will relight as soon as pressure is restored. Press and to extinguish the lamp. Verify the setting by opening the **manual test valve** fully, then close the valve while watching the manometer. The **high gas pressure** switch should trip when the set value is reached.

2.11. Step 8: Setting Low Gas Pressure Switch

1. Connect one side of manometer (high pressure side of differential pressure gauge) to **test point 2** (Figure 3 or Figure 11); leave the other side open to atmosphere.
2. Start with the **external gas shut-off valve** open. Close this valve slowly until value shown in Table 2 is read on manometer. Turn **low gas pressure switch dial** until switch trips and the burner extinguishes. The status light illuminates briefly then blinks. Open the **external gas shut-off valve** again. The machine will automatically re-light the burner. Press and to extinguish the lamp. Verify the setting by opening the **external gas shut-off valve** fully, then close the valve while watching the manometer. The **low gas pressure switch** should trip when the set value is reached.
3. Open **external gas shut-off valve** fully.

3. Adjustment Procedures for Landis and Gyr Equipped Dryers

3.1. Step 1 Setting Static Gas Pressure






WARNING [5]: Entangle and Crush Hazard —Moving parts can entangle and crush body parts

- Lock off and tag out power before servicing.

1. Turn machine **off**.
2. Attach one side of manometer (high pressure side of differential pressure gauge) to **static gas pressure gauge point (X)**; leave the other side open to atmosphere.

3. Open **external gas shut-off** valve.
4. Check the status of the following components
 - **External gas shut-off** valve is **open**.
 - **Manual test valve** and **modulating gas** valve are **closed**.
 - **Pilot** and **burner** are **not firing**.
 - **Combustion air blower** and **main blower** are **off**.
5. Adjust pressure of incoming gas (upstream from dryer) to achieve value listed in the Table 2. Incoming gas pressure must be at this value before further adjustments can be made. Pressures exceeding specified range will damage regulator.

3.2. Setting Conditions—Landis and Gyr equipped dryers must be adjusted with the dryer fired, the damper position at 2, and the **modulating gas** valve at 000. This is achieved by manually running any dry code that calls for fire, then manually setting the damper position and **modulating gas** valve as follows:

Display or Action	Explanation
WAITING FOR LOAD *****	The display after the power up sequence shows
MANUAL	Accesses manual load menu
SELECT DRY CODE 00 REDRY	
ENTER	Accepts the default dry code 00 and prompts for load size
ENTER LOAD SIZE 0 FULL LOAD	
ENTER	Accepts the default load size (full load) and prompts the operator to load dryer. Ignore this prompt.
LOAD DRYER WITH REDRY	
ENTER	Starts the cycle. When loading sequence ends, display appears as shown.
LOADING	
00F TIC TOC 000 VP xx xxxAxxx xxx xxx	The VP value alternates with an air value
After the burner fires	
MANUAL	Stops the timer and accesses the manual control panel for temperature, damper and basket rotation.
TICHTOC LDA MVP BSPD xxx+xxx x0x 0x xxxxx	
DAMPER + 	Sets damper position. Hold keys until damper position(D) = 2.
TICHTOC LDA MVP BSPD xxx+xxx x2x xxx 000	
 + 	Closes modulating gas valve (position). Hold keys until MVP = 000.
TICHTOC LDA MVP BSPD xxx+xxx x2x xxx xxxxx	
The dryer will continue to fire at minimum fire (MVP=000) until commanded to return to automatic. Perform the remaining adjustments herein. Upon completion,	
CANCEL	Returns to automatic.



3.3. Step 2 Setting the Low Combustion Air Pressure Switch






WARNING [6]: Crush and Entangle Hazard—Rotating machinery can entangle and crush body parts.

- Keep away from rotating belts and pulleys.

Note 13: If replacing the **low combustion air pressure** switch, set it at the highest setting before installing, then adjust as below.

Note 14: If the flame control trips during the following procedures, press  or Flame Control Reset, and  to reset.

1. Attach one end of the manometer (high pressure side of differential pressure gauge) to gauge point (B), near the **low combustion air pressure switch** (A, Figure 10). Connect the other side to the **plenum reference point** (P).
2. Adjust the **plenum reference point needle valve** (G) until the manometer achieves the value shown in Table 2. If this value can't be obtained with the **plenum reference needle valve** wide open, then slowly open the **combustion air needle valve** (C), until the desired value is achieved.
3. Slowly turn the **low combustion air pressure** switch dial clockwise until the  status light illuminates MOMENTARILY, the switch trips, and the burner extinguishes. Push  and  to reset.
4. Close the needle valve fully.




3.4. Step 3 Setting Main Air Pressure Switch



WARNING [7]: Crush and Entangle Hazard—Rotating machinery can entangle and crush body parts.

- Keep away from rotating belts and pulleys
- Ensure blower motor belt guard is in place at all times.

Note 15: Adjust the **main air pressure** switch very slowly, allowing time for air pressure to drop.

1. Connect one side of the manometer (low pressure side of differential pressure gauge) to the **main air gauge point** (M, Figure 10); leave the other side open to the atmosphere.
2. Verify that there is 0.8" of vacuum at the **main air pressure** switch. Make necessary adjustments to **main air blower** damper clevis arm and air cylinder stop nuts on top of dryer. Do not allow the clevis arm to strike the blower housing.
3. Adjust the **main air needle valve** (H, Figure 10) to achieve the value shown in Table 2. Slowly turn the **main air pressure** switch dial clockwise until the  status light illuminates MOMENTARILY, the switch trips, and the burner extinguishes. Push  and  to reset.
4. After setting switch, turn the **main air needle valve** fully counterclockwise to secure.

3.5. Step 4A Setting Pilot Gas Pressure



WARNING [8]: Explosion and Fire Hazard—Pilot Gas pressure/Pilot Gas flame procedure has potential for gas release.

- Follow instructions carefully.



1. Connect one side of manometer (high pressure side of differential pressure gauge) to **pilot gas test point** downstream (U, Figure 6) of the **pilot gas pressure setting valve** (S, Figure 6); leave the other side open to atmosphere.
2. Install handle on the **pilot gas pressure setting valve**(S, Figure 6). Open valve fully.



3. Adjust pilot gas regulator (V, Figure 5) to achieve **pilot gas pressure** value listed on Table 2. Remove handle after setting.

3.6. Step 4B Setting Pilot Gas Flame

1. Leave manometer connected to the **pilot gas test point**(U, Figure 6). Leave the other side open to the atmosphere.
2. Turn the handle on the **pilot gas pressure setting valve** (S, Figure 6) to obtain the value listed in Table 2. Pilot flame should be 4 - 5" long.

3.7. Step 5 Setting Regulated Gas Pressure

Note 16: If the **high gas pressure** switch trips during this procedure, turn the adjustment knob to the highest setting, then press  and .

Note 17: 2: If the **low gas pressure** switch trips during this procedure, turn the adjustment knob to the lowest setting, then press  and .


1. Open modulating gas valve position by holding keys until MVP=100.
2. Connect one side of manometer (high pressure side of differential pressure gauge) to **test point 2** (Figure 6); leave the other side open to atmosphere.
3. Open **manual test** valve (R, Figure 5 and Figure 6) fully.
4. Adjust **main gas regulator** (W, Figure 5) to achieve value listed in Table 2.

3.8. Step 6 Setting Burner Minimum Fire

1. Close modulating gas valve position by holding keys until MVP=000.
2. Calculate the desired minimum fire temperature using data from Table 2.
3. Turn the **modulating gas valve** minimum fire adjustment fully counterclockwise (AA, Figure 11). Slowly turn clockwise until value calculated from data shown in Table 2 appears on control panel display. After making an adjustment, wait for the display to settle.


3.9. Step 7 Setting High Gas Pressure Switch

Note 18: Set a replacement **high gas pressure switch** to the highest setting before installing, then adjust as below.

1. Attach one side of manometer (high pressure side of differential pressure gauge) to **test point 3** (Figure 6); leave the other side open to atmosphere.
2. Start with **manual test valve** (Figure 6) open. Slowly close this valve until value shown in Table 2 is read on manometer. Set the **high gas pressure switch** adjustment dial (K, Figure 5) to its highest value. Slowly turn the dial until the switch trips, The  status light illuminates MOMENTARILY, and the burner extinguishes. The flame control automatically resets and attempts to relight the burner. Verify the setting by opening the **manual test valve** fully, then closing the valve while watching the manometer. The **high gas pressure switch** should trip when the set value is reached.
3. Reopen **manual test valve** fully.

3.10. Step 8 Setting Low Gas Pressure Switch

Note 19: Set a replacement **low gas pressure switch** to the lowest value before installing, then adjust as below.

1. Connect one side of manometer (high pressure side of differential pressure gauge) to X (Figure 5); leave the other side open to atmosphere.
2. Start with the **external gas shut-off valve** open, and close it slowly until the value shown in Table 2 is read on the manometer. Set the **low gas pressure switch dial** to the highest value. Slowly turn dial until the switch trips,  status light illuminates **MOMENTARILY**, and the burner extinguishes. Verify the setting by opening the **external gas shut-off valve** fully, then closing the valve while watching the manometer. The **low gas pressure switch** should trip when the set value is reached.
3. Open **external gas shut-off valve FULLY**.

— End of BIPDJM01 —

Motor Maintenance



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

This document is for motors used on Milnor® machines that have grease fittings. If the motor manufacturer supplies maintenance instructions, use them. If not, use this document.

NOTICE P1: "Remove power from the machine" means use the necessary safety procedure for your location. In the USA, this is the OSHA lockout/tagout (LOTO) procedure. More local requirements can also apply.



WARNING 2: Risk of Severe Injury—A machine in operation without safety guards can pull in and mutilate your body.

- You must be an approved maintenance technician.
- Replace guards and covers that you remove for maintenance.



WARNING 3: Risk of Severe Injury—The machine has electrical power when the Master switch (M) on the control panel is off or on.

- Remove power from the machine (see Notice P1).

1. Necessary Maintenance

- 1.1. **Keep the motors clean.**—Examine and clean motors each 500 hours of operation or a minimum of each three months. Keep the motors free of dirt, oil, grease, and water. Contamination that prevents good airflow will cause too much heat and cause motor damage.
- 1.2. **Examine a motor that shows unusual symptoms.** —Examine a motor that becomes too hot, makes noise, makes smoke, smells unusual, or opens the circuit breaker frequently. Examine a motor if the inverter gives errors. Make sure that all electrical connections are tight. Make sure that the wire insulation is good. Use a low resistance ohmmeter. Disassemble the motor to clean it fully If necessary.
- 1.3. **Lubricate the motors.**—This document gives the lubricant frequency, quantity, type, and procedure. These are all important. See the related section in document BIIFUM02 which gives the calibration procedures for grease guns.

2. How to Find the Interval and Quantity of Grease to Add

frame code—codes for the standard motor dimensions used by motor manufacturers.

standard interval—the number of hours that a motor can operate in typical conditions before you must add grease.

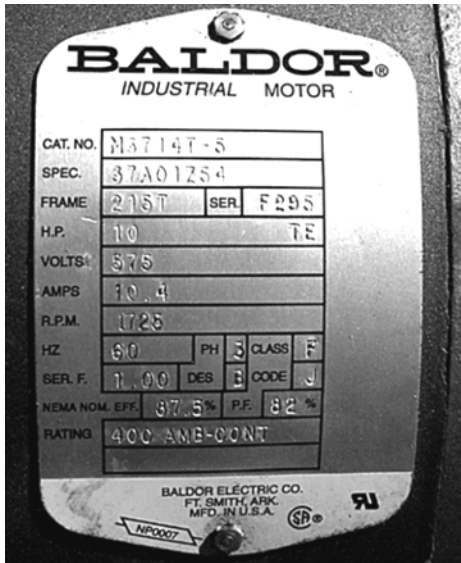
operation conditions—the conditions that can decrease the life of the motor and make it necessary to lubricate more frequently.

rating—One of three levels of operation conditions: typical, bad, very bad.

multiplication number—a decimal number given to the rating. Typical = 1.0, bad = 0.5, and very bad = 0.2.

This section gives the steps you use to find the interval and quantity of grease to add. The examples use the motor data plate shown in [Figure 1](#).

Figure 1: Typical Data Plate on a Motor



1. Find the frame code and RPM on the motor data plate. Example:

Frame code = 215T, RPM = 1725

2. Find the standard interval in [Table 1](#). Example:

Standard interval = 12,000 hours

3. Find the rating and multiplication number in [Table 2](#) for your worst operation condition. Example: ambient temperature = 102°F (39°C). Moderate contamination.

Rating = bad, Multiplication number = 0.5

4. Calculate the correct interval (the number of hours of operation before it is necessary to add grease). Example:

$$12,000 \times 0.5 = 6,000 \text{ hours}$$

Where:

12,000 is the standard interval

0.5 is the multiplication number for a rating = bad.

5. Find the quantity of grease for the frame code for your motor in [Table 3](#). You can use the bearing data in the table to do maintenance. Do not use this data to adjust the quantity of grease. Example:

grease volume = 0.16 ounces (4.7 grams)

grease gun cycles = 2.5

Table 1: Standard Interval

NEMA (IEC)** Range of Frame Codes	Interval in Hours for the Given RPM			
	3600 RPM*	1800 RPM*	1200 RPM*	900 RPM*
Up to 215 (132)	5500	12000	18000	22000
254 to 286 (160 - 180)	3600	9500	15000	18000
324 to 365 (200 - 225)	2200	7400	12000	15000
404 to 5000 (280 - 315) 6313 or 6314 bearings	2200	3500	7400	10500
	Roller bearings	1100	1750	3700

* Use this column if this is near or the same RPM as your motor.
 ** Frame codes given by the IEC are shown in parentheses.

Table 2: Operation Condition and Multiplication Number

Operation Conditions*			Rating	Multiplication Number
Maximum Ambient Temperature	Or Atmospheric Contamination	Or Bearing Type		
104°F (40°C)	Clean, not much corrosion	Ball bearing with a groove of large depth	Typical	1.0
122°F (50°C)	Moderate dirt, corrosion	Ball thrust, roller	Bad	0.5
>122°F (>50°C)	Much dirt, abrasive dust, corrosion	n.a.	Very bad	0.1

* The worst condition sets the rating.

Table 3: Grease Quantity (total quantity for all bearings in the motor)

NEMA (IEC) Range of Frame Codes	Largest Bearing Dimension in Range			Quantity of Grease *		Cycles of the Grease Gun
	Category of Bearing	Outer Diameter (mm)	Width (mm)	(Ounces)	(Grams)	
0 thru 215 (132)	6307	80	21	0.16	4.7	2.5
254 to 286 (160 - 180)	6311	120	29	0.32	9.1	5
324 to 365 (200 - 225)	6313	140	33	0.43	12.2	7
404 to 5000 (280 - 315)	NU322	240	50	1.11	31.5	18

* This is the quantity for the two bearings.

3. Grease Types and Procedures

Table 4: Type of Grease

Rating from Table 2	Type of Grease
Typical	Shell Dolium R, Chevron SRI, or equivalent
Bad	
Very Bad	Darmex 707 or equivalent



CAUTION [4]: Damage and Malfunction Risks—Too much grease gun pressure can put grease in the motor and cause electrical components to burn out. If grease touches a brake or a clutch surface, this can cause a malfunction.

- Apply grease carefully.

Apply grease as follows:

1. **Remove power from the machine (see Notice P1).**
2. Clean grease fittings.
3. If the motor has a grease outlet plug, remove it.
4. Add the recommended quantity of grease (See [Item 5](#)). Stop immediately if you see new grease around the motor shaft, wires or the grease outlet plug.
5. If the motor has a grease outlet plug, replace it.

— End of BIUUM03 —

GUIDE ROLLER REPLACEMENT

Guide Roller Installation

▲ WARNING ▲



CRUSHING AND ENTANGLEMENT HAZARD—Rotating machinery can entangle and crush body parts. Lock OFF and tag out power at the wall disconnect for the machine.

See “GUIDE ROLLER ASSEMBLY . . .” in this section for the following procedures:

1. Remove the front central access panel (FIGURE 1). Remove the guide roller cover (two screws).
2. Remove the four mounting bolts that secure the roller assembly to the basket housing and remove the roller assembly.
3. Remove the two rollers from the roller bracket. **Always replace both rollers.**
4. On each of the two new rollers, determine that the new snap ring is properly seated and the new bushing is installed on the roller shaft.
5. Install the two new rollers onto the roller bracket using the new locking washers and nuts. Tighten the nuts, and bend the locking washer tabs to secure the nuts.
6. Mount the guide roller assembly onto the basket housing using the four mounting bolts.

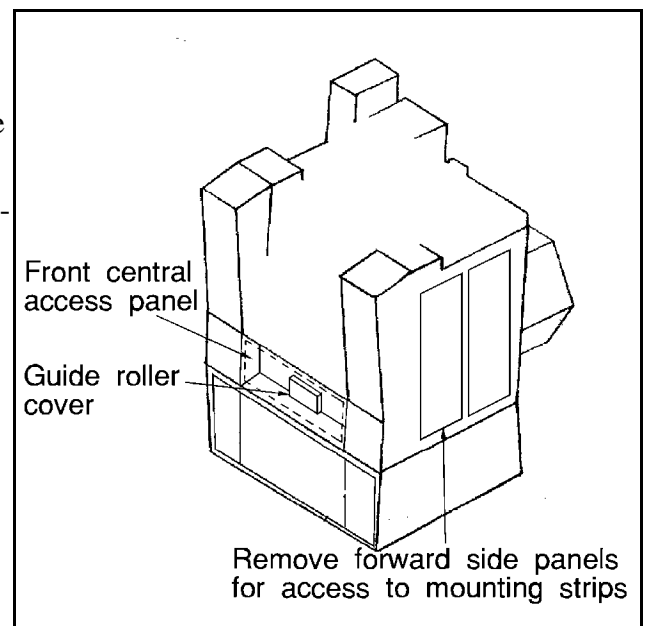


FIGURE 1 (MSSM0111AE)
Guide Roller Location

NOTE: The mounting bolts screw into two threaded mounting strips that may have fallen out of place when the roller bracket was removed. Remove the two forward panels on both sides of the machine and position these strips when re-installing the mounting bolts (FIGURE 1).

Guide Roller Adjustment

1. Vertically position the roller assembly so the exposed (forward) roller will ride completely within the surface area of the front ring on the basket (FIGURE 2).
2. Determine that the roller bracket is level with the basket housing, then tighten mounting bolts. Determine that the roller does not extend off of the basket ring.
3. With the unload door open, determine that the basket is recessed $\frac{1}{8}$ " (.31) or less within the rear of the basket housing. If necessary, turn the basket and adjust both of the positioning screws on the guide roller bracket. Ensure all lock nuts and screws are tight.

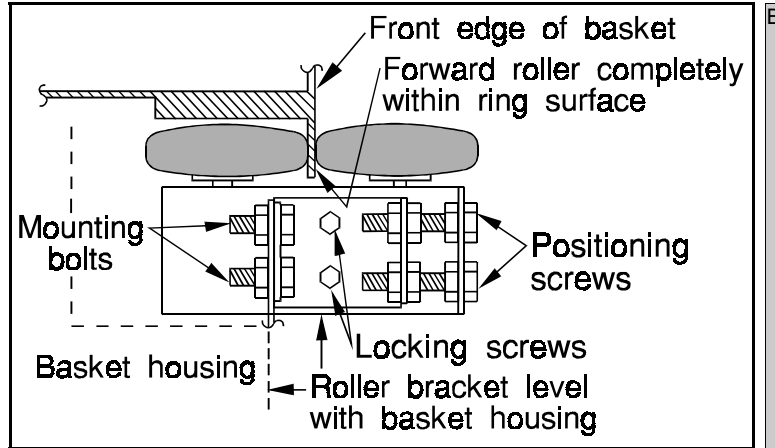


FIGURE 2 (MSSM0111AE)
**Correct Guide Roller Positioning
(Left Side View)**

NOTE: Insufficient dwell time between cylinder reversals causes the basket to “hop,” resulting in guide roller damage. Increase dwell time, (see “PROGRAMMING THE MARK II DRYER CONTROL” in the programming manual), if guide rollers need frequent replacement or basket “hopping” is observed.

HOW TO REPLACE THE T-SEAL

The T-Seal (used in Dryers and Conditioners) must be maintained in good working condition to maintain the proper direction of air flow and ensure drying efficiency. A drop in efficiency, particularly where outlet temperatures are prematurely achieved, is evidence of a leaking T-Seal. If this condition occurs, inspect the T-Seal tension bracket. If no tension exists, it is likely the T-Seal has broken and must be replaced. This procedure requires two people.

⚠ WARNING ⚠



CRUSHING AND ENTANGLEMENT HAZARD—Rotating machinery can entangle and crush body parts. Lock OFF and tag out power at the wall disconnect for the Dryer or Conditioner.

Removing the Old T-Seal

1. Remove the side access panels to gain access to the T-Seal and bracket. See FIGURE 1.
2. Release the tension on the bracket (if any tension exists) by loosening the hex nuts on the tension rod. See “T-SEAL ASSEMBLY . . .” in this section.
3. Disassemble the tension bracket from the T-Seal. See “T-SEAL ASSEMBLY . . .”
4. Thread a piece of strong, flexible wire through the holes in the end of the T-Seal, as shown in FIGURE 2, and remove the T-Seal from the J-ring by pulling the wire while another person hand turns the basket via the large cog belt pulley.

NOTE: Work the old T-Seal out gently while hand turning the basket to avoid breaking the T-Seal any more than it already is. **Never turn the basket under motor power.**

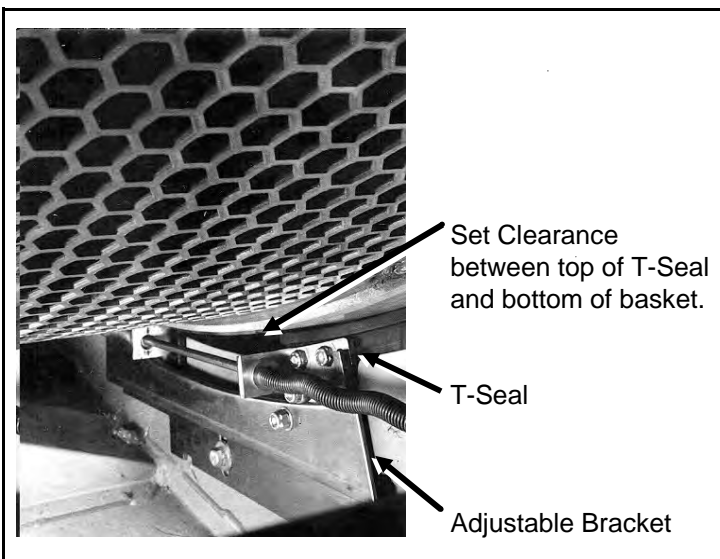


FIGURE 1 (MSSM0108AE)
T-Seal and Bracket in Place

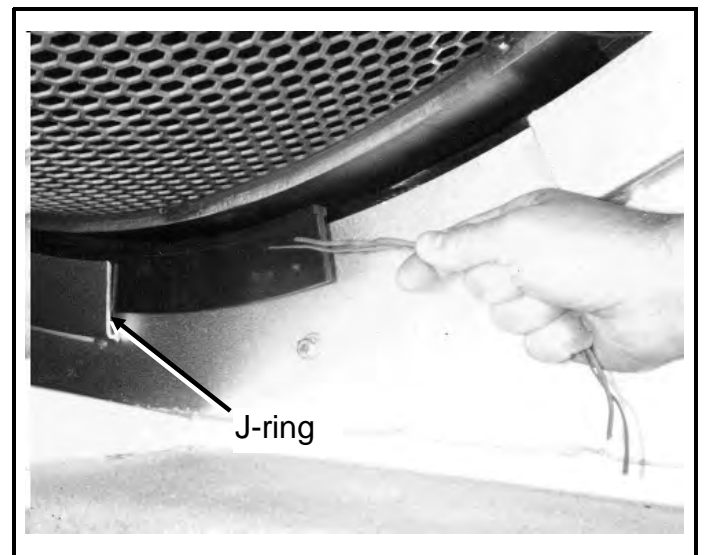


FIGURE 2 (MSSM0108AE)
Pulling Out Old T-Seal

Installing the New T-Seal

1. Check T-Seal mounting holes for fit and alignment. Studs should fit smoothly.
2. To minimize T-Seal stress and ease the threading process, place the new T-Seal atop the basket shroud. This will allow the new T-Seal to be fed easily down into the lower basket “J-ring” area.
3. Thread a piece of strong, flexible wire through two holes in the end of the T-Seal to be fed into the “J ring.” Feed this end of the T-Seal down the side of the basket. Feed the wire ends through holes in the perforated basket. Tie the wire ends together inside the basket, then start the T-Seal into the left J-ring.

NOTE: If the T-Seal becomes caught while installing, do not force the cog belt. Simply reverse the direction of the belt until the T-Seal is freed, then continue feeding the T-Seal through.

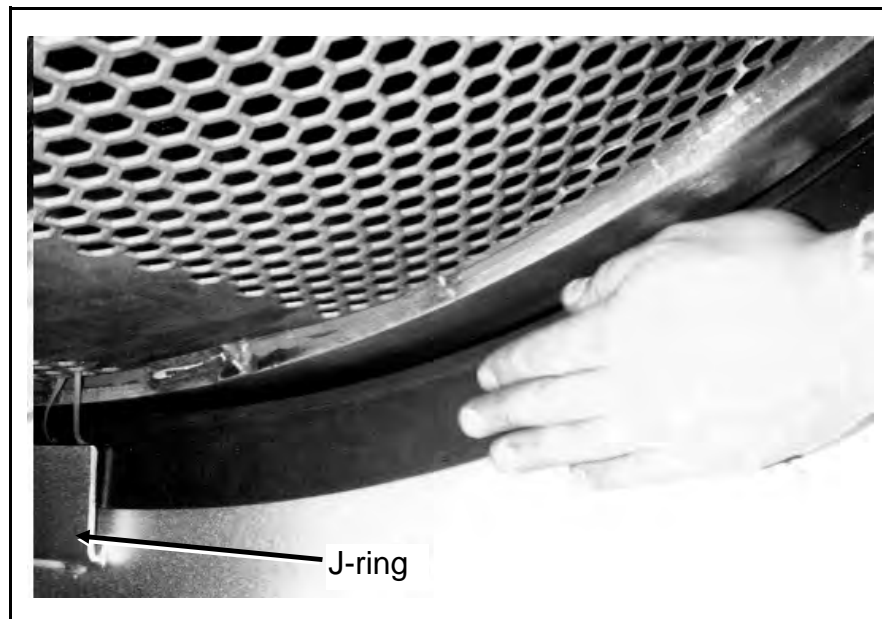


FIGURE 3 (MSSM0108AE)
Feeding New T-Seal into Retaining Channel

4. Referring to “T-SEAL ASSEMBLY . . .” reattach the left side stud and yoke assembly to the free end of the T-Seal. Also install the spring tension rod, the left side rod adjustment components, and hex nuts. Thread these hex nuts completely down the threaded portion of the spring tension rod.

NOTE: Step 4 could be done after the T-Seal has been completely fed through the J-ring channel, but it is easier to do while the end of the T-Seal is easily accessible.

5. With one person feeding the T-Seal into the J-ring and another person slowly hand turning the basket via the large cog belt, continue feeding the new T-Seal into the left J-ring as shown in FIGURE 3 until the entire T-Seal is fed through.
6. Remove the wire.
7. Install the remaining right side stud and yoke, then finish installing the right side tension rod components. Thread the right side hex nuts completely down the threaded portion of the spring tension rod.
8. Finish by installing the T-Seal retaining bracket, adjust the bracket for 1/8" - 3/16" (.31-.47 cm) clearance between the top edge of T-seal and the bottom of basket. See “T-SEAL ASSEMBLY . . .”

To verify that the T-Seal is properly installed, re-establish dryer or conditioner power and operate manually (as explained in the programming, operating and troubleshooting manual) to turn the cylinder clockwise and counterclockwise. Observe the T-Seal to be sure tension is maintained as the cylinder rotates. If any adjustments are required, **lock OFF and tag out power before proceeding.**

BIPD6M03 (Published) Book specs- Dates: 20100326 / 20100326 / 20100326 Lang: ENG01 Applic: PD6 PDJ PDP

Felt Seal Inspection and Maintenance

Milnor® 5040xxxx, 6458xxxx, and 7272xxxx dryers in current production use two felt seals and a Nomex® flap seal where the rotating basket front ring meets the stationary shell front. These seals help to retain heat and prevent goods from squeezing between the basket and the shell front.

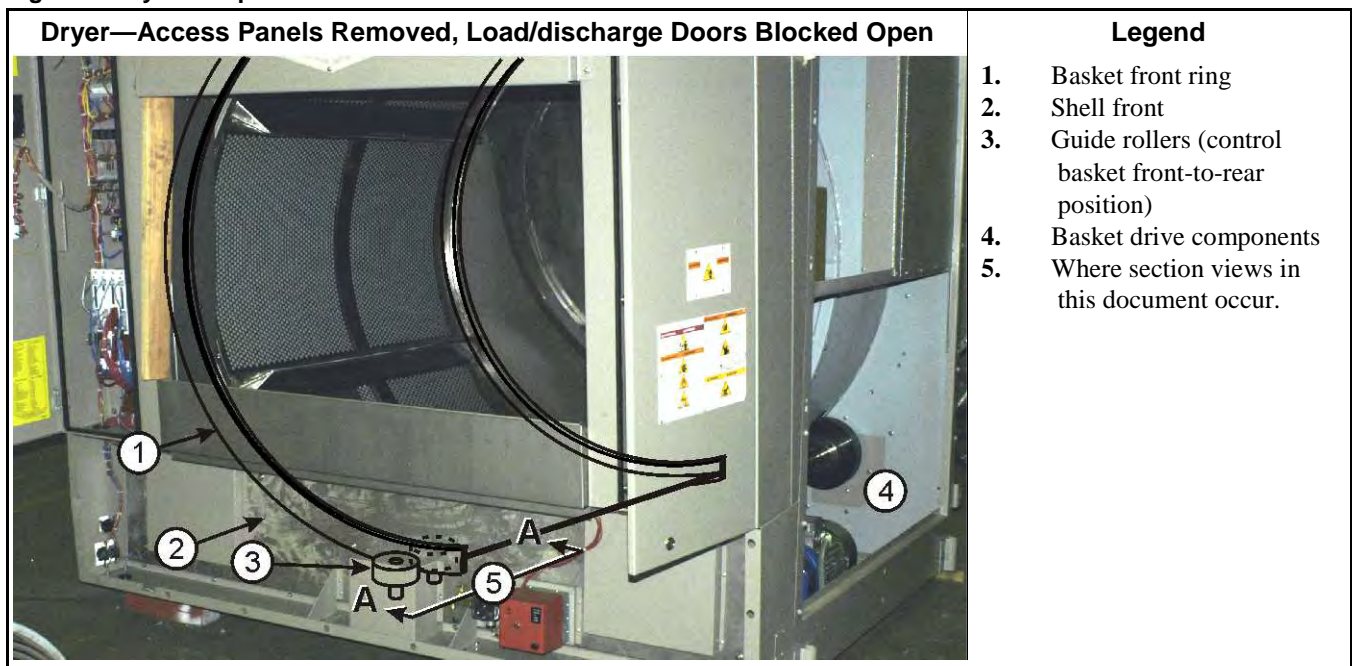


WARNING 1: Explosion hazard—If the basket seals deteriorate or spread apart, goods can become caught between the basket and shell front or get sucked into the blower wheel causing blower to fail and expel metal fragments at high speed. Bystanders can be struck.

- Ensure seals are functioning properly through regular inspection and maintenance.
- Do not indiscriminately change the basket tracking adjustment.

Various drawings showing the seals and how to work with them are provided. These drawings are longitudinal sections through the bottom of the basket, at the location indicated in [Figure 1](#).

Figure 1: Dryer Components Pertinent To This Work



1. Inspecting the Seals and Selecting Replacement Seals



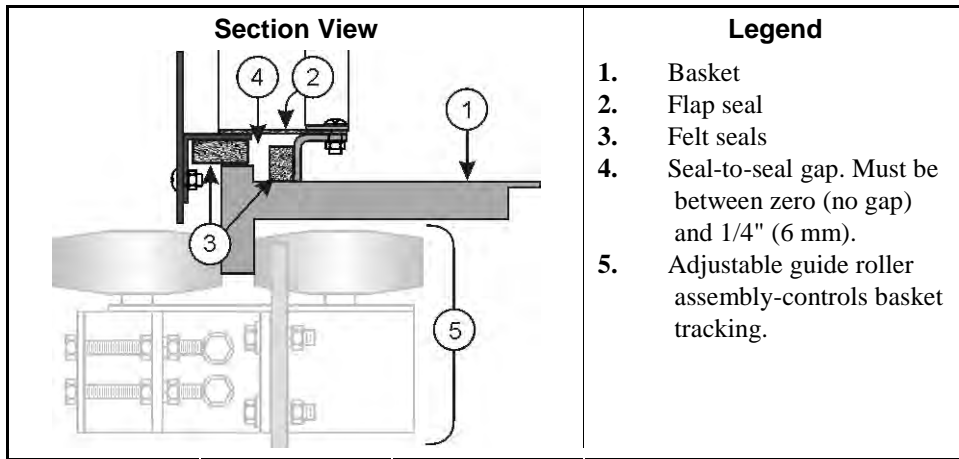
WARNING 2: Burn and Crush hazards—Hot goods and machine surfaces within a recently operated dryer can cause serious burns on contact. The turning basket or shifting goods can crush body parts. The machine can start unexpectedly if not externally disconnected from power. The weight of goods or a person can cause the basket to turn.

- Do not service machine unless qualified and authorized.
- Unload goods, lockout/tagout power at the external disconnect switch, block the doors open, mechanically restrain the drive chain to prevent basket rotation, ventilate and illuminate the dryer interior before entering the basket.
- Lockout/tagout power at the external disconnect before accessing guide rollers.
- Never place fingers in the basket-to-shell front gap. Use only tools.

1. With the dryer empty of goods, prepare for safe entry as follows:

- a. Use Manual mode to open both doors then use wood blocking to block the doors open.
 - b. Lockout/tagout power at the external disconnect switch.
 - c. Mechanically restrain the drive chain (as with wood blocking and c-clamps).
 - d. Ventilate and illuminate the basket interior as needed.
2. Once all appropriate precautions are observed (see [warning statement 2](#)), enter the basket.
 3. Referring to [Figure 2](#), lift the flap seal and inspect the felt seals.
 - If the seals are deteriorated, replace them as explained in [Section 2 “Seal Replacement”](#).
 - If the the seals are in good condition, but the seal-to-seal gap exceeds 1/4" (25 mm), add felt, as explained in [Section 3 “How To Close a Front Seal Gap”](#).
 - Otherwise, return the dryer to service.

Figure 2: Inspecting Seals



2. Seal Replacement

Refer to your "Cylinder Installation" parts document for seal and related component part identification. If you order the silicone rubber flap seal used on older models, you will receive the newer Nomex® seal, which should be used instead. 3M Rubber and Gasket Adhesive #1300, used to glue the felt seals in place is available from Milnor in one pint cans (Milnor P/N 20C044).

1. If replacing the front-most seal, fabricate the tools shown in [Figure 3](#) and [Figure 4](#).

Figure 3: Adhesive applicator—1" paint brush, bristles held at an angle with tape

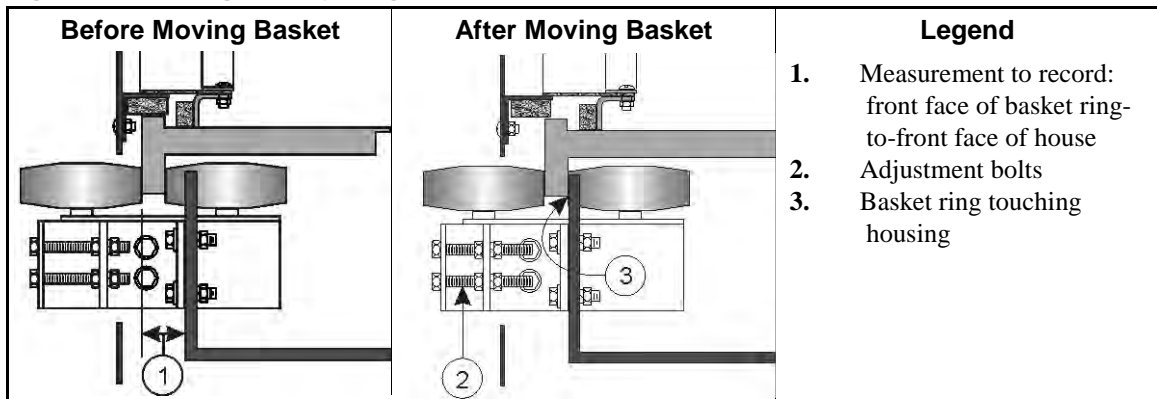


Figure 4: Seal installation tool—2" x 8" (5 x 20 cm) x 12 gauge steel plate, bent up on one end

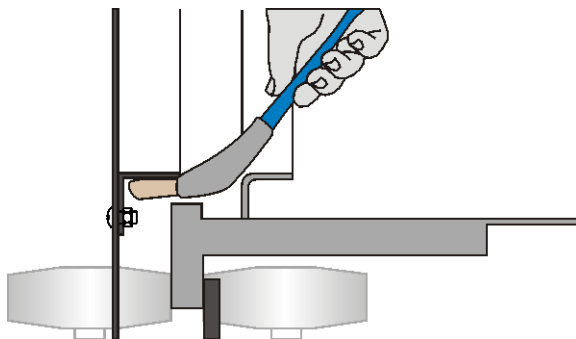
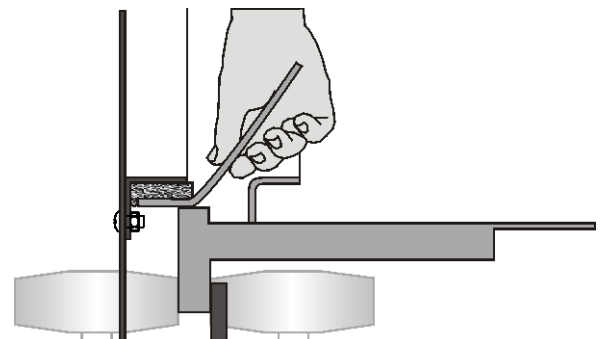


2. To provide more working room, widen the gap between the basket and shell front as follows:

- a. Remove covers as needed to gain access to the guide roller assembly (see [Figure 1](#)).
- b. Measure and record the face of house-to-face of basket dimension ([Figure 5](#), item 1).
When returning the dryer to operable condition, restore this dimension.
- c. Use the guide roller adjustment bolts ([Figure 5](#), item 2) to move the basket rearward until it is **lightly** touching the house (see [Figure 5](#), item 3).

Figure 5: Recording and Adjusting Basket Position (Section Views)

3. Prepare the dryer for safe entry, including lockout/tagout.
4. Once all appropriate precautions are observed, enter the basket.
5. Unbolt and remove the flap seal holder and the flap seal (see [Figure 2](#)).
6. Using blades that you can work into the recesses, scrape out one, or both felt seals, as needed. Clean out any remaining felt seal material and adhesive with solvent.
7. Cut length(s) of felt material long enough to fit around the circumference of the basket.
8. Apply 3M Rubber & Gasket Adhesive 1300 or similar to one side of felt and let dry.
9. Apply a coat of adhesive to a small section of mating surface on the machine. For the front-most seal, use the previously prepared brush as shown in [Figure 3](#) and [Figure 6](#).
10. Hold the seal in contact with the adhesive for about 30 seconds. For the front-most seal, use the installation tool as shown in [Figure 4](#) and [Figure 7](#).

Figure 6: Section View: Applying Adhesive**Figure 7: Section View: Setting Felt Seal**

11. Continue this process in small sections, until the seal is completely installed. Cut off excess material and butt the felt seal ends together.
12. When seal installation is complete, return the dryer to operable condition by reversing the actions taken in steps 5, 3, and 2. **Before re-installing the flap seal, make sure there are no sharp edges (glue or sharp metal) that could cut the flap seal as it rides against the ring. Use a sander to smooth these down as needed.**

3. How To Close a Front Seal Gap [Document BIPD6M04]

This instruction applies to Milnor dryer models 5040xxxx, 6458xxxx and 7272xxxx.

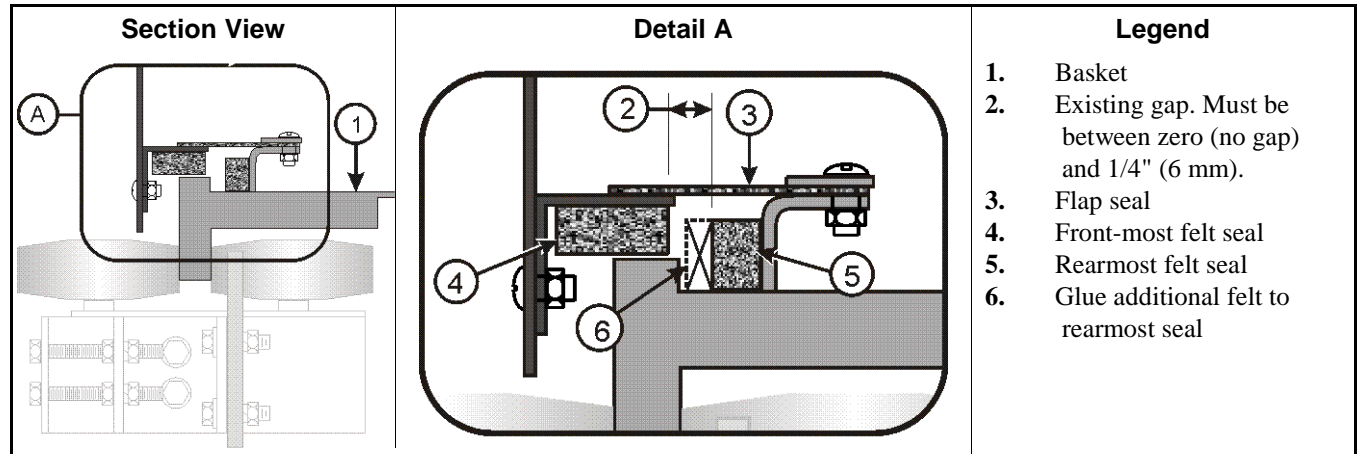
The gap between the two felt seals at the front of the basket must not exceed 1/4" (6 mm). These seals help to retain heat and prevent goods from squeezing between the basket and shell front. If this gap widens (due to wear or a change in basket position), it can be closed by gluing additional felt to the rearmost felt seal, as shown in Figure 8. It is not necessary to replace the existing seals unless they are deteriorated (see document BIPD6M03 "Felt Seal Inspection and Maintenance").

Table 1: Materials Available from Milnor for Closing Seal Gap

P/N	Description -- sizes in inch" and (mm)	Purpose
20C044	3M Rubber and Gasket Adhesive #1300 - pint	Glue seals
27A688	Felt, 1/8" (3) thick x 3/4" (19) *	Add to rearmost seal, if needed
27A689	Felt, 1/4" (6) thick x 3/4" (19) *	Add to rearmost seal, if needed
27A687	Felt, 1/2" (13) s 1 1/2" (38) *	Longer front-most seal, if needed

* Sold by the foot. Felt must fit around basket circumference. 50040 models = 14' (427 cm); 6458 models = 18' (549 cm); 7272 models = 20' (610 cm).

Figure 8: Adding Felt to Existing Seal



1. Prepare the dryer for safe entry including lockout/tagout.
2. Once all appropriate precautions are observed, enter the basket.
3. Lift the flap seal and measure the felt seal gap. If the gap is greater than 1/4" (6 mm), add thickness (see Table 1) to the rearmost felt seal as follows:
 - a. Cut length to fit around the circumference of the basket.
 - b. Apply adhesive (see Table 1) to one side and edge of felt and let dry.
 - c. Apply adhesive to a small section of the mating surfaces on the dryer.
 - d. Press the new material against the existing seal and basket. Hold for about 30 seconds.
 - e. Continue in small sections until the seal material is completely installed. Cut off excess material and butt the ends together.

— End of BIPD6M03 —

Cleaning the Burner Screen on Dryers and Conditioners

As a gas dryer operates, very small particles of lint get past the combustion air lint filter and screen, then accumulate on the burner diffuser screen and detrimentally affect the combustion air and gas ratio. This can result in frequent tripping of the combustion air switch. Periodically, we recommend vacuuming out the screen. Vacuum, rather than blow out the screen with compressed air. Blowing out the screen circulates lint throughout the machine, and can be a fire hazard.

The easiest way to gain access to the diffuser screen is to remove three of the four blower assembly fasteners and pivot the blower assembly about the fourth fastener, as explained below.



WARNING 1: Strike and Crush Hazards—A traveling machine such as a shuttle can strike, crush, or entrap you if you ride on it or enter its path. Traveling machines or their components can move automatically in any direction. Placing a system machine on line by energizing the machine control may immediately summon a shuttle or other traveling machine.

- Lock out and tag out power at the main machine disconnect before servicing, or in accordance with factory service procedures.

1. Moving the Blower Assembly to Expose the Diffuser Screen

Note 1: The following procedure requires two technicians

1. Locate the four bolts fastening the blower assembly to the blower box (Figure 1).
2. Slightly loosen, but do not remove, the inside bottom bolt (Figure 1). This bolt is used in the next step as a pivot for the blower assembly.
3. Have one technician support the blower motor assembly while the other technician removes the other three bolts. This prevents the assembly from inadvertently falling off after the bolts are removed. Dropping the assembly could damage it.
4. Carefully flip the blower assembly up and over to expose the burner diffuser screen. Use a wooden 2 X 4 or other temporary brace under the assembly for a support to take the strain off of the blower motor conduit (Figure 2).

Figure 1: Blower Assembly (Left side machine shown)

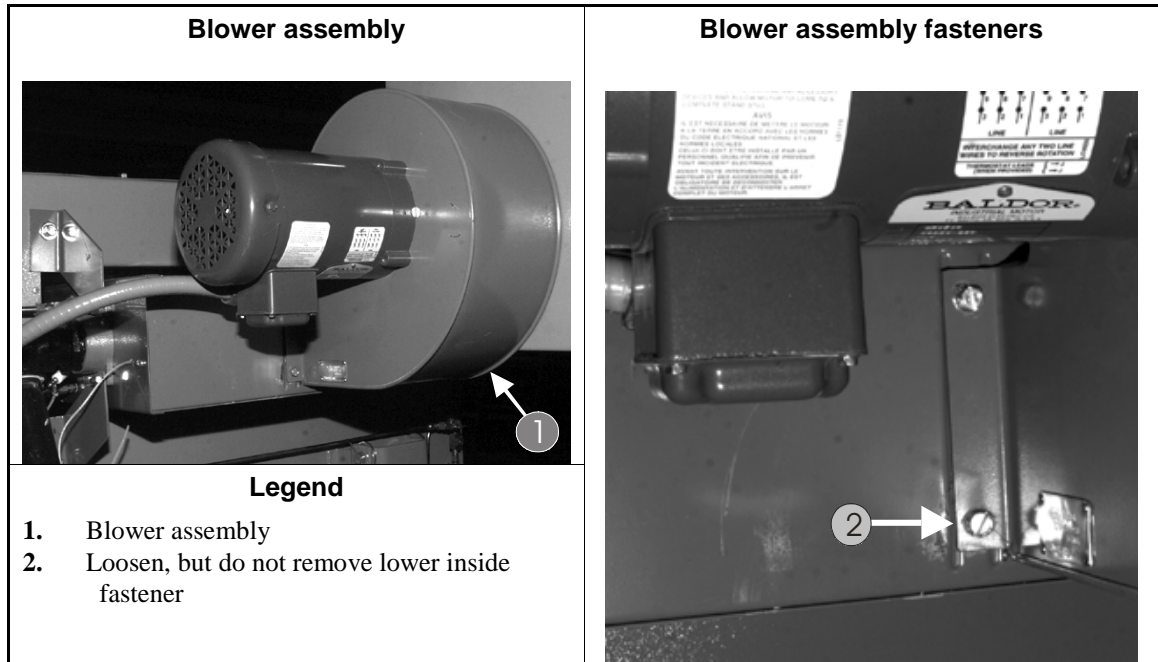
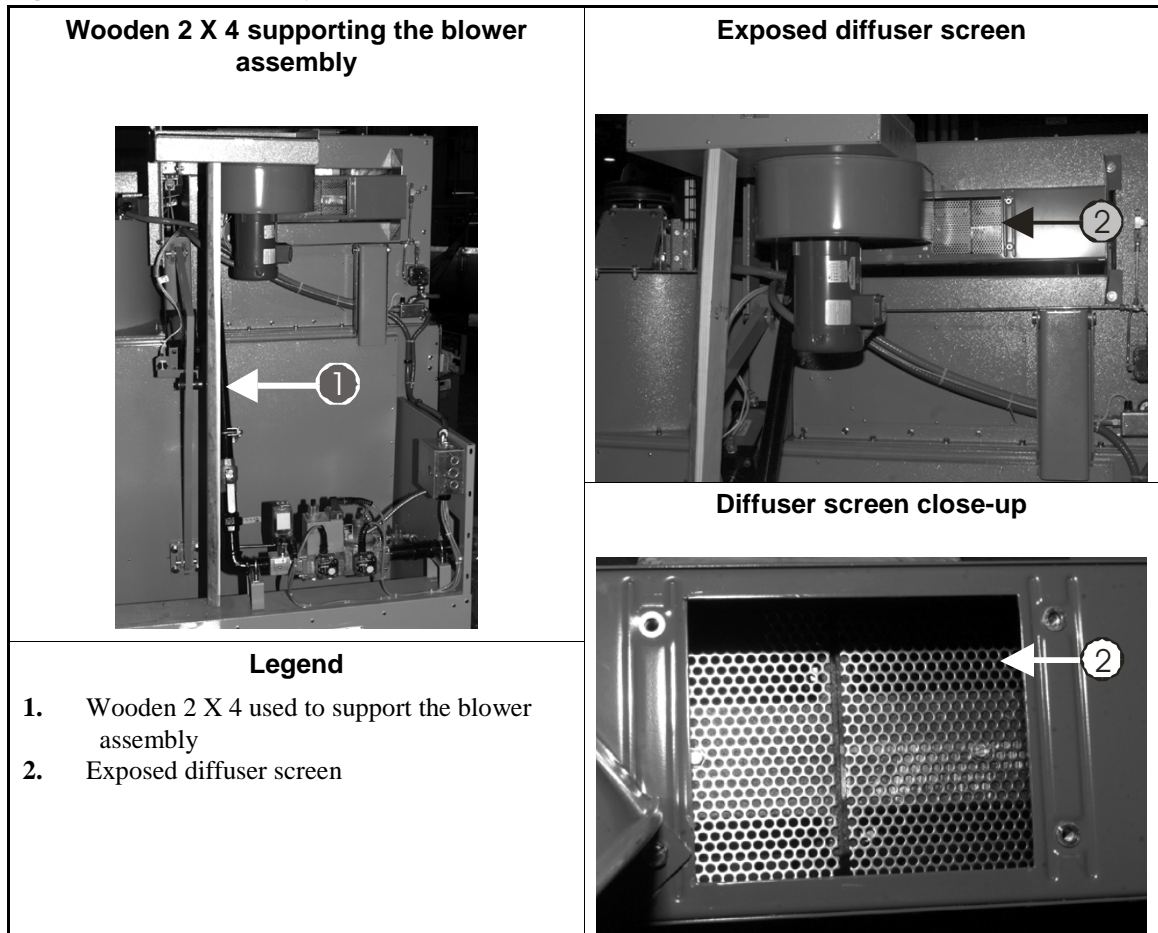


Figure 2: Blower Assembly Rotated to Inside



2. Vacuuming Out the Screen and Reinstalling the Blower Assembly

1. Insert a flexible vacuum hose into the open blower box and thoroughly vacuum out the diffuser screen.
2. After screen is clean, rotate blower assembly back into position and reinstall the fasteners.

— End of BIPDDM01 —

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
	<p>A. SAE Grades 1 and 2, ASTM A307, and stainless steel</p> <p>B. Grade BC, ASTM A354</p> <p>C. SAE Grade 5, ASTM A449</p> <p>D. SAE Grade 8 and ASTM A354 BD</p>

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

Dimension	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
	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	--	--

Torque Requirements for Fasteners

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

Dimension	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
	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
3/4 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

Dimension	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
	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

Dimension	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
	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
3/4 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)

LocTite Product	Dimension			
	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.

Torque Requirements for Fasteners

Table 6: Torque Values if You Apply LocTite 222

Dimension	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
	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

Dimension	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
	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

Dimension	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
	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)

Dimension	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
	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

Dimension	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
	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

Dimension	316 Stainless		18-8 Stainless		18-8 Stainless with Loctite 767	
	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

Dimension	316 Stainless		18-8 Stainless		18-8 Stainless with Loctite 767	
	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

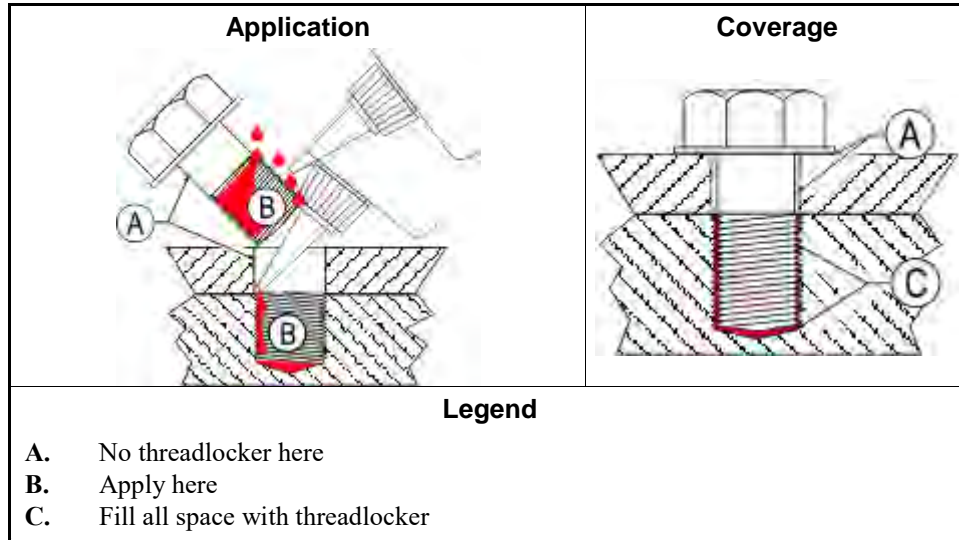


CAUTION 3: Malfunction Hazard—Heat, vibration, or mechanical shocks can let the fasteners loosen if you do not apply the threadlocker correctly. Loose fasteners can cause malfunctions of the equipment.

- 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



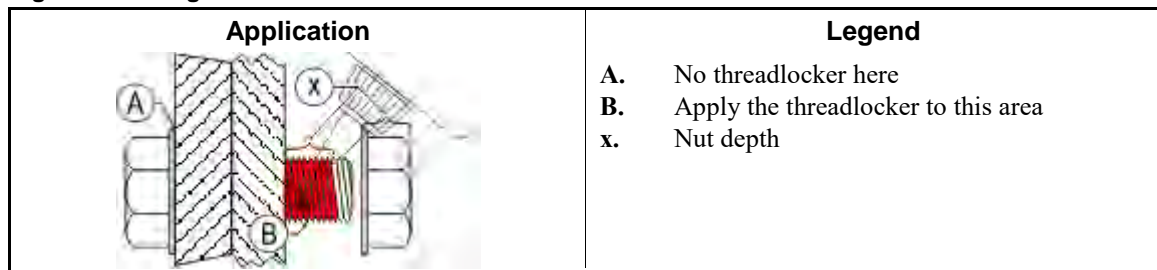
3.1. Blind Holes

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](#)).

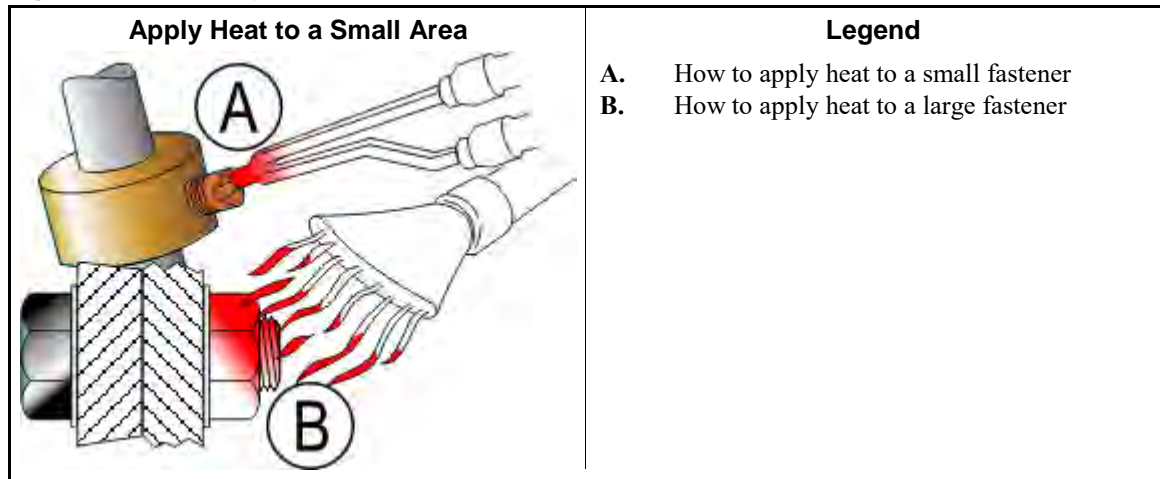
Figure 3: Through Hole



- 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



— End of BIUUM04 —

Covers, Safety, and Shipping Brackets

1

House, Base, & Covers
50040TS1,TT1,CS1,SA1,SB1

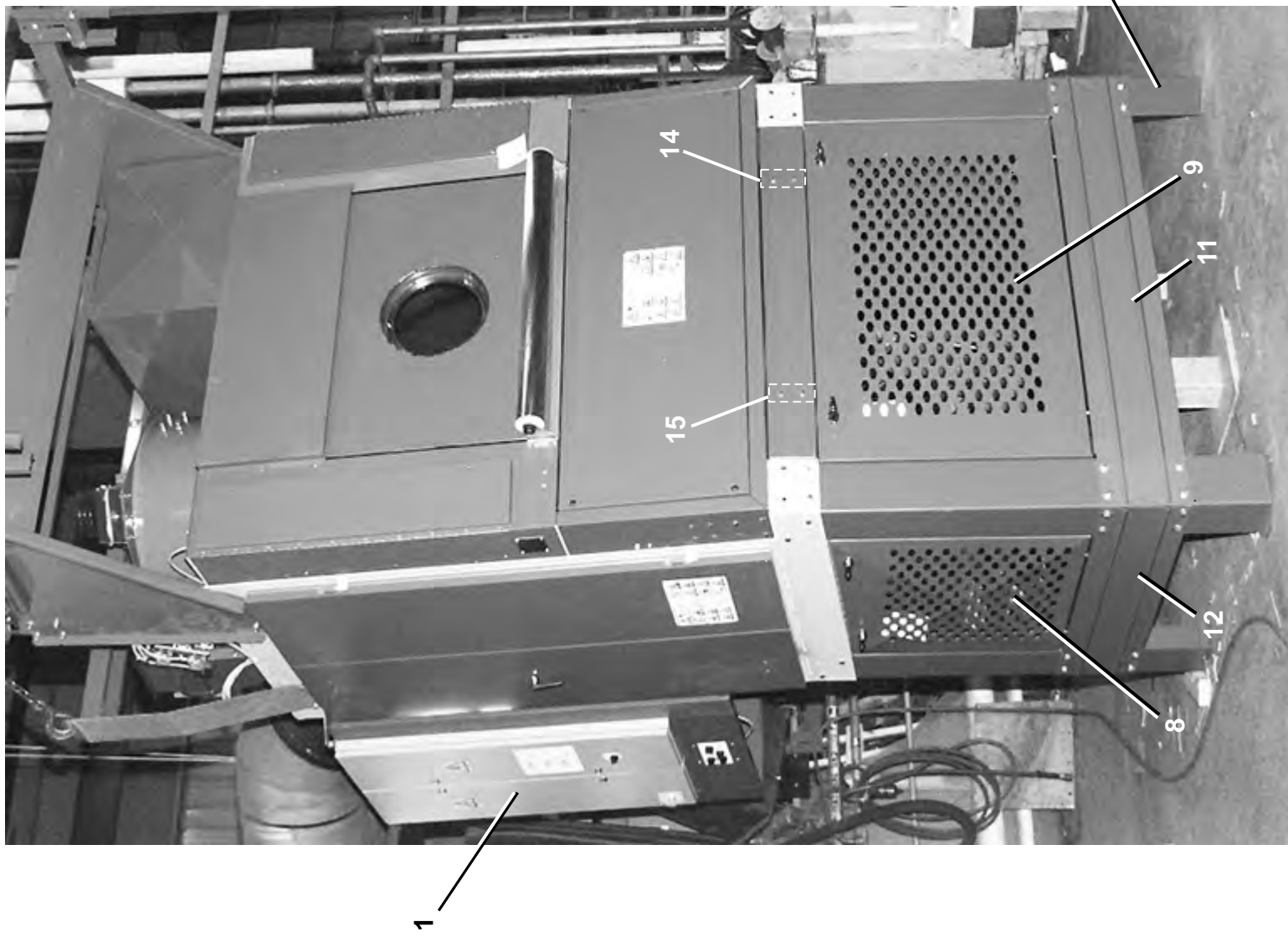
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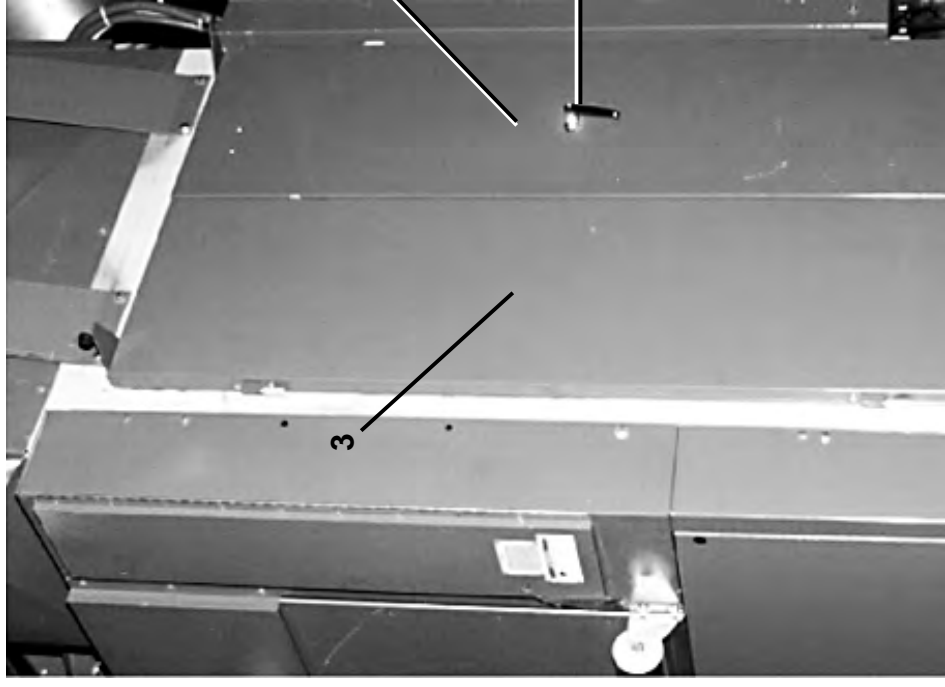
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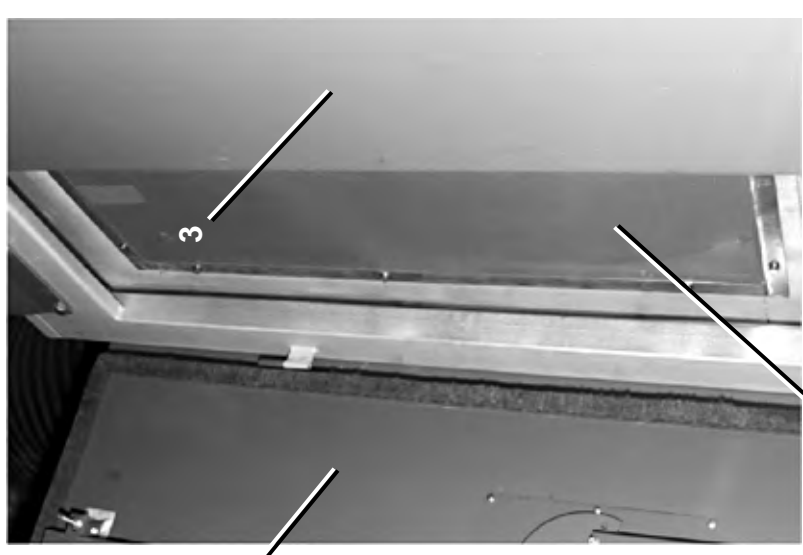
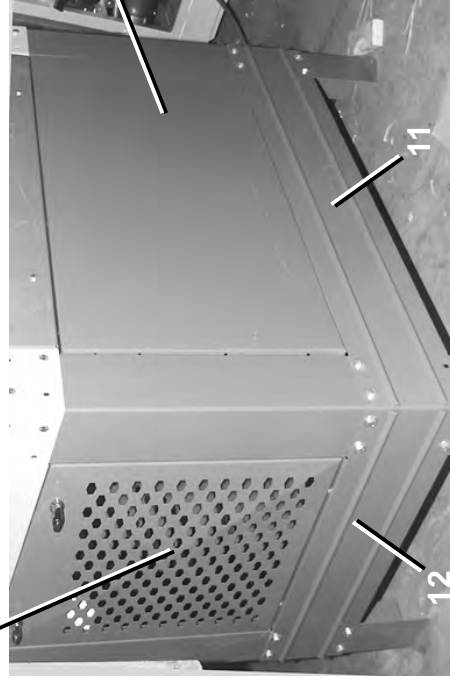
Litho in U.S.A.



ALL PEDESTAL LEGS 20-56



Right Side Doors



Left Side Doors

2 AUTOLINT SCREEN



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BMP970020/97267V (2 of 4)

Litho in U.S.A.

Used In	Item	Part Number	Description	Comments
			ASSEMBLIES-----	
A	G74SH001	93000Z*5040 SHELL HOUSE INSTALL9321		
B	A74SH002	94373D WLMT=5040 SHELL HOUSE W/LEGS		
			COMPONENTS-----	
all	1	G74SG001B	95000Z*5040 RR SHROUD INST/LF ELEC	
all	2	W7 40383	95367D*WLMT = LINT SCREEN FRAME	
all	3	A74GS003	93000Z*5040 SIDE DOOR W/O HANDLE	
all	4	A74GS002	93000Z*5040 SIDE DOOR W/HANDLE LEFT	
all	5	A74GS001	93000Z*5040 SIDE DOOR W/HANDLE RITE	
all	6	27A012ER	01Z "L"HANDLE W/LOCK CHROME PLT	
all	7	A74SD007	93000Z 5040 BASE COVER RIGHT SHORT	
all	7	A74SD004	93000Z*5040 BASE COVER RIGHT	
all	8	A74SD008	93000Z 5040 BASE COVER LEFT SHORT	
all	8	A74SD005	93000Z*5040 BASE COVER LEFT	
all	9	A74SD009	93000Z 5040 BASE COVER FRONT SHORT	
all	9	A74SD006	93000Z*5040 BASE COVER FRONT	
all	10	07 41159	94387D 50040 BASE COSM SMALL REAR	
all	10	07 41155	94391D 50040 BASE COSM LARGE REAR	
all	11	07 40821	94416D BASE LEG X-MBR - FRONT/REAR	
all	12	07 40822	94416D BASE LEG X-MBR - RIGHT/LEFT	
all	13	07 40823	94326C HOUSE BOT LEGBASE FILL FRONT	
all	14	07 40825	94326# HOUSE BTM LEGBASE GUSSET RT	
all	15	07 40826	94326C HOUSE BTM LEGBASE GUSSET LF	
all	16	07 40824	94391C HOUSE BOT LEGBASE FILL REAR	
all	20	07 40808	94476D LEG FRONT RIGHT W/NO EXT	
all	20	07 40808A	94476# LEG FRONT LEFT W/NO EXT	
all	20	07 40809	94383D LEG REAR RIGHT W/NO EXT	
all	20	07 40809A	94383# LEG REAR LEFT W/NO EXT	
all	21	07 40810	94476# LEG FRONT RIGHT 1.75 IN EXT	
all	21	07 40810A	94476# LEG FRONT LEFT 1.75 IN EXT	
all	21	07 40811	94383# LEG REAR RIGHT 1.75 IN EXT	
all	21	07 40811A	94383# LEG REAR LEFT 1.75 IN EXT	
all	22	07 40812	94476# LEG FRONT RIGHT 3.50 IN EXT	
all	22	07 40812A	94476# LEG FRONT LEFT 3.50 IN EXT	
all	22	07 40813	94383# LEG REAR RIGHT 3.50 IN EXT	

Parts List, cont.—House, Base, & Covers				
Used In	Item	Part Number	Description	Comments
all	22	07 40813A	94383# LEG REAR LEFT 3.50 IN EXT	
all	23	07 40814	94476# LEG FRONT RIGHT 5.25 IN EXT	
all	23	07 40814A	94476# LEG FRONT LEFT 5.25 IN EXT	
all	23	07 40815	94383# LEG REAR RIGHT 5.25 IN EXT	
all	23	07 40815A	94383# LEG REAR LEFT 5.25 IN EXT	
all	24	07 40816	94476# LEG FRONT RIGHT 7.00 IN EXT	
all	24	07 40816A	94476# LEG FRONT LEFT 7.00 IN EXT	
all	24	07 40817	94383# LEG REAR RIGHT 7.00 IN EXT	
all	24	07 40817A	94383# LEG REAR LEFT 7.00 IN EXT	
all	25	07 40818	94476# LEG FRONT RIGHT 8.75 IN EXT	
all	25	07 40818A	94476# LEG FRONT LEFT 8.75 IN EXT	
all	25	07 40819	94383# LEG REAR RIGHT 8.75 IN EXT	
all	25	07 40819A	94383# LEG REAR LEFT 8.75 IN EXT	
all	26	07 40827	94383D LEG FRONT RIGHT 10.50 IN EXT	
all	26	07 40827A	94383# LEG FRONT LEFT 10.50 IN EXT	
all	26	07 40828	94383D LEG REAR RIGHT 10.50 IN EXT	
all	26	07 40828A	94383# LEG REAR LEFT 10.50 IN EXT	
all	27	07 40829	94383# LEG FRONT RIGHT 12.25 IN EXT	
all	27	07 40829A	94383# LEG FRONT LEFT 12.25 IN EXT	
all	27	07 40830	94383# LEG REAR RIGHT 12.25 IN EXT	
all	27	07 40830A	94383# LEG REAR LEFT 12.25 IN EXT	
all	28	07 40831	94383# LEG FRONT RIGHT 14.00 IN EXT	
all	28	07 40831A	94383# LEG FRONT LEFT 14.00 IN EXT	
all	28	07 40832	94383# LEG REAR RIGHT 14.00 IN EXT	
all	28	07 40832A	94383# LEG REAR LEFT 14.00 IN EXT	
all	29	07 40833	94383# LEG FRONT RIGHT 15.75 IN EXT	
all	29	07 40833A	94383# LEG FRONT REAR 15.75 IN EXT	
all	29	07 40834	94383# LEG REAR RIGHT 15.75 IN EXT	
all	29	07 40834A	94383# LEG REAR LEFT 15.75 IN EXT	
all	30	07 40835	94383# LEG FRONT RIGHT 17.50 IN EXT	
all	30	07 40835A	94383# LEG FRONT LEFT 17.50 IN EXT	
all	30	07 40836	94383# LEG REAR RIGHT 17.50 IN EXT	
all	30	07 40836A	94383# LEG REAR LEFT 17.50 IN EXT	
all	31	07 40837	94383# LEG FRONT RIGHT 19.25 IN EXT	
all	31	07 40837A	94383# LEG FRONT LEFT 19.25 IN EXT	
all	31	07 40838	94383# LEG REAR RIGHT 19.25 IN EXT	
all	31	07 40838A	94383# LEG REAR LEFT 19.25 IN EXT	
all	32	07 40839	94383# LEG FRONT RIGHT 21.00 IN EXT	
all	32	07 40839A	94383# LEG FRONT LEFT 21.00 IN EXT	
all	32	07 40840	94383# LEG REAR RIGHT 21.00 IN EXT	
all	32	07 40840A	94383# LEG REAR LEFT 21.00 IN EXT	
all	33	07 40841	94383# LEG FRONT RIGHT 22.75 IN EXT	
all	33	07 40841A	94383# LEG FRONT LEFT 22.75 IN EXT	
all	33	07 40842	94383# LEG REAR RIGHT 22.75 IN EXT	



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Litho in U.S.A.

Parts List—House, Base, & Covers				Parts List, cont.—House, Base, & Covers			
Used In	Item	Part Number	Description	Used In	Item	Part Number	Description
all	33	07 40842A	94383# LEG REAR LEFT 22.75 IN EXT	all	44	07 40863A	94376# LEG FRONT LEFT 43.75 IN EXT
all	34	07 40843	94376# LEG FRONT RIGHT 26.25 IN EXT	all	44	07 40864	94422# LEG RIGHT REAR 43.75 IN EXT
all	34	07 40843A	94376# LEG FRONT LEFT 26.25 IN EXT	all	44	07 40864A	94422# LEG LEFT REAR 43.75 IN EXT
all	34	07 40844	94422# LEG RIGHT REAR 26.25 IN EXT	all	45	07 40865	94376# LEG FRONT RIGHT 45.50 IN EXT
all	34	07 40844A	94422# LEG LEFT REAR 26.25 IN EXT	all	45	07 40865A	94376# LEG FRONT LEFT 45.50 IN EXT
all	35	07 40845	94376# LEG FRONT RIGHT 28.00 IN EXT	all	45	07 40866	94422# LEG RIGHT REAR 45.50 IN EXT
all	35	07 40845A	94376# LEG FRONT LEFT 28.00 IN EXT	all	45	07 40866A	94422# LEG LEFT REAR 45.50 IN EXT
all	35	07 40846	94422# LEG RIGHT REAR 28.00 IN EXT	all	46	07 40869	95352ZLEG FRONT RIGHT 47.25 IN EXT
all	35	07 40846A	94422# LEG LEFT REAR 28.00 IN EXT	all	46	07 40869A	95352ZLEG FRONT LEFT 47.25 IN EXT
all	36	07 40847	94376# LEG FRONT RIGHT 29.75 IN EXT	all	46	07 40870	95352ZLEG RIGHT REAR 47.25 IN EXT
all	36	07 40847A	94376# LEG FRONT LEFT 29.75 IN EXT	all	46	07 40870A	95352ZLEG LEFT REAR 47.25 IN EXT
all	36	07 40848	94422# LEG RIGHT REAR 29.75 IN EXT	all	47	07 40871	95352ZLEG FRONT RIGHT 49.00 IN EXT
all	36	07 40848A	94422# LEG LEFT REAR 29.75 IN EXT	all	47	07 40871A	95352ZLEG FRONT LEFT 49.00 IN EXT
all	37	07 40849	94376# LEG FRONT RIGHT 31.50 IN EXT	all	47	07 40872	95352ZLEG RIGHT REAR 49.00 IN EXT
all	37	07 40849A	94376# LEG FRONT LEFT 31.50 IN EXT	all	47	07 40872A	95352ZLEG LEFT REAR 49.00 IN EXT
all	37	07 40850	94422# LEG RIGHT REAR 31.50 IN EXT	all	48	07 40873	95352ZLEG FRONT RIGHT 50.75 IN EXT
all	37	07 40850A	94422# LEG LEFT REAR 31.50 IN EXT	all	48	07 40873A	95352ZLEG FRONT LEFT 50.75 IN EXT
all	38	07 40851	94376# LEG FRONT RIGHT 33.25 IN EXT	all	48	07 40874	95352ZLEG RIGHT REAR 50.75 IN EXT
all	38	07 40851A	94376# LEG FRONT LEFT 33.25 IN EXT	all	48	07 40874A	95352ZLEG LEFT REAR 50.75 IN EXT
all	38	07 40852	94422# LEG RIGHT REAR 33.25 IN EXT	all	49	07 40875	95352ZLEG FRONT RIGHT 52.50 IN EXT
all	38	07 40852A	94422# LEG LEFT REAR 33.25 IN EXT	all	49	07 40875A	95352ZLEG FRONT LEFT 52.50 IN EXT
all	39	07 40853	94376# LEG FRONT RIGHT 35.00 IN EXT	all	49	07 40876	95352ZLEG RIGHT REAR 52.50 IN EXT
all	39	07 40853A	94376# LEG FRONT LEFT 35.00 IN EXT	all	49	07 40876A	95352ZLEG LEFT REAR 52.50 IN EXT
all	39	07 40854	94422# LEG RIGHT REAR 35.00 IN EXT	all	50	07 40877	95352ZLEG FRONT RIGHT 54.25 IN EXT
all	39	07 40854A	94422# LEG LEFT REAR 35.00 IN EXT	all	50	07 40877A	95352ZLEG FRONT LEFT 54.25 IN EXT
all	40	07 40855	94376# LEG FRONT RIGHT 36.75 IN EXT	all	50	07 40878	95352ZLEG RIGHT REAR 54.25 IN EXT
all	40	07 40855A	94376# LEG FRONT LEFT 36.75 IN EXT	all	50	07 40878A	95352ZLEG LEFT REAR 54.25 IN EXT
all	40	07 40856	94422# LEG RIGHT REAR 36.75 IN EXT	all	51	07 40879	95352ZLEG FRONT RIGHT 56.00 IN EXT
all	40	07 40856A	94422# LEG LEFT REAR 36.75 IN EXT	all	51	07 40879A	95352ZLEG FRONT LEFT 56.00 IN EXT
all	41	07 40857	94376# LEG FRONT RIGHT 38.50 IN EXT	all	51	07 40880	95352ZLEG RIGHT REAR 56.00 IN EXT
all	41	07 40857A	94376# LEG FRONT LEFT 38.50 IN EXT	all	51	07 40880A	95352ZLEG LEFT REAR 56.00 IN EXT
all	41	07 40858	94422# LEG RIGHT REAR 38.50 IN EXT	all	52	07 40881	95352ZLEG FRONT RIGHT 57.75 IN EXT
all	41	07 40858A	94422# LEG LEFT REAR 38.50 IN EXT	all	52	07 40881A	95352ZLEG FRONT LEFT 57.75 IN EXT
all	42	07 40859	94376# LEG FRONT RIGHT 40.25 IN EXT	all	52	07 40882	95352ZLEG RIGHT REAR 57.75 IN EXT
all	42	07 40859A	94376# LEG FRONT LEFT 40.25 IN EXT	all	52	07 40882A	95352ZLEG LEFT REAR 57.75 IN EXT
all	42	07 40860	94422# LEG RIGHT REAR 40.25 IN EXT	all	53	07 40883	95352ZLEG FRONT RIGHT 59.50 IN EXT
all	42	07 40860A	94422# LEG LEFT REAR 40.25 IN EXT	all	53	07 40883A	95352ZLEG FRONT LEFT 59.50 IN EXT
all	43	07 40861	94376# LEG FRONT RIGHT 42.00 IN EXT	all	53	07 40884	95352ZLEG RIGHT REAR 59.50 IN EXT
all	43	07 40861A	94376# LEG FRONT LEFT 42.00 IN EXT	all	53	07 40884A	95352ZLEG LEFT REAR 59.50 IN EXT
all	43	07 40862	94422# LEG RIGHT REAR 42.00 IN EXT	all	54	07 40885	95352ZLEG FRONT RIGHT 61.25 IN EXT
all	43	07 40862A	94422# LEG LEFT REAR 42.00 IN EXT	all	54	07 40885A	95352ZLEG FRONT LEFT 61.25 IN EXT
all	44	07 40863	94376# LEG FRONT RIGHT 43.75 IN EXT	all	54	07 40886	95352ZLEG RIGHT REAR 61.25 IN EXT
all	44	07 40863	94376# LEG FRONT LEFT 43.75 IN EXT	all	54	07 40886A	95352ZLEG LEFT REAR 61.25 IN EXT
all	44	07 40863	94376# LEG FRONT RIGHT 43.75 IN EXT	all	55	07 40887	95352ZLEG FRONT RIGHT 63.00 IN EXT

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.



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Litho in U.S.A.

Parts List—House, Base, & Covers

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	55	07 40887A	95352ZLEG FRONT LEFT 63.00 IN EXT	
all	55	07 40888	95352ZLEG RIGHT REAR 63.00 IN EXT	
all	55	07 40888A	95352ZLEG LEFT REAR 63.00 IN EXT	
all	56	07 40889	95352ZLEG FRONT RIGHT 66.50 IN EXT	
all	56	07 40889A	95352ZLEG FRONT LEFT 66.50 IN EXT	
all	56	07 40890	95352ZLEG RIGHT REAR 66.50 IN EXT	
all	56	07 40890A	95352ZLEG LEFT REAR 66.50 IN EXT	

Shipping Brackets

50040TS1,TT1,CS1,SA1,SB1

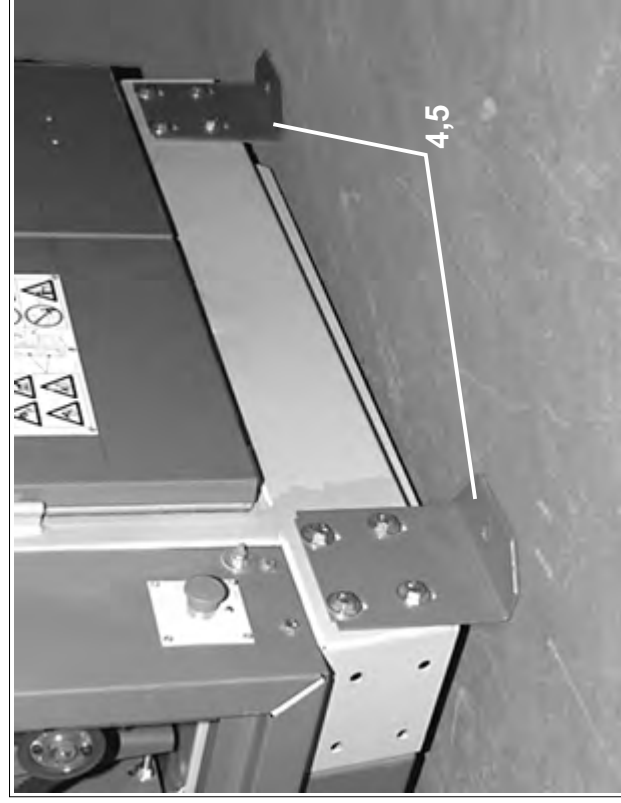
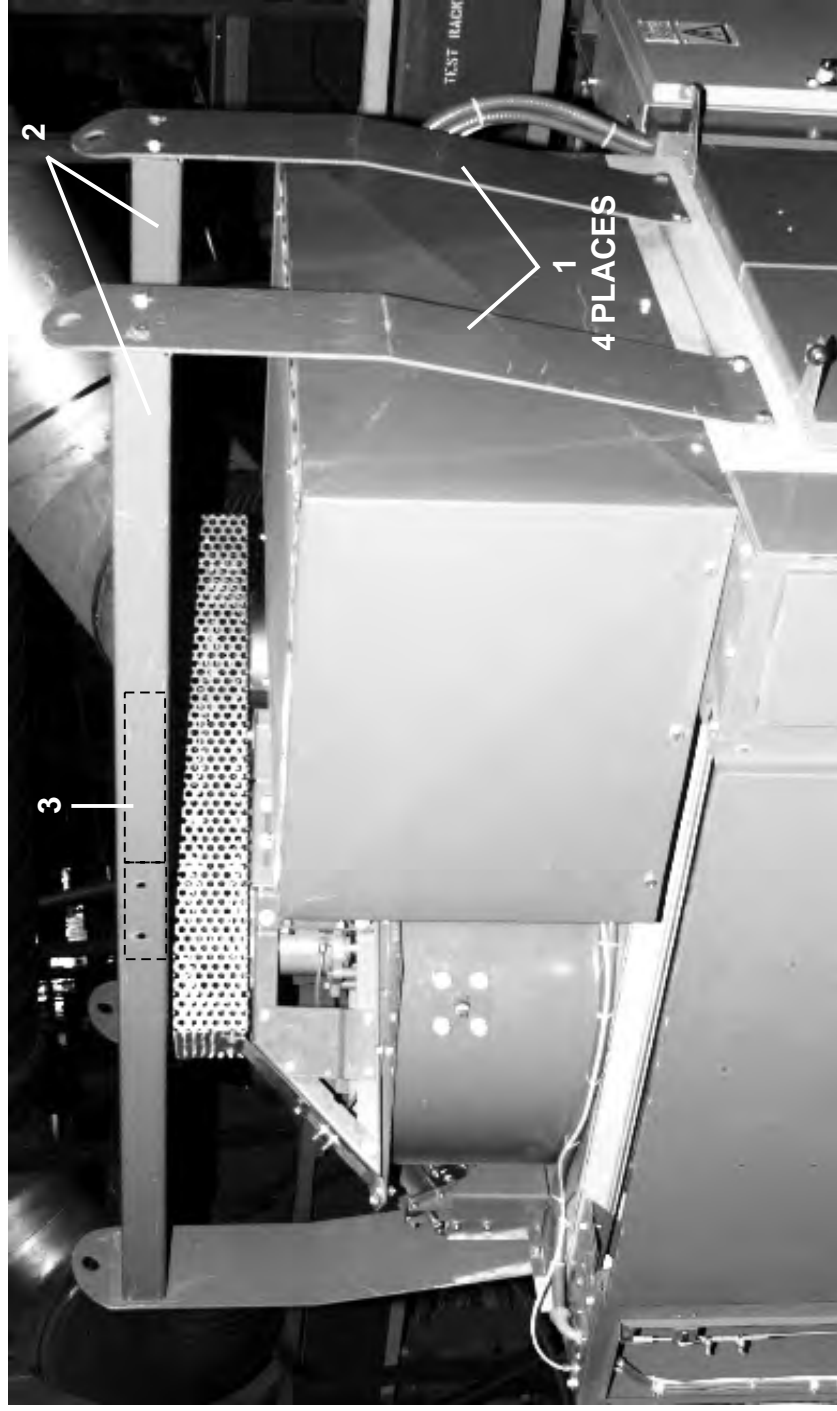
BMP970084/97467V
(Sheet 1 of 1)



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BMP970084/97467V (1 of 1)

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SHIPPING LEGS FOR UPPER HOUSE

Parts List—Shipping Brackets
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	1	07 40365	93000Z 5040 LIFT BRKT VERTICAL	
all	2	07 40367	93000Z 5040 LIFT BRKT SPREADER LONG	
all	3	07 40366	93000Z 5040 LIFT BRKT SPREADER SHORT	
all	4	07 41156	94293C REMOVABLE SHIP LEG - RT	
all	5	07 41156A	94293# REMOVABLE SHIP LEG - LF	

Drive Assemblies

2

Drive Chart

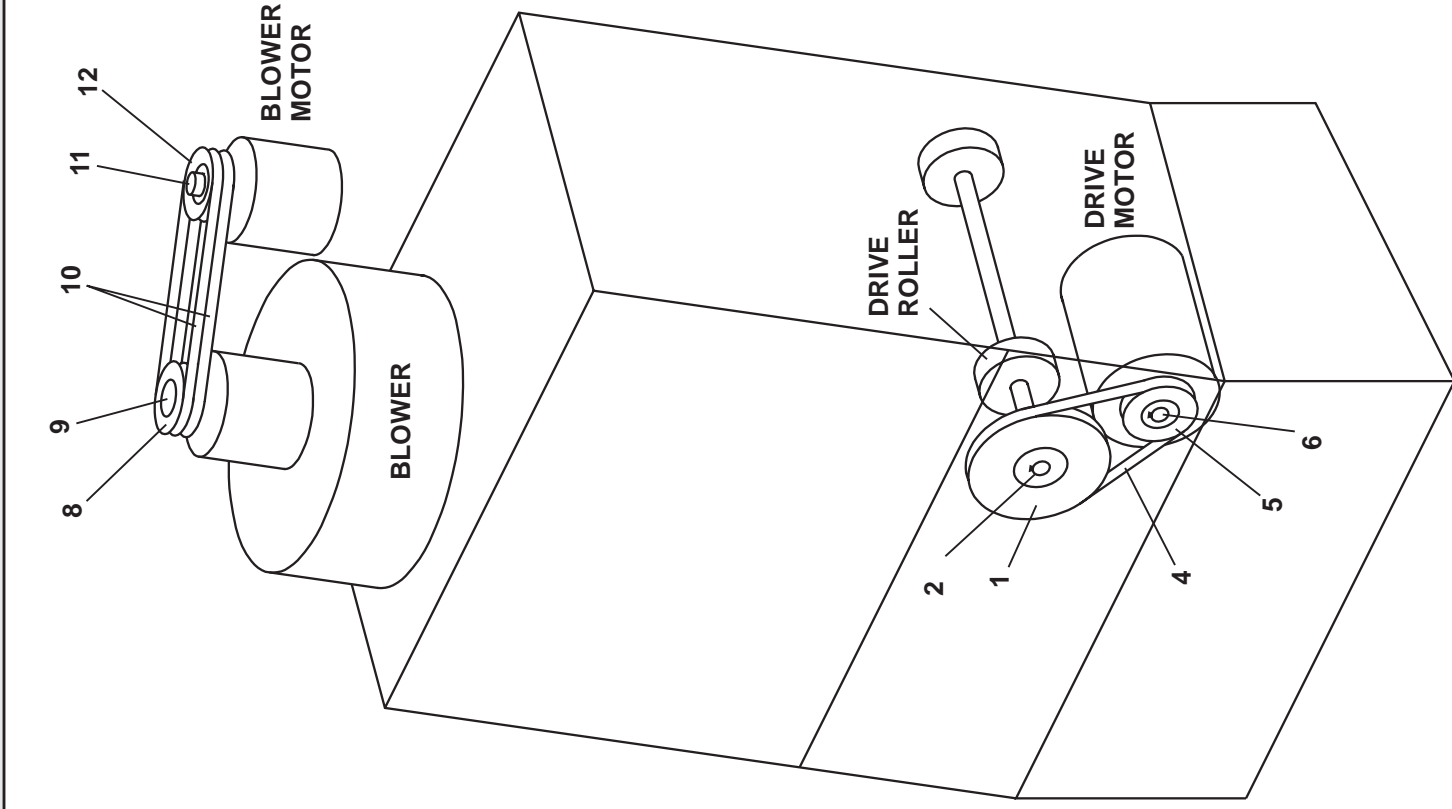
50040TS1,TT1,CS1,SA1,SB1



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BMP970025/2006143B
(Sheet 1 of 1)

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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		D74 00150	95452Z DRIVE CHART 5040 DRYER 50CYC	
B		D74 00160	95452Z DRIVE CHART 5040 DRYER 60CYC	
			-----COMPONENTS-----	
all	1	54WH020048	PULLEY SYNCH #P1128M30-SK	
all	2	56Q1GSK	1+3/8" BUSH VPUL QD TYPE SK	
all	4	54C284	SYNC-BELT RPP TYPE#12008M30R	
all	5	54WH020047	PULLEY SYNCHRONOUS #P328M30-QT	
all	5	54WH020046	PULLEY SYNCH #P268M30 MPB BTS	
all	6	56Q1CH	1+1/8" BUSH VPUL TYP H,D,OR QT	
all	6	56Q1CJA	1+1/8" BUSHING VPUL QD TYPE "JA"	
all	8	56Q1GH	1+3/8" BUSH VPUL TYPE H,D,ORQT	
all	9	56060B2SDS	VPUL 2B6.0/A5.6 (SDS) TYPE QD	
all	9	56056B2H	VPUL 2B5.6/A5.2 2BK62H R EQUAL	
all	10	56VB058X	VBELT BX58 DAYCO RAWEDGE COG	
all	11	56Q1GSDS	1+3/8" BUSH VPUL QD TYPE SDS	
all	11	56Q1GH	1+3/8" BUSH VPUL TYPE H,D,ORQT	
all	12	56064B2H	VPUL 2B6.4/A6.0 2BK70H DYNBAL	

Cylinder Installation
50040TS1,TT1,CS1,SA1,SB1

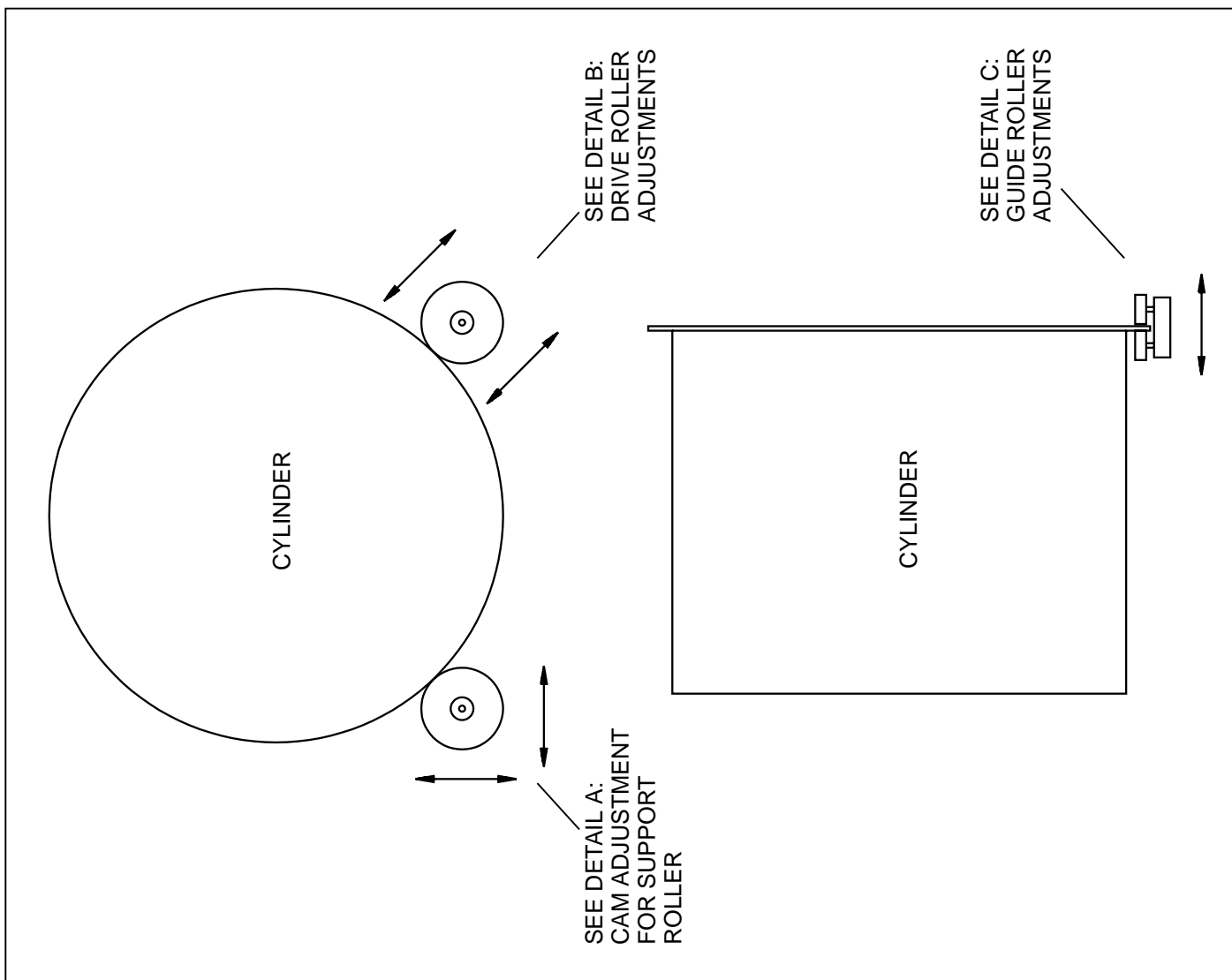
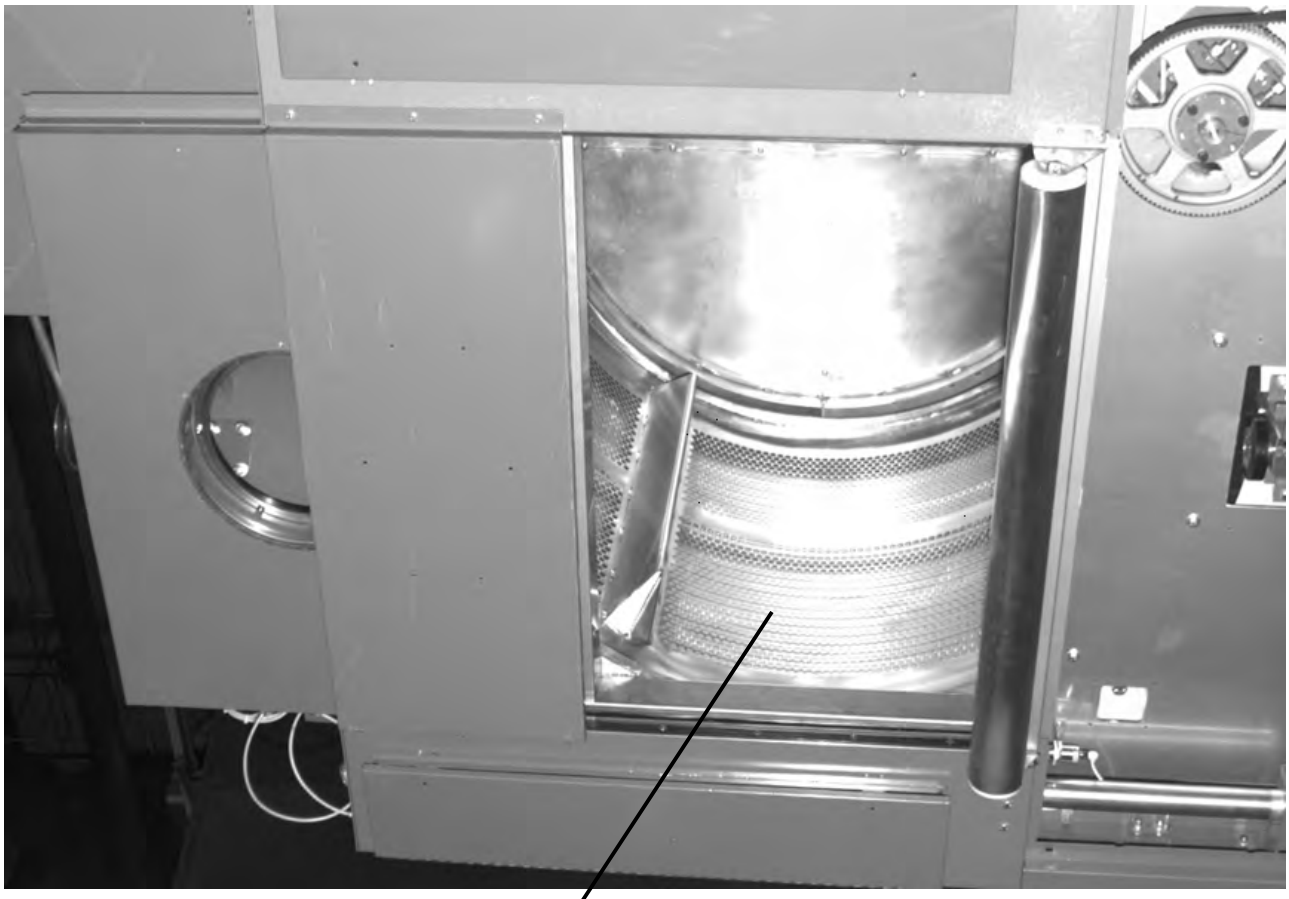
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CYLINDER ALIGNMENT ADJUSTMENTS

Cylinder Installation

50040TS1, TT1, CS1, SA1, SB1

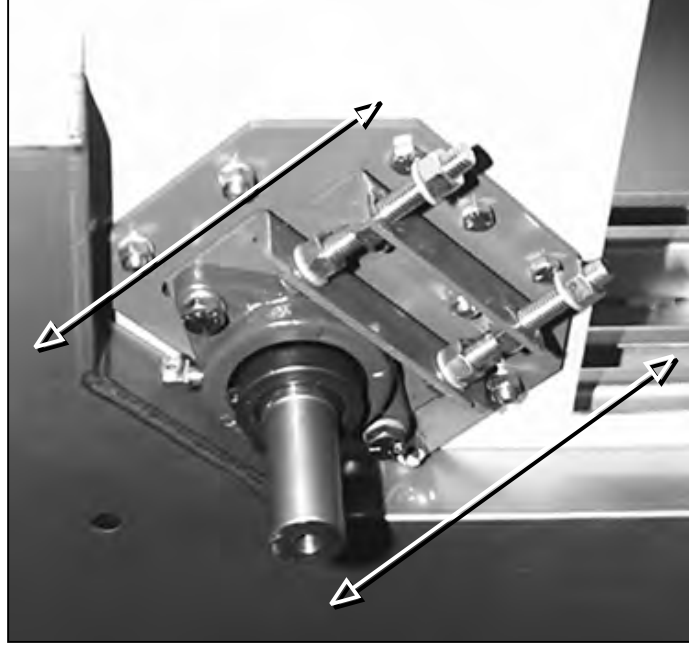


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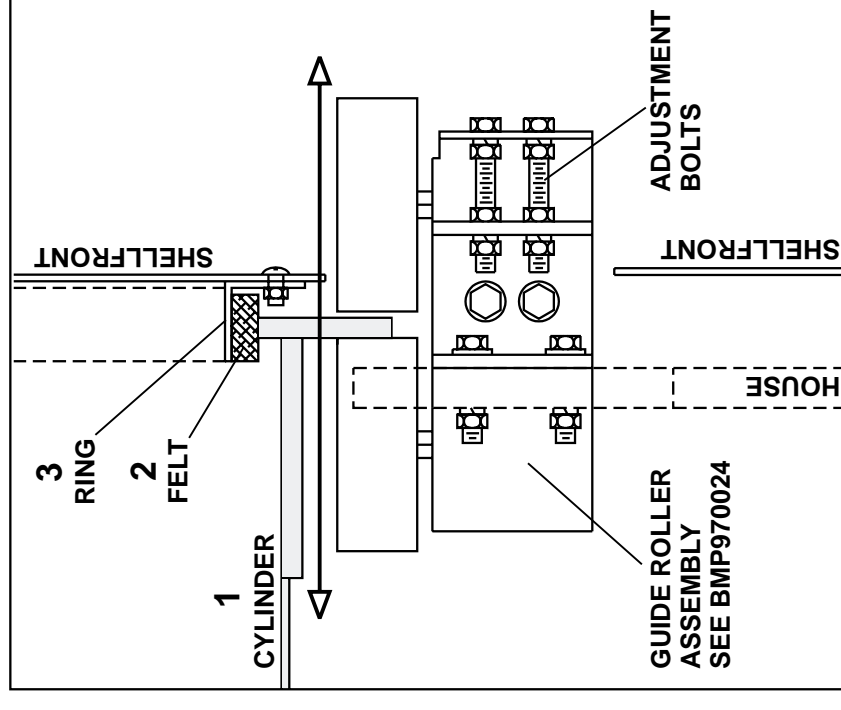
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(Sheet 2 of 3)

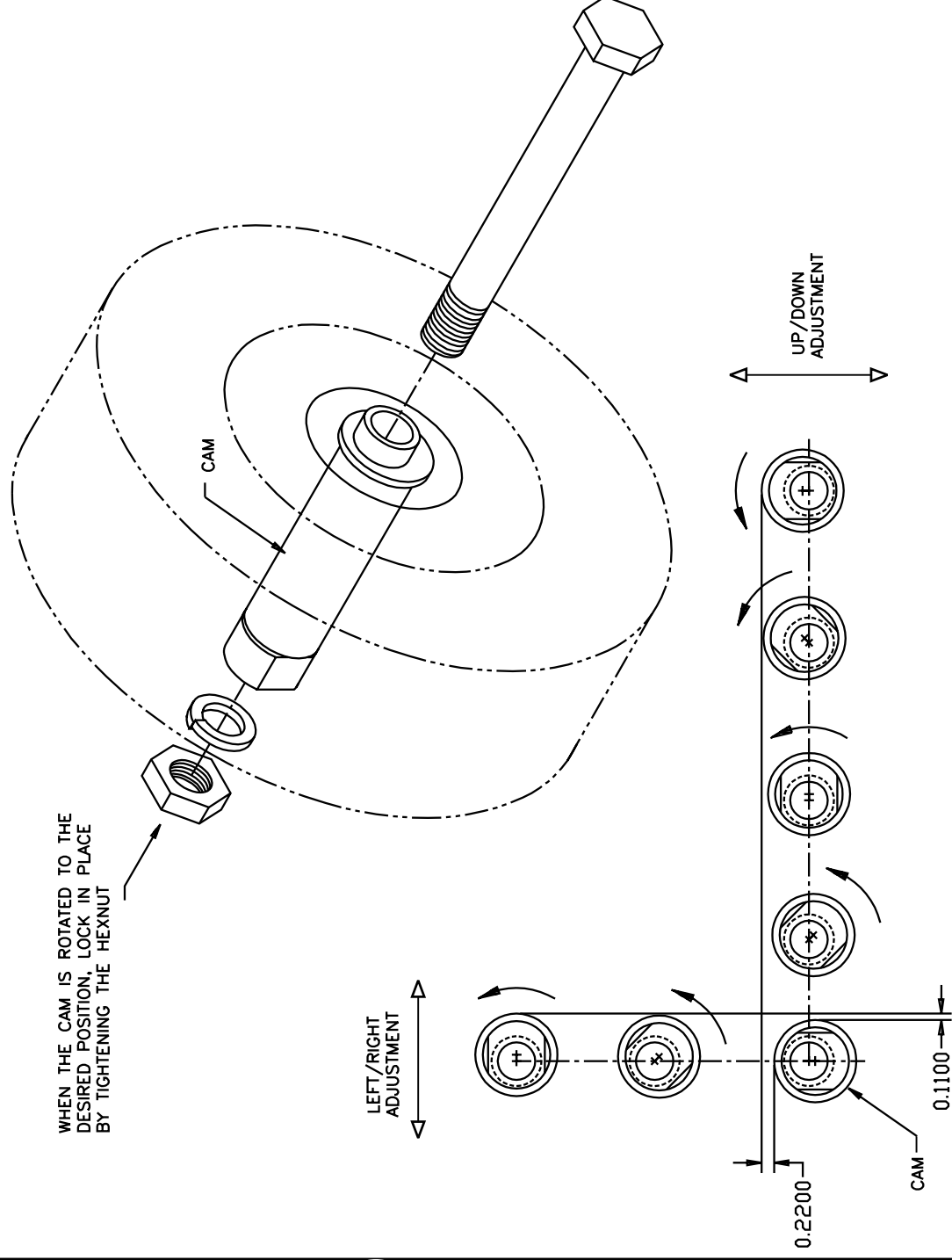


**DETAIL B:
DRIVE ROLLER ADJUSTMENTS**
(USE ADJUSTABLE BOLTS ON BEARING MOUNTING PLATES TO ADJUST POSITION OF DRIVE ROLLERS)

NOTE: CYLINDER IS ALIGNED WHEN SYMMETRICAL AND SQUARE WITHIN THE HOUSE CYLINDER CAVITY.
SEE MSSM0111AE FOR FURTHER INSTRUCTIONS.



**DETAIL C:
GUIDE ROLLER ADJUSTMENTS**
(ADJUSTS FRONT/REAR POSITION OF CYLINDER)



WHEN THE CAM IS ROTATED TO THE DESIRED POSITION, LOCK IN PLACE BY TIGHTENING THE HEXNUT

**DETAIL A:
CAM ADJUSTMENT FOR SUPPORT ROLLER**
(ROTATING THE CAM ADJUSTS POSITION OF SUPPORT ROLLER HORIZONTALLY AND VERTICALLY)



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Parts List—Cylinder 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-----				
none				
-----COMPONENTS-----				
all	1	A74CA002	94142# BASKET MACH DRYER 50X40 9321	
all	2	27A685	FELT 1/2" X 1+1/4" SAE F-3 *	
all	3	W7 40950	97053#*WLMT=COSMETIC RING	

T-Seal Assembly
50040TS1,TT1,CS1,SA1,SB1

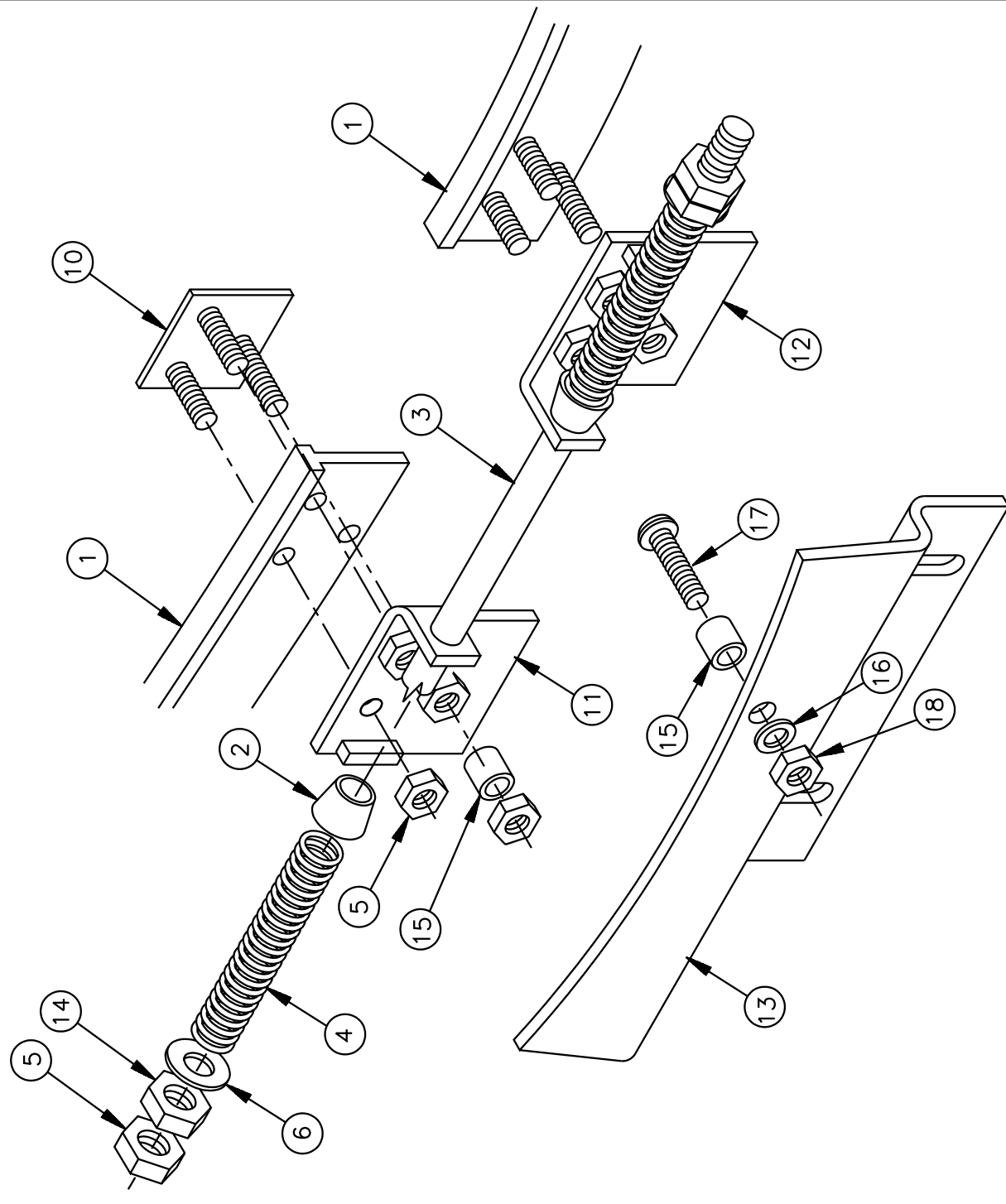
BMP970022/97312V
 (Sheet 1 of 2)



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Parts List—T-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	G74SH003	93000Z*5040 T-SEAL INSTALL 93213	
			-----COMPONENTS-----	
all	1	X7 41000	94127D 3BOLT T-SEAL NOTCH+DRIL 5040	
all	2	07 50469	86017B YOKE=T-SEAL ROD ADJUSTMENT	
all	3	07 50471	85456B ROD=SPRING TENSION T-SEAL	
all	4	07 50472	90461B SPRING=DRYER T-SEAL TENSION	
all	5	15G164	01Z HX THIN LOCKNUT NYL1/4-20 SS	
all	6	15U188	01Z FLTWASH 1/4 STD COMM SS18-8	
all	7	15G186	HEXNUT 5/16-18UNC2 SS18-8	
all	8	15U205	LOCKWASHER MEDIUM 5/16" 18-8SS	
all	10	07 50498	93201C RIBPLATE=STUD HOLDER T-SEAL	
all	11	W7 50466A	93247#*WLMT=SEAL/YOKE LF SIDE 3BOLT	
all	12	W7 50467A	93247#*WLMT=SEAL/YOKE RT SIDE 3BOLT	
all	13	07 50465	97166D BRKT=T-SEAL RETAINER DRYER	
all	14	15G170	HEXNUT 1/4-20UNC2 SS18-8	
all	15	54J004H	93263N COLLAR=HEAT TREAT 45-55 RC	
all	16	15U200	FLATWASHER(USS STD) 5/16"ZNC PLT	
all	17	15N176A	TRUSSCR 1/4-20UNCX3/4 SS18-8	
all	18	15G166A	01Z HXLKNUT NYL1/4-20 UNC2A STL/ZC	
all	19	54J004H	93263N COLLAR=HEAT TREAT 45-55 RC	
all	20	15U200	FLATWASHER(USS STD) 5/16"ZNC PLT	

Drive & Support Roller Installation

50040TS1,TT1,CS1,SA1,SB1

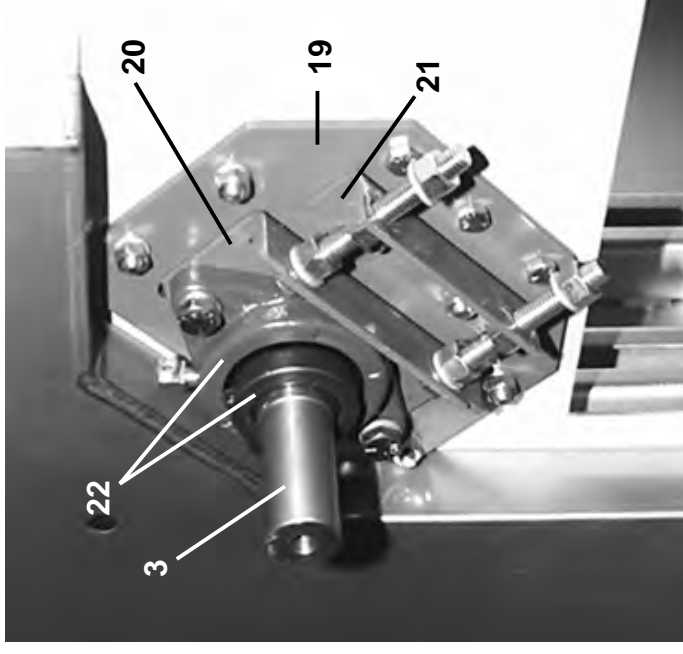
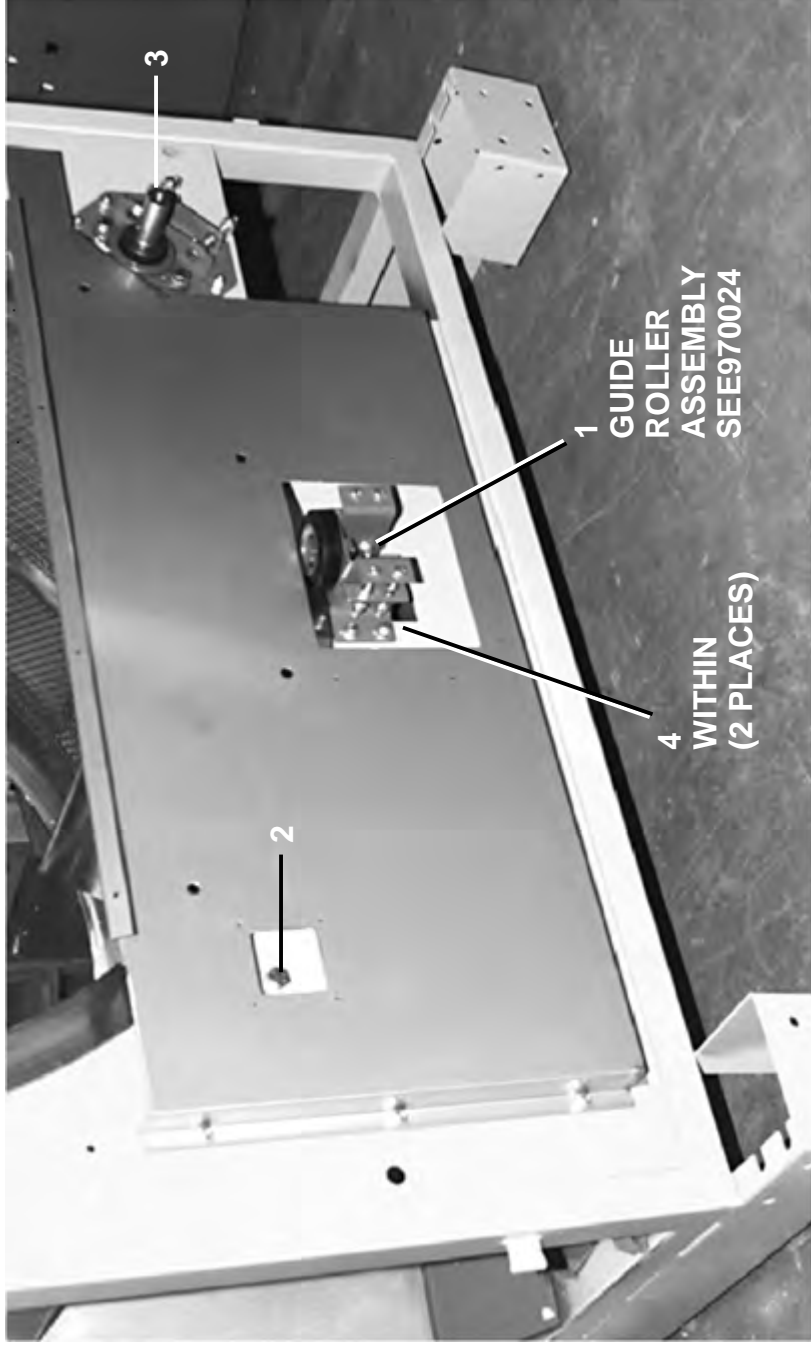
BMP970023/97417V
(Sheet 1 of 3)



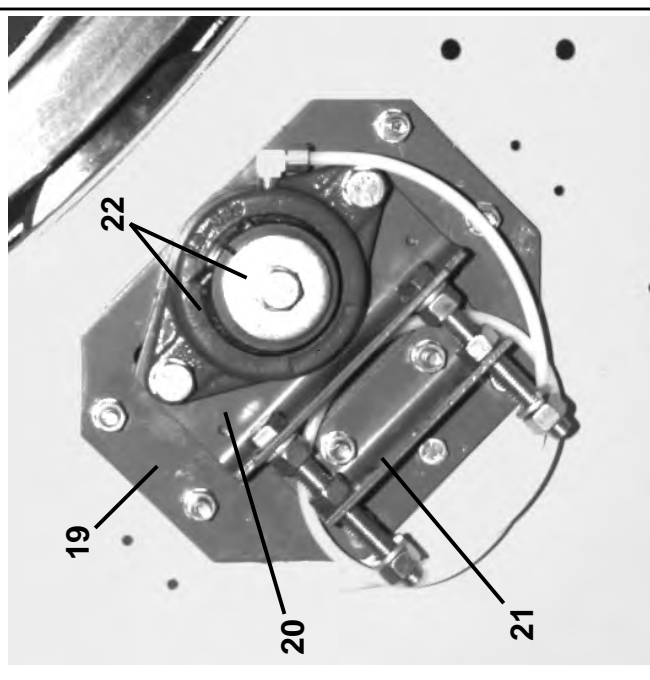
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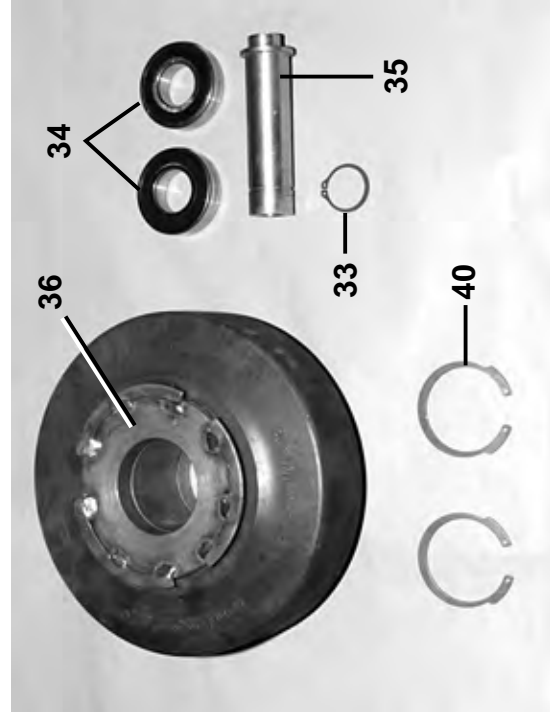
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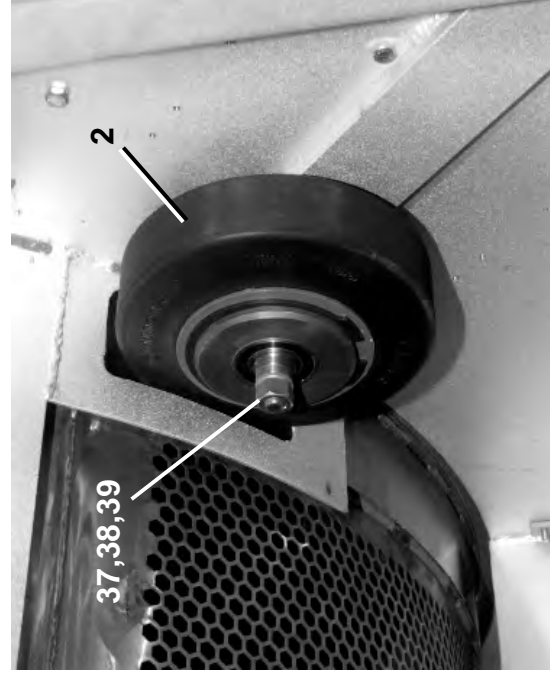
FRONT BEARING MOUNTING PLATE



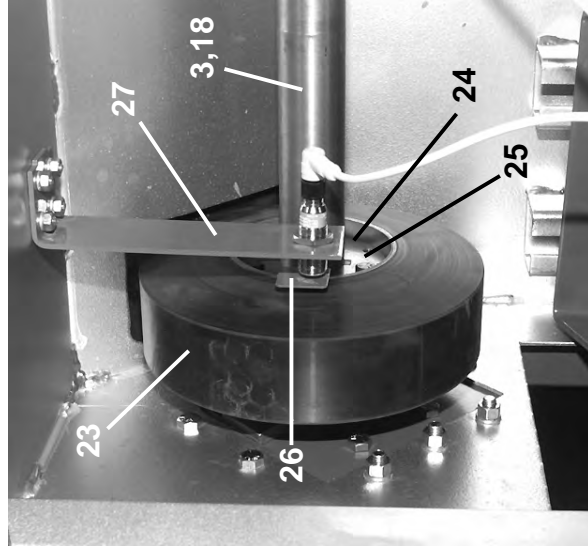
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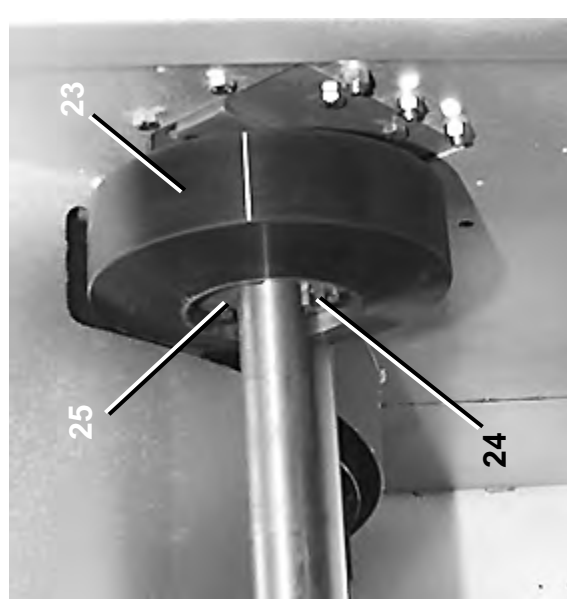
SUPPORT SHAFT ASSEMBLY



SUPPORT ROLLER



DRIVE SHAFT ASSEMBLY



Drive & Support Roller Installation

50040TS1,TT1,CS1,SA1,SB1

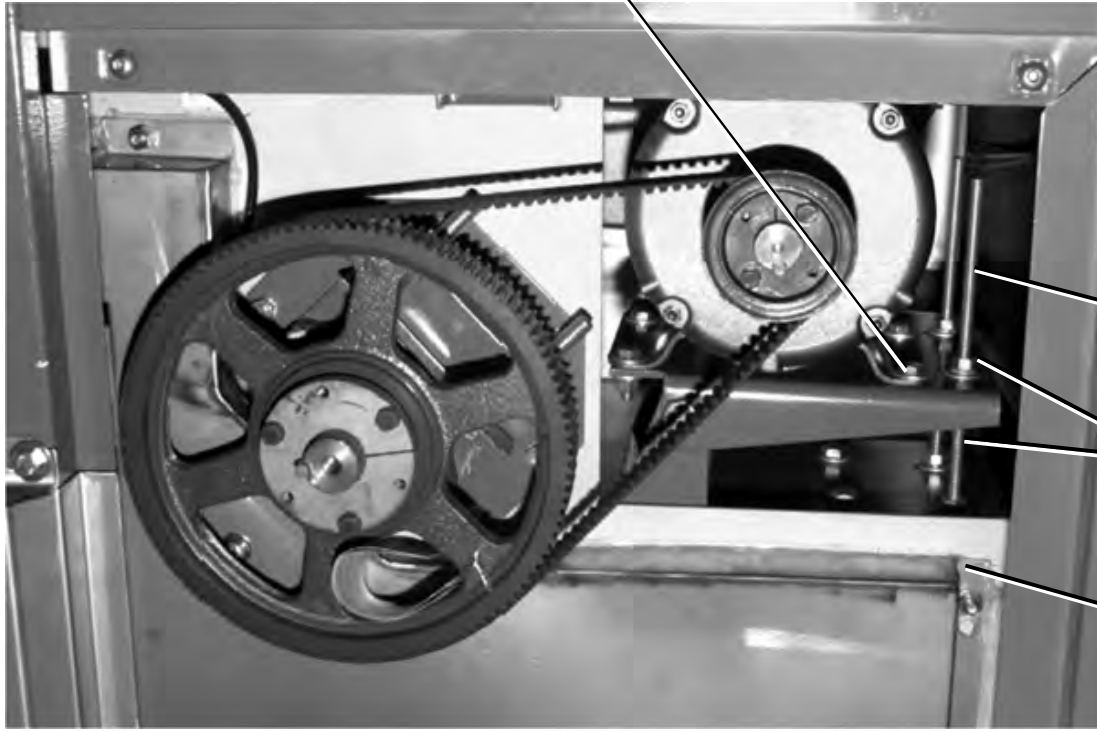
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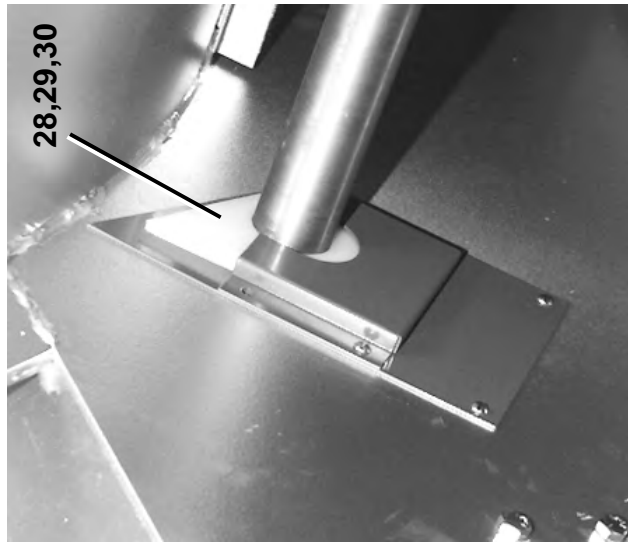
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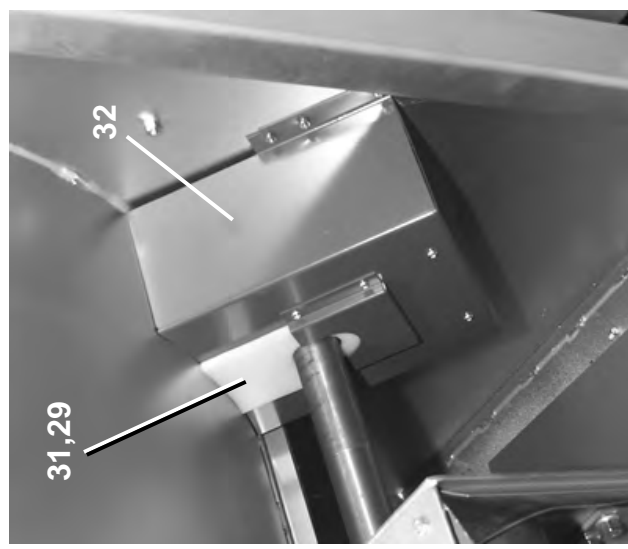
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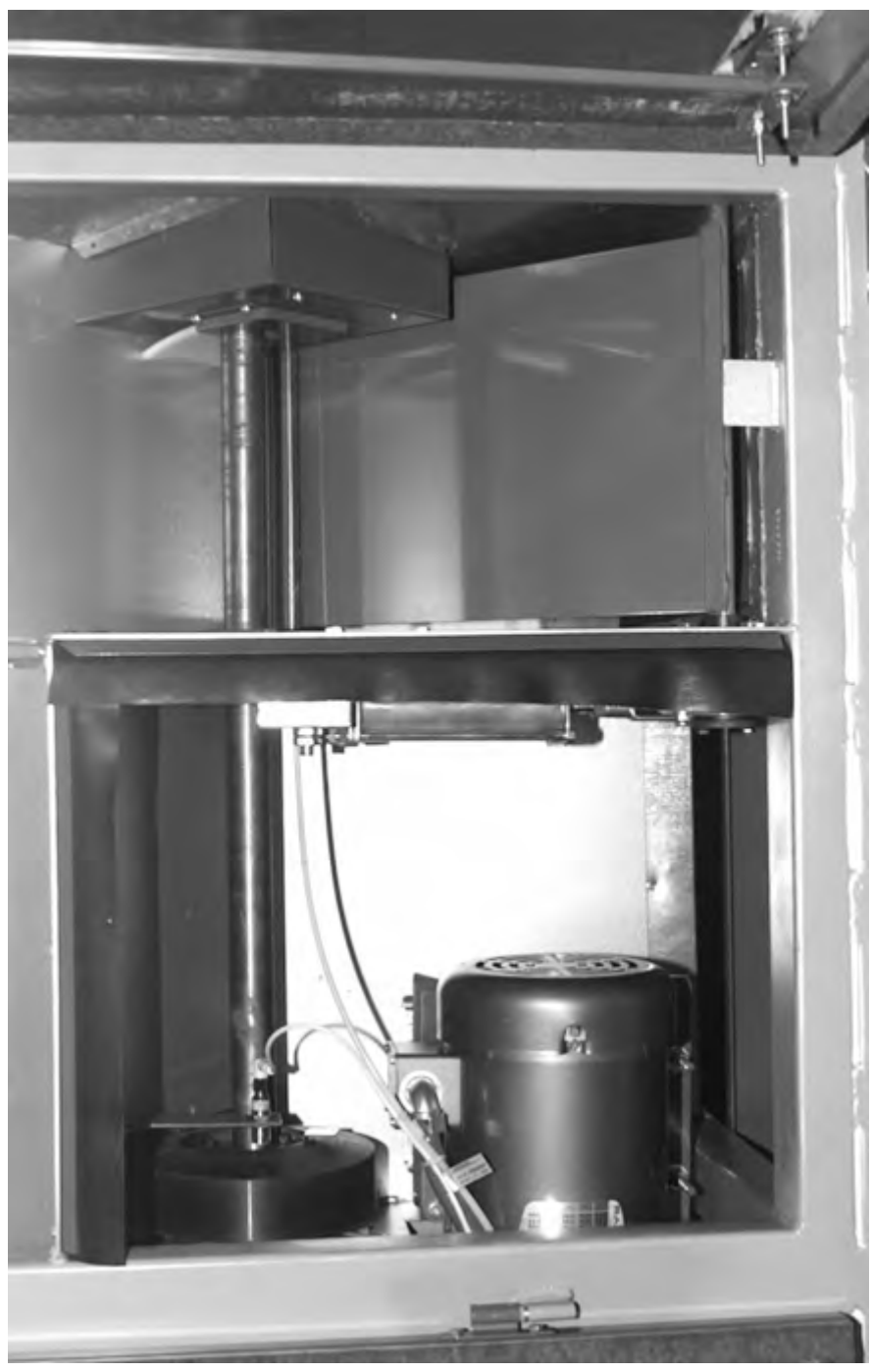


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31,29

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Litho in U.S.A.

Parts List—Drive & Support Roller 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	G74DB001	93000Z*5040 DRIVE INSTALLATION 9321	
	B	A74DB002	93000Z*DRIVE SHAFT=BASKET ASSY 5040	
	C	A74DB003	93000Z*SUPP. SHAFT=BASKET ASSY 5040	
			-----COMPONENTS-----	
all	1	A75GB003	90441D*GUIDE ROLLER ASSY=DRYER	
all	2	A74DB003	93000Z*SUPP. SHAFT=BASKET ASSY 5040	
all	3	A74DB002	93000Z*DRIVE SHAFT=BASKET ASSY 5040	
all	4	07 50263	93417B TAP STRIP=GUIDE ROLLER BKT	
all	5	07 40501	94262D MOTOR MOUNT BACK SUPT	
all	6	07 40502	94262C MOUNT ADJUST FRONT	
all	7	15UJ240	FLATWASHER(USS STD) 3/8" ZNC PLT	
all	8	15UJ255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	9	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	10	17R020A18A	THRD ROD 3/8-16UNC2X18"LG ZINC PLTD	
all	11	15K095	HXCPCSR 3/8-16UNC2AX1 GR5 ZINC/CAD	
all	12	15K151	HXCAPSCR 1/2-13UNC24X1.25 GR5 PLATE	
all	13	15U300	LOKWASHER REGULAR 1/2 ZINC PLT	
all	14	02 19283	86477B NUT=1/2-13UNCX1+1/25Q SPEC	
all	15	15K211	HXCAPSCR 5/8-11UNC2AX1 GR5 ZINC/CAD	
all	16	15U315	LOKWASHER MEDIUM 5/8 ZINCPL	
all	17	15G238	HXNUT 5/8-11UNC2B SAE ZINC GR2	
all	18	07 40500	94331C DRIVE SHAFT - 50040 DRYER	
all	19	07 40503	94431B 50040 DRIVE BRNG SPT BRKT	
all	20	07 40504	94317B 50040 DRIVE AJUST BRKT UPPER	
all	21	07 40505	94431B 50040 DRIVE SUPPORT BRKT LOW	
all	22	56F1H2CSWC	92057C FLG BRG=1.438 B.D.+COLLAR	
all	23	60C509UT	01Z WHEEL SINGLE 9"OD URETHANE	
all	24	07 50031A	87347B DRYER SHAFT KEY=WHEEL	
all	25	56Q1NSK	1+11/16" BUSH VPUL QD TYPE SK	
all	26	07 50290B	96117B BRKT=PROX SW TARGET SK HUB	

Parts List, cont.—Drive & Support Roller Installation				
Used In	Item	Part Number	Description	Comments
all	27	07 40357	94363C DRIVE WHEEL PROX SWITCH BRKT	
all	28	07 50222C	91417B BASKET SHAFT SEAL LARGE DIA	
all	29	07 50222A	91417B BASKET SHAFT SEAL HOLDER	
all	30	07 50222B	94091B BASKET SHAFT SEAL SUP PLATE	
all	31	07 40387	96496B DRIVE SHAFT SEAL REAR UHMW	
all	32	07 40925	97326C BASKET SUPPORT WHEEL COVER	
all	33	17B176	INTERNAL RET RING # 5100-118 BLACK	
all	34	54A080	BALLBEAR NTN #6206LLC3 1/BX	
all	35	07 40331	97063C IDLER WHEEL SHAFT	
all	36	A74GB002E	93000Z SUPP WHL WELD ASSY-PRESS FIT	
all	37	15K227D	02Z HXCPCSC 5/8-11X6 GR8 ZNC PLT	
all	38	15G236B	HEX NUT 5/8-11UNC2B BRASS	
all	39	15U315	LOKWASHER MEDIUM 5/8 ZINCPL	
all	40	17B180	INTRETRING ROTOR CLIP#H01-243 ST	

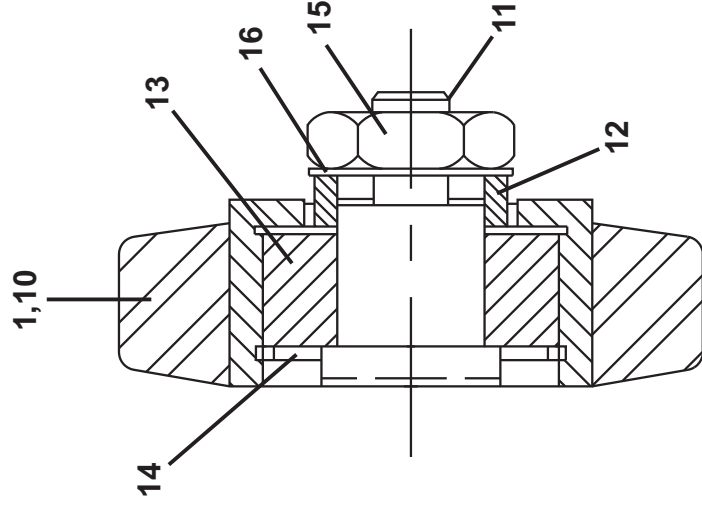
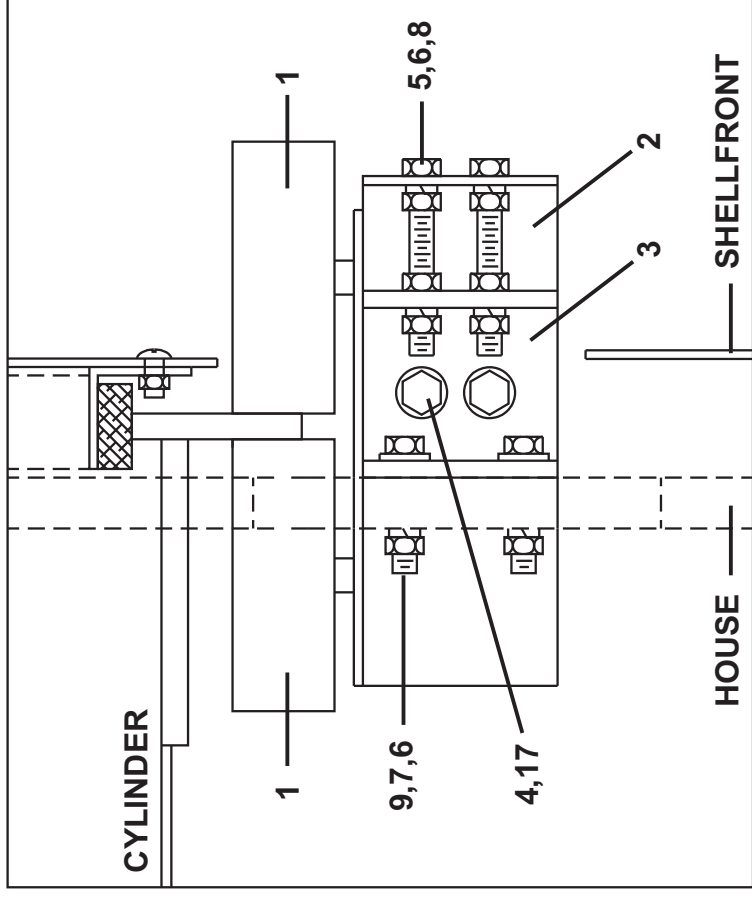
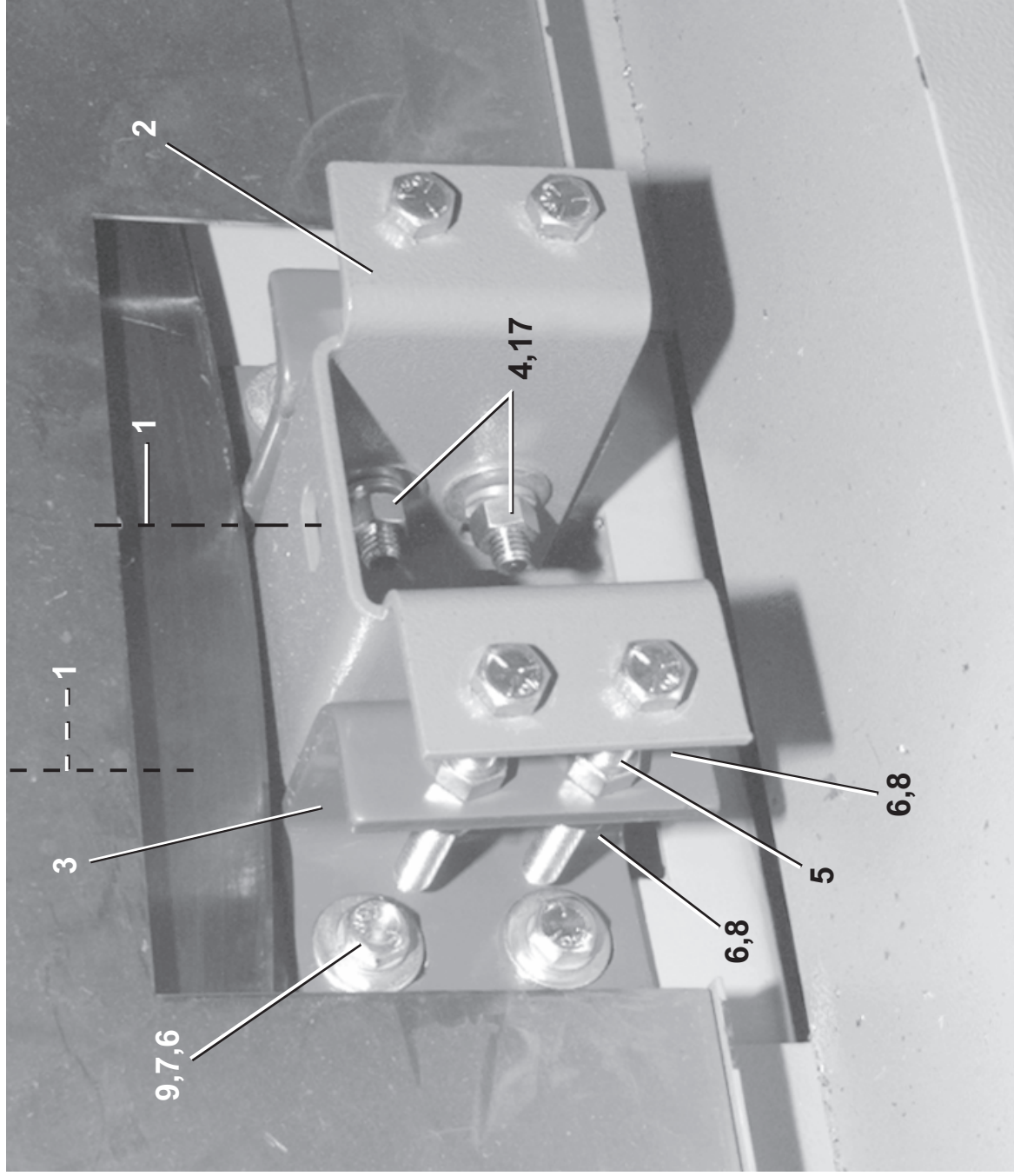
Guide Roller Assembly
5840, 5858, 5880DRYERS 64058TG1R/TG1L, 7272TG1R/TG1L

BMP970024/2021314B
 (Sheet 1 of 2)



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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	A75GB003	90441D*GUIDE ROLLER ASSY=DRYER	5040, 5840, 5858
	B	A77GB010	2002126Z 6458 GUIDE ROLLER ASSY=DRYER 6458	
	C	A77GB002	5880 GUIDE ROLLER ASSY	5880
	D	A78GB001	72" GUIDE ROLLER ASSY	7272
			-----COMPONENTS-----	
AB	1A	A75GB003B	90441B*4" GUIDE ROLLER WHEEL ASSY	USES 2, CONTAINS ITEMS 10-16
CD	1B	A77GB003	5880 GUIDE ROLLER WHEEL ASSY	USES 2, CONTAINS ITEMS 10-16
ABC	2	07 50219	87167C BRKT GUIDE ROLLER MOUNT	
D	2	07 80100	72" GUIDE ROLLER BRKT	
AB	3	07 50218	87382C BRKT SMALL GUIDE ROLLER	
C	3	07 70092	5880 5" GUIDE ROLLER BRKT	
D	3	07 80100	72" GUIDE ROLLER BRKT	
all	4	15K092Z	HEXFLGSCR 3/8-16X1 GR5 ZINC	
all	5	15B107	HEXTAPBOLT 3/8-16UNC2X3+1/2 ZNC GR5	
all	6	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	7	15U240	FLATWASHER(USS STD) 3/8" ZNC PLT	
all	8	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	9	15K105	HXCAPSCR 3/8-16UNC2A1.25 GR5 PLATED	
AB	10	60C502A	4" GUIDE ROLLER 1.50 BORE	
CD	10	60C503A	5" GUIDE ROLLER 1.38 BORE	
all	11	07 50053	92522B SHAFT=GUIDE ROLLER DRYER	
all	12	07 50054	85037B BUSHING=GUIDE ROLLER DRYER	
all	13	54A075	BALRG WIDE S-ROW#63205 1/BOX	
all	14	17B017B	INTERTRING IND# 3000X206-ST-ZD-ZIN	
all	15	15G245	HXFJNJMNU 3/4-10UNC2 SS18-8	
all	16	06 20070	80433B LOCKING WASHER ROLLER SHAFT	
All	17	15G198	HXFLGNUT 3/8-16 ZINC	

Air Flow Assemblies

3

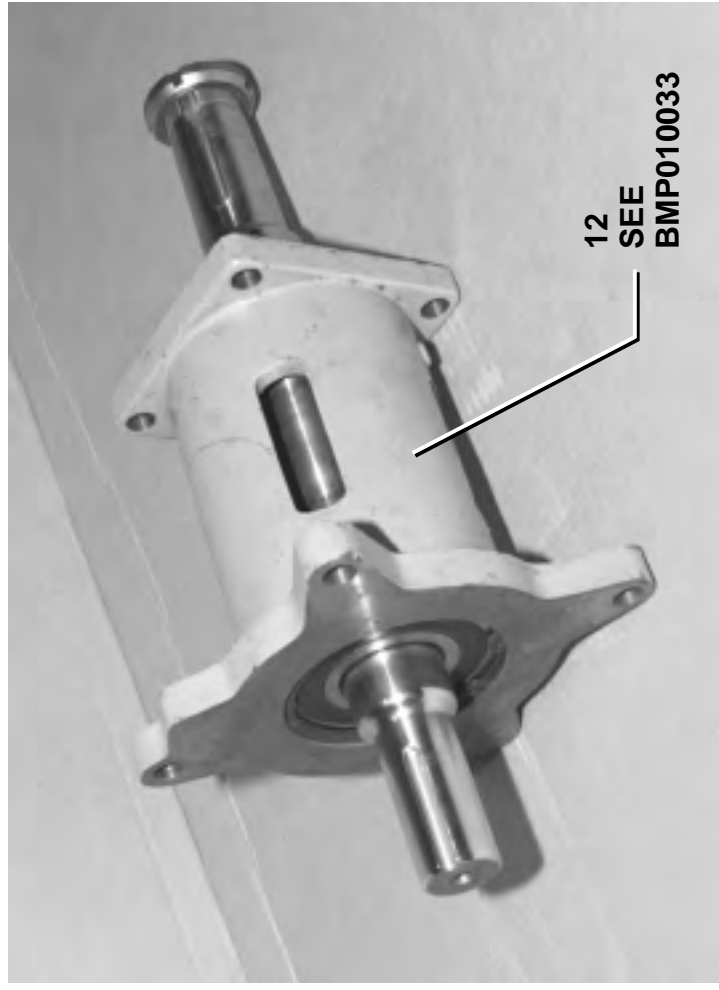
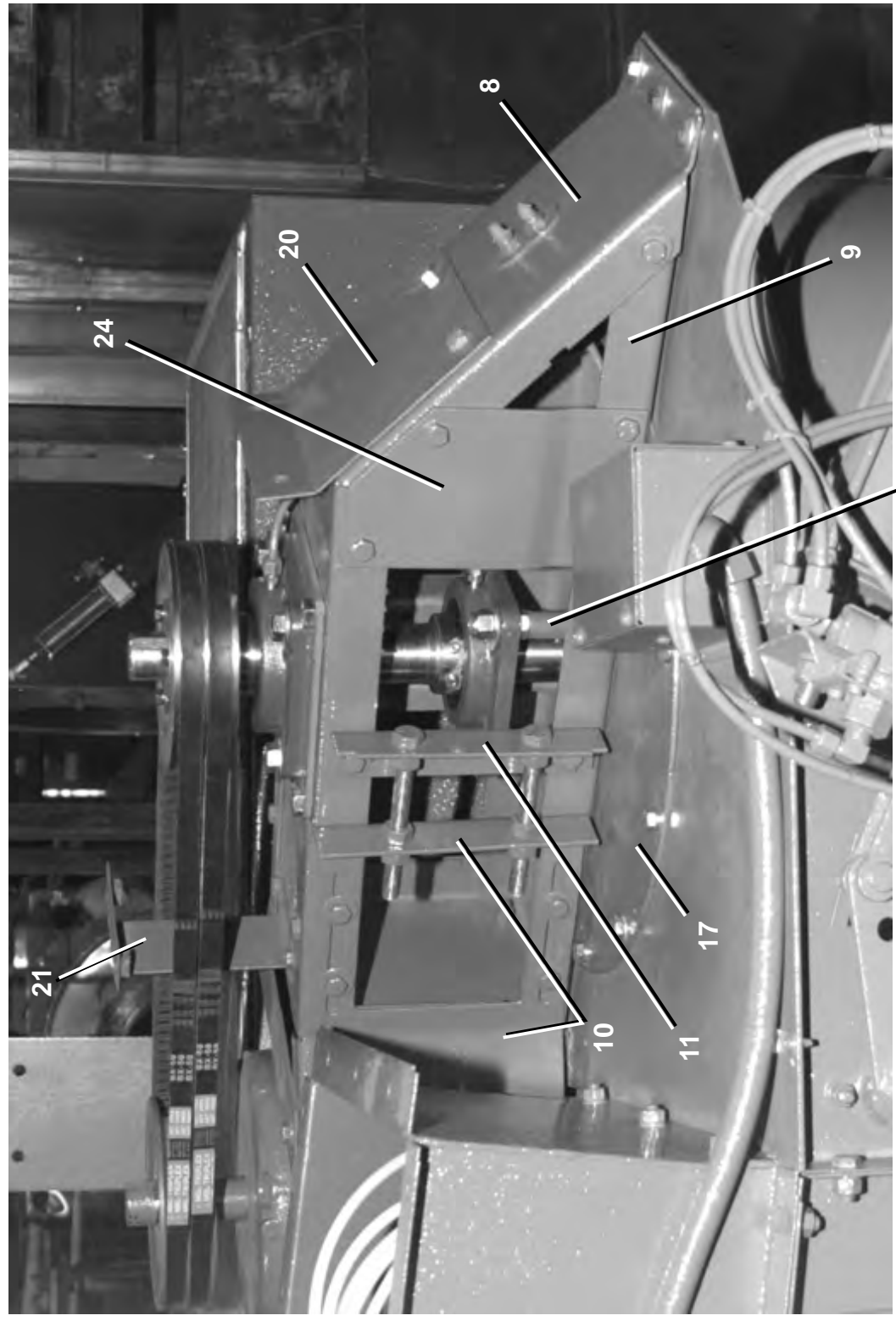
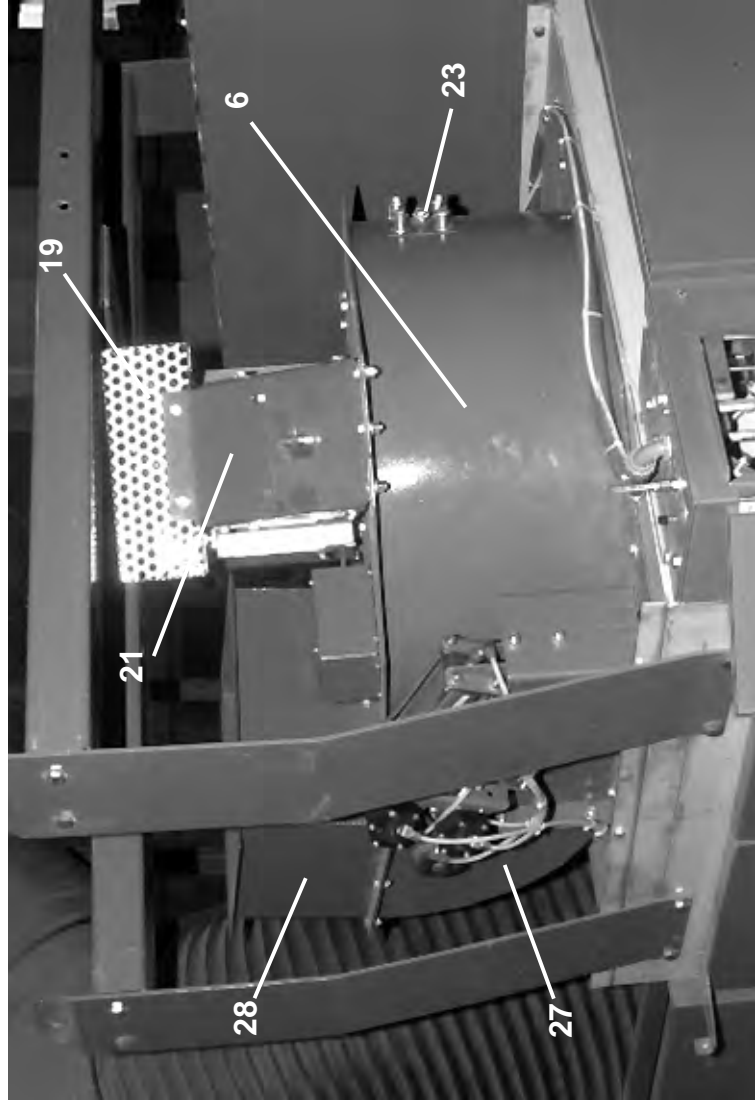
Blower Damper & Drive Assembly
50040TS1,TT1,CS1,SA1,SB1

BMP970026/2002096V
 (Sheet 1 of 3)



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BLOWER BEARING

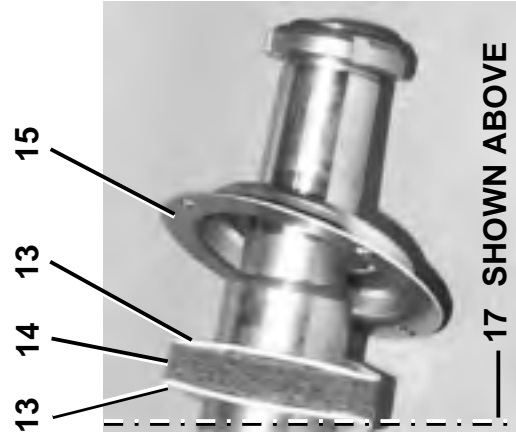
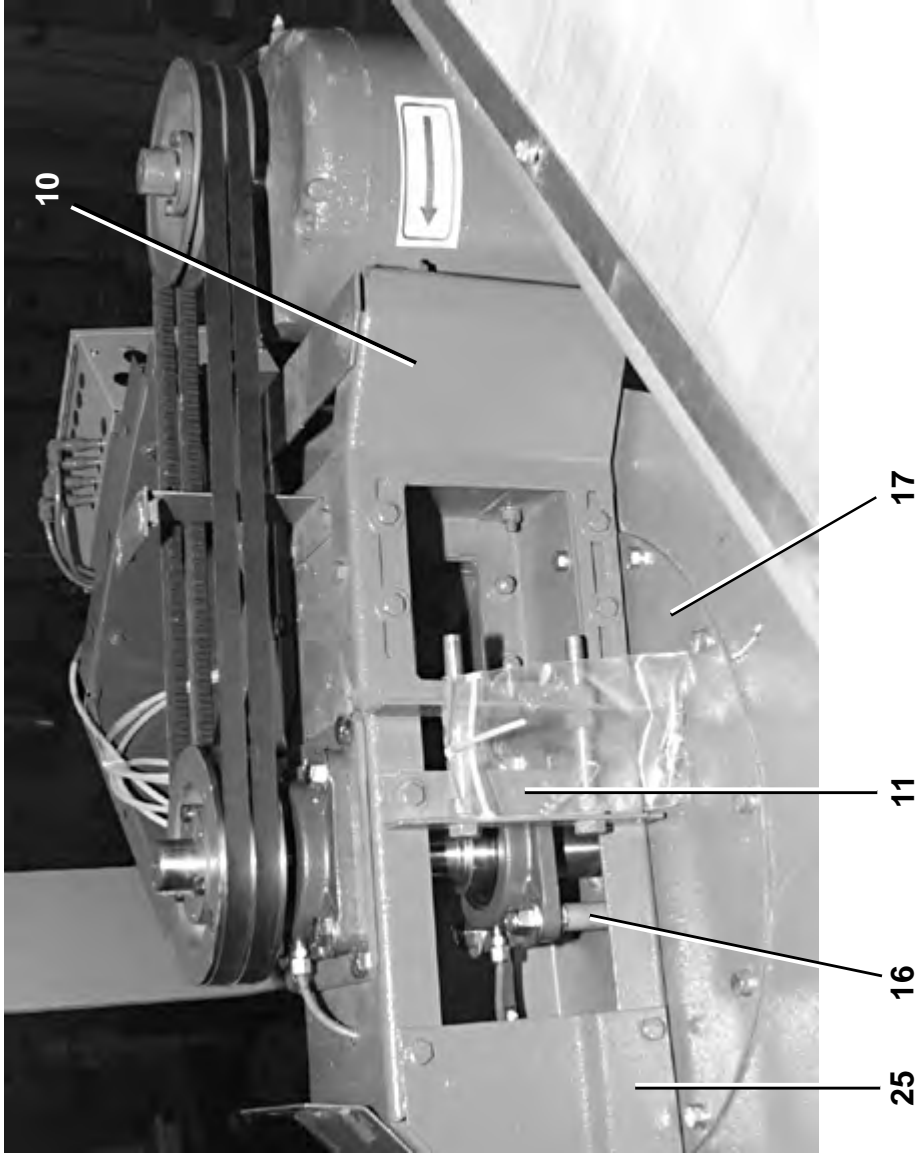
Blower Damper & Drive Assembly
50040TS1,TT1,CS1,SA1,SB1

BMP970026/2002096V
 (Sheet 2 of 3)

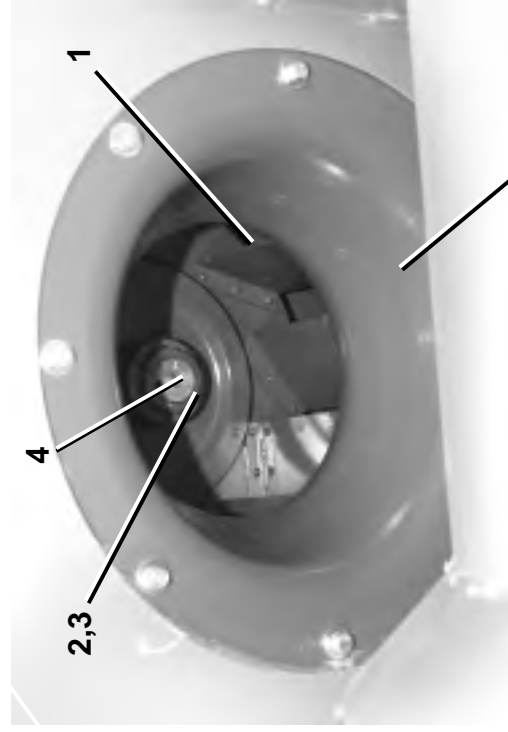


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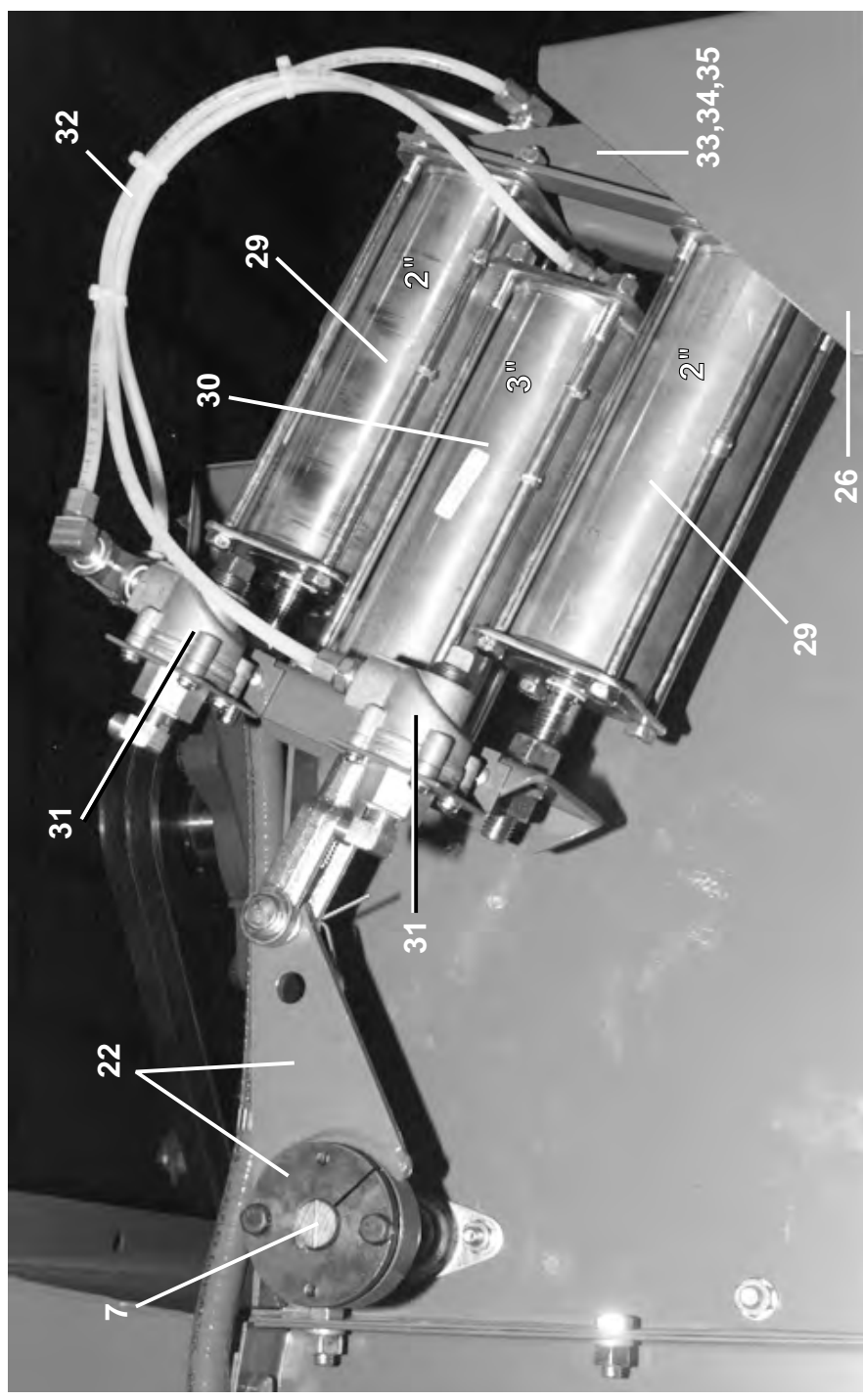
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— 17 SHOWN ABOVE



UNDERSIDE OF BLOWER



BLOWER DAMPER AIR CYLINDERS



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Parts List—Blower Damper & Drive 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.

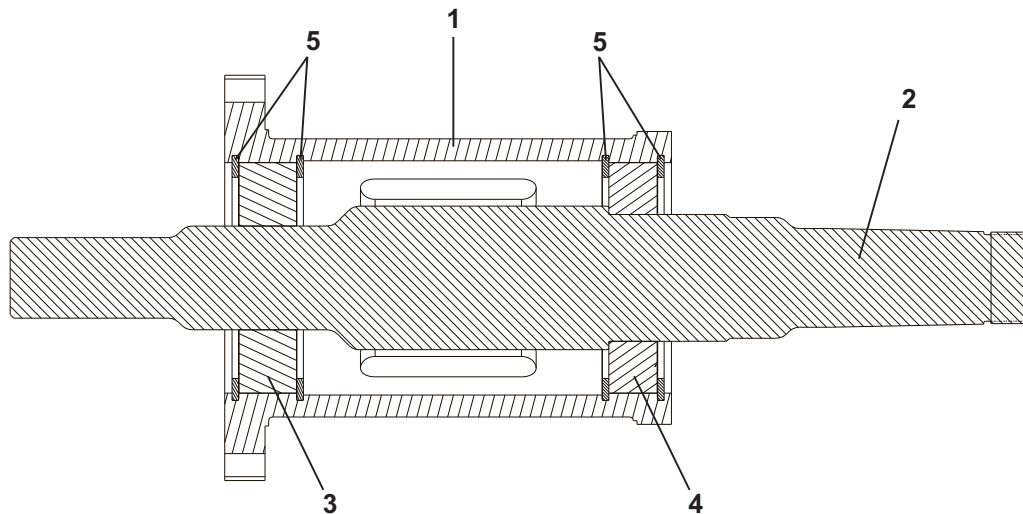
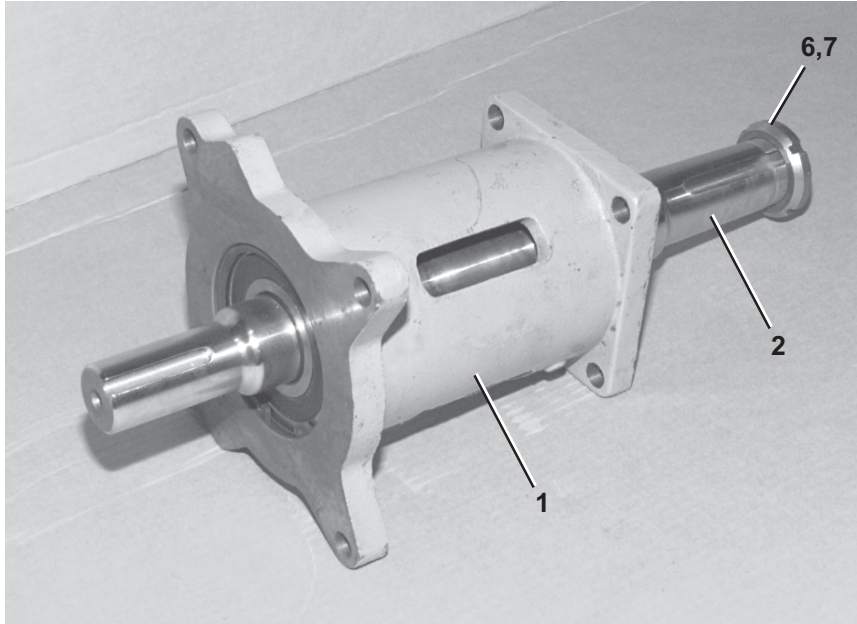
Used In	Item	Part Number	Description	Comments
			-----ASSEMBLIES-----	
	A	A74BA001	93000Z*50040DRY BLWR+DMPR DR ASSY	
	B	A76AC001	881611 15"BLOWER DAMP.AIR CYL ASSY	
			-----COMPONENTS-----	
all	1	13E150T	2000092A BLOWER WHL 15"CL-2 TAPERED HUB	
all	2	56AHN08	N08 BEARING LOCKNUT	
all	3	56AHW108	TW108 BEARING LOCKWASHER	
all	4	15E225	SQMACHKEY 3/8X1+1/2 NOTAPER-NOHEAD	
all	5	07 60067	86283D 15" DIA INLET NOZZLE 5840	
all	6	W7 40400	94177D*WLMT=50040DRY BLOWER HOUSE	
all	7	W7 60060	92333B*15"BLOWER DAMPER WLMT	
all	8	07 60077A	94132D 15"BLWR BKT MTR TOP CHNL	
all	9	07 60078A	89393D 15"BLWR BKT MTR BOT CHNL	
all	10	07 60039	89281D 15"BLOWER MOTOR MT BRKT	
all	11	07 50252	86286C ANGLE=BELT ADJ BLOWER MOTOR	
all	12	A75BG004	2001354C BLW BRG HSE ASSY=2001354	
all	13	07-50288	85192B BLOWER SHAFT TEFLON SEAL	
all	14	07 50287	85192B BLOWER SHAFT FELT SEAL	
all	15	07 50286	85192B BLOWER SHAFT SEAL CAP	
all	16	07-50179	2000143B BLOWER BRG HSE SPACER=00143	
all	17	07 60037	86236C 15"BLOWER HOUS.COVER PLATE	
all	19	A75BA003	94156#*ASSY=BELT GUARD MAIN BLOWER	
all	20	07 60075	86517BBRKT=15"BLOWER BELT GUARD LFT	
all	21	07 50262	90187B BRACKET=MAIN BLW BELT GUARD	
all	22	W7 50234	85446C*DAMPER ARM WLMT	
all	23	07 60265A	96337C LINT NOZZLE CVR PL NO HOLE	
all	24	07 60090	89352C 15"BLOWER BKT.SUPPORT L.	
all	25	07 60090A	89352# 15"BLOWER BKT SUPPORT R	
all	26	07 40406	94243C 15 BLOWER DAMP CTRL MT BRKT	
all	27	W7 40401	94432C*WLMT=BLOWER TRANSITION LOWER	
all	28	W7 40402	94146C*WLMT=BLOWER TRANSITION UPPER	

Parts List, cont.—Blower Damper & Drive Assembly

Used In	Item	Part Number	Description	Comments
all	27	W7 40401	94432C WLMT=BLOWER TRANSITION LOWER	
all	28	W7 40402	94146C WLMT=BLOWER TRANSITION UPPER	
all	29	A76AC001A	89463T AIR CYL.2-3/8 BORE 2"STROKE	
All	30	A76AC001B	89463@ AIR CYL.2-3/8 BORE 3"STROKE	
all	31	96M055	01Z QUICK EXHAUST VALVE 1/4"	
all	32	60E004NTN	01Z TUBING NYL(NAT) 1/4"ODX.127ID	
all	33	07 60071	86327B AIR CYLINDERS MOUNTING BRKT	
all	34	07 60070	86327L AIR CYLINDERS PIVOT BRKT	
All	35	07 60072	88161C AIR CYLINDERS MOUNTING BRKT	

Blower Bearing

5050, 64050, 64058, 64064, 72072, 76076, 82082 Dryers



1. Pressing against the inner race, press bearing (item 4) on the shaft.
2. Install one (item 5) into the inner groove at each end of item 1.
3. Pressing against the outer race, press bearing (item 4) with its shaft in housing (item 1) with guide at bearing location (item 3) to keep shaft and housing concentric.
4. Pressing bearing (item 3) against both its inner and outer race, press bearing (item 3) into housing and onto shaft, backing up bearing (item 4) at both its inner and outer race.
5. Install retaining rings (item 5) into outer grooves.

Parts List—Blower Bearing 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
			-----ASSEMBLY-----	
	A	A75BG004	BLW BRG HSE ASSY=2001354	ASSEMBLY, CONTAINS ITEMS (1-7) BELOW
			-----COMPONENTS-----	
all	1	X7 50185	BLOWR BRG HSE MACH=SNAP RING	
all	2	07 50186	BLOWER SHAFT=SNAP RING	
all	3	54A073	BALBRG NTN#6309LLBC3/5C 1/BX	
all	4	54A072	BALLBEAR NTN #6211BC3/5C	
all	5	17B014A	INTER RETRING 3000-393	
All	6	56AHN08	N08 BEARING LOCKNUT	
All	7	56AHW108	TW108 BEARING LOCKWASHER	

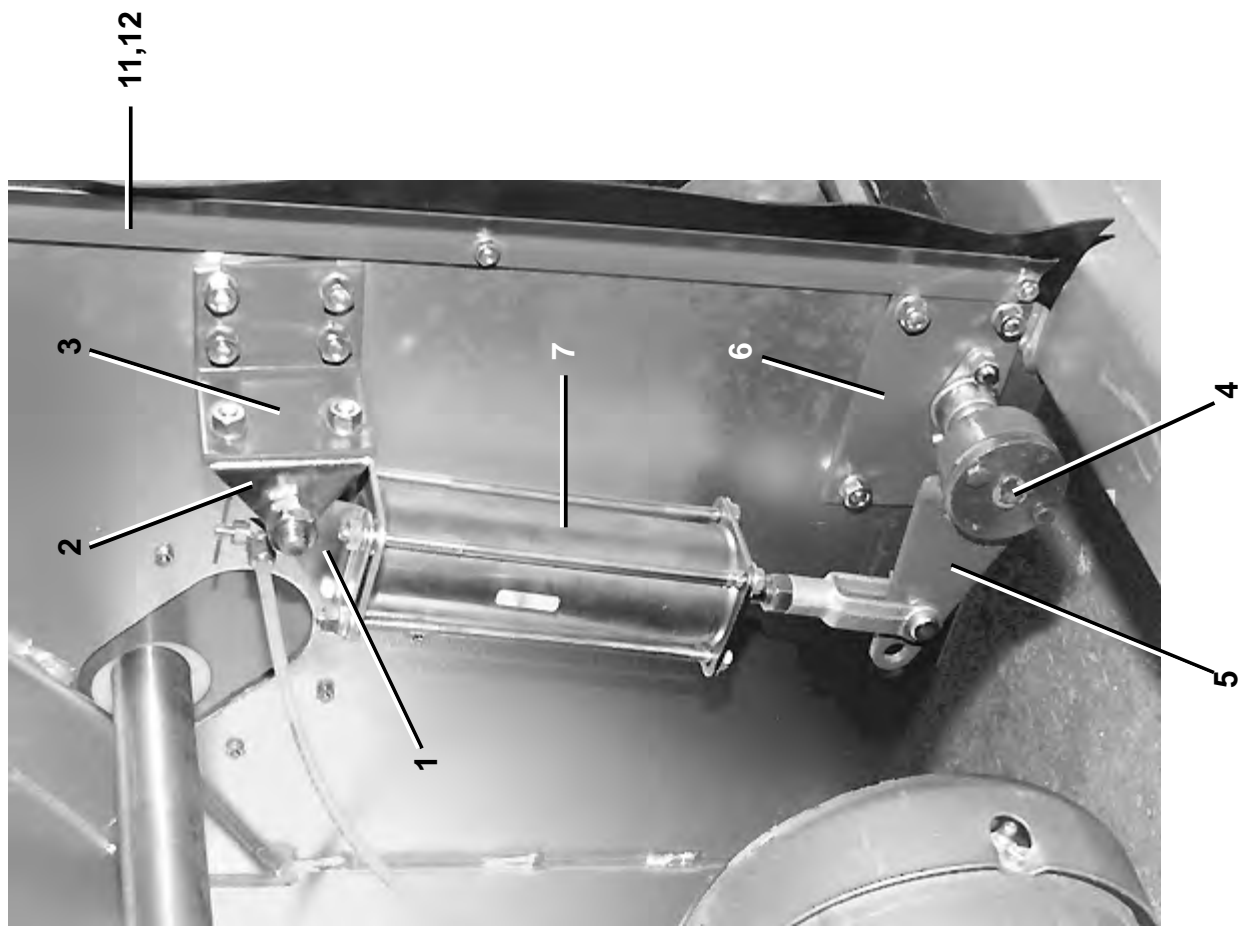
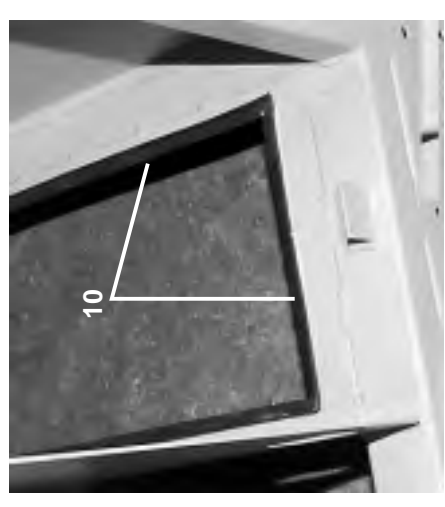
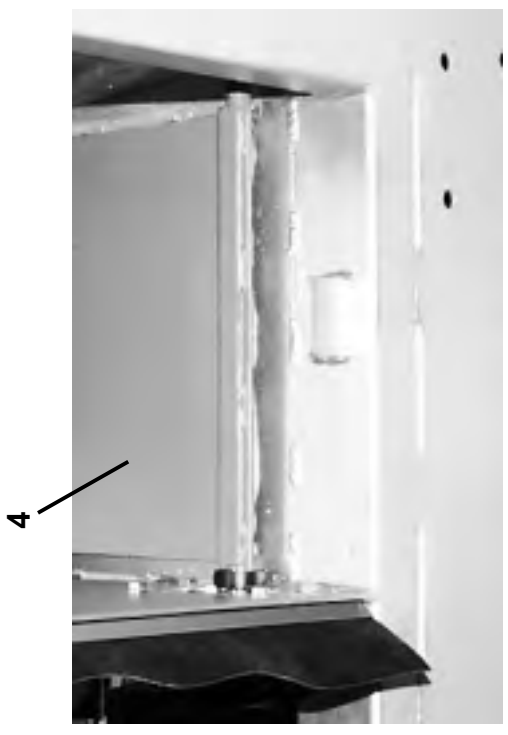
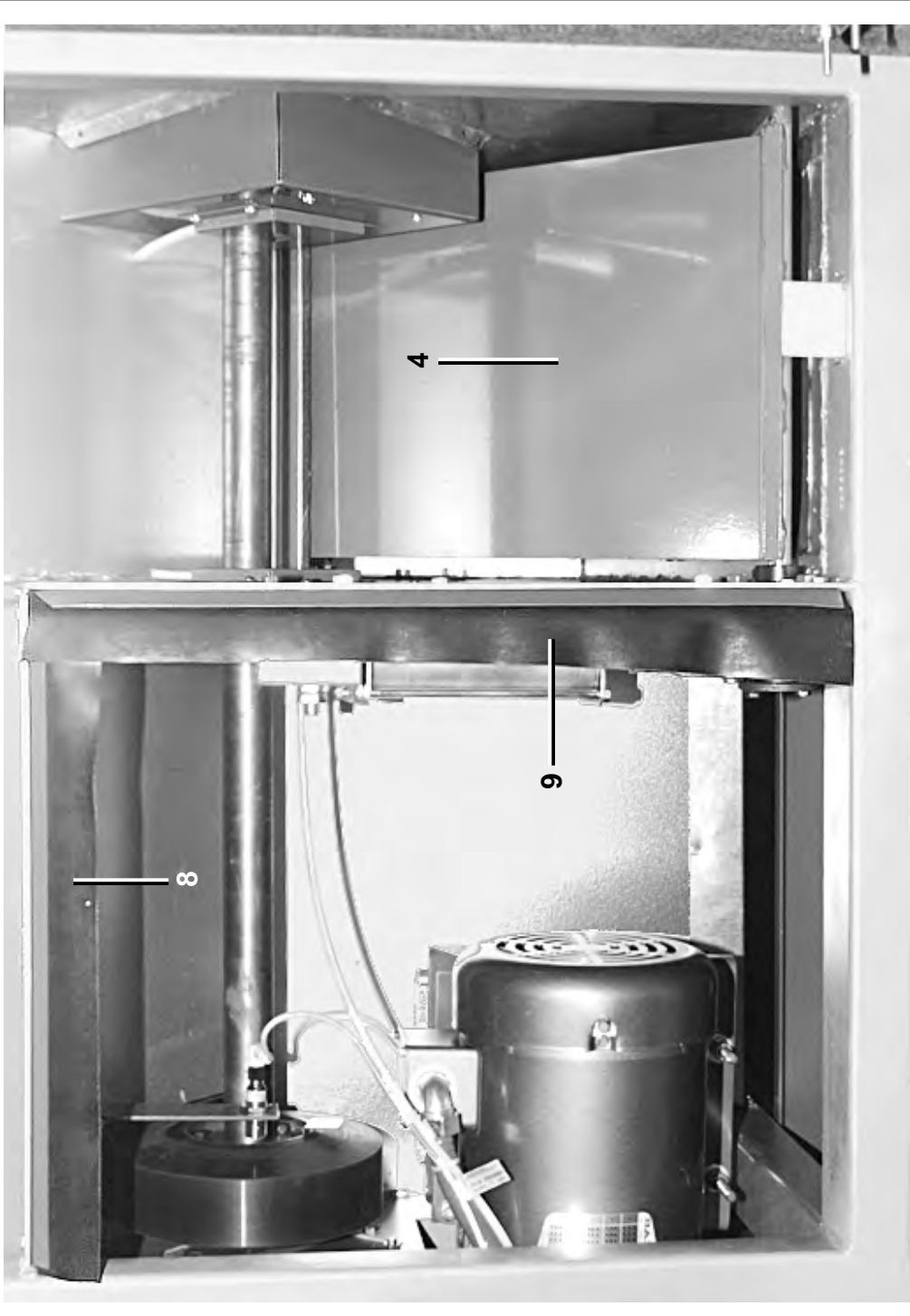
Cooldown Damper
50040TS1,TT1,CS1,SA1,SB1

BMP970032/97397V
 (Sheet 1 of 2)



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Parts List—Cooldown Damper

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	A74CD001	93000Z*5040 STEAM COOLDOWN DAMP ASS	
	B	ZTCSAA000A	50040 IS NOT A SHAKER	
-----COMPONENTS-----				
all	1	02 02547	LT BRACKET=AIRCYL CAD	
all	2	02 02550	97437ABRKT=AIRCYL-RIGHT ZINC/CAD	
all	3	07 40338	94201B COOLDOWN DAMPER CYL MNT BRKT	
all	4	W7 40332	94302C*WLMT:50040 HOUSE COOLDOWN DP	
all	5	W7 50234	85446C*DAMPER ARM WLMT	
all	6	07 40371	94263B COOLDOWN DAMPER LINKAGE CUR	
all	7	A76AC001B	89463@ AIR CYL.2-3/8 BORE 3"STROKE	
all	8	07 40388	94362B 5040 DR MOTOR HEAT SEAL-TOP	
all	9	07 40389	94362B 5040 DR MOTOR HEAT SEAL-VERT	
all	10	07 50275	85353B DOOR SEAL SINGLE LIP *	
all	11	07 40385	94362C HOUSE DRIVE SIDE BELT CLAMP	
all	12	07 40386	94362C HOUSE DR-SIDE BLT CLAMP SIDE	

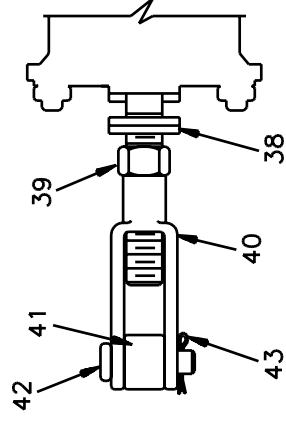
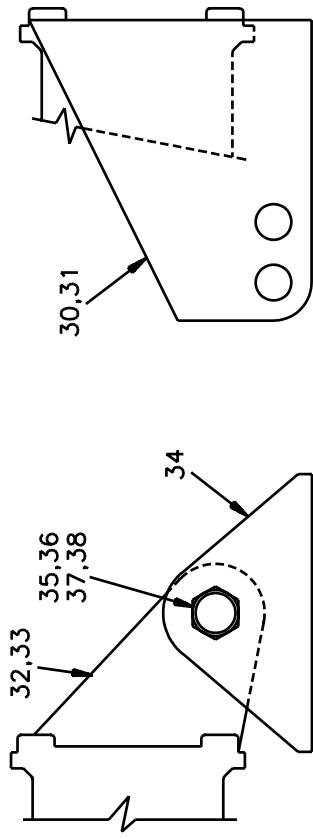
Air Cylinder Assemblies

BMP830078/2005525B
(Sheet 1 of 3)

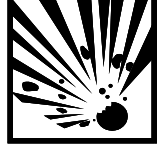


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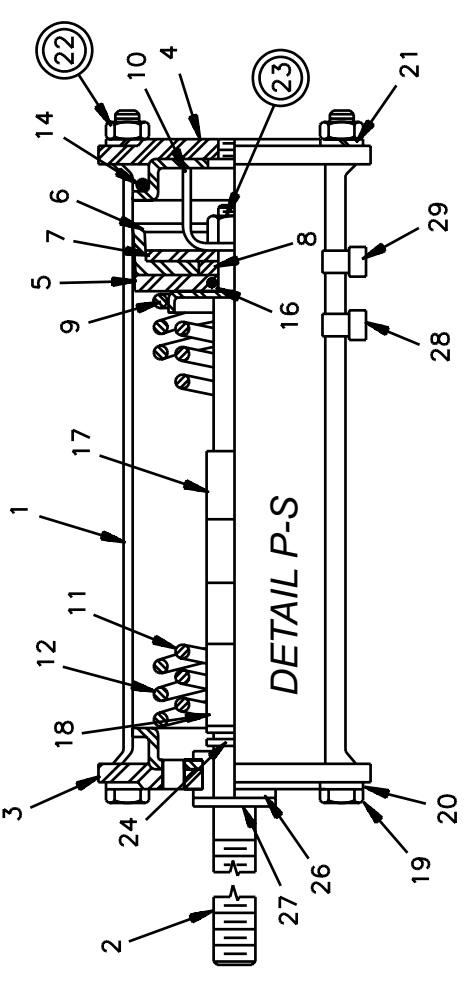
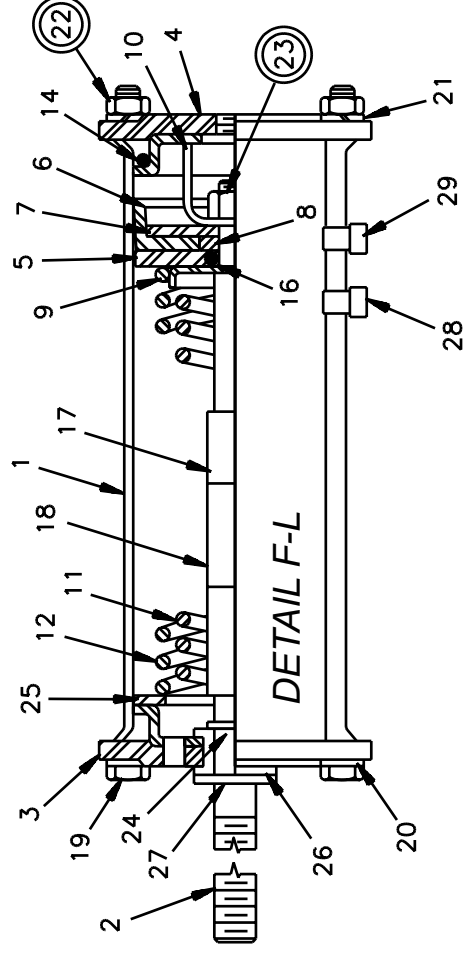
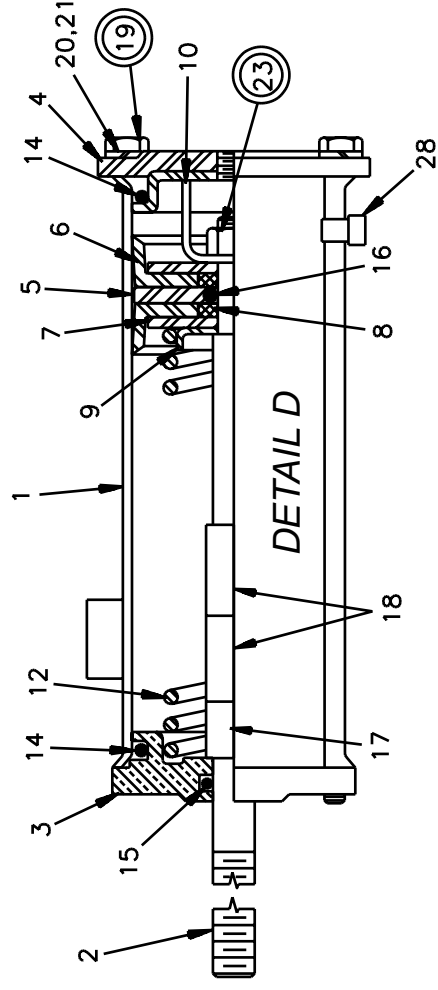
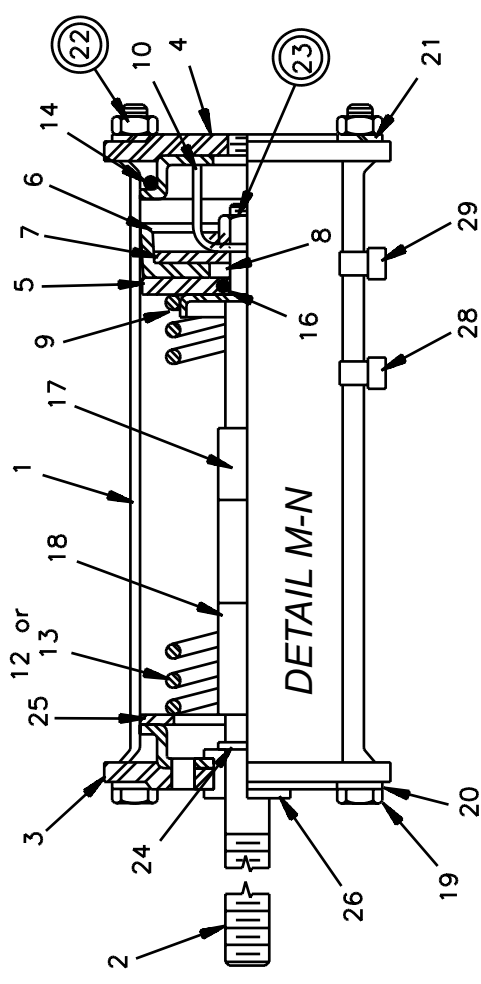
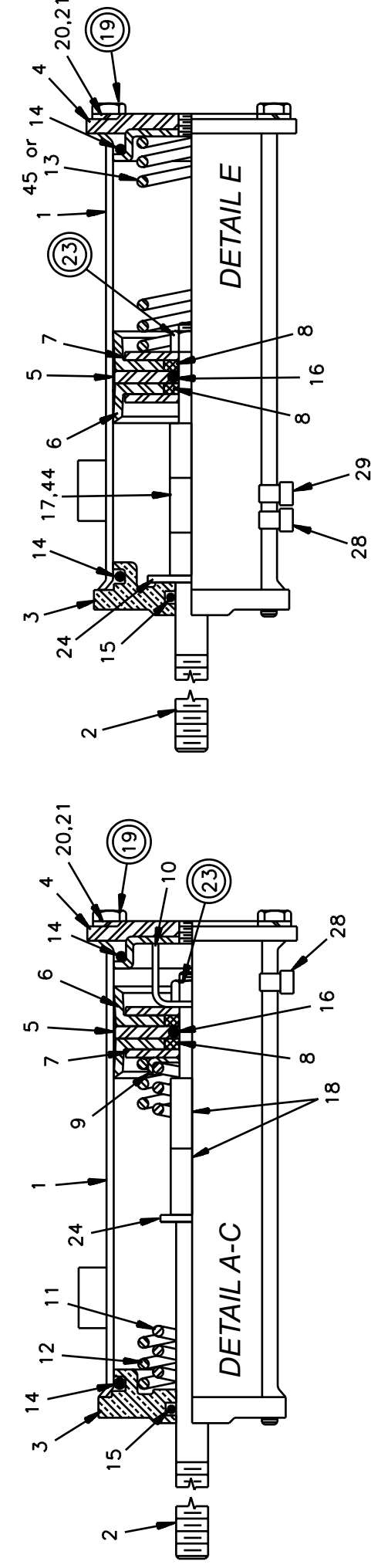


A WARNING



EXPLOSION HAZARD - Air cylinder can burst apart with great force.
Circled items are under high spring tension.
Follow maintenance instructions MSSM0130AE carefully.

AIR CYLINDER MOUNTING HARDWARE





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Parts List—Air Cylinder Assemblies				Parts List, cont.—Air Cylinder Assemblies			
Used In	Item	Part Number	Description	Used In	Item	Part Number	Description
<p>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.</p>							
ASSEMBLIES							
A		SA 36 035	89483V* AIRCYL=BRAKE ASSY			02 02185	79237A WASHER=PISTON CUP COMP LIMIT
B		SA 28 128	89483T* BRAKE AIRCYL 2-WAY 60+72SGU			02 18651	73171A WASHER=2WAY BRAKECYL
C		SA 28 152	89483V* BRAKE AIRCYL 2-WAY 60WE2+3			03 01313	70219A STOP=AIR CYL W/2+11/16STROKE
D		SA 10 019A	89483U* BRAKE AIRCYL,2-WAY=42WE+DAU			02 15880	96471B SPRING=BRAKE1.5OD10.3FL17#/"
F		A52 00200	89463U* BRAKE AIRCYL=7244 TILT ONLY			02 15881	96471# SPRING=BRAKE2.1OD11FL15.5#/"
G		SA 10 019Q	89483T*BRAKE CYL ASSY=4226QWE+DYA			02 17023	83392B SPRING-SS=DUMP 1.5OD8FL21#/"
H		AAC14001A	90000Z AIRCYL-LONG= 4256PFG			60C132	ORING 2"IDX3/16CS BUNA70 #329
I		A76AC001A	89463T AIR CYL.2-3/8 BORE 2"STROKE			60C110	ORING 1/2IDX3/32CS BUNA70 #112
J		A76AC001B	89463@ AIR CYL.2-3/8 BORE 3"STROKE			60C106	ORING 5/16ID 1/16CS BUNA70#011
K		A75 01200	89463T*AIR CYL. DAMPER = 3"STROKE			27B240	SPCRROLL.5ID.813L.062T STLZNC
L		A75 01300	89463U*AIR CYL. DAMPER = 2"STROKE			27B250	SPCRROLL.5ID1.5L.062T STLZNC
M		SA 10 019	89497U* BRAKE AIRCYL=BALCOM+DIVCYL			02 10585E	91142# TIE BOLT=5/16-18X8.25LG PLTD
N		AAC14001	90041U*AIRCYL=RATE 50-91 STRK 2.09			02 10585E	91142# TIE BOLT=5/16-18X8.25LG PLTD
P		A25 00600	89457V* BRAKE AIRCYL=52WE1 +52TILT			W6 20702F	90293B*FLOW NOT VLV=AIR-CYL ROD WLD
Q		AAC64001	894613*AIRCYL=BRAKE ASSY 6442			15U200	FLATWASHER(USS STD) 5/16"ZNC PLT
R		AAC65001	93481B AIRCYL=BRAKE ASSY 6446E6N			15U210	LOKWASHER MEDIUM 5/16 ZINCPL
S		AAC58001	95000Z AIRCYL=BRAKE ASSY 7258J2N			15G185	HXNUT 5/16-18UNC2B SAE ZINC GR2
COMPONENTS							
A-D	1	W2 18646	93344L CYLINDER-AIR=DOUBLEACT BRAKE			15G220	02Z LTHX THIN LOKNUT 3/8-24 SSNTE
F-S	1	02 02068	94266A AIRCYL-STAINLESS=DUMPVALVE			15U243	FLAWASHER 7/8ODX33/64IDX16GA ZINCPL
A-D,F-G,S, I-K,M-Q	2	02 18650	96431B STEM=2 WAY AIRCYLINDER BRAKE			15U520	FLAT WASHER 2+3/8X1+41/64X12GA ZINC
H	2	03 06313A	96431# STEM=AIR CYL 304SS			54E220	NYLNR 8L2FF BUSH 1/2X9/16X.140
L	2	02 18650A	96417B STEM-AIRCYL UPLOCK PRESS			17B012	EXTRETRING IND#1000-50-ST-ZD ZINC
R	2	02 18650B	97362B STEM=2WAY AIRCYL BRAKE 7.88L			20L601R	ID TAG NAT'L #1614 ALUM EMB LET "R"
A-D	3	02 18660	CYLHEAD-BRASS=2WAY AIRCYL			20L601U	ID TAG NAT'L #1614 ALUM EMB LET "U"
F-Q	3	02 02546	CYLHEAD=SLIDESTEM			20L601P	ID TAG NAT'L #1614 ALUM EMB LET "P"
R	3	06 20702E	91227B FLOW NOT ACTUATOR CYL HEAD			20L601X	ID TAG NAT'L #1614 ALUM EMB LET "X"
S	4	02 02101	71334A CYLHEAD W/TAPPED HOLE			20L601J	ID TAG NAT'L #1614 ALUM EMB LET "J"
ALL	5	02 02105	91522A PISTON CUP WASHER STNLS STL			20L601A	ID TAG NAT'L #1614 ALUM EMB LET "A"
S	5	02 02105B	92253B 2.38"ACYL BRASS PISCUP WASHR			20L601Q	ID TAG NAT'L #1614 ALUM EMB LET "Q"
ALL	6	02 02194	93217B PISTONCUP=DUMPVALVE 2+3/8"			20L601F	ID TAG NAT'L #1614 ALUM EMB LET "F"
ALL	7	02 02085	75161A UP WASHER=2"OD=PISTONCUP			20L601D	ID TAG NAT'L #1614 ALUM EMB LET "D"
						20L601V	ID TAG NAT'L #1614 ALUM EMB LET "V"
						20L601E	ID TAG NAT'L #1614 ALUM EMB LET "E"
						20L601A	ID TAG NAT'L #1614 ALUM EMB LET "A"
						20L601F	ID TAG NAT'L #1614 ALUM EMB LET "F"



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Parts List, cont.—Air Cylinder Assemblies

Used In	Item	Part Number	Description	Comments
N	29	20L601C	ID TAG NAT'L #1614 ALUM EMB LET "C"	
Q	29	20L601D	ID TAG NAT'L #1614 ALUM EMB LET "D"	
ALL	30	03 06309	70310C RIGHTMOUNT=BRAKE CYL ZNC	RIGHT
ALL	31	03 06308	70310C LEFTMOUNT=BRAKE CYL ZINC	LEFT
ALL	32	02 02550	97437ABRKT=AIRCYL-RIGHT ZINC/CAD	RIGHT
ALL	33	02 02547	LT BRACKET=AIRCYL CAD	LEFT
ALL	34	02 02556	SUPPORT=AIRCYL CADSTL	
ALL	35	27B2750LOT	01Z SPC RROLL.562ID.937L.048T ZNK	
ALL	36	15K206	HEXCAPSCR M5-.8X40MM 18-8SS	
ALL	37	15G235F	HXFJAMNUT 9/16-12UNC2B ZINC GR2	
ALL	38	15U280	01Z FL+WASHER(USS STD)1/2 ZNC PL+D	
ALL	39	15G230	HXNUT 1/2-13UNC2B SAE ZINC GR2	
ALL	40	17A020	ADJ CLEVIS MACHINED 1/2-13 ZINC PLT	
ALL	41	17A065	01Z EYEEND 1/2-13 X2.25 ZINC	
ALL	42	17A040	CLEVISPIN 1/2"X1+3/8" DRILLED	
ALL	43	15H030	STDCOTTERPIN 3/32X3/4 ZINCPL	
ALL	44	27B34010SZ	SPCRROLL.512ID.625L.062T STLZC	
ALL	45	02 17024	94302B SPRING-SS=DUMP 1.5OD4FL40#"	

Temperature Probes

50040TS1,TT1,CS1,SA1,SB1

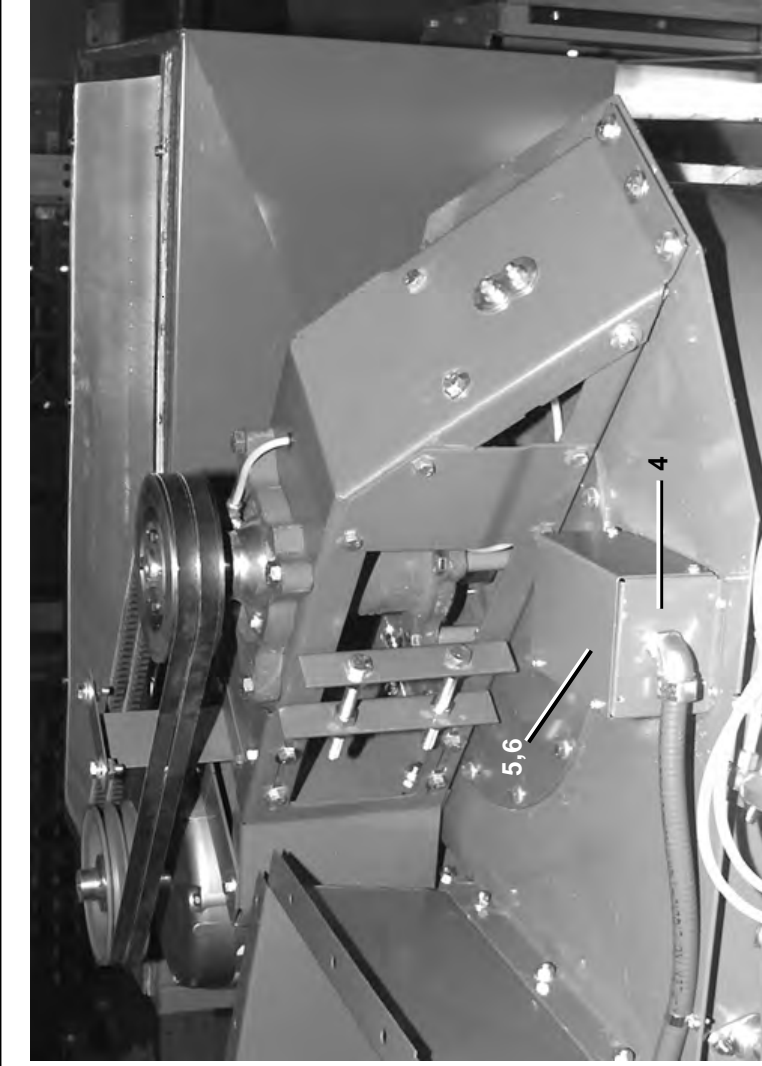


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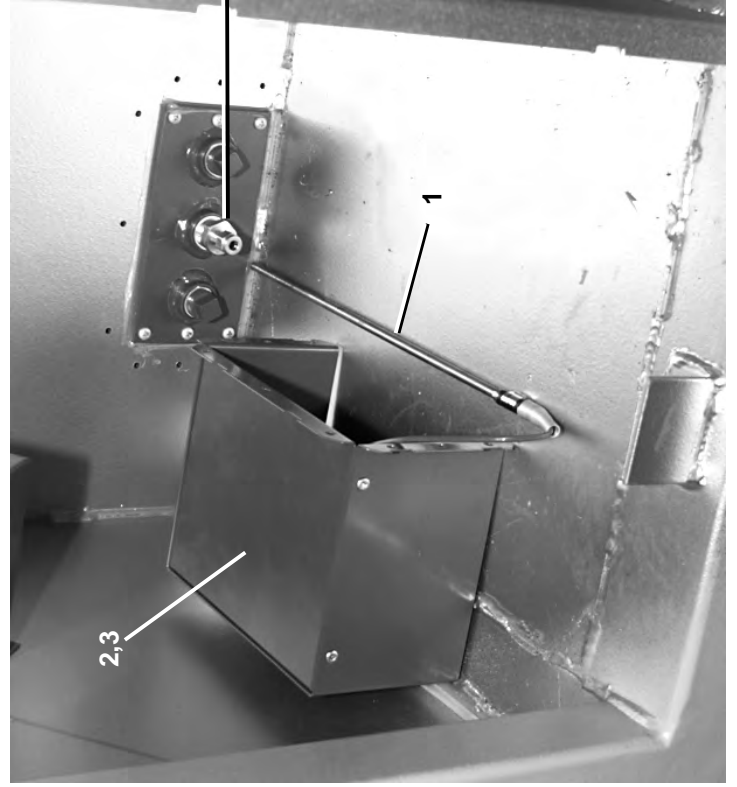
BMP970035/97473V (1 of 1)

Litho in U.S.A.

BMP970035/97473V
(Sheet 1 of 1)



OUTLET PROBE



INLET PROBE

Parts List—Temperature Probes
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	1	30R0050PP	97016N*100# DRYER T/C PROBE ASSY	
all	2	07 40382	94386C TEMP PROBE HOUSE LOWER	
all	3	07 40390	94386C TEMP PROBE HOUSE UPPER	
all	4	30R0055PP	86331N* DRYER OUTLET T/C PROBE ASSY	
all	5	03 E4X3Y	92572C ENCL:DRYER TEMP PROBE	
all	6	03 CL4X3Y	92563C COVER:DRYER TEMP PROBE	

Door Assemblies

4

Load Door Drive & Installation

50040TS1,TT1,CS1,SA1,SB1

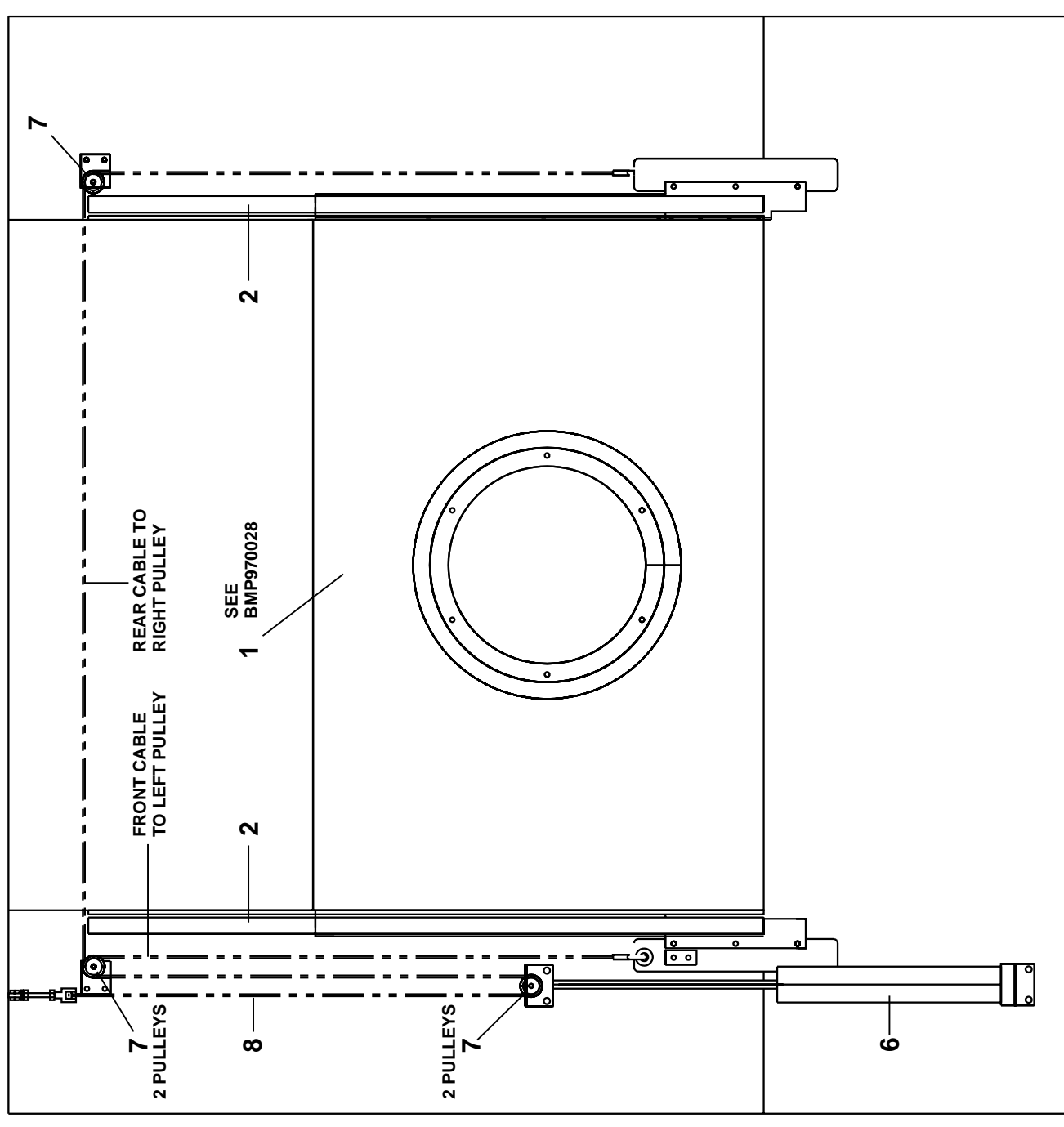
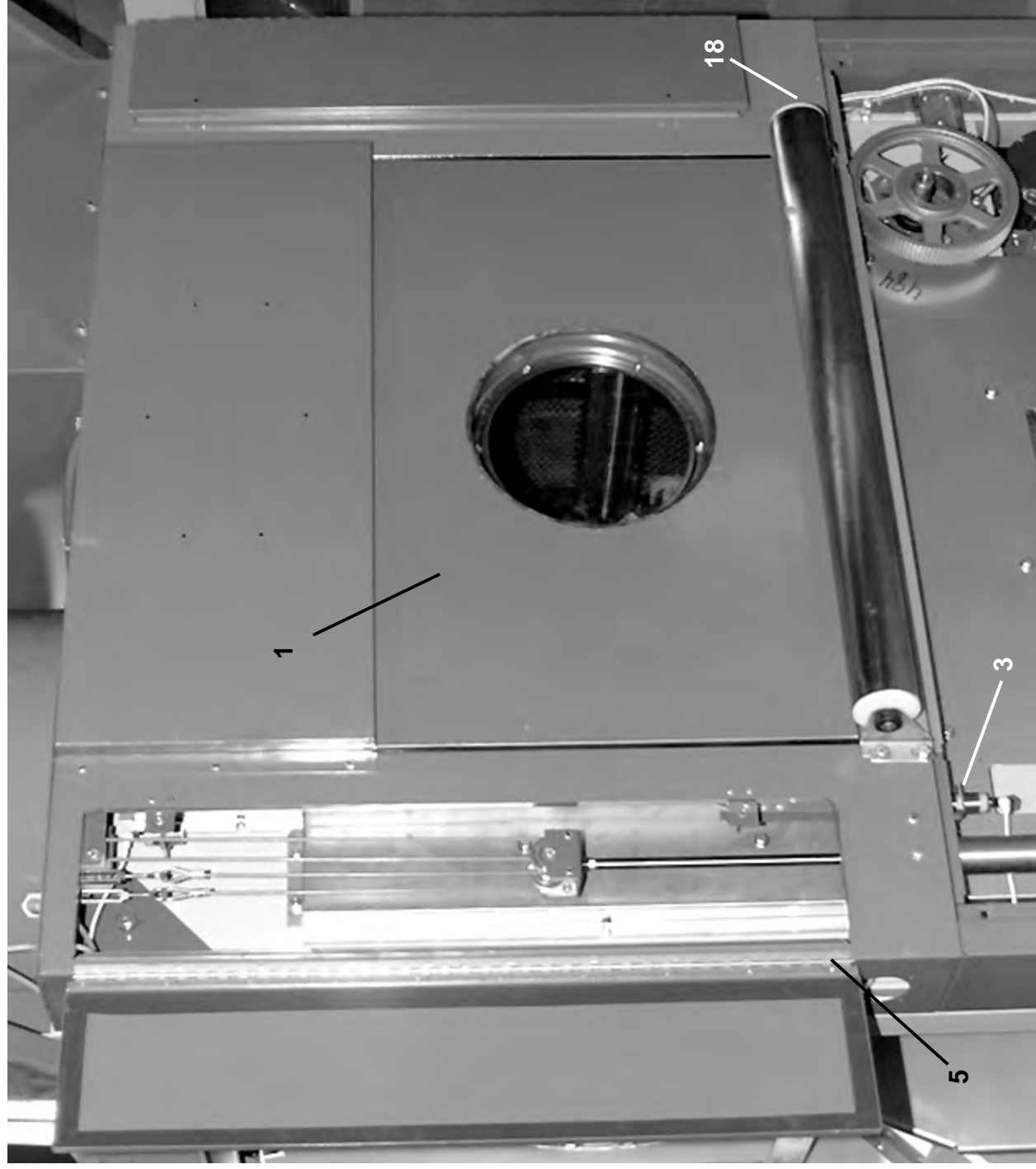
BMP970027/97322V
(Sheet 1 of 3)



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BMP970027/97322V (1 of 3)

Litho in U.S.A.



Load Door Drive & Installation

50040TS1,TT1,CA1,SA1,SB1

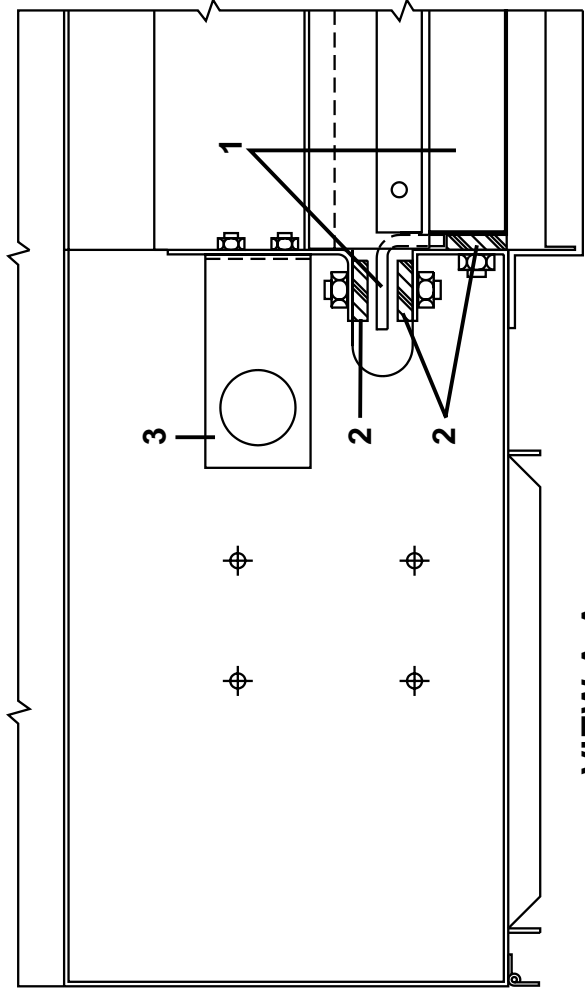
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(Sheet 2 of 3)



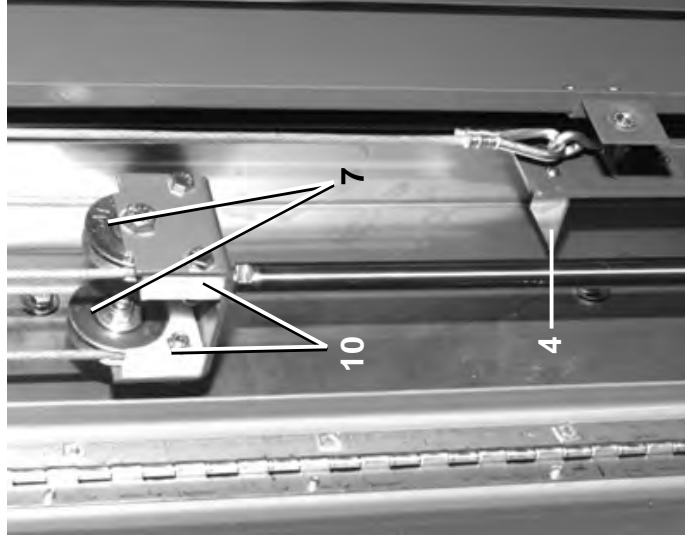
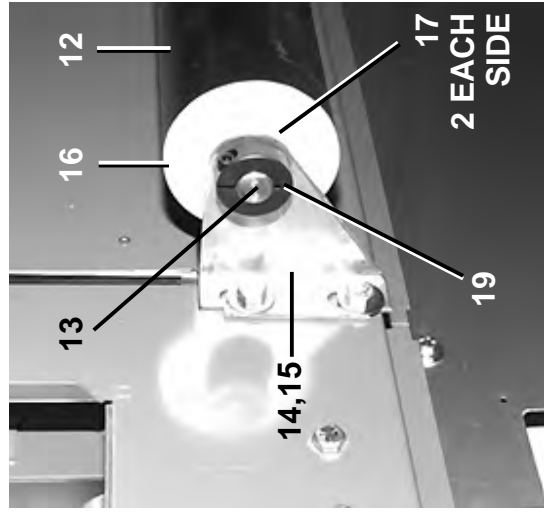
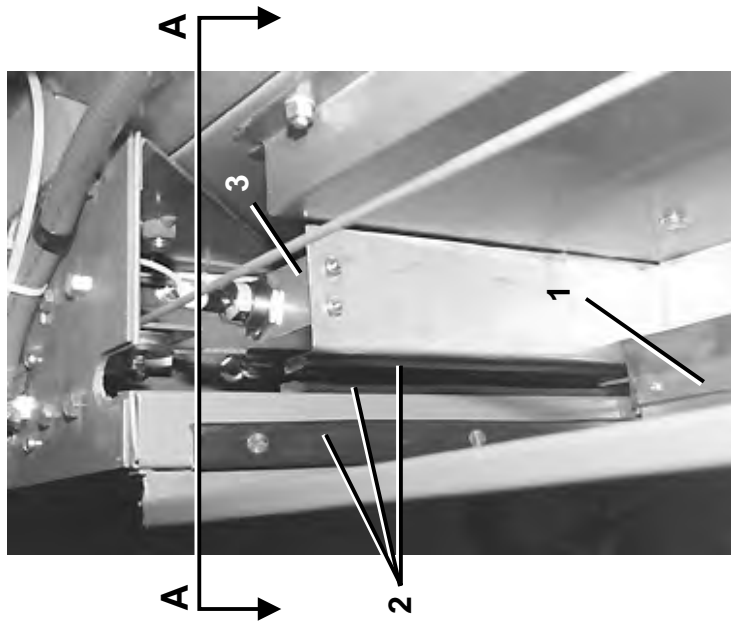
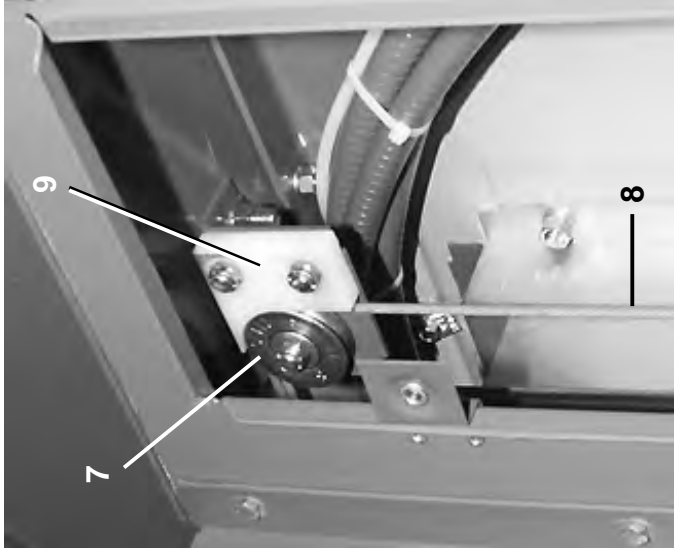
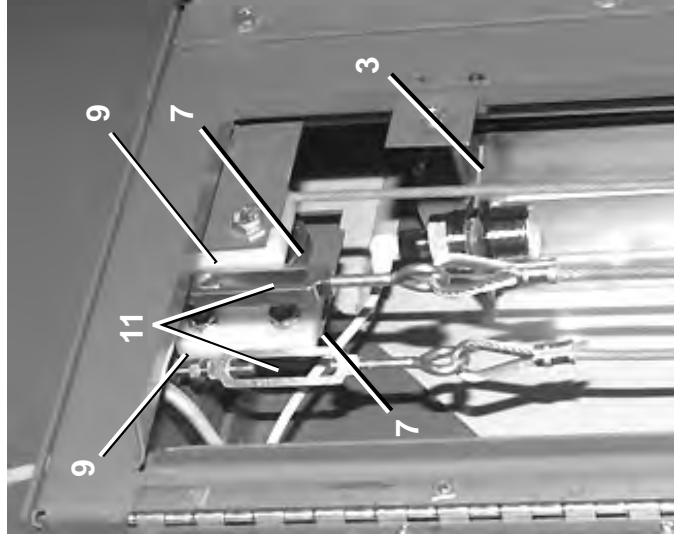
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BMP970027/97322V (2 of 3)

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**USE TURNBUCKLES (11)
TO REDUCE SLACK IN CABLES**





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Parts List—Load Door Drive & 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	G74SD003	94000Z*50040 COSMETIC FRONT INSTALL	
	B	A74SD011	93000Z*DOOR DRIVE ASSEMBLY 5040	
	C	G74SD004	93000Z*50040 S/S FRONT SEAL ASSY	
	D	A77GB001	89253#*5880 LOAD DOOR ROLLER ASSY	
-----COMPONENTS-----				
A	1	A74SD003	93000Z*ASSY = 50040 DRY LOAD DOOR	
A	2	07 40922	94373C LOAD DOOR TRACK LINER	
A	3	07 40959	96096C LOAD DOOR PROXIMITY SWT BRKT	
A	4	07 50264	85377B TARGET=LOAD DOOR POSITION	
A	5	07 50704	86523B HINGE-LINT COLLECTOR BOX	
B	6	27C220	01Z AIR CYL 2"BORE X 15"STROKE	
B	7	27A965	PULLEY-ZC.PLATED-CPS650	
B	8	27A964	CABLE #3126-G-N-6 *	
B	9	07 40935	94517B UHMW PULLEY CABLE GUIDE RT	
B	10	07 40937	94272B UHMW PULLEY GUIDE AIRCYL	
B	11	17A074	TURNBKLE 1/4X5+1/4EYE+EYE ZINC	
D	12	07 50213	85516B ROLLER=LOAD DOOR	
D	13	07 50214	85516B SHAFT=LOAD DOOR ROLLER	
D	14	07 70087	89253C 5880 ROLLER SPPT=LEFT BRKT	
D	15	07 70088	89281C 5880 ROLLER SPPT=RIGHT BRKT	
D	16	07 50217	85181B BRG END SUPPORT ROLLER	
D	17	15U348	FLAWASH 101NYL 1.25"ODX.781"IDX.032	
D	18	54JH10750C	SHFTCOLLAR 3/4" CLPTYP CFG#12S	
D	19	15H051	STDCOTTERPIN 1/8X1+1/2ZINCPL	

Load Door

50040TS1,TT1,CS1,SA1,SB1

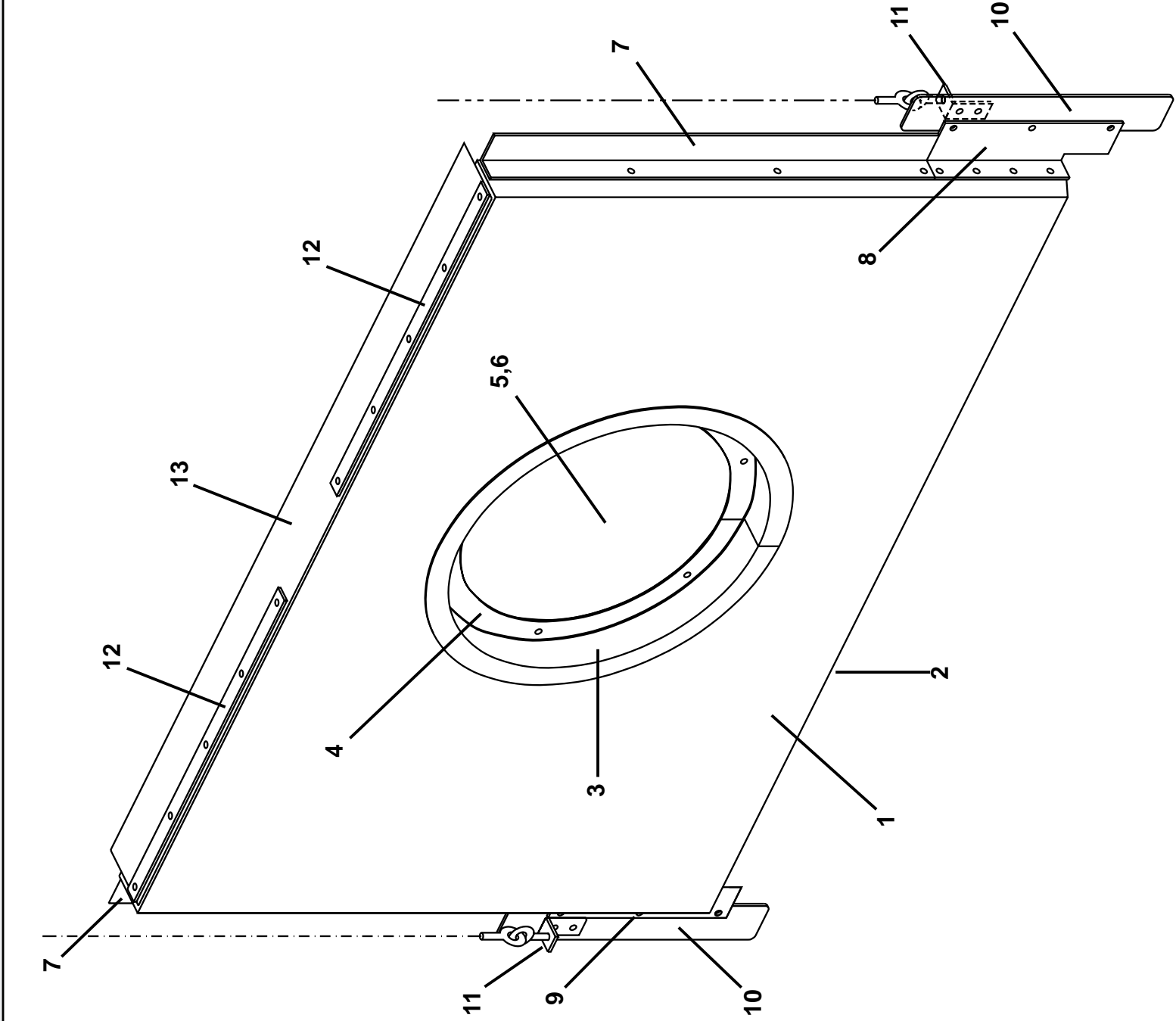


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BMP970028/97311V (1 of 1)

Litho in U.S.A.

BMP970028/97311V
(Sheet 1 of 1)



Parts List—Load Door

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
	A	A74SD003	93000Z*ASSY = 50040DRY LOAD DOOR	
			-----ASSEMBLIES-----	
			-----COMPONENTS-----	
all	1	07 40914	94427D LOAD DOOR MAIN - OUTSIDE	
all	2	07 40916	94291D LOAD DOOR MAIN - S/S INSIDE	
all	3	W7 40915	94196#*WLMT = SIGHT GLASS RING	
all	4	07 50057	93251C RING=SIGHGLASS LOAD DOOR	
all	5	02 02366A	92601B GASKET DOORGLASS = DRYER	
all	6	02 09215	83096A DRGLASS 12 3/8DIA SS STAMPED	
all	7	07 40917	94283C LOAD DOOR SEAL-TALL	
all	8	07 40918	94383C LOAD DOOR SEAL - SMALL RIGHT	
all	9	07 40918A	94383# LOAD DOOR SEAL-SMALL LEFT	
all	10	07 40919	94362B LOAD DOOR SEAL ARM	
all	11	07 40920	94283B LOAD DOOR CABLE ATTACH BRKT	
all	12	07 50012	85521B LOAD DOOR SEAL STRAP	
all	13	07 50013A	86187B RUBBER LOAD DOOR SEAL WIDE	

Unload Door
50040TS1,TT1,CS1,SA1,SB1

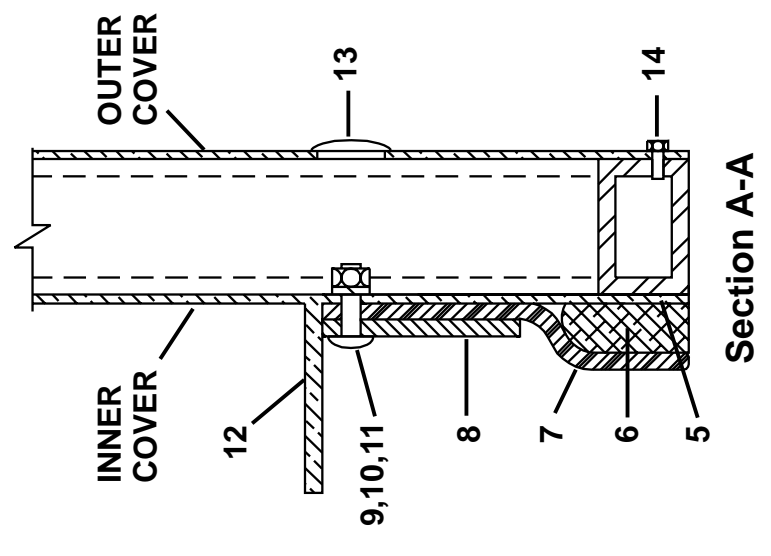
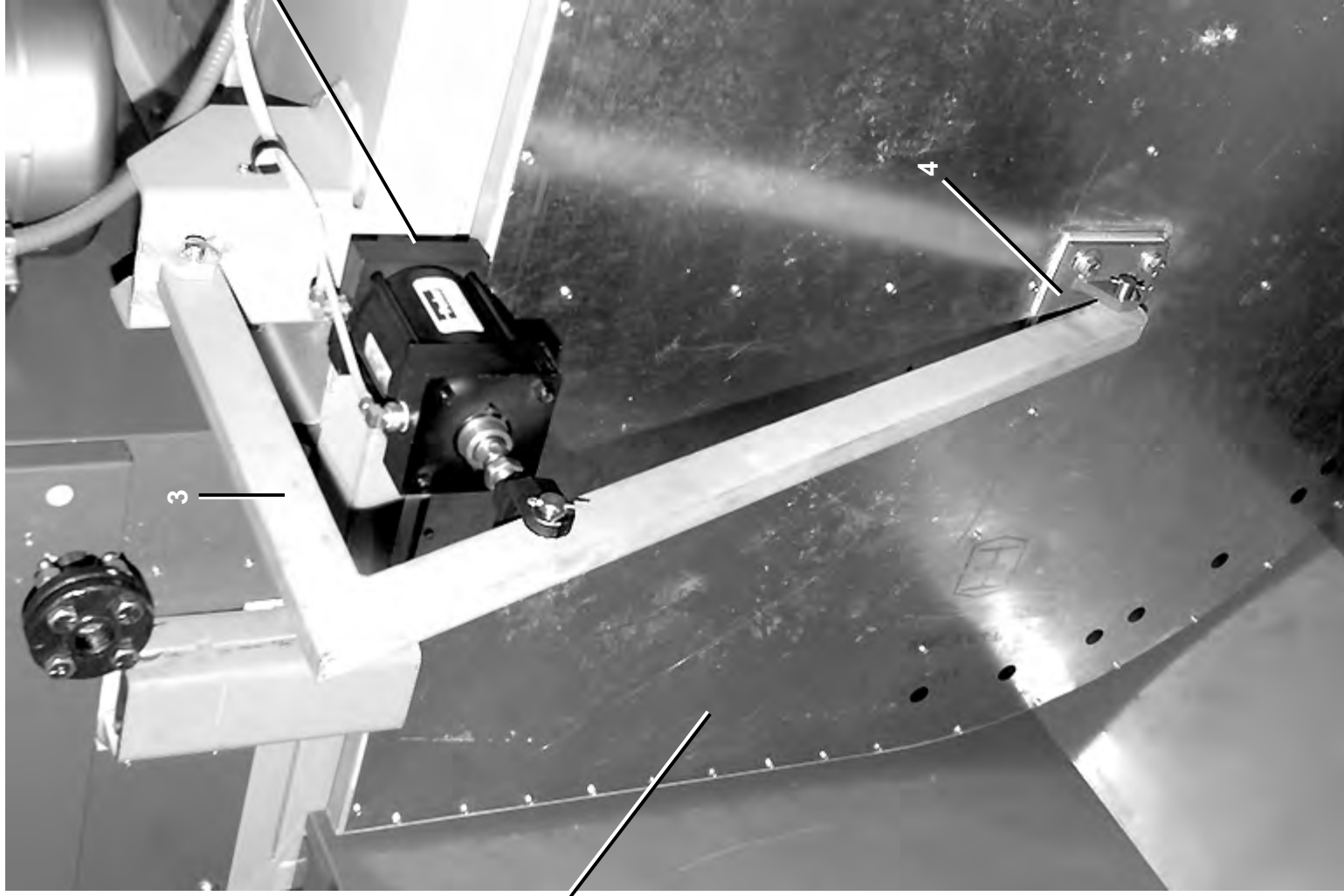
BMP970030/97322V
 (Sheet 1 of 2)



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BMP970030/97322V (1 of 2)

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Parts List—Unload Door

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	G74SD002A	93000Z*5040 UNLOAD DOOR INSTALL9321	COMPLETE DOOR ASSY
	B	A74SD002A	93000Z*5040 UNLOAD DOOR W/SM ASSY	
-----COMPONENTS-----				
A	1	A74SD002A	93000Z*5040 UNLOAD DOOR W/SM ASSY	
A	2	27C650	09Z AIR CYL 4"X3.5"X1" CLEVIS MNT.	
A	3	W7 40712	94146C*UNLOAD DOOR LINK-ARM WLD5040	
A	4	W7 50047A	91347C*LINKAGE ARM BASE BRKT WLMT	
A	5	20C044	ADHESIVE 3M EC-1300 IN PINT CONT.	
B	6	27A682	FELT 3/8" X 1" SAE F-3 *	
B	7	07 40708	94181C UNLDR FLT SEAL PROTECT 5040	
B	8	07 40717	94261C SEAL PROTECTOR	
B	9	15A002	CARBOLT 1/4-20UNC2X1/2 S/S	
B	10	15U181	LOCKWASHER MEDIUM 1/4 SS18-8	
B	11	15G170	HEXNUT 1/4-20UNC2 SS18-8	
B	12	W7 40701	94146D*WLMT=5040 UNL DOOR SM RING	
B	13	12P1ARHP	HOLEPLUG 7/8" BLK HEYCO #2703	
B	14	15P059	01Z SCRHXSELFDR:10-16X1/2 #2 ZINC	

Discharge Shroud
50040TS1,TT1,CS1,SA1,SB1

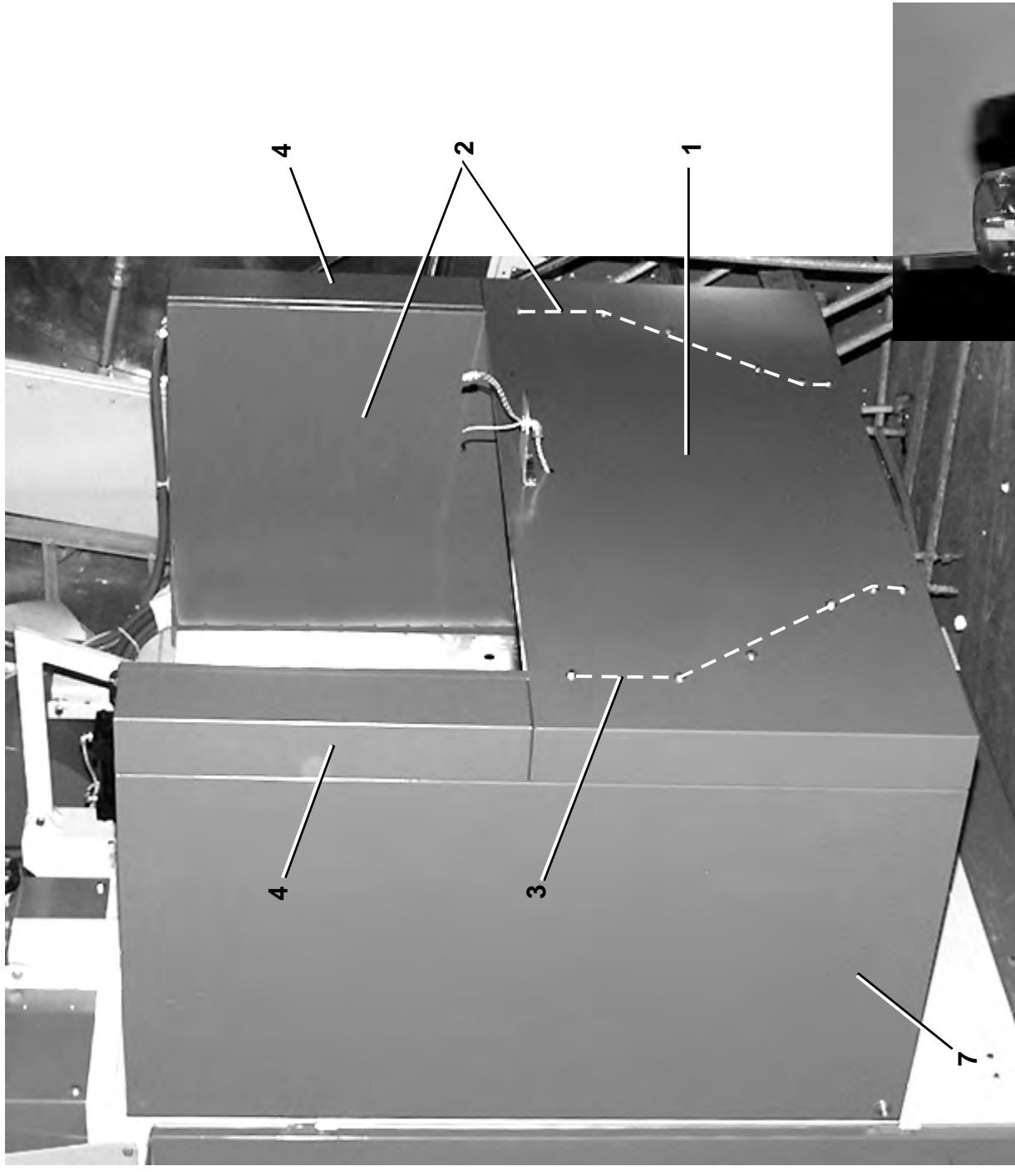
BMP970029/97327V
 (Sheet 1 of 2)



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BMP970029/97327V (1 of 2)

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Parts List—Discharge Shroud

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	G74SG001B	95000Z*5040 RR SHROUD INST/LF ELEC	
			-----COMPONENTS-----	
all	1	07 41205A	96347E UNLOAD SHROUD LOW REAR	
all	2	07 41206A	96347E 5040 UNLOAD=SHROUD LEFT	
all	3	07 41207B	96347E 5040 UNLOAD SHROUD RT	
all	4	07 41201B	95077C UNLOAD=SHROUD UP REAR LF&RT	
all	5	07 41202B	95077D UNLOAD=SHROUD OUTER LF FRONT	
all	6	07 41203A	94461C UNLOAD SHROUD LOW RT FRNT	
all	7	07 41200B	95077E SHROUD=OUTER COV RIGHT FRONT	
all	8	09H025V37	BEACON ROTARY 5.5"DIA AMBER	

Heating Systems

5

Steam Coil & Installation

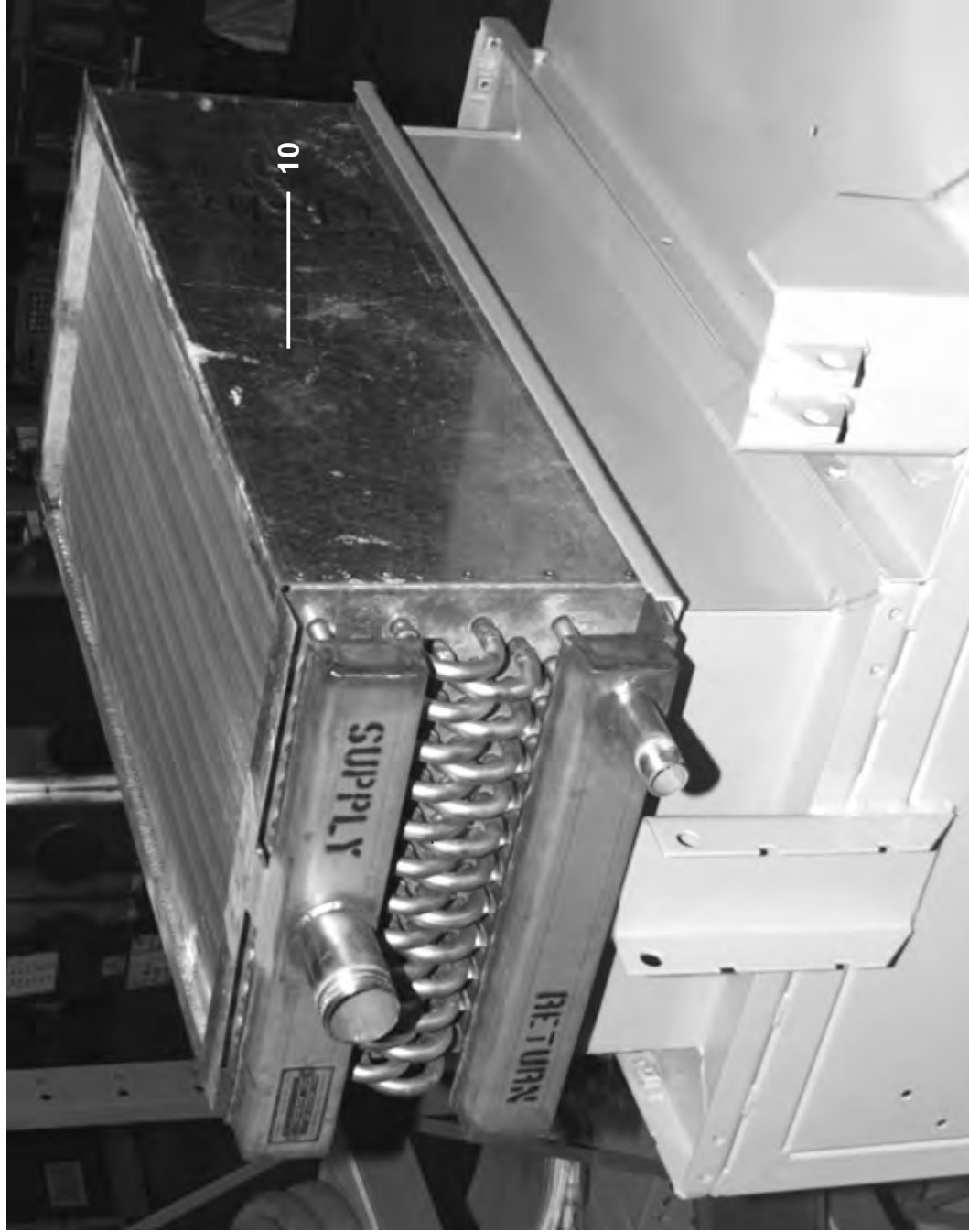
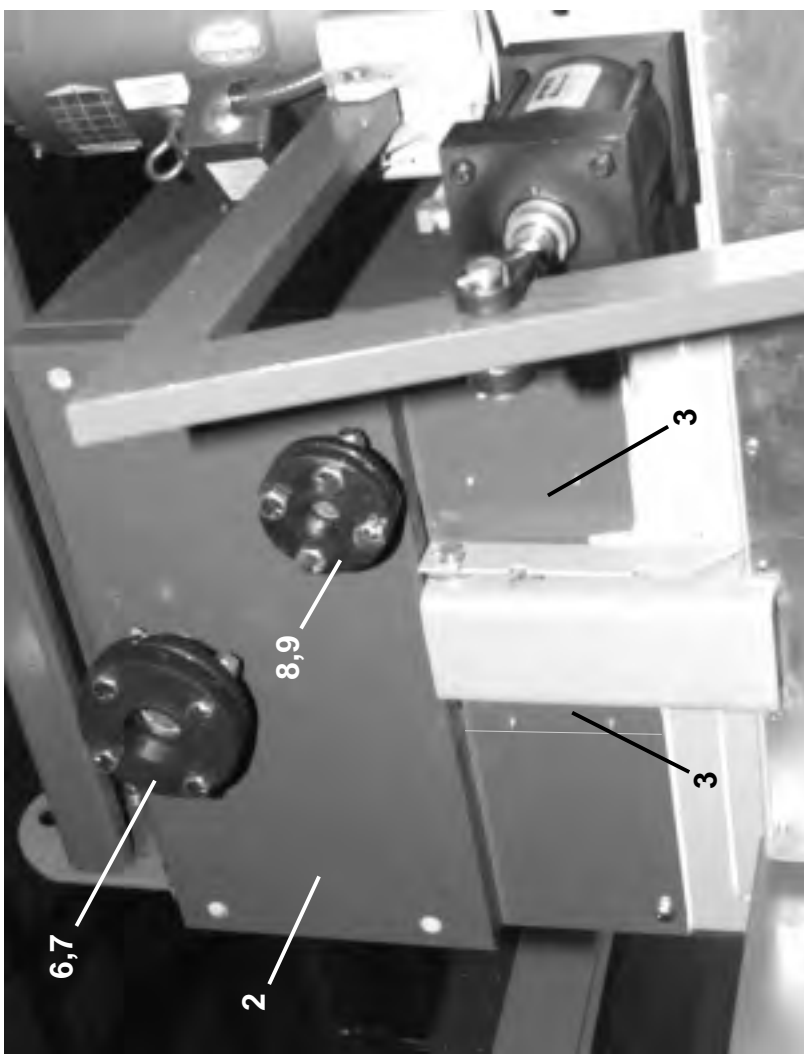
50040TS1

BMP970034/2005234V
(Sheet 1 of 2)



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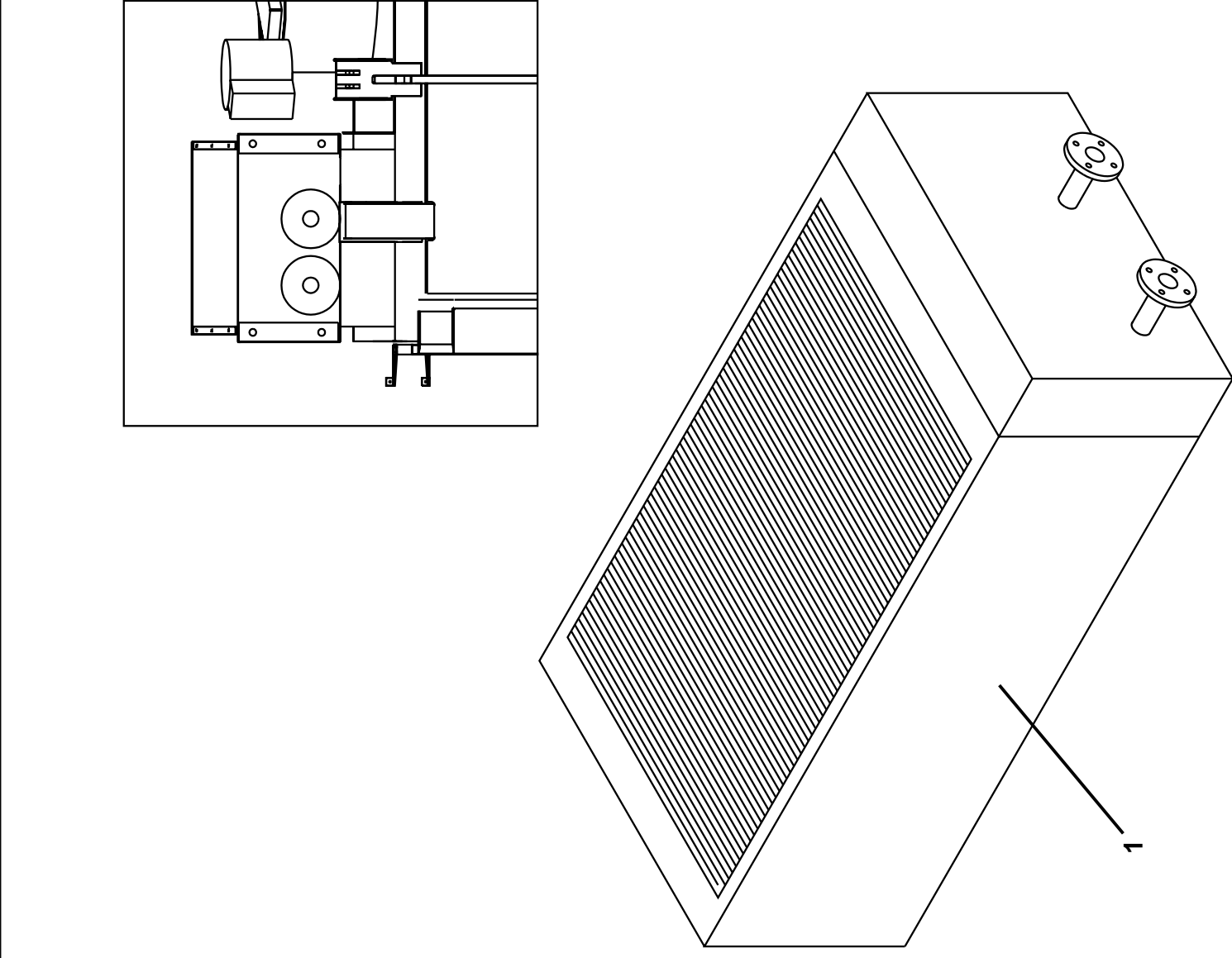
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Parts List—Steam Coil & Installation

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-----				
none				
-----COMPONENTS-----				
all	A	A74BS001	93000Z*50040DRY STEAM COIL ASSEMBLY	
all	1	07 40600	94401D STEAM COIL INSULATOR HOUSE	
all	2	07 40601	94263D STEAM COIL HOUSE END	
all	3	07 40606	94263B STEAM COIL REAR COVER PLATE	
all	4	07 40605	94396B ST COIL FRAME SCREEN - RT/LF	
all	5	98P035	02Z INSUL.FIBRGLS.24X48X1" E=1SHT	
all	6	51KE2ANA	FLANGE 2"150# THREAD RAISED-FACE	
all	7	51KE2ANASA	2" SPIRAL GASKET #FGCCG-1GG	
all	8	51KE1ANA	FLANGE 1" 150# THREAD RAISED-FACE	
all	9	51KE2ANAG	GSKT-1"FLANGE-1 5/16X 2 5/8	
A	10	27HS1936F	04ZSTEAMCOIL 19.5X36X.049 CARBSTL	
B	10	27HS1936S	04Z STEAMCOIL 19.5X36 .035 SS	



Parts List—Thermal Oil Coil
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	
	10	27HS1936TC	01ZTHERMOILCOIL 19.5X36 1.5FLNG	
all				

Gas Schematic and Burner Installation

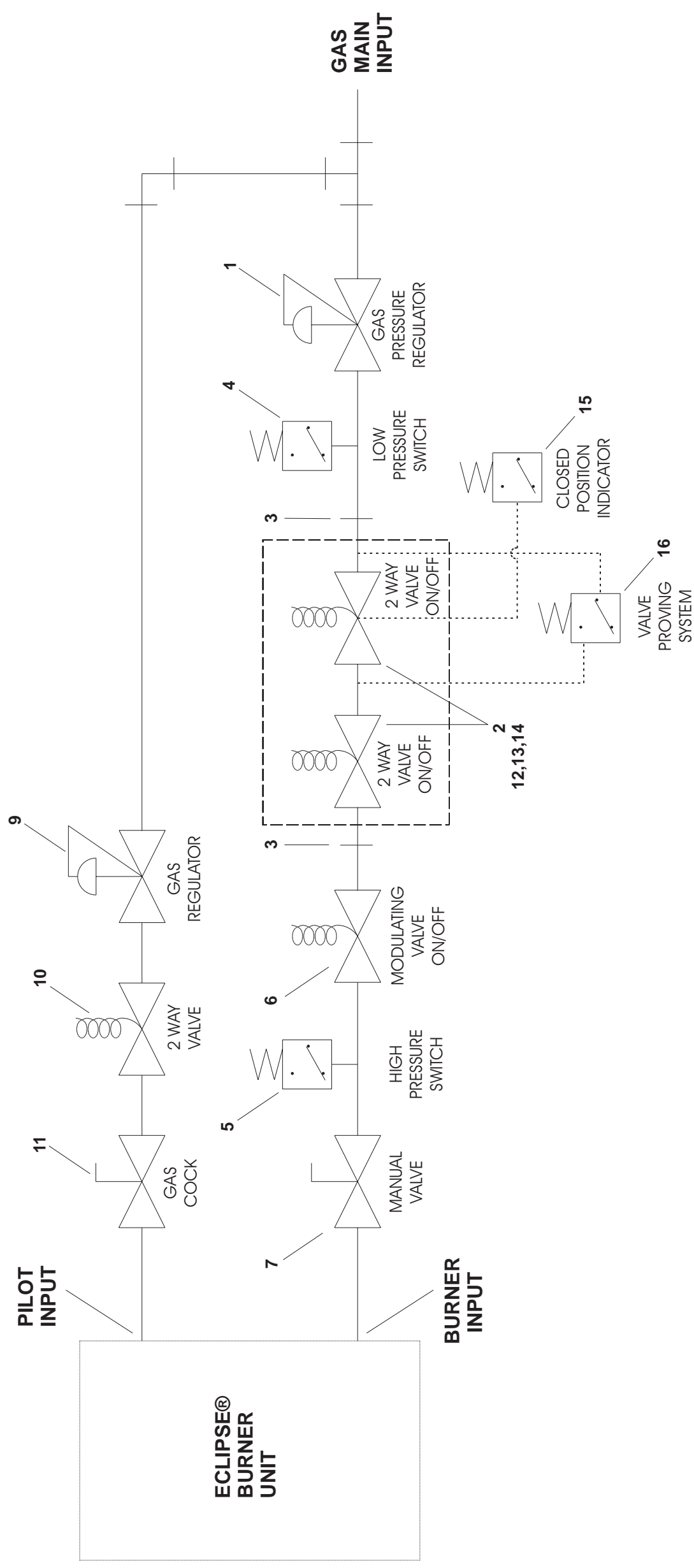
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BMP990001/2008323B
(Sheet 1 of 3)



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Litho in U.S.A.



Gas Schematic and Burner Installation

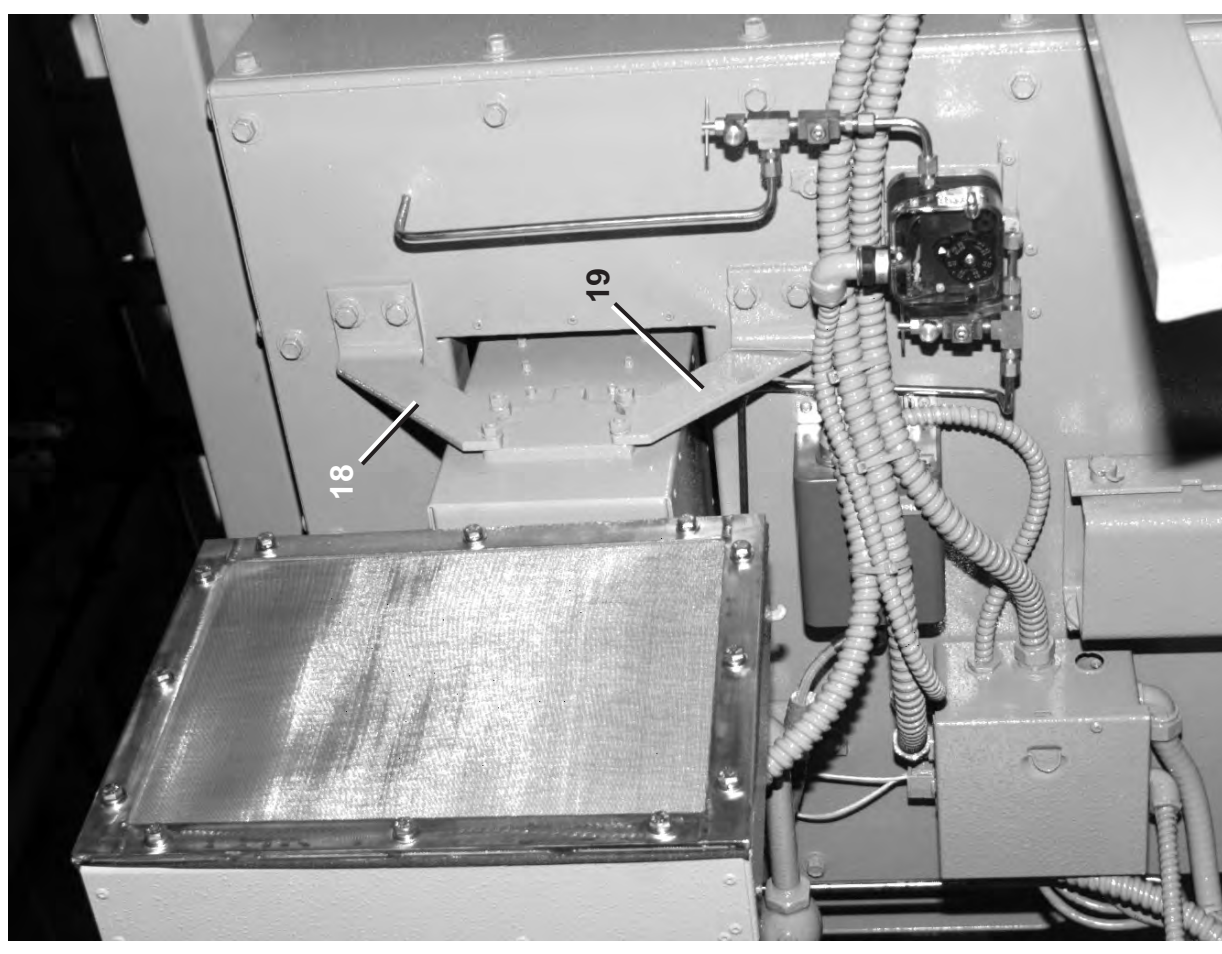
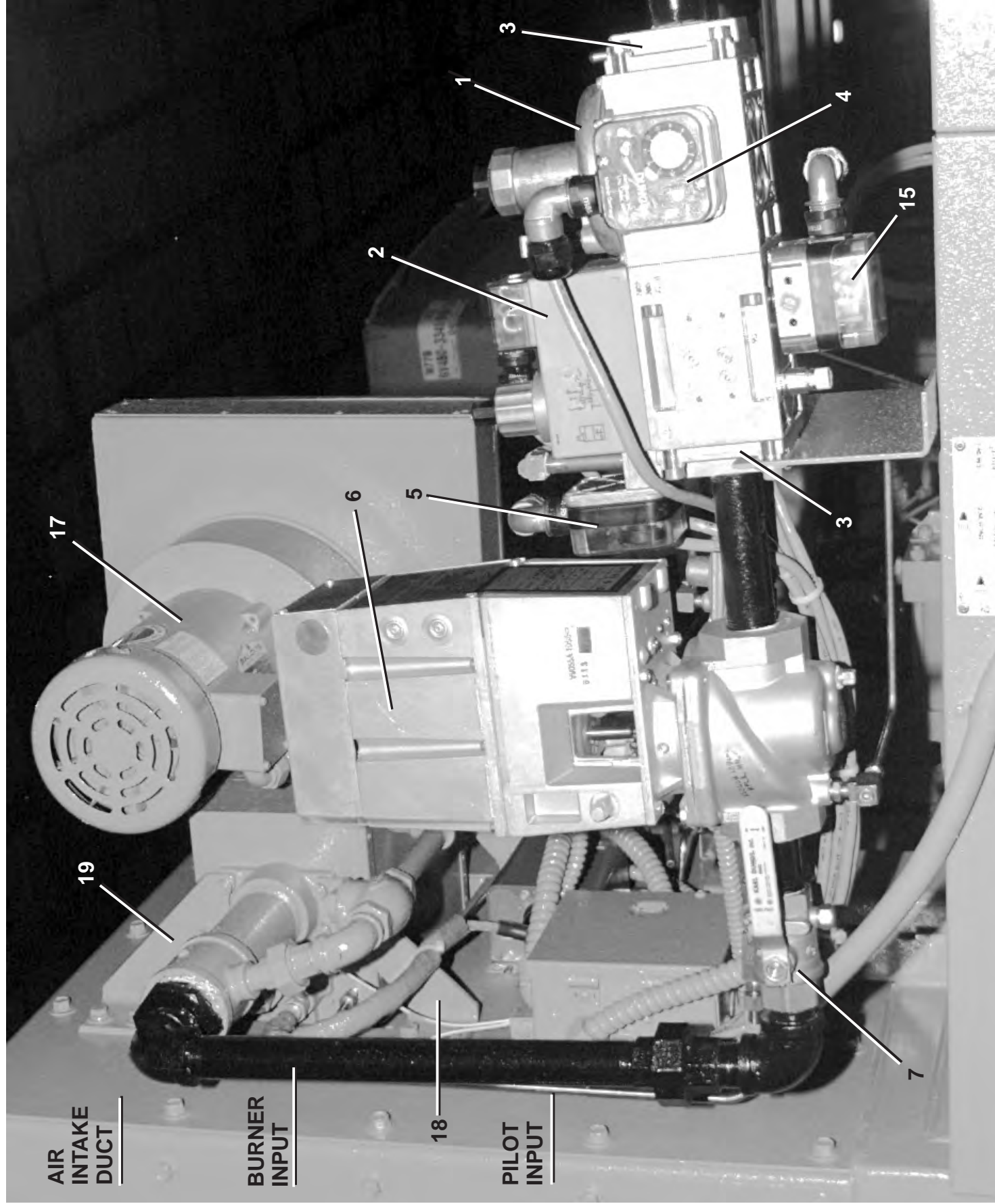
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BMP990001/2008323B
(Sheet 2 of 3)



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Gas Schematic and Burner Installation

50040TG-1



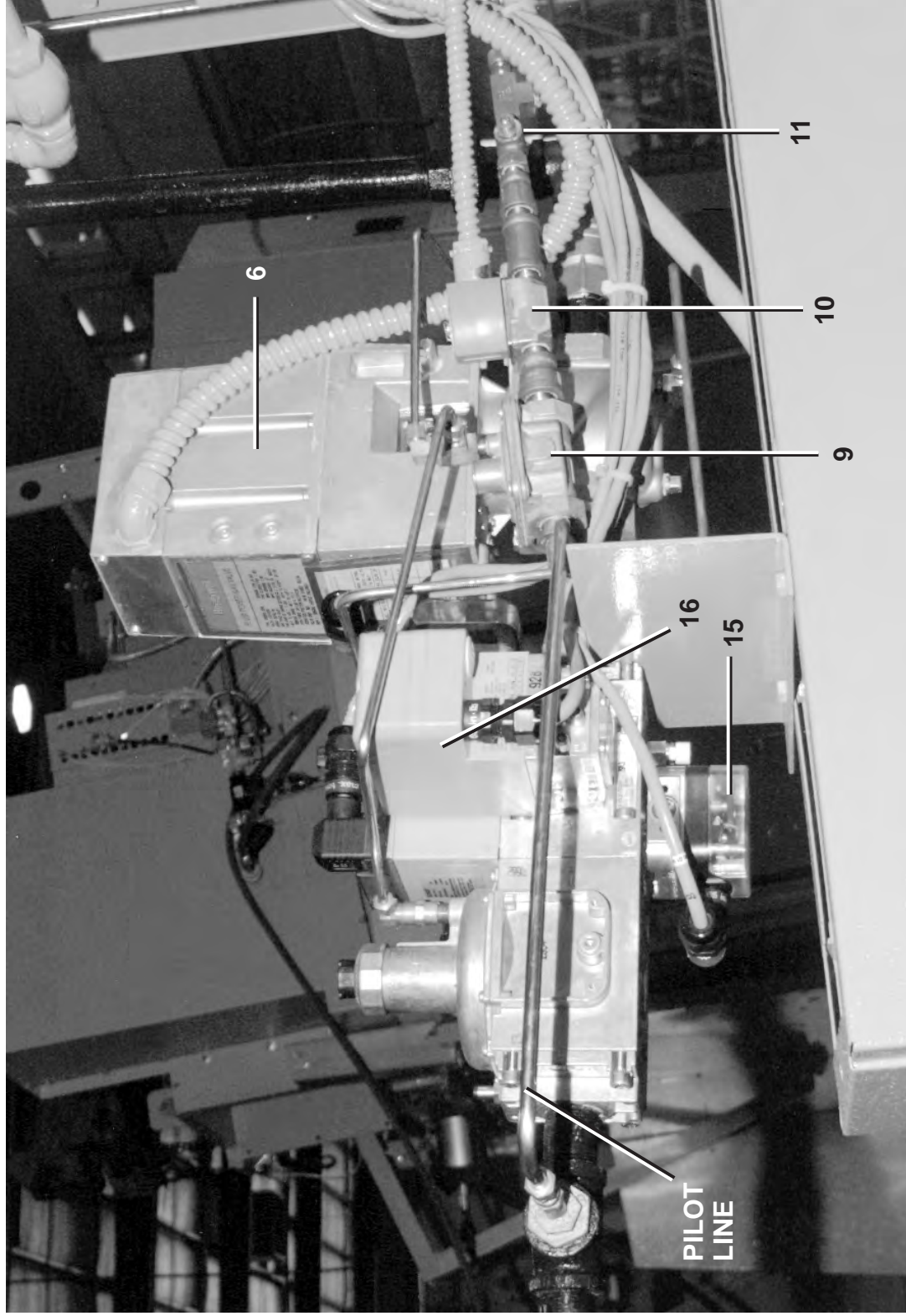
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BMP990001/2008323B
(Sheet 3 of 3)

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Parts List—Gas Schematic and Burner Installation

Used In	Item	Part Number	Description	Comments
			-----ASSEMBLIES-----	
	A	A74VG001	98513Z5040 GAS 3 VALVE NOVENT	REFERENCE ONLY
	B	A74VG002	98513Z5040 GAS PILOT	REFERENCE ONLY
	C	A74FB003	98491ZBURNER W/BRACKET ASSY	
			-----COMPONENTS-----	
A	1	96SD001	FRI 510 REGULATOR #D214407	
A	2	96SD002	DMV-DLE 512/11 #D222882	
A	3	96SD003	1" NPT FLANGES #D222369	
A	4	96SD004	GW10A2 AUTO.GASPRESSSW#D215231	
A	5	96SD005	GW50A2 AUTO.GASPRESSSW#D215232	
A	6	96S1002AGA	00Z 1" VALVE ON-OFF/MOD UNIVERSAL	
A	7	96SD006	1"NPTBALLVLV.W/SIDETAP#48603-5	
B	9	96J506	02Z 1/2" GAS REG 5"WC MAXTRL RV48	
B	10	96TCC2BA37	04Z 3/8" N/C 2WAY 120V50/60C VALVE	
B	11	96GG037AGA	02Z 1/4X1/4 GAS COCK VALVE W/T-HIDL	
A	12	96SD007	MOUNTKIT(FRI/DMV510)#D219968	
A	13	96SD014	VISUALVAL POSINDIC #217-665	
A	14	96SD008	G 1/8"TEST NIPPLE #D219008	
C	15	96SD021	CPI400 CLS. POS. INDICA SWITCH	IRI GAS TRAIN OPTION
C	16	96SD022	VALVE PROVING SYS #D221073	IRI GAS TRAIN OPTION
C	17	25AB241	BURNER/BLOWER MODEL 80 AH	
C	18	07 40445	98491Z5040 BURNER SUPPORT BKT RT	
C	19	07 40444	98491Z5040 BURNER SUPPORT BKT LF	



Gas Schematic

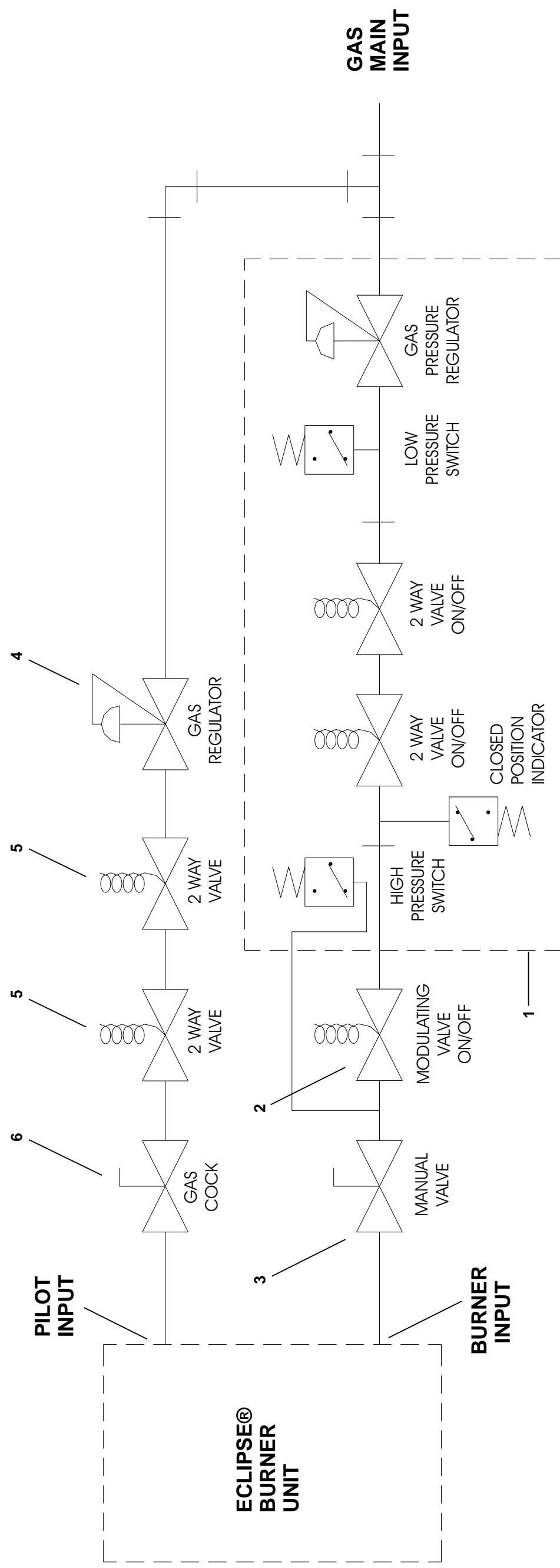
50040TG1 50-Cycle with Landis and Gyr Flame Control

BMP020030/2002264V
(Sheet 1 of 2)



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Parts List—Gas Schematic

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	A74VG005	5040 PILOT GAS TRAIN AUST.	
	B	A74VG006	5040 GAS TRAIN 2VAL-AUST	
-----COMPONENTS-----				
all	1	A74VG004	1" VALTRAIN 1MILBTU RT TO LFT	
all	2	96S1002AGA	1" VALVE ON-OFF/MOD UNIVERSAL	
all	3	96G101AUST	1" BSP-T GAS BALL VALVE	
all	4	96J506	1/2" GAS REG 5"WC MAXTRL RV48	
all	5	96R3025A37	1/4"AIR PILOT 2W N/C 110V50/60	
all	6	96G038AUST	3/8" BSP-T GAS BALL VALVE	

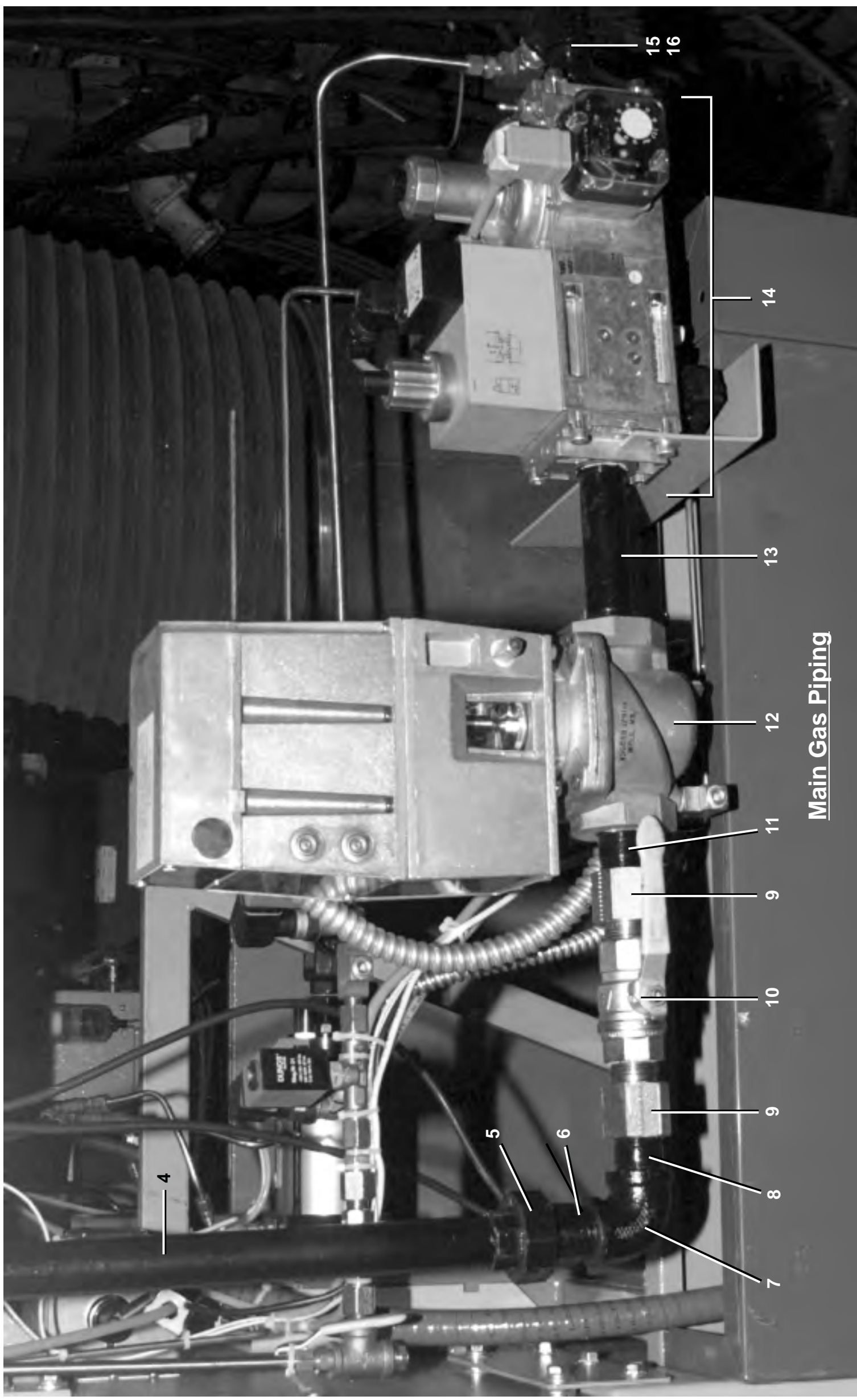
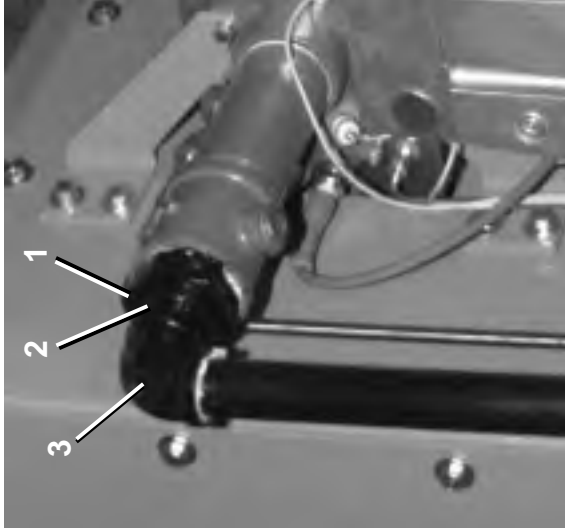
Main & Pilot Gas Piping
50040TG1 50-Cycle with Landis and Gyr Flame Control

BMP020031/2002264V
 (Sheet 1 of 2)



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Main Gas Piping

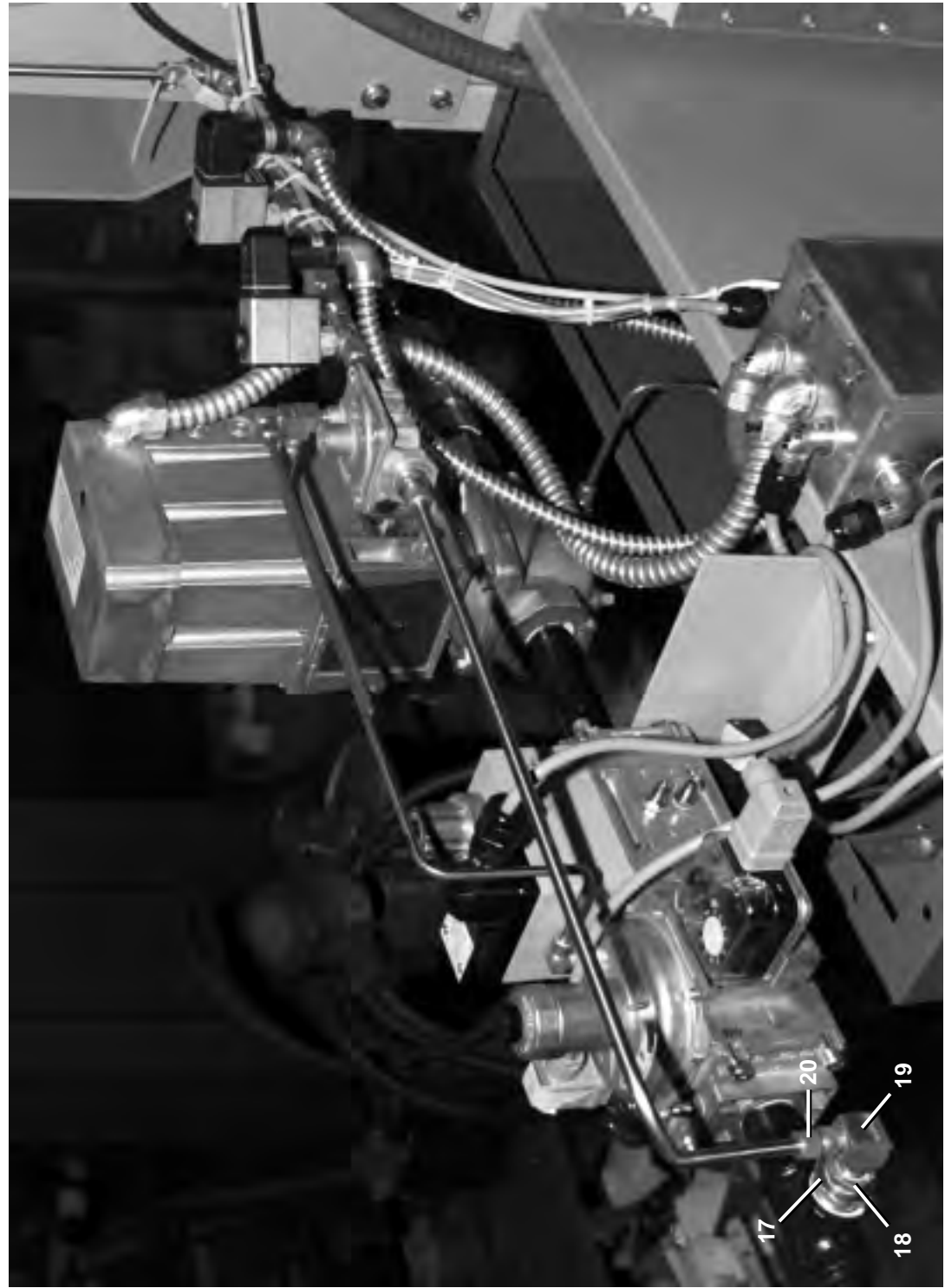
Main & Pilot Gas Piping
50040TG1 50-Cycle with Landis and Gyr Flame Control

BMP020031/2002264V
 (Sheet 1 of 2)

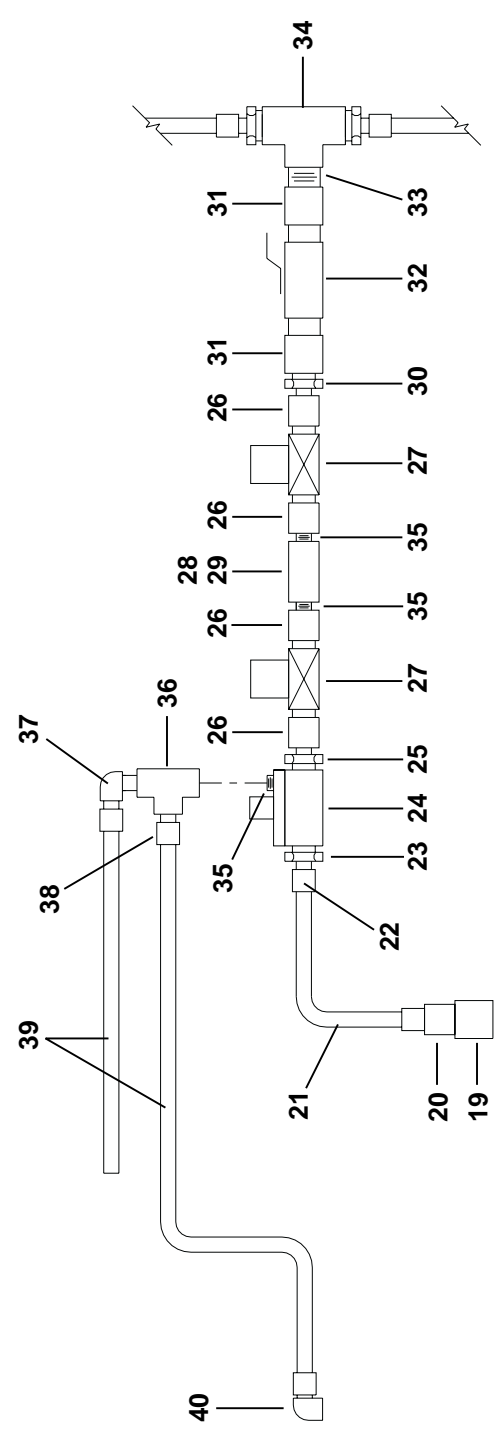


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Pilot Gas Piping



Pilot Gas Piping



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Used In	Item	Part Number	Description	Comments
			ASSEMBLIES-----	
	A	A76VG006	5840 GAS TRAIN 2-V=STD MOD2	
	B	A76VG005	*ASSY PRESS SW COVER 5840	
			COMPONENTS-----	
all	1	5SB2A1ACEO	NPTHEXBUSH 2X1 BLKCI 125#	
all	2	5N1ACLSF42	NPT NIP 1X CLS TBE BLKSTL SK40	
all	3	5SL1AMFA	NPT ELBOW 90DEG 1" BLKMAL 150#	
all	4	5N1A16AF42	NPT NIP 1X16 TBE BLKSTL SK40	
all	5	5SU1AMF	NPT UNION 1" BLKMAL 150#	
all	6	5N1ACLSF42	NPT NIP 1X CLS TBE BLKSTL SK40	
all	7	5SL1AMFA	NPT ELBOW 90DEG 1" BLKMAL 150#	
all	8	5N1ACLSF42	NPT NIP 1X CLS TBE BLKSTL SK40	
all	9	52AY0PR003	CONV.ADAPT.BRIT.1X1F3HG-S	
all	10	96G101AUST	1" BSP-T GAS BALL VALVE	
all	11	5N1A03AF42	NPT NIP 1X3 TBE BLKSTL SK40	
all	12	96S1002AGA	1" VALVE ON-OFF/MOD UNIVERSAL	
all	13	5N1A05KF42	NPT NIP 1X5.5 TBE BLKSTL SK40	
all	14	A74VG004	1" VALTRAIN 1MILBTU RT TO LFT	
all	15	5N1A03AF42	NPT NIP 1X3 TBE BLKSTL SK40	
all	16	5S1AMFA	NPT TEE 1" BLKMAL 150#	
all	17	5SB1A0KBE2	NPTHEXBUSH 1X1/2 BRASS 125#	
all	18	5SB0K0GBEO	NPTHEXBUSH 1/2X3/8 BRASS 125#	
all	19	53A045	EL90 COMP 1/2X3/8 #69A-8C	
all	20	53A026	BODYMALECON3/8X3/8 #68C-6-6B	
all	21	87Z00EX035	TUBE=1/4"ODX.035WL 316LSS*20RM	
all	22	53A023	MALECON3/8X.25COMP ANCHR#68-64	
all	23	5SB0K0GBEO	NPTHEXBUSH 1/2X3/8 BRASS 125#	
all	24	96J506	1/2" GAS REG 5"WC MAXTRL RV48	
all	25	5SB0K0EBEO	NPTHEXBUSH 1/2X1/4 BRASS 125#	
all	26	52AY0ER014	CONV.ADAPT.BRIT.1/4X1/4F3HG-S	
all	27	96R3025A37	1/4" AIR PILOT 2W N/C 110V50/60	

Used In	Item	Part Number	Description	Comments
all	28	51V015	TEE 1/4 FGDBRASS 101T7-444	
all	29	51P013	PLUG HXCNTRSUNK 1/4"BRASS	
all	30	5SB0G0EBEO	NPTHEXBUSH 3/8X1/4 BRASS 125#	
all	31	52AY0GR006	CONV.ADAPT.BRIT.3/8X3/8F3HG-S	
all	32	96G038AUST	3/8" BSP-T GAS BALL VALVE	
all	33	5N0GCLSBE2	NPT NIP 3/8XCLS TBE BRASS STD	
all	34	5S0GBEA	NPT TEE 3/8" BRASS 125#	
all	35	5N0ECLSBE2	NPT NIP 1/4XCLS TBE BRASS 125#	
all	36	51V015	TEE 1/4 FGDBRASS 101T7-444	
all	37	53A031B	BODY-EL90MALE.25X1/8 #269C-42B	
all	38	53A005B	BODYMALCON1/4X1/8COMP #B68A-4A	
all	39	87Z00EX035	TUBE=1/4"ODX.035WL 316LSS*20RM	
all	40	53A008B	BODYMALECON.25X.25COMP#B68A-4B	

Pneumatic Assemblies

6



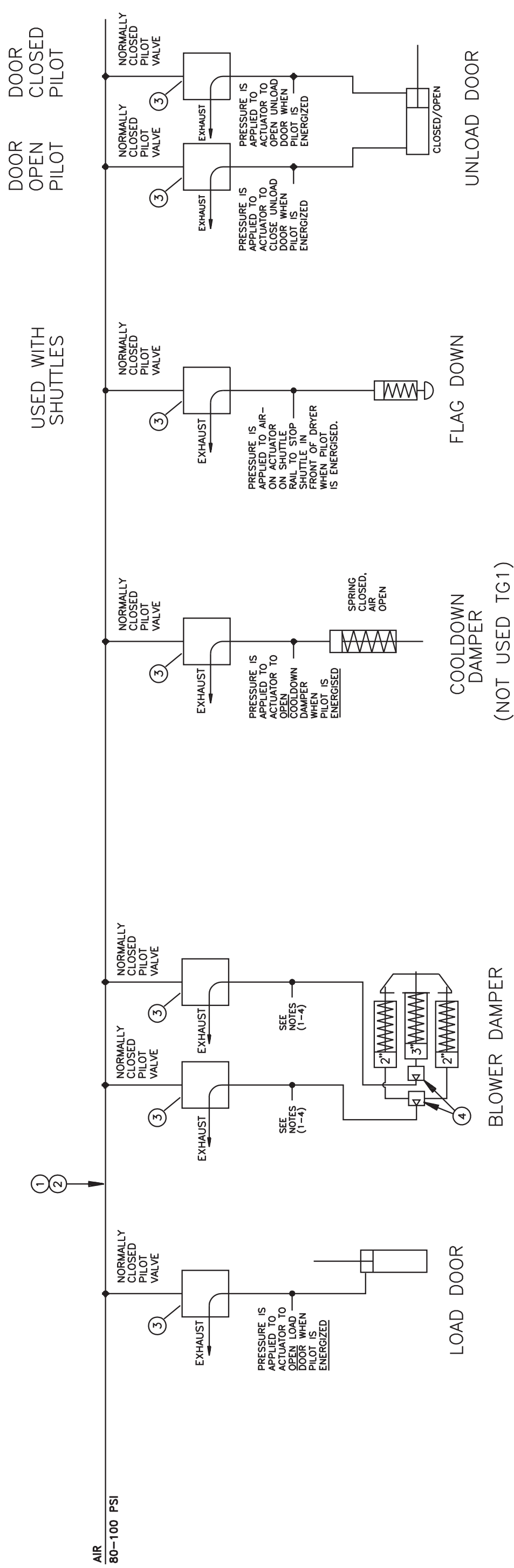
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NOTES:

1. MINIMUM AIR FLOW OCCURS WHEN PRESSURE IS APPLIED TO ALL BLOWER DAMPER AIR CYLINDER ACTUATORS
2. MORE THAN MINIMUM AIR FLOW OCCURS WHEN PRESSURE IS APPLIED ONLY TO THE 3" BLOWER DAMPER AIR CYLINDER ACTUATOR
3. LESS THAN MAXIMUM AIR FLOW OCCURS WHEN PRESSURE IS APPLIED ONLY TO THE 2" BLOWER DAMPER AIR CYLINDER ACTUATORS
4. MAXIMUM AIR FLOW OCCURS WHEN NO PRESSURE IS APPLIED TO ACTUATORS

- * STRAINER MUST BE CLEANED, SEE PREVENTIVE MAINTENANCE CHECKLIST FOR SCHEDULE
- ** USED ONLY WITH OPTIONAL AUTOLINT





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Parts List—Pneumatic Schematic

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	1	X3 01507A	88462# MANIFOLD BLOCK MACH 12PORTS	
all	2	03 LF110K	90363C LOCK BAR=VALVE SET 22STATION	
all	3	96R301A37	05Z 1/8" AIRPILOT 3W NC 120V50/60	
all	4	96M051	USE KZK5B00100	

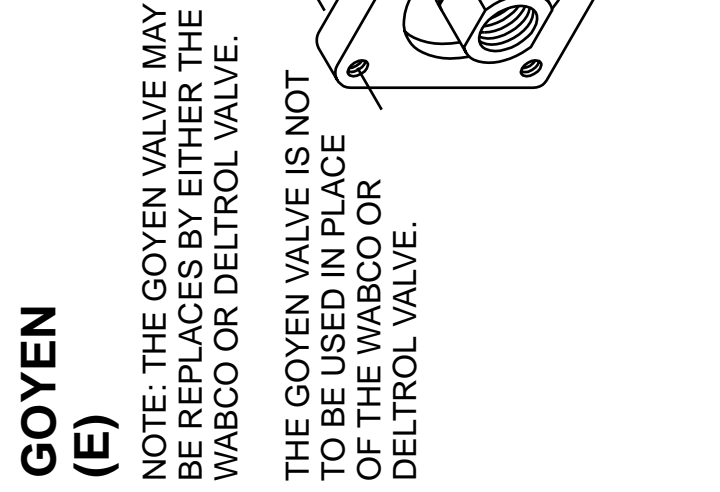
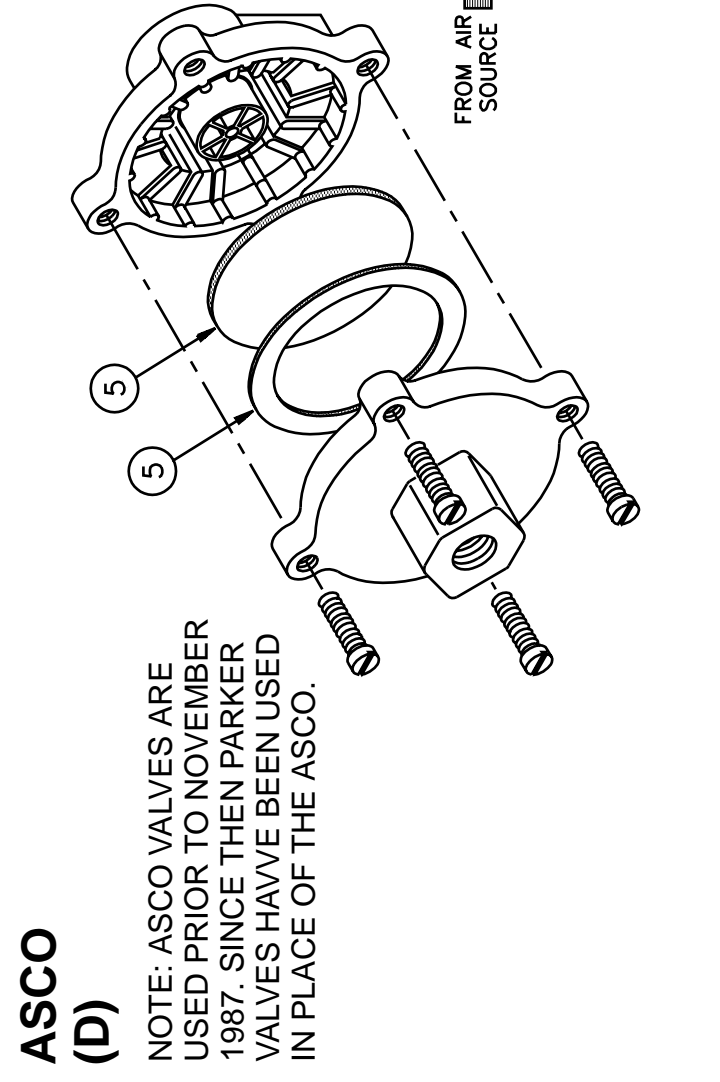
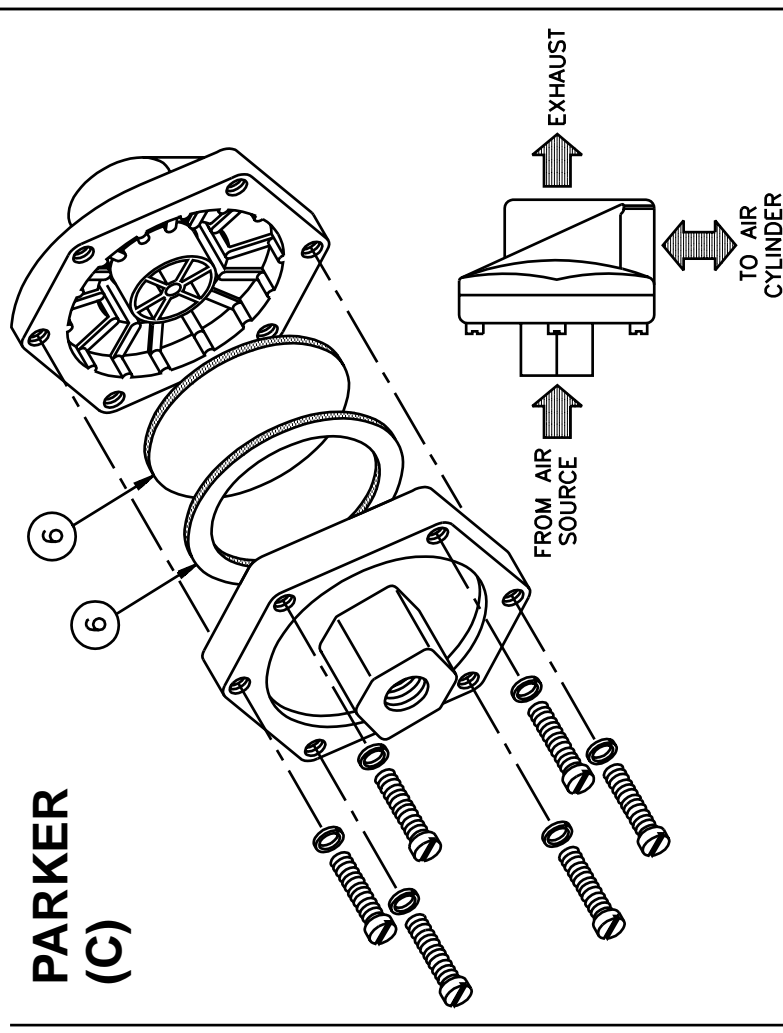
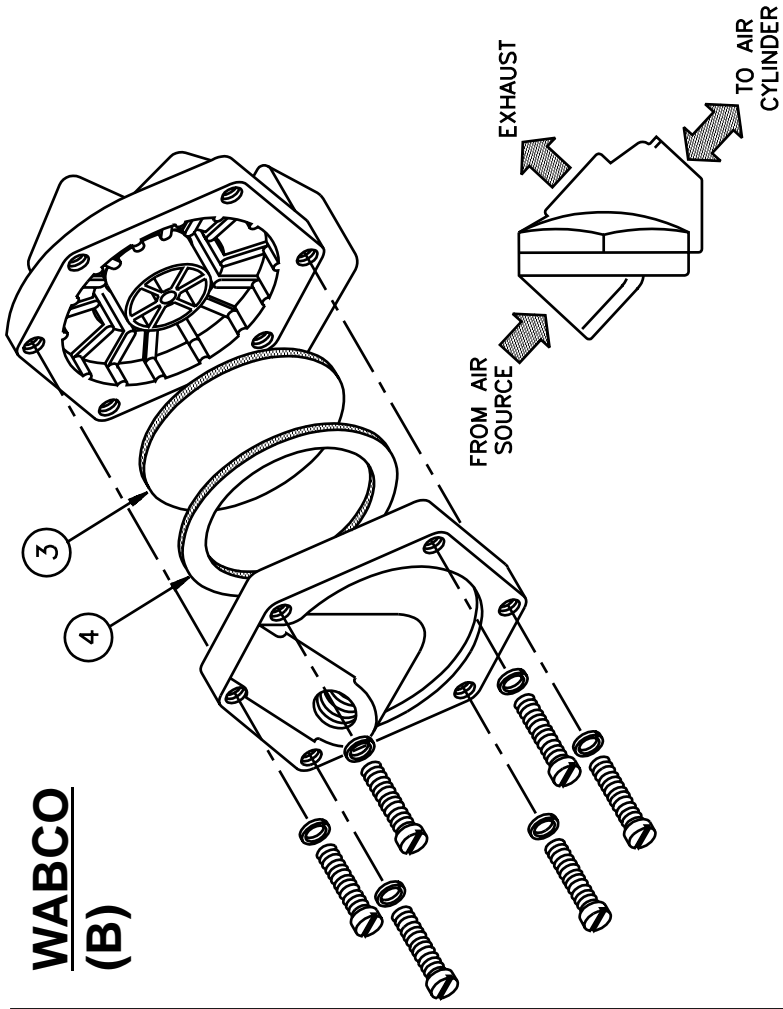
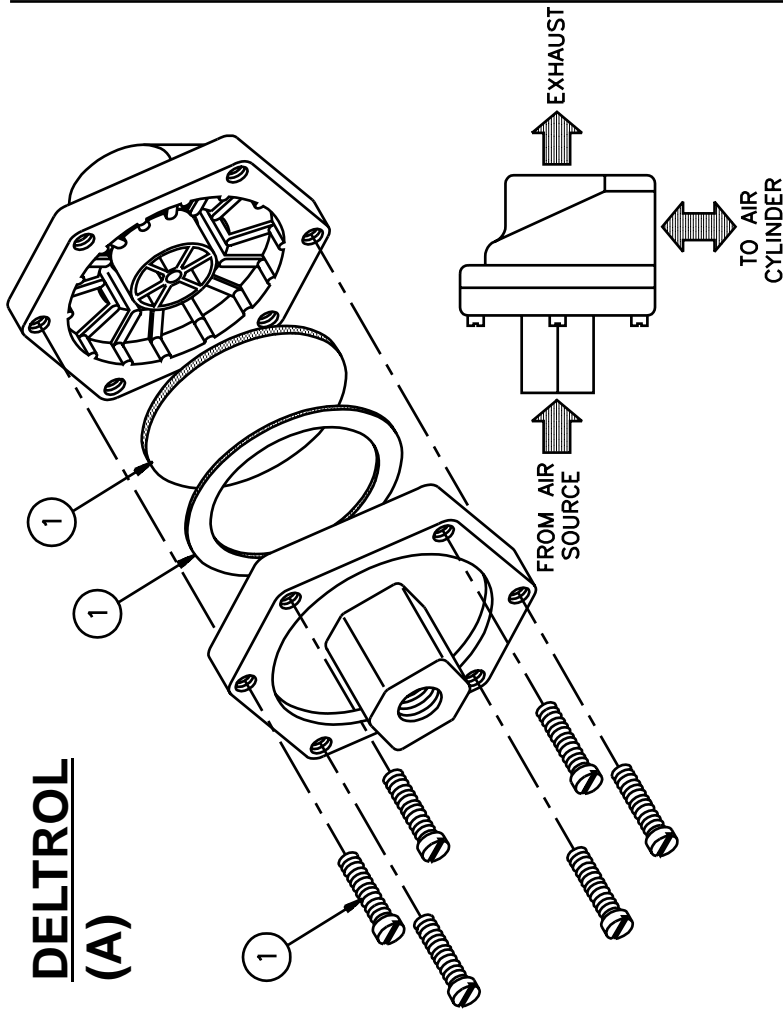
Quick Exhaust Valves

BMP701406/2002382V
(Sheet 1 of 2)



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Parts List—Quick Exhaust Valves

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	MESSAGE B2	REPAIR KITS ONLY <>	DELTROL
	B	96M051	USE KZK5B00100	WABCO
	C	96M054	QWIKEXHAUSTVLV 3/4"URETHANE	PARKER
	D	MESSAGE B1	PARTS NO LONGER SOLD	ASCO
	E	MESSAGE B2	REPAIR KITS ONLY <>	GOYEN
	F	96M055	QUICK EXHAUST VALVE 1/4"	DELTROL
-----COMPONENTS-----				
all	1	96M053A	KIT,QWIKRELVLV EV20A#10091-18	DELTROL VALVE ONLY
all	3	96M051B	DIAPHRAM,QWIKREL WAB#PS112-12	WABCO VALVE ONLY
all	4	96M051A	GASKET,WABCO QUICK EXHAUST VLV	WABCO VALVE ONLY
all	5A	96M052A	REPKIT,QES#M1319 (FOR 96M052)	GOYEN VALVE ONLY
all	5B	96M055A	REPAIR KIT FOR 96M055# 10128-99	DELTROL VALVE ONLY
all	6	96M054K	REPKIT 3/4"QWIKEXHAUSTVLV	PARKER VALVE ONLY

3-Way Pilot Valves

BMP900032/91182V
(Sheet 1 of 1)



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BMP900032/91182V (1 of 1)

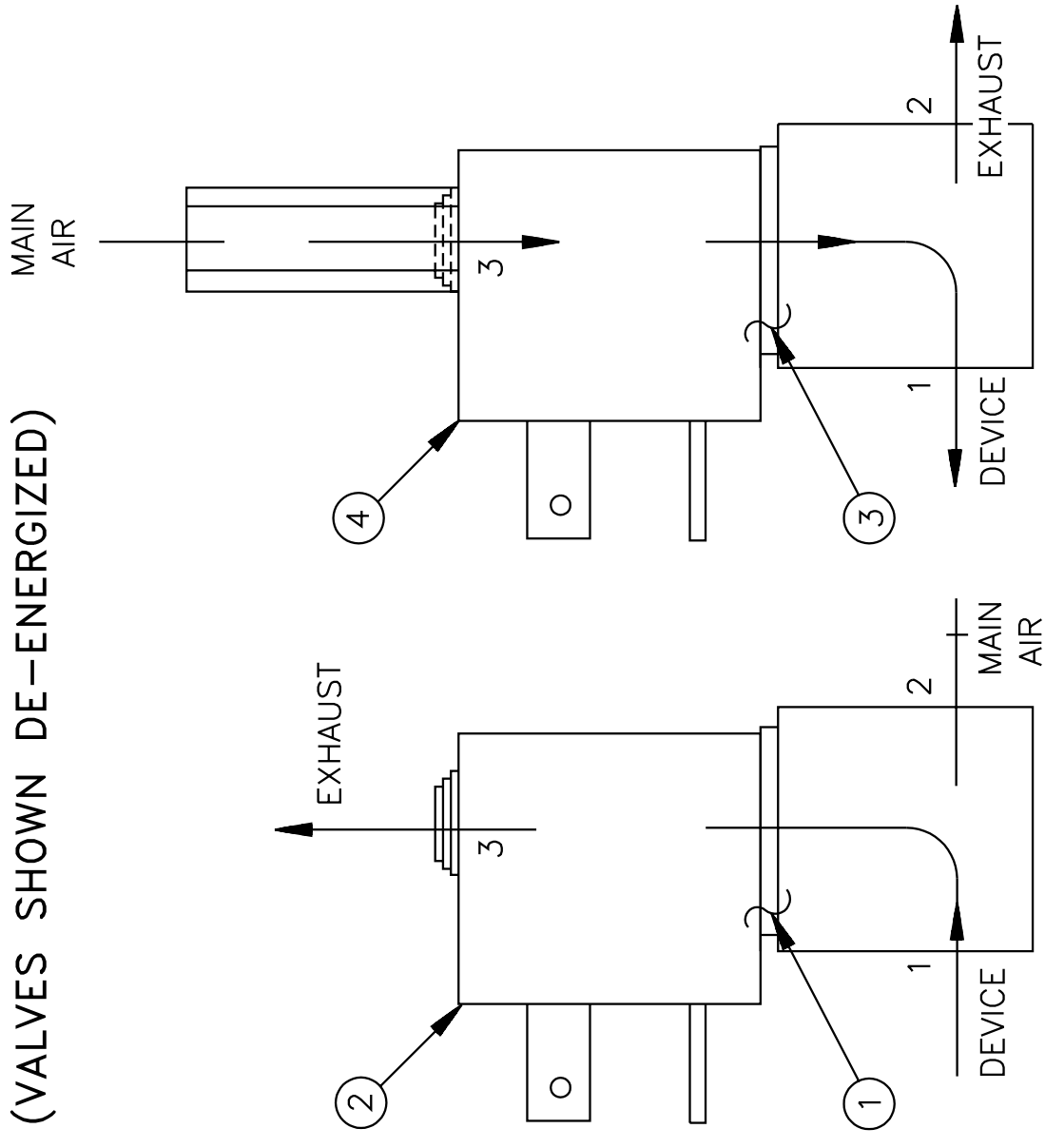
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(VALVES SHOWN DE-ENERGIZED)

Parts List—3-Way Pilot Valves

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	1	96R301A37	05Z 1/8" AIRPILOT 3W NC 120V50/60	
all	1	96R301A24	06Z 1/8" AIRPILOT 3W NC 24V50/60	
all	3	96R302A37	06Z 1/8" AIRPILOT 3W NO 120V50/60	
all	3	96R302A24	07Z 1/8" AIRPILOT 3W NO 24V50/60	



NORMALLY
CLOSED

NORMALLY
OPEN

FOR REPAIR OR REPLACEMENT PARTS FOR PILOT VALVES
USED ON WASHER EXTRACTORS GENERALLY PRIOR TO
JUNE 1, 1985, SEE BMP701359.

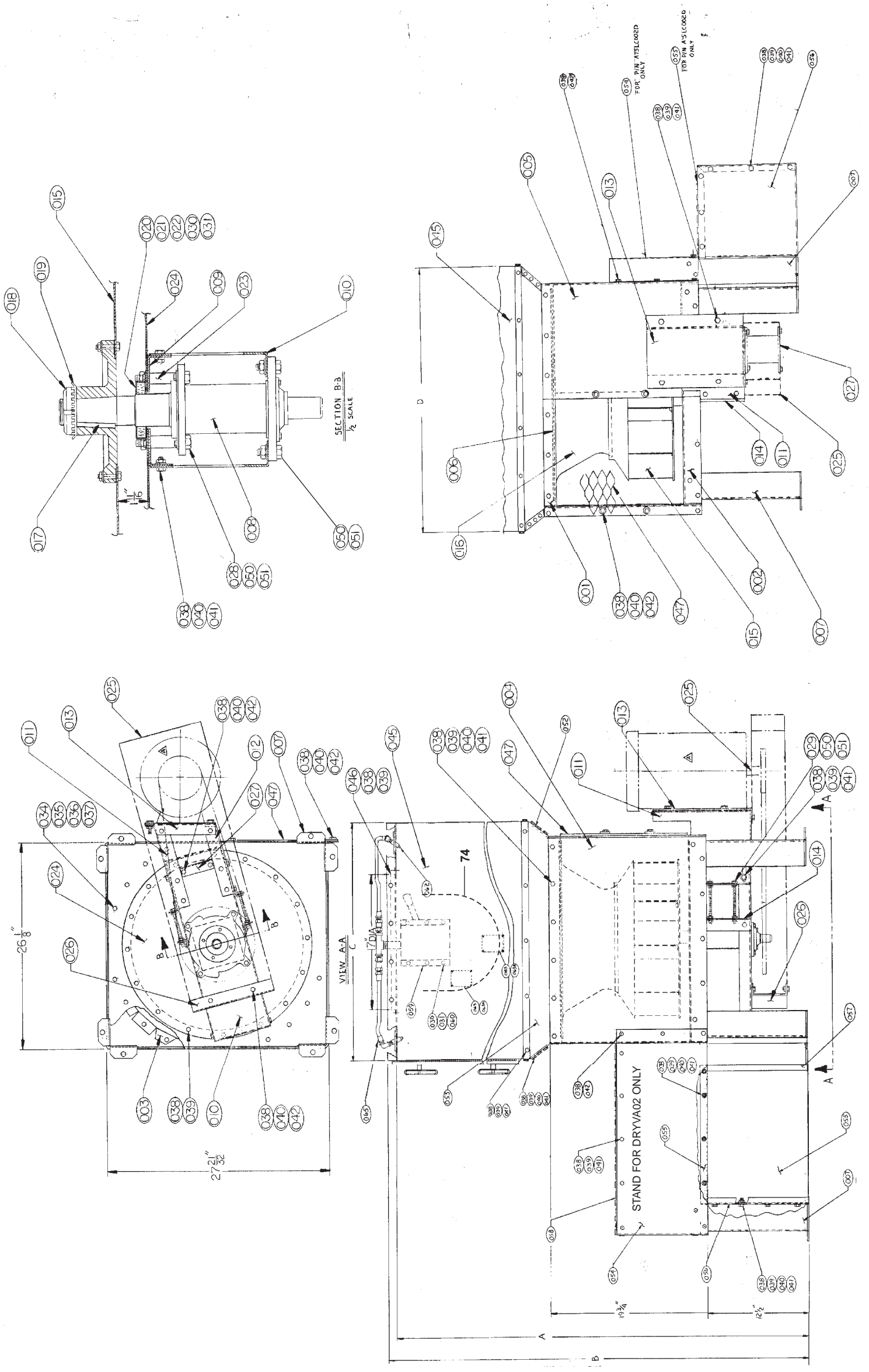
Lint Collector Assembly
 DRYVAC01, DRYVAC02

BMP070007/2013305B
 (Sheet 1 of 3)



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Lint Collector Assembly

DRYVAC01, DRYVAC02



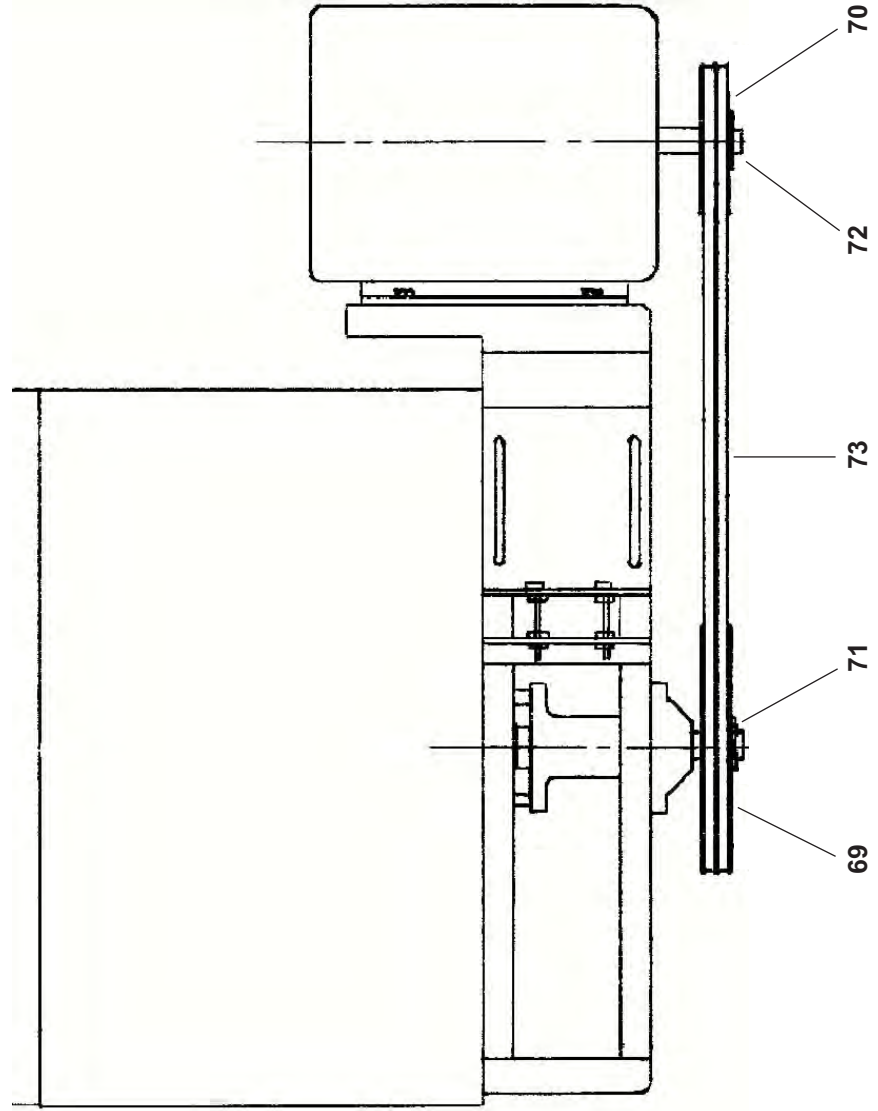
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BMP070007/2013305B
(Sheet 2 of 3)

Parts List—Lint Collector 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	A75LC002B	*LINT COLLECTOR ASSY-DRYVAC	DRYVAC01
	B	A75LC002D	*36X36 LINT COLLECT ASSY-DRYV	DRYVAC02
	C	D75 00250	DRIVE CHART FOR DRYVAC 50CYC	DRYVAC01 50 CYC
	D	D75 00260	DRIVE CHART FOR DRYVAC 60CYC	DRYVAC01 60 CYC
	E	D75-00350	MK2 DRIVE CHART DRYVAC 50CYC	DRYVAC02 50CYC
	F	D75 00360	MK2 DRIVE CHART DRYVAC 60CYC	DRYVAC02 60CYC
			-----COMPONENTS-----	
all	1	W7 50705	*TOP BLOWER WELDMENT	
all	2	W7 50706	*BOTTOM BLOWER WELDMENT	
all	3	07 50707	WRAPPER BLOWER-LINT BOX	
all	4	07 50708	BLOWER ENCLOSURE-LINT BOX	
all	5	07 50709	BLOWER ENCLOSURE-OUTLET SIDE	
all	6	07 50710	BLOWER INLET COVER-LINT BOX	
all	7	07 50711	LEG-LINT COLLECTOR BOX	
All	8	A75BG004	BLW BRG HSE ASSY=2001354	
all	9	07 50712	CHANN-BRG MT UPPER BLOWER	
all	10	W7 50713	WLDMT-BRG MT LOWER BLOWER	
all	11	07 50714	BKT-BLOWER BELT ADJ-RH	
all	12	07 50715	BKT-BLOWER BELT ADJ-LH	
all	13	07 50716	MOTOR MOUNTING PLATE	
all	14	07 50252	ANGLE=BELT ADJ BLOWER MOTOR	
all	15	13E203T	BLOWER WHL 20"CL-3 CW TAPERHUB	
all	16	07 50477	+20" DIA INLET NOZZLE	
all	17	15E225	SQMACHKEY 3/8X1+1/2 NOTAPER-NO	
all	18	56AHN08	N08 BEARING LOCKNUT	
all	19	56AHW108	TW108 BEARING LOCKWASHER	
all	20	07 50286	BLOWER SHAFT SEAL CAP	
all	21	07 50287	BLOWER SHAFT FELT SEAL	
all	22	07 50288	BLOWER SHAFT TEFLON SEAL	
All	23	07 50184	BLWR BRG HSE SPACE SH=00143	
all	24A	07 50727	BLOWER COVER PLATE-LINT BOX	
all	24B	07 50727A	BLOWER SEAL RETAINER	



DRIVE CHART



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Used In	Item	Part Number	Description	Comments
all	25	A75LC004	*BELT GUARD-LINT BOX ASSY	
all	26	07 50717	BRKT-BELT GUARD-LINT BOX	
all	27	07 50262A	BRACKET=DRYVAC BELT GUARD	
all	29	15K202	HEXCAPSCR 1/2-13UNC2AX5 GR5	
all	30	15K039	HXCAPSCR 1/4-20UNC2AX3/4 GR5	
all	31	15U180	LOCKWASHER MEDIUM 1/4 ZINCPL	
all	34	15K060	HXCAPSCR 5/16-18UNCAX3/4 GR5	
all	35	15U200	FLATWASHER(USS STD) 5/16"ZNC	
all	36	15U210	LOKWASHER MEDIUM 5/16 ZINCPL	
all	37	15G185	HXNUT 5/16-18UNC2B SAE ZINC GR	
all	38	15K095	HXCPCSCR 3/8-16UNC2AX1 GR5 ZINC	
all	39	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	40	15U240	FLATWASHER(USS STD) 3/8" ZNC	
all	41	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	42	17N070P	RETAIN NUT 3/8-16 #S10100-27	
all	43	15K105	HXCAPSCR 3/8-16UNC2A1.25 GR5	
A	45	A75LC002A	LINT COLLECTOR BOX ASSY	
B	45	A75LC002C	*36X36 LINT COLLECT BOX ASSY	
All	46	X7 50750	FLANGE=17" DIA DUCT MACHINED	
all	47	07 50753	BLOWER OUTLET COVER-DRYVAC	
all	48	20C041	SUPRFLXSIL ADH SEAL RED 10.2OZ	
all	50	15U300	LOKWASHER REGULAR 1/2 ZINC PLT	
all	51	15G230	HXNUT 1/2-13UNC2B SAE ZINC GR2	
B	52	07 50771	36X36 DRYVAC ADAPTER FRAME	
B	53	07 50771A	36X36 DRYVAC ADAPTER FRAME	
B	54	07 50772	36X36 DRYVAC STEP FRAME WRAP	
B	55	07 50769A	36X36 DRYVAC SIDE STEP	
B	56	07 50773	36X36 DRYVAC STEP SPPT RT	
B	57	07 50773A	36X36 DRYVAC STEP SPPT LF	
B	58	07 50769	36X36 DRYVAC STEP	
A	59	A75SM001A	*SPRINKLER SYSTEM ASSY-DRYVAC	

Parts List, cont.—Lint Collector Assembly				
Used In	Item	Part Number	Description	Comments
B	59	A75SM001B	*SPRINKLER SYSTEM ASSY-36X36	
all	60	15G165	HXNUT 1/4-20UNC2BSAE ZC Gr2	
all	61	15U185	FLATWASHER(USS STD) 1/4" ZNC	
A	62	A75LC007	DRYVAC PRESSURE SWITCH ASSY	
B	62	A75LC008	36X36 PRESSURE SWITCH ASSY	
all	63	15J065	POPRIVET 5/32 DIA X.425L AL/ST	
all	64	15J065	POPRIVET 5/32 DIA X.425L AL/ST	
A	65	A75VS008	LINT BAG BLOW DOWN PIPE ASSY	
B	65	A75VS008A	BAG BLOW DN PIPE ASSY=36X36	
all	66	15U280C	FLATWASH(US STD)1/2"CLIP+ZNC	
all	67	5SB0E0CBEO	NPTHEXBUSH 1/4X1/8 BRASS 125#	
all	68	53A007B	BODYFEMCON.25X.25COMP#B66A-4B	
All	68	15K191	HXCAPSCR 1/2-13UNC2AX2.5 GR5	
CDEF	69	56094B2H	VPUL 2B9.4/A9.0 2BK100H R EQUAL	
CDE	70	56059B2H	VPUL 2B5.9/A5.5 2BK65H R EQUAL	
F	70	56066B2SDS	VPUL 2A6.2B6.6-SDS TYPE QD	
CDEF	71	56Q1GH	1+3/8" BUSH VPUL TYPE H,D,ORQT	
CDE	72	56Q1GH	1+3/8" BUSH VPUL TYPE H,D,ORQT	
F	72	56Q1GSDS	1+3/8" BUSH VPUL QD TYPE SDS	
CDEF	73	56VB064X	VBELT BX64 EA=1 BELT	
A	74	A75SD017	LINT COLLECTOR BAG 24X36ASSY	
B	74	A75SD017A	LINT COLLECT BAG 36X48 ASSY	

Water Assemblies

7

Fire Safety System Operation and Maintenance

Notice 1: If the fire safety system is in operation (if there is a flow of water from the rear of the dryer)—go to [Section 5 “If Water Flow Occurs”](#).

fire safety system—the water nozzles and related equipment that put water in the dryer to stop a fire in the basket.

Water flow will start automatically if the temperature becomes too high, as told in [Section 1 “Fire Safety Functions and Components”](#). You can also start it manually. Pull the operation handle or use the control panel as told in [Section 4 “How to Do a Test of the Fire Safety System”](#). The system will start a flow of water. The water will go into the basket through the perforations. Do a test of this system at the intervals given in the routine maintenance schedule.

1. Fire Safety Functions and Components

This section gives the fire safety functions and components for 6464_ and 7272_ models. Components and their locations can be different on other dryer models but the functions are the same.

Table 1: Fire Safety Functions for 6464_ and 7272_ Dryer Models

Sensor type	Temperature switch (closes at specified temperature)			Thermocouple (gives continuous temperature data to the controller)		
Sensor name	ST225-1 & 2	ST550A & B	STBB	T3		
Location	Basket/outlet duct (Figures 1, 3, 4)	Inlet duct (Figures 1, 2)	At burner (Figures 1 and 5)	Outlet duct (Figure 3)		
Safety limit (the temperature or condition that causes the given result)	225° F (107° C)	550° F (288° C)	175° F (79° C)	–Three safety limits in software–		
				5° F increase for 15 seconds or 15° F increase for 5 seconds during min fire*	Higher than 220° F (104° C) for 5 seconds**	240°F (116°C)
Occurs when temperature is too high	Water flows and all dryer functions stop.	Flame goes off. If the flame will not come on, see the line below this one.		Each step before the cooldown is subsequently cancelled while the condition continues.		Water flows and all dryer functions stop.
Display when temperature is too high	THREE WIRE DISABLED error and operator alarm	Initially none. If the flame will not come on, the CHECK ERROR LIGHTS error and operator alarm occur.		The controller shows “MINF” and puts data in the record of dry cycle details	The controller shows “>220” and puts data in the record of dry cycle details	OUTLET TEMP EXCEEDED 240 Df - POWER DOWN error and operator alarm
Necessary procedure	See Section 5 “If Water Flow Occurs”	If the error given in the line above this one occurs, see “Error Messages” in the operator guide.		See Section 2 “About the Min Fire and Outlet Temperature Exceeded 220° Faults”		See Section 5 “If Water Flow Occurs”
* This does not apply to steam dryers						
** This does not apply to steam dryers if they do not use modulation.						

Figure 1: Component Locations for 6464_ Models

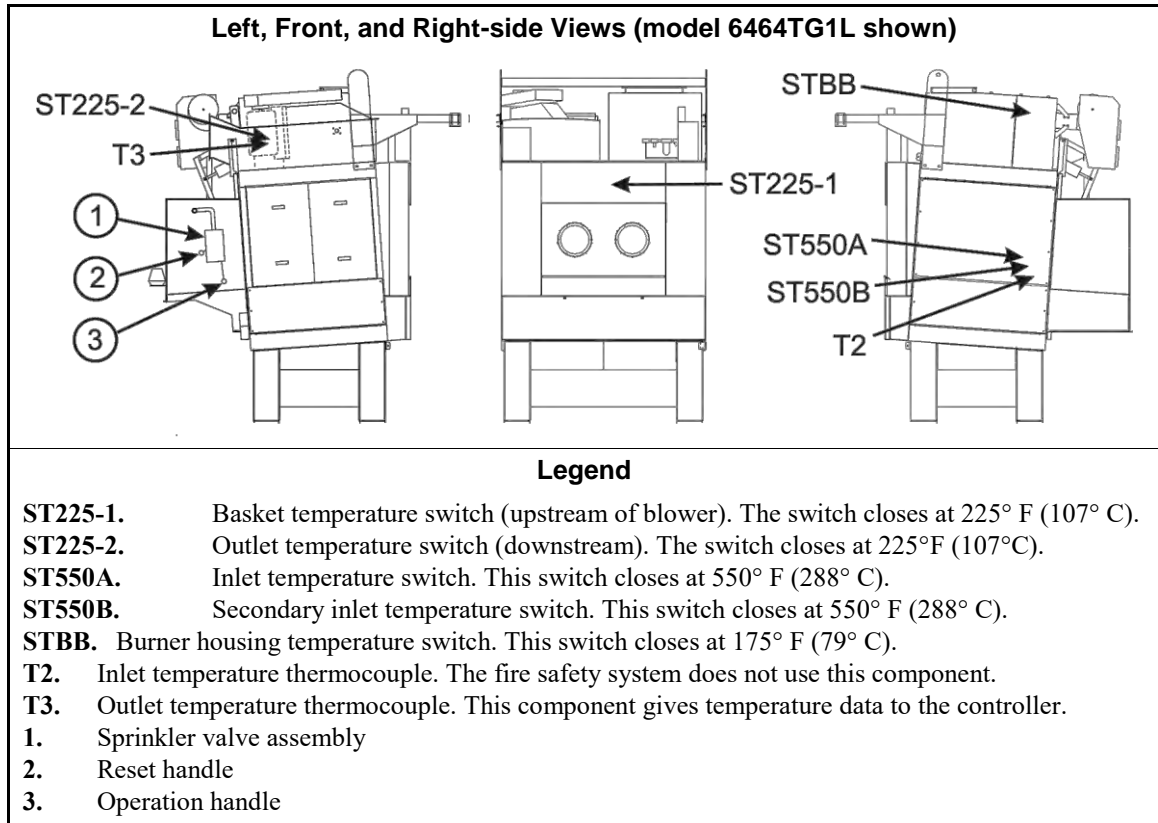


Figure 2: View of ST550A, ST550B and T2

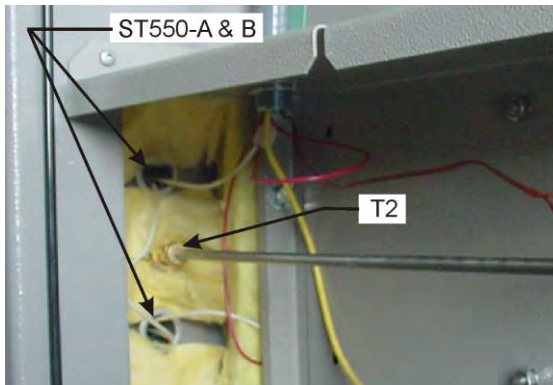


Figure 3: View of ST225-1

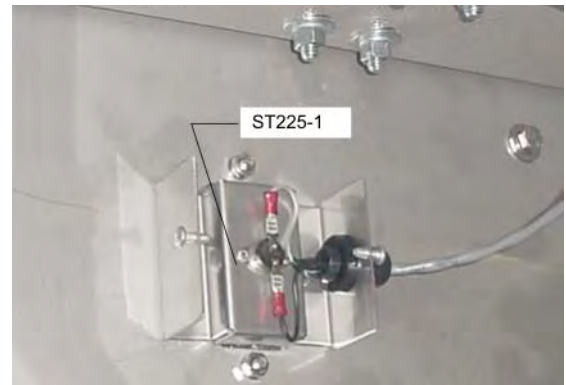


Figure 4: View of ST225-2 and T3

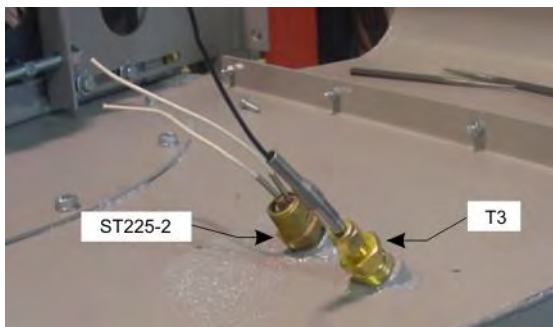


Figure 5: View of STBB



2. About the *Min Fire and Outlet Temperature Exceeded 220°* Faults

The function of these faults is to prevent conditions that can cause a fire. The controller does the necessary steps. There are no other steps for the operator to do immediately. But the controller puts data about the fault in the record of dry cycle details. These faults usually cause unsatisfactory operation. To prevent these faults, it can be necessary to change some procedures as told in the subsequent sections. Heat system adjustments and repairs are not routine maintenance. Speak to your dealer or Milnor.

2.1. Min Fire (MINF)—This condition applies to dryers that use gas or propane. Minimum fire is when the controller tells the modulating gas valve to go to the position 000. The correct condition is when the gas valve is open a small, stable increment. Under this condition, a *min fire* fault occurs if the controller senses that the outlet temperature increases. This fault usually shows that the goods became too hot and could catch fire. (One more symptom is if the goods have a burned smell.) When this fault occurs, the controller immediately goes to the subsequent cool down step. Some causes of min fire faults include:

- **The goods are held against the basket**—The correct condition is that the goods tumble in the basket. If the basket speed is too high, centrifugal force can hold the goods against the basket. Then the part of the goods that is against the basket can become too hot.
- **The gas valve does not operate correctly**—For example, the valve throttle cannot move down fully because it is damaged. This can prevent the min fire position.
- **Min fire is set too high**—The min fire position must be adjusted correctly when the gas and air as told in the procedure to set the heat system. Damage to components can cause this adjustment to change.

2.2. Outlet Temperature Exceeded 220° (degrees Fahrenheit)—This fault applies to all dryers except those with steam valves that do not modulate. The value 220° F (104° C) is 5°F (3° C) below the temperature that will close the outlet temperature switches (Fenwal switches) and start water flow. It cancels each subsequent heat step if the outlet temperature is higher than 220° F (104° C) for five seconds or more at the start of the step. This fault can also occur if the goods are held against the cylinder or the gas valve is damaged. The function of this fault is to make water flow not necessary, if the goods are not on fire. But if the goods catch fire, the temperature switches will quickly close to start water flow.

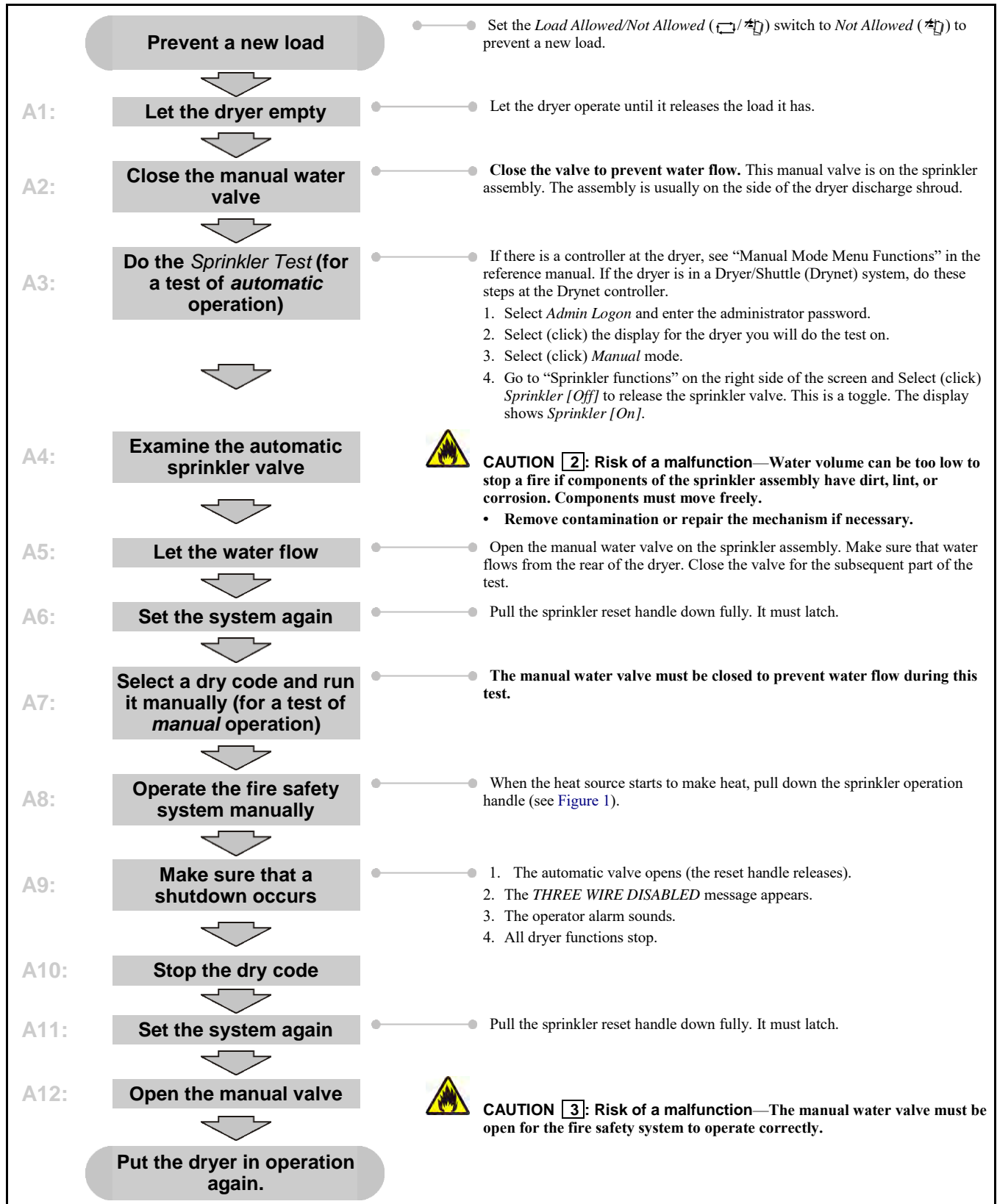
3. How to Prevent Water Flow When No Fire Occurs

If water flow occurs when there is no fire, two possible causes are:

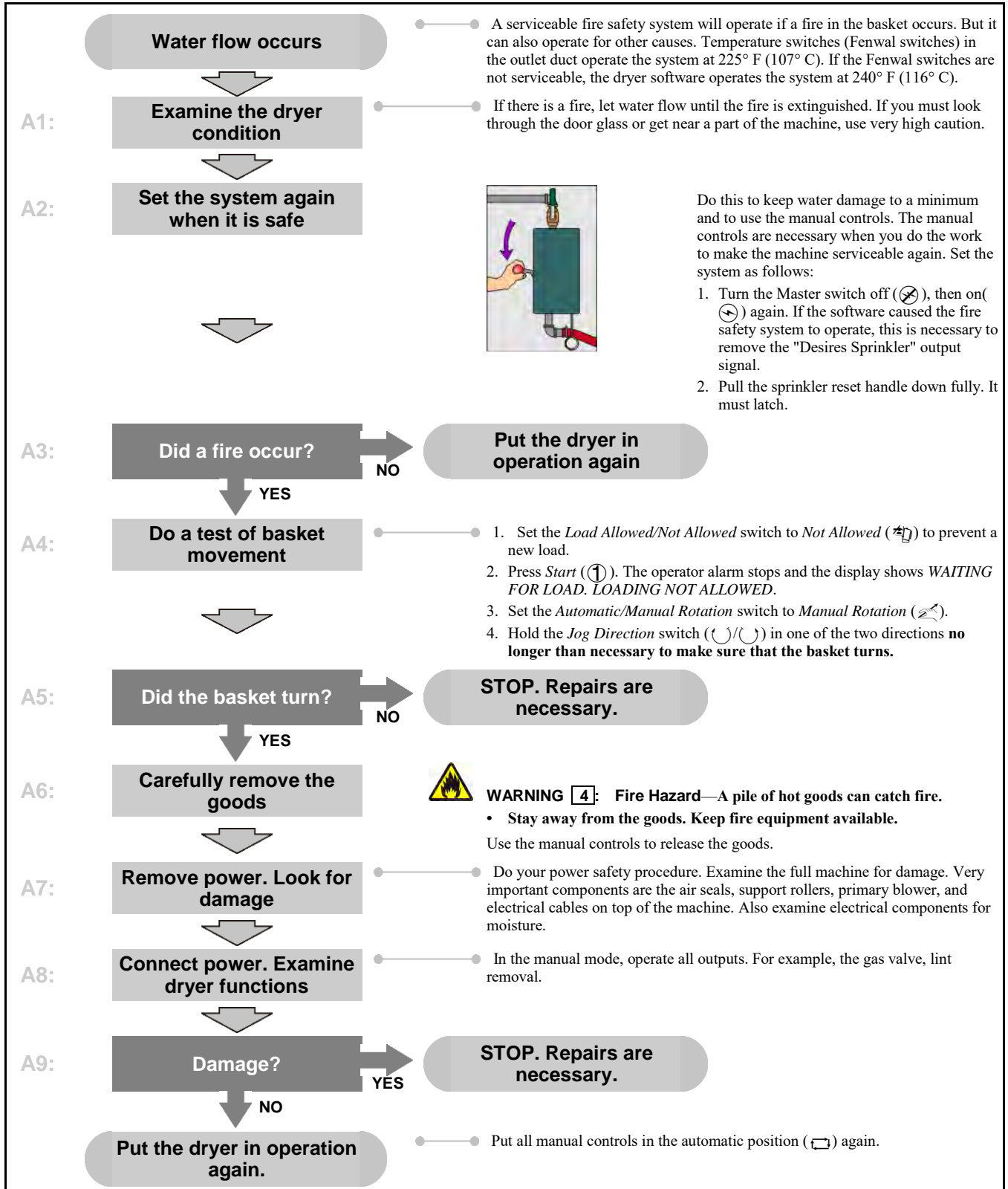
- **A temperature switch is damaged.** This is the usual cause. For example, material can hit a temperature probe and bend it. This can be a piece of goods that goes through a space where seals are worn. It is necessary to replace a damaged probe. The probe can also give an incorrect value if it has plastic contamination. It is necessary to remove the contamination.
- **Temperatures are not in the correct range.** The conditions described in [Section 2.1](#) can cause water flow if they are severe enough.

If water flow occurs when there is no fire, correct the cause. **Do not remove the fire safety system from operation.** If a fire occurs, this system is your first and best protection against a fire that is out of control.

4. How to Do a Test of the Fire Safety System



5. If Water Flow Occurs



— End of BIPDUM01 —

Sprinkler Assembly

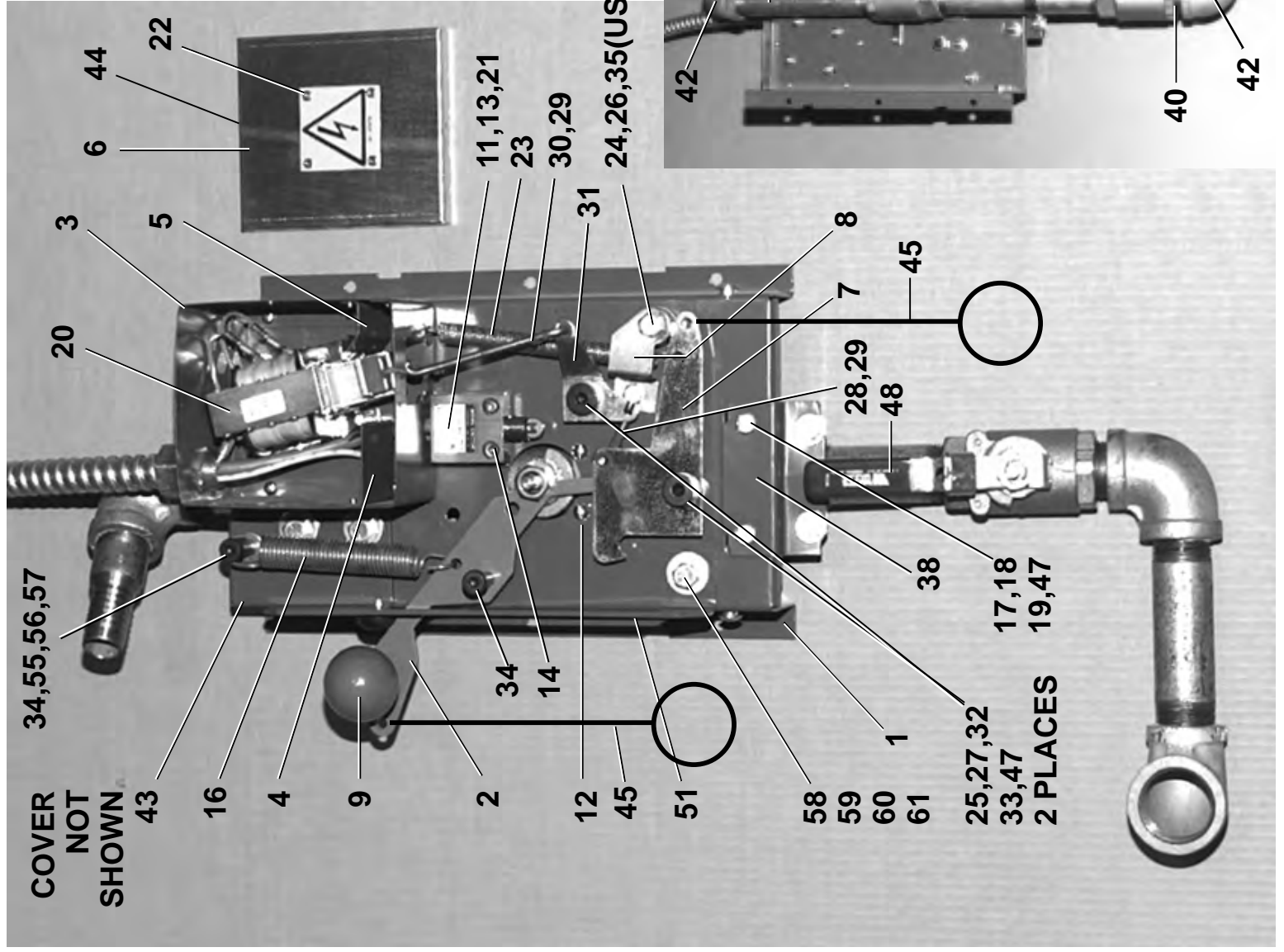
All Dryers

BMP960031/97017V
(Sheet 1 of 2)



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Parts List—Sprinkler 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
	A	A75SM005	93000Z*ASSY=SPRINKLER MECH-1" VALVE	
			-----ASSEMBLIES-----	
			-----COMPONENTS-----	
all	1	07 50276A	96287D SPRINKLER BASE PLATE MOD	
all	2	07 50277A	93396C SPRINKLER HANDLE-STAMPING	
all	3	07 50278A	96357C SOLENOID BOX=SPRINKLER MOD	
all	4	07 50279A	94287B BAFFLE PLATE LF - SOL BOX	
all	5	07 50279B	94287B BAFFLE PLATE RT - SOL BOX	
all	6	07 50280	91381B COVER FOR SOLENOID BOX	
all	7	07 50281	87503B LATCH ARM FOR SPRINKLER	
all	8	07 50282	85133B SPRING GUARD	
all	9	12P100	02Z BALLKNOB RED PLASTIC DAVIES#45H	
all	10	96D085WEXS	09Z BALVAL 1"BRZWATT#SB6400SSZ1070SP	
all	11	09RM01209S	02ZCAPSW 9FT 180DEG ROLLER SILVER	
all	12	15K021A	SOKCAPSCR 10-24UNCX1" LG S/S	
all	13	07 50285	94287B SWITCH MOUNT SPACER PLATE	
all	14	15G126	01Z HXLOCKNUT NYLON 10-24 UNC SS NM	
all	16	07 50293	85177BSPRING.500 ODX4.00LGX.049EXT	
all	17	15U180	LOCKWASHER MEDIUM 1/4 ZINCPL	
all	18	15G165	HXNUT 1/4-20UNC2BSAE ZC GR2	
all	19	15K030	HEXCAPSCR 1/4-20UNC2X1/2 GR5 ZINC	
all	20	09K061D	07Z SOLENOID 120V 60C #8940	
all	21	20A015GA	73115A SHIM=FRICTION=CWU DOORSWITCH	
all	22	15J051	01Z POPRIVET 1/8DIAx.265 LONG S/S	
all	23	06 20162A	91206B SPRING=CONLO SAFETY SWITCH	
all	24	15K070	HXCAPSCR 5/16-18 UNC2A X1.5 GR5 ZNC	
all	25	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	26	27B210	01Z SPCRR011 .375IDX.75LX.048T CSZN	
all	27	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	28	07 50400	91456BLATCH ARM LINKAGE ROD	
all	29	17N300	3/16" ROD CLIP 4L FMP#85303	
all	30	07 50401	85343ASOLENOID LINKAGE ROD	



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

Litho in U.S.A.

Parts List, cont.—Sprinkler Assembly

Used In	Item	Part Number	Description	Comments
all	31	07 50402	86101BTRIP LINK FOR SPRINKLER	
all	32	15C060	HXSOKSTRIPBOLT 1/2X3/4W 3/8-16 GR5	
all	33	54J010	SHFTCOLL #2X568 1/2"ID EA=1PC	
all	34	15C048	HXSOKSTRIPBOLT 3/8X1"W5/16-18 GR5	
all	35	15U200	FLATWASHER(USS STD) 5/16"ZNC PLT	
all	36	15U210	LOKWASHER MEDIUM 5/16 ZINCPL	
all	37	15G185	HXNUT 5/16-18UNC2B SAE ZINC GR2	
all	38	07 50403A	96287B SPRINKLER BOX SUPPORT - BTM	
all	39	27A019	83401A 1"PIPSTRAP 2HOLE STAMPEDGALV	
all	40	5N1ACLSG42	NPT NIPPLE 1XCLS TBE GALSTL SK40	
all	41	5N1A06KG42	NPT NIPPLE 1X6.5 TBE GALSTL SK40	
all	42	5SL1ANFA	NPT ELBOW 90DEG 1" GALMAL 150#	
all	43	07 50428	96343D SPRINKLER VALVE COVER DRYER	
all	44	15N162A	TRUSMACSCR 1/4-20UNC2AX1/2 ZINC GR2	
all	45	07 50436	88166B MANUAL TRIP HNDL 8.75" LONG	
all	46	15U185	FLATWASHER(USS STD) 1/4" ZNC PLT	
all	47	15U243	FLAWASHER 7/8ODX33/64IDX16GA ZINCPL	
all	48	96D085H01	LATCH-LOK HDL WATTS #6LL-HK	
all	49	5N1A05AG42	NPT NIPPLE 1X5 TBE GALSTL SK40	
all	50	5SL1ENFA1A	NPT ELBOW 90DEG 1.25X1" GALMAL 150#	
all	51	07 50860	90121C+SPRINKLER RESET HANDLE STOP	
all	52	51E099SS	DIXON 1"KINGCOMBNIP S.S.#RST10	
all	53	60E087	02Z HOSE WATER 1" #7092-100304 *	
all	54	27A090S	HOSECLAMP 11/16-1.5"SS#225-016	
all	55	15U185	FLATWASHER(USS STD) 1/4" ZNC PLT	
all	56	15G165	HXNUT 1/4-20UNC2BSAE ZC GR2	
all	57	15U180	LOCKWASHER MEDIUM 1/4 ZINCPL	
all	58	15K083	HXCAPSCR 3/8-16 UNC2AX1/2 GR5 ZNC	
all	59	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	60	15U240	FLATWASHER(USS STD) 3/8" ZNC PLT	
all	61	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	62	5N1A08AG42	NPT NIPPLE 1X8 TBE GALSTL SK40	
all	63	5N1A08KG42	NPT NIPPLE 1X8.5 TBE GALSTL SK40	