# BOOSTER PUMP TUBE

( POWER MASTER )

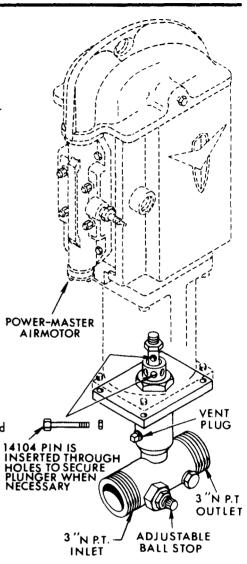
## Model 83496 Series "B"

#### DESCRIPTION AND OPERATION

The Model 83496 Booster Pump Tube is designed to insure proper lubricant supply line pressure when lubricant is pumped great distances. The Booster Pump Tube, with the addition of a Power-Master Airmotor makes up a Booster Pump which can be installed directly into the supply line. By regulating air pressure, the Booster Pump picks up low lubricant pressure at the pump inlet and "boosts" it back up to the desired pressure in the line. The greater the distance the grease is pumped from the storage tank, the greater is the pressure drop. This, plus pipe size and type of grease pumped, determines spacing of the Booster Pumps. The threads on both the inlet and outlet are 3" male pipe threads

A spring loaded ball and tapered seat type check is in both the inlet and outletends of the Booster Pump Tube body. These are a flow-through design which permits grease to flow through the pump tube body even through the airmotor is not operating Checks can be removed for cleaning without disturbing the header line The inlet check has an adjustable ball stop which permits the ball to be tightened into the seat, shutting of the flow of grease from the storage tank. This will be required when removing the airmotor for making repairs.

Pressure is built up on the down stroke only (output per cycle - 2.85 cu. in.) The up stroke permits the filling of the void with grease pumped from the storage tank The 14109 Plunger has a cross-drilled hole which, when aligned with a mating hole in the packing take-up screw, permits the insertion of a 14104 Bolt to lock the plunger in place for removal of the airmotor from the Booster Pump Tube. A 67117 Pipe Plug in the plunger housing is used to release grease pressure before removing the airmotor



#### AIRMOTOR REMOVAL AND PACKING REPLACEMENT PROCEDURE

If the removal of the airmotor or replacement of the packing gland is required, it can be done without removing the pump tube from the header line:

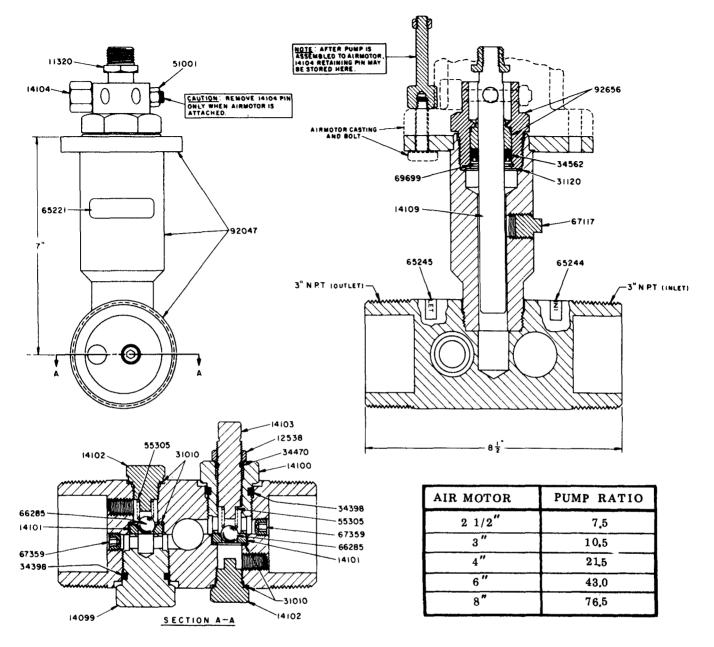
- (1) Remove air supply from airmotor.
- (2) Screw the 14103 Adjustable Ball Stop on the inlet check all the way in. This seats the ball against the seat and shuts off the supply of grease from the storage tank
- (3) The outlet check prevents the grease from the outlet side from flowing back into the pump
- (4) Loosen the 67117 Pipe Plug to vent the pressure which is trapped in the pump tube
- (5) Remove airmotor cover.
- (6) Force plunger down and rotate until hole in plunger aligns with hole in packing take-up screw and insert 14104 Bolt and secure with nut
- (7) Remove airmotor for repair or replacement If airmotor cannot be replaced immediately, tighten vent plug and reset ball stop at inlet check This will permit grease to flow through the pump.
- (8) If 34562 U-Cup Packing is to be replaced, remove airmotor and unscrew 92656 Bushing and Nut and replace 34562 U-Cup Packing.
- (9) To replace inlet and outlet checks, the entire header line should be vented.



A PENTAIR COMPANY

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## REPAIR PARTS LIST

Part No.	Description	Part No.	Description	Part No.	Description
11320	Coupling Adapter	31010	Pump Check	65244	Instruction Plate
12538	Nut		Body Gasket	65245	Instruction Plate
14099	Plug	31120	Gasket	66285	Ball
14100	Adapter	34398	O-Ring	67117	Pipe Plug
14101	Check Seat	34470	O-Ring	67359	Pipe Plug
14102	Plug	34562	U-Cup Seal	69699	Retaining Ring
14103	Adjusting Screw	51001	Nut	92047	Body
14104	Pin	55305	Spring	92656	Bushing & Nut
14109	Plunger	65221	Name Plate		-

## RETAIN THIS INFORMATION FOR FUTURE REFERENCE

When ordering replacement parts, list: Part Number, Description, Model Number, and Series Letter

LINCOLN ST LOUIS provides a Distributor Network that stocks equipment and replacement parts A list of Authorized Service Departments will be furnished upon request.