

# BRAKE NUMBER 75631 SERVICE NOTES

ECO 30393 REV C

THE MULTI-DISC BRAKE IS A SPRING-APPLIED, HYDRAULICALLY RELEASED BRAKE. HYDRAULIC PRESSURE IS REQUIRED TO RELEASE OR "HOLD OFF" THE BRAKE. NORMAL OPERATION IS TO HAVE THE BRAKE PRESSURIZED IN THE RELEASED POSITION WITH THE VEHICLE HYDRAULIC SYSTEM RUNNING. ANY FUNCTION WHICH REDUCES THE HYDRAULIC SYSTEM BELOW THE RELEASE PRESSURE OF THE BRAKE WILL CAUSE THE BRAKE TO BE APPLIED.

#### CAUTION:

FOR CORRECT OPERATION, HYDRAULIC PRESSURE TO THE BRAKE MUST FALL TO ZERO PSI. ANY RESIDUAL BACK PRESSURE APPLIED TO THE BRAKE WILL DEGRADE FUNCTION AND MAY RESULT IN A HAZARDOUS CONDITION.

#### INSTALLATION INFORMATION:

- ASSEMBLE BRAKE BETWEEN MOTOR AND GEARBOX. PLACE MOUNTING GASKETS ON THE MOUNTING FACES BEFORE ASSEMBLY. IF NEEDED, BRAKE SHAFT CAN BE ROTATED BY APPLYING HYDRAULIC PRESSURE TO THE PISTON INLET PORT
- INSERT FOUR 1/2" DIA. BOLTS (GRADE 5) THROUGH THE MOTOR | INSERT FOUR 1/2" DIA. BOLTS (GRADE 5) THROUGH THE MOTOR | INTERPRETATION OF THE THREADED HOLES IN THE GEAR REDUCER. MAKE SURE THAT THE BOLTS ARE NOT TOO LONG, SO THEY DO NOT BOTTOM OUT IN THE THREADED HOLES OF THE GEAR REDUCER
- TO PREVENT BINDING, RUN THE BOLTS IN ALTERNATELY UNTIL SNUG. TORQUE BOLTS TO 55-65 FT.-LBS.
  NOTE: THE SHAFTS MUST SLIDE TOGETHER FREELY. DO NOT USE THE BOLTS TO FORCE THEM TOGETHER.
- WITH MOTOR AND BRAKE BOLTED TOGETHER INTO POSITION CONNECT INLET HYDRAULIC LINE. BRAKE INLET IS 1/4" LINE STRAIGHT THREAD O-RING BOSS (7/16-20 UNF).

#### BRAKE DISASSEMBLY INFORMATION:

- DISASSEMBLE IN THE FOLLOWING ORDER: BOLTS (ALTERNATELY), POWER PLATE, GASKET, STATIONARY DISCS, ROTATING DISCS, PRIMARY DISC, TORQUE PINS, COMPRESSION SPRINGS, AND SPRING RETAINER. FURTHER DISASSEMBLY IS NOT RECOMMENDED AND SHOULD NOT BE ATTEMPTED UNLESS NECESSARY TO REPLACE THE BEARING, THE SEAL OR THE SHAFE.
- THE SEAL, OR THE SHAFT.
  NOTE: IF THE BEARING OR SEAL ARE REMOVED FOR ANY REASON, BOTH MUST BE REPLACED.
  2a. REMOVE SNAP RINGS AS NEEDED.
- 2d. REMOVE SNAP RINGS AS NEEDED.

  2b. SEAL CAN BE REMOVED BY PRYING IT OUT
  WITH AN APPROPRIATE TOOL. TAKE CARE
  NOT TO DAMAGE THE BORE.

  2c. SHAFT CAN BE REMOVED BY PRESSING IT
  OUT WITH A SHOP PRESS.

  3. REMOVE THE PISTON FROM THE POWER PLATE BY INTRODUCING LOW PRESSURE AIR (15 psi) INTO THE HYDRAULIC INLET.
  MAKE SURE THE PISTON IS DIRECTED AWAY FROM THE
  OPERATOR. DO NOT REMOVE O-RINGS AND BACKUP RINGS FROM THE
  O.D. AND I.D. GROOVES OF THE PISTON UNLESS REPLACEMENT
  IS NECESSARY, BECAUSE THEY WILL BE DAMAGED.

## ASSEMBLY INFORMATION:

THERE MAY BE MORE PARTS IN A SERVICE IMPORTANT: THERE MAY DE MORE FARTS IN A SERVICE KIT THAN YOUR BRAKE REQUIRES. CHECK THE PARTS LIST CAREFULLY FOR THE EXACT QUANTITY. SPACE THE SPRINGS AS SHOWN ON THE SPRING ORIENTATION VIEW.

USE THE REVERSE OF THE DISASSEMBLY PROCEDURE WITH THE FOLLOWING NOTES AND ADDITIONS:

- WORN AND DAMAGED O-RINGS AND BACKUP RINGS MUST BE REPLACED PRIOR TO RE-ASSEMBLY.
- 2. LUBRICATE THE PISTON BORE OF THE POWER PLATE, THE PISTON, AND THE O-RINGS WITH SYSTEM HYDRAULIC FLUID PRIOR TO RE-ASSEMBLY.
- 3. PISTON ASSEMBLY PISION ASSEMBLY:

  ASSEMBLE PISTON INTO POWER PLATE USING A SHOP PRESS. TAKE CARE NOT TO DAMAGE THE O-RING OR TEFLON BACKUP RINGS. VISUALLY ALIGN THE CENTER OF THE CUTOUTS IN THE PISTON WITH THE TORQUE PIN HOLES IN THE POWER PLATE.

  CAUTION: THE DEPTH THE PISTON IS INSTALLED INTO CAUTION: THE DEPTH THE PISTON IS INSTALLED
  THE POWER PLATE IS CRITICAL. THE
  SURFACE OF THE PISTON AT THE CUTOUTS
  MUST BE FLUSH TO 0.120 BELOW THE
  SURFACE OF THE POWER PLATE, OR PISTON
  MAY COCK RESULTING IN A COMPLETE LOSS OF BRAKING.
- 4. BEARING ASSEMBLY USE A SHOP PRESS TO PRESS THE BEARING ONTO THE SHAFT. PRESS ONLY ON THE INNER RACE OF THE BEARING. BEARING IS A SLIP FIT TO THE HOUSING.
- 5. LIP SEAL ASSEMBLY LIP OF SEAL MUST FACE AWAY FROM THE BEARING. SEE CUTAWAY VIEW FOR SEAL ORIENTATION DETAIL.
- ROTATING, STATIONARY, AND PRIMARY DISC ASSEMBLY: ROTATING DISC MUST BE CLEAN & DRY. THE LINING MATERIAL AND MATING SURFACES OF THE STATIONARY DISCS MUST BE THOROUGHLY CLEAN AND FREE FROM DEBRIS. WORN OR SCARRED ROTATING DISCS MUST BE REPLACED.
- 7. INSTALL BOLTS IN THE POWER PLATE. TIGHTEN SEQUENTIALLY ONE TURN AT A TIME UNTIL POWER PLATE IS PROPERLY SEATED. TORQUE BOLTS TO 80-90 FT-LBS.

### SERVICE KIT INFORMATION:

BEARING KIT: PK - 933 - INCLUDES SEALS.

RETAINING RINGS, AND BEARINGS.

STACK KIT: PK - 932 - INCLUDES TORQUE PINS.

PRIMARY, STATIONARY, ROTATING DISC AND COMPRESSION SPRINGS.

PK- 931 - INCLUDES O-RINGS, BACKUP RINGS, AND O-RING KIT:

GASKET KIT:

INTERNAL GASKET.

PK - 679 - INCLUDES EXTERIOR

GASKET(S).

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PRODUCTS, INC.  BRAKE NUMBER 75631 PARTS LIST ECO 30393 REV C			
ITEM	PART	DESCRIPTION	QTY
	36345	HOUSING	
2	36359	COMPRESSION SPRING	8
3	36367	SPRING RETAINER	-
4	36343	SPLINE SHAFT	
5	36342	LIP SEAL	-
6	28427	GASKET	2
7	75071	PRIMARY DISC	I
8	36346	STATIONARY DISC	6
9	36224	ROTATING DISC	5
10	35966	GASKET	
	32833	BACKUP RING	
12	36701	O-RING	I
13	29035	BLEEDER SCREW	
4	36337	POWER PLATE	
15	75723	PISTON	
16	27967	BACKUP RING	
17	27808	O-RING	
18	28285	RETAINING RING	2
19	28284	BALL BEARING	2
20	31218	HEX HEAD FLANGE SCREW	2
21	28435	PROTECTIVE PLUG	
22	37176	PRESSURE RELIEF VALVE	
23	36336	PIN - TORQUE	2
2 4	29284	COMPRESSION SPRING	10

