

# BRAKE NUMBER 76928 SERVICE NOTES

ECO 22128 REV E

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 BRAKE INSERT FOUR 1/2" DIA. BOLTS (GRADE 5) THROUGH BRAKE,
  THE GASKET AND INTO 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. TOROUE BOLTS TO 55-65 FT.-LBS.
  NOTE: THE SHAFTS MUST SLIDE TOGETHER FREELY. DO NOT USE
  THE BOLTS TO FORCE THEM TOGEHER.
  MOUNT HYD. MOTOR WITH TWO 7/16" DIA. BOLTS (GRADE 5) THROUGH
  THE FLANGE & GASKET INTO BRAKE. (NOTE THE MAX FULL THD IN BRAKE)
- TORQUE BOLTS TO 50-60 FT.-LBS. ALTERNATE MONTING OF HYD. MOTOR WITH TWO 1/2" DIA BOLTS (GRADE 5) THROUGH THE FLANGE & GASKETINTO BRAKE. (NOTE THE MAX FULL THD) TORQUE BOLTS TO 55-65 FT.-LBS.
- 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 SHAFT.
  NOTE: IF THE BEARING AND SEAL ARE REMOVED FOR ANY REASON, BOTH MUST BE REPLACED. 2a. REMOVE SNAP RINGS AS NEEDED.
  - 2b. SEAL CAN BE REMOVED BY PRYING IT OUT WITH AN APPROPRIATE TOOL. TAKE CARE
- WITH AN APPROPRIATE TOOL. TAKE CARE
  NOT TO DAMAGE THE BORE.

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

IMPORTANT: THERE MAY BE MORE PARTS 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:

- I. 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:

  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.

  <u>CAUTION:</u> THE DEPTH THE PISTON IS INSTALLED INTO 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. <u>LIP SEAL ASSEMBLY:</u>
  LIP OF SEAL MUST FACE TOWARD THE BEARING.
  SEE CUTAWAY VIEW FOR SEAL ORIENTATION DETAIL.
- 6. 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.

### OIL FILL PROCEDURE:

UNSCREW THE TOP OIL FILL PLUG AND ADD DTE 26 OIL TO THE APPROPRIATE LEVEL.

HORIZONTAL POSITION: 150 mL VERTICAL POSITION : 300 mL

# SERVICE KIT INFORMATION:

BEARING KIT: PK - 933 - INCLUDES SEALS RETAINING RINGS,

AND BEARINGS.

STACK KIT. PK - 1370 - INCLUDES TORQUE PINS,

PRIMARY, STATIONARY, ROTATING DISCS AND COMPRESSION SPRINGS.

O-RING KIT: PK - 1368 - INCLUDES O-RINGS

BACKUP RINGS, AND INTERNAL GASKET.

PK - 1398 - INCLUDES EXTERIOR GASKET KIT:

GASKET(S).

REF: GENERAL ASSEMBLY VIEW 8001



# NUMBER 76928 PARTS LIST REV E

T NOVOC	o, inc.	ECO 55150	טר ע בי
HETEM	PART	DESCRIPTION	QTY
	75731	HOUSING	
2	36359	COMPRESSION SPRINGS	- 5
ယ	36367	SPRING RETAINER	
4	36342	LIP SEAL	
5	75728	SPLINED SHAFT	_
6	28284	BALL BEARING	2
7	28285	RETAINING RING	2
8	28427	GASKET	
9	75071	PRIMARY DISC	
10	75072	STATIONARY DISC	7
	74996	DISC - ROTATING	9
12	75395	TEFLON TAPERED PLUG	2
13	73448	GASKET	
14	32833	BACKUP RING	
15	36701	O-RING	
91	29035	SCREW BLEEDER	
17	37323	POWER PLATE	
18	75724	PISTON	
19	27967	BACKUP RING	
20	27808	O-RING	
12	30468	GASKET	
22	31218	FLANGE HEX SCREW	2
23	28435	PLUG PROTECTIVE	
24	28811	HEX PLUG	
25	27948	TORQUE PIN	2



