

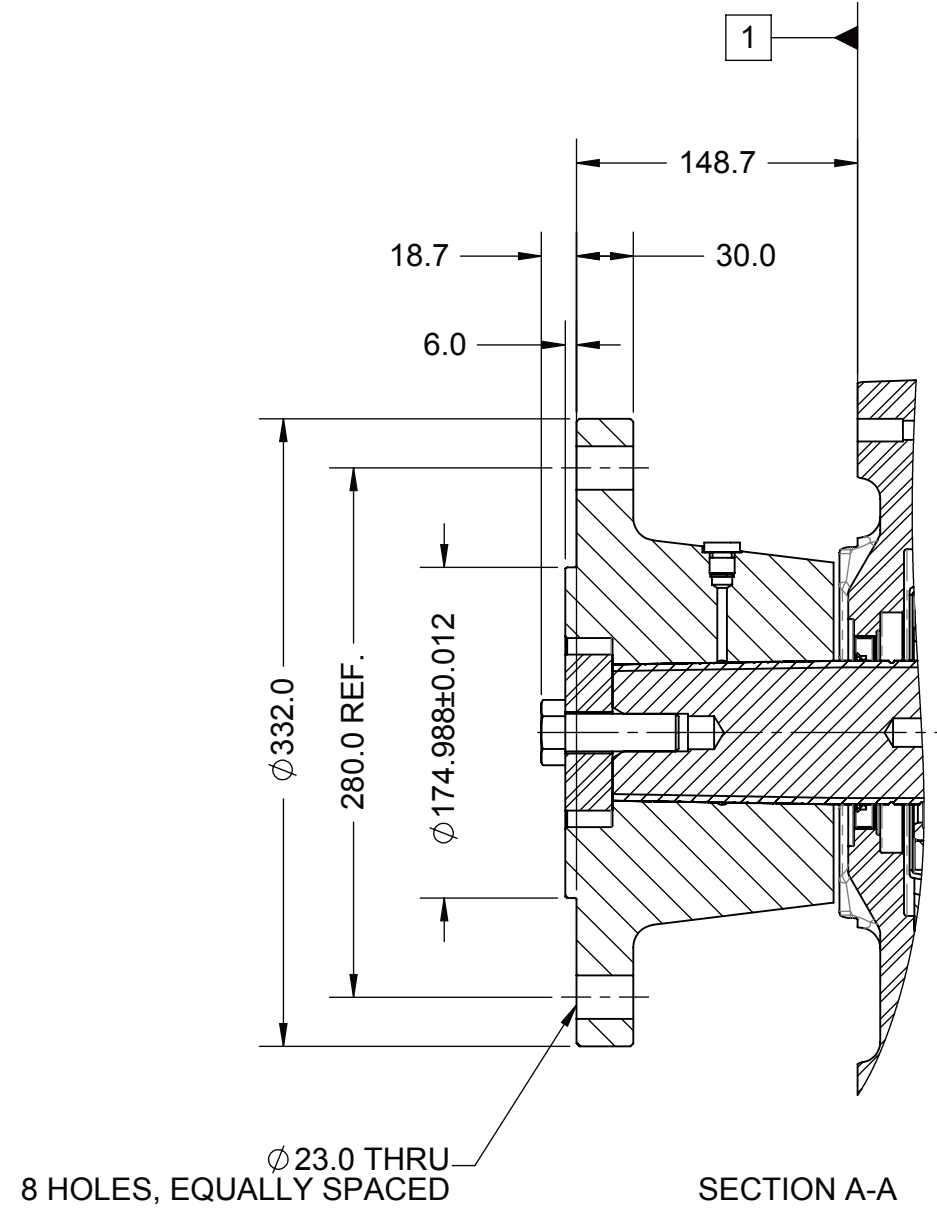
- 1 INPUT GROUP REFERENCE PLANE  
2 PTO ADAPTER MOUNTING FACE  
3 LEFT MOUNTING BRACKET FACE  
4 RIGHT MOUNTING BRACKET FACE  
5 LIVE PTO PUMP MOUNTING FACE

NOTES:

- A. PROPORTIONAL CONTROL VALVE OPERATION  
1. WARNING DO NOT CONNECT VALVE COIL DIRECTLY TO BATTERY/POWER SUPPLY VOLTAGE.  
2. OPERATION TO BE PERFORMED WITH ONLY TWIN DISC CONTROL SYSTEMS OR MODULES.
- B. MANUAL DIRECTIONAL CONTROL VALVE OPERATION  
1. WITH MANUAL DIRECTIONAL CONTROL VALVE IN CENTERED POSITION, PUSH TO ENGAGE PRIMARY CLUTCH.  
2. WITH MANUAL DIRECTIONAL CONTROL VALVE IN CENTERED POSITION, PULL TO ENGAGE SECONDARY CLUTCH.
- C. MANUAL DIRECTIONAL CONTROL VALVE MODE SWITCH  
1. SWITCH IS NORMALLY CLOSED WHEN MANUAL DIRECTIONAL CONTROL VALVE IS IN THE CENTERED POSITION AND OPEN WHEN LEVER IS ACTUATED FROM CENTERED POSITION.  
2. CURRENT = 20 AMP MAX.  
3. FOR WIRING SCHEMATIC, REFER TO CONTROL MODULE DRAWING.

NOTES:

ALL POINTS AVAILABLE FOR TESTING ARE CODED



EYEBOLTS FOR LIFTING MARINE TRANSMISSION ONLY (2 EYEBOLTS, ONE EACH SIDE). EQUALIZE LOAD ON BOTH EYEBOLTS TO LIFT MARINE TRANSMISSION ONLY

ENGAGES SECONDARY SHAFT CLUTCH  
SEE NOTE "A"

WATER OUTLET FOR HEAT EXCHANGER  
M42x2.0 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 108±10 Nm

WATER INLET FOR HEAT EXCHANGER  
M42x2.0 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 108±10 Nm

ENGAGES PRIMARY SHAFT CLUTCH  
SEE NOTE "A"

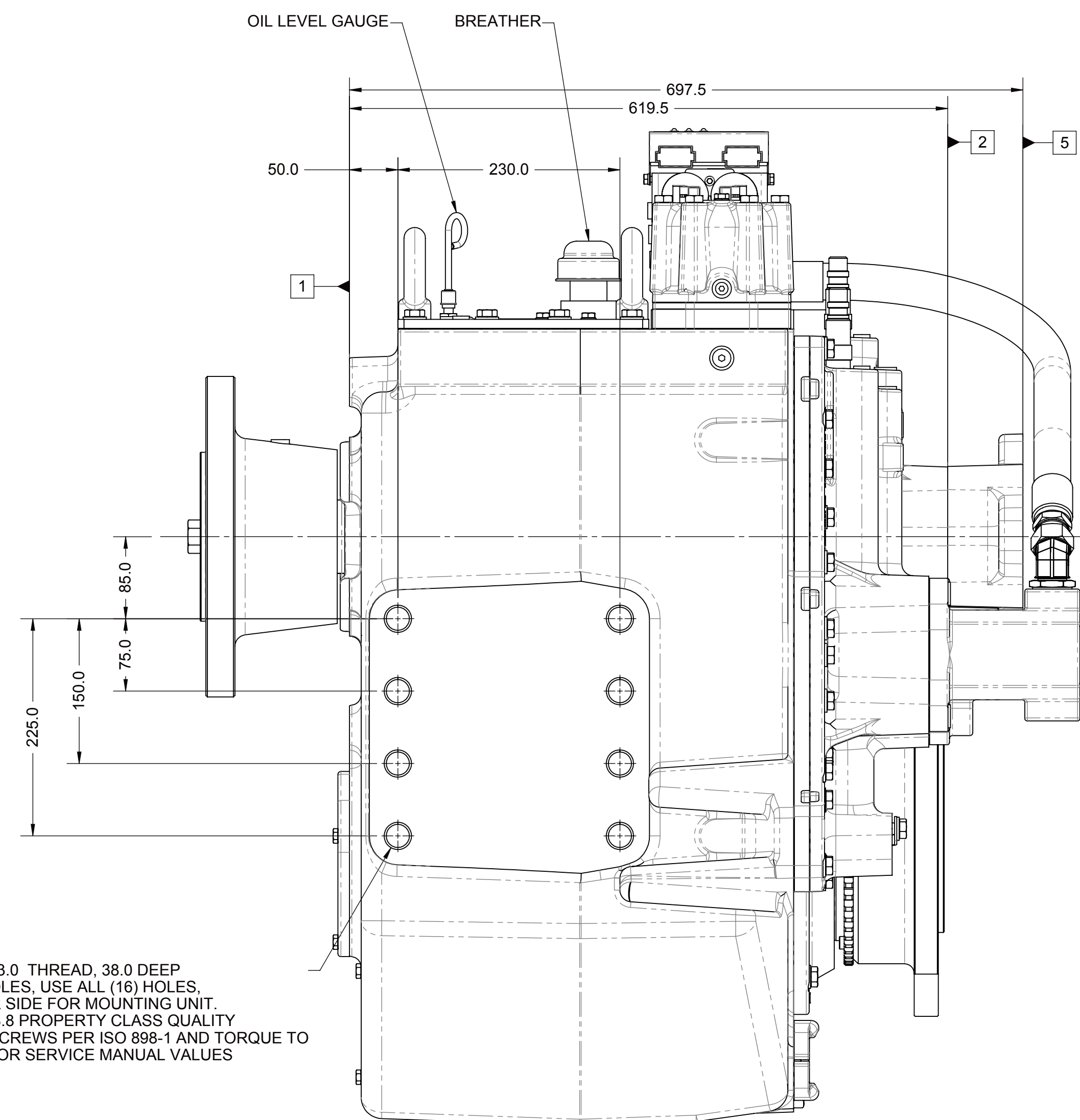
SECONDARY CLUTCH (SECOND) PRESSURE PORT  
M12x1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 16±1.5 Nm  
ZSc2

SECONDARY CLUTCH (FIRST) PRESSURE PORT  
M14x 1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 20±2 Nm  
ZSc1

MAIN PRESSURE PORT  
M12x1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 16±1.5 Nm  
CONNECT OIL PRESSURE GAUGE LINE HERE.  
X

PRIMARY CLUTCH (SECOND) PRESSURE PORT  
M12x1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 16±1.5 Nm  
ZPc2

LUBE PRESSURE PORT  
M18x1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 34±3 Nm  
G TAc



M24X3.0 THREAD, 38.0 DEEP  
16 HOLES, USE ALL (16) HOLES,  
8 PER SIDE FOR MOUNTING UNIT.  
USE 8.8 PROPERTY CLASS QUALITY  
CAPSCREWS PER ISO 898-1 AND TORQUE TO  
S574 OR SERVICE MANUAL VALUES

TEMPERATURE PORT  
M14x1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 20±2 Nm  
TAc

LUBE (AUXILIARY)  
M27x2.0 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 75±7 Nm  
QDP

PRIMARY CLUTCH (FIRST) PRESSURE PORT  
M14x 1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 20±2 Nm  
ZPc1

TEMPERATURE PORT  
M14x1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 20±2 Nm  
Tbc

LUBE (AUXILIARY)  
M16x1.5 METRIC PORT  
CONFORMS TO ISO 6149  
(AUXILIARY LUBE SUPPLY  
INLET. SEE HYDRAULIC  
DIAGRAM.)  
TIGHTENING TORQUE 24±2 Nm  
QTP

SAE J744 127-2/4, 32-4 OR 38-4  
LIVE PTO. REFERENCE 1017177  
FOR ADDITIONAL INFORMATION.

PRIMARY CLUTCH SHAFT

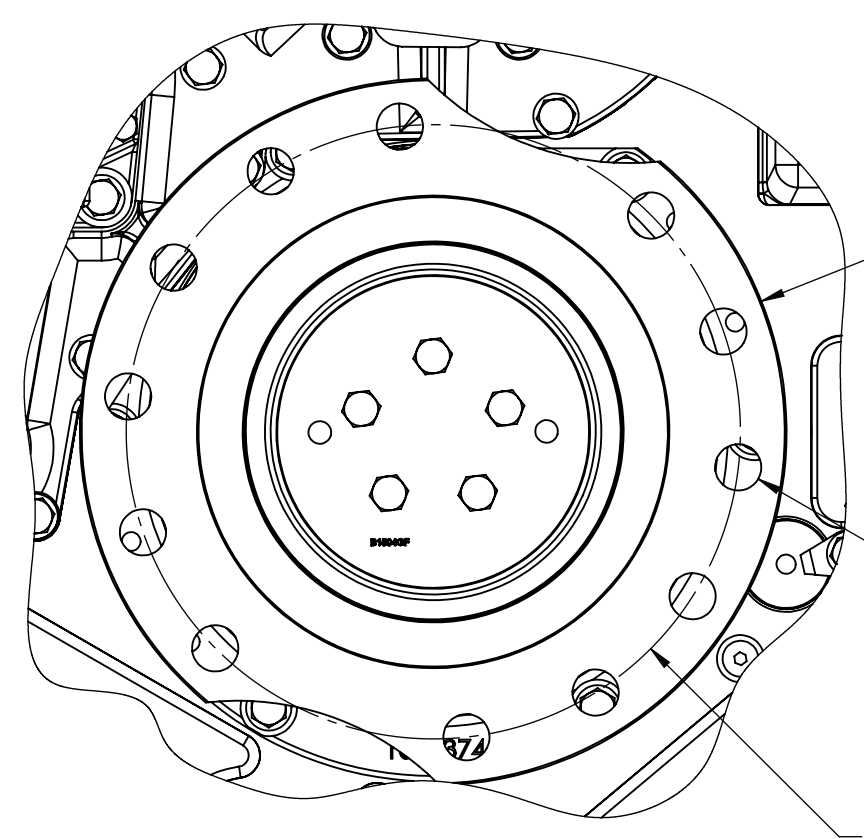
OIL STRAINER  
FOR USE WITH OPTIONAL  
TRAILING PUMP

DIRECTION OF OUTPUT  
FLANGE ROTATION  
(R.H. ENGINES DRIVING  
THRU PRIMARY CLUTCH)

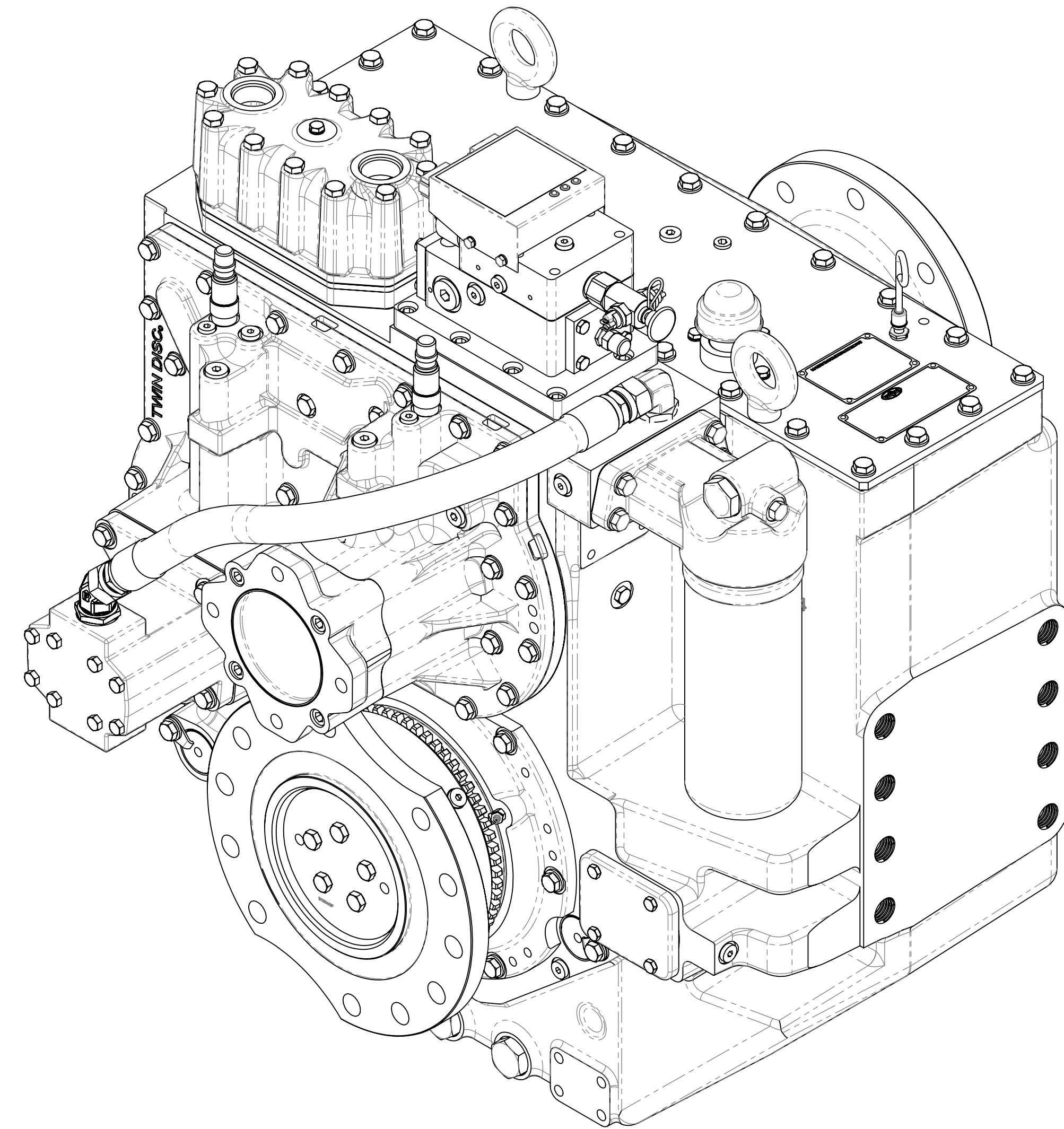
TEMPERATURE PORT  
M14 X 1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 20±2 Nm  
FOR USE WITH OPTIONAL  
TRAILING PUMP  
TTP

AUXILIARY LUBE SUCTION PORT  
FLANGE SIZE 38  
PER ISO 6162 (CODE 61)  
M12x1.75, 33.0 DEEP

OIL DRAIN  
M33x2.0 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 88±8 Nm  
15 mm CLEARANCE REQUIRED  
TO REMOVE PLUG



VIEW B-B





OIL FILTER  
24 mm CLEARANCE REQUIRED  
TO REMOVE FILTER CANISTER.  
TIGHTEN FILTER AN ADDITIONAL  
1/2 OF TURN AFTER FILTER  
GASKET MAKES CONTACT

PRESSURE PORT  
M14 X 1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 20±2 Nm  
FOR USE WITH OPTIONAL  
TRAILING PUMP  
GTP

APPLICABLE MODELS:  
MGX-6690SC PER 1020674  
MGX-6848SC PER-1020675

EQUIPMENT SHOWN:  
- 1017769A FREESTANDING INPUT HUB  
- 1020941L GP VALVE WITH EC050 CONTROL MODULE  
- RAW WATER HEAT EXCHANGER  
- SAE J744 127-2/4, 38-4 OR 32-4 LIVE PTO

|   |                     |   |                           |  |                       |   |
|---|---------------------|---|---------------------------|--|-----------------------|---|
| FIRST USE ASSEMBLY:<br>FIRST USE MODEL:<br>SIMILAR TO:  | WEIGHT:<br>kg<br>lb |  | THIRD ANGLE<br>PROJECTION | MATERIAL:<br><br>HEAT TREAT:   | DATE:<br>03/12/2013   |  |
| <b>METRIC</b>   |                     |   |                           | SCALE:<br>1:4  | RACINE, WI 53403, USA |   |
| UNLESS OTHERWISE SPECIFIED<br>MACHINED DIMENSIONS ARE IN<br>MILLIMETERS<br>FRACTIONS<br>DECIMALS<br>TOLERANCES<br>ALUMINUM<br>GENERAL TOLERANCES<br>FINISHES  |                     |   |                           | DESCRIPTION:<br><br>INSTALLATION<br>MGX-6690SC/MGX-6848SC                | 1025142H              |   |
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|   |                     |   |                           | SHEET 1 OF 1   |                       |   |