

THE MULTI DISC BRAKE IS 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. IN ADDITION, THE BRAKE MAY BE APPLIED VIA SEPERATE HYDRAULIC SYSTEM CONNECTED TO THE SERVICE BRAKE INLET. PRESSURE IN THIS CIRCUIT WILL APPLY THE BRAKE AND THE BRAKE TORQUE WILL BE DIRECTLY PROPORTIONAL TO THE AMOUNT OF PRESSURE APPLIED WITHOUT DISTURBING THE FAILSAFE PORTION OF THE BRAKE.

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 ON GEARBOX. IF NEEDED, BRAKE SHAFT CAN BE ROTATED BY APPLYING HYDRAULIC PRESSURE TO THE PISTON INLET PORT.
- INSERT FOUR 1/2" DIA. BOLTS (GRADE 5) AND LOCKWASHERS THROUGH THE HOUSING. MAKE SURE THAT THE BOLTS ARE NOT TOO LONG, SO THEY DO NOT BOTTOM OUT IN THE THREADED HOLES OF THE GEAR REDUCER.
- RUN THE BOLTS IN ALTERNATELY UNTIL SNUG TO PREVENT BINDING. THEN TORQUE 55-65 FT-LBS [75-88 Nm]. BOLTS MUST BE LUBRICATED.
NOTE: THE SHAFTS MUST SLIDE TOGETHER FREELY. DO NOT USE THE BOLTS TO FORCE THEM TOGETHER.
- WITH GEARBOX AND BRAKE BOLTED TOGETHER INTO POSITION, CONNECT INLET HYDRAULIC LINE. BRAKE INLET IS 3/8" INLET STRAIGHT THREAD O-RING BOSS (9/16-18 UNF).
- CONNECT SERVICE BRAKE HYDRAULIC LINE. BRAKE INLET IS 1/4" INLET STRAIGHT THREAD O-RING BOSS (7/16-20 UNF).
- CONNECT COOLING/LUBE INLETS. COOLING INLET IS 3/4" INLET STRAIGHT THREAD O-RING BOSS (1 1/16-12 UNF).

BRAKE DISASSEMBLY INFORMATION:

- DISASSEMBLE IN THE FOLLOWING ORDER: BOLTS (ALTERNATELY), POWER PLATE, O-RING SEAL, STATIONARY DISCS, ROTATING DISCS, PRIMARY DISC, TORQUE PINS, AND COMPRESSION SPRINGS.
- 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 OR SEAL ARE REMOVED FOR ANY REASON, BOTH MUST BE REPLACED.
 - REMOVE SNAP RINGS AS NEEDED.
 - SEAL CAN BE REMOVED BY PRYING IT OUT WITH AN APPROPRIATE TOOL. TAKE CARE NOT TO DAMAGE THE BORE.
 - 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 [1 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.
- REMOVE THE SERVICE PISTONS FROM THE HOUSING BY INSERTING 1/4-20 THREADED BOLT IN EACH PISTON AND PULL WITH APPROPRIATE TOOL.
DO NOT REMOVE O-RINGS AND BACKUP RINGS FROM THE O.D. AND I.D. GROOVES OF THE SERVICE PISTONS 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.

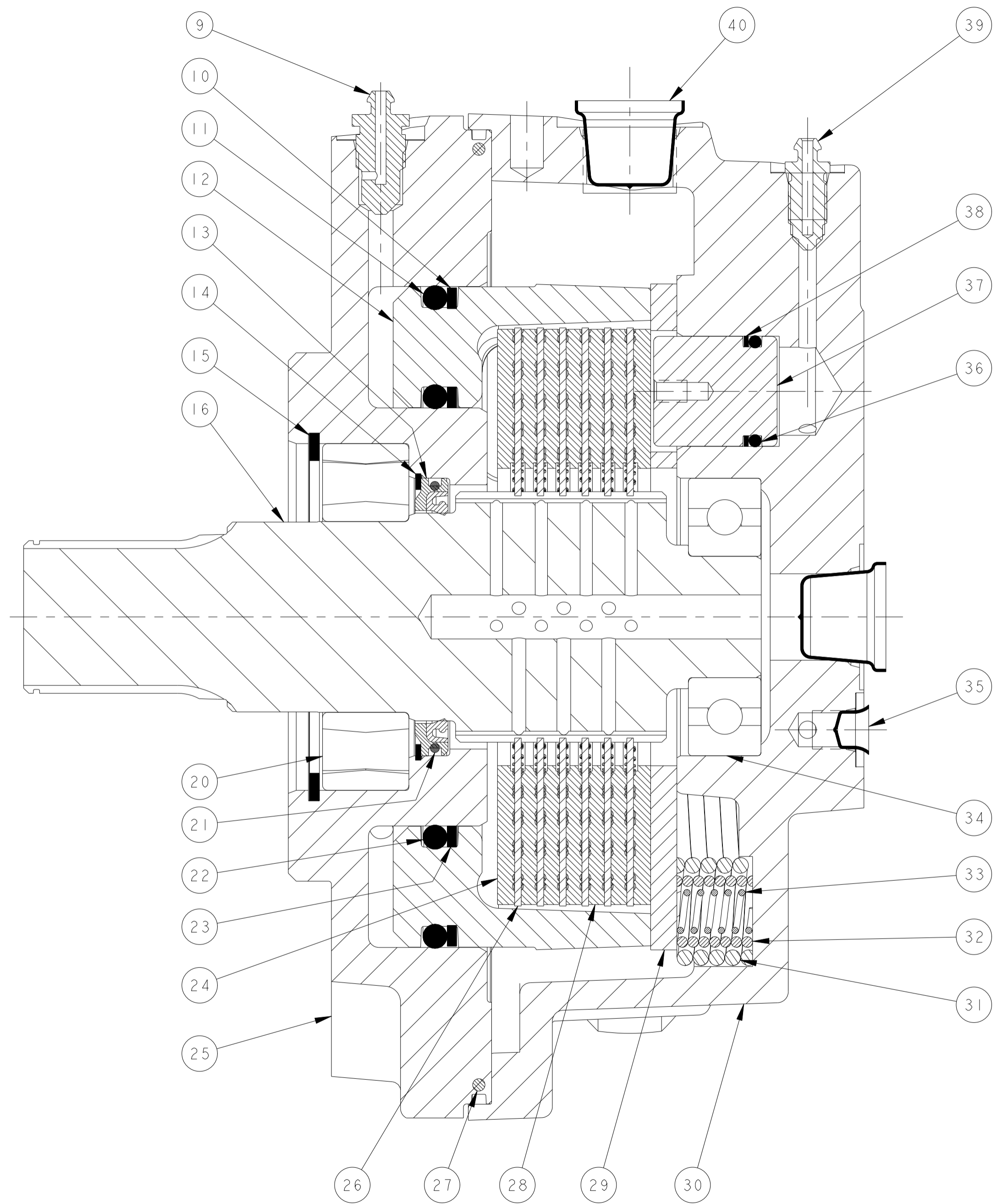
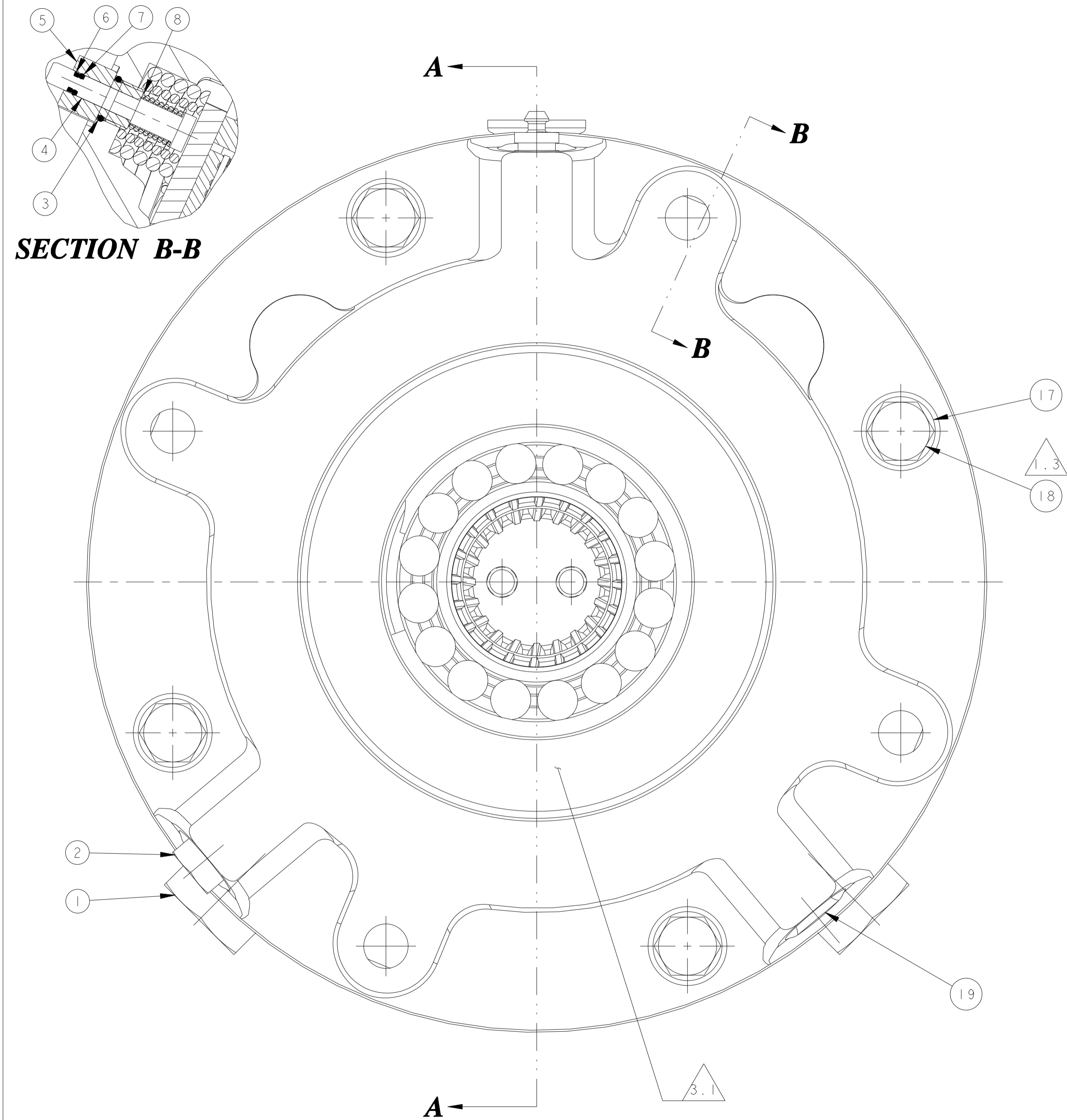
USE THE REVERSE OF THE DISASSEMBLY PROCEDURE WITH THE FOLLOWING NOTES AND ADDITIONS:

- WORN AND DAMAGED O-RINGS OR WORN BACKUP RINGS MUST BE REPLACED PRIOR TO REASSEMBLY.
- LURBRICATE ALL O-RINGS, BACKUP RINGS, PISTONS, AND PISTON BORES IN THE HOUSING AND POWER PLATE WITH SYSTEM HYDRAULIC FLUID PRIOR TO REASSEMBLY.
- PISTON ASSEMBLY:
ASSEMBLE PISTON INTO POWER PLATE USING A SHOP PRESS. TAKE CARE NOT TO DAMAGE THE O-RINGS 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 LOSS OF BRAKING.
- LIP SEAL ASSEMBLY:
LIP OF SEAL MUST FACE AWAY FROM THE BEARING. IT IS CRITICAL THAT THE SEAL IS INSTALLED USING A TOOL WITH THE SAME O.D. AS THE SEAL. SEE CUTAWAY VIEW FOR SEAL ORIENTATION DETAIL. IT IS CRITICAL THAT AN O-RING IS INSTALLED IN THE GROOVE OF THE SEAL CASE. TAKE CAUTION TO NOT DAMAGE THE O-RING.
- 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.
- ROTATING, STATIONARY, AND PRIMARY DISC ASSEMBLY:
ROTATING DISC MUST BE CLEAN & DRY. THE LINING MATERIAL AND MATING SURFACES OF THE ROTATING DISCS MUST BE THOROUGHLY CLEAN AND FREE FROM DEBRIS. WORN OR SCARRED ROTATING OR STATIONARY DISCS MUST BE REPLACED.
- 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]. BOLTS MUST BE LUBRICATED.

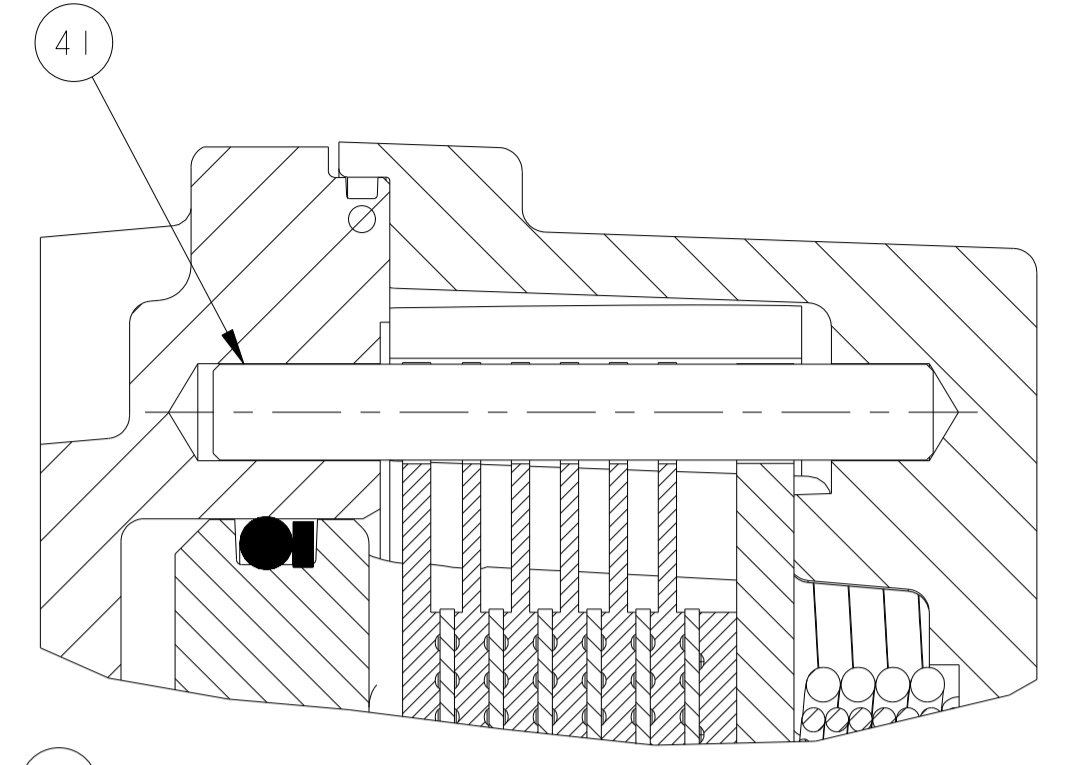
SERVICE KIT INFORMATION:

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| BEARING KIT: | PK-1941 | - INCLUDES RETAINING RINGS AND BEARINGS. |
| STACK KIT: | PK-2364 | - INCLUDES STATIONARY AND ROTATING DISCS. |
| O-RING KIT: | PK-1529 | - INCLUDES O-RINGS, BACKUP RINGS, AND SEAL. |
| SERVICE PISTON: ASSEMBLY KIT | PK-936 | - INCLUDES O-RINGS, BACKUP RINGS, AND SERVICE PISTON. |
| WEAR INDICATOR: KIT | PK-2083 | - INCLUDES O-RINGS, BACKUP RING, HEX PLUG, COMPRESSION SPRING, AND INDICATOR SHAFT. |
| REBUILD KIT: | PK-2365 | - INCLUDES O-RINGS, BACKUP RINGS, SEAL, RETAINING RING, TORQUE PIN, AND BEARING. |
| SPRING KIT: | PK-2366 | - INCLUDES COMPRESSION SPRINGS. |

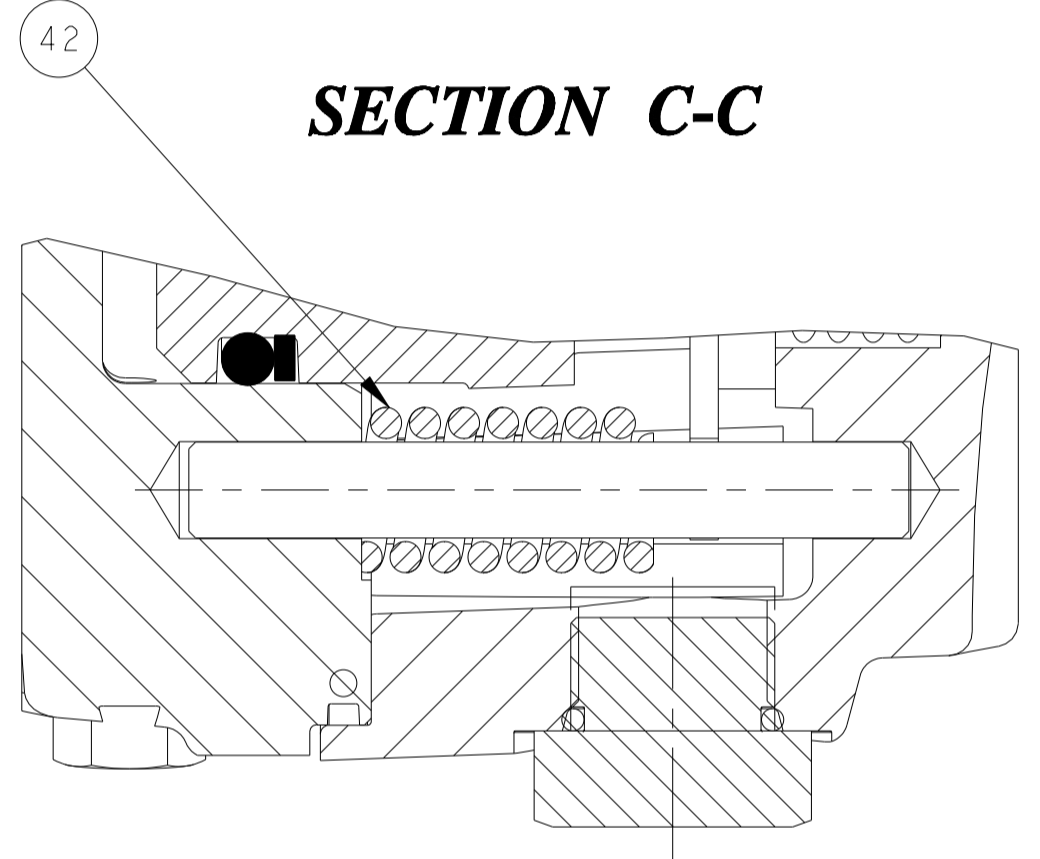
ITEM	PART	DESCRIPTION	QTY
1	37452	HEX HEAD PLUG	2
2	37453	HEX HEAD PLUG	1
3	31943	O-RING	1
4	96865	INDICATOR SHAFT	1
5	96866	HEX HEAD PLUG - MODIFIED	1
6	96749	BACKUP RING	1
7	96748	O-RING	1
8	96747	COMPRESSION SPRING	1
9	31935	BLEEDER SCREW	1
10	28704	BACKUP RING	1
11	28703	O-RING	1
12	36686	PISTON	1
13	96334	OIL SEAL	1
14	82382	RETAINING RING	1
15	82073	RETAINING RING	1
16	90304	SPLINED SHAFT	1
17	28419	LOCK WASHER	4
18	35961	HEX HEAD BOLT	4
19	36326	PROTECTIVE PLUG	1
20	36649	SPHERICAL ROLLER BEARING	1
21	96755	O-RING	1
22	28701	O-RING	1
23	28702	BACKUP RING	1
24	88481	STATIONARY DISC - ONE SIDE LINED	2
25	80251	POWER PLATE	1
26	80252	ROTATING DISC - UNLINED	6
27	103025	O-RING	1
28	88483	STATIONARY DISC-BOTH SIDES LINED	5
29	37461	PRIMARY DISC	1
30	90305	HOUSING	1
31	90491	COMPRESSION SPRING	15
32	33017	COMPRESSION SPRING	15
33	90029	COMPRESSION SPRING	14
34	90306	BALL BEARING	1
35	28435	PROTECTIVE PLUG	1
36	35606	O-RING	3
37	36558	SERVICE PISTON	3
38	37018	BACKUP RING	3
39	29035	BLEEDER SCREW	1
40	36673	PROTECTIVE PLUG	2
41	37518	TORQUE PIN	4
42	36676	COMPRESSION SPRING	2
43	80782	O-RING	8



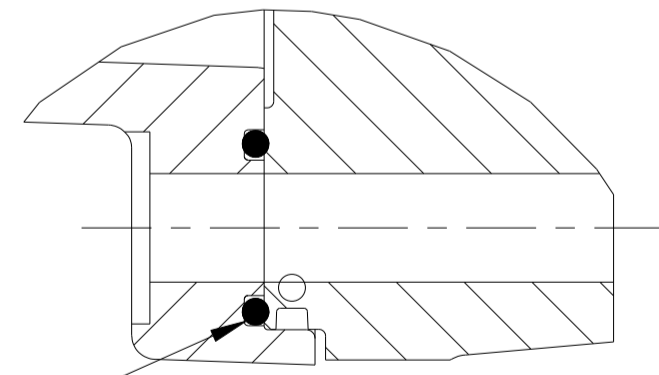
SECTION A-A



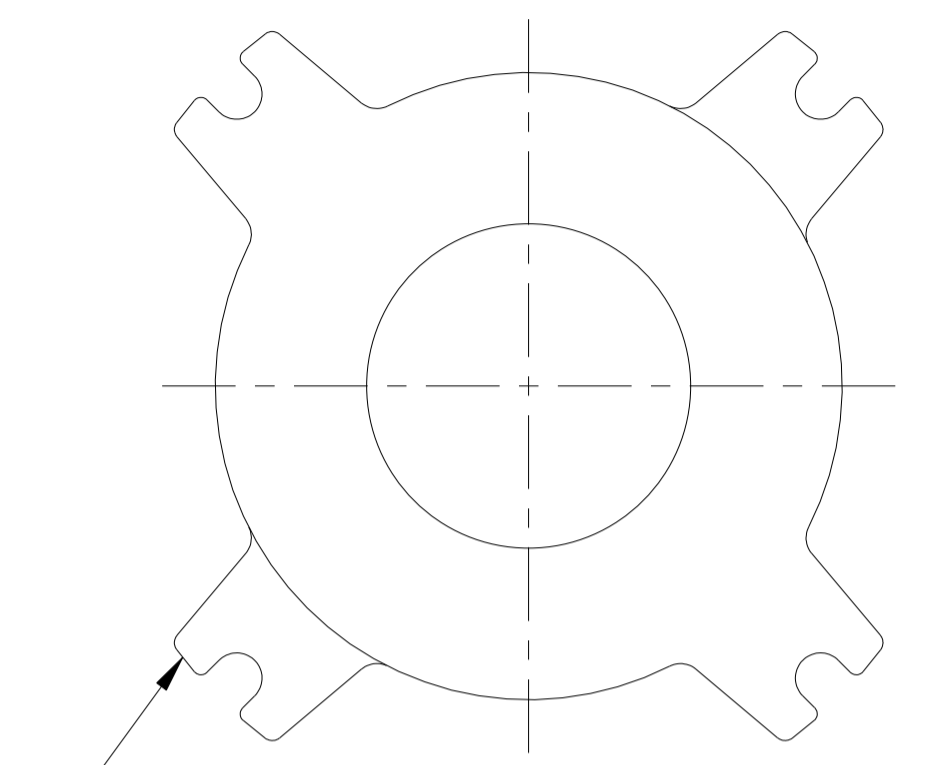
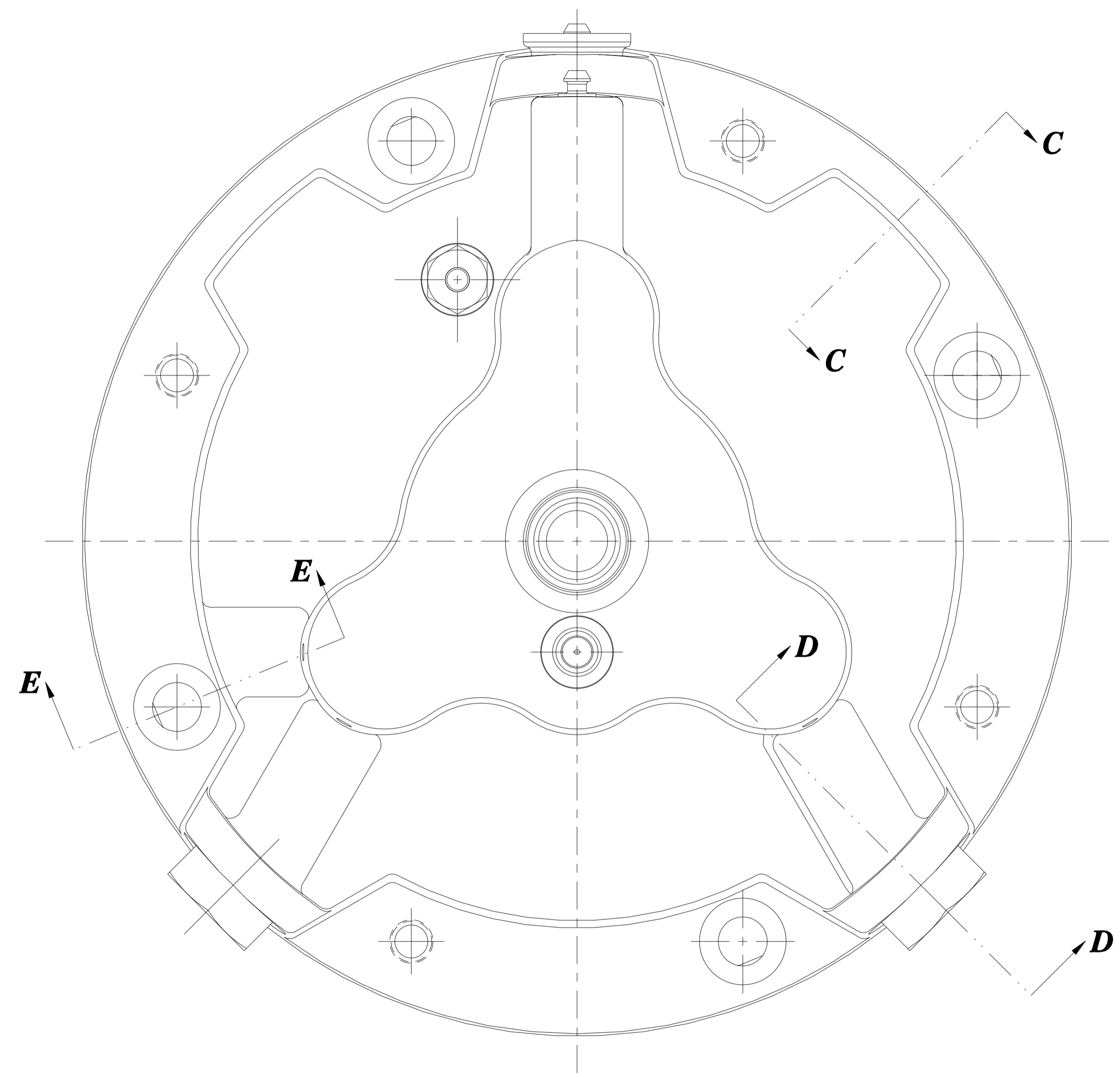
SECTION C-C



SECTION D-D

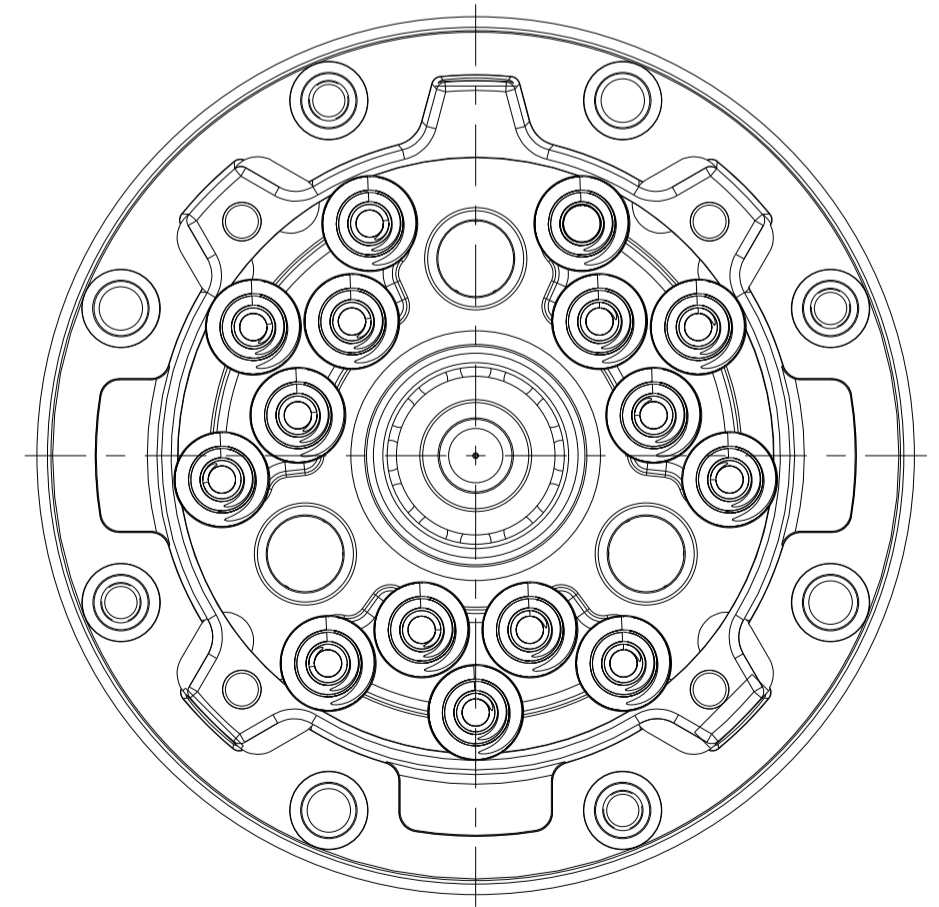


SECTION E-E



ONE STATIONARY DISC (88481) PLACED AGAINST PRIMARY DISC (37461) CLOKED AT 90° FROM REST OF STACK.

**DISC STACK ORIENTATION
NO SCALE**



**NESTED SPRING ORIENTATION
NO SCALE**