

BRAKE NUMBER 85400 SERVICE NOTES

FCO 31303 RFV J

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:

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 LUBRICATED 1/2" DIA. BOLTS (GRADE 8) THROUGH
THE MOTOR FLANGE, THE GASKET, AND INTO THE THREADED HOLES
IN THE MOTOR. MAKE SURE THAT THE BOLTS ARE NOT TOO LONG, SO
THEY DO NOT BOTTOM OUT IN THE THREADED HOLES OF THE GEAR REDUCER

REDUCER.
TO PREVENT BINDING, RUN THE BOLTS IN ALTERNATELY UNTIL
SNUG. TORQUE BOLTS TO 80-90 FT-LBS [108-122 Nm].
NOTE: THE SHAFTS MUST SLIDE TOGETHER FREELY. DO NOT USE
THE BOLTS TO FORCE THEM TOGEHER.
WITH MOTOR AND BRAKE BOLTED TOGETHER INTO POSITION,
CONNECT INLET HYDRAULIC LINE. BRAKE INLET IS 3/8" LINE
STRAIGHT THREAD O-RING BOSS (9/16-18 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
- 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.

 20. 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.
- OUT WITH A SHOP PRESS.

 3. REMOVE THE PISTON FROM THE POWER PLATE BY INTRODUCING LOW PRESSURE AIR (15 psi [I BAR]) 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.

 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 MAY COCK RESULTING IN A COMPLETE LOSS OF 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 TOWARD 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. TIGH SEQUENTIALLY ONE TURN AT A TIME UNTIL POWER PLATE IS PROPERLY SEATED. TORQUE BOLTS TO 80-90 FT-LBS [108-122 Nm]. TIGHTEN

PROCEDURE:

WITH BLEEDER POINTING UPWARD IN THE VERTICAL POSITION, FILL BRAKE FROM TOP FILL PLUG WITH ISO 68 HYD OIL (EQUIVALENT TO CITGO A/W HYD OIL) UNTIL OIL RUNS OUT SIDE OIL LEVEL PORT.

SERVICE KIT INFORMATION:

PK - 1489 - INCLUDES SEALS. BEARING KIT: RETAINING RINGS, AND BEARINGS PK - 1656 - INCLUDES TORQUE PINS, PRIMARY, STATIONARY, AND ROTATING DISCS. STACK KIT: PK - 1368 - INCLUDES O-RINGS O-RING KIT: BACKUP RINGS, AND INTERNAL GASKET. PK - 1659 - INCLUDES EXTERNAL GASKET KIT: GASKET(S). FRICTION DISC PK - 1657 - INCLUDES (6) ROTATING DISCS

(2) EXTERNAL GASKET. (I) INTERNAL GASKET FRICTION DISC PK - 1720 - INCLUDES (6) ROTATING DISCS, (I) INTERNAL GASKET, (7) STATIONARY DISC AND REWORK KIT:

(2) EXTERNAL GASKETS.

REF: GENERAL ASSEMBLY VIEW 8001

			MBER 85400 PARTS LIST	DEV I
	ITEM	S, INC. PART	DESCRIPTION	QTY
		84673	HOUSING	
4	2	84198	GASKET	2
	3	36359	COMPRESSION SPRING	16
	4	36367	SPRING RETAINER	
	5	32362	RETAINING RING	
	6	80795	BALL BEARING	2
	7	83914	SPLINED SHAFT	
	8	8 2 4 5	OIL SEAL	
	9	75071	PRIMARY DISC	
	10	75072	STATIONARY DISC	7
		90730	ROTATING DISC	6
	12	32833	BACKUP RING	
	13	36701	O-RING	
	4	75724	PISTON	
	15	27808	O-RING	
	16	27967	BACKUP RING	
	17	83912	COVER PLATE	
	18	83913	POWER PLATE	
	19	7 3 4 4 8	GASKET	
	20	37176	PRESSURE RELIEF VALVE	
	21	29035	BLEEDER SCREW	
	22	29932	HEX BOLT	2
	23	84674	HEX HEAD PIPE PLUG	5
	24	75395	PIPE PLUG	
	25	3 2 8	FLANGE HEX SCREW	2
	26	36326	PROTECTIVE PLUG	
	27	27948	TORQUE PIN	2
	28	75970	CAUTION TAG	

