

OWNERS MANUAL

IT IS THE RESPONSIBILITY OF THE OWNER AND/OR OPERATOR TO PROPERLY USE AND MAINTAIN THIS EQUIPMENT. CAREFULLY READ AND UNDERSTAND THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL BEFORE OPERATING THIS EQUIPMENT.

If the operator is not fluent in English the instructions and warnings shall be read and discussed in the operator's native language, making sure the operator comprehends the contents.

This equipment complies with OSHA Standards where applicable.

! WARNING

This air pressure specification is for the air motor only. Never exceed the maximum air or fluid working pressure of the lowest rated system component.

! WARNING

DO NOT exceed the stated maximum working pressure of the pump or of the lowest rated component in your system.

DO NOT alter or modify any part of this equipment.

DO NOT operate this equipment with combustible gas.

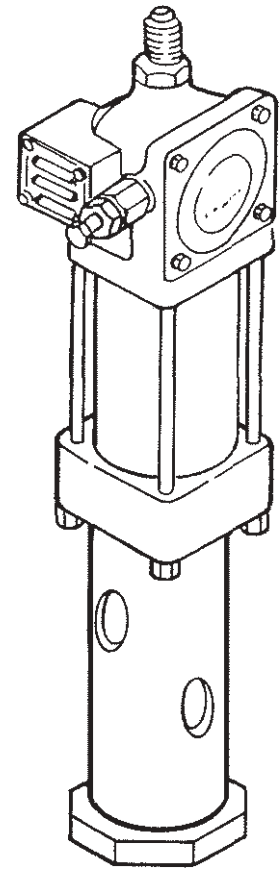
DO NOT attempt to repair or disassemble the equipment while the system is pressurized.

TIGHTEN all fluid connections securely before using this equipment.

ALWAYS read and follow the fluid manufacturer's recommendations regarding fluid compatibility, and the use of protective clothing and equipment.

CHECK all equipment regularly and repair or replace worn or damaged parts immediately.

IMPORTANT: Failure to heed these warnings including misuse, overpressurizing, modifying parts, using incompatible chemicals and fluids, or using worn or damaged parts, may result in equipment damage and/or serious personal injury, fire, explosion, or property damage.



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This manual contains **IMPORTANT WARNINGS** and **INSTRUCTIONS** READ AND RETAIN FOR REFERENCE

SAFETY INSTRUCTIONS

This equipment for professional use only. Observe all warnings Read and understand all instructions before operating equipment Extreme caution should be used when operating this equipment as personal injury and/or property damage can result from equipment misuse.

WARNING

ALWAYS check equipment for proper operation before each use, making sure safety devices are in place and operating properly. Tighten all connections before each use. DO NOT alter or modify any part of the equipment as this may cause a malfunction and result in serious bodily injury.

WARNING

ALWAYS disconnect air to pump and relieve system pressure before checking, cleaning and lubricating, or servicing air motor. Periodic inspection of air motor parts at least once each year is recommended.

INSPECTION INSTRUCTIONS

If overpressurizing of the equipment is believed to have occurred, contact the factory authorized warranty and service center nearest you for inspection of the pump.

Any equipment that appears to be damaged in any way, is badly worn, or operates abnormally shall be removed from use until repairs are made. Specialized equipment and knowledge is required for repair of this air motor. Contact the factory authorized warranty and service center nearest you for repair or adjustments other than maintenance specified in this manual.

Annual inspection by the factory authorized warranty and service center nearest you is recommended. A list of factory authorized warranty and service centers is available upon request.

INSTALLATION

Use of an airline filter/regulator/lubricator is recommended to remove harmful dirt and moisture from the compressed air supply, and to provide automatic lubrication to your Lincoln air motor.

Contact your Lincoln representative for assistance in designing a system to meet your specific needs. Flush supply lines and hoses with mineral spirits or oil based solvent and blow dry with air before connecting them to the system. This is to purge any contaminants such as dirt, moisture, or metal shavings that could damage the air motor.

OPERATION

To start the pump, turn on the main air supply. Slowly open the air regulator until the air motor runs smoothly.

In a direct supply system, with adequate air pressure supplied to the air motor, the pump starts when the dispensing valve is opened and stalls against pressure when dispensing valve is closed.

In a circulating system, the pump runs continuously and slows down or speeds up as supply demands until the air supply is shut off.

Use the air regulator to control pump speed and fluid pressure. Always use the lowest pressure required to achieve the desired results. Higher pressures will cause pump packings to wear pre-maturely.

WARNING

To reduce the risk of serious bodily injury or property damage, NEVER exceed the maximum air or fluid working pressure of the lowest rated system component.

WARNING

To reduce the risk of serious bodily injury, ALWAYS disconnect air to pump and relieve system pressure before checking, cleaning and lubricating, or servicing air motor.

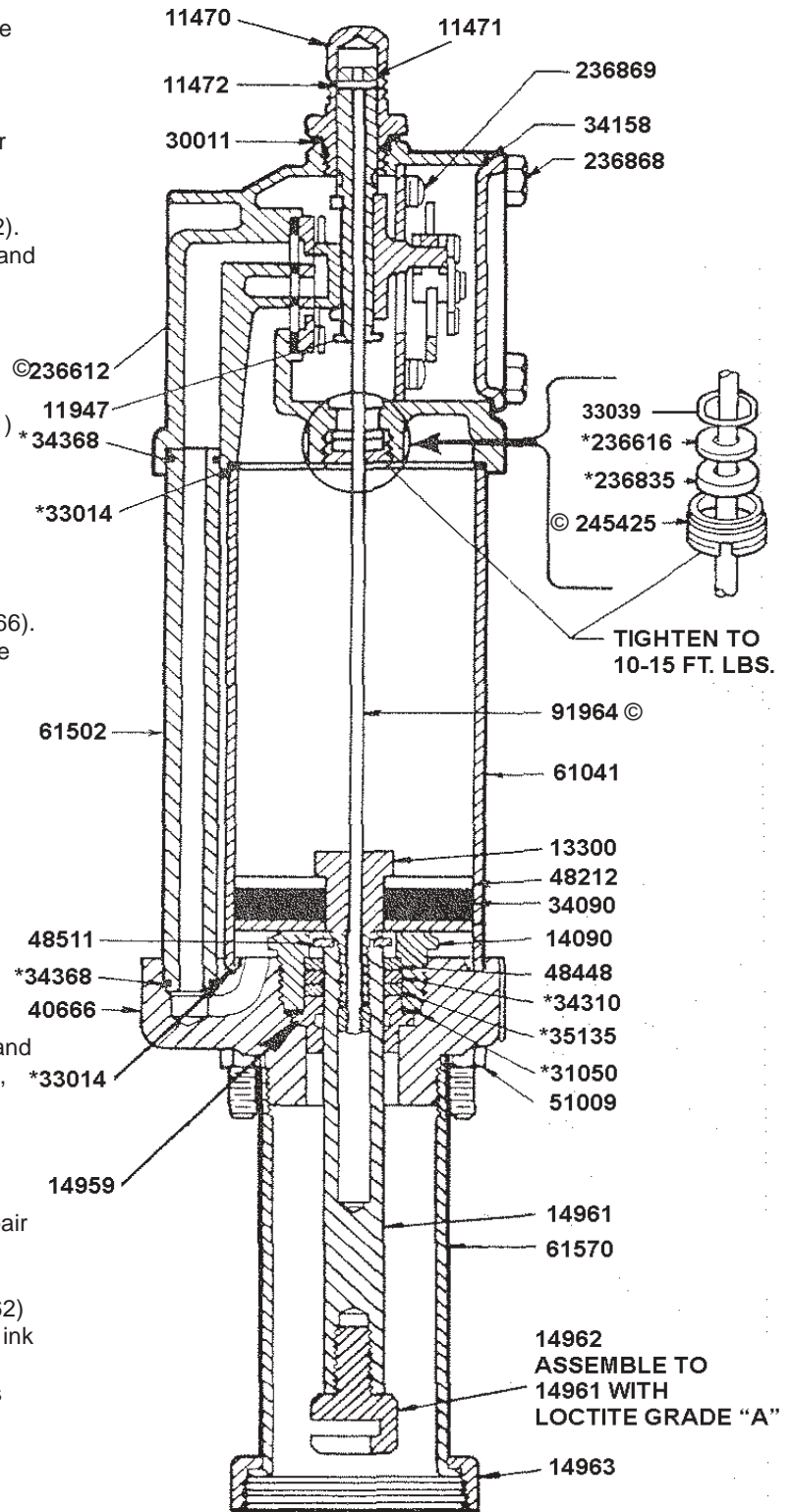
DISASSEMBLY PROCEDURE

1. Unscrew Body Cap (14963) securing air motor to the pump body.
2. Lift air motor straight up to move air piston to its extreme "down" position,
3. Shift airmotor to one side to disengage the air motor coupling from the pump rod and lift upward to complete separation.
4. Remove Valve Cap (11470) and Trip Rod Pin (11472).
5. Unscrew four Nuts (51009) from Tie Rods (14960) and lift Air Valve Casting (236612©) off of Air Cylinder (61041).
6. Remove Packing Nut (11904) and Packing Cap (11905) from Air Valve Casting.
7. Remove four Screws (236868) and Cover (236286).
8. Remove four Screws (236869), Toggle Plate (91331) and Trip Shoe Assembly (11947).
9. Remove four Valve Seat Bolts (236870), Springs (55138), Valve Guide Plate (45605) and Valve Slide (11482©), Seat (14919©) and Gasket (38162©).
10. Unscrew Trip Rod Packing Nut (245425©) from Air Valve Casting and remove all packing parts.
11. Unscrew Tube (61570) from Adapter Casting (40666).
12. Remove Air Cylinder (61041) and Air Passage Tube (61502) from adapter casting.
13. Place wrenches on Piston Bolt (13300) and on wrench flats of Piston Rod (14961) and loosen.
14. Remove Piston Bolt, Trip Rod (91964©), Air Piston Washers (48212), Air Piston Packing (34090) and Washer (48511) from Piston Rod.
15. Remove Piston Rod through bottom of Adapter Casting.
16. Unscrew Gland Packing Nut (14090) from Adapter Casting and remove all gland parts.
17. To reassemble, reverse procedure. Tighten fasteners per torque specifications provided.

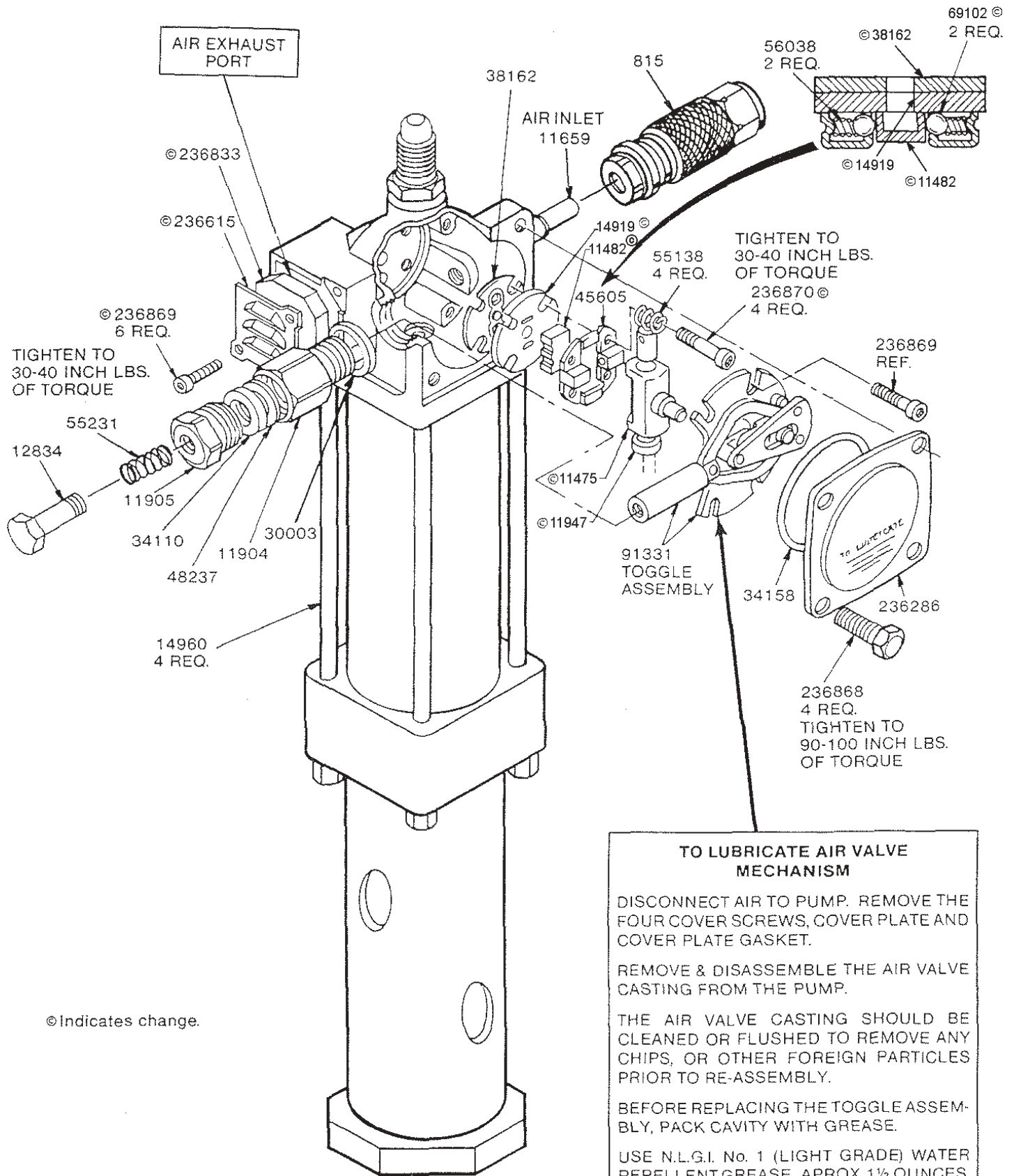
IMPORTANT: To prevent damage to Air Piston Packing and Pump Gland Packing, and to help increase packing life, Lube Air Cylinder and Air Piston Rod before assembly.

NOTES:

1. If complete disassembly is required, replace all Gaskets, O-rings and Packings. (Order 236464 Repair Kit.)
2. Before tightening four Valve Seat Screws (236870), align Slide Plate (11482©), Valve Seat Gasket (38162) and Air Valve Casting (236612©) by placing a rod or ink pen through the center port hole.
3. Start all fasteners by hand to avoid stripping threads when reassembling.



© Indicates Change



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IMPORTANT: Start fasteners by hand to avoid stripping threads when re-assembling.

TO LUBRICATE AIR VALVE MECHANISM

DISCONNECT AIR TO PUMP. REMOVE THE FOUR COVER SCREWS, COVER PLATE AND COVER PLATE GASKET.

REMOVE & DISASSEMBLE THE AIR VALVE CASTING FROM THE PUMP.

THE AIR VALVE CASTING SHOULD BE CLEANED OR FLUSHED TO REMOVE ANY CHIPS, OR OTHER FOREIGN PARTICLES PRIOR TO RE-ASSEMBLY.

BEFORE REPLACING THE TOGGLE ASSEMBLY, PACK CAVITY WITH GREASE.

USE N.L.G.I. No. 1 (LIGHT GRADE) WATER REPELLENT GREASE. APPROX. 1½ OUNCES.

REPLACE COVER GASKET, COVER, AND SCREWS. TIGHTEN TO AVOID AIR LEAKS.

PERIODIC INSPECTION OF PARTS AT LEAST ONCE EACH YEAR IS ADVISABLE.

SERVICE PARTS

Part	Qty.	Description	Part	Qty.	Description
815	1	Air coupler	*35135	1	Gland packing
11470	1	Valve cap	**38162	1	Valve seat gasket
© 11471	1	Collar, Trip Rod	40666	1	Adapter casting
11472	1	Trip rod pin	45605	1	Valve guide plate
© 11475	1	Trip shoe assembly	48212	2	Air piston washer
11659	1	Air nipple	48237	1	Washer
11904	1	Packing nut	48448	1	Washer
© 11905	1	Packing cap	48511	1	Washer
11947	1	Sleeve, Trip	51009	4	Nut
12834	1	Spring retainer	**55138	4	Spring
13300	1	Piston bolt	55231	1	Spring
© 14090	1	Gland packing nut	56038	2	Spring
14959	1	Gland packing spacer	61041	1	Air cylinder
14960	4	Tie rod	61502	1	Air passage tube
14961	1	Piston rod	61570	1	Tube
14962	1	Coupling adapter	*69102	2	Ball
14963	1	Body cap	91331S	1	Toggle plate
*30003	1	Packing nut gasket	91964	1	Trip rod
*30011	1	Valve gasket	236286	1	Cover
*31050	1	Gland gasket	236612	1	Air valve casting
*33014	2	Gasket	236615	1	Muffler cover
© 33039	1	Gasket	*236616	1	Gasket
34090	1	Air piston packing	236833	1	Muffler packing
*34110	1	Packing	236835	1	Packing
*34158	1	O-ring	236868	4	Screw
*34310	1	Packing	236869	6	Screw
*34368	2	O-ring	236868	4	Valve seat bolt
			245425	1	Trip rod packing nut

* Included in 236464 Repair Kit.

** Included in 83063 Valve Seat Assembly.

TROUBLESHOOTING

Problem	Solution
1. Pump does not operate.	Check air supply to air motor. Replace 11475© Trip Shoe Assembly, 11947 Trip Sleeve and 91331 Toggle Plate.
2. Air seepage from air exhaust port while pump is not operating.	Replace 11482 Valve Slide©, 14919 Valve Seat© & 38162 Valve Gasket©, 236835 Trip Rod Packing and 236616 Gasket.
3. Excessive amount of air entrapped in fluid or excessive amount of fluid coming from air exhaust. Note: Some fluid exhausts with air normally.	Replace 34310 Packing, 35135 Gland Packing and 31050 Gland Gasket.

ACCESSORIES

Filter/regulator & Gauge/Lubricator

Eyebolt Kit

1709 Hoist

© 83321 Low Pressure Kit

84148 Wall mount Bracket Kit

© Indicates change

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