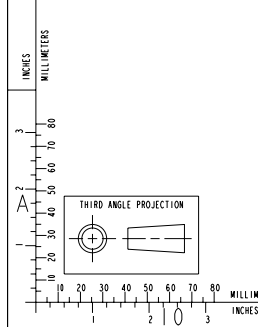


ITEM NUMBER
4954059
OPTIONS LIST
AC9312
BR9415
EE9177
EM9388
FF90375
FH9971
FW9958
HX9146
LA9260
LF9255
LG90135
OC9118
OP9464
PH9386
RG9355
SA9089
ST9487
SW9091
TB92005
VB9050
WI9449
XS9372

ZONE	REV	DESCRIPTION	DWN	APP'D
01	REVISED		93-97-13	



ENGINE SERVICE TEST PORTS/INSTALLATION CONNECTIONS			
1	AUXILIARY HEATER RETURN:	5/8 BARBED	
2	AUXILIARY HEATER SUPPLY:	5/8 BARBED	
3	BATTERY CONNECTION (STARTER) (+):	M10 X 1.5	
4	BATTERY CONNECTION (STARTER) (-):	M10 X 1.5	
5	BATTERY CONNECTION (ECM) (+):	4 PIN CONNECTOR	
6	BATTERY CONNECTION (ECM) (-):	4 PIN CONNECTOR	
7	COOLANT FILL:	Ø31.2 [1.23]	
8	COOLANT OVERFLOW TUBE:	7.9 I.D. [1.31]	
9	ENGINE OIL DRAIN:	M18 X 1.5	
10	ENGINE OIL FILL:	Ø32.1 [1.27]	
11	EXHAUST OUTLET CONNECTION (ELBOW):	Ø152.4 [6.00] O.D.	
12	EXHAUST OUTLET CONNECTION (TURBO):	4X M8 X 1.25 ∇ 17.8	
13	EXHAUST TEMP. /BACK PRESSURE TEST PORT:	1/4-18 NPT	
14	EXHAUST TEMP. /SW FLOW SENSOR	N/A	
15	FUEL INLET CONNECTION:	7/8-14 (STOR FEMALE)	
16	FUEL INLET TEST PORT:	M10 X 1.0	
17	FUEL RETURN TO TANK CONNECTION:	3/4-16 (STOR FEMALE)	
18	FUEL RETURN TEST PORT:	M10 X 1.0	
19	GEAR OIL COOLER DRAIN:	3/8 NPT	
20	GEAR OIL COOLER INLET:	M22 X 1.5	
21	GEAR OIL COOLER OUTLET:	M22 X 1.5	
22	OIL HEATER CONNECTION:	M22 X 1.5	
23	SEA WATER INLET:	Ø50.8 [2.00] O.D.	
24	SEA WATER INLET TEST PORT:	1/4-18 NPT	
25	SEA WATER OUTLET:	Ø50.8 [2.00] O.D.	
26	SEA WATER OUTLET TEST PORT:	1/4-18 NPT	
27	SHAFT LOG SEA WATER SUPPLY:	1/4 NPT	
28	ZINC ANODE:	4X 1/2-14 NPT	3/8-18 NPT (OIL COOLER)

Product Graphics File
 NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED:	REF. DRAWING STANDARDS:	ITEM NAME
:	ANSI Y14.5M ISO 81101	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES		QSB 6.7L W/ ZF 280-1 A
DWN	JHANSEN	IDENTIFIER
CHD	UNCHECKED	J
APPD		SIZE CODE (IDENT. NO.) ITEM NUMBER
APPD		J 4954059
		SCALE: N/A
		ITEM CONTROL: MCS
		SHEET 1 OF 1

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