

- 1

INPUT GROUP REFERENCE PLANE
- 2

PTO ADAPTER MOUNTING FACE
- 3

LEFT MOUNTING BRACKET FACE
- 4

RIGHT MOUNTING BRACKET FACE
- 5

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 AMPS MAX.
3. FOR WIRING SCHEMATIC, REFER TO EC050 CONTROL MODULE DRAWING.
- D. REFERENCE S930 FOR TWIN DISC REQUIREMENTS FOR PRESSURE AND TEMPERATURE ALARM LEVELS.
- E. ALL POINTS AVAILABLE FOR TESTING ARE CODED

Ø 13.5 THRU (SCREWS ARE CUSTOMER SUPPLIED)
16 HOLES EQUALLY SPACED

SAE#0 HOUSIN MOUNTING FACE
MUST CONFORM TO SAE J617

SECTION B-B

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

OIL OUT TO HEAT EXCHANGER
M33 X 2.0 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 88 ± 8 Nm

OIL IN FROM HEAT EXCHANGER
M33 X 2.0 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 88 ± 8 Nm

SECONDARY CLUTCH (FIRST)
PRESSURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 20 ± 2 Nm

SECONDARY CLUTCH (SECOND)
PRESSURE PORT
M12 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 16 ± 1.5 Nm

TEMPERATURE AND
LUBE PRESSURE PORT
M18 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 34 ± 3 Nm

MAIN PRESSURE PORT
M12X1.5 METRIC PORT
CONFORMS TO ISO 6149
CONNECT OIL PRESSURE GAUGE LINE HERE.
TIGHTENING TORQUE 16 ± 1.5 Nm

PRIMARY CLUTCH (SECOND)
PRESSURE PORT
M12 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 16 ± 1.5 Nm

PRIMARY CLUTCH (FIRST)
PRESSURE PORT
M12 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 16 ± 1.5 Nm

MAIN PRESSURE PORT
M14x1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 20 ± 2 Nm

TEMPERATURE AND
LUBE PRESSURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
AFTER HEAT EXCHANGER
TIGHTENING TORQUE 20 ± 2 Nm

MAIN PRESSURE PORT
M14x1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 20 ± 2 Nm

LUBE PORT (AUXILIARY)
M27 X 2.0 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 75 ± 7 Nm

SECONDARY CLUTCH (FIRST)
PRESSURE PORT
M12 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 16 ± 1.5 Nm

PRIMARY CLUTCH (FIRST)
PRESSURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 20 ± 2 Nm

TEMPERATURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
BEFORE HEAT EXCHANGER
TIGHTENING TORQUE 20 ± 2 Nm

MAIN PRESSURE PORT
M14x1.5 METRIC PORT
CONFORMS TO ISO 6149
FOR USE WITH OPTIONAL
HYDRAULIC PTO
TIGHTENING TORQUE 20 ± 2 Nm

INPUT SPEED SENSOR PORT
3/8-18 UNF THREAD
TARGET WHEEL- 61 TEETH

PRIMARY CLUTCH SHAFT

OIL LEVEL GAUGE

R.H. ENGINE ROTATION
DRIVEN THRU PRIMARY

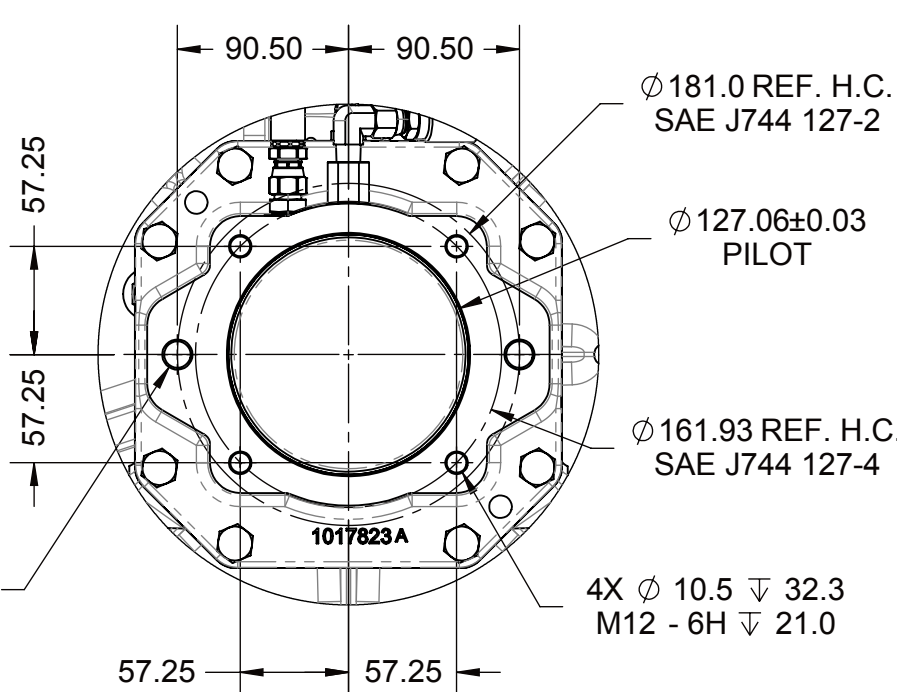
Ø 325.0
B.C.

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B.C.

OIL DRAIN
M33 X 2.0 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 88 ± 8 Nm
15 mm CLEARANE REQUIRED
TO REMOVE PLUG

AUXILIARY LUBE SUCTION PORT
FLANGE SIZE 38 PER ISO 6162 (CODE 61)
M12X1.75 TAP, 33.0 DEEP



DETAIL A

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

1017820P HYDRAULIC PTO.
SEE DRAWING 1017820P
FOR ADDITIONAL
INFORMATION
AND LIMITATIONS.

GREASE FITTING

OUTPUT SPEED
SENSOR BRACKET
TARGET WHEEL- 60 TEETH

M24 X 3.0 TAP, 40.0 DEEP
20 HOLES (10 EACH SIDE)
USE ALL 20 HOLES FOR MOUNTING UNIT.
USE 8.9 PROPERTY CLASS CAPSCREWS
PER ISO 898-1 AND TORQUE TO S574 OR
SERVICE MANUAL VALUE.

EQUIPMENT SHOWN:
- MGX-5321DC PER 1022203C ASSEMBLY
- SAE#0 INPUT HOUSING
- GP VALVE WITH EC300 HARNESS
- DITCH PLATE FOR CUSTOMER SUPPLIED HEAT EXCHANGER
- SAE 127-2/4, 38-4 HYDRAULIC PTO
- STANDARD PUMP GROUP

FIRST USE ASSEMBLY 1022203C FIRST USE MODEL MGX-5321DC SIMILAR TO:	WEIGHT 1675 INCHES 1675 MM 1675	THIRD ANGLE PROJECTION	MATERIAL HEAT TREAT	DATE 11/4/2016 SCALE 1:4 DRAWN BY PM CHECKED BY JMF APPROVED BY JMF	DESCRIPTION INSTALLATION MGX-5321DC	SHEET 1 OF 1 A	REVISION 1
METRIC NOTES: THIS PRINT CONTAINS PROPRIETARY INFORMATION AND IS NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF TWIN DISC, INCORPORATED. TWIN DISC, INCORPORATED 1512 ALL ANGULAR TOLERANCES ±1° GEOMETRIC TOLERANCING PER ASME Y14.5M 2018							1026064M RACINE, WI 53403 - USA TWIN DISC