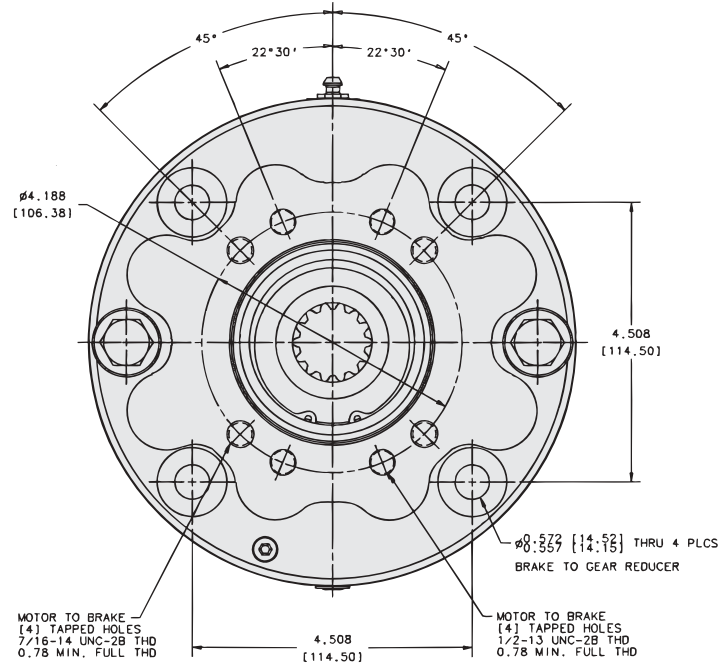
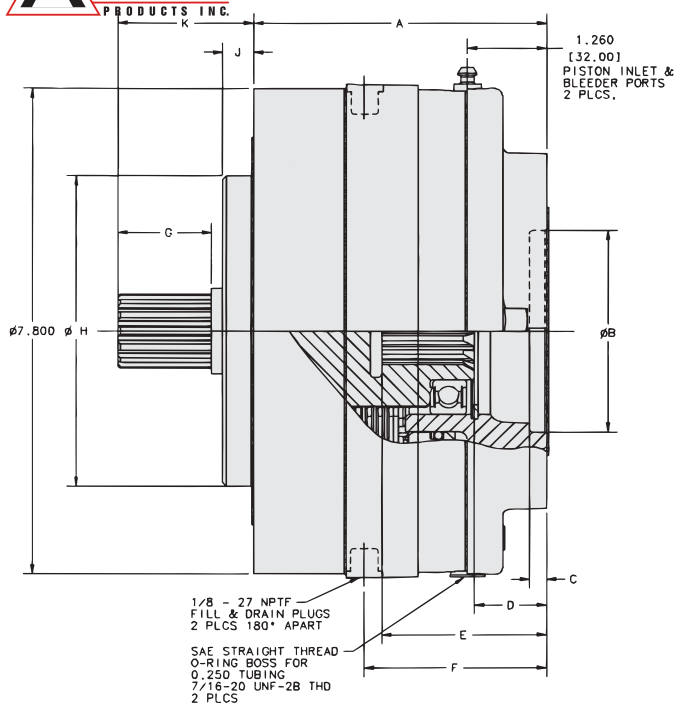


# Modified SAE 'A' to SAE 'C' Mount – WET



DESCRIPTION	76928	78299
Rated Torque	9100 (1028)	9000 (1017)
Full Release Pressure	240 (17)	230 (16)
Input Spline (Internal)	14T 12/24 ANSI B92.1 Side Fit 30° PA	SAE 6B 1.00 O.D. Parallel Side Fit
Output Spline (External)	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA
A-Mounting Length	4.720 (119.89)	4.720 (119.89)
B-Input Pilot Diameter	3.253 (82.63)	3.253 (82.63)
C-Input Pilot Length	0.270 (6.86)	0.270 (6.86)
D-Input Shaft Clearance	1.156 (29.36)	1.156 (29.36)
E-Max Input Shaft Length	2.660 (67.56)	2.036 (51.71)
F-Fill/Drain Plug Locations	2.930 (74.42)	2.930 (74.42)
G-Min Spline Length	1.500 (38.1)	1.500 (38.1)
H-Output Pilot Diameter	4.999 (126.97)	4.999 (126.97)
J-Output Pilot Length	0.490 (12.45)	0.490 (12.45)
K-Output Shaft Length	2.160 (54.86)	2.160 (54.86)
Oil Fill Volume Horizontal (ml)	150	150
Oil Fill Volume Vertical (ml)	300	300
O-Ring Service Kit	PK-1368	PK-1368
Stack Service Kit	PK-1370	PK-1370
Bearing Service Kit	PK-933	PK-933
Gasket Service Kit	PK-1398	PK-1398

- Units: length/diameter = in (mm), pressure = psi (bar), torque = lbs in (Nm)
- Maximum operating pressure is 3,000 psi. (207 bar). Pressure spikes or surges not to exceed 4,000 psi. (278 bar).
- Brake cavity cooling oil pressure not to exceed 15 psi (1 bar).
- Maximum brake speed is 5,000 rpm.



"B" SERIES  
FAILSAFE BRAKE W/SERVICE BRAKE  
73285

**BRAKE FUNCTION**

The Failsafe Brake is spring loaded to apply the brake and 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 pressure below the release pressure of the brake, will cause a brake application.

In addition, the brake may be applied via a separate 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.

**INSTALLATION INSTRUCTIONS (Ref Fig 1)**

- Place the Gasket (31) onto the mounting face of the brake.
- Place the brake shaft into the gear reducer with the brake Bleeder Screws in the vertical position, if possible.
- Move the brake into position with gear reducer assuring proper gasket location. Align the mounting bolt holes by rotating the engaged brake into position. If this is not possible, the brake may be rotated after pressure has been applied to the inlet in the Power Plate (25). This will release the brake and allow it to be rotated into position.
- Similarly place a Gasket (31) onto the flange of the motor.
- Insert the shaft of the motor into the brake and push into position, assuring proper gasket location.
- Insert two half-inch bolts (Grade 5) thru the motor flange, the gasket, the brake, the second gasket and into the threaded hole in the gear reducer mounting flange. Insure that the bolts are not too long so that they do not bottom out in the reducer before clamping.
- Run bolts in alternately, to prevent binding, until snug. Then torque the bolts to 75-85 lb ft. Note: Both shafts must slide together freely - DO NOT use bolts to force the unit together.
- With motor and brake bolted into position, remove cap plugs and connect "inlet" hydraulic lines to brake Housing (5) and Power Plate (25). (If not done for shaft alignment - Step 3) Brake inlet is 250 tubing OD, straight thread o-ring boss, (438-20 UNF-2R Thd).
- Bleed air from brake via bleeder screws. Note: Maximum pressure to brake is 3000 psi.

**BRAKE DISASSEMBLY PROCEDURE (Ref Fig 2)**

- With shaft protrusion downward, disassemble in the following order:
- Remove Bolts (28) alternately. Use extreme caution as the free length of Springs (16) will cause the Power Plate (25) assembly to "pop off" the housing as soon as threaded engagement between the bolts and housing is lost.
- Remove Power Plate (25) assembly, Springs (16), O Ring (14), Stationary Discs (8 & 17), Rotating Discs (18), Primary Disc (7), Pins (6 & 9) and Springs (13).
- Further disassembly is not recommended and should not be attempted unless necessary for replacement of specific parts. If necessary, proceed as follows:
- Remove Seal (1), this will be ruined and must be replaced. CAUTION: Be extra careful not to damage the adjacent bearing seal.
- Remove Retaining Ring (2). The Shaft (15) and Bearing (3) may then be removed from Housing (5) by tapping the motor end of the shaft with a plastic mallet.
- Remove Retaining Ring (10). The Bearing (3) can be removed from the Shaft (15) by supporting the inner race of the bearing and applying pressure to the shaft.
- Remove Pistons (12) from Housing (5) by introducing low pressure air - 15 psi maximum - to the hydraulic inlet. Make sure the pistons are directed away from the operator. Remove O-Rings (11).

- Remove the Piston (20) from the Power Plate (25) by introducing low pressure air - 15 psi - into the hydraulic inlet. Make sure piston is directed away from the operator. Remove O-Rings (22 & 24) and Backup Rings (21 & 23) from the piston OD and ID grooves. Backup rings will be damaged and should not be removed if replacement is not planned.
- Pressure Relief Valve (26) can be removed and inspected to assure spring-loaded ball moves freely and is free of contamination.

**ASSEMBLY PROCEDURE**

**IMPORTANT:** There may be more parts in a service kit than your brake requires. Check the parts list carefully for the exact quantity. In the case of springs, space the required quantity equally.

All parts must be thoroughly clean prior to reassembly. Use the reverse of the disassembly procedure with the following notes and additions:

- Worn o-rings and damaged or worn teflon backup rings must be replaced prior to reassembly.
- Cylinder of the power plate, housing, pistons and o-rings must be clean prior to assembly and pre-lubed with the brake system fluid. See list below for brake system fluid type for Failsafe & Service brake pistons.
- If replacement of Pressure Relief Valve (26) is necessary, install 1/2 to 3/4 turns beyond finger tight.
- Visually align the center of cast slots in Piston (20) by lining up the arrow on the piston with 312 dia Torque Pin (6) holes in Power Plate (25). Insure that the cast slots are centered with the 312 dia torque pin holes so that Piston (20) will not strike the ears of Primary Disc (7) and Stationary Discs (8 & 17), causing possible brake failure. See Fig 3.

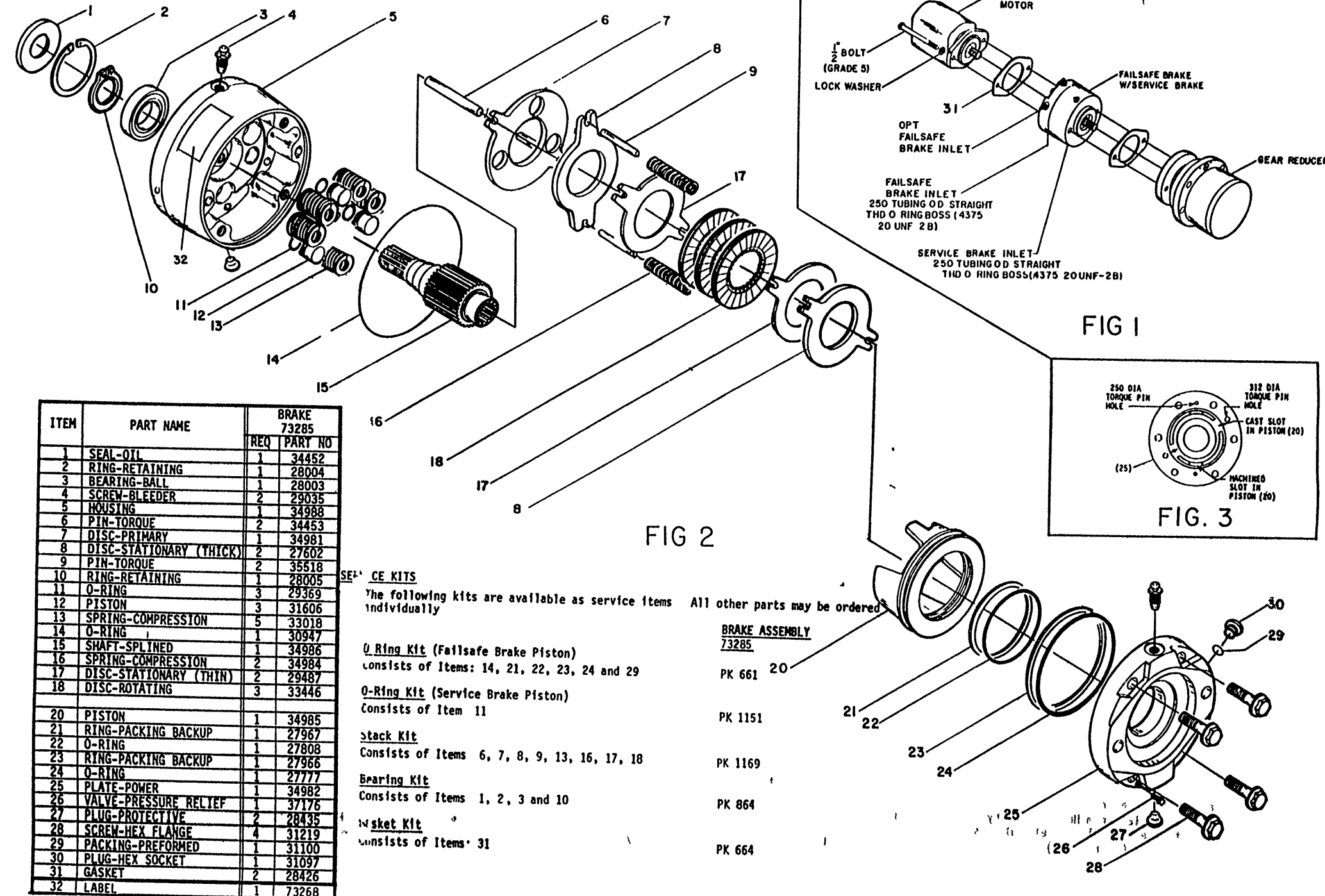


- Rotating discs must be clean and dry. There should be no presence of oil on any lining material or mating surfaces of the stationary discs. Worn or heavily scored rotating discs must be replaced.
- Assemble the stack components in the following order:
  - Place Torque Pins (6 & 9) in their respective holes in Housing (5).
  - Place Primary Disc (7) on Pins (6) being sure to align the holes in the Primary Disc with the pistons (12).
  - Place one thick Stationary Disc (8) on Torque Pins (9). Then place Springs (16) on Torque Pins (9).
  - Place one thin Stationary Disc (17) on Torque Pins (6).
  - Place three Rotating Discs (18) on shaft.
  - Place one thick Stationary Disc (17) and one thick Stationary Disc (8) on Torque Pins (6).
- Assemble the Power Plate (25) assembly onto the Housing (5) using a shop press. Match closely as the Springs (16) are apt to buckle. NOTE: Insure that all four torque pins seat properly into matching holes in power plate.
- Install Bolts (28). Tighten sequentially, one turn at a time, until Power Plate (25) is properly seated. Torque to 55-65 lb ft.

BRAKE SYSTEM FLUID TYPE		
	Service Brake	Failsafe Brake
Brake (Housing)	Petroleum	Petroleum
Power Plate		

Auto Specialties Manufacturing Co  
Benton Harbor, Michigan 49022 Phone 616/926-0882

F73276  
MAR 90



ITEM	PART NAME	BRAKE 73285	
		REQ	PART NO
1	SEAL-OIL	1	34452
2	RING-RETAINING	1	28004
3	BEARING-BALL	1	28003
4	SCREW-BLEEDER	2	29035
5	HOUSING	1	34988
6	PIN-TORQUE	2	34453
7	DISC-PRIMARY	1	34981
8	DISC-STATIONARY (THICK)	2	27602
9	PIN-TORQUE	2	35518
10	RING-RETAINING	1	28005
11	O-RING	3	29369
12	PISTON	3	31606
13	SPRING-COMPRESSION	5	33018
14	O-RING	1	30947
15	SHAFT-SPLINED	1	34986
16	SPRING-COMPRESSION	2	34984
17	DISC-STATIONARY (THIN)	2	29487
18	DISC-ROTATING	3	33446
20	PISTON	1	34985
21	RING-PACKING BACKUP	1	27967
22	O-RING	1	27808
23	RING-PACKING BACKUP	1	27966
24	O-RING	1	27777
25	PLATE-POWER	1	34982
26	VALVE-PRESSURE RELIEF	1	37176
27	PLUG-PROTECTIVE	2	28435
28	SCREW-HEX FLANGE	4	31219
29	PACKING-PREFORMED	1	31100
30	PLUG-HEX SOCKET	1	31097
31	GASKET	2	28426
32	LABEL	1	73268

**SEAL & CE KITS**

The following kits are available as service items. All other parts may be ordered individually.

**O-Ring Kit (Failsafe Brake Piston)**  
Consists of Items: 14, 21, 22, 23, 24 and 29  
PK 661

**O-Ring Kit (Service Brake Piston)**  
Consists of Item 11  
PK 1151

**Stack Kit**  
Consists of Items 6, 7, 8, 9, 13, 16, 17, 18  
PK 1169

**Bearing Kit**  
Consists of Items 1, 2, 3 and 10  
PK 864

**Gasket Kit**  
Consists of Items 31  
PK 664

**BRAKE ASSEMBLY 73285**

- PK 661 20
- PK 1151
- PK 1169
- PK 864
- PK 664

BRAKE FUNCTION

The Failsafe Brake is spring loaded to apply the brake and 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 that reduces the pressure of the hydraulic system below the release pressure of the brake will cause the brake to be applied.

The brake is designed to fit with a gear reducer and a hydraulic motor. The common mounting surfaces of the brake, the motor and the gear reducer are machined to close tolerances and should be protected from damage during installation and removal.

INSTALLATION PROCEDURE (ref FIG 2)

- 1 Place the gasket (25) onto the mounting face of the brake.
- 2 Place the brake shaft into the gear reducer with the bleeder screw in the vertical position.
- 3 Move the brake into position with the gear reducer maintaining proper gasket location. Align the mounting bolt holes by rotating the engaged brake into position. If this is not possible the brake may be rotated after pressure has been applied to the brake inlet. This will release the brake and allow it to be rotated into position.
- 4 Similarly place the other gasket onto the flange of the motor.
- 5 Insert the shaft of the motor into the brake and push into position maintaining proper gasket alignment.
- 6 Insert the two 1/2 in dia bolts (grade 5) through the motor flange, the gasket, the brake, the second gasket and into the threaded holes in the gear reducer. Make sure that the bolts are not too long so that they do not bottom out in the gear reducer before clamping.
- 7 To prevent binding, run the bolts alternately until snug. Then, torque the bolts to 75-85 lb-ft. NOTE: both shafts must slide together freely -- DO NOT use the bolts to force the unit together.
- 8 With motor and brake bolted into position, remove cap plug and connect inlet hydraulic line (if not already done for 3). Brake inlet is 250 OD tubing straight thread o-ring boss (438-20 UNF 2B thread).
- 9 Bleed air from brake via bleeder screw. NOTE: maximum pressure to brake is 3000 psi.
- 10 For sump cooling, remove one housing plug and fill the brake 1/3-1/2 full of oil. Replace plug. For flow thru cooling, remove both plugs and hydraulic system. Do not allow the internal pressure of the brake to exceed 15 psi or seal failure will occur.

BRAKE DISASSEMBLY PROCEDURE (ref FIG 1)

- 1 With shaft protrusion downward, disassemble in the following order: bolts (23) alternately, power plate (21), gasket (4) and bearing (19).
- 2 Further disassembly is not recommended and should not be attempted unless necessary to replace one or more of the following parts: bearing (5), seal (6) or shaft (9). If further disassembly is required, proceed as follows:
  - a) Remove shaft and stack sub-assembly from housing (3) by lightly tapping or pressing on the small external spline end of the shaft and removing the shaft (9), bearing (5), seal (6) and stack from housing (3).
  - b) Remove bearing (19), stationary discs (13), rotating discs (12), primary disc (11) and pins (10).
  - c) Remove bearing (5) from shaft being careful not to damage seal (6). Remove seal (6) and inspect sealing lip and OD for damage. If damaged, replace per reassembly instructions.
  - d) Remove springs (8) and spring retainer (7) from housing (3).
- 3 Remove the piston (14) from the power plate (21) by introducing low pressure air (15 psi) into the hydraulic inlet. Make sure the piston is directed away from the operator. Remove o-rings (16 & 18) and back-up rings (15 & 17) from the ID and OD grooves of the piston. Back-up rings will be damaged and should not be removed if replacement is not planned.

ASSEMBLY TIPS

Use the reverse of the disassembly procedure with the following notes and additions:

RECEPTION There may be more parts in a service kit than your brake requires. Check the parts list carefully for the exact quantity. In the case of springs, space the required quantity equally.

- 1 Make sure all parts are thoroughly clean before reassembly.
- 2 Torn o-rings and damaged or worn teflon back-up rings must be replaced prior to reassembly.
- 3 The cylinder of the power plate, the piston and the o-rings must be clean prior to reassembly and pre-lubed with the hydraulic system fluid.
- 4 Assemble piston (14) into power plate (21) using a shop press, being careful not to damage the o-rings or teflon back-up rings. Visually align the center of the cutouts in the piston with the torque pin (10) holes in the power plate (21). 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 120 in below the surface of the power plate. Do NOT exceed the 120 depth or piston will cock resulting in a complete loss of braking.
- 5 Install bearing (5) into housing (3). Bearing must be seated against shoulder in housing.
- 6 Before installing seal (6), lubricate the lip of the seal with system hydraulic fluid or other suitable lubricant. Face the lip of the seal toward the inside of the brake in order to keep the oil inside the brake.
- 7 Install seal (6) into housing, be pressing evenly around OD of the seal. Use care to avoid rocking. The edge of the seal must be installed flush to surface of housing.
- 8 Install shaft (9) into housing. Support the inner race of bearing (5) when pressing shaft into bearing.
- 9 Rotating discs must be clean and dry. The lining material and mating surfaces of the stationary discs must be clean. Worn or heavily scored rotating discs must be replaced.
- 10 Install gasket (4). Be sure to properly align. After installing all the remaining internal components of the brake, install bearing (19).
- 11 Install the power plate sub-assembly. Use a shop press to evenly lower plate into position. There should be no gap at the OD when the power plate is properly seated against housing. If a shop press is not available, use the assembly bolts (23). Tighten sequentially, one turn at a time, until power plate is properly seated. Torque to 50-60 lb-ft.

SERVICE KITS

The following kits are available as service items. All other parts may be ordered individually.

BEARING KIT

Contains items  
F 6 19

73705  
PK 95

STACK KIT

Contains items  
8 10 11 12 13

PK 1220

O-RING KIT

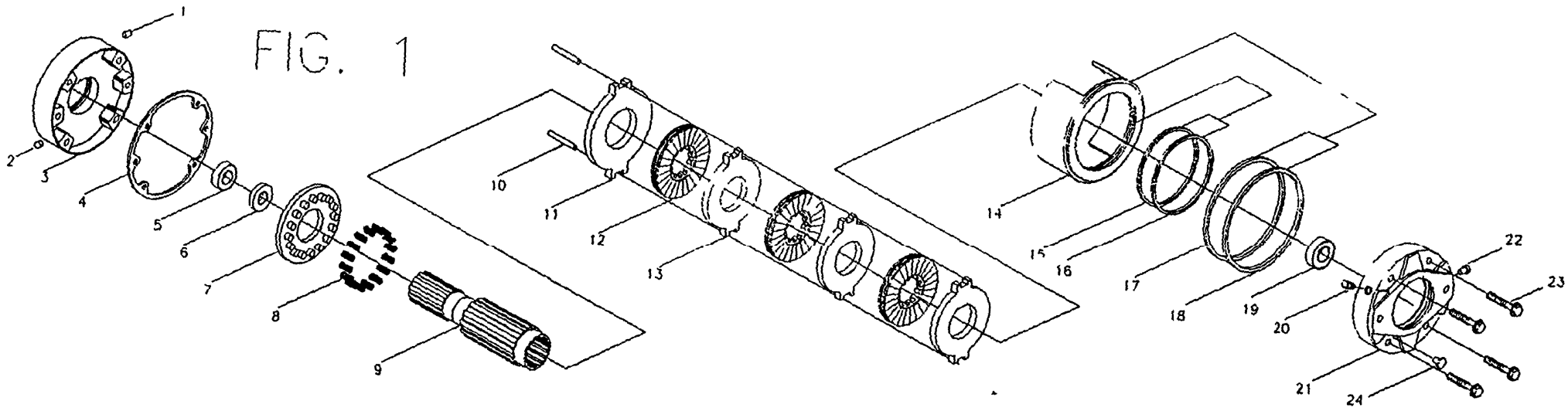
Contains items  
4 15 16 17 18

PK 1221

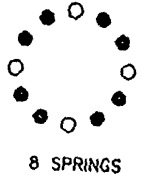
GASKET KIT

Contains items  
24

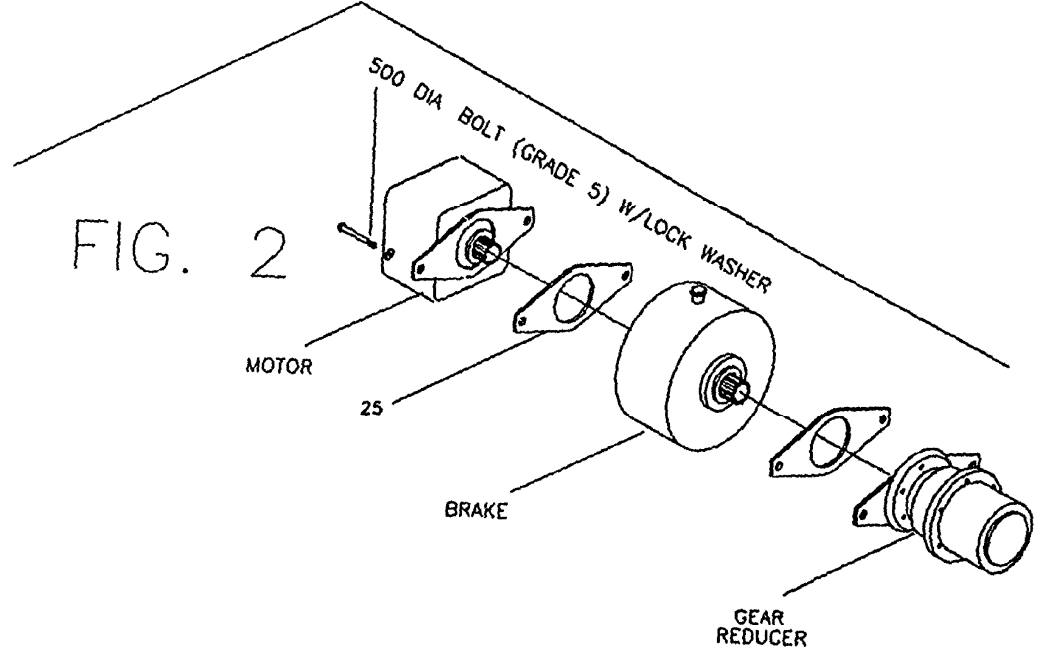
PK 664



SPRING ALIGNMENT



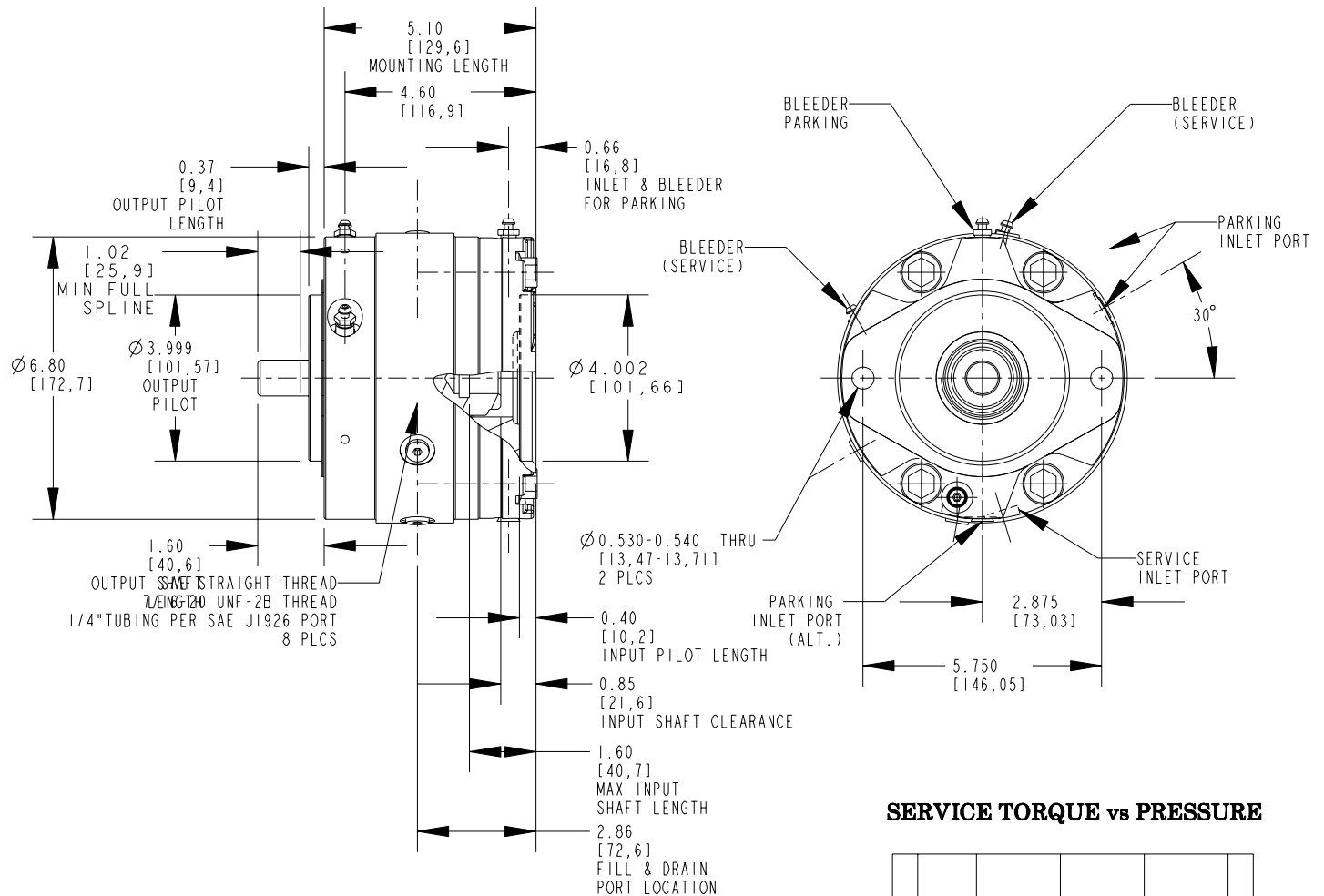
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		REQ	PART #
1	HEX SOCKET - PLUG	1	31037
2	HEX SOCKET - PLUG	1	31097
3	HOUSING	1	73529
4	GASKET	1	73519
5	BEARING - BALL	1	34574
6	SEAL - OIL	1	37144
7	RETAINER - SPRING	1	37029
8	SPRING - COMPRESSION	8	36359
9	SHAFT	1	37717
10	PIN - TORQUE	2	27928
11	PRIMARY DISC	1	74946
12	ROTATING DISC	3	37022
13	STATIONARY DISC	3	74947
14	PISTON	1	37031
15	RING - PACKING BACKUP	1	27887
16	O - RING	1	27808
17	RING - PACKING BACKUP	1	27968
18	O - RING	1	27777
19	BEARING - BALL	1	28288
20	SCREW - BLEEDER	1	29039
21	POWER PLATE	1	39205
22	PLUG - PROTECTIVE	1	28435
23	SCREW - HEX FLANGE	4	31219
24	HEX SOCKET - PLUG	1	28811
25	GASKET	2	28426



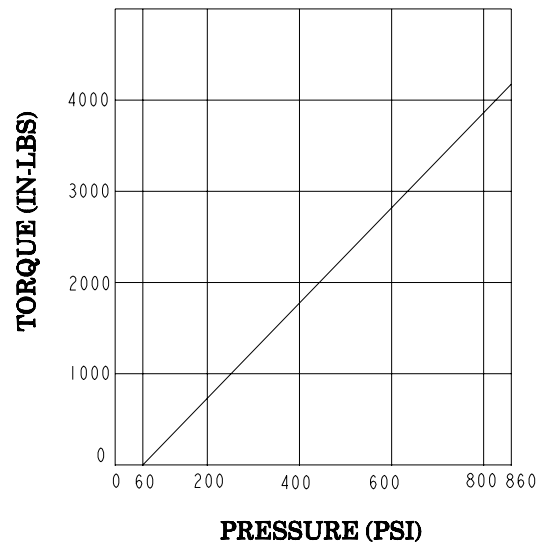
THIS DRAWING REPRESENTS A GENERAL ASSEMBLY ALIGNMENT  
CONSULT PARTS LIST FOR EXACT PARTS AND QUANTITIES FOR  
EACH BRAKE

# 74030 SAE "B" WITH SERVICE

# WET

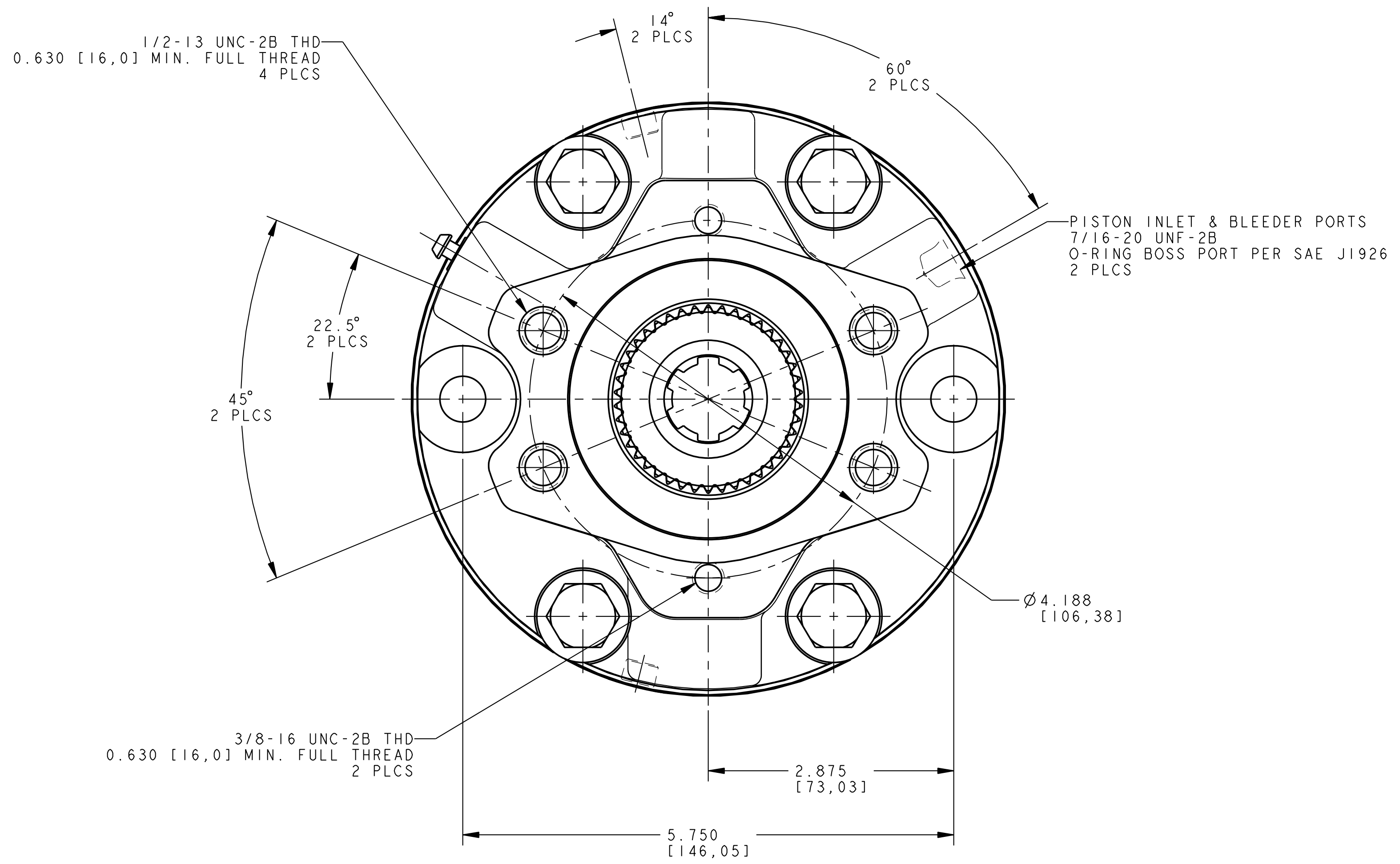
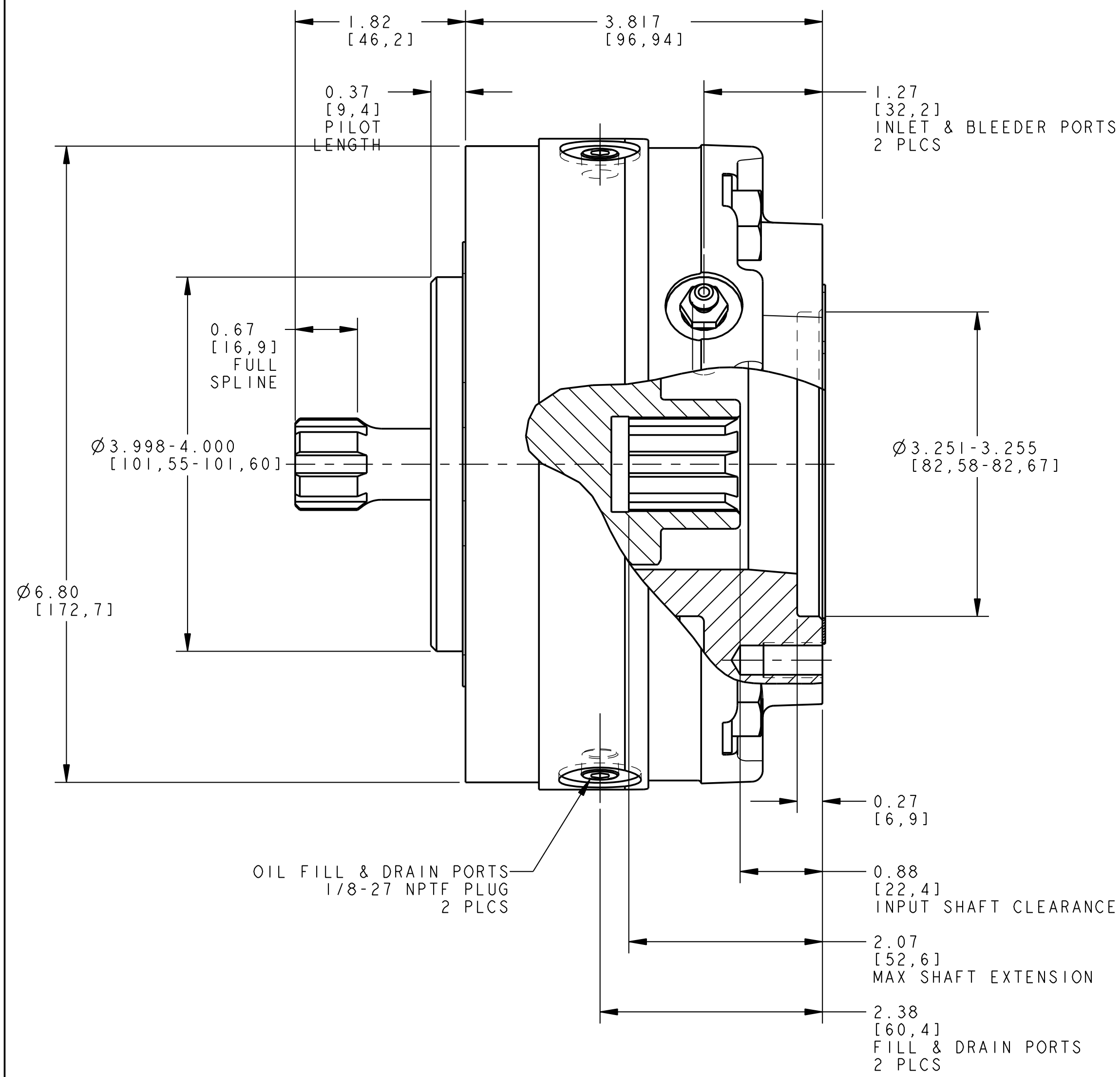


**SERVICE TORQUE vs PRESSURE**



PISTON TYPE	SERVICE	PARKING
RATED TORQUE	SEE CHART	3200 (362)
FULL RELEASE PRESSURE	SEE CHART	185 (11)
INPUT SPLINE (INTERNAL)	13T 16/32 ANSI B92.1 SIDE FIT 30° PRESSURE ANGLE	
OUTPUT SPLINE (EXTERNAL)	13T 16/32 ANSI B92.1 SIDE FIT 30° PRESSURE ANGLE	
OIL FILL VOLUME HORIZONTAL (mL)	70 ml	
OIL FILL VOLUME VERTICAL (mL)	370 ml	
O-RING SERVICE KIT	PK-1221	PK-1225
STACK SERVICE KIT	PK-1226	
BEARING SERVICE KIT	PK-864	
GASKET SERVICE KIT	PK-1362	

- \* UNITS: LENGTH, DIAMETER = IN (mm), PRESSURE = PSI (BAR), TORQUE = LBS IN (Nm)
- \* MAX OPERATING PRESSURE FOR PARKING is 2,200 PSI (152 BAR).
- \* PRESSURE SPIKES OR SURGES ARE NOT TO EXCEED 3,000 PSI (207 BAR).
- \* BRAKE CAVITY COOLING OIL PRESSURE NOT TO EXCEED 15 PSI (1 BAR).
- \* MAXIMUM SERVICE PRESSURE NOT TO EXCEED 800 PSI. (55 BAR).
- \* MAXIMUM OPERATING SPEED IS 3,500 RPM.
- \* FOR VERTICAL APPLICATION, CONTACT AUSCO FOR MAX SPEED DETAILS.
- \* REVIEW IMPORTANT NOTES ON GENERAL INFORMATION.



NOTES:

- THIS DRAWING IS MEANT TO PROVIDE CUSTOMER MOUNTING DATA ONLY. ALL DIMENSIONS ARE REFERENCE UNLESS OTHERWISE NOTED.
- THE TORQUE INFORMATION CONTAINED IN THIS DOCUMENT IS FOR REFERENCE ONLY. IT IS RECOMMENDED THAT THIS BRAKE BE TESTED IN THE SPECIFIC APPLICATION TO VERIFY PERFORMANCE.
- MAXIMUM OPERATING PRESSURE IS 3000 PSI [207 BAR]. PRESSURE SPIKES AND SURGES NOT TO EXCEED 4000 PSI [276 BAR].
- BRAKE CAVITY COOLING OIL PRESSURE NOT TO EXCEED 15 PSI [1 BAR].
- FILL HOUSING WITH THE SPECIFIED QUANTITY OF DTE-26. THE AMOUNT OF OIL NEEDED IS DEPENDENT UPON THE SHAFT ORIENTATION. IF THE SHAFT IS INSTALLED IN A HORIZONTAL POSITION, THE AMOUNT OF OIL ADDED TO THE BRAKE WILL BE DIFFERENT THAN IF THE SHAFT IS INSTALLED VERTICALLY.  
 HORIZONTAL POSITION: 160 ML  
 VERTICAL POSITION: 320 ML
- MAXIMUM OPERATING SPEEDS:  
 HORIZONTAL SHAFT ORIENTATION: 5000 RPM  
 VERTICAL SHAFT ORIENTATION: CONTACT AUSCO ENGINEERING

RATED TORQUE	3800 IN-LBS [429 Nm]
FULL RELEASE PRESSURE	240 PSI [17 BAR]
INPUT SPLINE (INTERNAL)	SAE 6B 1.00 O.D. PARALLEL SIDE FIT
OUTPUT SPLINE (EXTERNAL)	SAE 6B 1.00 O.D. PARALLEL SIDE FIT
HORIZONTAL OIL FILL	160 mL
VERTICAL OIL FILL	320 mL
BEARING SERVICE KIT	PK-1320
STACK SERVICE KIT	PK-1323
O-RING SERVICE KIT	PK-1324
GASKET SERVICE KIT	PK-1356

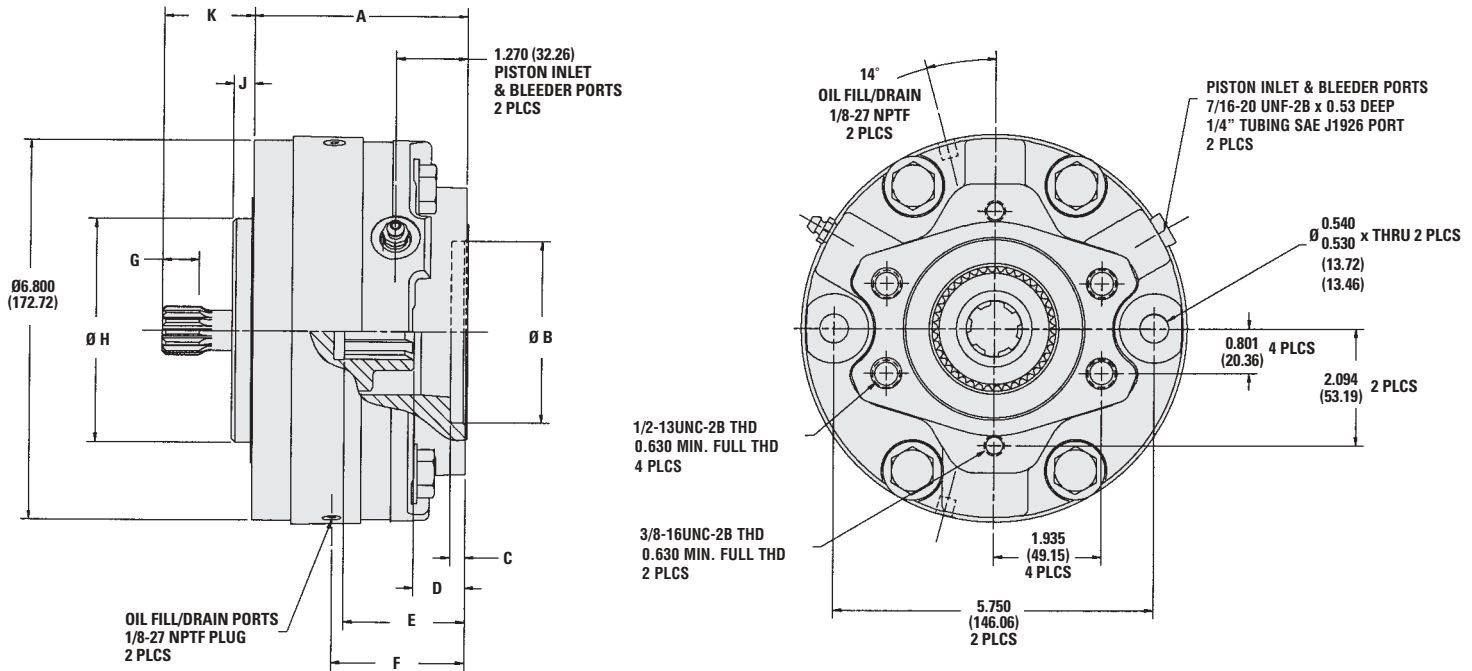
DO NOT SCALE THIS DRAWING  
 PROPRIETARY DATA: NOT TO BE  
 DISCLOSED, USED, OR DUPLICATED  
 FOR PROCUREMENT OR MANUFACTURING  
 PURPOSES, EXCEPT AS AUTHORIZED  
 IN WRITING BY AUSCO, INC.



PROJECT 4344  
 DATE 08-05-96  
 DESIGNER H. BALDEOSINGH

PART NAME CATALOG SHEET  
 BRAKE M/D "MAB" WET  
 SCALE 1.000  
 PART NUMBER 75120

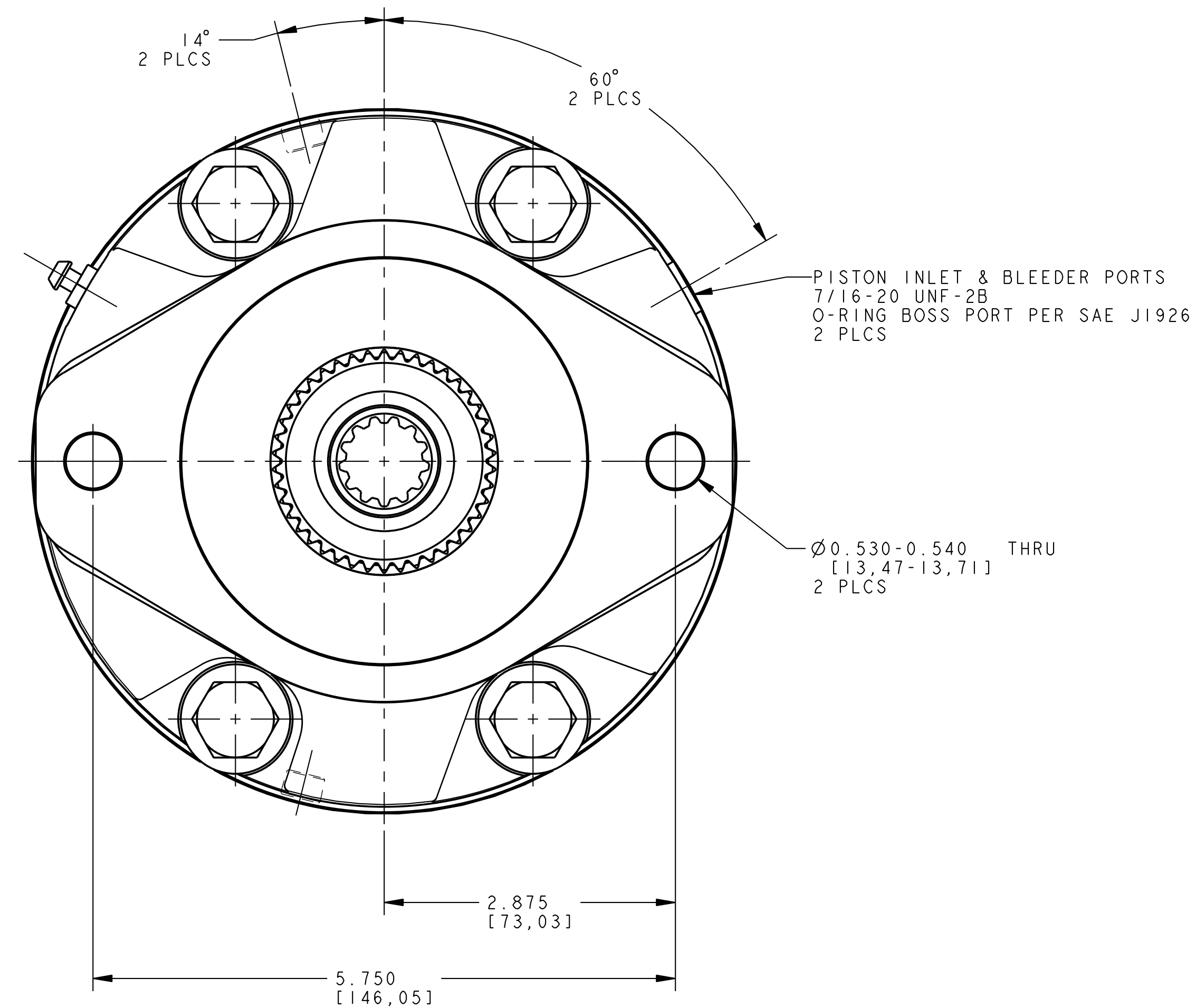
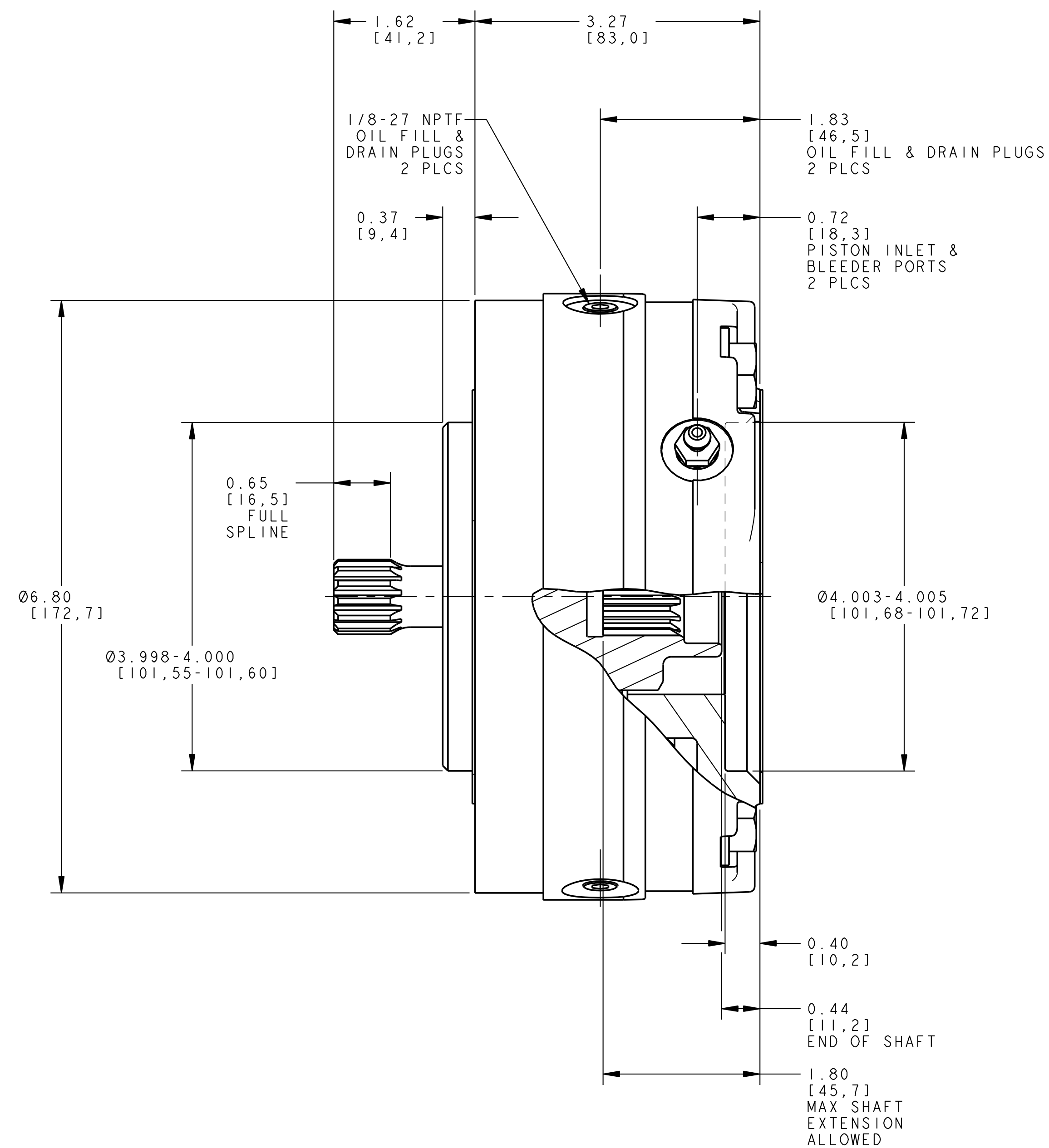
# Modified SAE 'A' to SAE 'B' Mount – WET



DESCRIPTION	75105	75110	75115	75120	75125
Rated Torque	1540 (174)	2600 (294)	3200 (362)	3800 (429)	3800 (429)
Full Release Pressure	190 (13)	180 (12)	220 (15)	240 (17)	240 (17)
Input Spline (Internal)	13T 16/32 ANSI B92.1 Side Fit 30° PA	SAE 6B 1.00 O.D. Parallel Side Fit	SAE 6B 1.00 O.D. Parallel Side Fit	SAE 6B 1.00 O.D. Parallel Side Fit	SAE 6B 1.00 O.D. Parallel Side Fit
Output Spline (External)	13T 16/32 ANSI B92.1 Side Fit 30° PA	13T 16/32 ANSI B92.1 Side Fit 30° PA	SAE 6B 1.00 O.D. Parallel Side Fit	SAE 6B 1.00 O.D. Parallel Side Fit	13T 16/32 ANSI B92.1 Side Fit 30° PA
A-Mounting Length	3.440 (87.38)	3.820 (97.03)	3.820 (97.03)	3.820 (97.03)	3.820 (97.03)
B-Input Pilot Diameter	3.253 (82.63)	3.253 (82.63)	3.253 (82.63)	3.253 (82.63)	3.253 (82.63)
C-Input Pilot Length	0.270 (6.86)	0.270 (6.86)	0.270 (6.86)	0.270 (6.86)	0.270 (6.86)
D-Input Shaft Clearance	0.640 (16.26)	0.920 (23.37)	0.880 (22.35)	0.880 (22.35)	0.920 (23.37)
E- Max Input Shaft Length	1.840 (46.74)	2.170 (55.12)	2.060 (52.32)	2.060 (52.32)	2.170 (55.12)
F- Fill/Drain Plug Locations	2.380 (60.45)	2.380 (60.45)	2.380 (60.45)	2.380 (60.45)	2.380 (60.45)
G-Min Full Spline Length	0.650 (16.51)	0.650 (16.51)	0.650 (16.51)	0.650 (16.51)	0.650 (16.51)
H-Output Pilot Diameter	3.999 (101.58)	3.999 (101.58)	3.253 (82.63)	3.999 (101.58)	3.999 (101.58)
J- Output Pilot Length	0.370 (9.40)	0.370 (9.40)	0.270 (6.86)	0.370 (9.40)	0.370 (9.40)
K- Output Shaft Length	1.620 (41.15)	1.620 (41.15)	1.700 (43.18)	1.820 (46.23)	1.620 (41.15)
Oil Fill Volume Horizontal (ml)	100	160	160	160	160
Oil Fill Volume Vertical (ml)	250	320	320	320	320
O-Ring Service Kit	PK-1324	PK-1324	PK-1324	PK-1324	PK-1324
Stack Service Kit	PK-1322	PK-1323	PK-1323	PK-1323	PK-1323
Bearing Service Kit	PK-1320	PK-1320	PK-1320	PK-1320	PK-1320
Gasket Service Kit	PK-1356	PK-1356	PK-1356	PK-1356	PK-1356

- Units: length/diameter = in (mm), pressure = psi (bar), torque = lbs in (Nm)
- Maximum operating pressure is 3,000 psi. (207 bar). Pressure spikes or surges not to exceed 4,000 psi. (276 bar).
- Brake cavity cooling oil pressure not to exceed 15 psi. (1 bar).
- Maximum brake speed is 5,000 rpm.





- THIS DRAWING IS MEANT TO PROVIDE CUSTOMER MOUNTING DATA ONLY. ALL DIMENSIONS ARE REFERENCE UNLESS OTHERWISE NOTED.
- THE TORQUE INFORMATION CONTAINED IN THIS DOCUMENT IS FOR REFERENCE ONLY. IT IS RECOMMENDED THAT THIS BRAKE BE TESTED IN THE SPECIFIC APPLICATION TO VERIFY PERFORMANCE.
- MAXIMUM OPERATING PRESSURE IS 3,000 PSI [207 BAR]. PRESSURE SPIKES AND SURGES NOT TO EXCEED 4000 PSI [276 BAR].
- BRAKE CAVITY COOLING OIL PRESSURE NOT TO EXCEED 15 PSI [1 BAR].
- FILL HOUSING WITH THE SPECIFIED QUANTITY OF DTE-26. THE AMOUNT OF OIL NEEDED IS DEPENDENT UPON THE SHAFT ORIENTATION. IF THE SHAFT IS INSTALLED IN A HORIZONTAL POSITION, THE AMOUNT OF OIL ADDED TO THE BRAKE WILL BE DIFFERENT THAN IF THE SHAFT IS INSTALLED VERTICALLY.  
 HORIZONTAL POSITION: 160 ML - MAX SPEED 5000 RPM  
 VERTICAL POSITION : 320 ML - CONTACT AUSCO FOR MAX SPEED

RATED TORQUE	2600 IN-LBS [294 Nm]
FULL RELEASE PRESSURE	180 PSI [12 BAR]
INPUT SPLINE (INTERNAL)	13T 16/32 ANSI B92.1 SIDE FIT 30° PRESSURE ANGLE
OUTPUT SPLINE (EXTERNAL)	13T 16/32 ANSI B92.1 SIDE FIT 30° PRESSURE ANGLE
OIL FILL VOLUME HORIZONTAL	160 mL
OIL FILL VOLUME VERTICAL	320 mL
BEARING SERVICE KIT	PK-1320
STACK SERVICE KIT	PK-1323
O-RING SERVICE KIT	PK-1324
GASKET KIT	PK-1325

DO NOT SCALE THIS DRAWING  
 PROPRIETARY DATA: NOT TO BE  
 DISCLOSED, USED, OR DUPLICATED  
 FOR PROCUREMENT OR MANUFACTURING  
 PURPOSES, EXCEPT AS AUTHORIZED  
 IN WRITING BY AUSCO, INC.



PROJECT DATE  
 4579 08-08-96

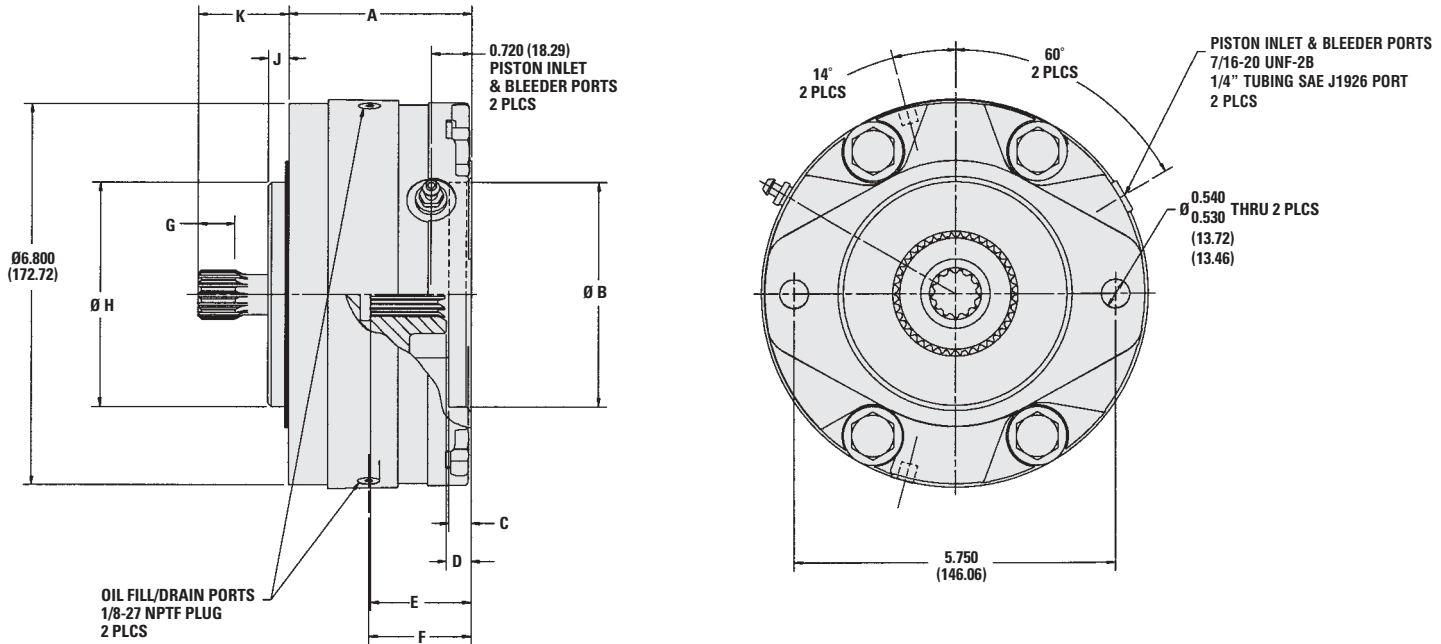
PART NAME  
 BRAKE MULTI-DISK "B" WET

DESIGNER  
 H. BALDEOSINGH

SCALE PART NUMBER  
 1.000 75230



# SAE 'B' Mount – WET



DESCRIPTION	75220	75225	75230	75255	75130	75260
Rated Torque	1540 (174)	1800 (203)	2600 (294)	3200 (362)	3200 (362)	3800 (429)
Full Release Pressure	190 (13)	140 (10)	180 (12)	220 (15)	220 (15)	240 (17)
Input Spline (Internal)	13T 16/32 ANSI B92.1 Side Fit 30° PA	13T 16/32 ANSI B92.1 Side Fit 30° PA	13T 16/32 ANSI B92.1 Side Fit 30° PA	15T 16/32 ANSI B92.1 Side Fit 30° PA	13T 16/32 ANSI B92.1 Side Fit 30° PA	13T 16/32 ANSI B92.1 Side Fit 30° PA
Output Spline (External)	13T 16/32 ANSI B92.1 Side Fit 30° PA	13T 16/32 ANSI B92.1 Side Fit 30° PA	13T 16/32 ANSI B92.1 Side Fit 30° PA	15T 16/32 ANSI B92.1 Side Fit 30° PA	13T 16/32 ANSI B92.1 Side Fit 30° PA	13T 16/32 ANSI B92.1 Side Fit 30° PA
A-Mounting Length	2.890 (73.40)	3.270 (83.06)	3.270 (83.06)	3.270 (83.06)	3.270 (83.06)	3.270 (83.06)
B-Input Pilot Diameter	4.002 (101.65)	4.002 (101.65)	4.002 (101.65)	4.002 (101.65)	4.002 (101.65)	4.002 (101.65)
C-Input Pilot Length	0.400 (10.16)	0.400 (10.16)	0.400 (10.16)	0.400 (10.16)	0.400 (10.16)	0.400 (10.16)
D-Input Shaft Clearance	0.440 (11.18)	0.440 (11.18)	0.440 (11.18)	0.440 (11.18)	0.440 (11.18)	0.440 (11.18)
E-Max Input Shaft Length	1.800 (45.72)	1.800 (45.72)	1.800 (45.72)	1.800 (45.72)	1.800 (45.72)	1.800 (45.72)
F-Fill/Drain Plug Locations	1.830 (46.48)	1.830 (46.48)	1.830 (46.48)	1.830 (46.48)	1.830 (46.48)	1.830 (46.48)
G-Min Full Spline Length	0.650 (16.51)	0.650 (16.51)	0.650 (16.51)	0.650 (16.51)	0.650 (16.51)	0.650 (16.51)
H-Output Pilot Diameter	3.999 (101.57)	3.999 (101.57)	3.999 (101.57)	3.999 (101.57)	3.999 (101.57)	3.999 (101.57)
J-Output Pilot Length	0.370 (9.40)	0.370 (9.40)	0.370 (9.40)	0.370 (9.40)	0.370 (9.40)	0.370 (9.40)
K-Output Shaft Length	1.620 (41.15)	1.620 (41.15)	1.620 (41.15)	1.620 (41.15)	1.620 (41.15)	1.620 (41.15)
Oil Fill Volume Horizontal (ml)	100	160	160	160	160	160
Oil Fill Volume Vertical (ml)	250	320	320	320	320	320
O-Ring Service Kit	PK-1324	PK-1324	PK-1324	PK-1324	PK-1324	PK-1324
Stack Service Kit	PK-1322	PK-1323	PK-1323	PK-1323	PK-1323	PK-1323
Bearing Service Kit	PK-1320	PK-1320	PK-1320	PK-1320	PK-1320	PK-1320
Gasket Service Kit	PK-1325	PK-1325	PK-1325	PK-1325	PK-1325	PK-1325

- Units: length/diameter = in (mm), pressure = psi (bar), torque = lbs in (Nm)
- Maximum operating pressure is 3,000 psi. (207 bar). Pressure spikes or surges not to exceed 4,000 psi. (276 bar).
- Brake cavity cooling oil pressure not to exceed 15 psi. (1 bar).
- Maximum operating speed is 5,000 rpm.

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:

1. 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.
2. INSERT FOUR 1/2" DIA. BOLTS (GRADE 5) THROUGH THE MOTOR FLANGE, THE GASKET, THE BRAKE, 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.
3. 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.
4. 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:

1. DISASSEMBLE IN THE FOLLOWING ORDER: BOLTS (ALTERNATELY), POWER PLATE, GASKET, STATIONARY DISCS, ROTATING DISCS, PRIMARY DISC, TORQUE PINS, COMPRESSION SPRINGS, AND SPRING RETAINER.
2. 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 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:

**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:

1. 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 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 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. TIGHTEN SEQUENTIALLY ONE TURN AT A TIME UNTIL POWER PLATE IS PROPERLY SEATED. TORQUE BOLTS TO 80-90 FT.-LBS.

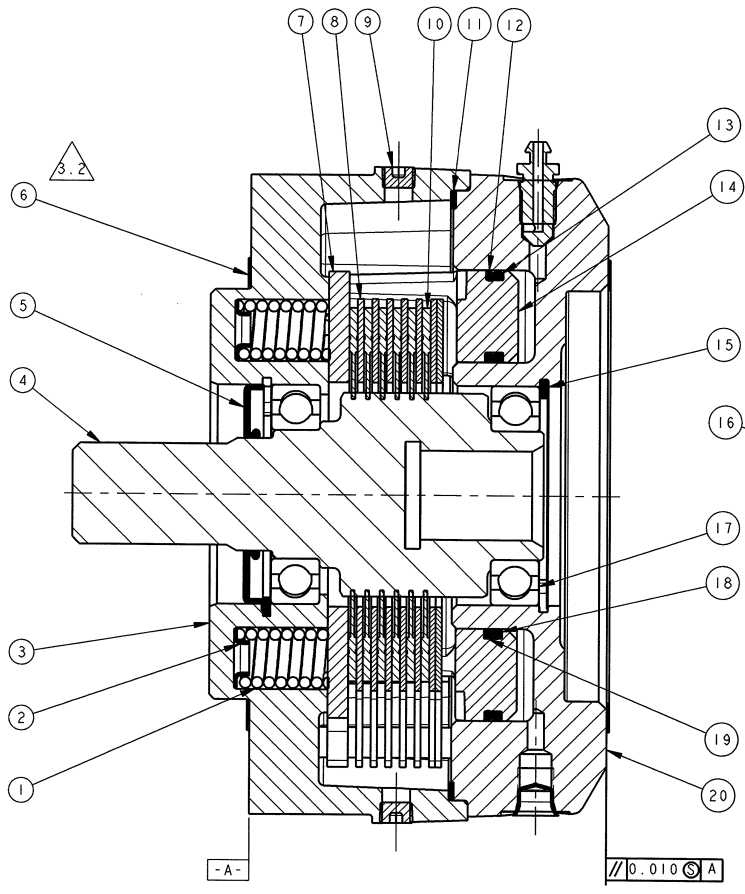
### OIL FILL PROCEDURE:

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

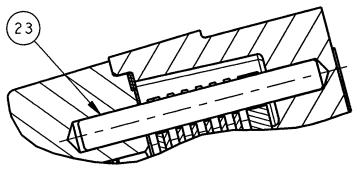
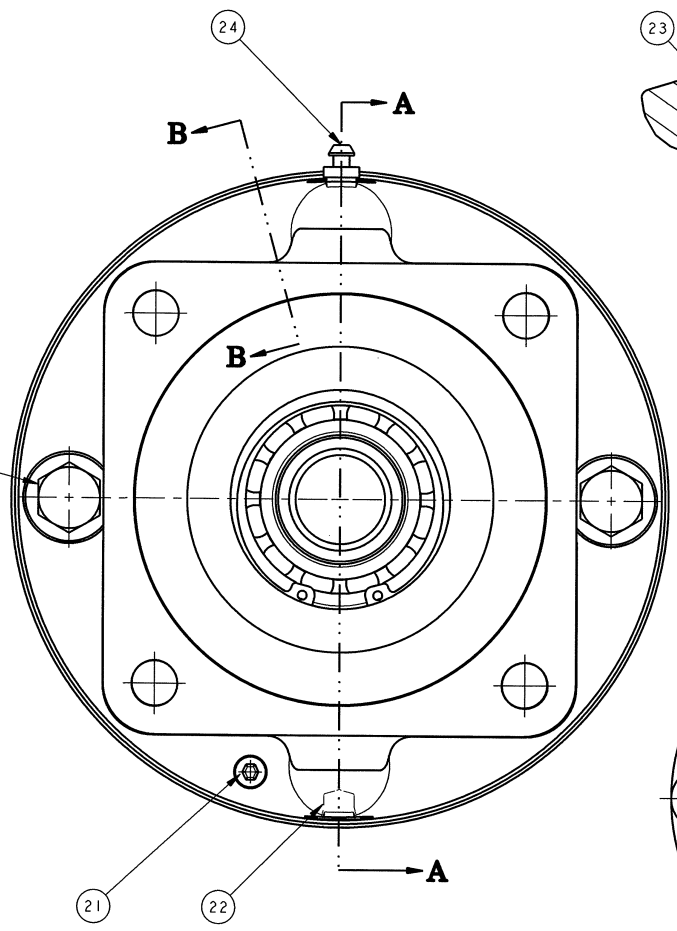
### SERVICE KIT INFORMATION:

- 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.
- GASKET KIT: PK - 679 - INCLUDES EXTERIOR GASKET(S).

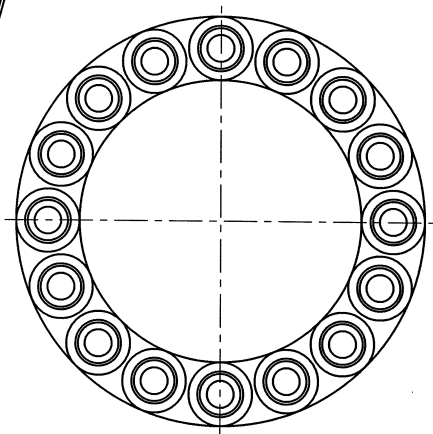
ITEM	PART	DESCRIPTION	QTY
1	36359	COMPRESSION SPRING	16
2	36367	SPRING RETAINER	1
3	75731	HOUSING	1
4	75728	SPLINED SHAFT	1
5	36342	OIL SEAL	1
6	28427	GASKET	2
7	75071	PRIMARY DISC	1
8	75072	STATIONARY DISC	7
9	75395	PIPE PLUG	2
10	74996	ROTATING DISC	6
11	73448	GASKET	1
12	27967	BACKUP RING	1
13	27808	O-RING	1
14	75724	PISTON	1
15	28285	RETAINING RING	2
16	31218	HEX FLANGE SCREW	2
17	28284	BALL BEARING	2
18	36701	O-RING	1
19	32833	BACKUP RING	1
20	36337	POWER PLATE	1
21	28811	HEX PLUG	1
22	28435	PROTECTIVE PLUG	1
23	27948	TORQUE PIN	2
24	29035	BLEEDER SCREW	1
25	75970	CAUTION TAG	1



**SECTION A-A**



**SECTION B-B**

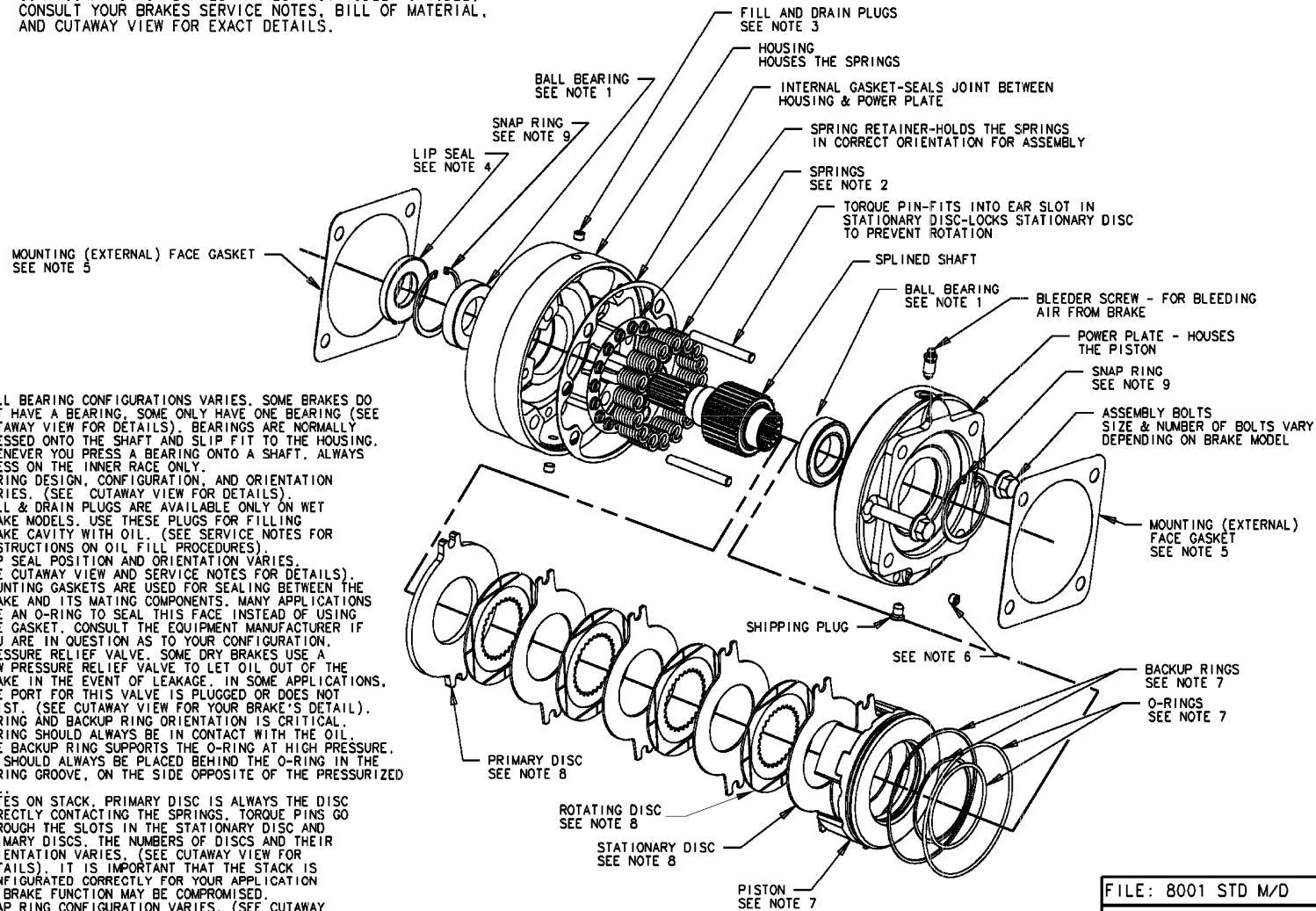


**NESTED SPRING ORIENTATION**  
NO SCALE



# STANDARD WET OR DRY MULTI-DISC BRAKES GENERAL ASSEMBLY VIEW

NOTE: THIS DRAWING PROVIDES GENERAL GUIDELINES AND ASSEMBLY INFORMATION ON AUSCO MULTI-DISC BRAKES. CONFIGURATION OF BRAKES VARIES FROM MODEL TO MODEL. CONSULT YOUR BRAKES SERVICE NOTES, BILL OF MATERIAL, AND CUTAWAY VIEW FOR EXACT DETAILS.



**NOTES:**

1. BALL BEARING CONFIGURATIONS VARIES. SOME BRAKES DO NOT HAVE A BEARING. SOME ONLY HAVE ONE BEARING (SEE CUTAWAY VIEW FOR DETAILS). BEARINGS ARE NORMALLY PRESSED ONTO THE SHAFT AND SLIP FIT TO THE HOUSING. WHENEVER YOU PRESS A BEARING ONTO A SHAFT. ALWAYS PRESS ON THE INNER RACE ONLY.
2. SPRING DESIGN, CONFIGURATION, AND ORIENTATION VARIES. (SEE CUTAWAY VIEW FOR DETAILS).
3. FILL & DRAIN PLUGS ARE AVAILABLE ONLY ON WET BRAKE MODELS. USE THESE PLUGS FOR FILLING BRAKE CAVITY WITH OIL. (SEE SERVICE NOTES FOR INSTRUCTIONS ON OIL FILL PROCEDURES).
4. LIP SEAL POSITION AND ORIENTATION VARIES. (SEE CUTAWAY VIEW AND SERVICE NOTES FOR DETAILS).
5. MOUNTING GASKETS ARE USED FOR SEALING BETWEEN THE BRAKE AND ITS MATING COMPONENTS. MANY APPLICATIONS USE AN O-RING TO SEAL THIS FACE INSTEAD OF USING THE GASKET. CONSULT THE EQUIPMENT MANUFACTURER IF YOU ARE IN QUESTION AS TO YOUR CONFIGURATION.
6. PRESSURE RELIEF VALVE. SOME DRY BRAKES USE A LOW PRESSURE RELIEF VALVE TO LET OIL OUT OF THE BRAKE IN THE EVENT OF LEAKAGE. IN SOME APPLICATIONS, THE PORT FOR THIS VALVE IS PLUGGED OR DOES NOT EXIST. (SEE CUTAWAY VIEW FOR YOUR BRAKE'S DETAIL).
7. O-RING AND BACKUP RING ORIENTATION IS CRITICAL. O-RING SHOULD ALWAYS BE IN CONTACT WITH THE OIL. THE BACKUP RING SUPPORTS THE O-RING AT HIGH PRESSURE. IT SHOULD ALWAYS BE PLACED BEHIND THE O-RING IN THE O-RING GROOVE, ON THE SIDE OPPOSITE OF THE PRESSURIZED OIL.
8. NOTES ON STACK, PRIMARY DISC IS ALWAYS THE DISC DIRECTLY CONTACTING THE SPRINGS. TORQUE PINS GO THROUGH THE SLOTS IN THE STATIONARY DISC AND PRIMARY DISCS. THE NUMBERS OF DISCS AND THEIR ORIENTATION VARIES. (SEE CUTAWAY VIEW FOR DETAILS). IT IS IMPORTANT THAT THE STACK IS CONFIGURATED CORRECTLY FOR YOUR APPLICATION OR BRAKE FUNCTION MAY BE COMPROMISED.
9. SNAP RING CONFIGURATION VARIES. (SEE CUTAWAY VIEW FOR DETAILS).

FILE: 8001 STD M/D  
CURRENT REV: ECO11481 REV A

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:

1. 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.
2. INSERT FOUR 1/2" DIA. BOLTS (GRADE 5) THROUGH THE MOTOR FLANGE, THE GASKET, THE BRAKE, 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.
3. 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.
4. 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:

1. DISASSEMBLE IN THE FOLLOWING ORDER: BOLTS (ALTERNATELY), POWER PLATE, GASKET, STATIONARY DISCS, ROTATING DISCS, PRIMARY DISC, TORQUE PINS, COMPRESSION SPRINGS, AND SPRING RETAINER.
2. 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 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:

**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:

1. 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 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 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. 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.

### 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.
- GASKET KIT: PK - 679 - INCLUDES EXTERIOR GASKET(S).

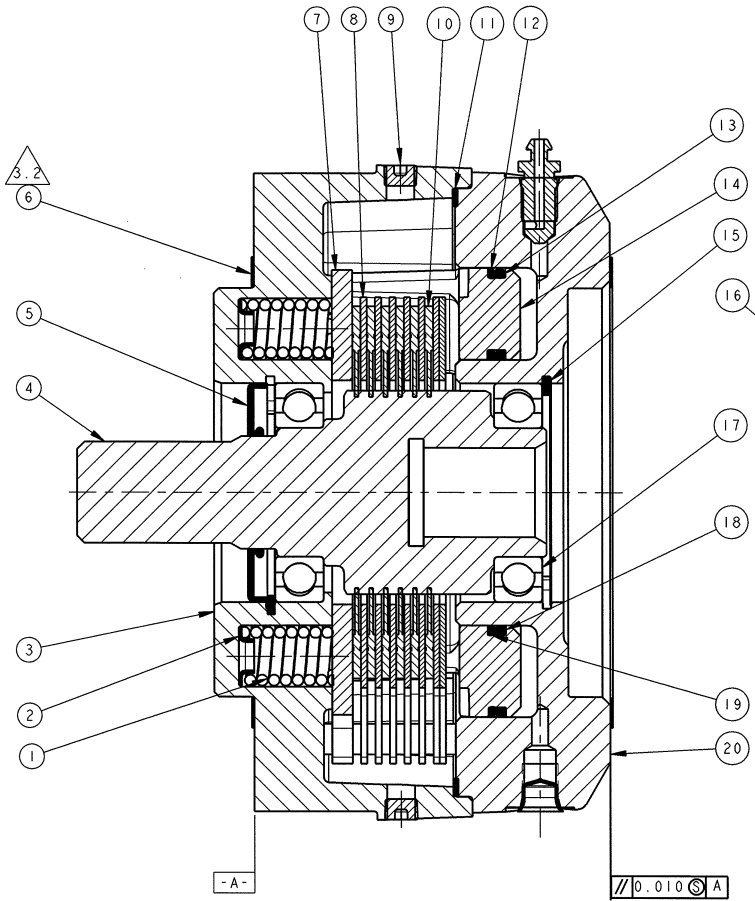


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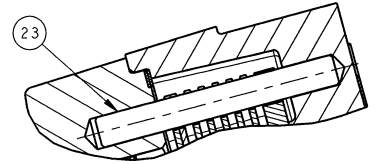
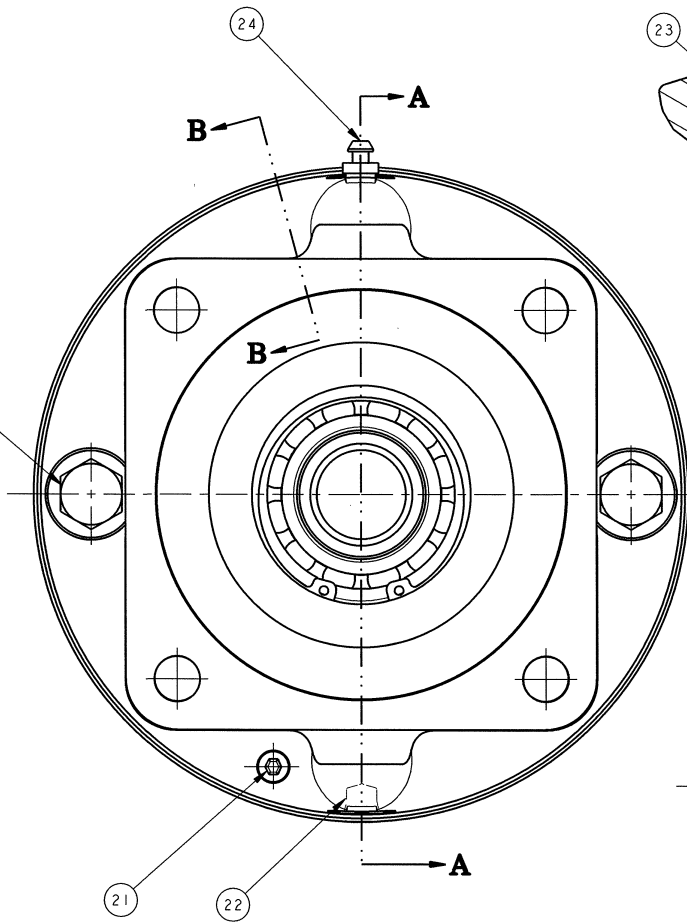
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ITEM	PART	DESCRIPTION	QTY
1	36359	COMPRESSION SPRING	13
2	36367	SPRING RETAINER	1
3	75731	HOUSING	1
4	75728	SPLINED SHAFT	1
5	36342	OIL SEAL	1
6	28427	GASKET	2
7	75071	PRIMARY DISC	1
8	75072	STATIONARY DISC	7
9	75395	PIPE PLUG	2
10	74996	ROTATING DISC	6
11	73448	GASKET	1
12	32833	BACKUP RING	1
13	36701	O-RING	1
14	75724	PISTON	1
15	28285	RETAINING RING	2
16	31218	HEX. FLANGE SCREW	2
17	28284	BALL BEARING	2
18	27808	O-RING	1
19	27967	BACKUP RING	1
20	36337	POWER PLATE	1
21	28811	HEX PLUG	1
22	28435	PROTECTIVE PLUG	1
23	27948	TORQUE PIN	2
24	29035	BLEEDER SCREW	1
25	75970	CAUTION TAG	1

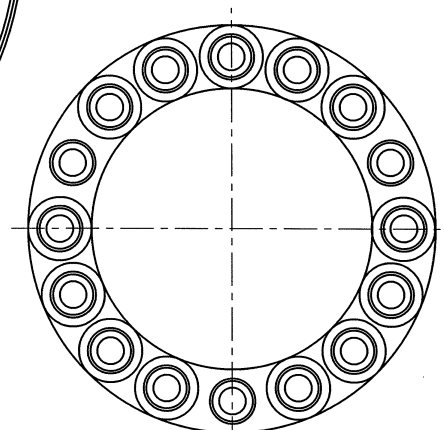




**SECTION A-A**



**SECTION B-B**

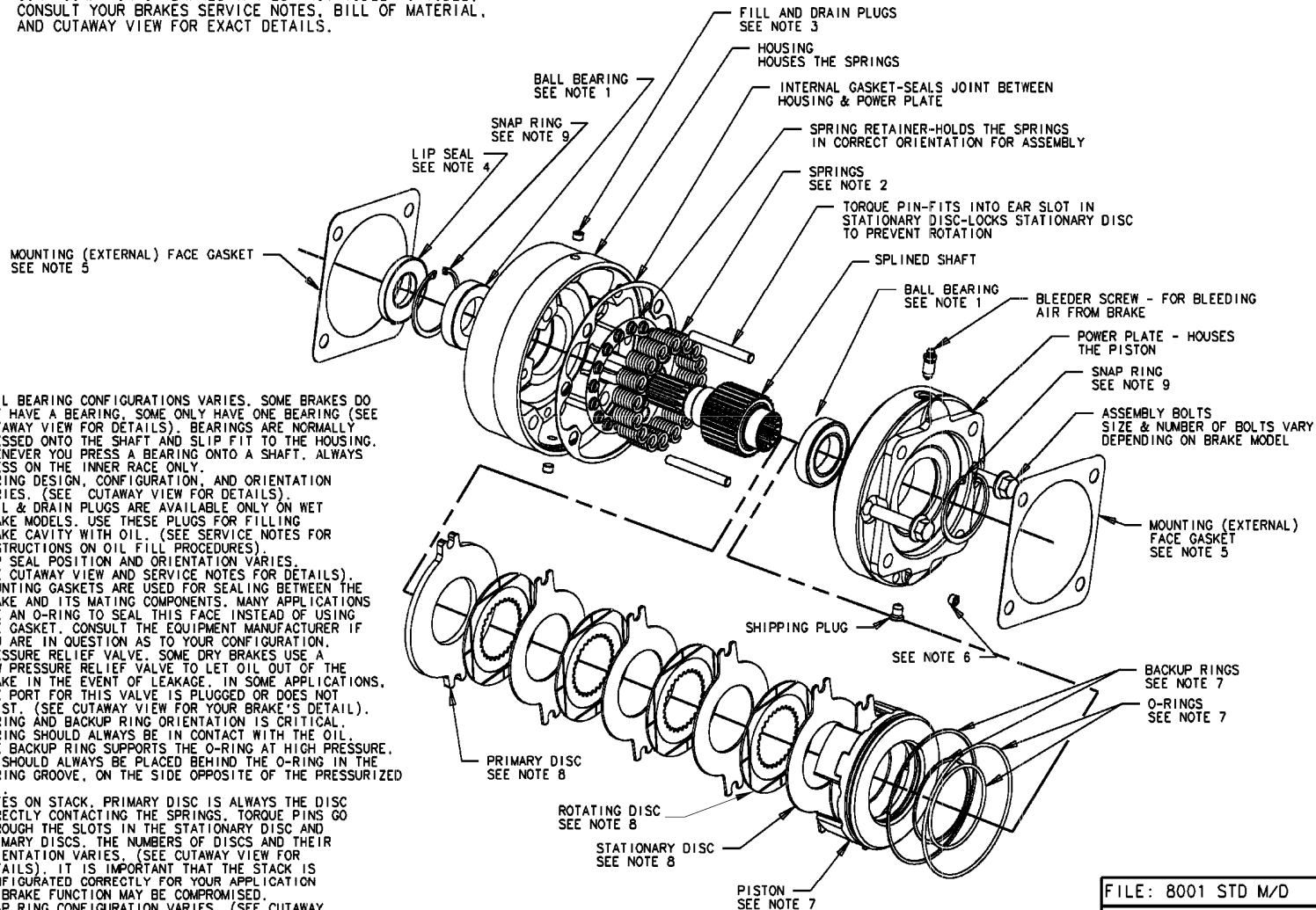


**NESTED SPRING ORIENTATION**  
NO SCALE



# STANDARD WET OR DRY MULTI-DISC BRAKES GENERAL ASSEMBLY VIEW

NOTE: THIS DRAWING PROVIDES GENERAL GUIDELINES AND ASSEMBLY INFORMATION ON AUSCO MULTI-DISC BRAKES. CONFIGURATION OF BRAKES VARIES FROM MODEL TO MODEL. CONSULT YOUR BRAKES SERVICE NOTES, BILL OF MATERIAL, AND CUTAWAY VIEW FOR EXACT DETAILS.



**NOTES:**

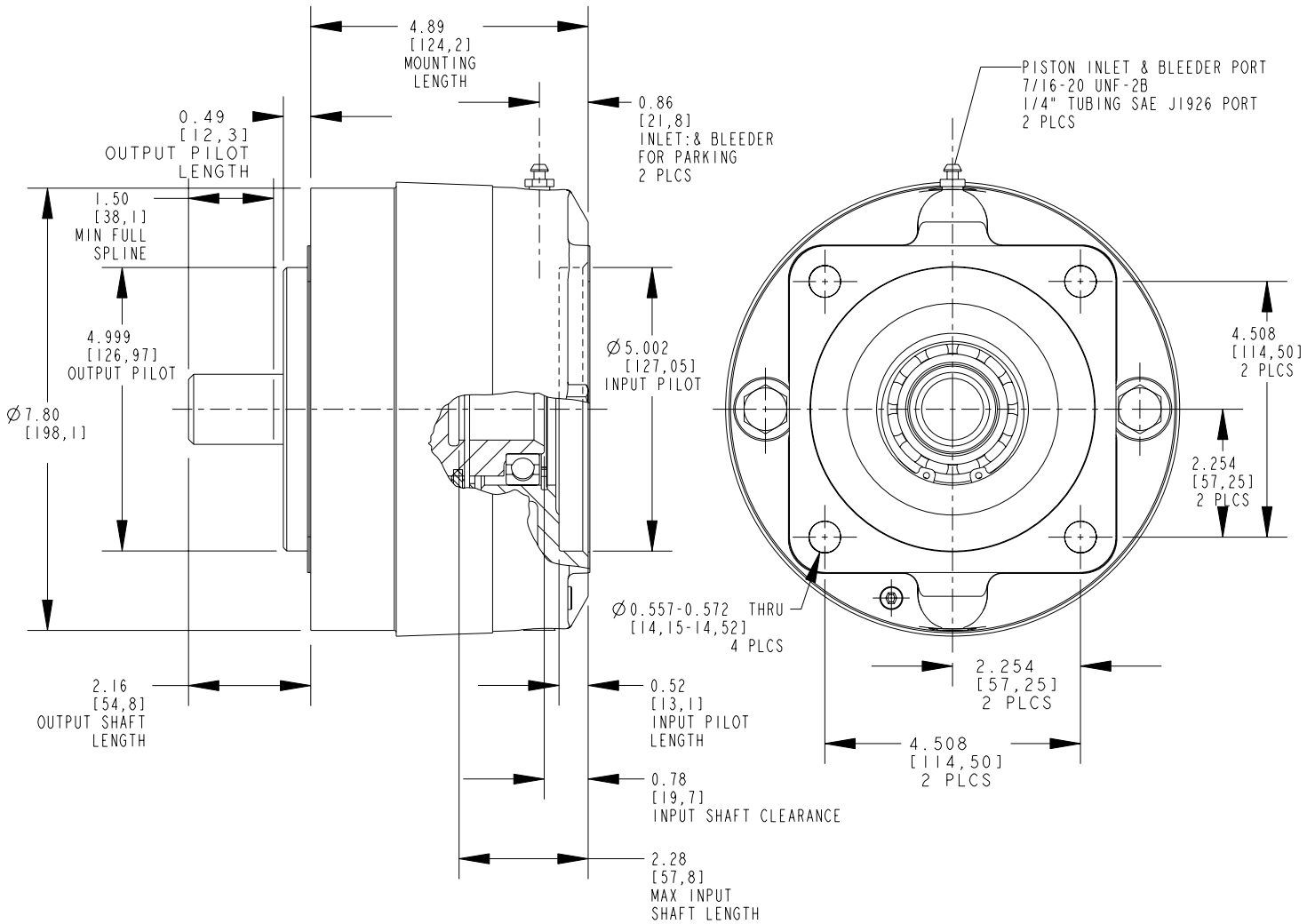
1. BALL BEARING CONFIGURATIONS VARIES. SOME BRAKES DO NOT HAVE A BEARING. SOME ONLY HAVE ONE BEARING (SEE CUTAWAY VIEW FOR DETAILS). BEARINGS ARE NORMALLY PRESSED ONTO THE SHAFT AND SLIP FIT TO THE HOUSING. WHENEVER YOU PRESS A BEARING ONTO A SHAFT. ALWAYS PRESS ON THE INNER RACE ONLY.
2. SPRING DESIGN, CONFIGURATION, AND ORIENTATION VARIES. (SEE CUTAWAY VIEW FOR DETAILS).
3. FILL & DRAIN PLUGS ARE AVAILABLE ONLY ON WET BRAKE MODELS. USE THESE PLUGS FOR FILLING BRAKE CAVITY WITH OIL. (SEE SERVICE NOTES FOR INSTRUCTIONS ON OIL FILL PROCEDURES).
4. LIP SEAL POSITION AND ORIENTATION VARIES. (SEE CUTAWAY VIEW AND SERVICE NOTES FOR DETAILS).
5. MOUNTING GASKETS ARE USED FOR SEALING BETWEEN THE BRAKE AND ITS MATING COMPONENTS. MANY APPLICATIONS USE AN O-RING TO SEAL THIS FACE INSTEAD OF USING THE GASKET. CONSULT THE EQUIPMENT MANUFACTURER IF YOU ARE IN QUESTION AS TO YOUR CONFIGURATION.
6. PRESSURE RELIEF VALVE. SOME DRY BRAKES USE A LOW PRESSURE RELIEF VALVE TO LET OIL OUT OF THE BRAKE IN THE EVENT OF LEAKAGE. IN SOME APPLICATIONS, THE PORT FOR THIS VALVE IS PLUGGED OR DOES NOT EXIST. (SEE CUTAWAY VIEW FOR YOUR BRAKE'S DETAIL).
7. O-RING AND BACKUP RING ORIENTATION IS CRITICAL. O-RING SHOULD ALWAYS BE IN CONTACT WITH THE OIL. THE BACKUP RING SUPPORTS THE O-RING AT HIGH PRESSURE. IT SHOULD ALWAYS BE PLACED BEHIND THE O-RING IN THE O-RING GROOVE, ON THE SIDE OPPOSITE OF THE PRESSURIZED OIL.
8. NOTES ON STACK, PRIMARY DISC IS ALWAYS THE DISC DIRECTLY CONTACTING THE SPRINGS. TORQUE PINS GO THROUGH THE SLOTS IN THE STATIONARY DISC AND PRIMARY DISCS. THE NUMBERS OF DISCS AND THEIR ORIENTATION VARIES. (SEE CUTAWAY VIEW FOR DETAILS). IT IS IMPORTANT THAT THE STACK IS CONFIGURATED CORRECTLY FOR YOUR APPLICATION OR BRAKE FUNCTION MAY BE COMPROMISED.
9. SNAP RING CONFIGURATION VARIES. (SEE CUTAWAY VIEW FOR DETAILS).

FILE: 8001 STD M/D  
CURRENT REV: ECO11481 REV A

# 75633

## SAE "C" TO SAE "C"

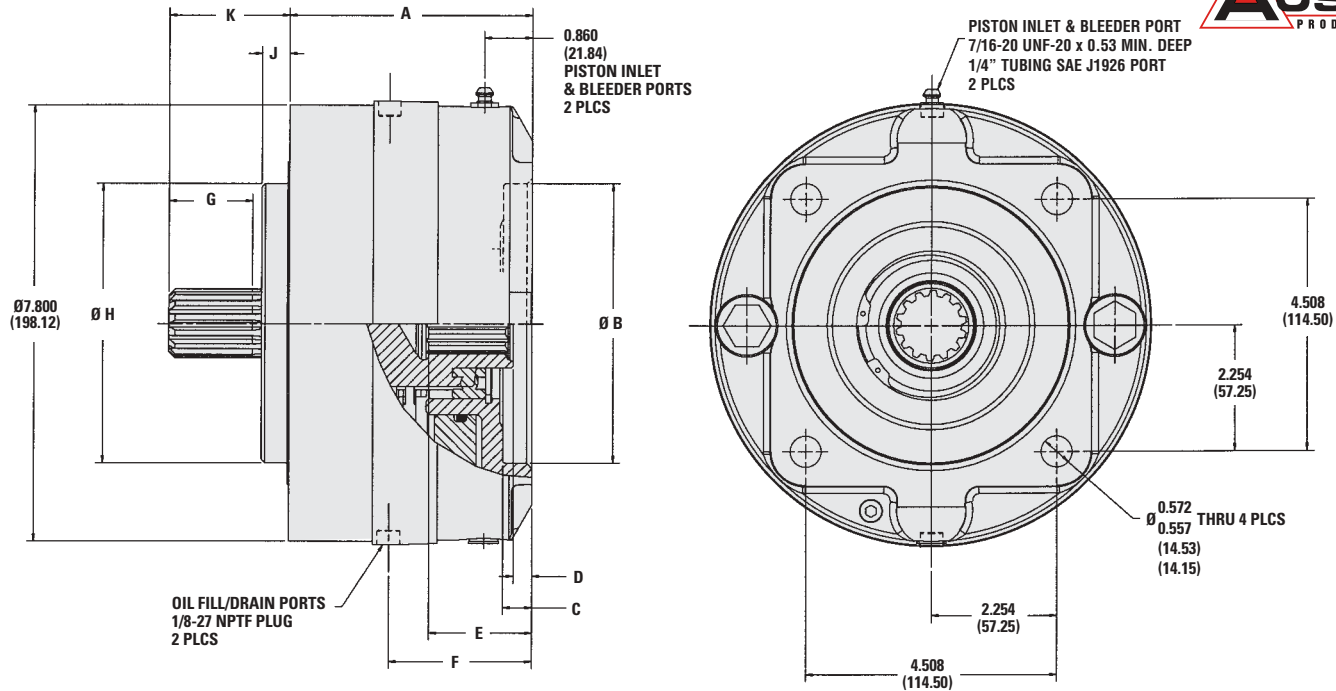
# DRY



RATED TORQUE	9000 (1017)
FULL RELEASE PRESSURE	230 (16)
INPUT SPLINE (INTERNAL)	14T 12/24 ANSI B92.1 SIDE FIT 30° PRESSURE ANGLE
OUTPUT SPLINE (EXTERNAL)	14T 12/24 ANSI B92.1 SIDE FIT 30° PRESSURE ANGLE
O-RING SERVICE KIT	PK-931
STACK SERVICE KIT	PK-932
BEARING SERVICE KIT	PK-933
GASKET SERVICE KIT	PK-679

- \* UNITS: LENGTH, DIAMETER = IN (mm), PRESSURE = PSI (BAR), TORQUE = LBS IN (Nm)
- \* MAX OPERATING PRESSURE FOR PARKING IS 3000 PSI (207 BAR).
- \* PRESSURE SPIKES OR SURGES ARE NOT TO EXCEED 4000 PSI (276 BAR).
- \* MAXIMUM HORIZONTAL OPERATING SPEED IS 3000 RPM.
- \* FOR VERTICAL APPLICATION, CONTACT AUSCO FOR MAX SPEED DETAILS.
- \* REVIEW IMPORTANT NOTES ON GENERAL INFORMATION.

# SAE 'C' Mount – WET



DESCRIPTION	76263	76264	75626	75627	75629	75628	76208
Rated Torque	2200 (249)	3300 (373)	4000 (452)	5400 (610)	7200 (814)	9000 (1017)	12500 (1412)
Full Release Pressure	120 (8)	155 (11)	120 (8)	150 (10)	190 (13)	230 (16)	230 (16)
Input Spline (Internal)	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA
Output Spline (External)	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA	14T 12/24 ANSI B92.1 Side Fit 30° PA
A-Mounting Length	3.792 (96.32)	3.792 (96.32)	4.349 (110.46)	4.349 (110.46)	4.349 (110.46)	4.349 (110.46)	4.730 (120.14)
B-Input Pilot Diameter	5.002 (127.05)	5.002 (127.05)	5.002 (127.05)	5.002 (127.05)	5.002 (127.05)	5.002 (127.05)	5.002 (127.05)
C-Input Pilot Length	0.515 (13.08)	0.515 (13.08)	0.515 (13.08)	0.515 (13.08)	0.515 (13.08)	0.515 (13.08)	0.515 (13.08)
D-Input Shaft Clearance	0.780 (19.81)	0.780 (19.81)	0.780 (19.81)	0.780 (19.81)	0.780 (19.81)	0.780 (19.81)	0.780 (19.81)
E-Max Input Shaft Length	2.280 (57.91)	2.280 (57.91)	2.280 (57.91)	2.280 (57.91)	2.280 (57.91)	2.280 (57.91)	2.280 (57.91)
F-Fill/Drain Plug Locations	2.500 (63.50)	2.500 (63.50)	2.559 (65.00)	2.559 (65.00)	2.559 (65.00)	2.559 (65.00)	2.940 (74.68)
G-Min Full Spline Length	1.500 (38.10)	1.500 (38.10)	1.500 (38.10)	1.500 (38.10)	1.500 (38.10)	1.500 (38.10)	1.500 (38.10)
H-Output Pilot Diameter	4.999 (126.97)	4.999 (126.97)	4.999 (126.97)	4.999 (126.97)	4.999 (126.97)	4.999 (126.97)	4.999 (126.97)
J-Output Pilot Length	0.490 (12.45)	0.490 (12.45)	0.490 (12.45)	0.490 (12.45)	0.490 (12.45)	0.490 (12.45)	0.490 (12.45)
K-Output Shaft Length	2.160 (54.86)	2.160 (54.86)	2.160 (54.86)	2.160 (54.86)	2.160 (54.86)	2.160 (54.86)	2.160 (54.86)
Oil Fill Volume Horizontal (ml)	100	100	150	150	150	150	200
Oil Fill Volume Vertical (ml)	250	250	300	300	300	300	350
O-Ring Service Kit	PK-931	PK-931	PK-1368	PK-1368	PK-1368	PK-1368	PK-1368
Stack Service Kit	PK-938	PK-938	PK-1370	PK-1370	PK-1370	PK-1370	PK-1369
Bearing Service Kit	PK-933	PK-933	PK-933	PK-933	PK-933	PK-933	PK-933
Gasket Service Kit	PK-679	PK-679	PK-679	PK-679	PK-679	PK-679	PK-679

- Units: length/diameter = in (mm), pressure = psi (bar), torque = lbs in (Nm)
- Maximum operating pressure is 3,000 psi. (207 bar). Pressure spikes or surges not to exceed 4,000 psi. (276 bar).
- Brake cavity cooling oil pressure not to exceed 15 psi. (1 bar).
- Maximum brake speed is 5,000 rpm.