

ATD5289 *MADE IN MEXICO* FOR 25-50 LB. BUCKETS



OWNERS MANUAL

AIR OPERATED CHASSIS PUMP

50:1 RATIO, OUTPUT – 80 CU. IN./MIN.
MIN. AIR PRESSURE – 30 PSI
MAX. AIR PRESSURE – 120 PSI
MAX. OUTPUT PRESSURE – 7500 PSI
RECOMMENDED OPERATING PRESSURE 80-100 PSI
GREASE TYPE: NLGI #2 (maximum for effective performance)

RETAIN THIS MANUAL FOR FUTURE REFERENCE TO IMPORTANT WARNINGS AND OPERATING AND MAINTENANCE INSTRUCTIONS.

PROPER USE AND MAINTENANCE OF THIS EQUIPMENT IS THE RESPONSIBILITY OF THE OWNER AND/OR OPERATOR.

DO NOT USE THIS EQUIPMENT UNLESS YOU HAVE CAREFULLY READ AND UNDERSTAND THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL.

! WARNING !

NEVER exceed the stated maximum working pressure of the pump or of the lowest rated component in your system.

NEVER modify any part of this equipment.

NEVER use combustible gas with this equipment.

NEVER attempt repairs while the system is under pressure.

NEVER attempt to disassemble the equipment while the system is under pressure.

ALWAYS tighten fluid connections before using this equipment

ALWAYS read/follow the fluid manufacturer's recommendations regarding fluid compatibility.

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

ALWAYS use an air line filter/moisture eliminator at the air inlet for the pump.

ALWAYS use air line lubrication.

REGULARLY check all equipment and repair/replace worn or damaged parts immediately.

FAILURE TO HEED THESE WARNINGS INCLUDING OVERPRESSURIZING, ALTERING PARTS, USE OF INCOMPATIBLE FLUIDS, MISUSE, OR USE OF DAMAGED/WORN PARTS MAY RESULT IN EQUIPMENT DAMAGE, PROPERTY DAMAGE, FIRE, EXPLOSION AND/OR SERIOUS PERSONAL INJURY.

SAFETY INSTRUCTIONS

Extreme caution should be used when operating this equipment as it generates very high fluid pressure. Leaks from loose or ruptured components or material from dispensing valve can inject fluid through the skin causing serious bodily injury and possible need for amputation. Always wear protection to prevent material splashing onto skin or into eyes.

IMPORTANT: GET EMERGENCY MEDICAL CARE IMMEDIATELY IF ANY FLUID APPEARS TO PENETRATE THE SKIN! INFORM PHYSICIAN OF EXACTLY WHAT WAS INJECTED. PLEASE DO NOT TREAT THIS INJURY AS A SIMPLE CUT.

! WARNING ! – RELIEF PROCEDURE

DO NOT EVER point the dispensing valve at another person.

DO NOT EVER attempt to stop material from the dispensing valve or a leaking connection with your hand or body.

BEFORE EACH USE, check equipment for proper operation and to insure safety devices are in place and working properly.

NEVER modify this equipment. Modification could cause equipment malfunction and result in serious bodily injury.

When flushing the pump with solvents, ALWAYS hold a metal part of the dispensing valve firmly to the side of a grounded metal pail and operate pump at the lowest possible fluid pressure to reduce the risk of injury from splashing or static sparking.

WARNING: This pump can develop 7500 PSI working pressure at 120 PSI maximum incoming air pressure. Be sure that all system equipment and accessories are rated to withstand the maximum working pressure of this pump. **NEVER** exceed the maximum working pressure of the lowest rated component in the system. **IMPORTANT:** “Whip” hoses for dispensing valve are fluid pressure rated at 4500 PIS. **NEVER** exceed 90 PSI, air pressure to pump when using “whip” hoses.

WARNING: Water and even moist air can cause this pump to corrode. To aid in the prevention of this corrosion, **NEVER** leave the pump filled with water or air. After normal flushing, flush the pump once more with mineral spirits or an oil based solvent, relieve pressure and leave the mineral spirits in the pump. **BE SURE TO CORRECTLY FOLLOW THE PRESSURE RELIEF PROCEDURE.**

PRESSURE RELIEF PROCEDURE

ALWAYS FOLLOW THIS PROCEDURE to reduce the risk of serious bodily injury, including splashing into the eyes. After shutting off the pump; checking/servicing any part of the system; installing/cleaning or changing any part of the system, **ALWAYS** follow this procedure:

1. Disconnect the air supply to the pump.
2. Aim the dispensing valve away from yourself and others.
3. Aim the dispensing valve into an appropriate container and open until all pressure is relieved.

If you believe that the dispensing valve or hose is completely clogged or that pressure in the pump has not been fully relieved after following the above procedure, **VERY SLOWLY** loosen the hose end coupling to relieve the pressure gradually and then loosen completely. Then proceed to clear the valve or hose.

WARNING: ALWAYS follow the Pressure Relief Procedure after shutting off the pump.

WARNING: ALWAYS follow the Pressure Relief Procedure when checking/servicing any part of the system and when installing, cleaning or changing any part of the system.

INSPECTION INSTRUCTIONS

If you believe that you have overpressurized the equipment, or if your equipment requires adjustments or repair, contact your Authorized Distributor or Service Center for inspection of the pump.

INSTALLATION

It is recommended that you use an **air line filter/regulator/lubricator** to remove harmful dirt and moisture from the compressed air supply and to provide automatic lubrication to the air motor. Blow-dry the lines and hoses with air before connecting them to the system.

Instruction for Assembly of ATD5289 Lubrigun

Unpack ATD5289 Assembly from Carton	This should include the following pieces: Pump, Drum Cover (Red), Follower Plate, Grease Control Valve, 6 Foot Grease Hose, Muffler, Air Nipple and Rapid Disconnect Coupler.
Assemble Drum Cover to Pump (For Coupler and Ferrule Assembly)	Place ferrule both top and bottom on either side of the drum cover and insert end of pump tube through the respective holes.. Thread top and bottom of ferrule together with the pump cover in between both pieces of the ferrule. Do this as far up the pump tube as possible underneath the bottom of the air motor.
Assemble Drum Cover to Pump (For Screw Mounted Cover Assembly)	Insert end of pump tube through hole in the drum cover. Line up holes in drum cover with the pump outlet body. Place the screws in there respective holes and tighten drum cover to the bottom of the pump body

Insert follower plate onto the bottom of the pump tube and slide the follower plate up the pump tube.

Lower pump tube into lubricant until drum cover rests on top bead of drum.

Insert the three (3) adjusting screws into the drum cover and tighten securely to hold the pump to the drum.

Assemble the lubricant hose to the pump outlet body. The connections must be **leakproof**. **Do not connect the ATD5218 Control Valve Yet. You want to prime the system and purge contaminants out of the Grease Hose.**

Insert Air Nipple 11660 and thread into pump head opening. Use Teflon tape to seal threads to prevent air leakage if necessary.

Assemble air coupler 815 to an air hose of sufficient length so that the lubrigun can be moved to cover the entire lubrication area with the hose attached. When air coupler 815 is attached to air coupler nipple 11660, lubrigun is ready for operation. To release air coupler 815, draw back on the coupler sleeve.

NOTE: DO NOT INSTALL ATD5218 CONTROL VALVE YET!

DID YOU: Purchase a Filter / Regulator for your pump? The Filter / Regulator should have an automatic dump mechanism to purge the water out of the incoming air. Water in the compressed air system is the biggest "Killer" of Air Operated Equipment.

YES: Proceed

NO: Think about it! It is cheap insurance to keep your pump running at maximum efficiency and the pump will last longer.

Initiating Air Motor and Pump Operation

To Start Pump: Turn on air from Air Regulator **slowly**. You will hear the air enter the air motor. Pump will start quickly and then reach prime at a stall pressure. It might take as much as 60-70 PSI to get the pump started initially. Recommended Air Pressure to operate the pump under normal conditions is 80PSI. Pump will activate as low as 15-20PSI. For first time operation, pump will start at 50-60 PSI. After that pump will activate at the lower pressure.

Pump will start quickly and then reach prime at a stall pressure when the control valve is attached.

Allow pump to operate: Pumping Grease into the hose. Allow approximately 1/3 Cup of Grease to flow out of the Hose. **This is to insure that any particles or contaminants or residue inside the hose do not enter the ATD5218 Control Valve.** Stop Pump; Install the ATD5218 Control Valve on the hose; Make sure connections are tight; Resume operation of the pump. The pump should reach stall pressure and stop.

Test the System Pull the Trigger slowly and Grease should be ejected from the nozzle. **Don't point it at anyone!**

Never Put your Finger or Other Bodily parts near the valve control nozzle when pulling the trigger on the control valve ATD5218.

To know the amount of lubricant pressure in your system or the hose, multiply the amount of air pressure by 50. For example, if there is 100 psi of air pressure indicated on the regulator (100 psi of air entering) then there is 5000 psi of grease pressure in the lubricant line.

Revision: January, 2003

Version LT989B

Instruction for Assembly of ATD5289 Lubrigun

Additional Instruction Notes...

Ensure that the **Muffler ATD5317** is inserted in the correct orifice.

The **Air Coupler and Nipple** are packed in a separate bag.

Thread the Nipple into the orifice on the side of the pump.

Once the Nipple is threaded into the pump orifice, the Rapid Disconnect Coupler can be inserted onto the nipple.

Connect **Lube Hose 75072** to orifice at indicated in pump drawing.

Connect **ATD5218 Control Valve** to Hose.

Adhering the Drum Cover to the Pump and Pump Tube: Use the Knurl Fixture. Two pieces that thread together.

A: Unthread both sections.

B: Put the thicker piece on top of the Drum Cover and the thinner piece on the bottom of the Drum Cover.

C: Thread them together with the Drum Cover Hole Between them.

D: Slide the Assembly up the Pump Tube.

E: To slide the Knurl Fixture that adjusts the drum cover on the pump tube, grease or some type of lubricant might have to be applied to the "O" ring on the inside of the Knurl Fixture. This fixture is for adjustment of the drum cover on the Pump Tube and prevents the Drum Cover from sliding up and down the pump tube when the pump is removed from the drum.

Slide the Follower Plate onto the Bottom of the Pump Tube.

Insert Pump, Cover and Follower Plate into Pail.

Use the 3 adjustment screws on the Drum Cover to ensure that the pump is securely attached to the Pail or Drum

Before Starting Pump ensure all connections are tight.

Read Caution and Warning Statements included with the Pump.

Start Pump slowly and gradually increase air pressure to desirable level. Normal Operating Air Pressure is 80 to 100 PSI.

Have you thought of a **Grease Strainer** for the Pump Down Tube: 99% of Pump Repairs are due to Foreign Particles caught in the Down Tube. Ask for **Strainer ATD5356 (82103ME)**.

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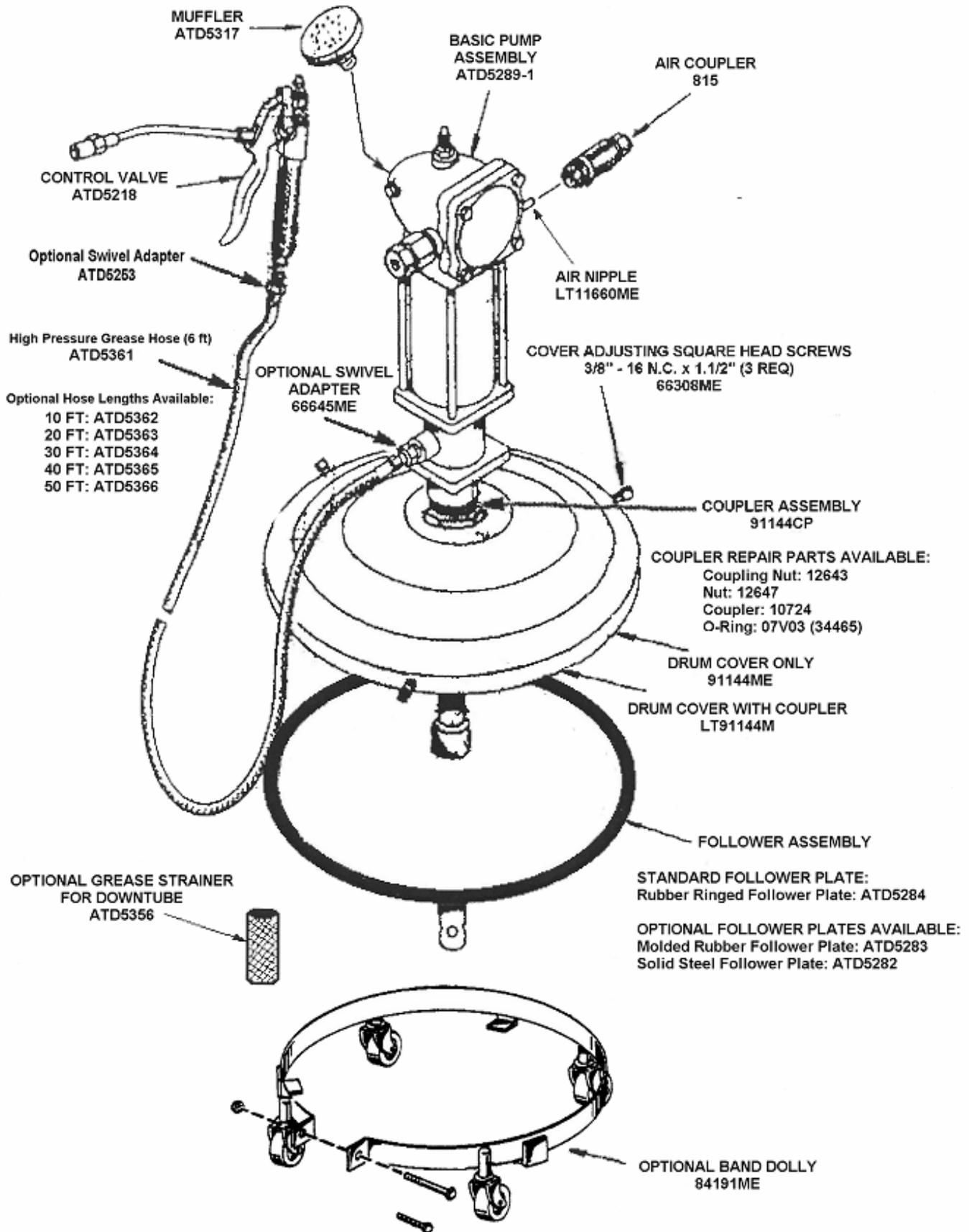
Trouble Shooting Guide for Pumps ATD5217 – ATD5219 –ATD5289

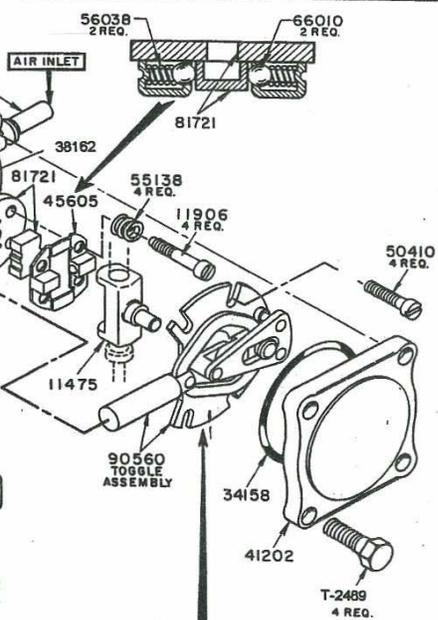
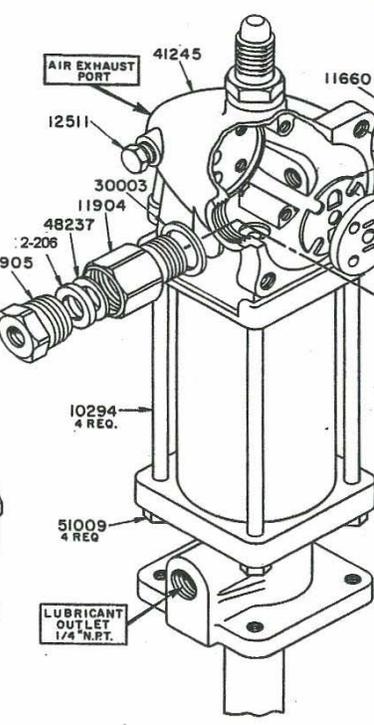
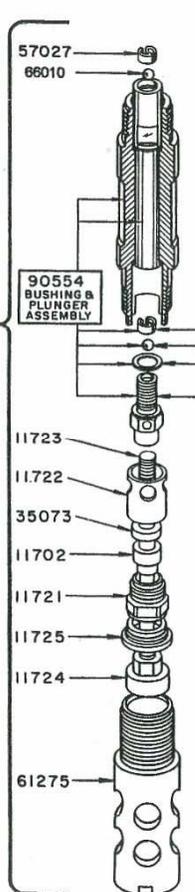
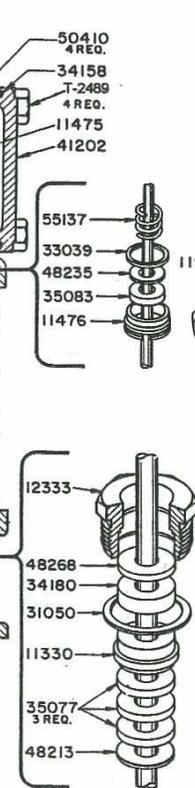
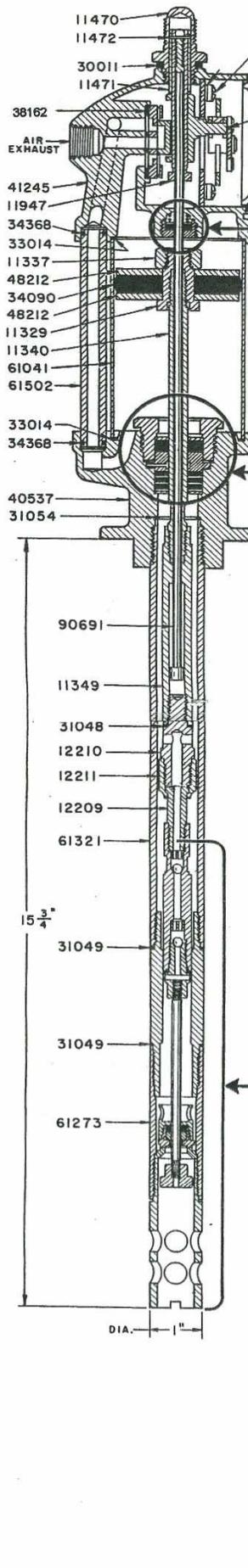
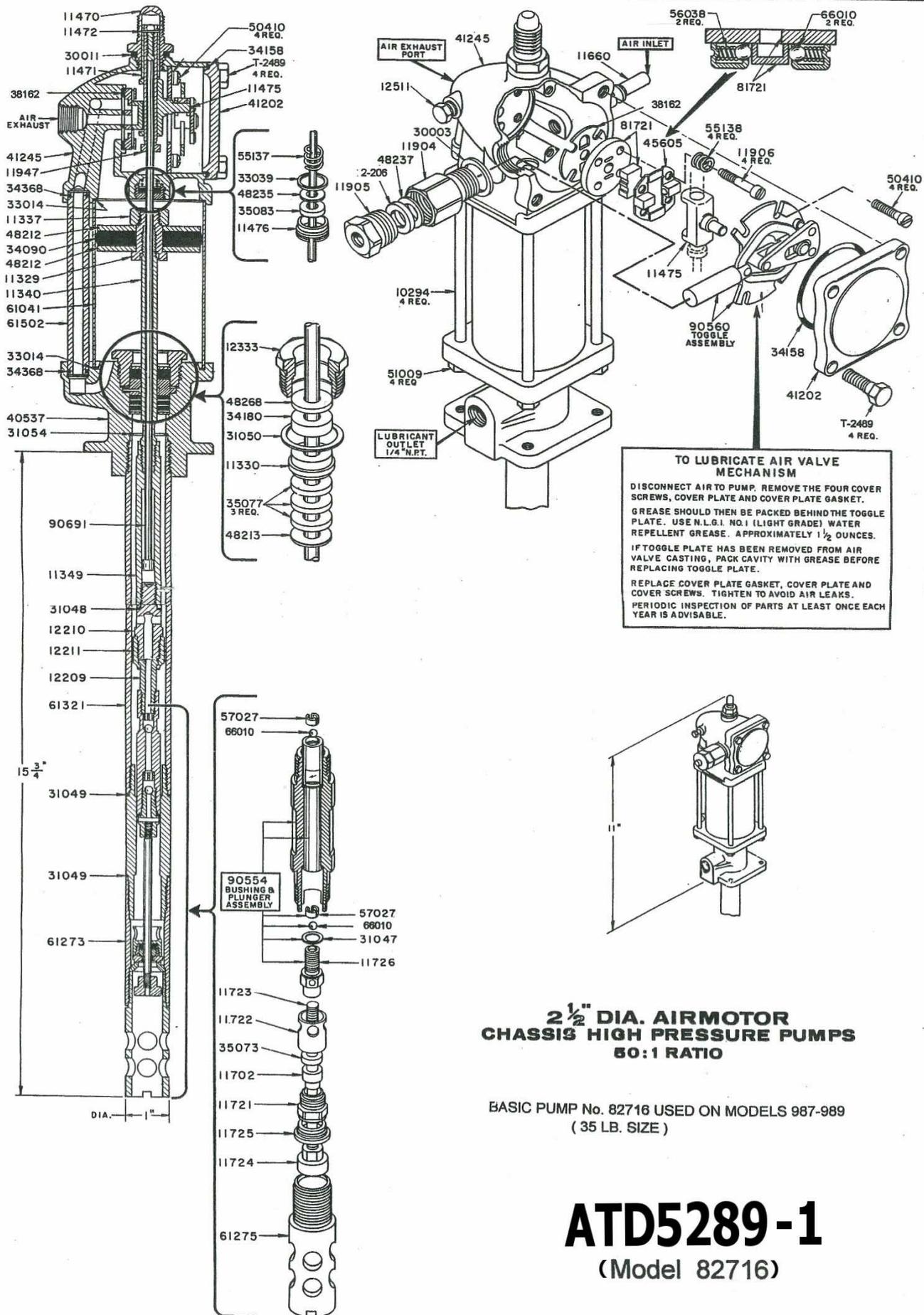
PROBLEM:	SOLUTION:
Warning:	If the Air is connected to the pump, <i>consider the pump to be live</i>. Do not attempt to work on the pump or the system without disconnecting the Air Inlet and relieving pressure in the system, both air pressure and lube pressure. Make sure there are no live air pockets in the air motor and all air has been bled from the Air Motor.
Pump does not Operate	Check In-Line Air Pressure to the pump. Recommended Air Pressure is 80 PSI – 100 PSI.
Pump is Leaking Air	Check the Inlet Air Nipple. Use Teflon tape to seal the threads at the Air Inlet. Silicon is not recommended since it can escape into the interior of the Air Motor and cause damage to the valves. Check the Quick Disconnect Coupler connection to the Air Hose. Use Teflon tape to seal the threads at the Connection
Pump blows air through the Muffler	Check to see that the Air Inlet Nipple is installed in the correct location. Check that the Brass Plug is installed in the Air Motor head and is not leaking air.
Question:	Are you using a Filter / Regulator on the pump?
Answer:	We strongly suggest the use of a Filter / Regulator on the pump. The Filter should be a moisture evaporator with an automatic dump on it so water is eliminated and purged from the air before entering the pump. If you do not have a Filter / Regulator on the pump, chances are the pump head could be full of water and this will corrode the inside of the pump and moving parts, thereby reducing the life of the pump.
Pump does not pump material	Check to see if there are any blockages in the Lubricant lines.
Pump operates, pumps material but does not shut off.	Reason: Pump is not reaching stall pressure. 1: Check that all hoses, lubricant lines and controls valves are connected and the connections are tight. There should be no leaks. 2: Check that the hoses are SAE approved Grease Hoses and made for pumping High Pressure Grease. DO NOT use Oil Hose or garden hose for pumping High Pressure Grease.
Air Motor on Pump operates but no material comes out	1: Check the follower plate. Make sure there are no air pockets in the grease underneath the follower plate. Push down lightly on the follower plate to ensure a positive prime. 2: Check that all hoses and control valves are fully connected 3: Check to see that there are no blockages in the lines, hoses or control valves.
Pump, hoses and valves are connected and pump does not pump when I pull the trigger on the control valve	See Trouble Shooting Sequence On Following Page:
Warning:	If the Air is connected to the pump, <i>consider the pump to be live</i>. Do not attempt to work on the pump or the system without disconnecting the Air Inlet and relieving pressure in the system, both air pressure and lube pressure. Make sure there are no live air pockets in the air motor and all air has been bled from the Air Motor.
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QUESTION	YES	NO
Does the pump Air Motor operate when it is removed from the Grease?	Yes? Then put the pump back in the grease. Remove the hose from the pump	No? Check Air Inlet for Pressure, and check Air Motor for Leaks at the Air Nipple, Muffler or Seals. If there are no air leaks and Air is fully engaged at least 80 psi, take the rubber part of a mallet and slightly tap the front cover of the Air Motor (41202) with the rubber part only. Sometimes and very rarely the Toggle Valve sticks and needs to be prodded off of the neutral position.
Does it pump grease now when inserted in the drum?	Yes? There is a blockage in the Hose or the Control Valve. Remove the Control Valve from the hose and connect the hose to the pump.	No? Return to a step above.
Does the grease pump through the hose?	Yes? Then the blockage is in the Control Valve. Attach the control valve to the hose. Remove the coupler from the Control Valve. Most likely the blockage is at the control valve.	No? Then the blockage is in the hose.
Does the grease pump through the Control Valve?	Yes? There was blockage in the coupler of the control valve. Clean the Coupler out with Mineral Spirits.	No? There is a blockage in the main body of the Control Valve. Control Valve needs to be disassembled and cleaned.
<i>Is there Blockage in your Lubricant Lines, Hoses, Pumps and Control Valves Common?</i>	If yes, we suggest the use of a foot valve strainer: ATD5356 (82103ME).	
Note:	To prevent Blockage in the pump, hose, lubricant lines or control valve with contaminated grease, or to prevent contaminated grease from entering your bearings, we suggest the use of a Grease Strainer: ATD5356 (82103ME).	
Has your Pump been Outside in the elements? Has water entered the pump?	Yes? There is a possibility that water has accumulated inside the Air Motor. Over time this can cause damage to the Air Motor. All pumps are packed at the factory with a water repellent grease. Over time with water accumulating inside the Air Motor, the grease can be flushed out.	
Note:	To ensure the proper operation of your Pneumatic pump, we suggest an Air Lubricator, Moisture Evaporator and Regulator on each Pump OR at the very least a Filter /Regulator with an automatic dump mechanism on it to purge water out of the air.	
Note:	Don't Bang on the pump with a hammer or blunt instrument. The pumps are rugged and made for professional and industrial use but are made of Aluminum and if any parts are dented, it will affect the operation of the pump.	
Warning:	If the Air is connected to the pump, consider the pump to be live. Do not attempt to work on the pump or the system without disconnecting the Air Inlet and relieving pressure in the system, both air pressure and lube pressure. Make sure there are no live air pockets in the air motor and all air has been bled from the Air Motor.	
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CHASSIS LUBRIGUN **ATD5289**

(25-50lb SIZE ORIGINAL CONTAINER)
50:1 RATIO



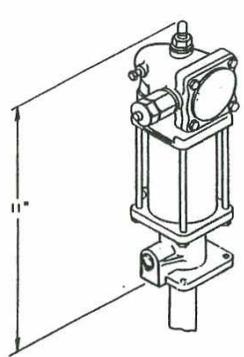


TO LUBRICATE AIR VALVE MECHANISM

DISCONNECT AIR TO PUMP. REMOVE THE FOUR COVER SCREWS, COVER PLATE AND COVER PLATE GASKET. GREASE SHOULD THEN BE PACKED BEHIND THE TOGGLE PLATE. USE N.L.G.I. NO.1 (LIGHT GRADE) WATER REPELLENT GREASE. APPROXIMATELY 1 1/2 OUNCES.

IF TOGGLE PLATE HAS BEEN REMOVED FROM AIR VALVE CASTING, PACK CAVITY WITH GREASE BEFORE REPLACING TOGGLE PLATE.

REPLACE COVER PLATE GASKET, COVER PLATE AND COVER SCREWS. TIGHTEN TO AVOID AIR LEAKS. PERIODIC INSPECTION OF PARTS AT LEAST ONCE EACH YEAR IS ADVISABLE.



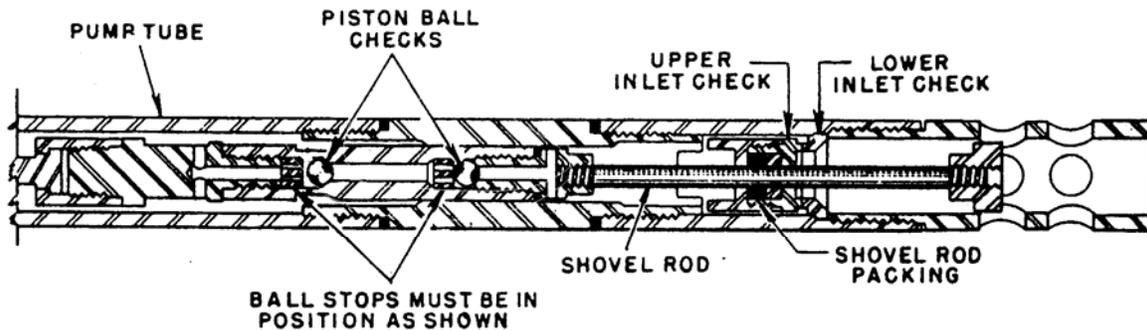
2 1/2" DIA. AIRMOTOR CHASSIS HIGH PRESSURE PUMPS 50:1 RATIO

BASIC PUMP No. 82716 USED ON MODELS 987-989 (35 LB. SIZE)

ATD5289-1
(Model 82716)

Service Instructions for ATD5289 Pump Assembly (ATD5289-1)
Lubricate Air Valve Once Each Year

SERVICE OF LOWER PUMP TUBE ASSEMBLY



Loss of pressure, volume or continuous operation of pump when not in normal use indicates:

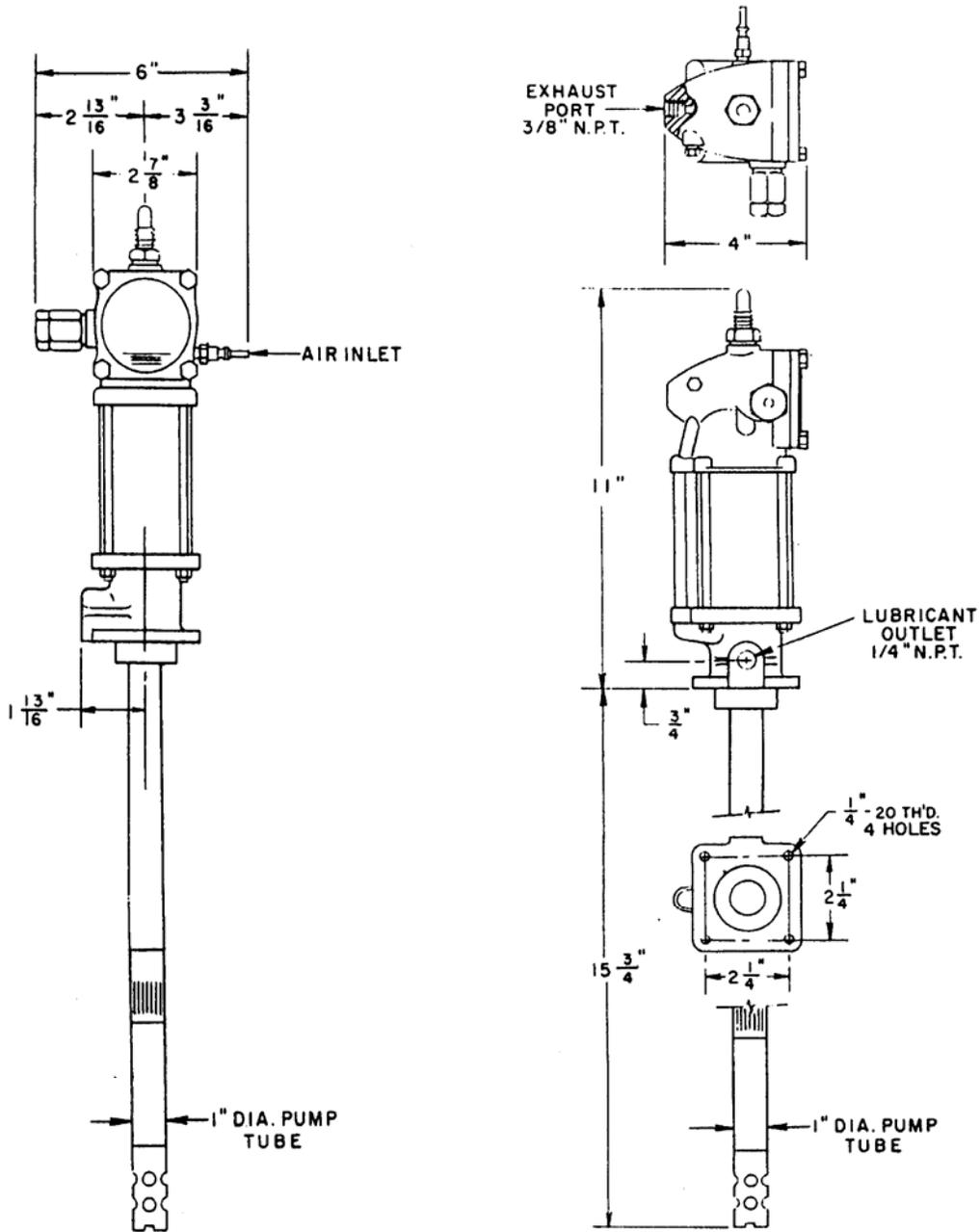
- A. Foreign material lodged under Piston Ball Checks or between Upper and Lower Inlet Checks.
 To correct this condition the Piston ball Checks and Inlet Checks should be removed,, thoroughly. If sealing surfaces between Upper and Lower Inlet Checks are rough or pitted, place or resurface if damage is slight.
- B. Shovel Rod Packing worn or damaged. Before installing new Packing, inspect surface of Shovel Rod and replace if rough or pitted. Do not grip Shovel Rod when disassembling lower pump tube assembly.

If pump continues to operate when not in normal use and lubricant level in drum drops, inspect lubricant supply line between pump and outlet for leaks or break in line.

COMPLETE PUMP PARTS LIST

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
10294	Tie Rod	12211	Coupling Nut	48213	Gland Packing Washer
11329	Air Piston Bolt	12333	Gland Packing Nut	48235	Packing Washer
11330	Gland Packing Spacer	12511	Pipe Plug	48237	Plunger Packing Washer
11337	Air Piston Nut	30003	Packing Nut Gasket	48268	Gland Packing Washer
11340	Air Motor Piston Rod	30011	Valve Cap Gasket	T-2489	Valve Cover Screw
11349	Piston Rod Connector	31047	Check Seat Gasket	50410	Toggle Plate Screw
11470	Valve Cap	31048	'Connector Gasket	51009	Tie Rod Nut
11471	Trip Rod Collar	31049	Bushing Gasket	55137	Trip Rod Packing Spring
11472	Trip Rod Pin	31050	Gland Gasket	55138	Valve Seat Spring
11475	Trip Shoe	31054	Pump Tube Gasket	56038	Spring
11476	Trip Rod Packing Nut	33014	Air Cylinder Gasket	57027	Ball Stop
11660	Air Inlet Nipple	33039	Packing Nut Gasket	61041	Air Cylinder
11702	Check Washer	34090	Air Piston Packing	61273	Bushing Extension
11721	Priming Check	2-206	Plunger Packing	61275	Priming Tube
11722	Check Stop	34158	Cover Gasket	61321	Pump Tube
11723	Plunger Rod	34180	Gland Packing	61502	Air Passage Tube
11724	Priming Plunger	34368	O-Ring	66010	Equalizer Ball
11725	Priming Check Seat	35073	Priming Check Packing		
11726	Check Seat	35077	Gland Packing	81721	Valve Slide and Seat Assembly
11904	Packing Nut	35083	Trip Rod Packing	90554	Plunger and Bushing Assembly
11905	Packing Cap	38162	Valve Seat Gasket	90560	Toggle Plate Assembly
11906	Valve Seat Bolt	40537	Outlet Body	90691	Trip Rod Assembly
11947	Trip Sleeve	41202	Cover Casting		
12209	Coupling Stud	41245	Air Valve Casting		
12210	Coupling Adapter	45605	Valve Guide Plate		
		48212	Air Piston Washer		

2-1/2" AIR MOTOR OPERATED PUMPS
MODEL ATD5289 Pump Assembly (ATD5289-1 Pump)
(CHASSIS --- 50:1 RATIO)



**REPAIR KITS AVAILABLE FOR
SERVICING 2-1/2" AIR MOTOR HIGH PRESSURE PUMPS**

- Repair Kit No: **ATD5320 (R83054M)** Simple Overall Repair Kit for Pump
- Repair Kit No: **(R83054ME)** Complex Overall Repair Kit for Pump
- Repair Kit No: **ATD5322 (R83000ME)** Air Motor Repair Kit
- Repair Kit No: **ATD5323 (R83001ME)** Down Tube Repair Kit

REPAIR KIT LISTINGS FOR THE ATD5289

Simple Repair kit for the Air Motor and Downtube; Air Motor Repair Kit; Downtube Repair Kit and Complex Repair kit for the Air Motor and Downtube.

COMPLEX REPAIR KIT FOR AIR MOTOR AND DOWNTUBE R83054ME				SIMPLE REPAIR KIT FOR AIR MOTOR AND DOWNTUBE ATD5320 (R83054M)			
QTY	MODEL	DESCRIPTION	QTY	MODEL	DESCRIPTION	QTY	MODEL
1	11340	AIR MOTOR PISTON ROD	2	33014	AIR CYLINDER GASKET	2	33014
1	11472	TRIP PIN	1	33039	PACKING NUT GASKET	1	33039
1	11475	TRIP SHOE	1	34090	AIR PISTON PACKING	1	34206
1	11702	CHECK WASHER	1	34206	O RING	1	34158
1	11721	PRIMING CHECK	1	34158	COVER GASKET	1	34180
1	11723	PLUNGER ROD	1	34180	GLAND PACKING	2	34368
1	11724	PRIMING PLUNGER	2	34368	O RING	1	35073
1	11725	PRIMING CHECK SEAT	1	35073	PRIMING CHECK PACKING	1	35083
1	11726	CHECK SEAT	3	35077	GLAND PACKING	1	38162
1	30003	PACKING NUT GASKET	1	35083	TRIP ROD PACKING	2	56038
1	30011	VALVE CAP GASKET	1	38162	VALVE SEAT GASKET	4	66010
1	31047	CHECK SEAT GASKET	1	55137	TRIP ROD PACKING SPRING	4	66213
1	31048	CONNECTOR GASKET	2	56038	SPRING	4	66213
2	31049	BUSHING GASKET	1	61041	AIR CYLINDER	4	66213
1	31050	GLAND GASKET	4	66010	EQUALIZER BALL	4	66213
1	31054	PUMP TUBE GASKET	4	66213	LOCK WASHER	1	31054
DOWNTUBE REPAIR KIT ATD5323 (R83001ME)				AIR MOTOR REPAIR KIT ATD5322 (R83000ME)			
QTY	MODEL	DESCRIPTION	QTY	MODEL	DESCRIPTION	QTY	MODEL
1	11702	CHECK WASHER	1	11340	AIR MOTOR PISTON ROD	1	34158
1	11721	PRIMING CHECK	1	11472	TRIP PIN	1	34180
1	11723	PLUNGER ROD	1	11475	TRIP SHOE	2	34368
1	11724	PRIMING PLUNGER	3	30003	PACKING NUT GASKET	3	35077
1	11725	PRIMING CHECK SEAT	1	30011	VALVE CAP GASKET	1	35083
1	11726	CHECK SEAT	1	31048	CONNECTOR GASKET	1	38162
1	31047	CHECK SEAT GASKET	1	31050	GLAND GASKET	1	55137
2	31049	BUSHING GASKET	2	31054	PUMP TUBE GASKET	2	56038
1	35073	PRIMING CHECK PACKING	1	33014	AIR CYLINDER GASKET	1	61041
2	66010	EQUALIZER BALL	1	33039	PACKING NUT GASKET	2	66010
			1	34090	AIR PISTON PACKING	4	66213
			1	34206	O RING	1	34158

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BAND DOLLY PARTS BREAKDOWN

