

BRAKE NUMBER 78391 SERVICE NOTES

FCO 29473 RFV F

THE MULTI DISC BRAKE IS A SPRING APPLIED 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 ADAPTER PLATE TO GEARBOX USING (4) LUBRICATED 1/2" BOLTS (GRADE 5). PLACE MOUNTING GASKETS ON BOTH SIDES OF THE ADAPTER BEFORE ASSEMBLY. TIGHTEN BOLTS TO 55-65 FT-LB [75-88 Nm]. MOUNT BRAKE TO ADAPTER FLANGE USING (2) LUBRICATED
- 1/2-13 UNC X 4" LONG BOLTS (GRADE 5). TIGHTEN BOLTS TO 55-65 FT-LB [75-88 Nm]. IF NEEDED, BRAKE SHAFT CAN BE ROTATED BY APPLYING HYDRAULIC PRESSURE TO THE PISTON INLET PORT
- INLET PORT.
 MOUNT MOTOR TO BRAKE USING EITHER (2) LUBRICATED 3/8"
 BOLTS (GRADE 8) OR (4) LUBRICATED 1/2" BOLTS (GRADE 5).
 TO PREVENT BINDING. RUN BOLTS IN ALTERNATELY USING SNUG.
 NOTE: COMPONENTS MUST SLIDE TOGETHER FREELY. DO
 NOT USE THE BOLTS TO FORCE THE UNIT TOGETHER.
 TORQUE BOLTS AS FOLLOWS: FOR FOUR 1/2" BOLTS (GRADE 5),
 USE 55-65 FT-LBS [75-88 Nm]; FOR TWO 3/8" DIA BOLTS
 (GRADE 8) USE 30-40 FT-LBS [41-54 Nm].
 WITH MOTOR AND BRAKE BOLTED TOGETHER INTO POSITION.
 CONNECT INLET HYDRAULIC LINE. BRAKE INLET IS 1/4"INLET
 STRAIGHT THREAD O-RING BOSS (7/16-20 UNF).

<u>Brake Disassembly information:</u>

- 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 E
 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.
 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.
 REMOVE THE PISTON FROM THE POWER PLATE BY INTE BE ATTEMPTED UNLESS NECESSARY TO REPLACE THE BEARING,
- OUT WITH A SHOP PRESS.

 REMOVE THE PISTON FROM THE POWER PLATE BY INTRODUCING
 LOW PRESSURE AIR (15 ps; [I BAR]) INTO THE HYDRULIC 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 THERE MAY DUE 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.

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

- I. WORN AND DAMAGED O-RINGS OR WORN BACKUP RINGS MUST BE REPLACED PRIOR TO REASSEMBLY.
- 2. CYLINDER OF THE POWER PLATE, PISTON, AND O-RINGS MUST BE PRE-LUBED WITH SYSTEM HYDRAULIC FLUID PRIOR TO REASSEMBLY.
- 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.

 CAUTION: 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 [3,05 mm] BELOW THE SURFACE OF THE POWER PLATE OR PISTON WILL COCK RESULTING IN A COMPLETE WILL 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
 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.
- 6. ROTATING, STATIONARY, AND PRIMARY DISC ASSEMBLY: ROTATING DISCS 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 [108-122 Nm].

FILL PROCEDURE:

UNSCREW ONE OF THE OIL FILL PLUGS AND ADD DTE-26 OIL TO THE APPROPRIATE LEVEL.

HORIZONTAL POSITION: 240 mL VERTICAL POSITION:

SERVICE KIT INFORMATION:

BEARING KIT: PK - 1476 - INCLUDES SEAL RETAINING RING,

AND BEARING.

STACK KIT:

PK - 1477 - INCLUDES TORQUE PINS, PRIMARY, STATIONARY, ROTATING DISCS, COMPRESSION SPRINGS, AND

SPRING RETAINER.

O-RING KIT:

PK - 1324 - INCLUDES O-RINGS BACKUP RINGS, AND INTERNAL GASKET.

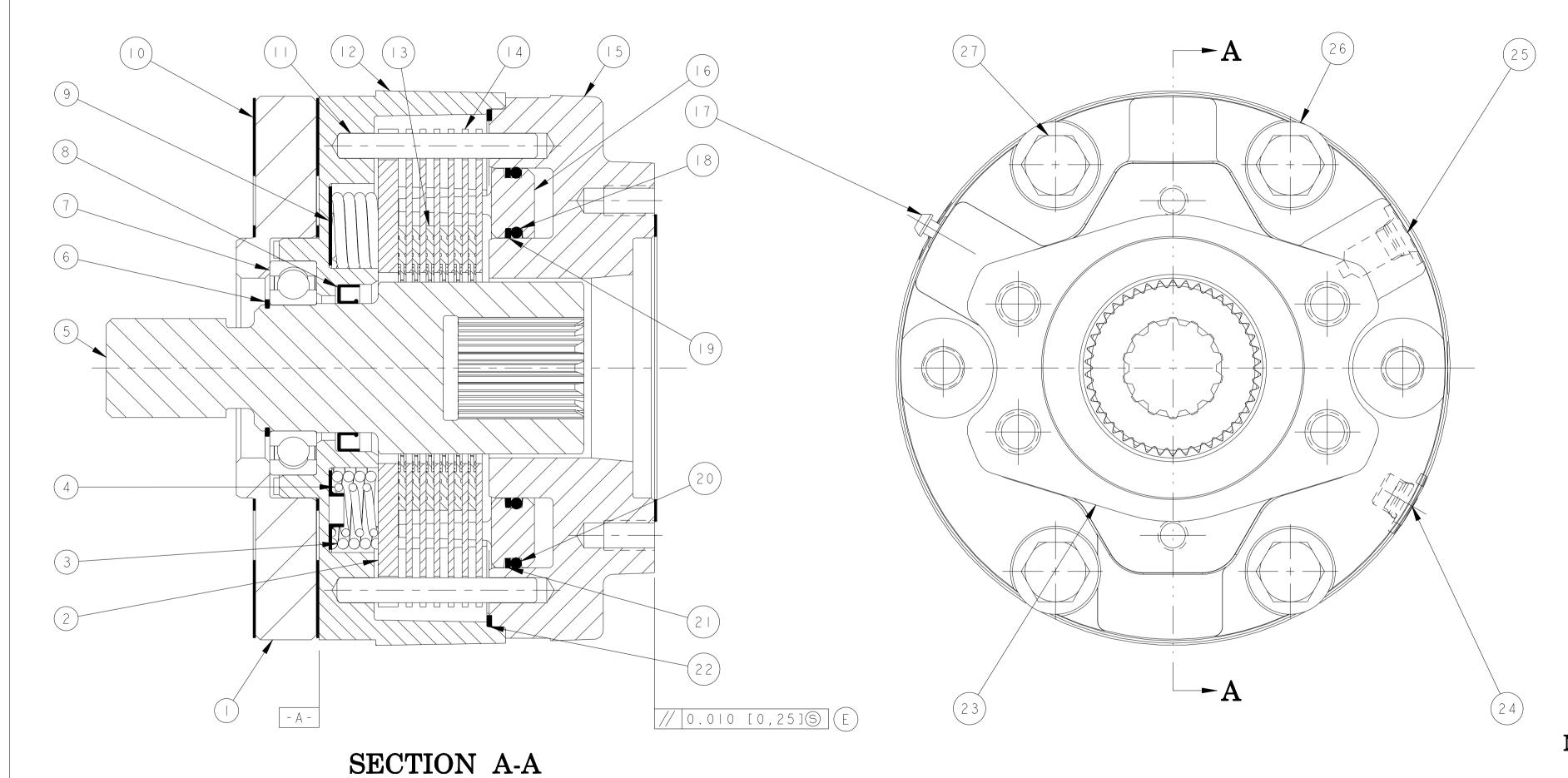
GASKET KIT: PK - 2124 - INCLUDES EXTERIOR

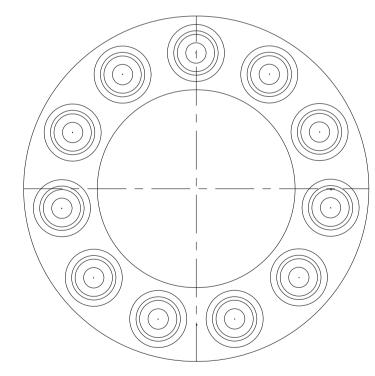
GASKET(S).



REF: GENERAL ASSEMBLY VIEW 8212

PRODUCTS, INC. BRAKE NUMBER 78391 PARTS LIST			
ITEM	PART	DESCRIPTION	QTY
	76978	ADAPTER	
2	74553	PRIMARY DISC	
3	36384	COMPRESSION SPRING	
4	36385	COMPRESSION SPRING	
5	78788	SHAFT	
6	78198	RETAINING RING	
7	28284	BALL BEARING	
8	76983	LIP SEAL	
9	7 4 5 5 4	SPRING RETAINER	
10	78010	GASKET	2
	27928	TORQUE PIN	2
12	78789	HOUSING	
13	74551	ROTATING DISC	6
4	74552	STATIONARY DISC	6
15	75502	POWER PLATE	
16	78787	PISTON	
17	29035	BLEEDER	
18	27808	O-RING	
19	27967	BACKUP RING	
20	27777	O-RING	
2	27966	BACKUP RING	
22	73741	GASKET	
23	28863	GASKET	
2 4	31097	PLUG O-RING	2
25	28435	PROTECTIVE PLUG	
26	74877	WASHER	4
27	73594	HEX BOLT	4
28	75970	CAUTION TAG	





NESTED SPRING ORIENTATION

NO SCALE

