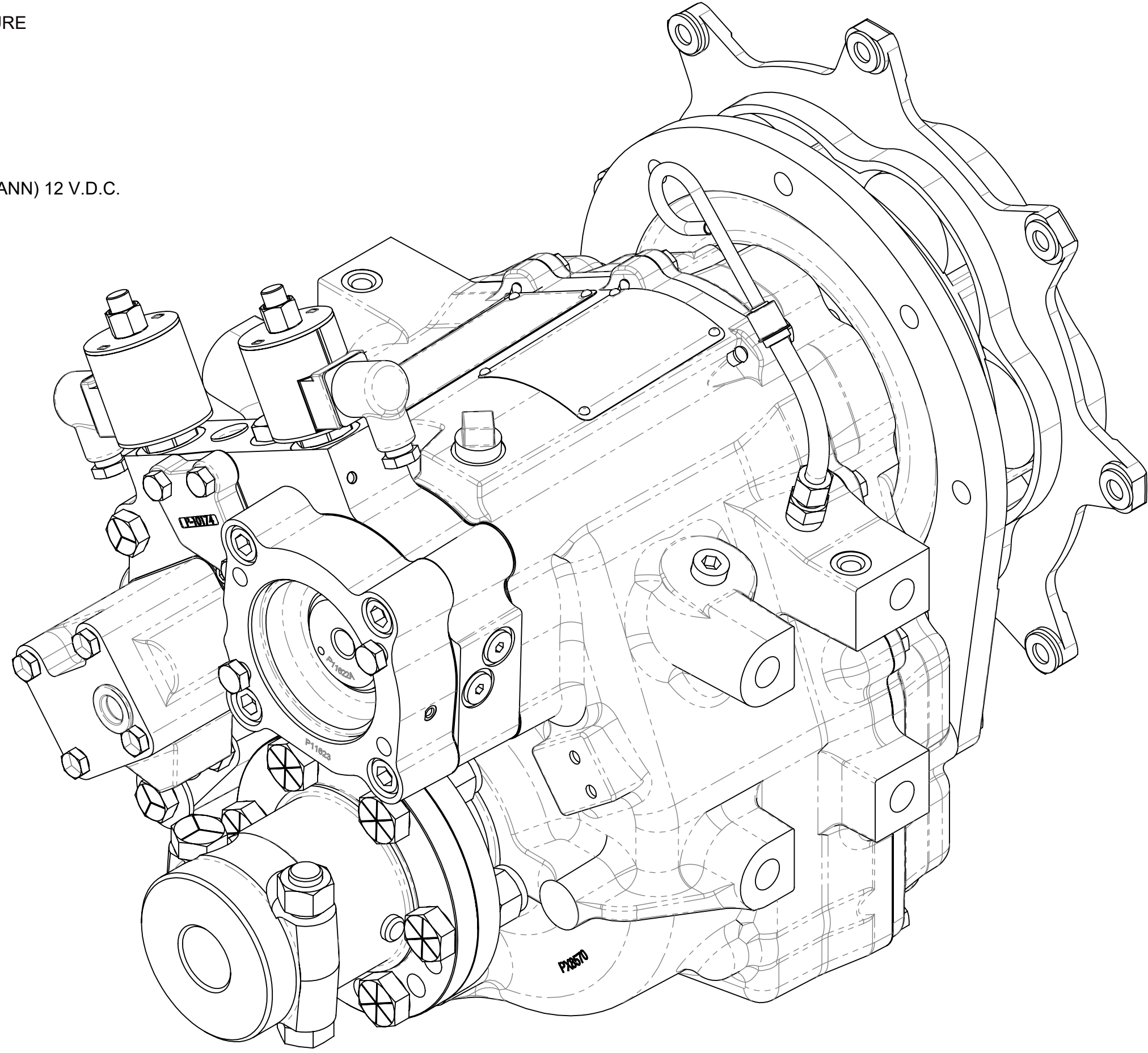
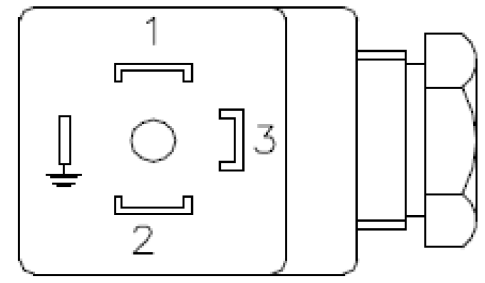


- 1 INPUT GROUP MOUNTING FACE  
2 PTO GROUP MOUNTING FACE  
3 LEFT BRACKET MOUNTING FACE  
4 RIGHT BRACKET MOUNTING FACE  
5 PUMP MOUNTING FACE

NOTES:

- A. MANUAL OVERRIDE VALVE OPERATION
1. THE MANUAL OVERRIDE FEATURE FOR THE PRIMARY AND SECONDARY SOLENOIDS MUST NEVER BE ENGAGED SIMULTANEOUSLY.
  2. THE MANUAL OVERRIDE BUTTON FOR BOTH THE PRIMARY AND SECONDARY SOLENOIDS MUST BE IN THE NEUTRAL POSITION TO OPERATE EITHER SOLENOID ELECTRICALLY TO ENGAGE PRIMARY CLUTCH USING THE MANUAL OVERRIDE
  3. TO REMOVE PROTECTIVE CAP FROM THE PRIMARY SOLENOID  
a. REMOVE PROTECTIVE CAP FROM THE PRIMARY SOLENOID  
b. PUSH BUTTON DOWN  
c. CONTINUE TO PUSH BUTTON AND ROTATE CLOCKWISE 180°  
d. RELEASE BUTTON
  4. TO ENGAGE SECONDARY CLUTCH USING THE MANUAL OVERRIDE  
a. REMOVE PROTECTIVE CAP FROM THE SECONDARY SOLENOID  
b. PUSH BUTTON DOWN  
c. CONTINUE TO PUSH BUTTON AND ROTATE CLOCKWISE 180°  
d. RELEASE BUTTON
  5. TO RETURN EITHER OF THE PRIMARY OR SECONDARY MANUAL OVERRIDE TO THE NEUTRAL POSITION:  
a. PUSH BUTTON DOWN  
b. CONTINUE TO PUSH BUTTON AND ROTATE COUNTERCLOCKWISE 180°  
c. RELEASE BUTTON  
d. INSTALL PROTECTIVE CAP OVER THE MANUAL OVERRIDE BUTTON
- B. REFERENCE S830 FOR TWIN DISC REQUIREMENTS FOR PRESSURE AND TEMPERATURE ALARM LEVELS.
- C. UNLESS OTHERWISE SPECIFIED, FASTENER TORQUE VALUES PER S574 STANDARD.
- D. ALL POINTS AVAILABLE FOR TESTING ARE CODED
- E. VALVE SPECIFICATION:
- SOLENOID CONNECTOR ISO STD PER DIN 43650 (HIRSHMANN) 12 V.D.C.
  - AMPERAGE DRAW AT 26°C (70°F): 1.4 AMPS
  - OPTIONAL 24 V.D.C. SOLENOID
  - AMPERAGE DRAW AT 26°C (70°F): 0.7 AMPS
  - OPERATING PRESSURE: 20700 kPa
  - FLOW: 22.0 lpm
  - OPERATING TEMPERATURE: -40°C TO 100 °C
  - WIRING DIAGRAM
  - TERMINAL 1: + VDC
  - TERMINAL 2: 0 VDC
  - TERMINAL 3: GROUND



3/8-16 UNC THREAD, 33.0 DEEP WITH Ø10.3mm C'BORE 7.9 DEEP.  
2 HOLES FOR EYEBOLTS  
THESE BOLTS MAY BE USED FOR LIFTING MARINE TRANSMISSION ONLY.

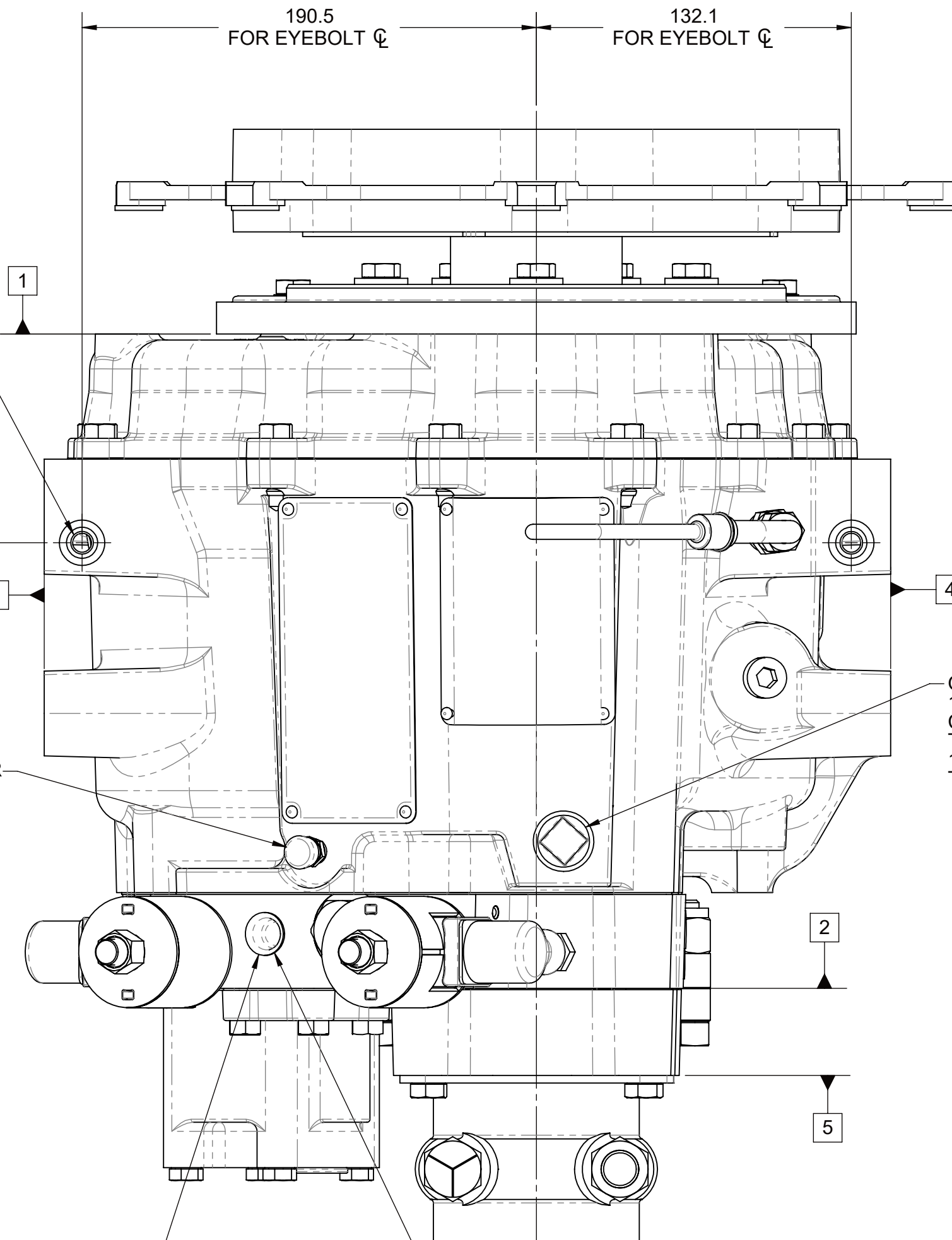
Ø7.5  
FOR EYEBOLT  
2 PLACES

BREATHER

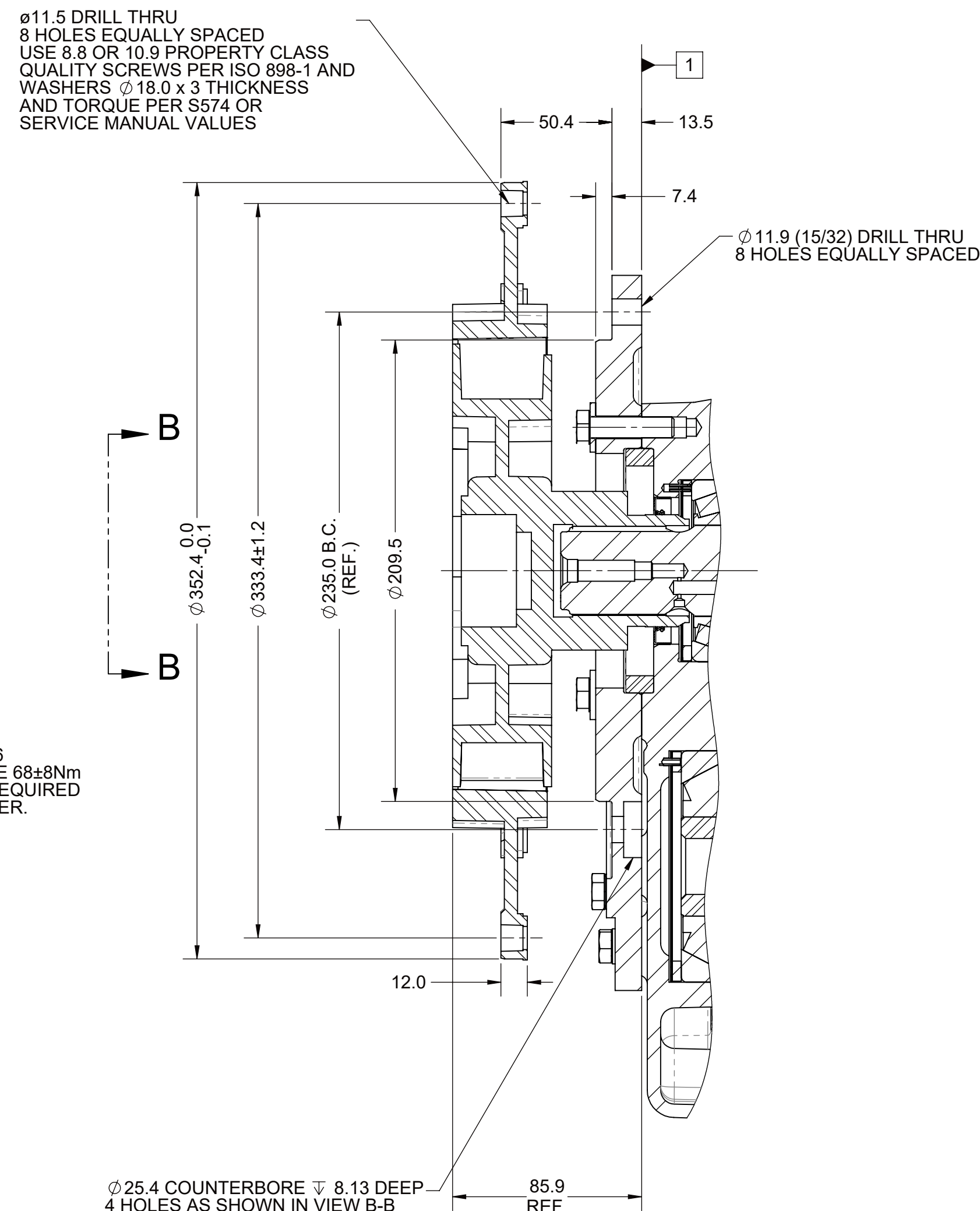
OIL INLET FROM HEAT EXCHANGER  
3/8-18 NPTF THREAD DRYSEAL  
CONFORMS TO J1926  
REMOVE THREAD PROTECTOR BEFORE USE  
TIGHTENING TORQUE 37±4Nm



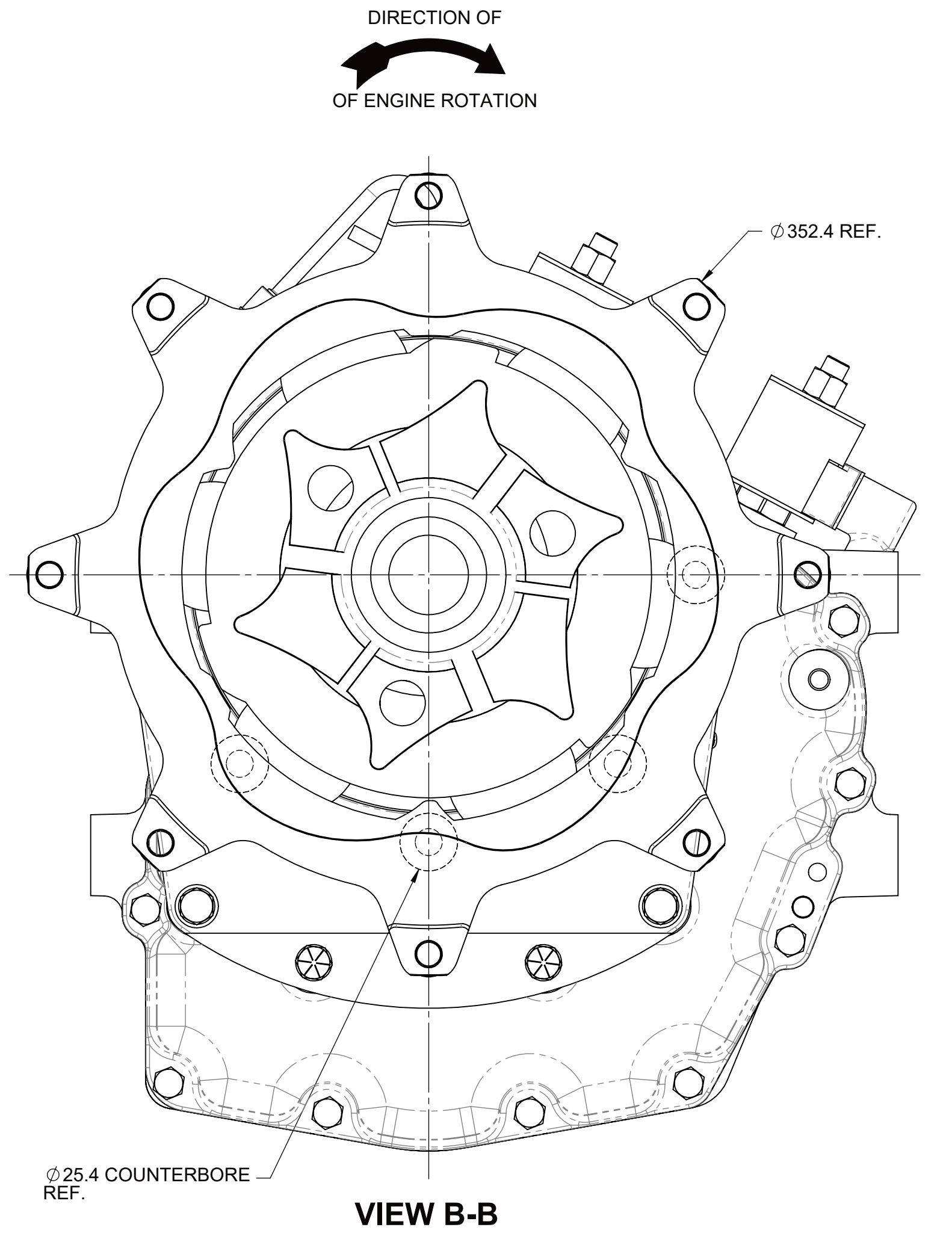
MAIN PRESSURE PORT  
3/8-18 NPTF THREAD (DRYSEAL)  
CONNECT OIL PRESSURE  
GAUGE LINE HERE  
USE TEE ADAPTOR  
TIGHTENING TORQUE 37±4Nm



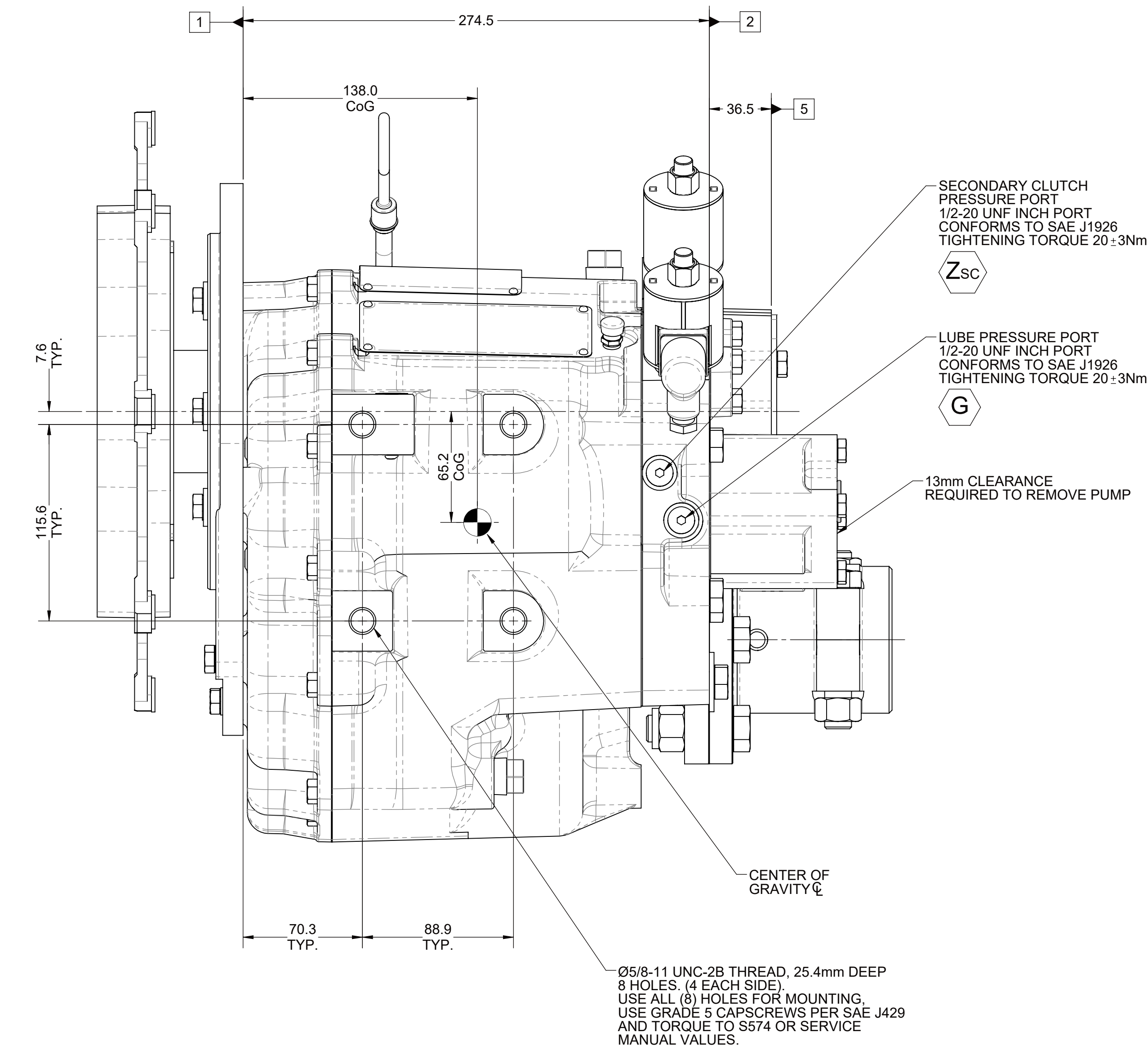
OIL FILLER HOLE  
1/2-14 NPTF THREAD  
CONFORMS TO J1926  
TIGHTENING TORQUE 68±8Nm  
15mm CLEARANCE REQUIRED  
TO REMOVE OIL FILLER.



SECTION A-A



VIEW B-B



SECONDARY CLUTCH  
PRESSURE PORT  
1/2-20 UNF INCH PORT  
CONFORMS TO SAE J1926  
TIGHTENING TORQUE 20 : 3Nm

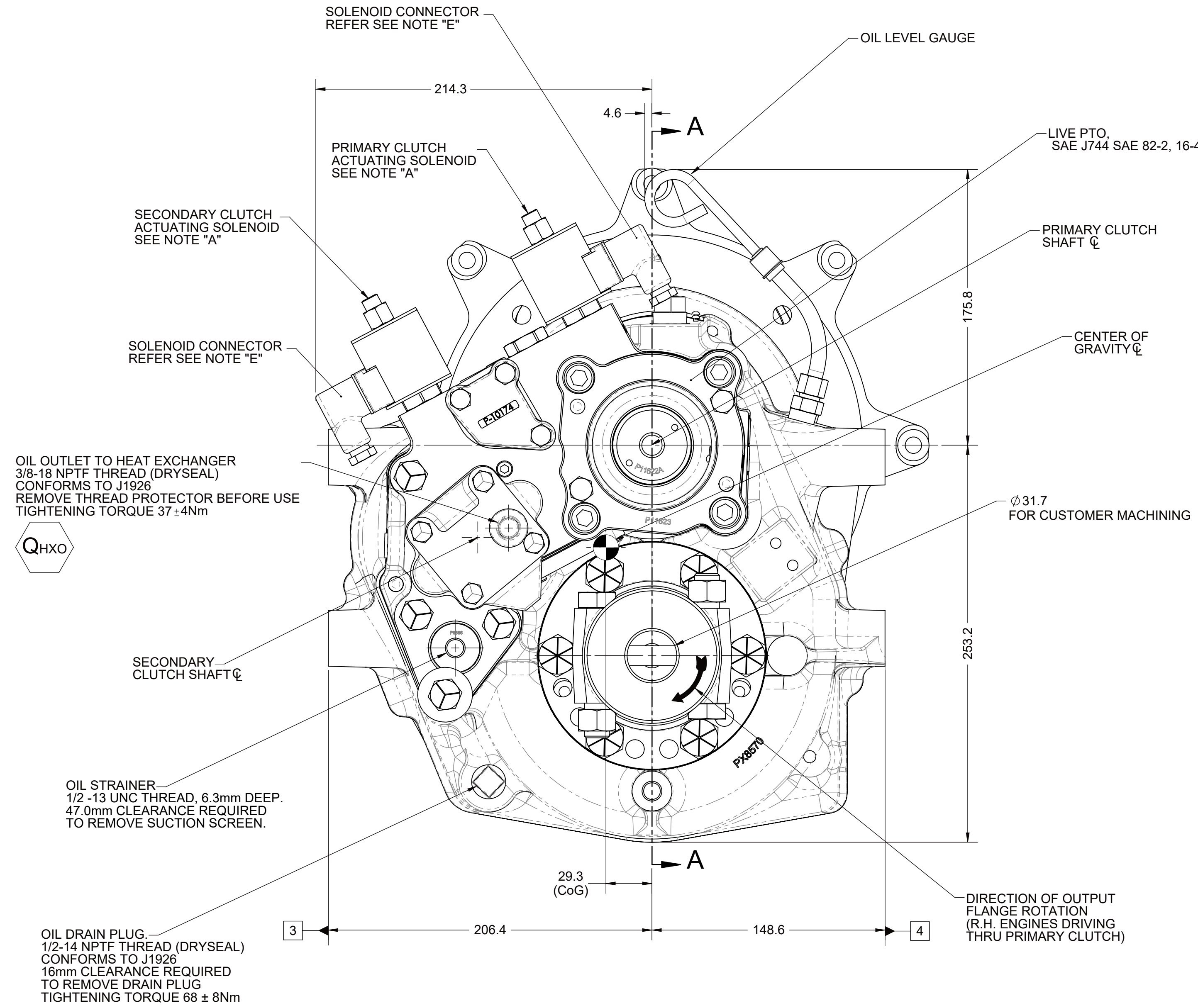
Zsc

LUBE PRESSURE PORT  
1/2-20 UNF INCH PORT  
CONFORMS TO SAE J1926  
TIGHTENING TORQUE 20 : 3Nm

G

13mm CLEARANCE  
REQUIRED TO REMOVE PUMP

Ø5/8-11 UNC-2B THREAD, 25.4mm DEEP  
8 HOLES, (4 EACH SIDE)  
USE ALL (8) HOLES FOR MOUNTING.  
USE GRADE 5 CAPSCREWS PER SAE J429  
AND TORQUE TO S574 OR SERVICE  
MANUAL VALUES.



SECONDARY CLUTCH  
ACTUATING SOLENOID  
SEE NOTE "A"

SOLENOID CONNECTOR  
REFER SEE NOTE "E"

OIL OUTLET TO HEAT EXCHANGER  
3/8-18 NPTF THREAD (DRYSEAL)  
CONFORMS TO J1926  
REMOVE THREAD PROTECTOR BEFORE USE  
TIGHTENING TORQUE 37 : 4Nm

QHXO

SECONDARY CLUTCH  
SHAFT

OIL STRAINER  
1/2-13 UNC THREAD, 6.3mm DEEP.  
47.0mm CLEARANCE REQUIRED  
TO REMOVE SUCTION SCREEN.

OIL DRAIN PLUG  
1/2-14 NPTF THREAD (DRYSEAL)  
CONFORMS TO J1926  
16mm CLEARANCE REQUIRED  
TO REMOVE DRAIN PLUG  
TIGHTENING TORQUE 68 ± 8Nm

PRIMARY CLUTCH  
PRESSURE PORT  
1/2-20 UNF INCH PORT  
CONFORMS TO SAE J1926  
TIGHTENING TORQUE 20 : 3Nm

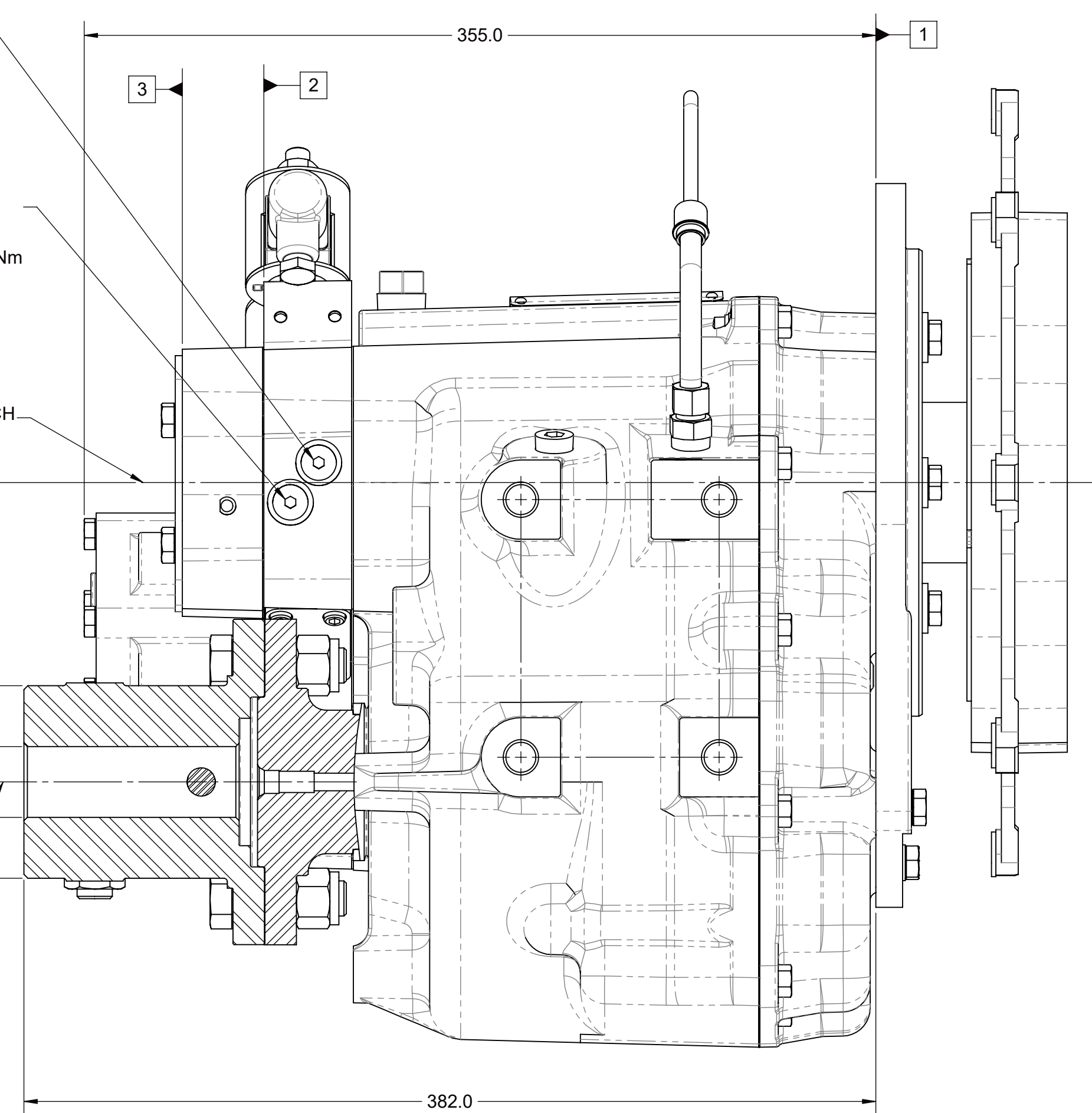
Zpc

LUBE PRESSURE PORT  
1/2-20 UNF INCH PORT  
CONFORMS TO SAE J1926  
TIGHTENING TORQUE 20 : 3Nm

G

PRIMARY CLUTCH  
SHAFT

OUTPUT SHAFT



EQUIPMENT SHOWN:  
- MG-5050SC PER PX12700 ASSEMBLY  
- SAE 290 - CF-R-136 COUPLING WITH BORG WARNER ADAPTOR  
- ELECTRIC CONTROL VALVE  
- LIVE PTO, SAE J744 SAE 82-2, 16-4  
- PX8775A COMPANION FLANGE

FIRST USE ASSEMBLY: FIRST USE MODEL: SIMILAR TO:	WEIGHT: 99 kg	THIRD ANGLE PROJECTION	MATERIAL: HEAT TREAT:	DATE: 4/19/2017 SCALE: 1:2 DRAWN BY: DT CHECKED BY: DV	DESCRIPTION: INSTALLATION MG-5050SC	REVISIONS: REV. 1 OF 1	DATE: 07/25/2023	BY: A
METRIC				TWIN DISC, INCORPORATED		TWIN DISC		PX13021G
NOTES: THIS PRINT CONTAINS PROPRIETARY INFORMATION AND IS NOT TO BE USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF TWIN DISC, INCORPORATED.				ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES (DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS). GEOMETRIC TOLERANCING PER ASME Y14.5M-2018		APPROVED BY: DV		1025450W Rev. B