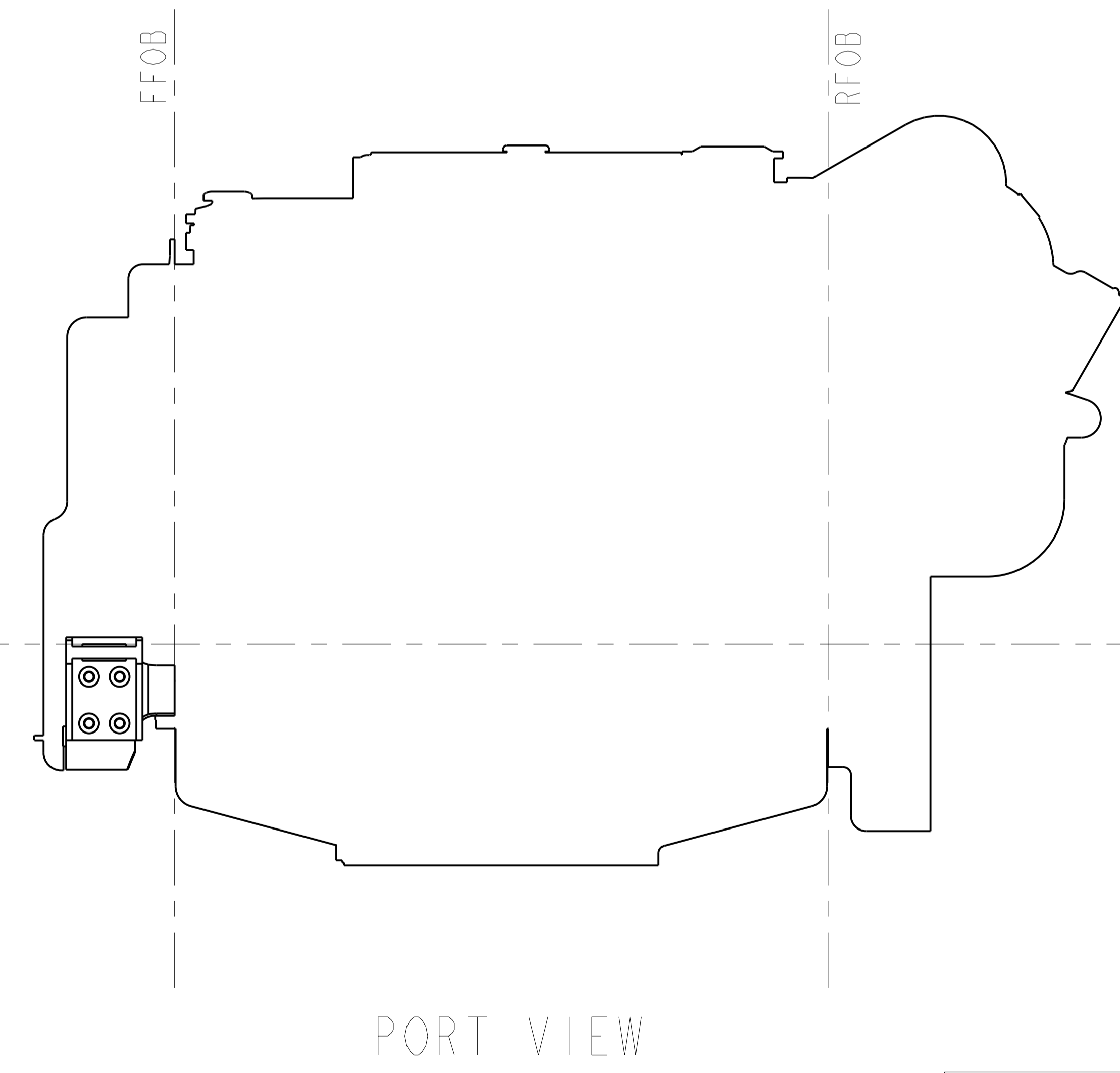
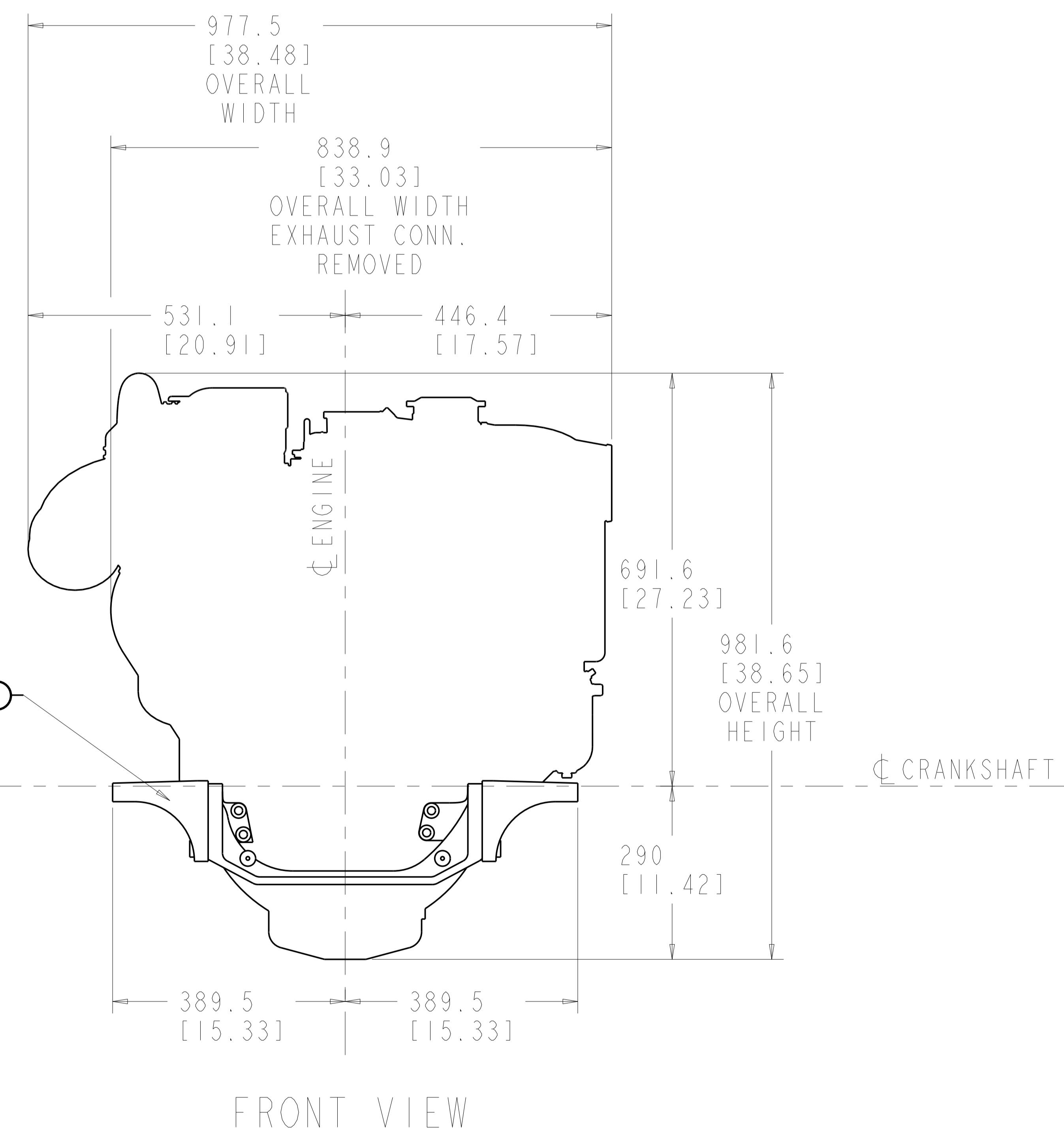
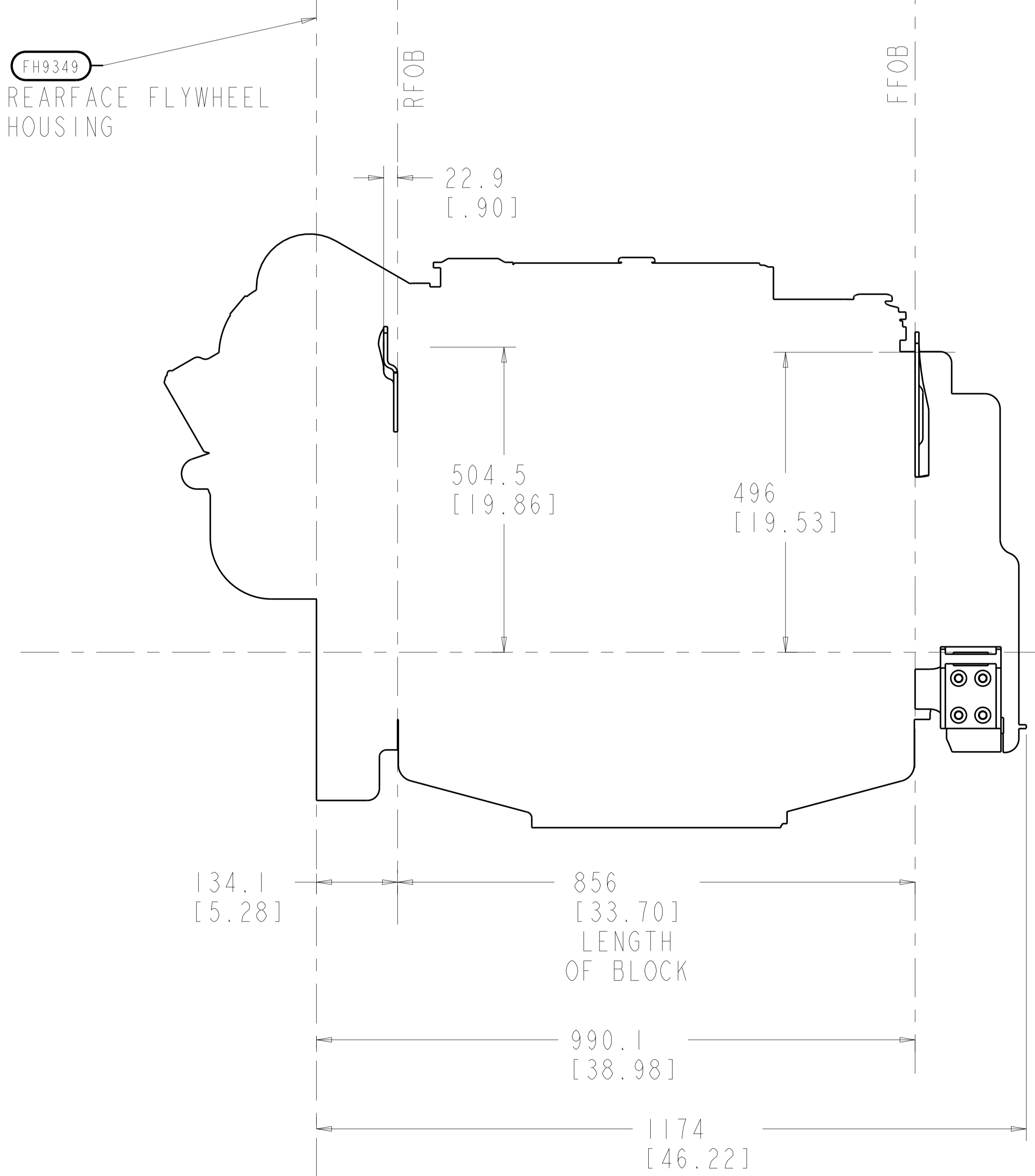
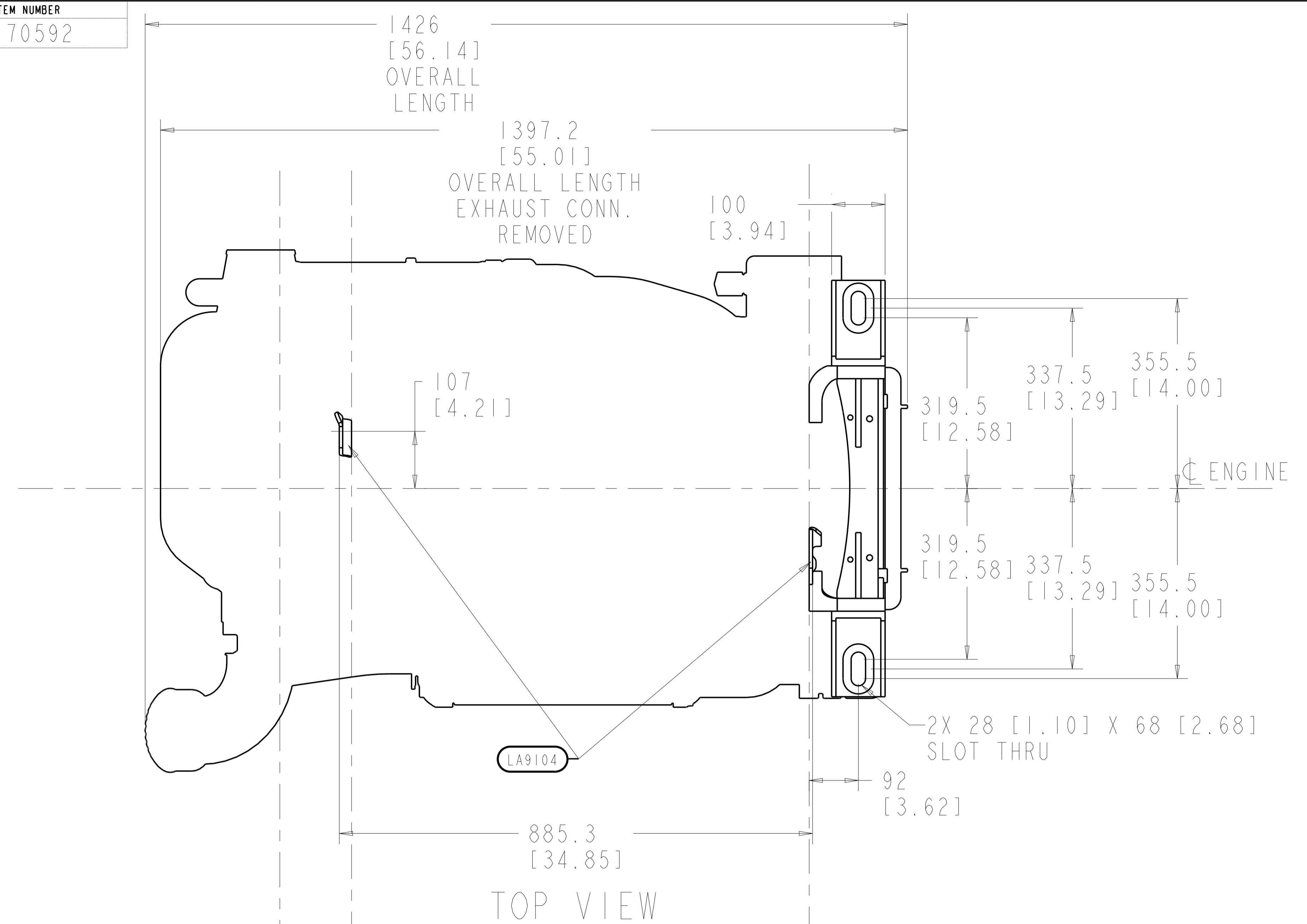
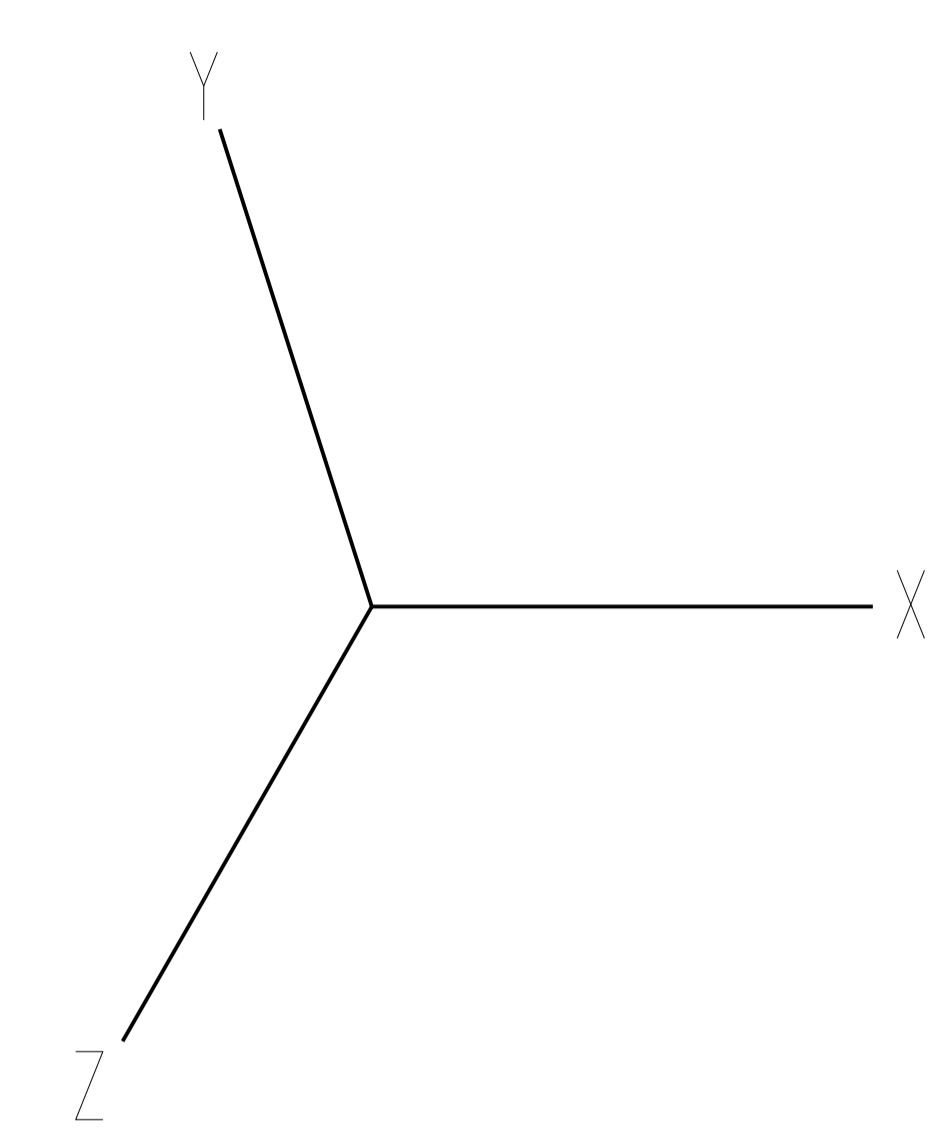
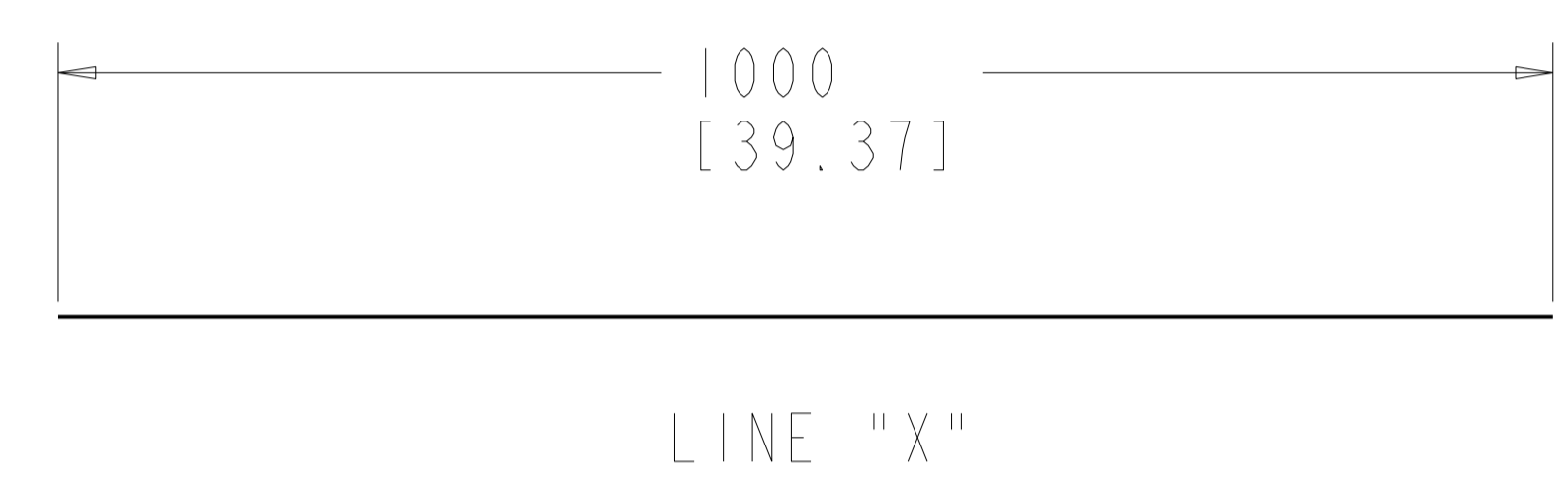


ITEM NUMBER
3170592

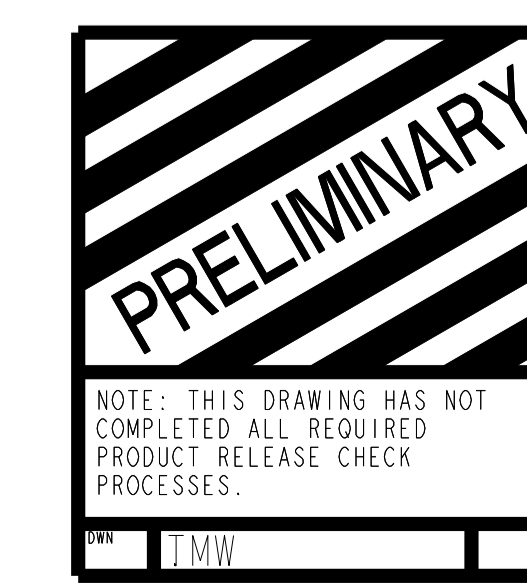
REVISIONS		DWN	APP'D
ZONE	REV	DATE	
00	QSC 8.3-HX	1-20-04	

TO DETERMINE THE SCALE AT WHICH THE DRAWING WAS PLOTTED MEASURE THE LENGTH OF LINE "X" AND COMPARE IT TO THE CHART BELOW. IF DESIRED, YOU MAY THEN ENLARGE OR REDUCE, BY THE USE OF A PHOTOCOPIER TO THE SCALE THAT BEST SUITS YOUR NEEDS.

LINE "X" LENGTH	CURRENT SCALE
1000mm	FULL
250mm	1:4
200mm	1:5
125mm	1:8
100mm	1:10
85mm	1:12
62mm	1:16
50mm	1:20
42mm	1:24

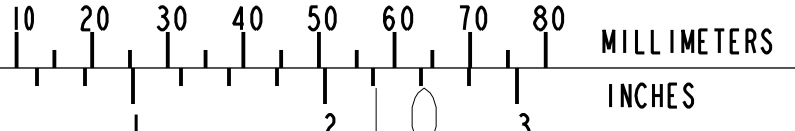
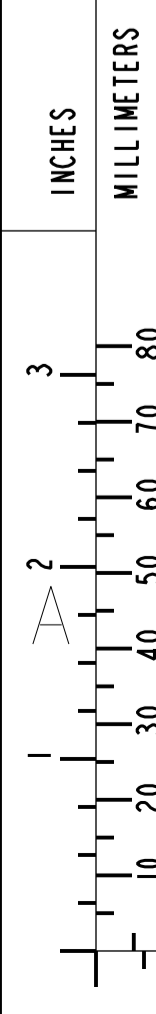
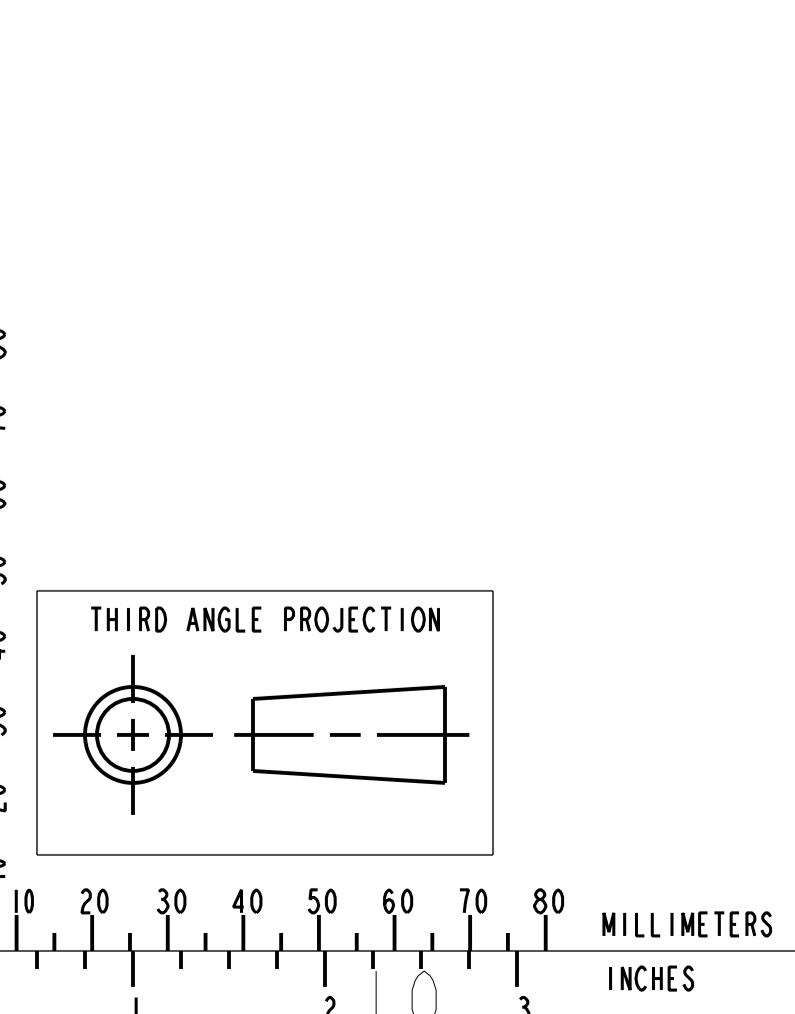


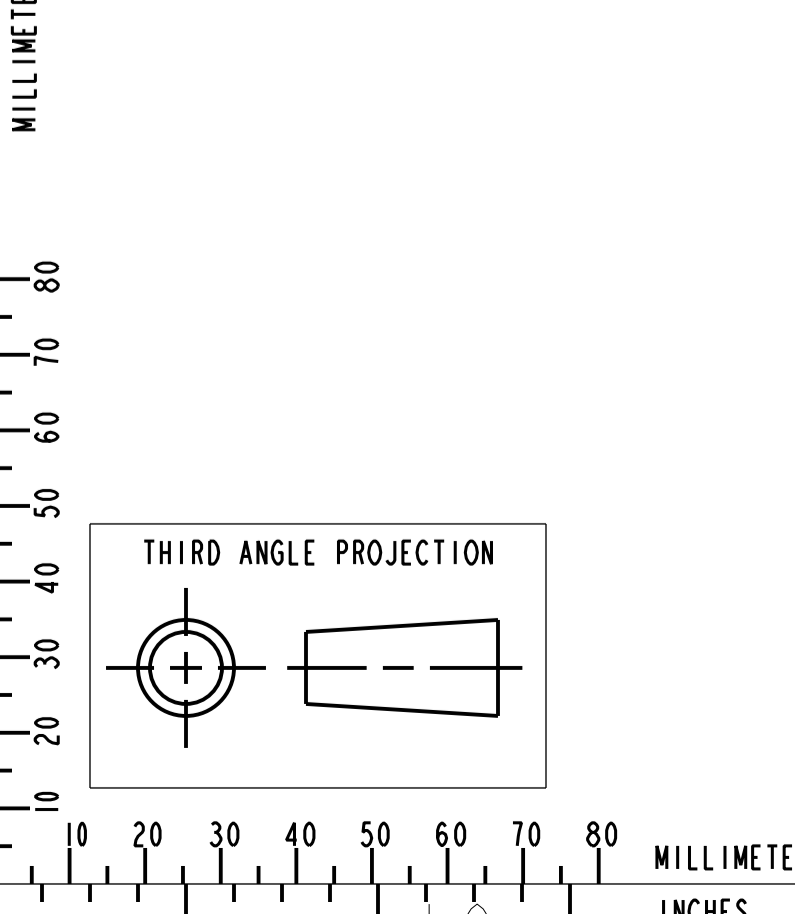
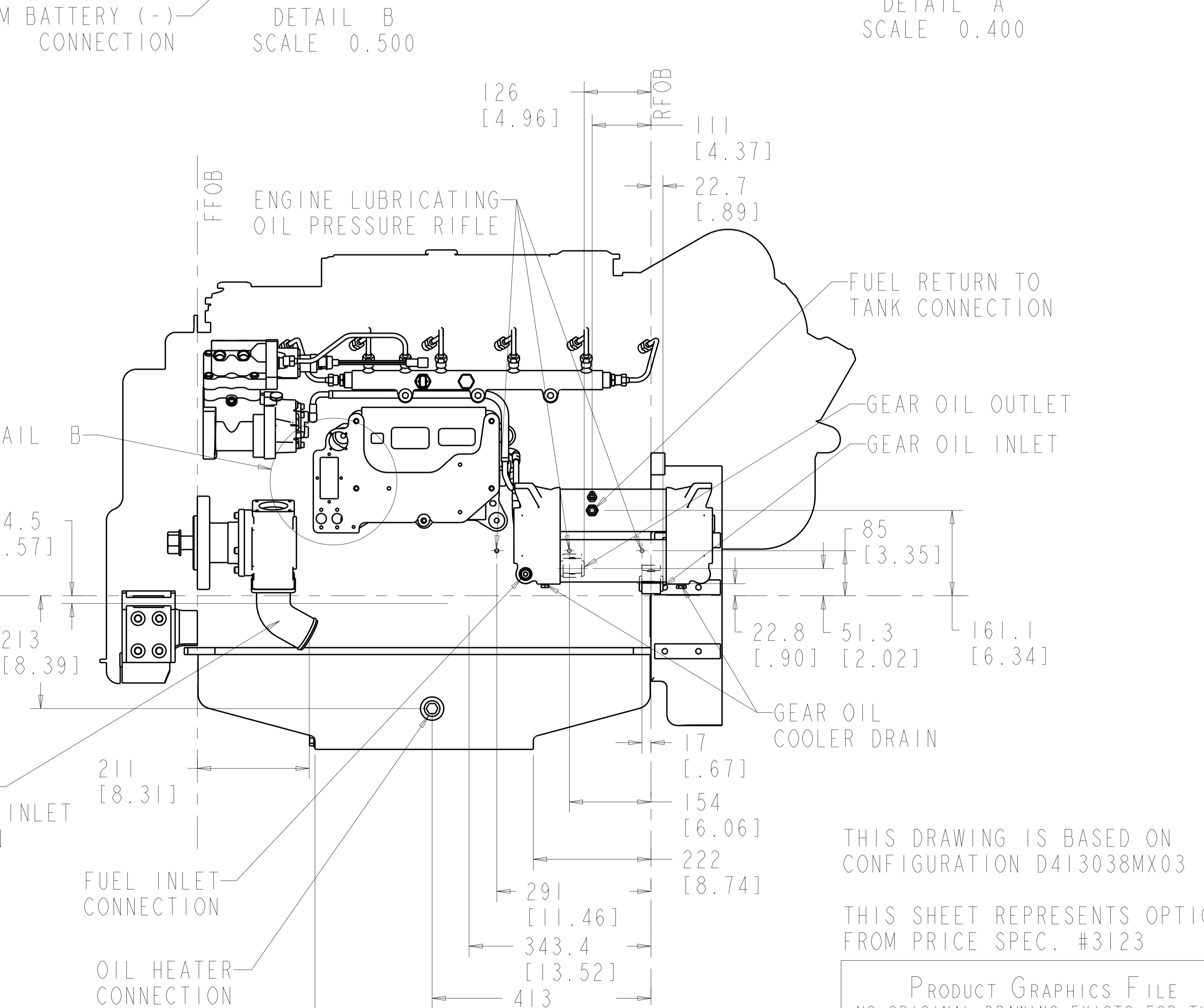
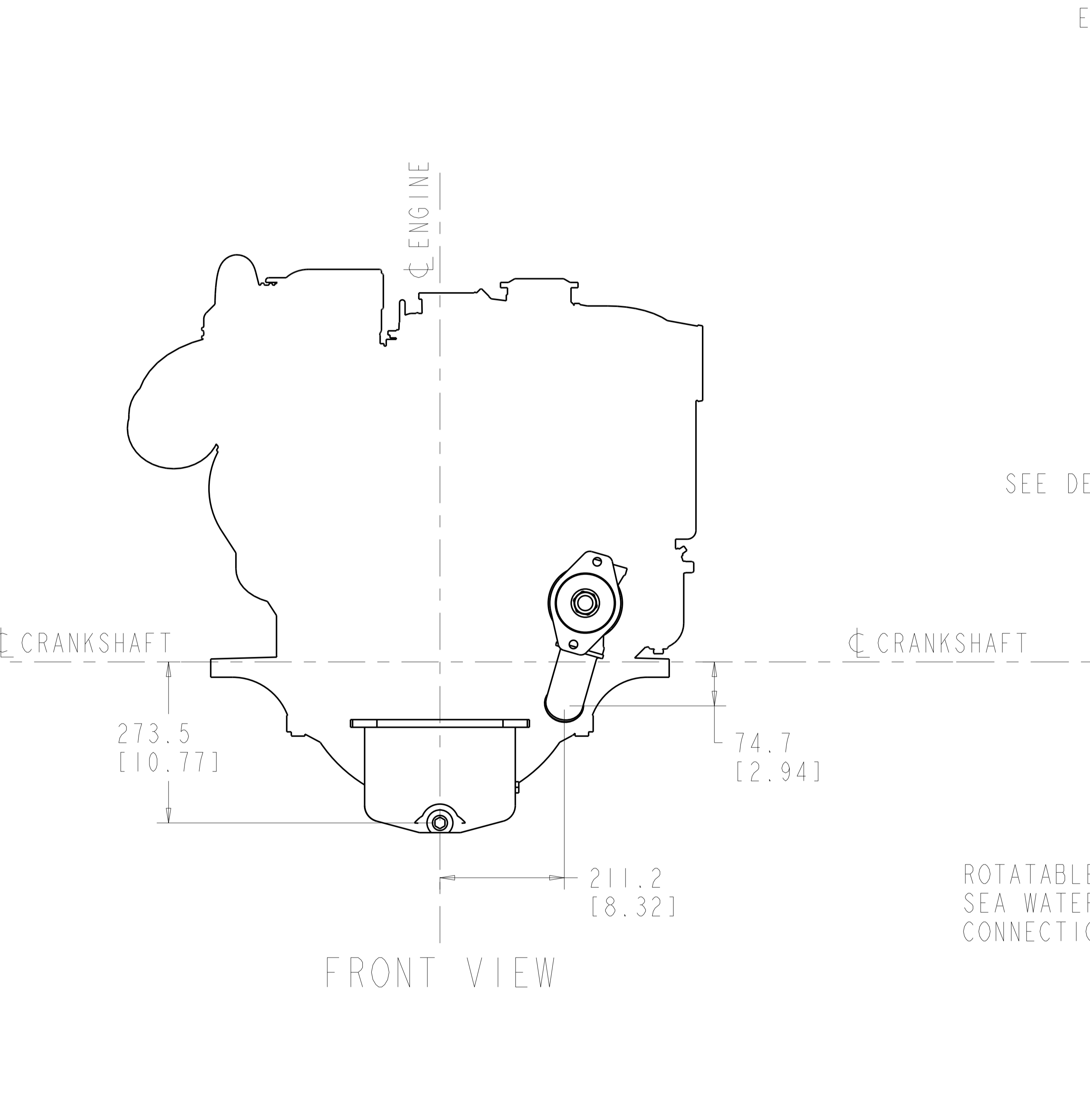
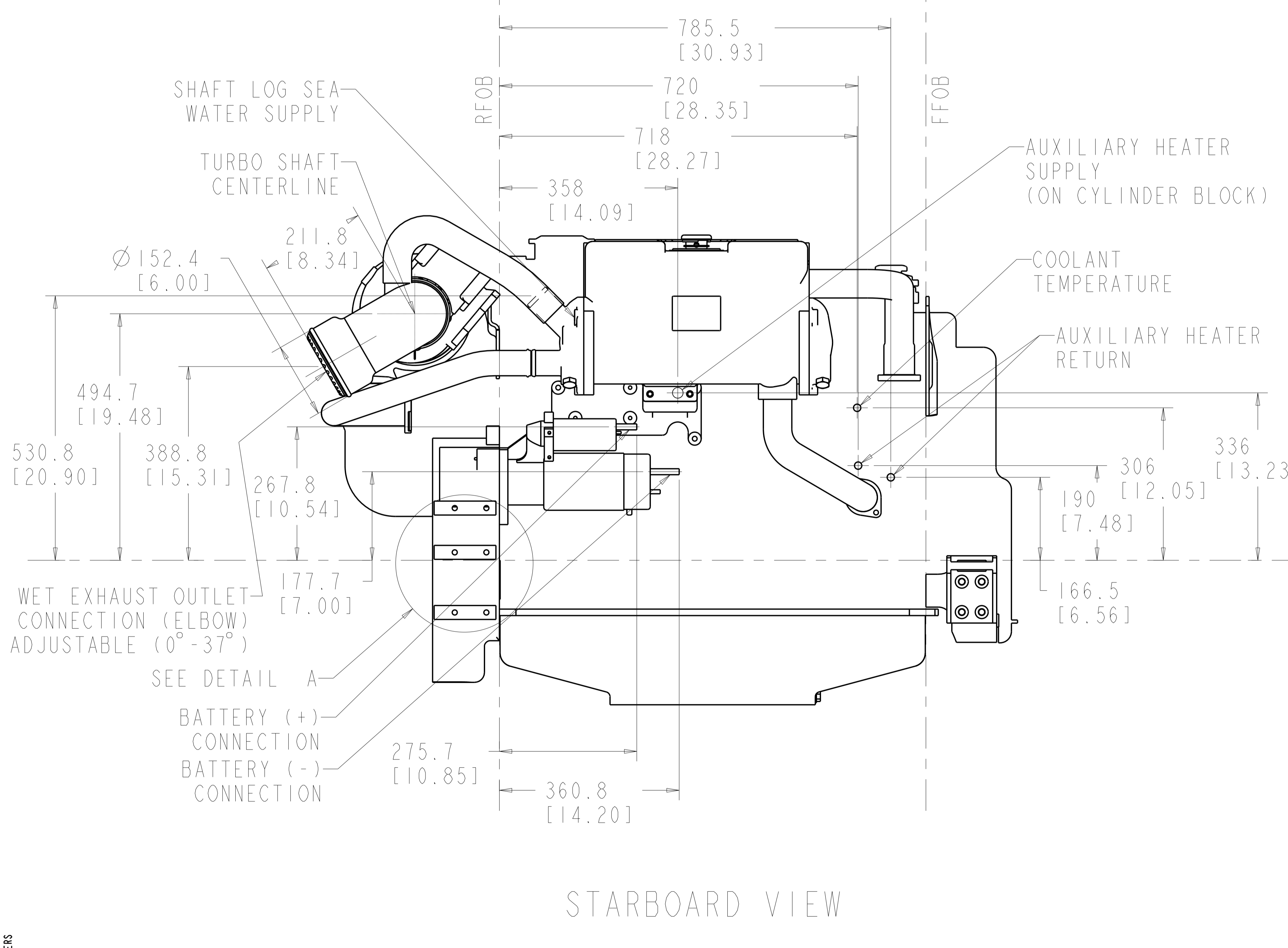
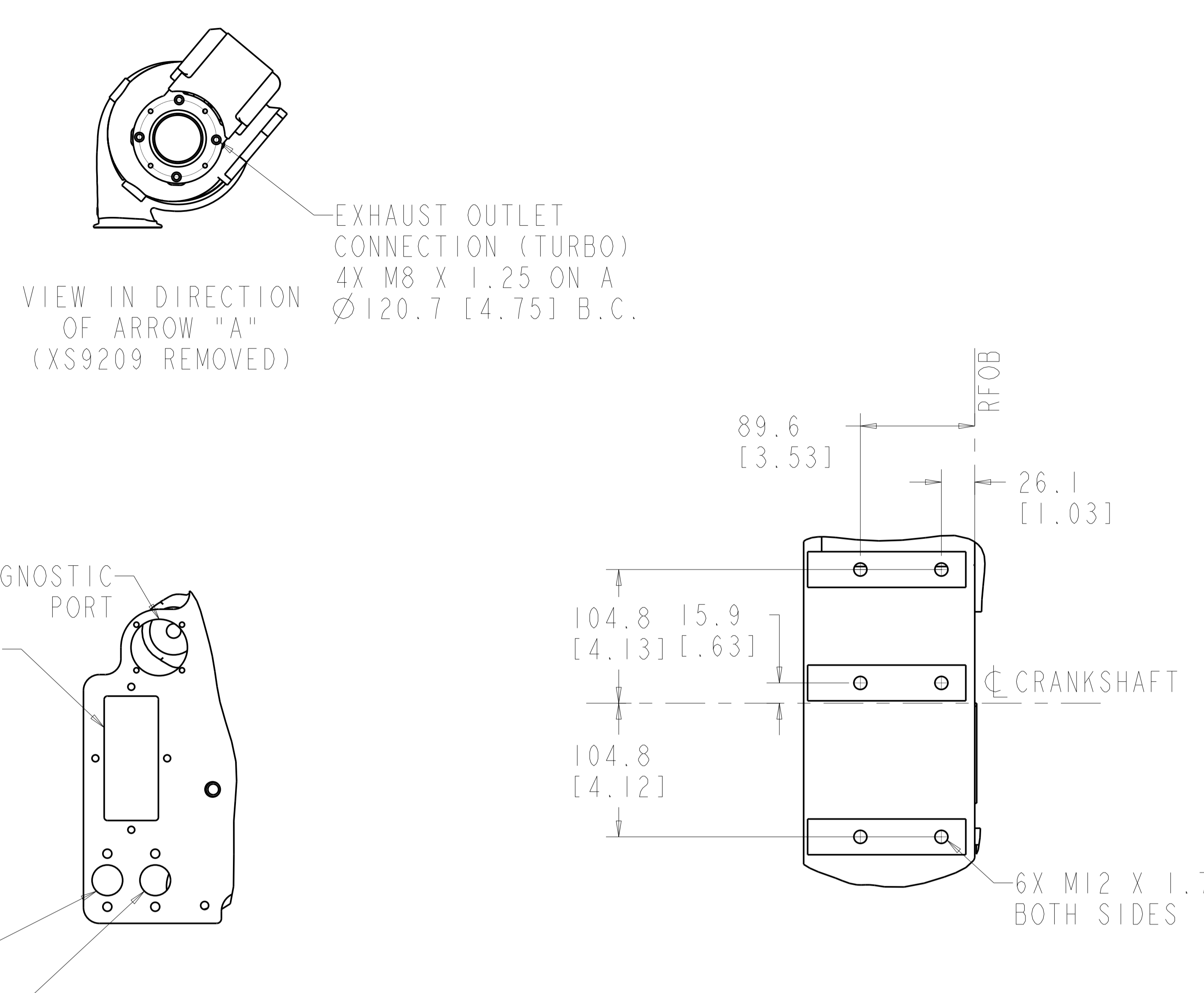
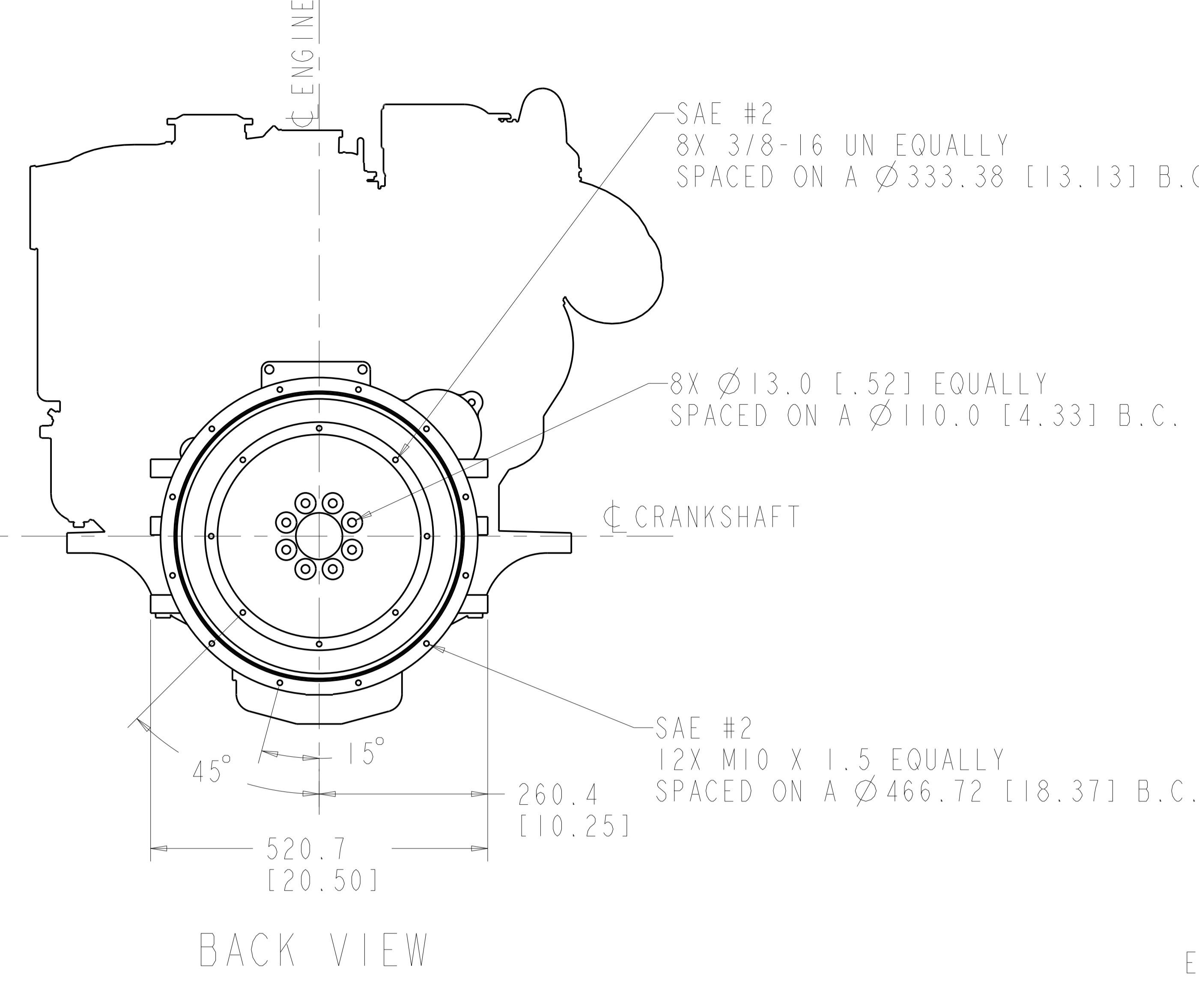
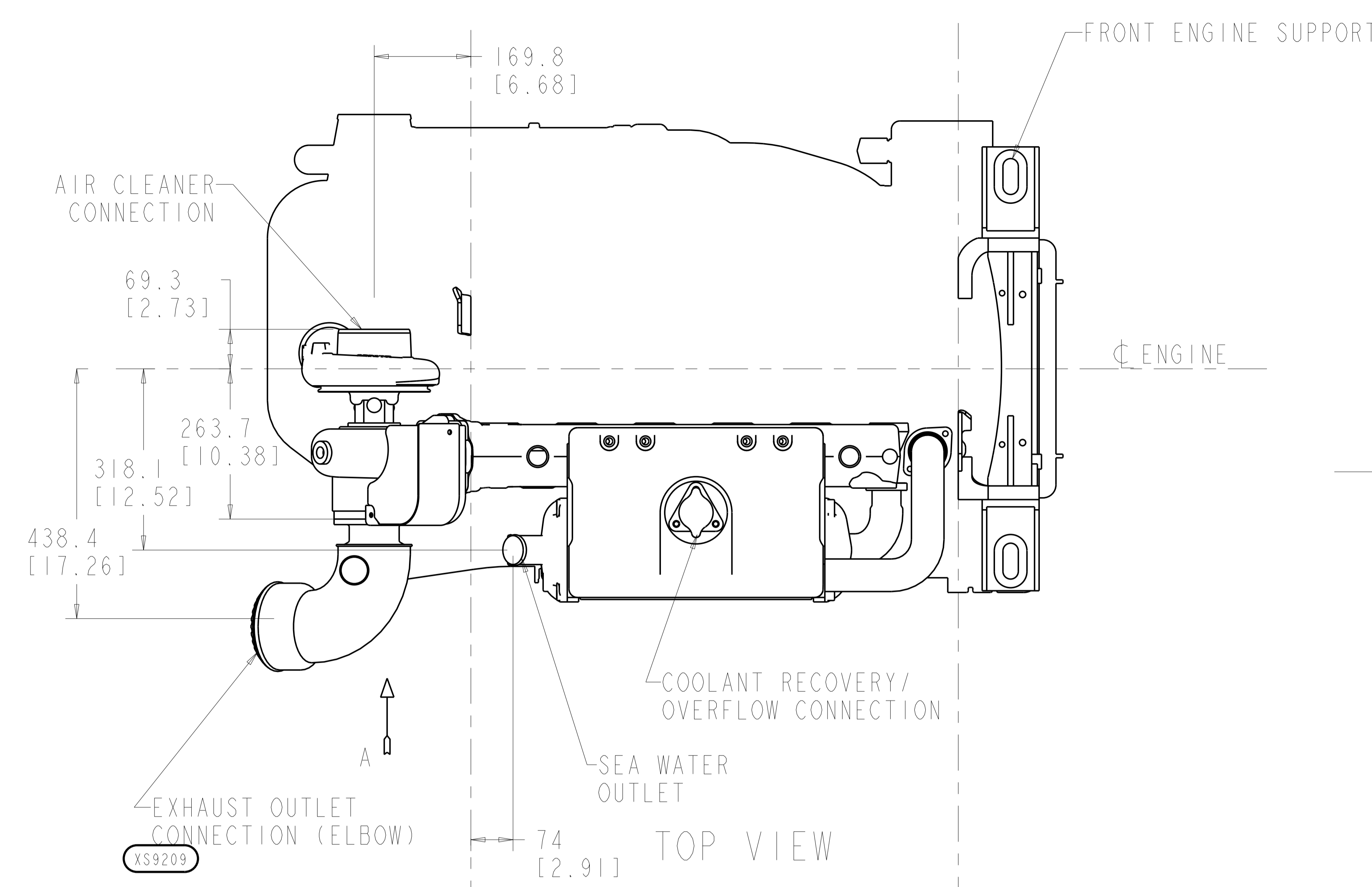
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.



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LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO R1101	CUMMINS INC.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM
DWN: TWOLF/GANG CND: UNCHECKED APPD:	DATE: 1-20-04	SIZE CODE IDENT. NO. ITEM NUMBER J 3170592
	SCALE: 20	ITEM CONTROL: MCS SHEET 1 OF 3





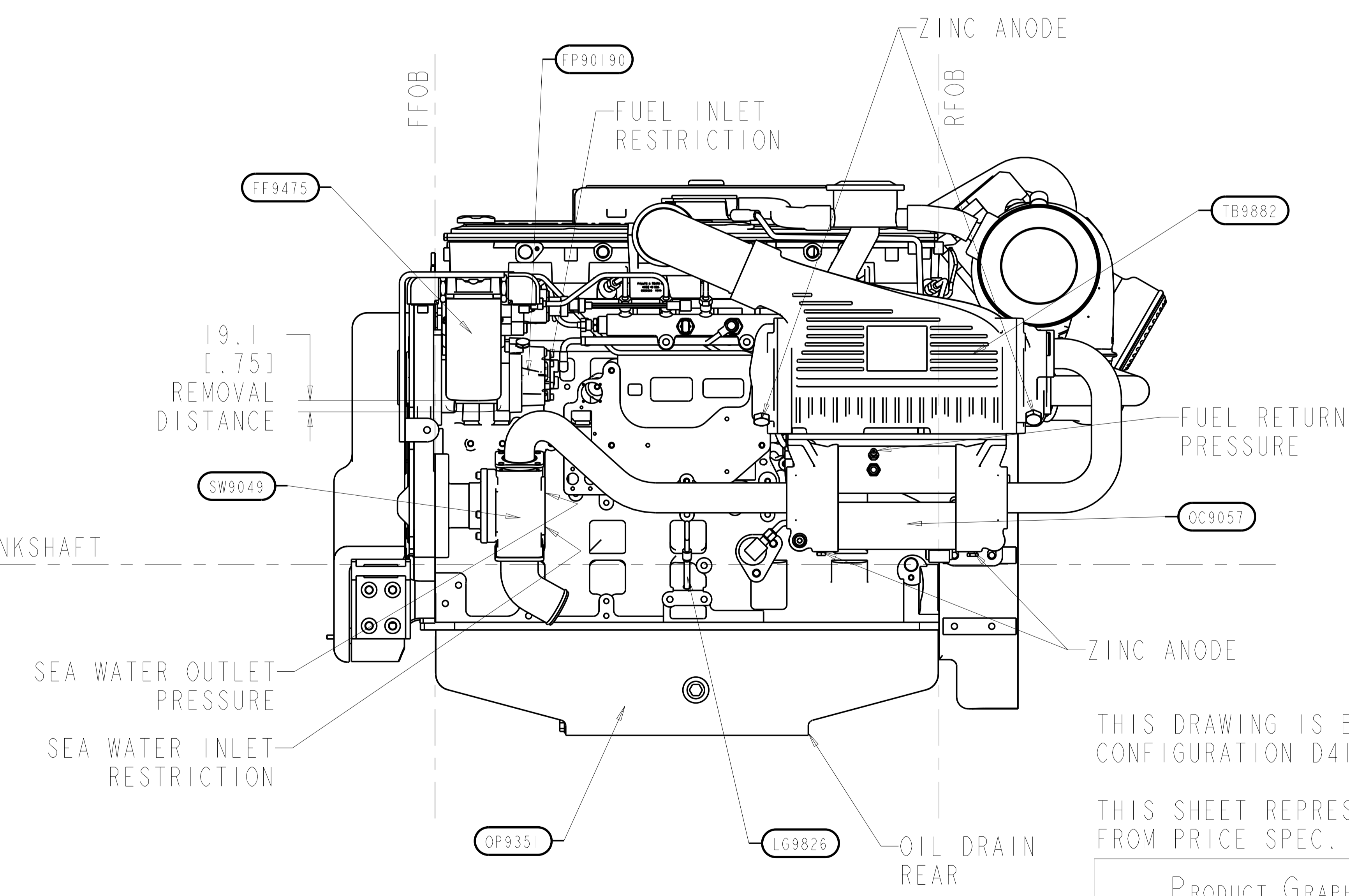
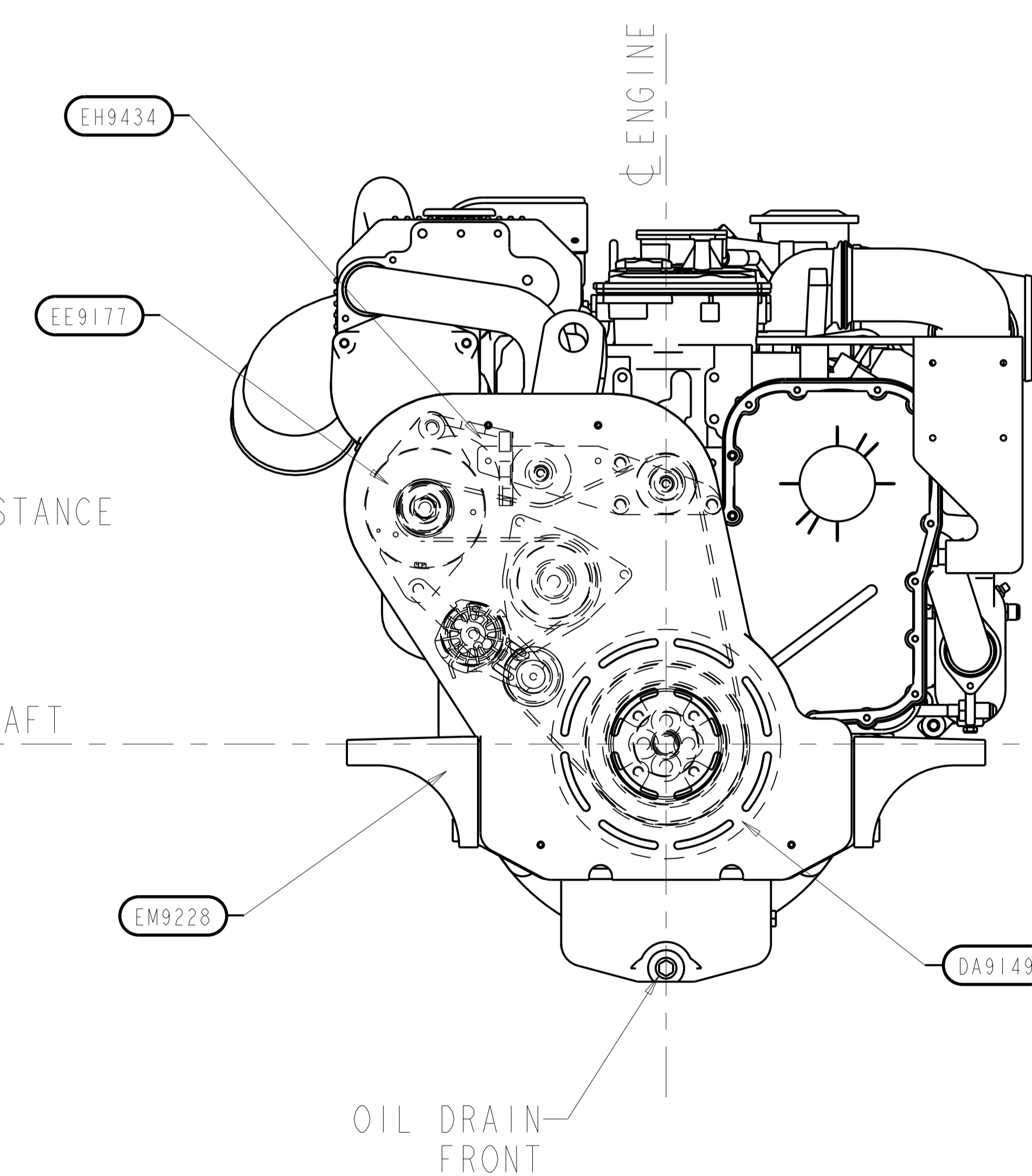
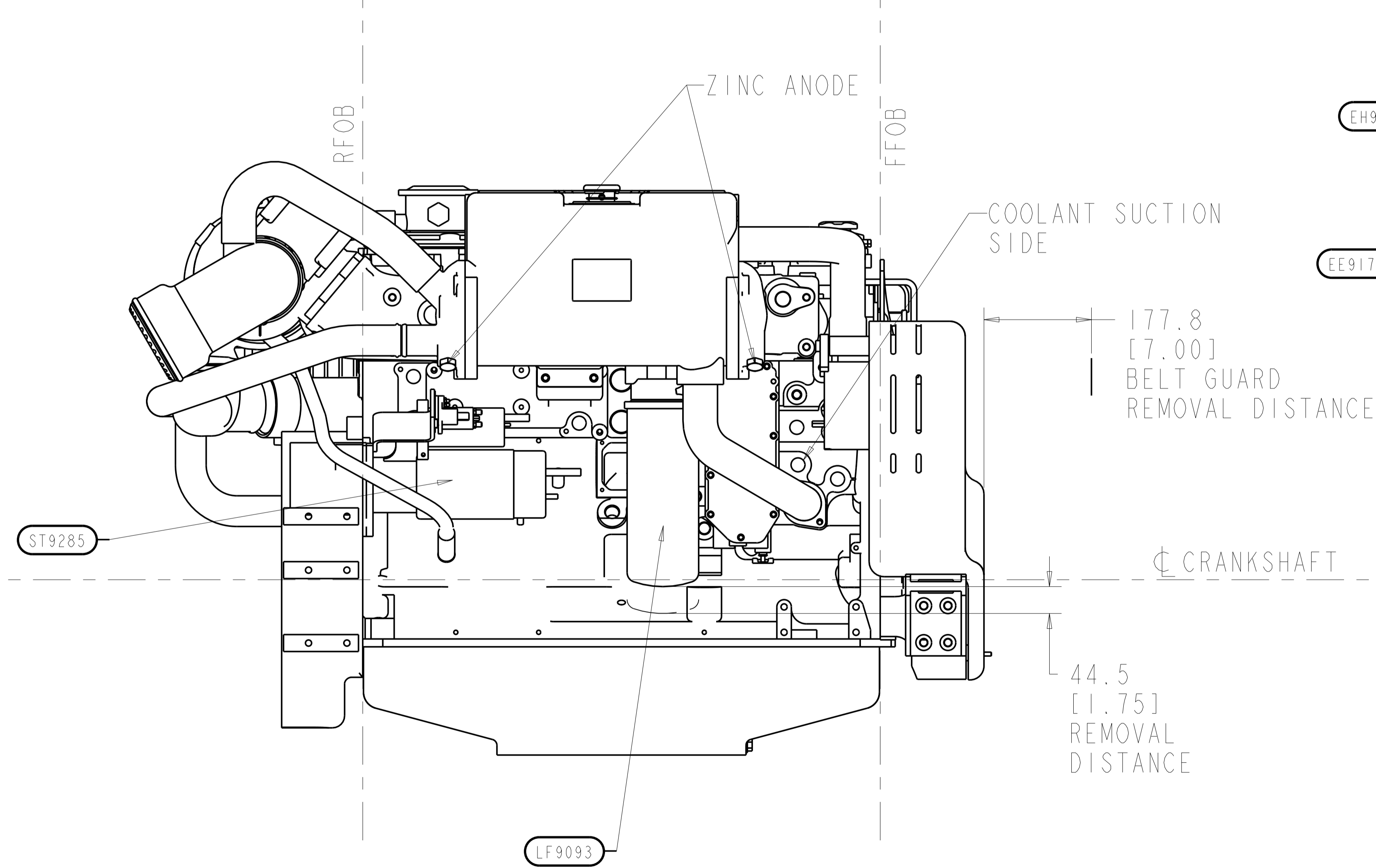
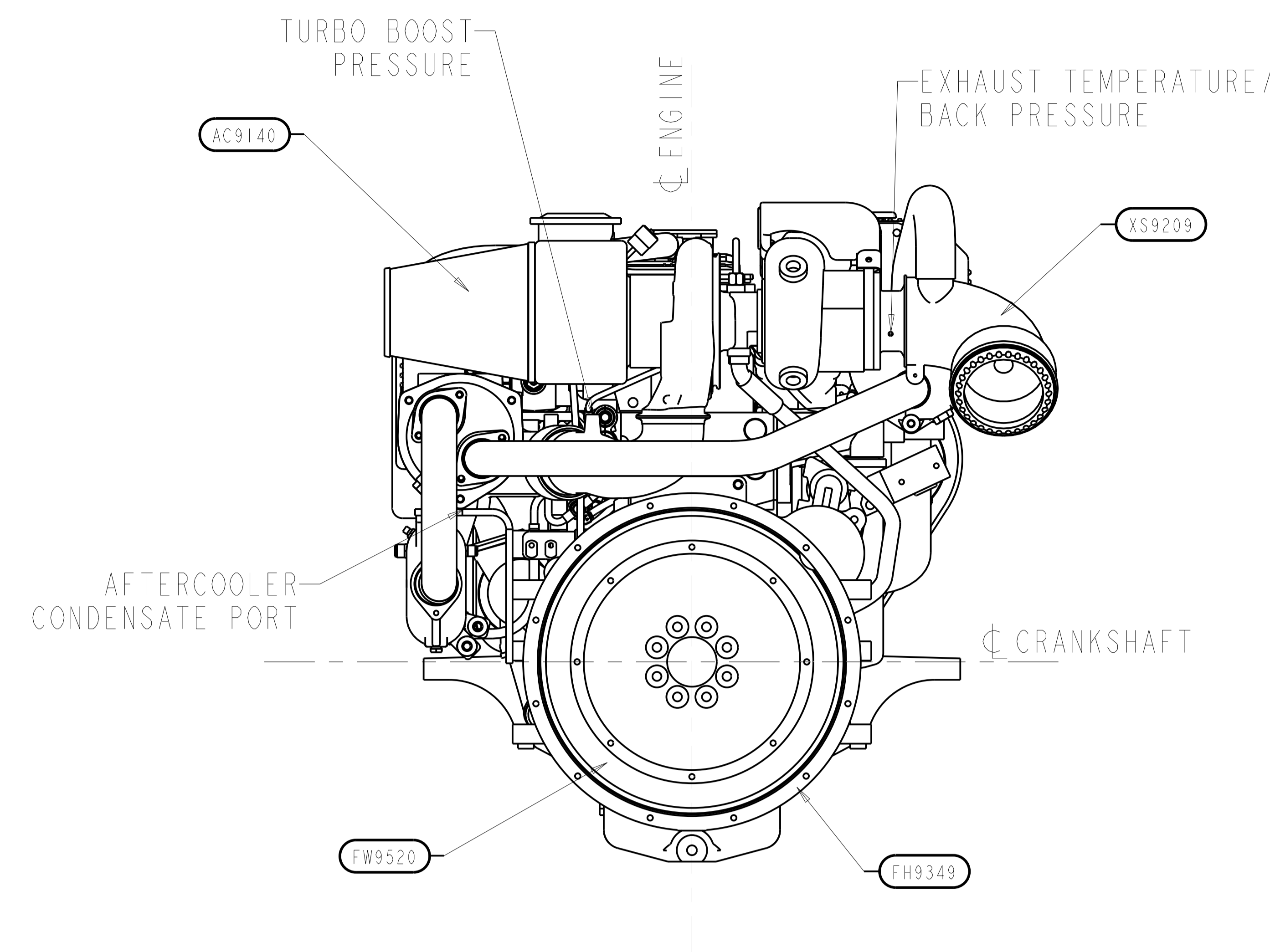
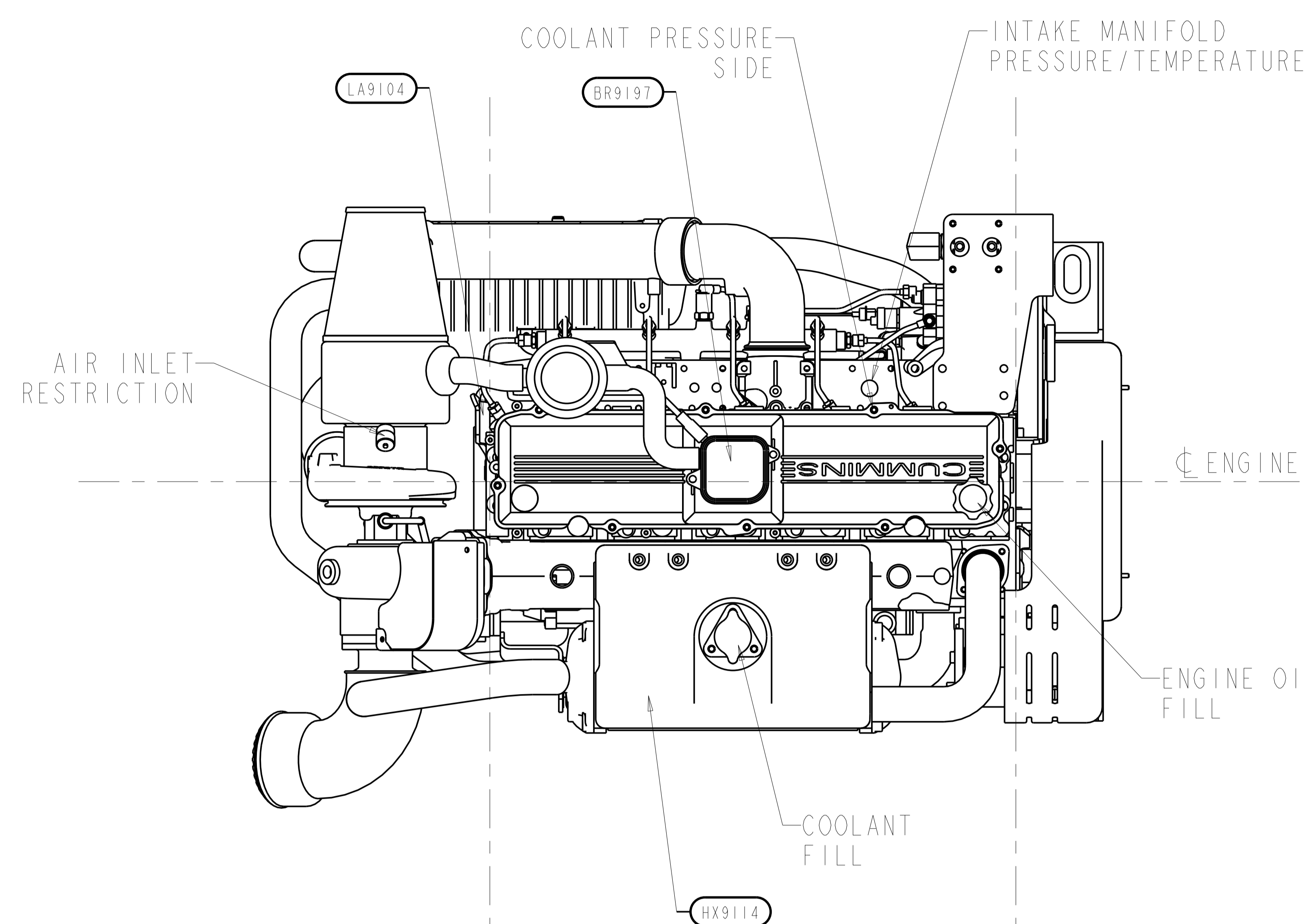
INSTALLATION CONNECTIONS			
AIR CLEANER CONNECTION:	101.6 [4.00]	COOLANT TEMPERATURE:	M14 X 1.5
AUXILIARY HEATER RETURN:	3/4 NPT	CRANKCASE VENT:	Ø35.4 [1.39] O.D. HOSE
AUXILIARY HEATER SUPPLY:	3/4 NPT W/ ORIFICE	ENGINE LUBRICATING OIL PRESSURE RIFLE:	M10 X 1.0
BATTERY CONNECTION (STARTER) (+):	M12 X 1.75	EXHAUST OUTLET CONNECTION (ELBOW):	Ø152.4 [6.00] O.D.
BATTERY CONNECTION (STARTER) (-):	M12 X 1.75	EXHAUST OUTLET CONNECTION (TURBO):	Ø66 [2.60] I.D.
BATTERY CONNECTION (ECM) (+):	1/4-20 UN	FRONT ENGINE SUPPORT:	2X 27 [1.06] X 63 [2.48] SLOT
BATTERY CONNECTION (ECM) (-):	1/4-20 UN	FUEL RETURN TO TANK CONNECTION:	3/4-16 UN, 45° FLARE (SAE #8)
COOLANT RECOVERY/OVERFLOW CONNECTION:	Ø8.39 [0.33]	FUEL INLET CONNECTION:	7/8-14 UN, 45° FLARE (SAE #10)
		GEAR OIL COOLER DRAIN:	1/8 NPT
		GEAR OIL COOLER INLET AND OUTLET:	1/2 NPT
		OIL HEATER CONNECTION:	M22 X 1.5
		SEA WATER INLET:	Ø63.5 [2.50]
		SEA WATER OUTLET:	Ø50.8 [2.00]
		SHAFT LOG SEA WATER SUPPLY:	1/4 NPT

THIS DRAWING IS BASED ON CONFIGURATION D413038MX03

THIS SHEET REPRESENTS OPTIONS FROM PRICE SPEC. #3123

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:	CUMMINS INC.
A	ANSI Y14.5M ISO R101	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS	ITEM NAME	QSC 8.3-HX
INCHES	IDENTIFIER	INSTALLATION DIAGRAM
DWN: TWOLF GANG 1-20-04	SIZE CODE IDENT. NO. ITEM NUMBER	J 3170592
CHD: UNCHECKED	SCALE: 20	ITEM CONTROL: MCS SHEET 2 OF 3
APPD:		



THIS DRAWING IS BASED ON CONFIGURATION D413038MX03
THIS SHEET REPRESENTS OPTIONS FROM PRICE SPEC. #3123

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ENGINE SERVICE TEST PORTS

AIR INLET RESTRICTION:	1/8-27 NPT	ENGINE OIL DRAIN FRONT:	M18 X 1.5	SEA WATER INLET RESTRICTION:	1/4-18 NPT
BLOW-BY CONNECTION:	Ø35.4 [1.39] O.D. HOSE	ENGINE OIL DRAIN REAR:	9/16-18 UN	SEA WATER OUTLET PRESSURE:	1/4-18 NPT
COOLANT FILL:	F8/F9	ENGINE OIL FILL:	29.5 [1.16]	TURBO BOOST PRESSURE:	M8 X 1.25
COOLANT PRESSURE SIDE:	1/2 NPT	EXHAUST TEMPERATURE/BACK PRESSURE:	1/8 NPT	VENT PETCOCK:	N/A
COOLANT SUCTION SIDE:	3/4 NPT	FUEL INLET RESTRICTION:	M10 X 1.0	ZINC ANODE:	4X 1/2 NPT
COOLANT TEMPERATURE:	M14 X 1.5	FUEL RETURN PRESSURE:	9/16-18 UNF		2X 3/8 NPT
ENGINE LUBRICATION OIL PRESSURE:	M10 X 1.0	INTAKE MANIFOLD PRESSURE/TEMPERATURE:	3/4 NPT		

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS [] ARE IN: INCHES	ITEM NAME QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM
DWN: TWOLF GANG 1-20-04 CND: UNCHECKED APPD:	SIZE CODE IDENT. NO. ITEM NUMBER J 3170592	SCALE: 20 ITEM CONTROL: MCS SHEET 3 OF 3

