

- [1] INPUT GROUP MOUNTING FACE  
[2] PTO GROUP MOUNTING FACE  
[3] LEFT MOUNTING BRACKET FACE  
[4] RIGHT MOUNTING BRACKET FACE  
[5] HEAT EXCHANGER MOUNTING FACE

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 SYSTEM MODULES.

B. MANUAL DIRECTIONAL CONTROL VALVE OPERATION.  
1. WITH MANUAL DIRECTIONAL CONTROL VALVE IN CENTERED POSITION PULL TO ENGAGE SECONDARY CLUTCH.  
2. WITH MANUAL DIRECTIONAL CONTROL VALVE IN CENTERED POSITION PUSH TO ENGAGE PRIMARY CLUTCH.

C. MANUAL DIRECTIONAL CONTROL VALVE MODE SWITCH.  
1. SWITCH IS NORMALLY CLOSED WHEN MANUAL DIRECTIONAL CONTROL VALVE IS IN CENTERED POSITION AND OPEN WHEN LEVER IS ACTUATED FROM CENTERED POSITION.  
2. CURRENT = 20 AMP MAX.  
3. FOR WIRING SCHEMATIC REFER TO CONTROL DRAWING.

D. INPUT SPEED SENSOR.  
1. APPLY ANAEROBIC SEALANT (LOCTITE 242) TO SPEED SENSOR THREADS.  
2. ASSEMBLE SENSOR UNTIL CONTACTING THE GEAR TOOTH TIP AND THEN BACK OUT SENSOR "ONE" FULL TURN.  
3. USE JAM NUT TO SECURE THE SENSOR POSITION, TIGHTENING TORQUE 5 Nm.

E. OUTPUT SPEED SENSOR.  
1. APPLY ANAEROBIC SEALANT (LOCTITE 242) TO SPEED SENSOR THREADS.  
2. ASSEMBLE SENSOR UNTIL CONTACTING THE GEAR TOOTH TIP AND THEN BACK OUT SENSOR "TWO" FULL TURNS.  
3. USE JAM NUT TO SECURE THE SENSOR POSITION, TIGHTENING TORQUE 5 Nm.

F. UNLESS OTHERWISE SPECIFIED FASTENER TORQUE VALUES PER S574 STANDARD.

G. REFERENCE S930 FOR TWIN DISC REQUIREMENTS FOR PRESSURE AND TEMPERATURE ALARM LEVELS.

H. ALL POINTS AVAILABLE FOR TESTING CODED.

Ø13.0 THRU 8-HOLES EQUALLY SPACED  
USE 10.9 PROPERTY CLASS QUALITY SOCKET HEAD CAP SCREW PER ISO-898-1 AND TORQUE TO S-574 OR SERVICE MANUAL VALUES.

37.5  
25.4  
116.0  
6.0

Ø53.8  
Ø511.173±0.055  
REF.

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

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

FLYWHEEL OUTLINE  
MUST CONFORM  
TO SAE J620 NO. 355

SAE#1 HOUSING  
MOUNTING FACE  
MUST BE CONFORM TO  
SAE J617

SECTION A-A

INPUT SPEED SENSOR.  
53 TEETH GEAR  
SEE NOTE 'D'

S

ENGAGES PRIMARY  
SHAFT CLUTCH  
SEE NOTE 'A'

ENGAGES SECONDARY  
SHAFT CLUTCH  
SEE NOTE 'A'

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

Z<sub>PC</sub>

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

Z<sub>SC</sub>

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

X

OIL FILTER 29mm REQUIRED  
TO REMOVE FILTER CANISTER  
TIGHTEN FILTER CANISTER  
TO 20 Nm

SECONDARY CLUTCH (SECOND)  
PRESSURE PORT  
M14x1.5 METRIC PORT  
CONFORMS TO ISO 6149  
TIGHTENING TORQUE 20±2 Nm

Z<sub>SC2</sub>

WATER OUTLET  
(INNER DIAMETER Ø53.0)

1

Ø40.0  
(2 PLACES)

2

Ø63.5  
(2 PLACES)

Ø64.9  
(2 PLACES)

WATER INLET  
(INNER DIAMETER Ø53.0)

DIRECTION OF  
ROTATION

A

3

342.8

58.4

329.4

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

G

T<sub>AC</sub>

CENTER OF  
GRAVITY

3

OIL DRAIN PLUG (2 PL'S)  
M27x2 THREAD CONFORM  
TO ISO-6149  
TIGHTENING TORQUE 75 ± 7 Nm

Z<sub>SC1</sub>

A

FORWARD WITH R.H.  
ENGINE DRIVING  
THRU PRIMARY CLUTCH

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265.0

39.7

265.0

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