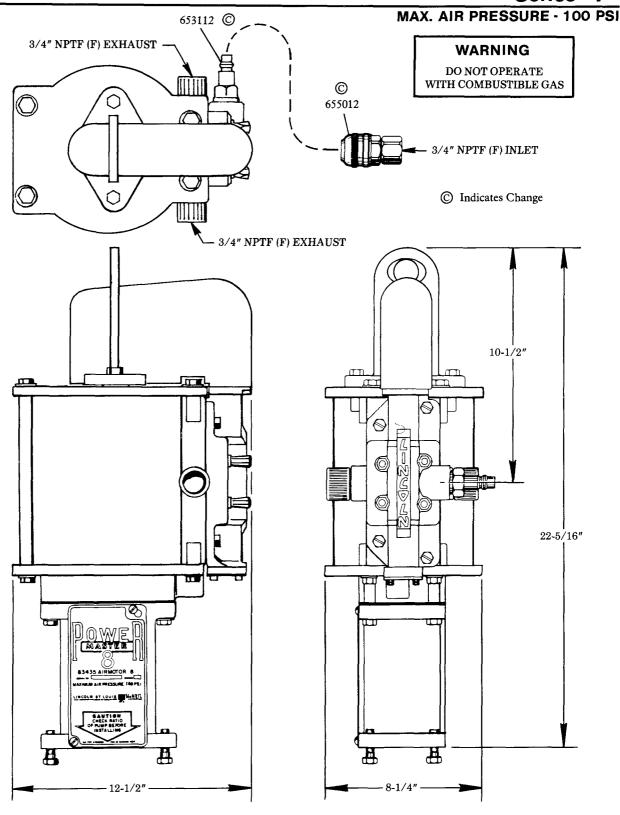


Model No. 83435 POWER MASTER 8 AIRMOTOR

Series "F"

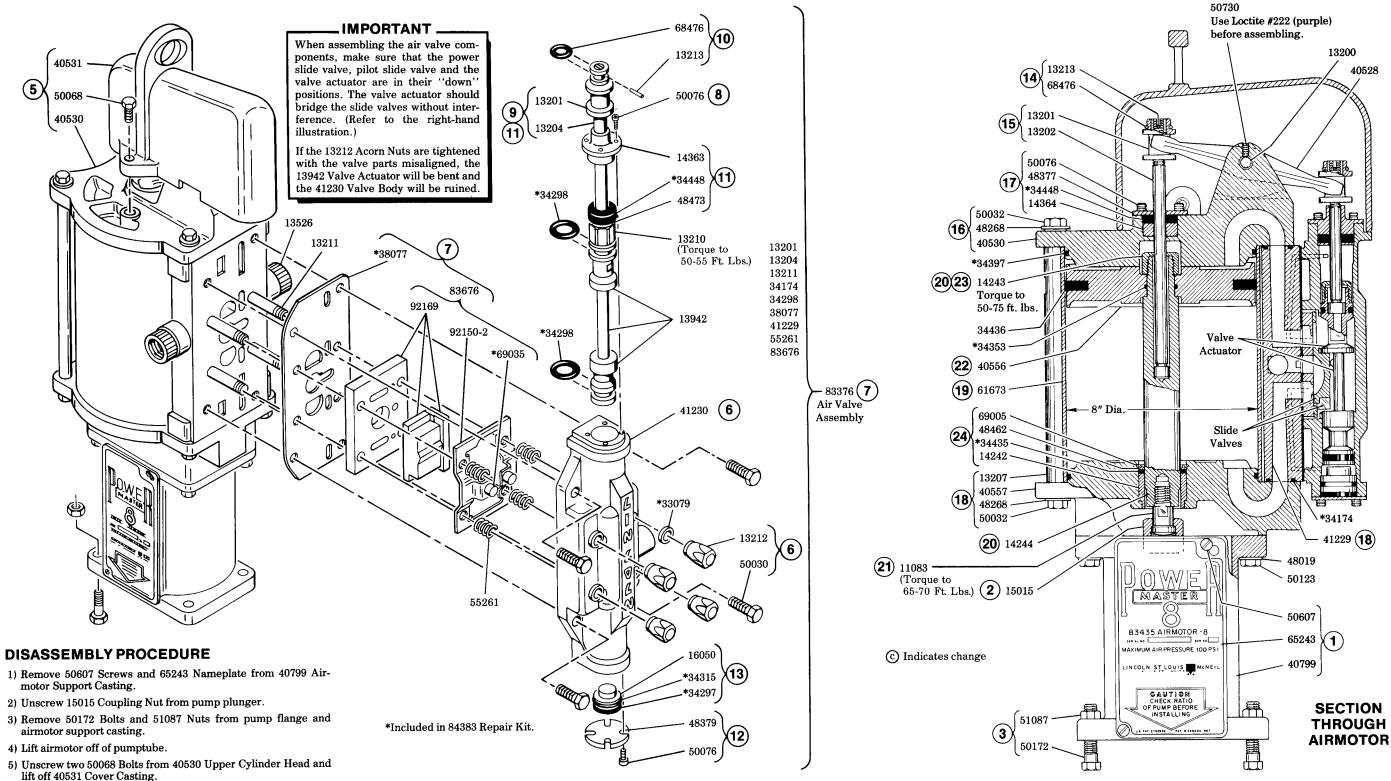




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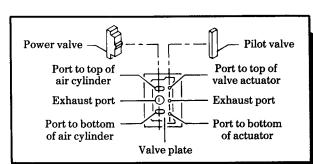


- 1) Remove 50607 Screws and 65243 Nameplate from 40799 Air-
- airmotor support casting.
- lift off 40531 Cover Casting.
- 6) Remove 13212 Acorn Nuts and 50030 Screws from 41230 Valve
- 7) Remove 83376 Air Valve Assembly, 83676 Slide Valve Assembly and 38077 Valve Gasket.
- 8) Unscrew four 50076 Screws from top of valve body.
- 9) Lift up on 13201 Trip Rod Collar and pull 13204 Trip Rod and attached parts from valve body.
- 10) Remove 68476 Retaining Ring and 13213 Pin from trip rod
- 11) Unscrew trip rod collar from trip rod and remove 14363 Trip Rod Guide, 34448 Packing and 48473 Packing Washer. (Thread packing off of trip rod.)
- 12) Unscrew four 50076 Screws from bottom of valve body and remove 48379 Washer.

- 13) Tap 16050 Spacer and 34297 Packing out through bottom of
- 14) Remove 68476 Retaining Ring and 13213 Pin from other 13201 Trip Rod Collar.
- 15) Unscrew trip rod collar from 13202 Trip Rod. (It may be necessary to push trip rod down to remove trip rod collar.)
- 16) Unscrew four 50032 Bolts from 40530 Upper Cylinder Head and remove upper cylinder head.
- 17) Unscrew four 50076 Screws from upper cylinder head and remove 48377 Washer, 34448 Packing and 14364 Trip Rod Guide.
- 18) Unscrew four 50032 Bolts from 40557 Lower Cylinder Head and remove 41229 Support and 13207 Tie Rods.
- 19) Remove 61673 Air Cylinder. (When reassembling air cylinder, use caution to avoid damage to 34397 O-rings.)

- 20) Hold 14244 Piston Rod on wrench flats and loosen 14243 Trip Rod Stop. (Do Not Remove.)
- 21) Unscrew 11083 Coupling Stud from piston rod using wrench
- 22) Remove 40556 Piston and piston rod from lower cylinder head.
- 23) Unscrew trip rod stop and remove trip rod and piston from piston rod. (Thread piston off of piston rod to avoid damage to
- 24) Remove 69005 Retaining Ring, 48462 Washer, 34435 Packing and 14242 Bearing through top of lower cylinder head.
- 25) To reassemble reverse procedure.

NOTE: If complete disassembly is required, replace all gaskets, o-rings and packings. (Order 84383 Repair Kit.)



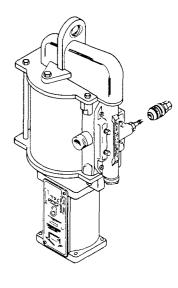
POWER & PILOT VALVES & AIR PASSAGE PORTS IN VALVE PLATE

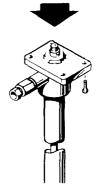
ATTACHING AIRMOTOR TO PUMPTUBE

- 1) Tightly connect airmotor coupling nut to the pump plunger.
- 2) Attach airmotor to the pump outlet body flange with the four bolts and nuts (hand tight) supplied with airmotor.
- 3) Slowly cycle the pump several times, using just enough air pressure to operate the pump without stalling.
- 4) Stop the pump on an ''up'' stroke and tighten the four bolts and nuts to securely fasten the airmotor to the pumptube.

TROUBLESHOOTING

| Problem | Solution | | | |
|---|---|--|--|--|
| 1) Airmotor does not operate. | Check air supply to pump. | | | |
| | Check 92169 Valve & Seat. If rusted or scored, replace. | | | |
| | Check for broken 13202 or 13204 Trip Rod, replace. | | | |
| 2) Air leakage at top of cylinder. | Replace 34448 Packing. | | | |
| _ | Check 13202 Trip Rod. If scored, replace trip rod. | | | |
| 3) Air leakage at bottom of cylinder. | Replace 34435 Packing. | | | |
| | Check 14244 Piston Rod. If scored, replace piston rod. | | | |
| 4) Air leakage at top of valve body. | Replace 34448 Packing. | | | |
| | Check 13204 Trip Rod. If scored, replace trip rod. | | | |
| 5) Air leakage from exhaust. | Check 92169 Valve & Seat. If rusted or scored, replace | | | |
| | Replace 34298 Packings. | | | |
| | Check inside diameter of 41230 Valve Body. If scored, replace 83376 Air Valve Assembly. | | | |
| 6) Airmotor ices up and stalls frequently | Install airline filter. | | | |
| under continuous operation. | (Above item must be ordered separately.) | | | |





SERVICE PARTS

| Part | Qty. | Description | Part | Qty. | Description | Part | Qty. | Description |
|--------|------|------------------|--------|------|--------------------------------|---------|------|----------------------|
| 11083 | 1 | Coupling stud | *34298 | 2 | Packing (buna-N) | 50030 | 4 | Screw |
| 13200 | 1 | Pin | *34315 | 1 | O-ring (buna-N) | 50032 | 8 | Bolt |
| 13201 | 2 | Trip rod collar | *34353 | 1 | O-ring (buna-N) | 50068 | 2 | Bolt |
| 13202 | 1 | Trip rod | *34397 | 2 | O-ring (buna-N) | 50076 | 12 | Screw |
| 13204 | 1 | Trip rod | *34435 | 1 | Packing (buna-N) | 50123 | 4 | Bolt |
| 13207 | 2 | Tie rod | 34436 | 1 | Piston packing (buna-N) | 50172 | 4 | Bolt |
| 13210 | 1 | Trip rod stop | *34448 | 2 | Packing (buna-N) | 50607 | 2 | Screw |
| 13211 | 4 | Stud | *38077 | 1 | Valve gasket (buna-N on nylon) | 50730 | 2 | Set screw |
| 13212 | 4 | Acorn nut | 40528 | 1 | Rocker arm | 51087 | 4 | Nut |
| 13213 | 2 | Pin | 40530 | 1 | Upper cylinder head | 55261 | 4 | Spring |
| 13526 | 2 | Adapter | 40531 | 1 | Cover casting | 61673 | 1 | Air cylinder |
| 13942 | 1 | Valve actuator | 40556 | 1 | Piston | 65243 | 1 | Nameplate |
| 14242 | 1 | Bearing | 40557 | 1 | Lower cylinder head | 68476 | 2 | Retaining ring |
| 14243 | 1 | Trip rod stop | 40799 | 1 | Airmotor support casting | 69005 | 1 | Retaining ring |
| 14244 | 1 | Piston rod | 41229 | 1 | Support | *69035 | 2 | Catch |
| 14363 | 1 | Trip rod guide | 41230 | 1 | Valve body | 83376 | 1 | Air valve assembly |
| 14364 | 1 | Trip rod guide | 48019 | 4 | Washer | 83676 | 1 | Slide valve assembly |
| 15015 | 1 | Coupling nut | 48268 | 8 | Washer | 92150-2 | 1 | Guide plate |
| 16050 | 1 | Spacer | 48377 | 1 | Washer | 92169 | 1 | Valve & seat |
| *33079 | 4 | Gasket (fibre) | 48379 | 1 | Washer | 653112 | 1 | Air nipple |
| *34174 | 2 | O-ring (buna-N) | 48462 | 1 | Washer | 655012 | 1 | Air coupler |
| *34297 | 1 | Packing (buna-N) | 48473 | 1 | Packing washer | | | , |

*Included in 84383 Repair Kit.

RETAIN THIS INFORMATION FOR FUTURE REFERENCE -

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

LINCOLN provides a Distributor Network that stocks equipment and replacement parts.