

DOUBLE POST INDUCTOR FOR 400 LB. DRUMS

PART NO.:

L794450-004 - DOUBLE POST (HEAVY DUTY) MECHANICAL RAM PUMP
 L791451-001 - 450, 40:1 PUMP DOUBLE POST MECHANICAL RAM
 L791451-002 - 450, 70:1 PUMP DOUBLE POST MECHANICAL RAM
 L791451-003 - 600, 80:1 PUMP DOUBLE POST MECHANICAL RAM

DESCRIPTION

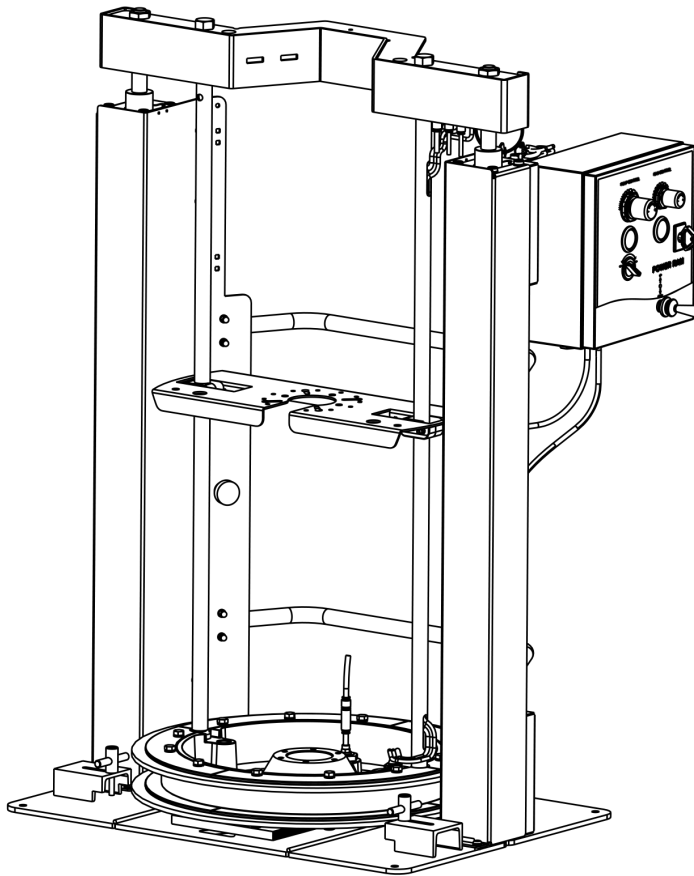


Fig. 1

Fixed inductor for the supply of grease. Operated by compressed air. This unit uses two pneumatic cylinders connected with a metal structure and protected with metal fairing fixed to a reinforced base plate, resulting in a very robust piece of equipment that is very small for the type of drums with which it can work.

This unit, supplied with all the components necessary for its use, was designed to supply grease with the greater guarantee of priming of the pump, and maximum use of the grease drums, compatible with this model of inductor.

It incorporates a robust aluminum inductor plate, which has a sealing system made up of lip seals or double O-rings.

This system guarantees the walls of the drum are clean and that it is perfectly sealed, which keeps impurities from getting in and protects from the weather. There are also different pump kits designed to optimize the work depending on the use required of this unit.

When the unit is correctly secured, the plate can be raised together with the pump to a given height to facilitate changing the used drum.

This unit has a control cabinet for the inductor and for the pump installed in the unit. This control cabinet has all the systems necessary to facilitate the inductor plate going into and out of the drum.

WARNING AND CAUTIONS



WARNING



CAUTION

THIS SYMBOL BE AWARE OF SERIOUS BODILY INJURY OR DEATH IF YOU IGNORE THE WARNING DESCRIBED

THIS SYMBOL BE AWARE OF PERSONAL INJURY OR PROPERTY DAMAGE IF YOU IGNORE THE CAUTION DESCRIBED

READ BEFORE USE



WARNING

READ ALL INSTRUCTION MANUALS, TAGS, AND LABELS BEFORE OPERATING THE EQUIPMENT.

THIS EQUIPMENT IS FOR PROFESSIONAL USE ONLY.

DO NOT ALTER OR MODIFY THIS EQUIPMENT. USE GENUINE COMPONENTS PROVIDED FROM LUBRICATION SCIENTIFICS, LLC

NON-COMPATIBLE FLUIDS MAY CAUSE DAMAGE IN THE PUMP AND SERIOUS PERSONAL INJURY.

THE PUMP GENERATES HIGH OR VERY HIGH PRESSURES. DO NOT EXCEED THE MAXIMUM AIR INLET PRESSURE OF 145 PSI (10 BAR).

DO NOT EXCEED THE DRUM'S PRESSURE LIMITS. BE SURE OF THE DRUM'S PRESSURE LIMITATIONS AND REGULATE THE PRESSURE WITHIN THE SAFETY LIMITS WHEN SUPPLYING AIR TO THE INDUCTOR PLATE. DO NOT TRY TO USE THE UNIT UNTIL YOU HAVE TAKEN ALL POSSIBLE PRECAUTIONS TO GUARANTEE THAT THE UNIT HAS BEEN INSTALLED CORRECTLY, IS LEVEL, AND THAT THE BASE HAS BEEN FIRMLY SECURED TO THE CONCRETE FLOOR.

AVOID ELECTRICAL DISCHARGES. ENSURE THERE ARE NO ELECTRICAL CABLES, DEVICES, OR ACCESSORIES ABOVE THE LIFT. EXAMINE THE WORK AREA AND TAKE THE MEASURES NECESSARY TO ENSURE THAT ENOUGH SPACE IS MAINTAINED FOR THE INSTALLATION OF THE LIFT AND FOR THE PUMP TO BE LIFTED AS MUCH AS NECESSARY AND THAT THEY WORK CORRECTLY.

MAINTAIN A MINIMUM SAFETY DISTANCE WHEN RAISING AND LOWERING THE INDUCTOR. DO NOT GET TOO CLOSE; OPERATE IT FROM A SAFE PLACE, AS TO NOT GET TRAPPED BETWEEN THE UNIT AND ITS MOBILE ELEMENTS. TAKE CARE WHEN INSERTING THE INDUCTOR PLATE INTO THE DRUM.

WHEN NOT IN USE, BE SURE TO SHUT OFF THE AIR SUPPLY TO AVOID ACCIDENTS.

CHECK THAT ALL THE OPERATORS THAT WORK WITH THIS UNIT HAVE BEEN TRAINED IN SAFE WORKING PRACTICES, THAT THEY UNDERSTAND THEIR LIMITATIONS AND USE SAFETY EQUIPMENT WHEN REQUIRED.

INSTALLATION



WARNING

IF THE UNIT IS NOT INSTALLED CORRECTLY THIS CAN RESULT IN SERIOUS INJURY OR MATERIAL DAMAGE. READ THE WARNINGS.

This unit comes completely assembled, apart from the following details for proper installation and commissioning.

The unit is supplied with the control cabinet in the transport position. To place the control panel in the working position, simply disconnect pipes A and B from the control panel (fig. 5) and remove the pin from the hole locking the control panel (see upper arrows) and lower the control panel into its new working position (see arrow for rotational direction). Once the control panel is in place, insert the pin making sure the holes of the new position coincide. This will lock it in the working position. Then connect the pipes in the lower part of the control panel according to the diagram (see fig. 5).

To facilitate its handling, the unit is supplied with a pallet system integrated in the design. This system is composed of two galvanized sheet metal profiles bolted to the base plate. Once you have selected where you will secure the unit, it is necessary to remove these profiles; to do this, loosen and remove the screws that secure them and then remove the profiles in the direction of the arrows (Fig. 3). Take care when doing so to avoid possible accidents.

Once the definitive location of the unit has been decided, pay special attention to the work area that will be above the inductor; this work area shall be free of objects and any electrical devices and ensure that the floor is level. Once you have finished the above step, secure the unit definitively. To do this, firmly secure the base to the concrete floor using anchor bolts (not included in the supply). The base plate itself can be used as a pattern to establish the correct fixing locations.

To finish the installation process, connect pipes A and B (Fig. 5) to the pneumatic control panel according to the details in the drawing. The unit is tested and verified in the factory but it is a good idea to check it at its destination. Connect it to a compressed air inlet with a maximum pressure of 145 psi (10 bar) and check that all the accessories of the pneumatic system are in good condition after transport. The control cabinet enables you to regulate the pneumatic actuator for raising and lowering the cylinders independently and to regulate the pump pressure.

To extend the life of the unit and the pump, use a filter at the control panel input.

The control panels are regulated in the factory to an approximate pressure of 72.5 psi (5 bar) for the pneumatic actuator and 72.5 psi (5 bar) for the pneumatic pump.

WORKING POSITION

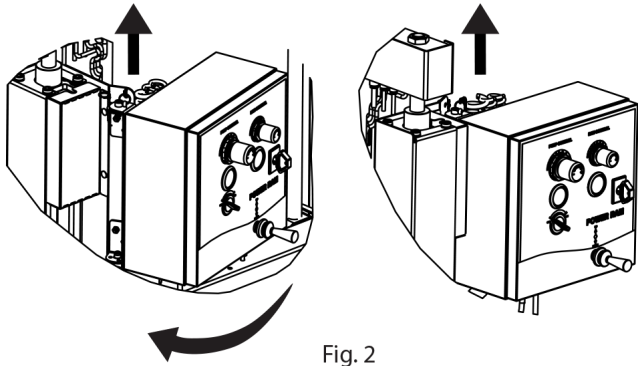


Fig. 2

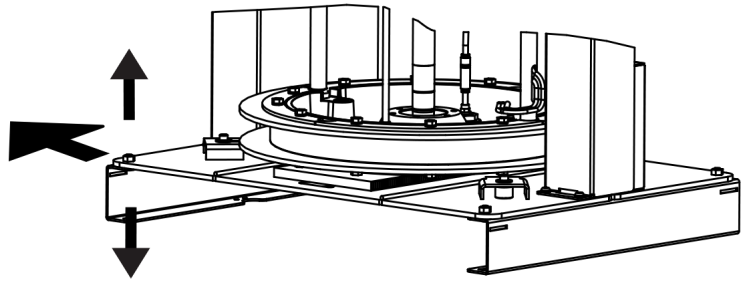


Fig. 3

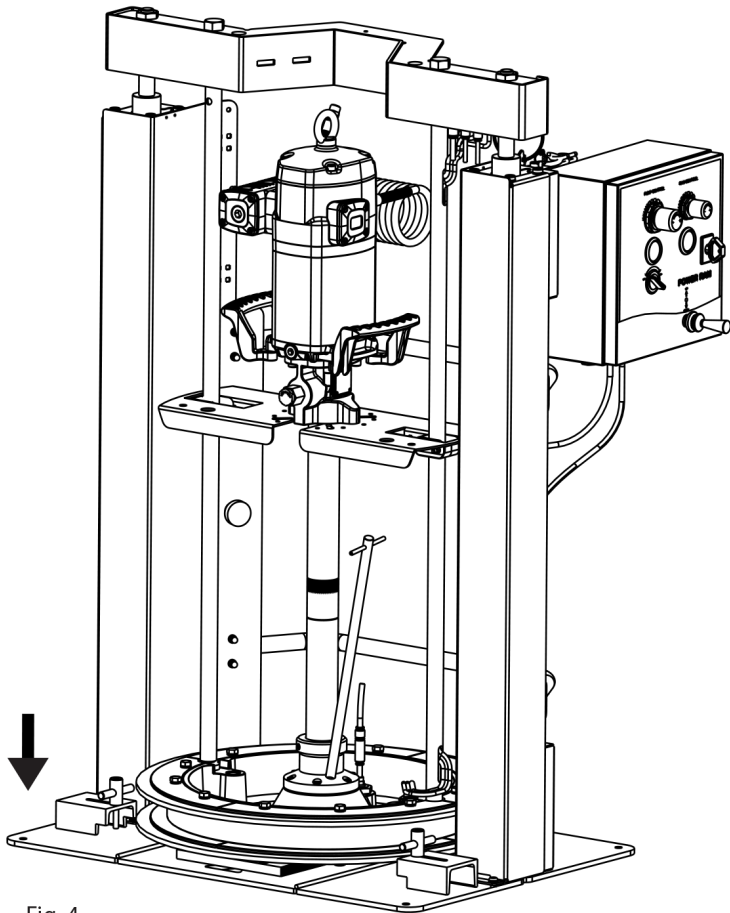


Fig. 4

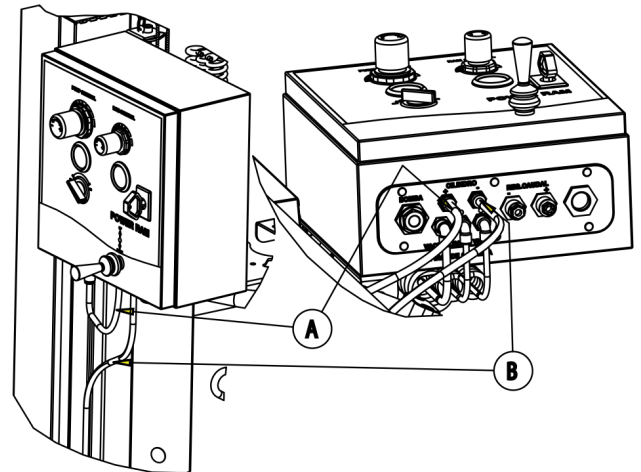


Fig. 5

WORKING POSITION

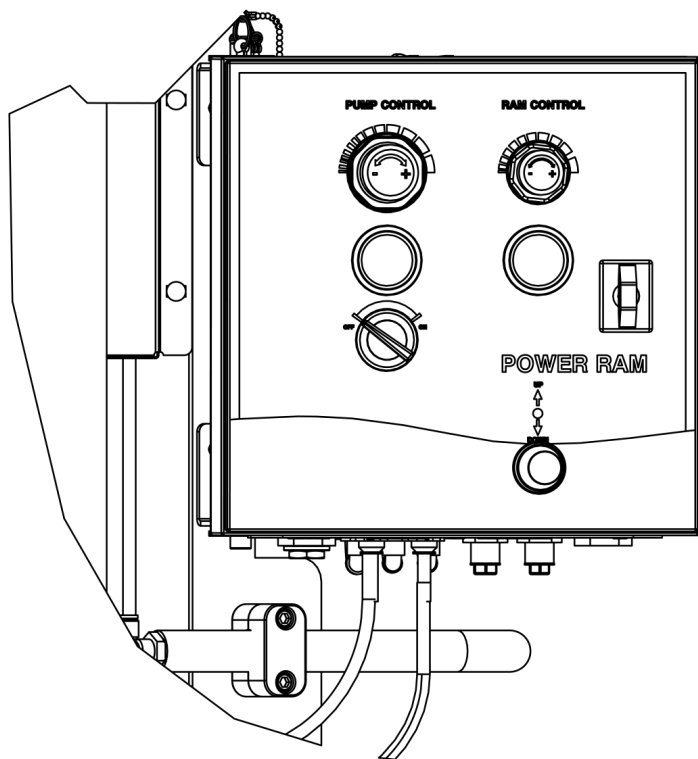


Fig. 6



CAUTION

To raise the inductor for the first time:

1. Ensure there is nothing above the lift. In addition, read the WARNINGS AND PRECAUTIONS on page 2.
2. Move the control cabinet lever to the "UP" position. Do not touch any part of the unit while it is moving!
3. Lift the inductor plate higher than the top of the drum. Stop the lift ascending further by moving the control cabinet lever to the "NEUTRAL" position (center).

To raise the inductor, (normal operation):

1. Before raising the inductor, the pump control valve must be in the "OFF" position.
2. With new gaskets the pressure indicated on the "Ram Control" dial must be 87-100 psi (6-7 bar) (with softer used gaskets the pressure may be lower, to reduce slight fluid leakage). To adjust the inductor air pressure, pull out the "Ram Control" regulator control so it can be turned, clockwise to increase the pressure and counter-clockwise to reduce it. To set the pressure, push the regulator towards the control box and lock it again.
3. Move the control cabinet lever to the "UP" position.
4. Lift the inductor plate higher than the top of the drum. Stop the lift from ascending further by moving the control cabinet lever to the "NEUTRAL" position (center).

GREASE DRUM INSTALLATION

1. Check that the control cabinet lever is in the "NEUTRAL" position (center).
2. Slide the 400 lb drum along the base of the inductor. It will stop up against the inductor limiters. Always use drums that are compatible with this unit. Do not use damaged drums as they can cause the inductor plate to get stuck in the drum.
3. Unscrew the bleed rod from the inductor plate, keeping it nearby or using the housing designed to hold it in the inductor pump brackets.

4. Move the control cabinet lever to the "DOWN" position.
5. Let the inductor plate descend through the drum. When the air stops and the grease starts to flow through the bleed hole, stop the inductor by moving the control cabinet lever to the "NEUTRAL" position (center).
6. Insert the bleed rod and tighten it correctly.
7. The unit is now ready to work with. The pump should already be operative.

GREASE SUPPLY

1. Select the "DOWN" position in the lift control cabinet, the inductor plate will compress the grease, priming the pump.
2. Start the pump by placing the "Pump Control" valve in the "ON" position.
3. The pump/inductor can now supply grease through the output hose until the drum is empty, the speed of emptying can be monitored by opening and closing the end of the output hose. When the inductor plate touches the bottom of the drum the inductor plate sensor is activated and stops the pump.
4. Before raising the inductor to replace the drum, the pump control valve must be in the "OFF" position.

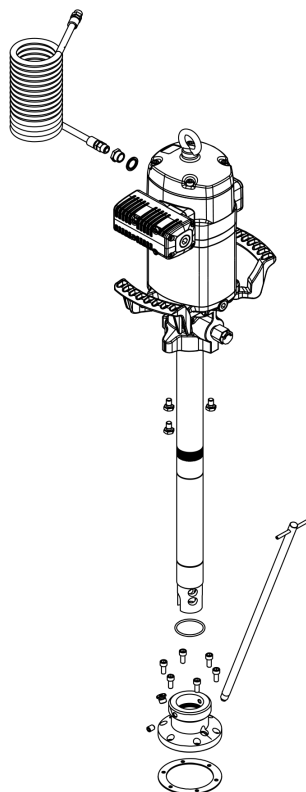
5. Move the control cabinet lever to the "UP" position. In this position the cylinders go up in the unit and a current of air enters the drum to push the inductor plate.
6. Lift the inductor plate higher than the top of the drum. Stop the lift ascending further by moving the control cabinet lever to the "NEUTRAL" position (center).



WARNING

WHILE THE EQUIPMENT IS CONNECTED TO THE AIR LINE, BE AWARE OF THE DANGER OF BEING TRAPPED BY THE MOBILE ELEMENTS OF THIS EQUIPMENT. FOR YOUR OWN SECURITY AND TO PROLONG YOUR PUMPS LIFETIME UNPLUG THE AIR INLET COUPLER AFTER USING THIS EQUIPMENT.

INDUCTOR PACKAGES



DOUBLE POST: L794450-004*
 *Includes a follower plate

Designed for pumps:
 L791450-003 450, 40:1 120 LB
 L791450-006 450, 70:1 120 LB
 L791450-009 600, 80:1 120 LB

INDUCTOR PACKAGE		INDUCTOR		PUMP		COLLAR KIT	FOLLOWER KIT
ITEM#	DESCRIPTION	INDUCTOR	DESCRIPTION	ITEM#	DESCRIPTION	ITEM#	ITEM#
L791451-001	450, 40:1	L794450-004	DOUBLE POST	L791450-003	450, 40:1 120LB	L79833650*	INCLUDED IN L794450-004
L791451-002	450, 70:1			L791450-006	450, 70:1 120LB		
L791451-003	600, 80:1			L791450-009	600, 80:1 120LB		

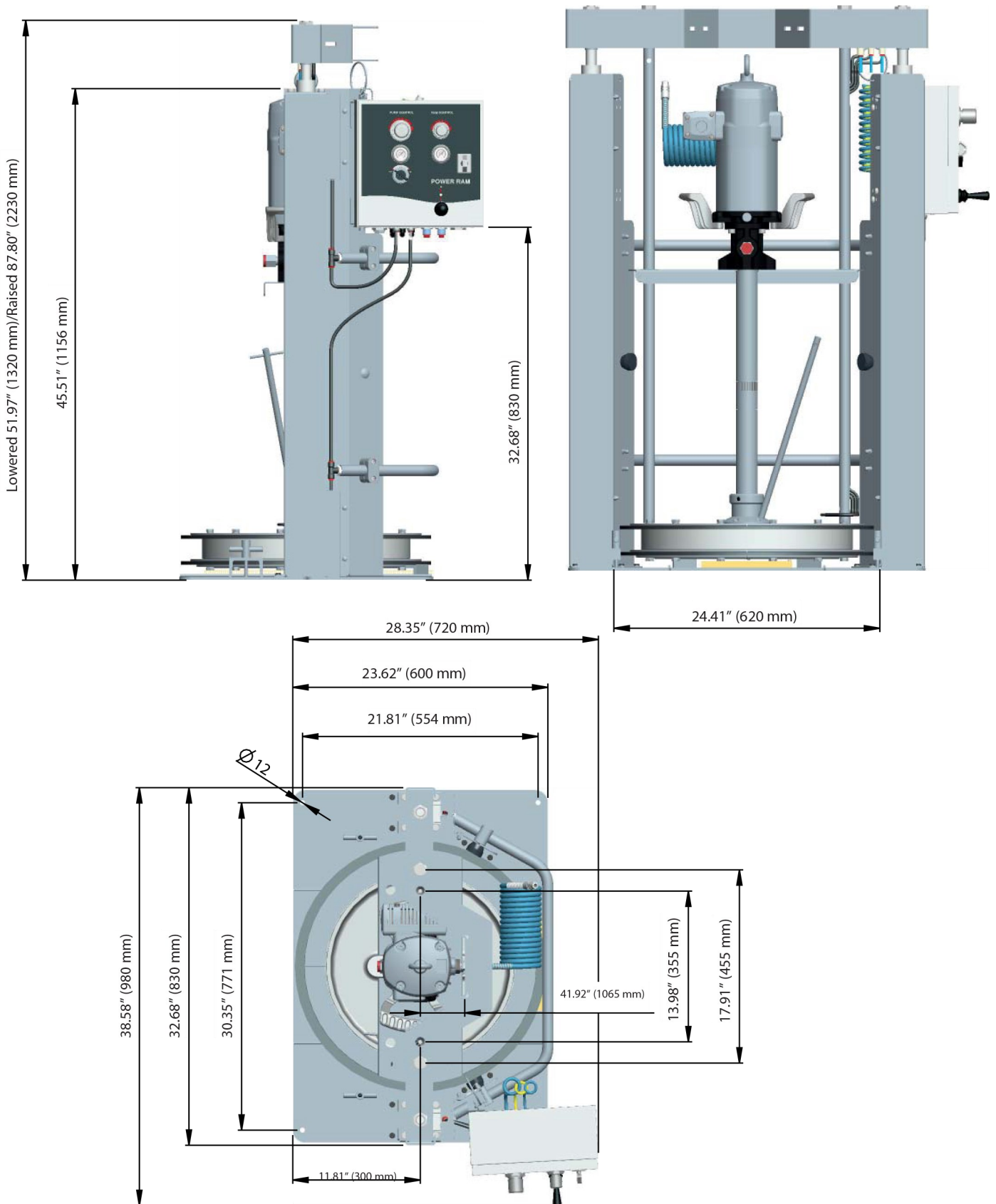
TECHNICAL DATA

PUMPS	450, 40:1 L791450-003	450, 70:1 L791450-006	600, 80:1 L791450-009
MAXIMUM AIR PRESSURE	200 PSI (14 BAR)	100 PSI (7 BAR)	100 PSI (7 BAR)
MINIMUM AIR PRESSURE	21 PSI (1.5 BAR)	21 PSI (1.5 BAR)	21 PSI (1.5 BAR)
MAXIMUM GREASE DELIVERY (A)	24.25 LBS/MIN (11 KG/MIN)	16.53 LBS/MIN (7.5 KG/MIN)	17.64 LBS/MIN (8 KG/MIN)
AIR INLET THREAD	1/2" NPT	1/2" NPT	1/2" NPT
GREASE OUTLET THREAD	1/2" NPT	1/2" NPT	1/2" NPT
AIR PISTON DIAMETER	4 1/2" (115 MM)	4 1/2" (115 MM)	6" (150 MM)
AIR PISTON STROKE	4" (100 MM)	4" (100 MM)	4" (100 MM)

INDUCTOR TECHNICAL DATA	
DIAMETER OF THE PNEUMATIC CYLINDER	3.15 IN (80 MM)
STROKE OF THE PNEUMATIC CYLINDER	39.37 IN (1000 MM)
MINIMUM HEIGHT OF EQUIPMENT	52 IN (1320 MM)
MAXIMUM HEIGHT OF EQUIPMENT	87.81 IN (2230 MM)
DIMENSIONS OF THE BASE	32.68 IN X 23.62 IN (830 MM X 600 MM)
AIR INLET THREAD	1/2" NPT
MAXIMUM AIR PRESSURE	140 PSI (10 BAR)
WETTED PARTS	ALUMINUM, ZINC PLATED STEEL, BUNA-N, VITON

*KIT: L79833650 includes collar, air hose, hardware, bleed rod.

DIMENSIONS



TROUBLESHOOTING

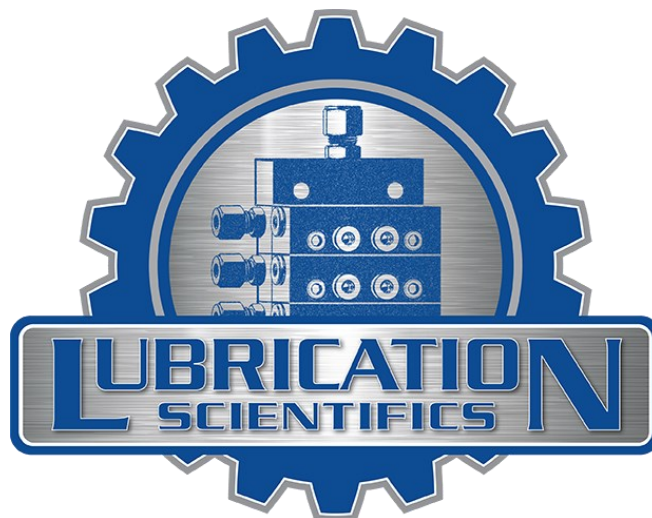
SYMPTOMS	POSSIBLE REASONS	SOLUTIONS
THE PUMP IS NOT WORKING OR THERE IS NO FLUID DELIVERY	NO SUITABLE AIR SUPPLY PRESSURE	INCREASE THE AIR SUPPLY PRESSURE
	SOME OUTLET CIRCUIT ELEMENT IS CLOGGED OR CLOSED	CLEAN OR OPEN THE OUTLET CIRCUIT
	AIR BETWEEN THE FOLLOWER PLATE AND THE GREASE	BLEED THE AIR
THE PUMP BEGINS TO OPERATE VERY FAST	THE DRUM IS EMPTY OR THE GREASE LEVEL IS BENEATH THE SUCTION TUBE INLET	REPLACE THE DRUM
THE PUMP KEEPS ON OPERATING ALTHOUGH THE GREASE OUTLET IS CLOSED	THERE IS A GREASE LEAKAGE IN SOME POINT OF THE CIRCUIT	VERIFY AND TIGHTEN OR REPAIR
GREASE LEAKAGE THROUGH THE AIR OUTLET MUFFLER	GREASE HAS PASSED OVER TO THE AIR MOTOR CAUSED BY WORN OR DAMAGED PACKAGING SET	REPLACE THE PACKING SET (REPAIR KIT)
AIR LEAKAGE THROUGH THE AIR OUTLET MUFFLER	THE O-RINGS OF THE DISTRIBUTOR AXLE OR THE BUSHING WORN OR DAMAGED	REPLACE THE AXLE ASSEMBLY AND/ OR THE BUSHING ASSEMBLY
	THE INVERTER O-RINGS ARE WORN OR DAMAGED	REPLACE THE INVERTER O-RINGS
DECREASE OF THE GREASE DELIVERY	DIRT IN UPPER VALVE OR FOOT VALVE	DISMOUNT AND CLEAN, REPLACE IF DAMAGED
	DIRT IN MUFFLER	CLEAN OR REPLACE THE MUFFLER
THE PUMP DOESN'T LIFT EVEN WITHOUT THE PAIL	THE ACTUATOR IS NOT WORKING WITH PROPER PRESSURE	REGULATE THE PRESSURE IN THE ACTUATOR WITH ITS CONTROL WITH A PRESSURE HIGHER THAN 2 BAR
LEAKAGE BETWEEN THE FOLLOWER PLATE ADAPTOR AND THE PUMP'S TUBE OR BETWEEN THE FOLLOWER PLATE AND ADAPTOR	THE SEALS ARE DAMAGED	REPLACE THE SEALS FROM THE FOLLOWER PLATE ASSEMBLY

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