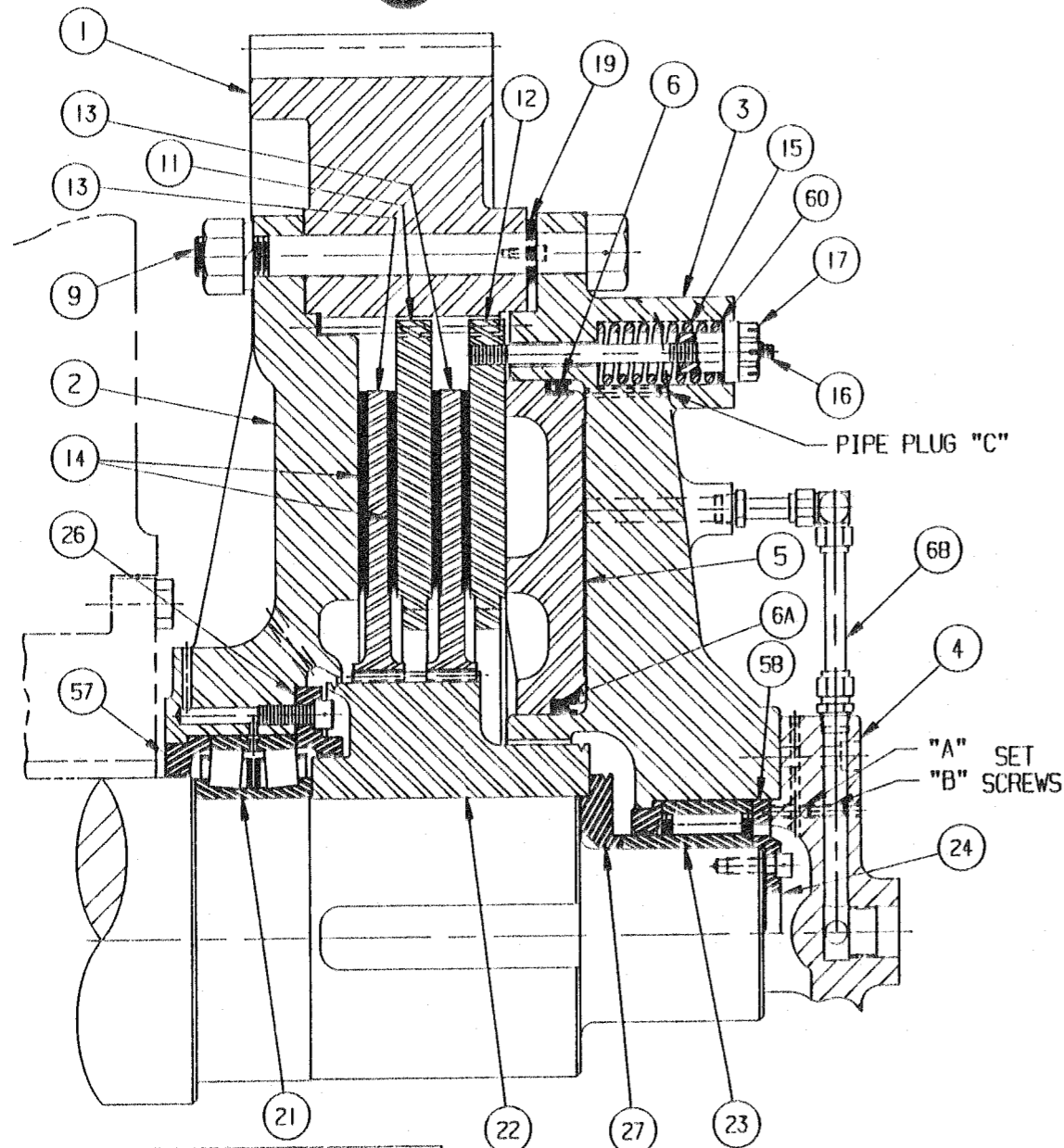


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WHEN ORDERING REPLACEMENTS STATE SERIAL NUMBER AND SIZE STAMPED ON NAMEPLATE OF MACHINE AND DESIGNATE PARTS BY BOTH NAME AND NUMBER

NOTE:
WIRE TOGETHER AND TACK WELD ALL CAP SCREW HEADS INSIDE OF CLUTCH.

- | | |
|-------------------------------------|--|
| 1 MAIN GEAR | 16 CLUTCH RELEASE SPRING STUD |
| 2 INNER CLUTCH FLANGE | 17 CLUTCH RELEASE SPRING ADJUST. NUT |
| 3 OUTER CLUTCH FLANGE | 19 CLUTCH ADJUSTING WASHER |
| 4 AIR DISTRIBUTOR CAP | 21 CLUTCH INNER BEARING |
| 5 PISTON | 22 CLUTCH PINION |
| 6 CLUTCH PISTON PACKING-INNER | 23 CLUTCH OUTER BEARING |
| 6A CLUTCH PISTON PACKING-OUTER | 24 CLUTCH SHAFT END PLATE |
| 9 CLUTCH TIE BOLTS | 26 INNER CLUTCH BEARING RETAINER RING |
| 11 CLUTCH CENTER DRIVING PLATE | 27 CLUTCH PINION RETAINER |
| 12 CLUTCH OUTER DRIVING PLATE | 54 CLUTCH OUTER BEARING CLAMP RING |
| 13 CLUTCH FRICTION PLATE | 57 INNER CLUTCH FLANGE INSERT |
| 14 CLUTCH FRICTION SEGMENT & RIVETS | 58 OUTER CLUTCH FLANGE INSERT |
| 15 CLUTCH RELEASE SPRING | 60 CLUTCH RELEASE SPRING WASHER |
| | 68 CLUTCH CYLINDER TUBE FITTING ASSEMBLY |

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ADJUSTMENT

THE CLUTCH MUST RELEASE PROMPTLY A MINIMUM OF 1/4" (6MM), AS MEASURED ON SPRING STUDS (16) WHEN AIR IS EXHAUSTED FROM CLUTCH PISTON (5). IF ADJUSTMENT OF RELEASE SPRINGS (15) DOES NOT RESULT IN QUICK OPENING, INVESTIGATE.

WHEN TRAVEL OF CLUTCH PISTON (5) EXCEEDS 3/8" (9.5MM), IT SHOULD BE REDUCED TO 1/4" (6MM) AS FOLLOWS:

- 1 - LOOSEN NUTS ON CLUTCH TIE BOLTS (9).
- 2 - USE SET SCREWS AT THE SIDE OF THE CLUTCH TIE BOLTS (9) TO LOOSEN THE OUTER CLUTCH FLANGE (3) TO FACILITATE REMOVAL OF ADJUSTMENT WASHERS (19). REMOVE SUFFICIENT WASHERS (19) FROM UNDER THE HEAD OF EACH CAP SCREW TO REDUCE THE TRAVEL OF THE CLUTCH PISTON (5) TO 1/4" (6MM).
- 3 - REMOVE THE SET SCREWS AT THE SIDE OF THE CLUTCH TIE BOLTS (9) AND TIGHTEN THE CLUTCH TIE BOLT NUTS TO CLAMP THE CLUTCH OUTER FLANGE (3) FIRMLY AGAINST THE ADJUSTING WASHERS (19).

DISASSEMBLY OF CLUTCH FROM SHAFT

- 1 - BLOCK UP THE MAIN GEAR WITH THE STENCIL 'TOP' VERTICALLY UP, USING JACK SCREWS IN THE GEAR SHIELD SUPPORT BRACKET, AND WEDGES.
- 2 - DISCONNECT MAIN AIR SUPPLY LINE AND REMOVE ROTARY AIR CONNECTION & CLUTCH VALVE [SHEET RV-2A].
- 3 - REMOVE CLUTCH TIE BOLTS (9), LEAVING UPPER TWO HALFWAY IN HOLES. SLIDE OUTER CLUTCH FLANGE (3) [WITH AIR DISTRIBUTOR CAP (4), OUTER BEARING (23), PISTON (5), AND OUTER DRIVING PLATE (12) AS A UNIT] OUT HORIZONTALLY UNTIL THEY CAN BE LIFTED. THEN SLIDE OUT THE REMAINING CLUTCH PLATES (11) AND (13) FROM THE MAIN GEAR.
- 4 - REMOVE SHAFT END CAP (24), INNER RACE OF BEARING (23), AND PINION RETAINER RING (27).
- 5 - PULL CLUTCH PINION KEYS, THEN PULL CLUTCH PINION (22), USING STUDS AND A CLAMP ACROSS THE END OF THE SHAFT.
- 6 - REMOVE THE MAIN GEAR (1) BY REMOVING THE CAP SCREWS FROM THE INNER CLUTCH FLANGE (2).
- 7 - REMOVE THE INNER CLUTCH FLANGE (2) [WITH THE INNER CLUTCH BEARING (21), INNER CLUTCH BEARING RETAINER RING (26), AND INNER CLUTCH FLANGE INSERT (57)] AS A UNIT.
- 8 - TO REMOVE THE INNER CLUTCH BEARING (21) FROM THE INNER CLUTCH FLANGE (2), REMOVE BEARING RETAINER RING (26), THEN DRIVE AGAINST THE INNER CLUTCH FLANGE INSERT (57), TAKING CARE NOT TO DAMAGE THE CAPILLARY GROOVES.
- 9 - TO REMOVE THE OUTER CLUTCH BEARING (23), LOOSEN THE FOUR LOCKING SCREW AT "B" AND FOUR SET SCREWS AT "A". THEN REMOVE THE AIR DISTRIBUTOR CAP (4), AND OUTER CLUTCH BEARING CLAMP RING (54). THEN DRIVE AGAINST THE OUTER CLUTCH FLANGE INSERT (58), TAKING CARE NOT TO DAMAGE THE CAPILLARY GROOVES.
- 10 - TO REMOVE THE ANNULAR PISTON (5) FROM THE OUTER CLUTCH FLANGE (3), NOTE THE SETTING OF THE ADJUSTING NUTS (17), THEN UNSCREW RELEASE SPRING ADJUSTING NUTS (17). REMOVE RELEASE SPRINGS (15) AND OUTER DRIVING PLATE (12). THE PISTON (5) PULLS OUT FROM THE CYLINDER. TO AVOID DAMAGE TO LIPS OF THE PISTON PACKINGS (6, 6A), REASSEMBLE WITH OUTER FLANGE LYING HORIZONTALLY. INSTALL PACKINGS (6, 6A) WITH EXPANDERS TO PISTON (5) AND CAREFULLY LOWER INTO CYLINDER.
- 11 - WHEN REASSEMBLING CLUTCH, BE CERTAIN TO DRIVE CLUTCH PINION (22) "TIGHT HOME", AND TO WIRE TOGETHER AND TACK WELD ALL CAP SCREW HEADS INSIDE OF CLUTCH.
- 12 - IF AIR DISTRIBUTOR CAP (4) HAS BEEN REMOVED FROM OUTER CLUTCH FLANGE (3) CHECK THAT SET SCREWS AT "A" AND "B" ARE SLIGHTLY BACKED OFF. BOLT DISTRIBUTOR CAP (4) SECURELY TO OUTER CLUTCH FLANGE (3). TIGHTEN SET SCREWS AT "A" AGAINST OUTER BEARING CLAMP RING (54) AND LOCK WITH SET SCREWS AT "B".

LUBRICATION

THE CLUTCH INNER BEARING (21) AND CLUTCH OUTER BEARING (23) SHOULD BE LUBRICATED WITH A MODERATE AMOUNT OF GREASE AT TWO WEEK INTERVALS. EXCESS GREASE WILL ONLY FORCE PAST THE RETAINING CAPILLARIES AND THROW TO THE OUTSIDE OF THE CLUTCH. AN AIR LINE LUBRICATOR IS PROVIDED TO ALLOW LUBRICATION FOR THE CLUTCH PISTON PACKINGS (6, 6A).

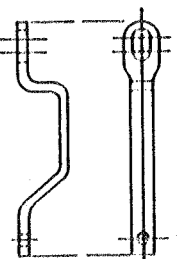
AIR PRESSURE REGULATION

A REGULATING VALVE TO MAINTAIN PRESSURE AS INDICATED ON GAUGE IS PROVIDED WITH MACHINE. THIS REGULATES TORQUE OF CLUTCH TO SAFE CAPACITY OF MACHINE. CLUTCH WILL SLIP AND MACHINE WILL STALL ONLY FROM OVERLOAD, IF AIR IS KEPT AT PROPER PRESSURE AND VALVES ARE OPERATING PROPERLY.

TO CLEAN CLUTCH CYLINDER

REMOVE PIPE PLUGS AT "C" IN OUTER CLUTCH FLANGE (3) AND, WITH MAIN GEAR (1) REVOLVING, USE "INCH MODE" TO ACTUATE CLUTCH VALVES. THIS ALLOWS AIR TO BLOW ANY ACCUMULATION IN CYLINDER TO OUTSIDE.

A HOOK, AS SHOWN IN SKETCH, IS FURNISHED FOR DISASSEMBLY OF OUTER CLUTCH FLANGE (3) AND CLUTCH PLATES (11), (12), AND (13).



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