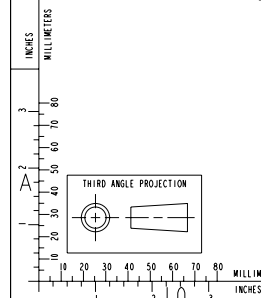
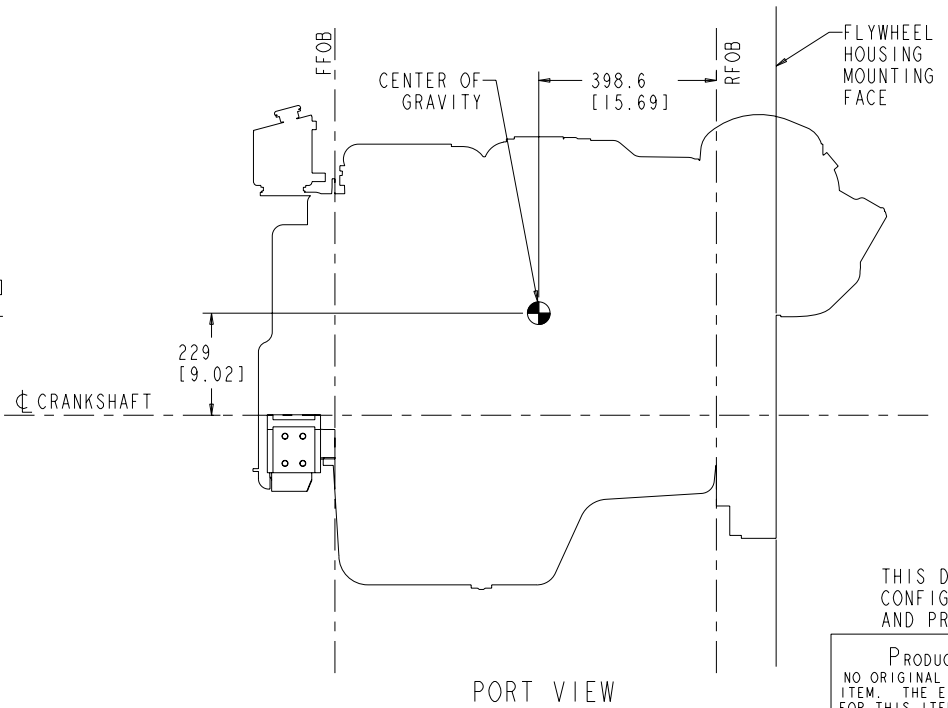
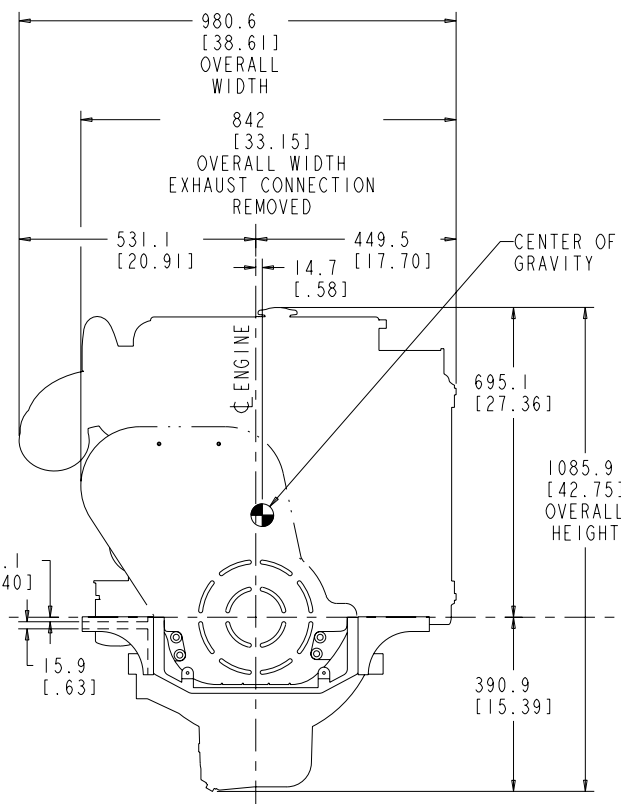
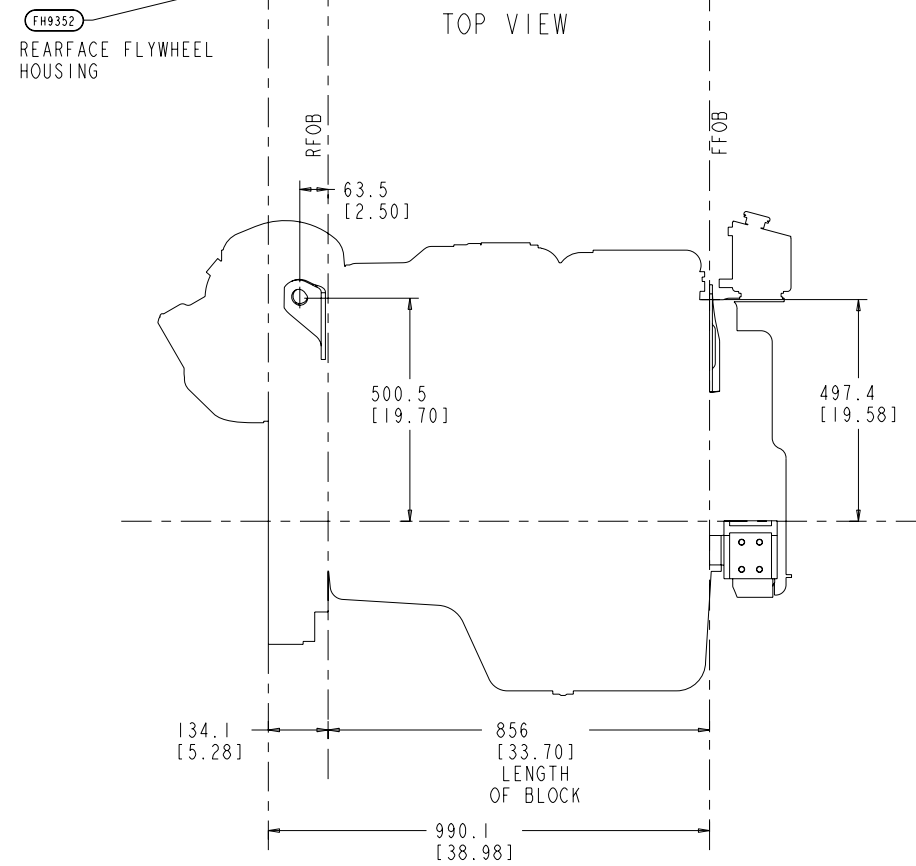
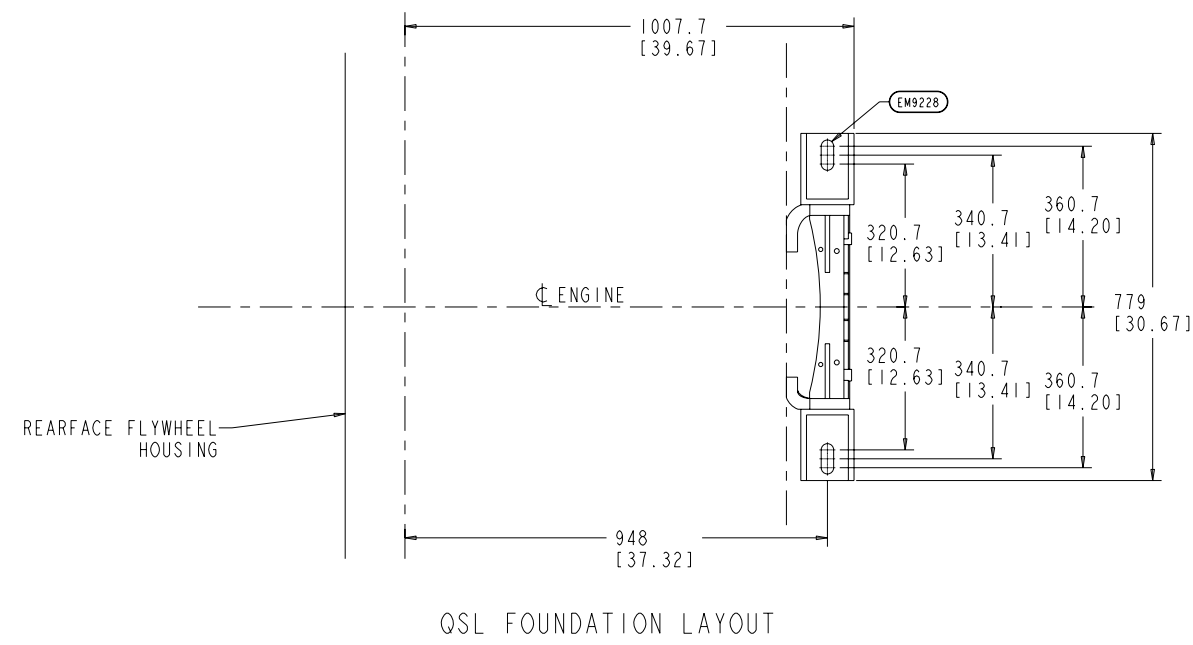
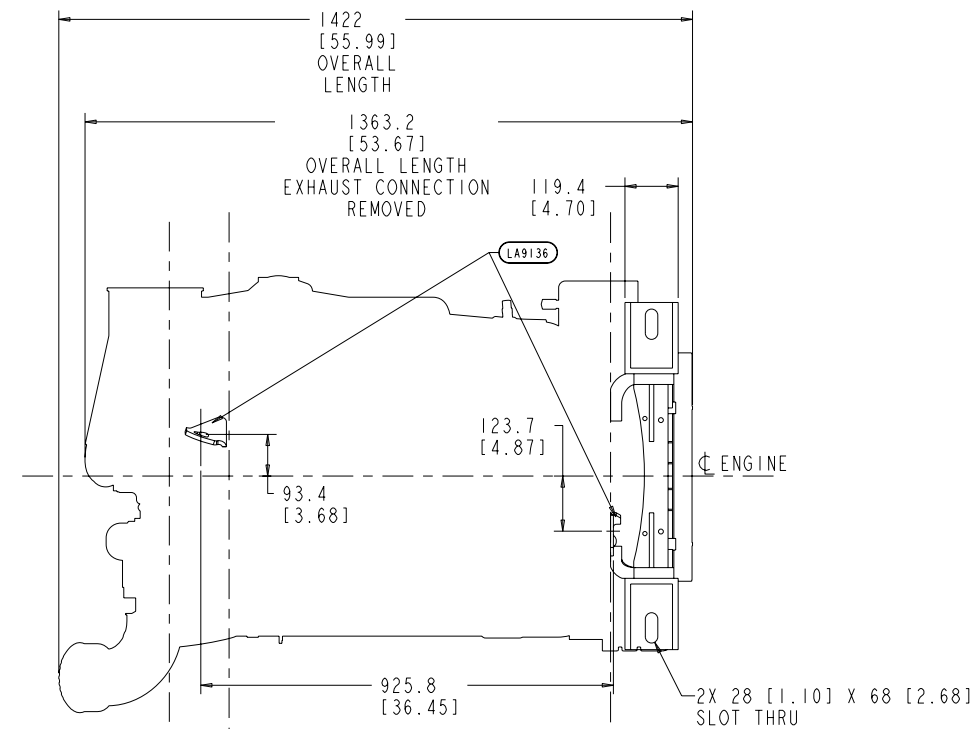


ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		

TABLE OF CONTENTS	
DRAWING / SUB-SYSTEM	SHEET
DIMENSION OUTLINE	1
ASSEMBLY DRAWING	2
ACCESSORY DRIVES & PTOS	3-4
AIR INDUCTION SYSTEM	5
COOLING SYSTEM	6-8
ELECTRICAL SYSTEM	9-10
EXHAUST SYSTEM	11
FUEL SYSTEM	12-13
LUBE OIL SYSTEM	14-17
MOUNTING SYSTEM	18-20
STARTING SYSTEM	21



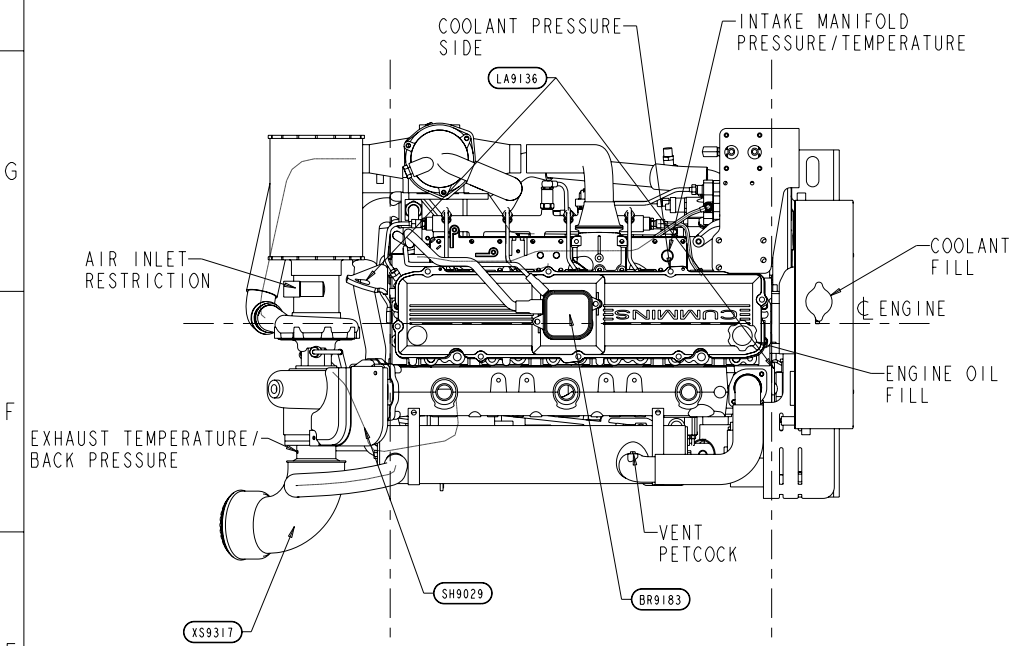
DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

THIS DRAWING IS BASED ON CONFIGURATION D563005MX03 AND PRICE SPEC. #2913  
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.

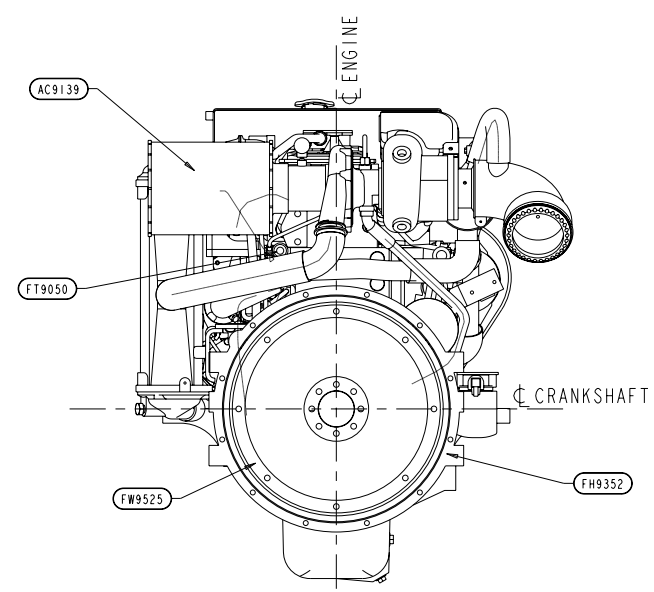
LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME QSL9-HX	IDENTIFIER	
DWN: TMO/TGANG CHD: UNCHECKED APPD:	SIZE CODE IDENT. NO. ITEM NUMBER <b>J</b> 3170591	INSTALLATION DIAGRAM	
	SCALE: 2:1	ITEM CONTROL: MCS	SHEET 1 OF 21

ITEM NUMBER  
3170591

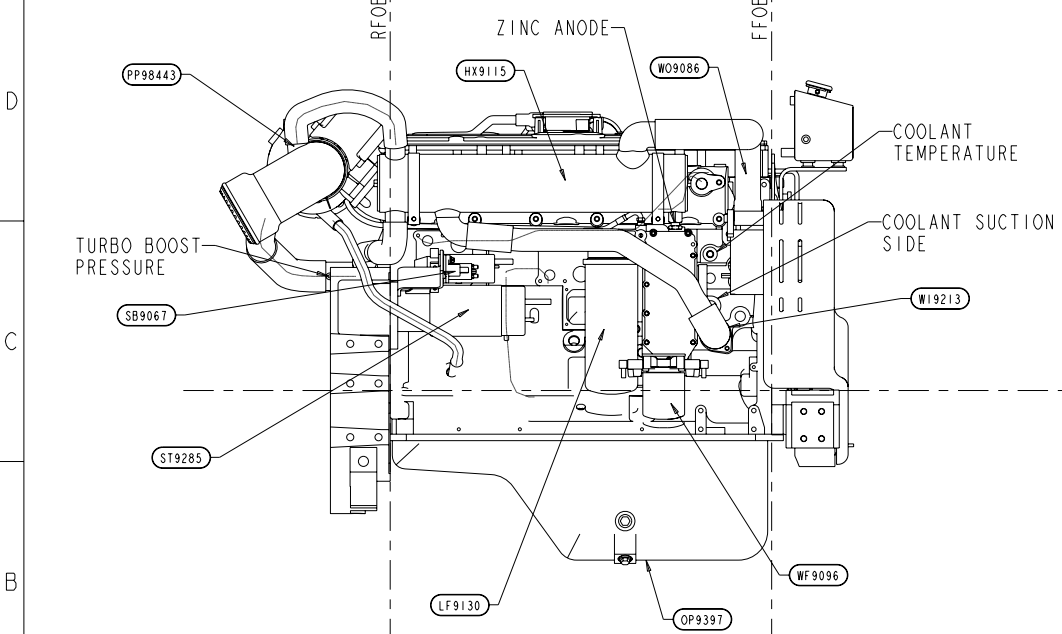
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



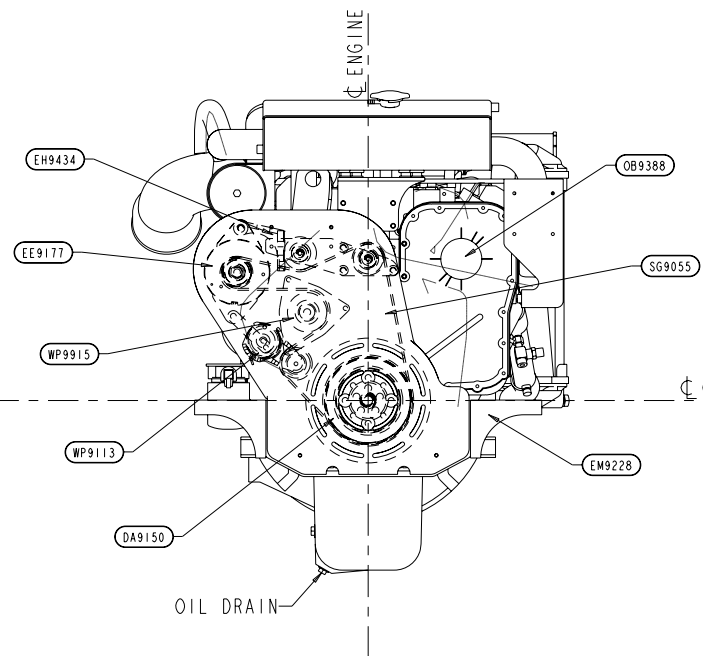
TOP VIEW



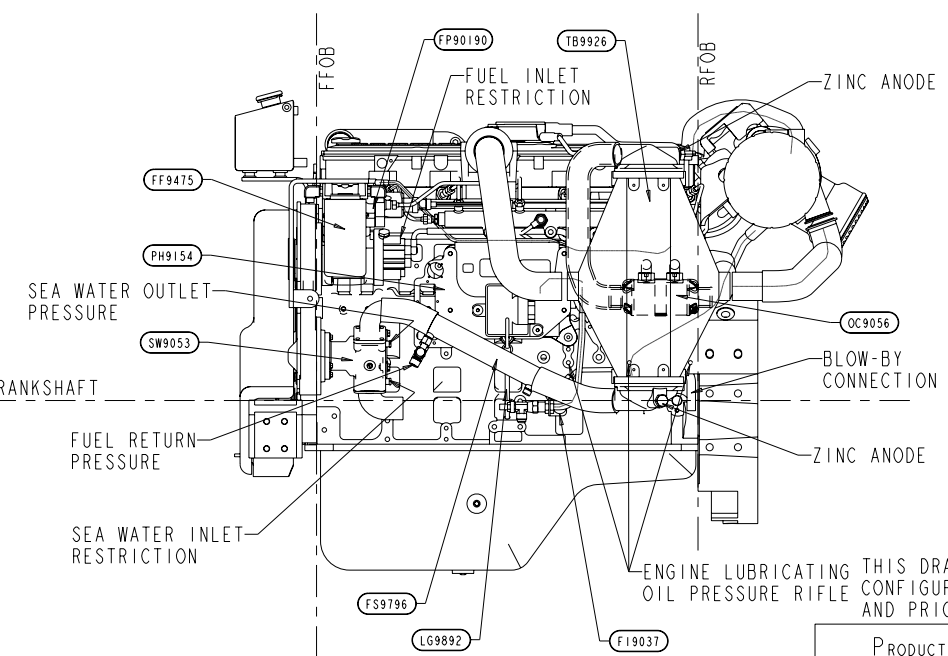
BACK VIEW



STARBOARD VIEW



FRONT VIEW



PORT VIEW

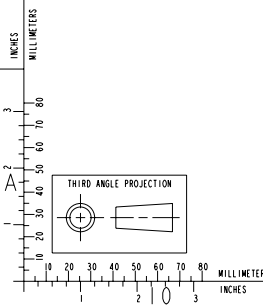
ENGINE SERVICE TEST PORTS

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:	Ø19.1 [0.75] O.D.	ENGINE OIL DRAIN REAR:	N/A	SEA WATER OUTLET PRESSURE:	1/4-18 NPT
COOLANT FILL:	F8	ENGINE OIL FILL:	29.5 [1.16], F8	TURBO BOOST PRESSURE:	M8 X 1.25
COOLANT PRESSURE SIDE:	1/2 NPT	EXHAUST TEMPERATURE/BACK PRESSURE:	1/8 NPT	VENT PETCOCK:	1/8 NPT
COOLANT SUCTION SIDE:	3/4 NPT	FUEL INLET RESTRICTION:	M10	ZINC ANODE:	3X 1/2 NPT
COOLANT TEMPERATURE:	M14 X 1.5	FUEL RETURN PRESSURE:	1/4 NPT		
ENGINE LUBRICATION OIL PRESSURE:	M10 X 1.0	INTAKE MANIFOLD PRESSURE/TEMPERATURE:	3/4 NPT		

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

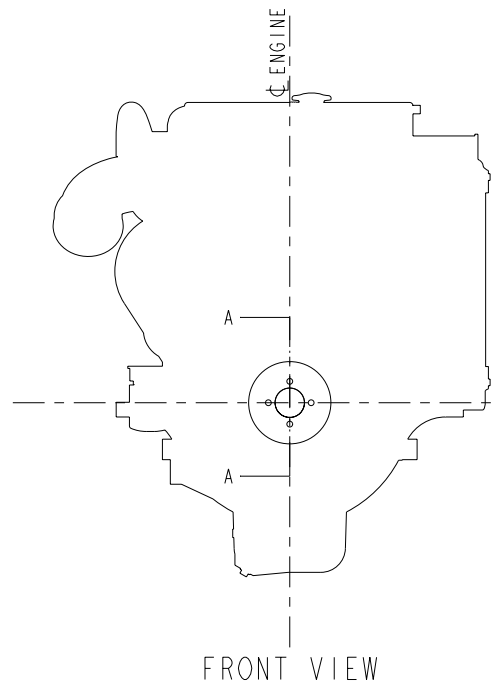
THIS DRAWING IS BASED ON OIL PRESSURE RIFLE CONFIGURATION D563005MX03 AND PRICE SPEC. #2913

LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME OSL9-HX	IDENTIFIER INSTALLATION DIAGRAM
DWN: UNCHECKED APPD: UNCHECKED	SIZE CODE IDENT. NO.   ITEM NUMBER <b>J</b>   3170591	SCALE: 2:1   ITEM CONTROL: MCS   SHEET 2 OF 21

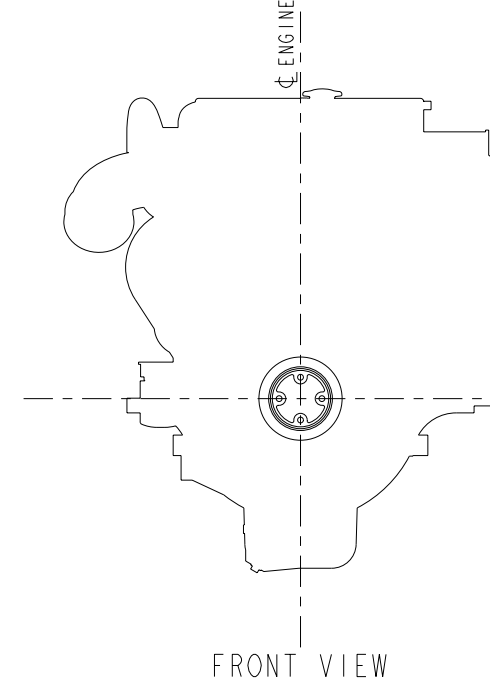
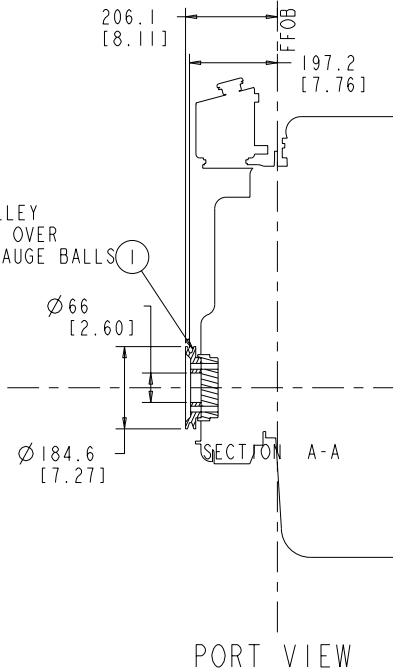


ITEM NUMBER  
3170591

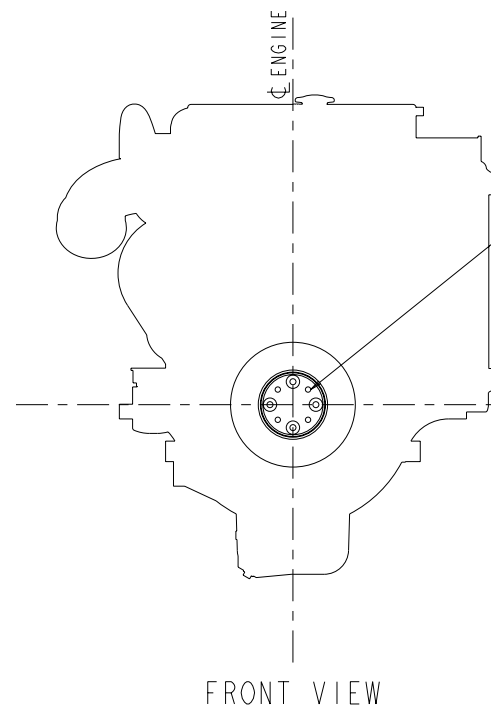
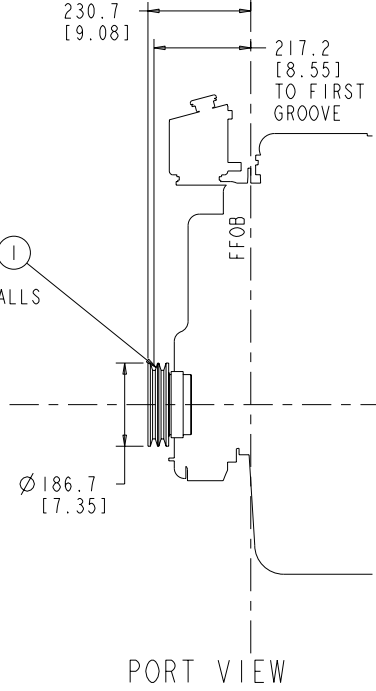
REVISIONS		OWN	APP'D
ZONE	REV		
02	OSL9-HX		



AF9141

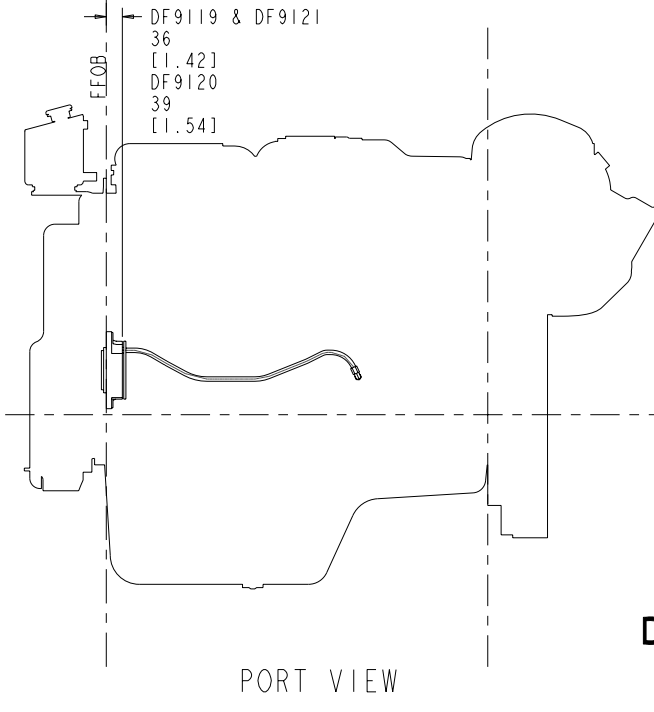
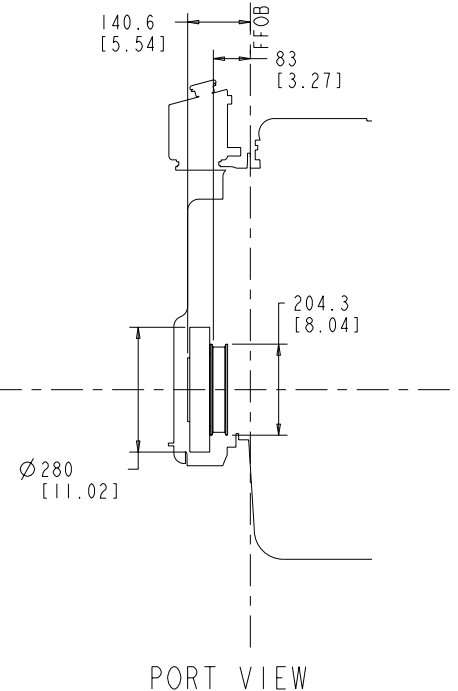


AF9142



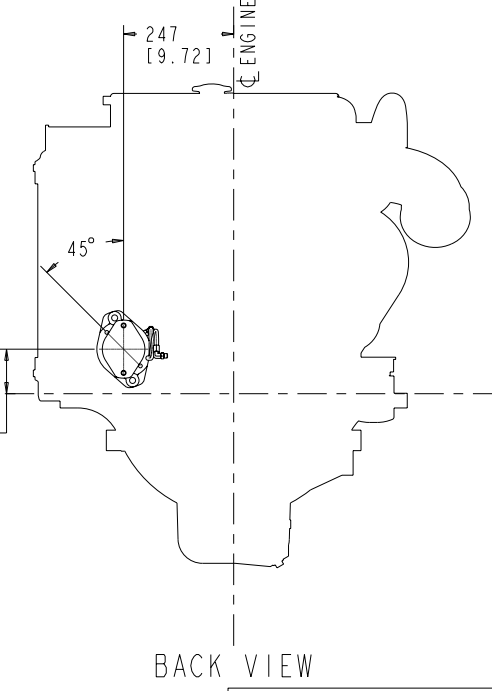
DA9150

② 4X M12 X 1.75  
EQUALLY SPACED ON  
A  $\phi 96 [3.78]$  B.C.



DF9119/DF9120/DF9121

DA9119  
SAE "A" 11 TOOTH SPLINE ②  
DF9120  
SAE "B" 13 TOOTH SPLINE  
DF9121  
SAE "A" 9 TOOTH SPLINE



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.

CUMMINS INC.

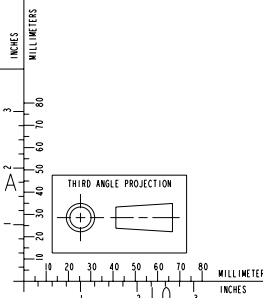
ITEM NAME  
QSL9-HX  
IDENTIFIER  
INSTALLATION DIAGRAM

LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	SCALE: 2:1
DWN: TMO/TGANG	SIZE CODE (IDENT. NO.):
CHD: UNCHECKED	ITEM NUMBER 3170591
APPD:	ITEM CONTROL: MCS
	SHEET 3 OF 21

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

ACCESSORY DRIVES & PTO'S

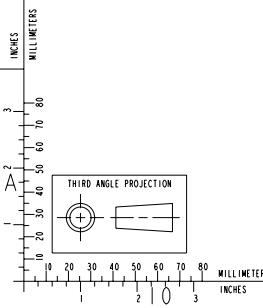
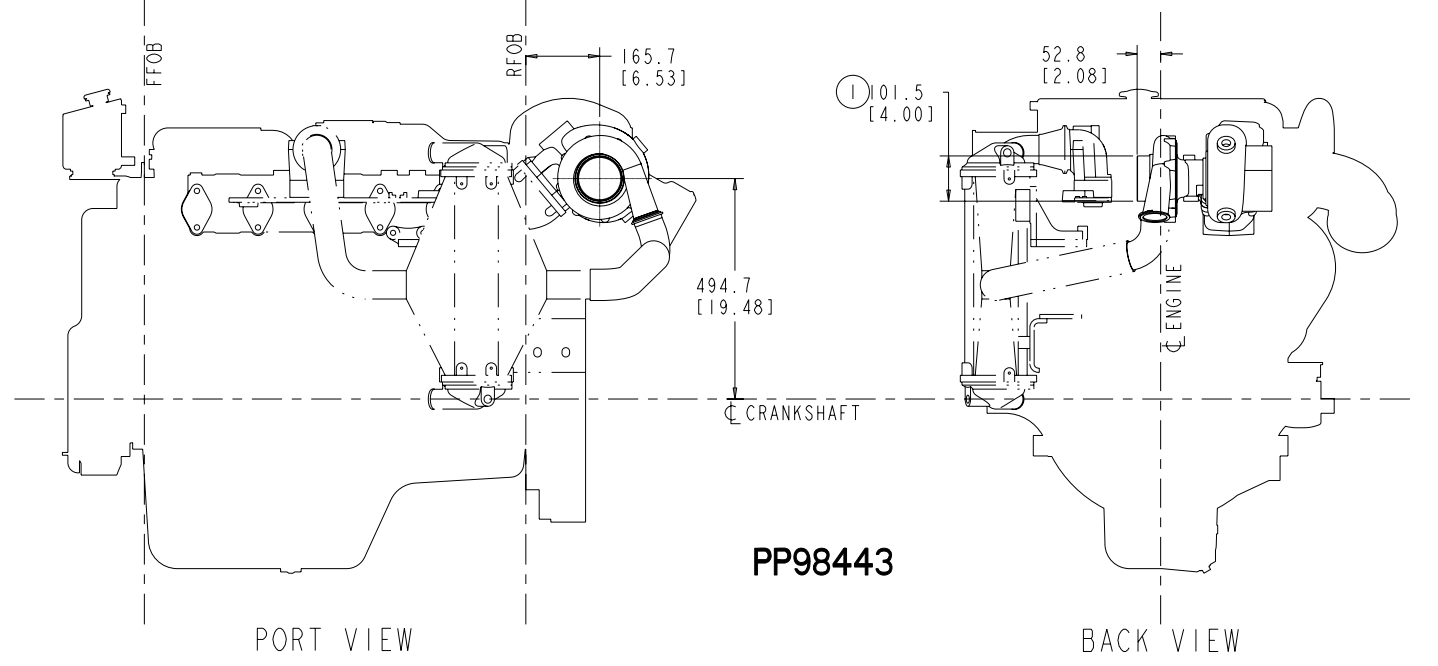
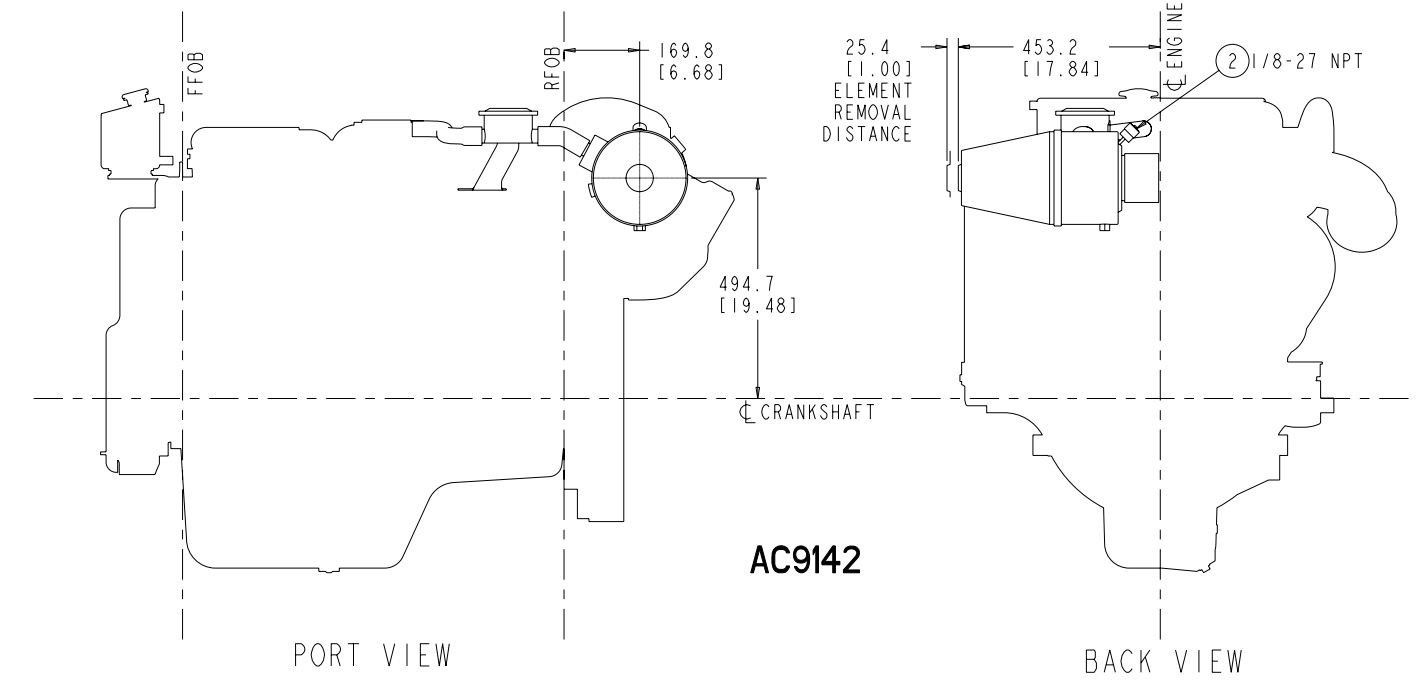
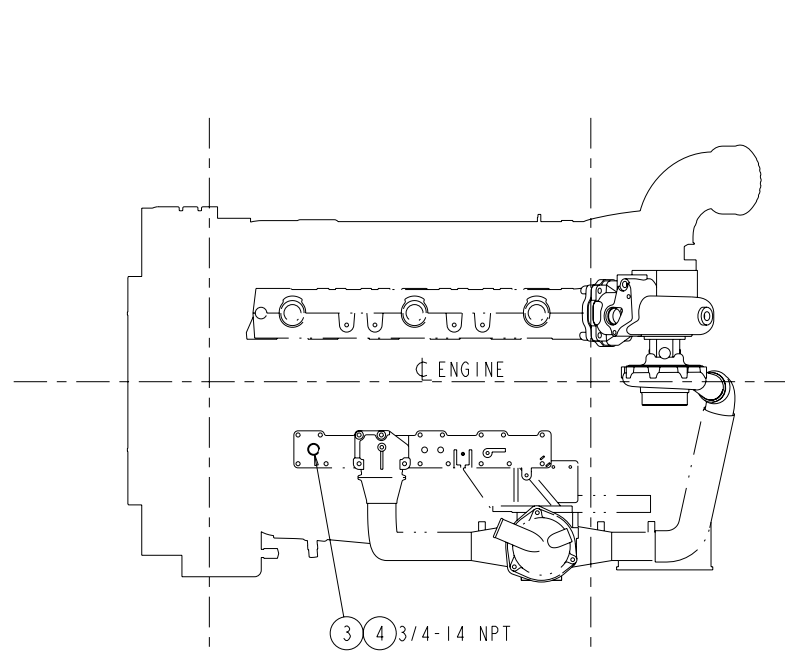
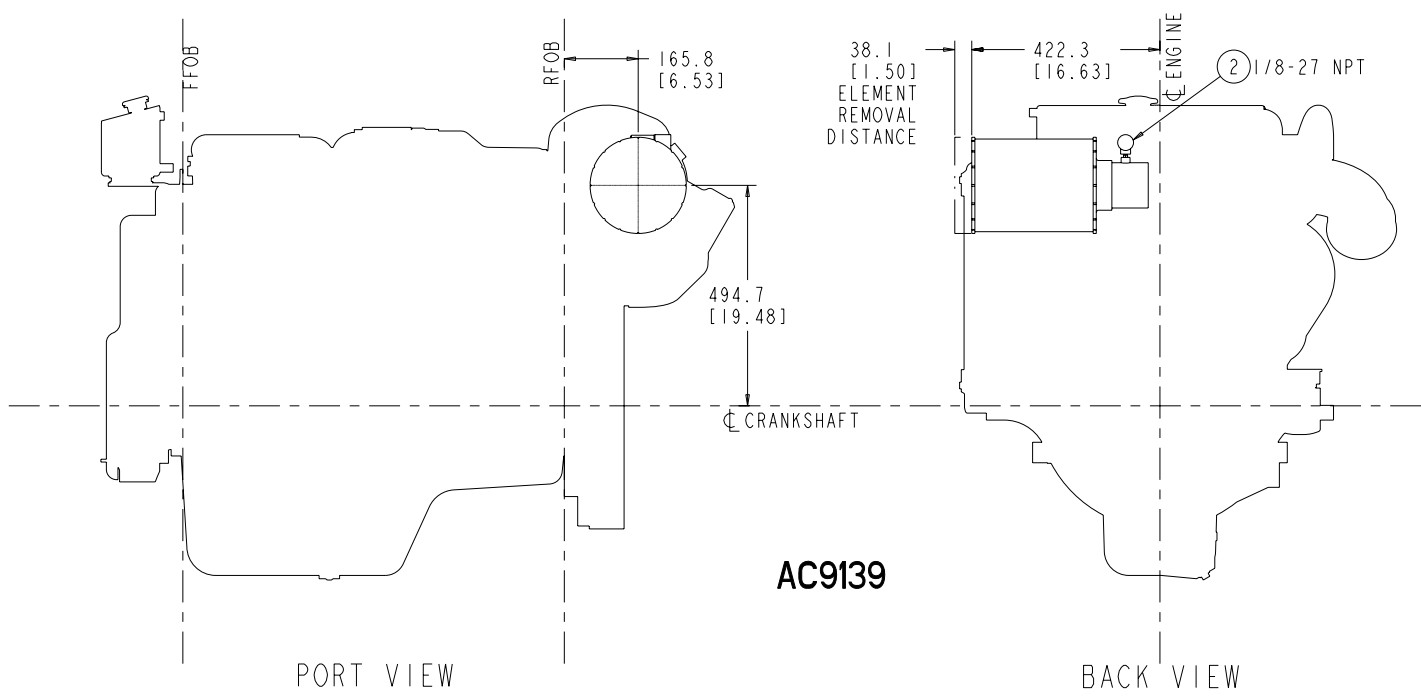
- ① BELT DRIVE CONNECTION
- ② DRIVE CONNECTION BOLT PATTERN
- ③ PTO FLYWHEEL HOUSING BOLT PATTERN - N/A





ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



- ① AIR INLET CONNECTION, COMPRESSOR
- ② AIR INLET RESTRICTION GAUGE/PORT
- ③ INTAKE MANIFOLD PRESSURE PORT
- ④ INTAKE MANIFOLD TEMPERATURE PORT
- ⑤ TURBO BOOST PRESSURE PORT- N/A

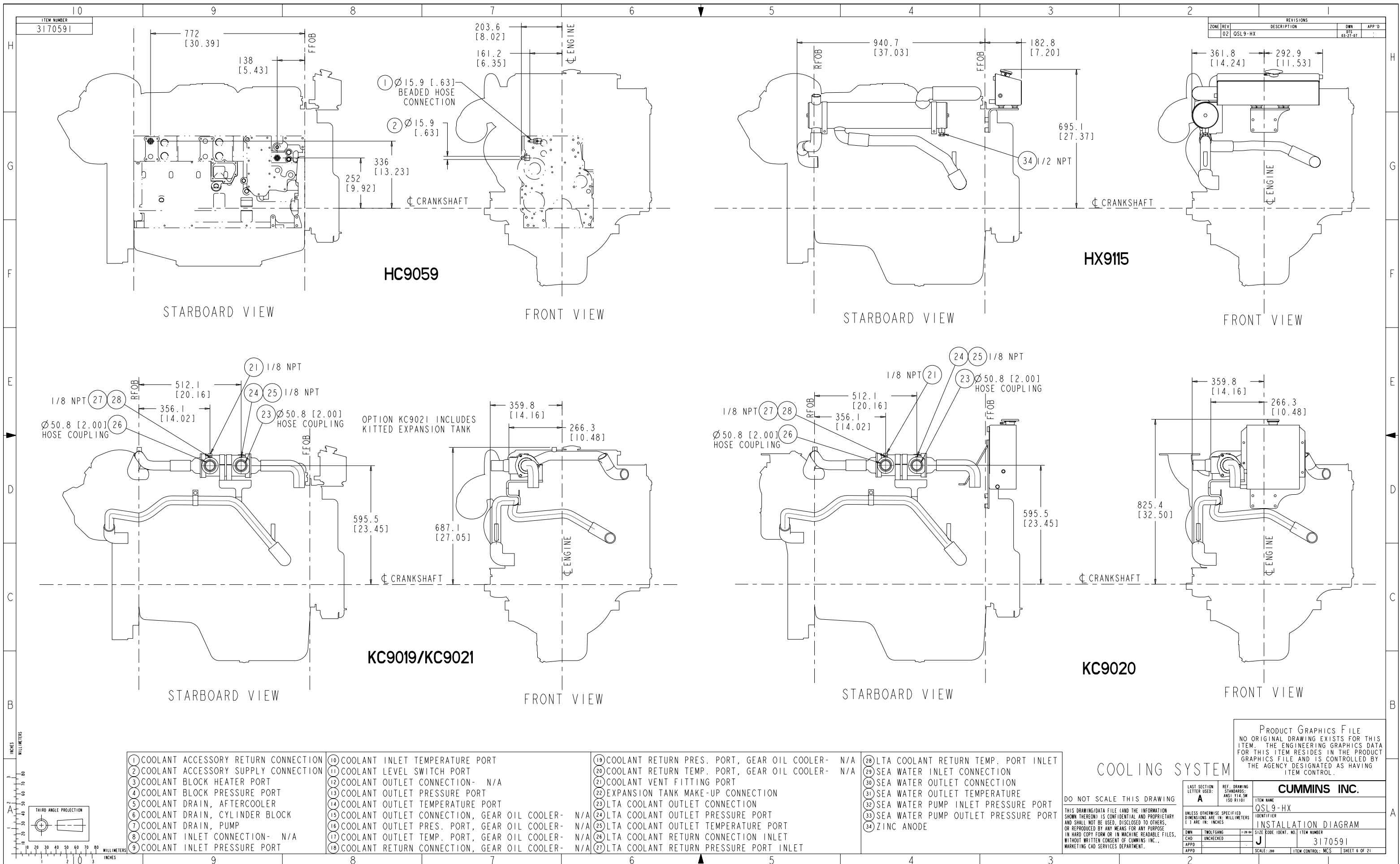
DO NOT SCALE THIS DRAWING

THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

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: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME OSL9-HX	IDENTIFIER INSTALLATION DIAGRAM	ITEM NUMBER 3170591
DWN: TMO/TGANG CHD: UNCHECKED APPD:	SCALE: 2:1	ITEM CONTROL: MCS	SHEET 5 OF 21

AIR INDUCTION SYSTEM



ITEM NUMBER  
3170591

REVISIONS		OWN	APP'D
ZONE REV	DESCRIPTION	DATE	
02	OSL9-HX	02-27-97	

STARBOARD VIEW

FRONT VIEW

STARBOARD VIEW

FRONT VIEW

STARBOARD VIEW

FRONT VIEW

STARBOARD VIEW

FRONT VIEW

HC9059

HX9115

KC9019/KC9021

KC9020

OPTION KC9021 INCLUDES KITTED EXPANSION TANK

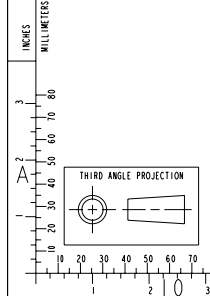
1 COOLANT ACCESSORY RETURN CONNECTION	10 COOLANT INLET TEMPERATURE PORT	19 COOLANT RETURN PRES. PORT, GEAR OIL COOLER- N/A	28 LTA COOLANT RETURN TEMP. PORT INLET
2 COOLANT ACCESSORY SUPPLY CONNECTION	11 COOLANT LEVEL SWITCH PORT	20 COOLANT RETURN TEMP. PORT, GEAR OIL COOLER- N/A	29 SEA WATER INLET CONNECTION
3 COOLANT BLOCK HEATER PORT	12 COOLANT OUTLET CONNECTION- N/A	21 COOLANT VENT FITTING PORT	30 SEA WATER OUTLET CONNECTION
4 COOLANT BLOCK PRESSURE PORT	13 COOLANT OUTLET PRESSURE PORT	22 EXPANSION TANK MAKE-UP CONNECTION	31 SEA WATER OUTLET TEMPERATURE
5 COOLANT DRAIN, AFTERCOOLER	14 COOLANT OUTLET TEMPERATURE PORT	23 LTA COOLANT OUTLET CONNECTION	32 SEA WATER PUMP INLET PRESSURE PORT
6 COOLANT DRAIN, CYLINDER BLOCK	15 COOLANT OUTLET CONNECTION, GEAR OIL COOLER- N/A	24 LTA COOLANT OUTLET PRESSURE PORT	33 SEA WATER PUMP OUTLET PRESSURE PORT
7 COOLANT DRAIN, PUMP	16 COOLANT OUTLET PRES. PORT, GEAR OIL COOLER- N/A	25 LTA COOLANT OUTLET TEMPERATURE PORT	34 ZINC ANODE
8 COOLANT INLET CONNECTION- N/A	17 COOLANT OUTLET TEMP. PORT, GEAR OIL COOLER- N/A	26 LTA COOLANT RETURN CONNECTION INLET	
9 COOLANT INLET PRESSURE PORT	18 COOLANT RETURN CONNECTION, GEAR OIL COOLER- N/A	27 LTA COOLANT RETURN PRESSURE PORT INLET	

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.

COOLING SYSTEM

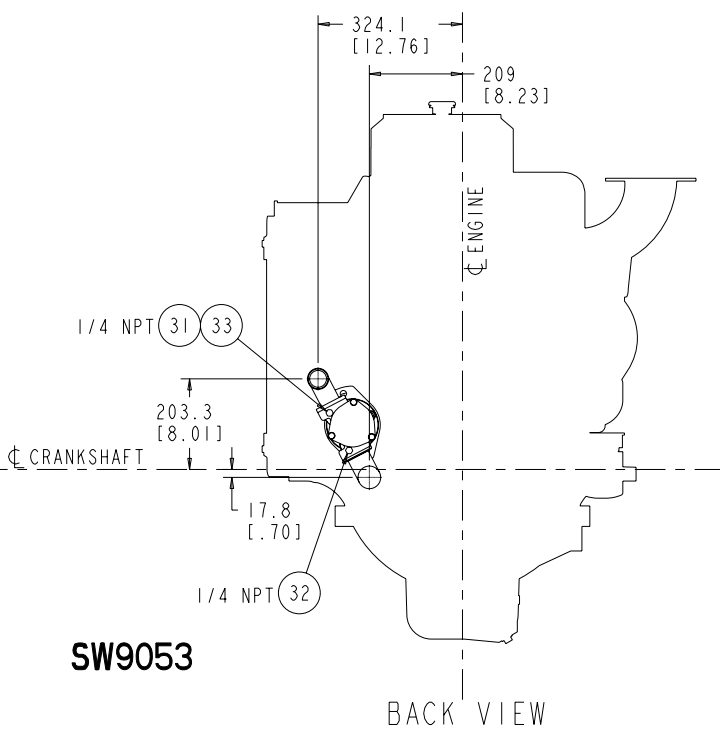
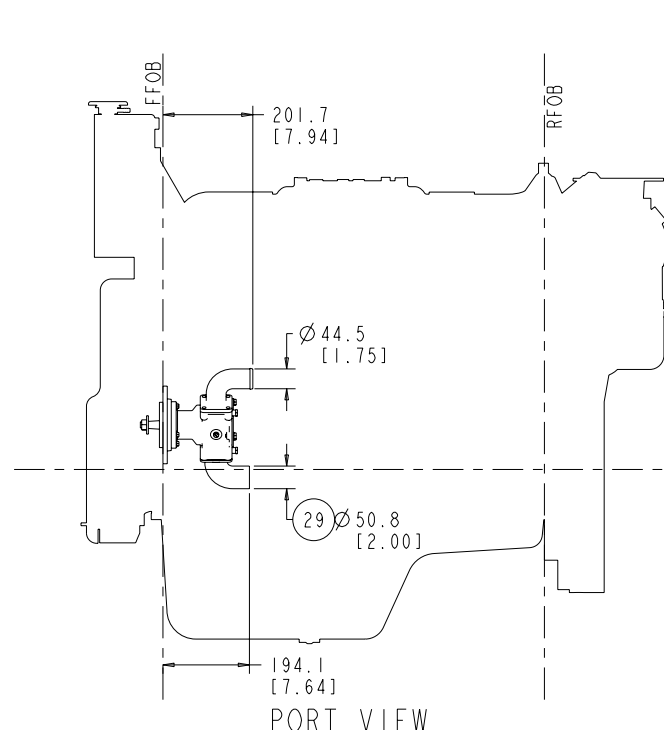
LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	ITEM NAME OSL9-HX
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS 1 ARE IN: INCHES	IDENTIFIER <b>J</b>	SIZE CODE IDENT. NO. ITEM NUMBER 3170591
DWN UNCHECKED	SCALE: 2:1	ITEM CONTROL: MCS
APPD UNCHECKED		SHEET 6 OF 21

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

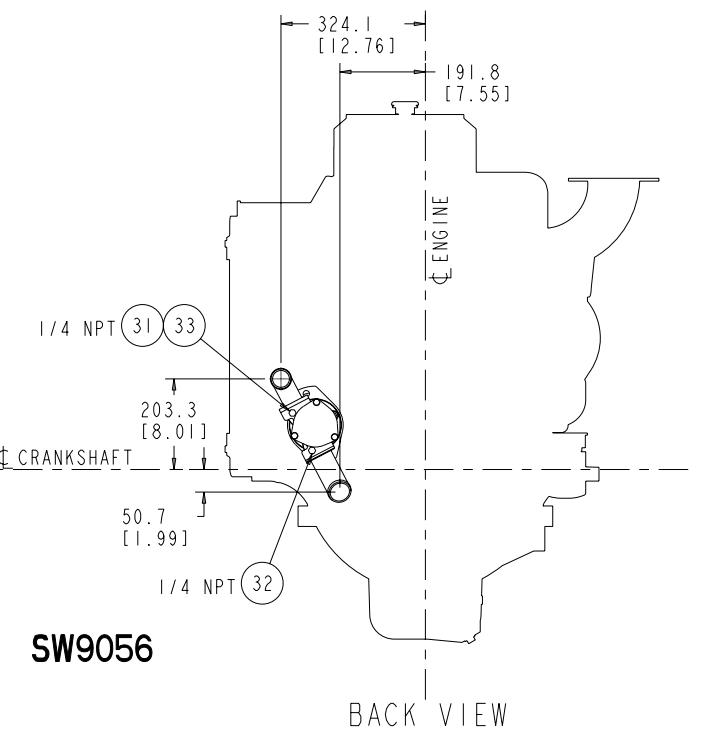
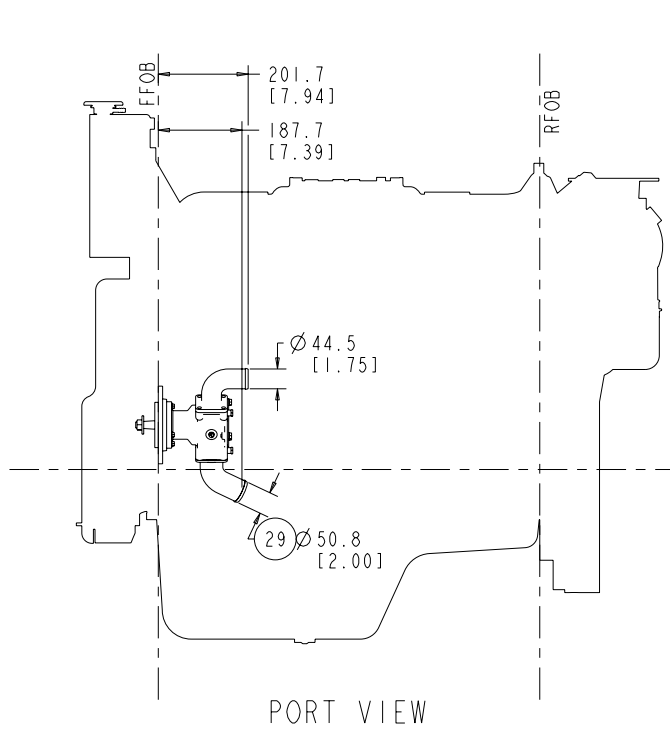


ITEM NUMBER  
3170591

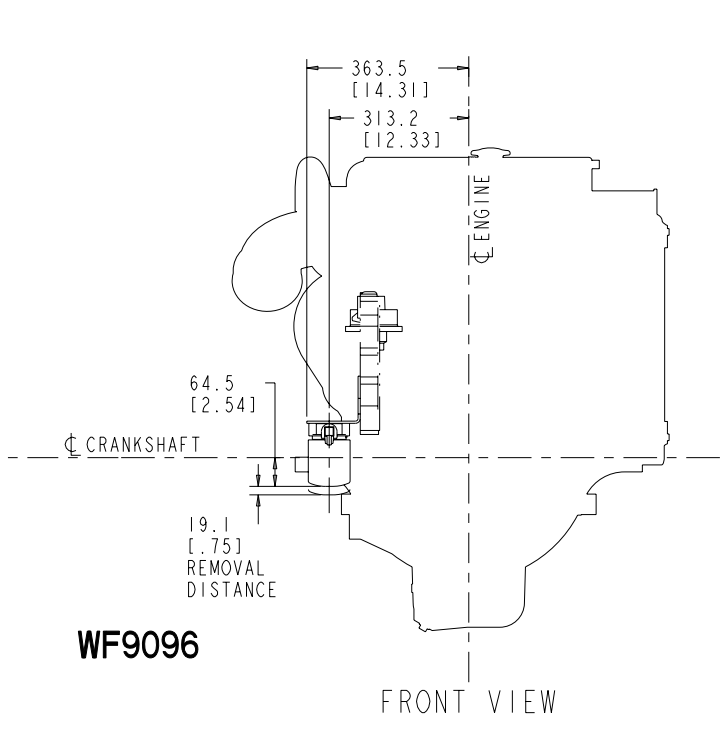
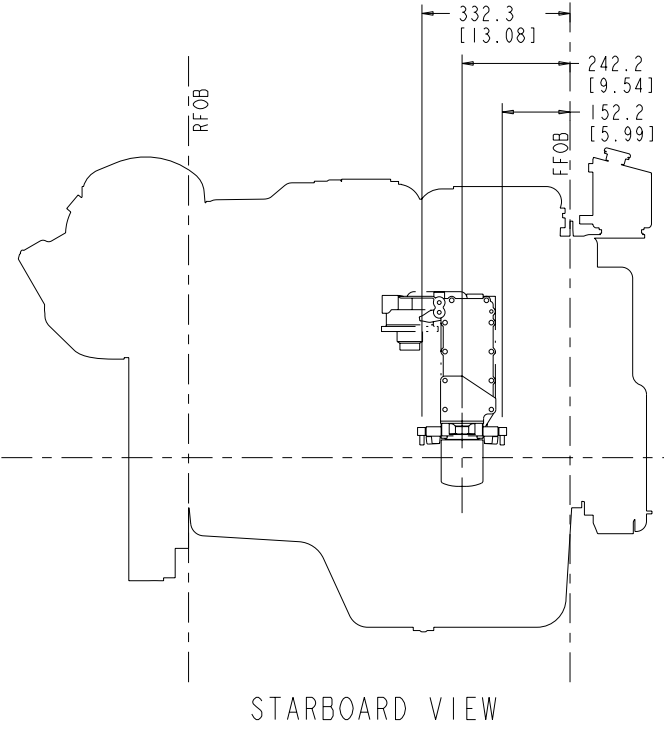
ZONE	REV	DESCRIPTION	DWN	APP'D
02	OSL9-HX		9/5	9/27/97



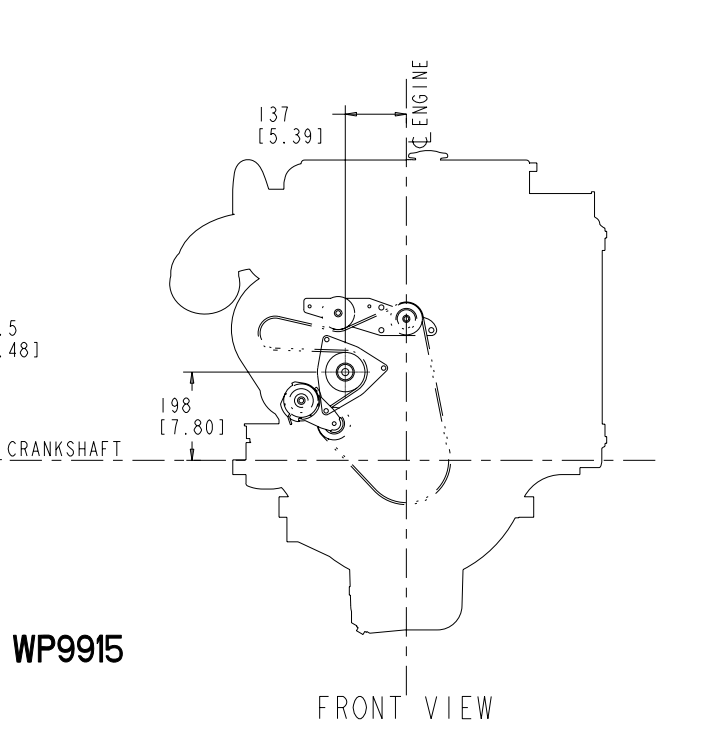
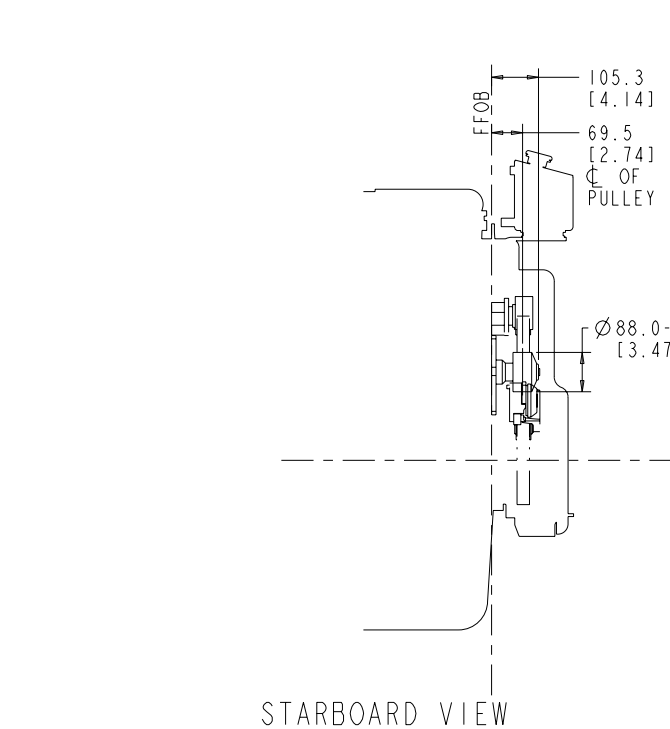
SW9053



SW9056



WF9096



WP9915

- 1 COOLANT ACCESSORY RETURN CONNECTION
- 2 COOLANT ACCESSORY SUPPLY CONNECTION
- 3 COOLANT BLOCK HEATER PORT
- 4 COOLANT BLOCK PRESSURE PORT
- 5 COOLANT DRAIN, AFTERCOOLER
- 6 COOLANT DRAIN, CYLINDER BLOCK
- 7 COOLANT DRAIN, PUMP
- 8 COOLANT INLET CONNECTION- N/A
- 9 COOLANT INLET PRESSURE PORT

- 10 COOLANT INLET TEMPERATURE PORT
- 11 COOLANT LEVEL SWITCH PORT
- 12 COOLANT OUTLET CONNECTION- N/A
- 13 COOLANT OUTLET PRESSURE PORT
- 14 COOLANT OUTLET TEMPERATURE PORT
- 15 COOLANT OUTLET CONNECTION, GEAR OIL COOLER- N/A
- 16 COOLANT OUTLET PRES. PORT, GEAR OIL COOLER- N/A
- 17 COOLANT OUTLET TEMP. PORT, GEAR OIL COOLER- N/A
- 18 COOLANT RETURN CONNECTION, GEAR OIL COOLER- N/A

- 19 COOLANT RETURN PRES. PORT, GEAR OIL COOLER- N/A
- 20 COOLANT RETURN TEMP. PORT, GEAR OIL COOLER- N/A
- 21 COOLANT VENT FITTING PORT
- 22 EXPANSION TANK MAKE-UP CONNECTION
- 23 LTA COOLANT OUTLET CONNECTION
- 24 LTA COOLANT OUTLET PRESSURE PORT
- 25 LTA COOLANT OUTLET TEMPERATURE PORT
- 26 LTA COOLANT RETURN CONNECTION INLET
- 27 LTA COOLANT RETURN PRESSURE PORT INLET

- 28 LTA COOLANT RETURN TEMP. PORT INLET
- 29 SEA WATER INLET CONNECTION
- 30 SEA WATER OUTLET CONNECTION
- 31 SEA WATER OUTLET TEMPERATURE
- 32 SEA WATER PUMP INLET PRESSURE PORT
- 33 SEA WATER PUMP OUTLET PRESSURE PORT
- 34 ZINC ANODE

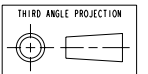
COOLING SYSTEM

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: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	ITEM NAME OSL9-HX
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	IDENTIFIER <b>J</b>	SIZE CODE (IDENT. NO.) 3170591
DWN: UNCHECKED CHD: UNCHECKED APPD: UNCHECKED	SCALE: 2:1	ITEM CONTROL: MCS SHEET 7 OF 21

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

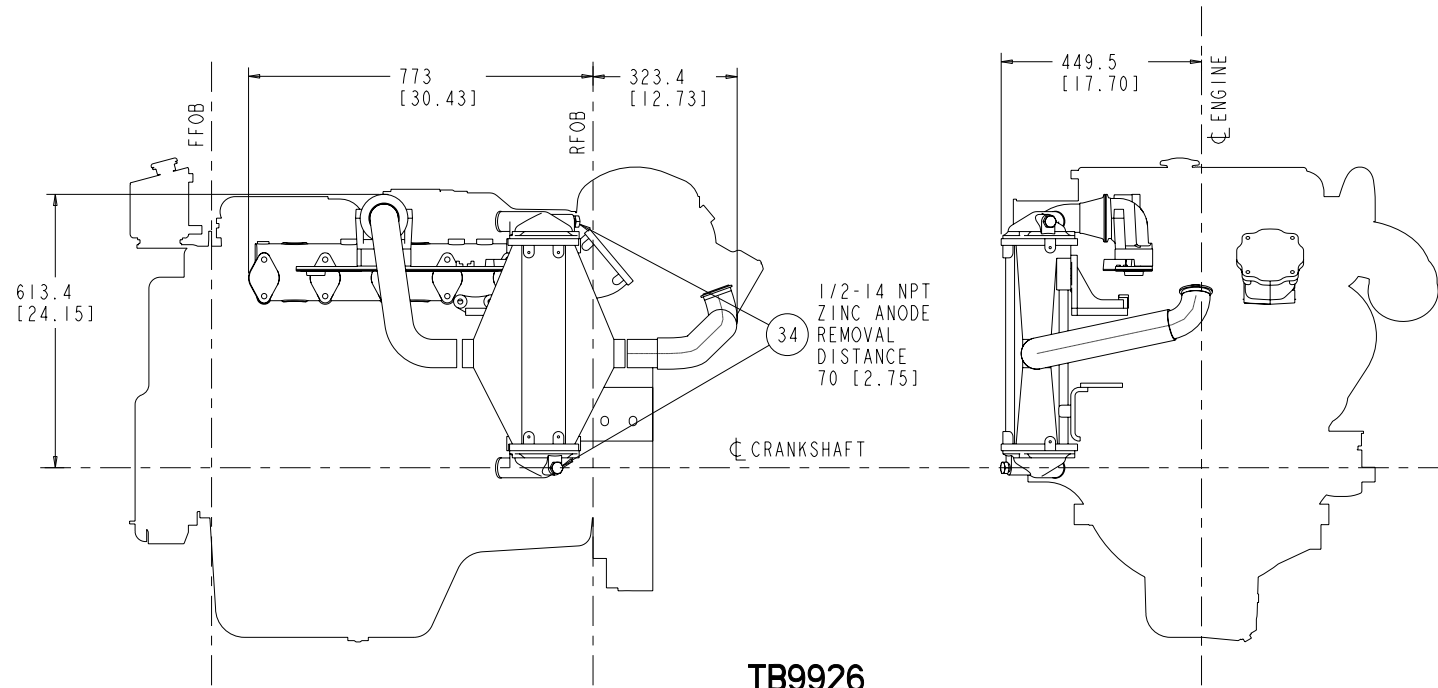
INCHES  
MILLIMETERS



INCHES  
MILLIMETERS

ITEM NUMBER  
3170591

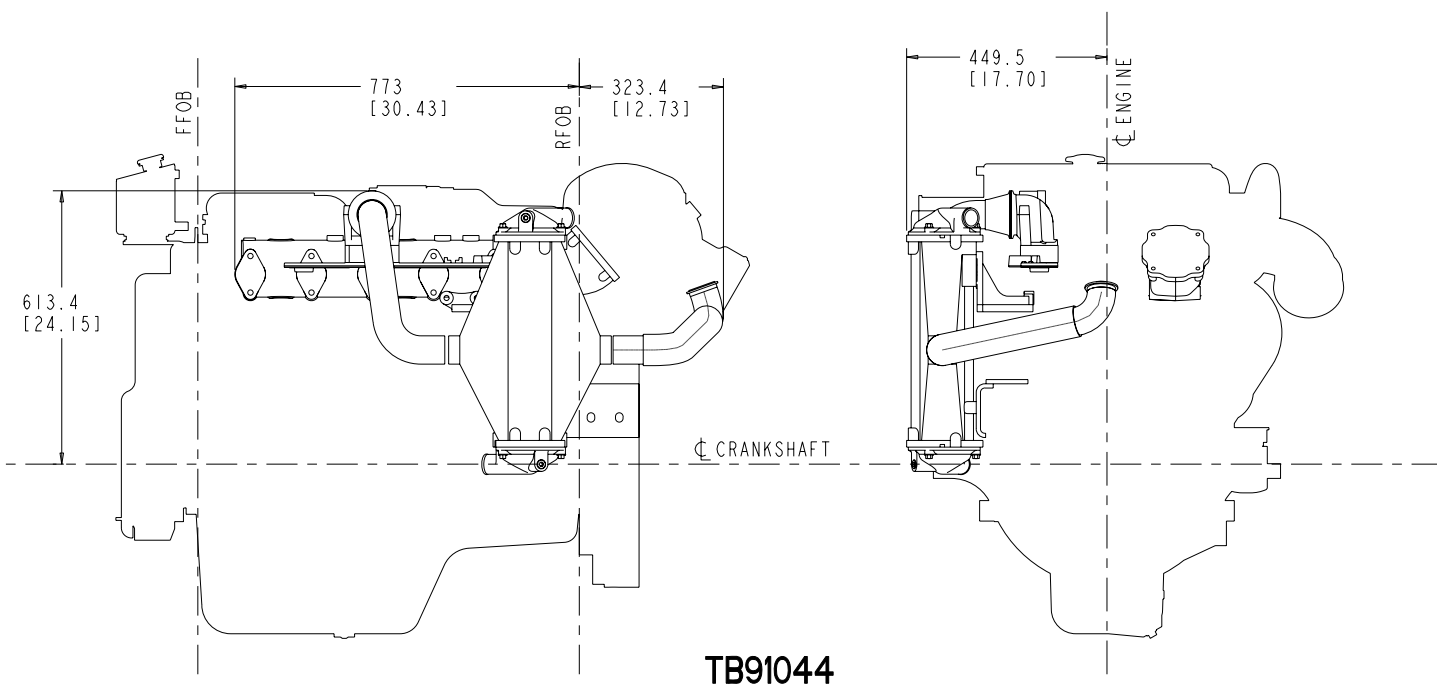
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



TB9926

PORT VIEW

BACK VIEW



TB91044

PORT VIEW

BACK VIEW

1 COOLANT ACCESSORY RETURN CONNECTION	10 COOLANT INLET TEMPERATURE PORT	19 COOLANT RETURN PRES. PORT, GEAR OIL COOLER- N/A	28 LTA COOLANT RETURN TEMP. PORT INLET
2 COOLANT ACCESSORY SUPPLY CONNECTION	11 COOLANT LEVEL SWITCH PORT	20 COOLANT RETURN TEMP. PORT, GEAR OIL COOLER- N/A	29 SEA WATER INLET CONNECTION
3 COOLANT BLOCK HEATER PORT	12 COOLANT OUTLET CONNECTION- N/A	21 COOLANT VENT FITTING PORT	30 SEA WATER OUTLET CONNECTION
4 COOLANT BLOCK PRESSURE PORT	13 COOLANT OUTLET PRESSURE PORT	22 EXPANSION TANK MAKE-UP CONNECTION	31 SEA WATER OUTLET TEMPERATURE
5 COOLANT DRAIN, AFTERCOOLER	14 COOLANT OUTLET TEMPERATURE PORT	23 LTA COOLANT OUTLET CONNECTION	32 SEA WATER PUMP INLET PRESSURE PORT
6 COOLANT DRAIN, CYLINDER BLOCK	15 COOLANT OUTLET CONNECTION, GEAR OIL COOLER- N/A	24 LTA COOLANT OUTLET PRESSURE PORT	33 SEA WATER PUMP OUTLET PRESSURE PORT
7 COOLANT DRAIN, PUMP	16 COOLANT OUTLET PRES. PORT, GEAR OIL COOLER- N/A	25 LTA COOLANT OUTLET TEMPERATURE PORT	34 ZINC ANODE
8 COOLANT INLET CONNECTION- N/A	17 COOLANT OUTLET TEMP. PORT, GEAR OIL COOLER- N/A	26 LTA COOLANT RETURN CONNECTION INLET	
9 COOLANT INLET PRESSURE PORT	18 COOLANT RETURN CONNECTION, GEAR OIL COOLER- N/A	27 LTA COOLANT RETURN PRESSURE PORT INLET	

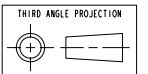
COOLING SYSTEM

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.

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	ITEM NAME <b>CUMMINS INC.</b>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	IDENTIFIER <b>OSL9-HX</b>	INSTALLATION DIAGRAM
DWN: UNCHECKED	SIZE CODE IDENT. NO.: <b>J</b>	ITEM NUMBER <b>3170591</b>
APPD: UNCHECKED	SCALE: 200	ITEM CONTROL: MCS SHEET 8 OF 21

INCHES  
MILLIMETERS

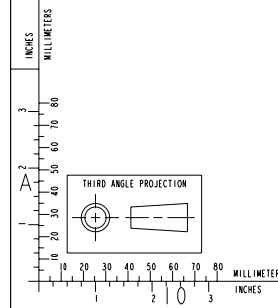
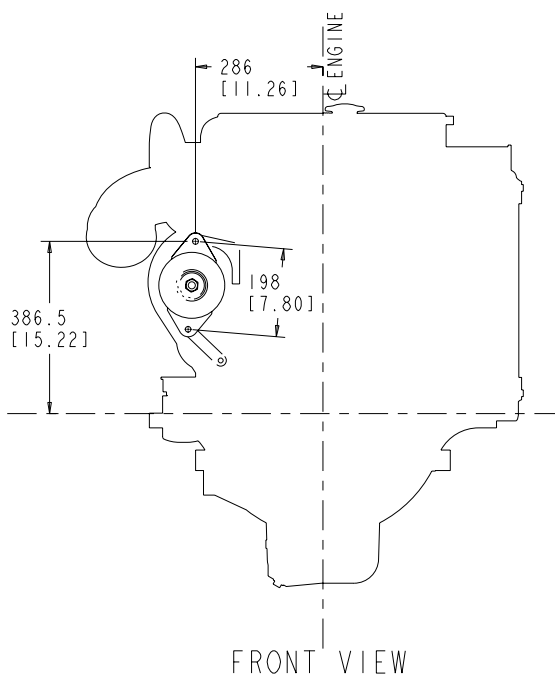
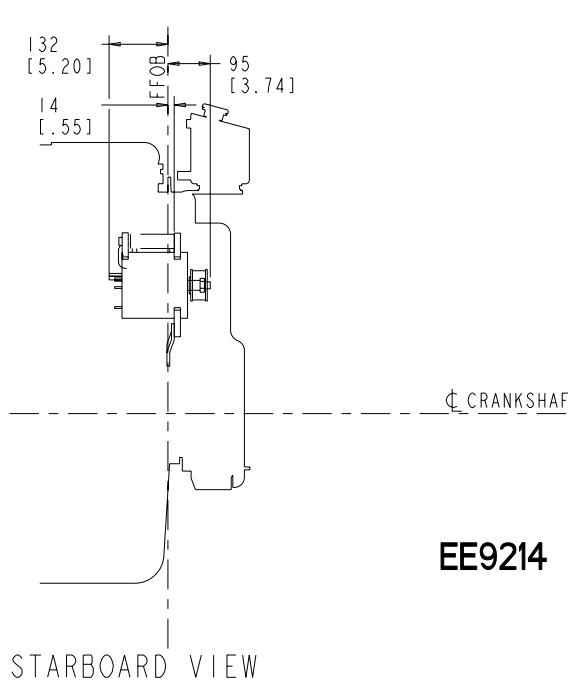
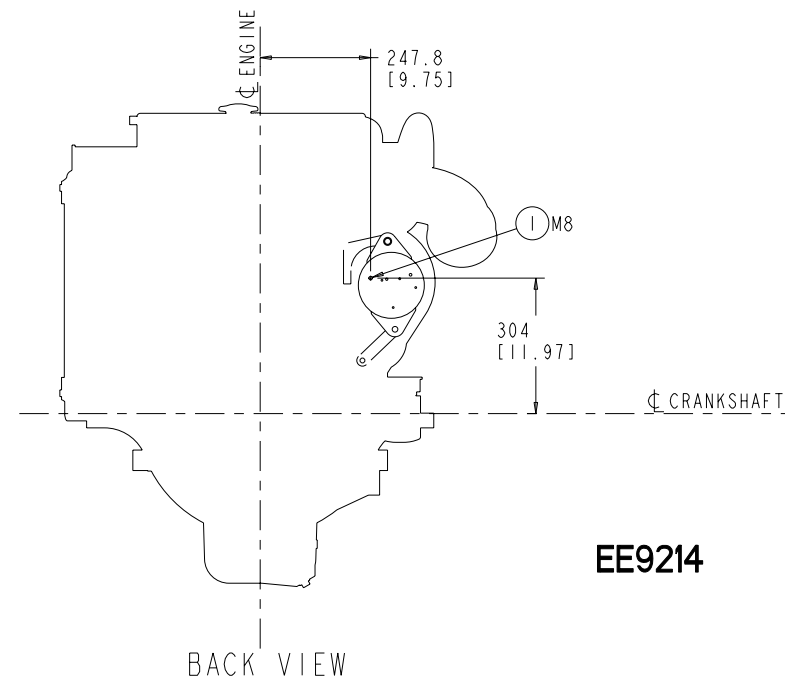
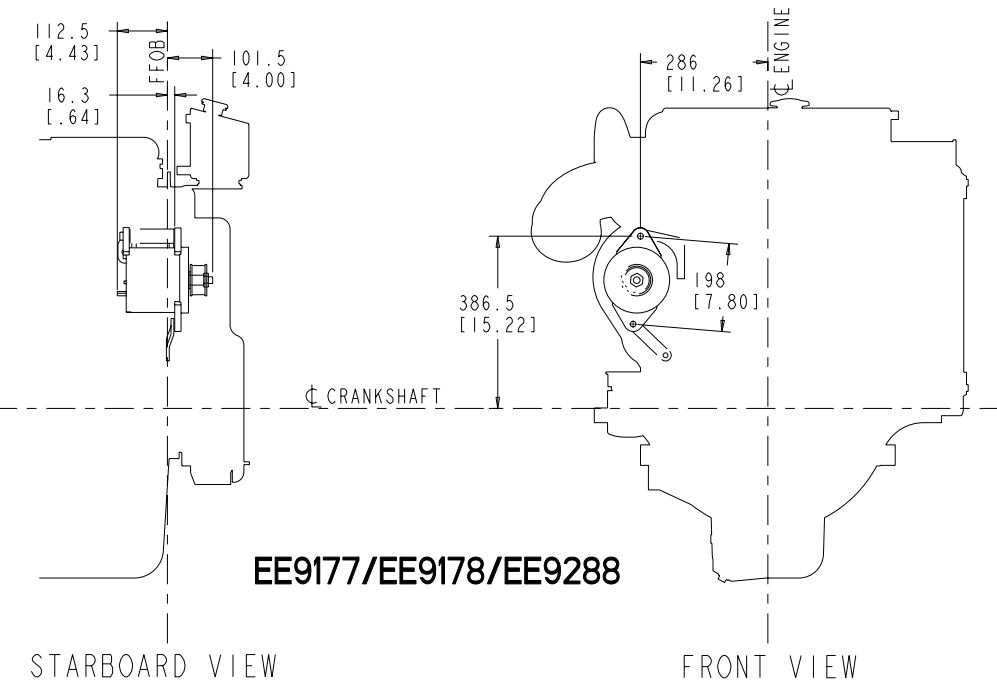
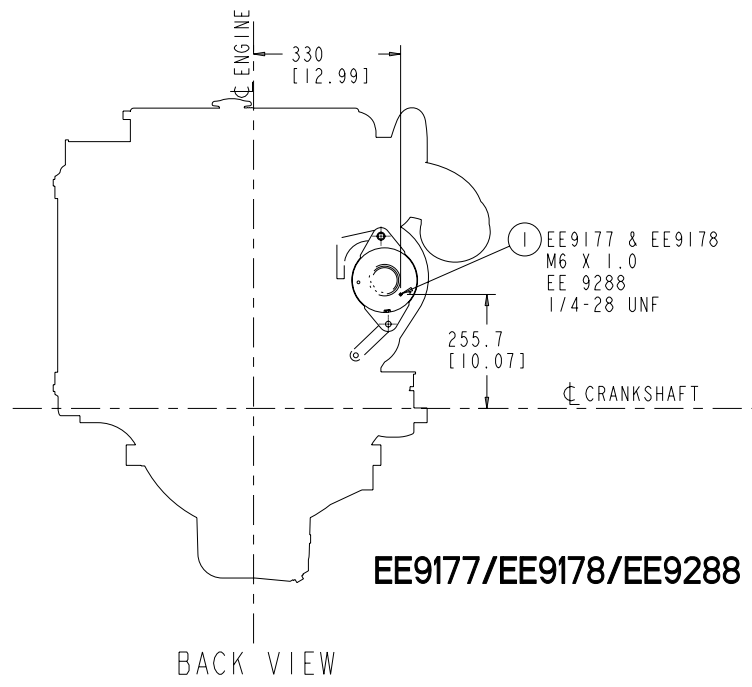
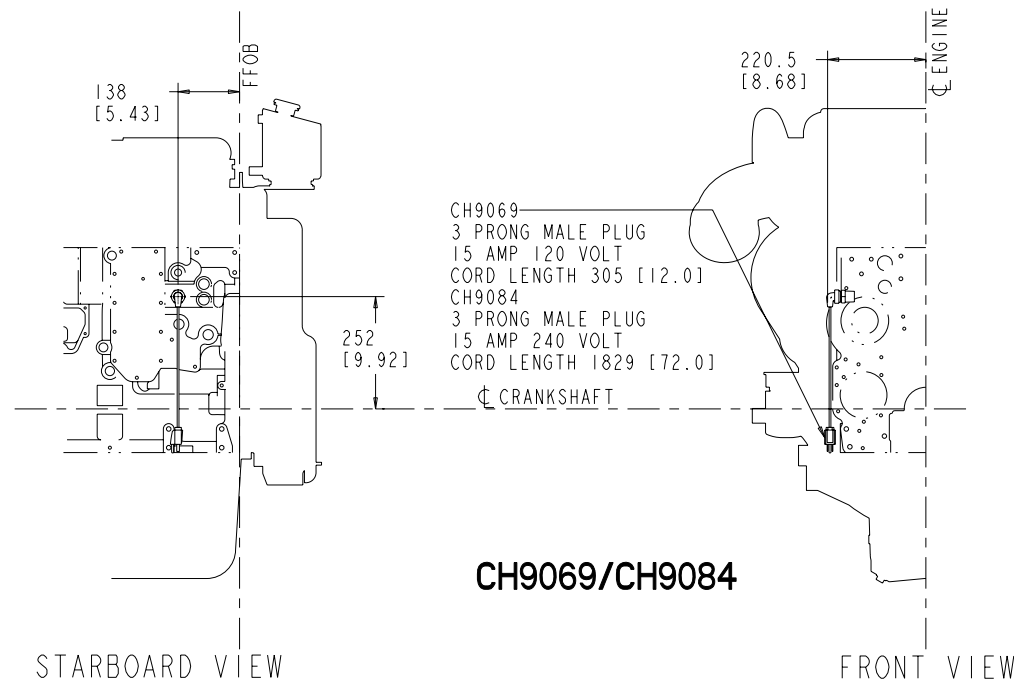


INCHES  
MILLIMETERS



ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



- ① ALTERNATOR POSITIVE B+ TERMINAL
- ② WIRE HARNESS INTERCONNECT

ELECTRICAL SYSTEM

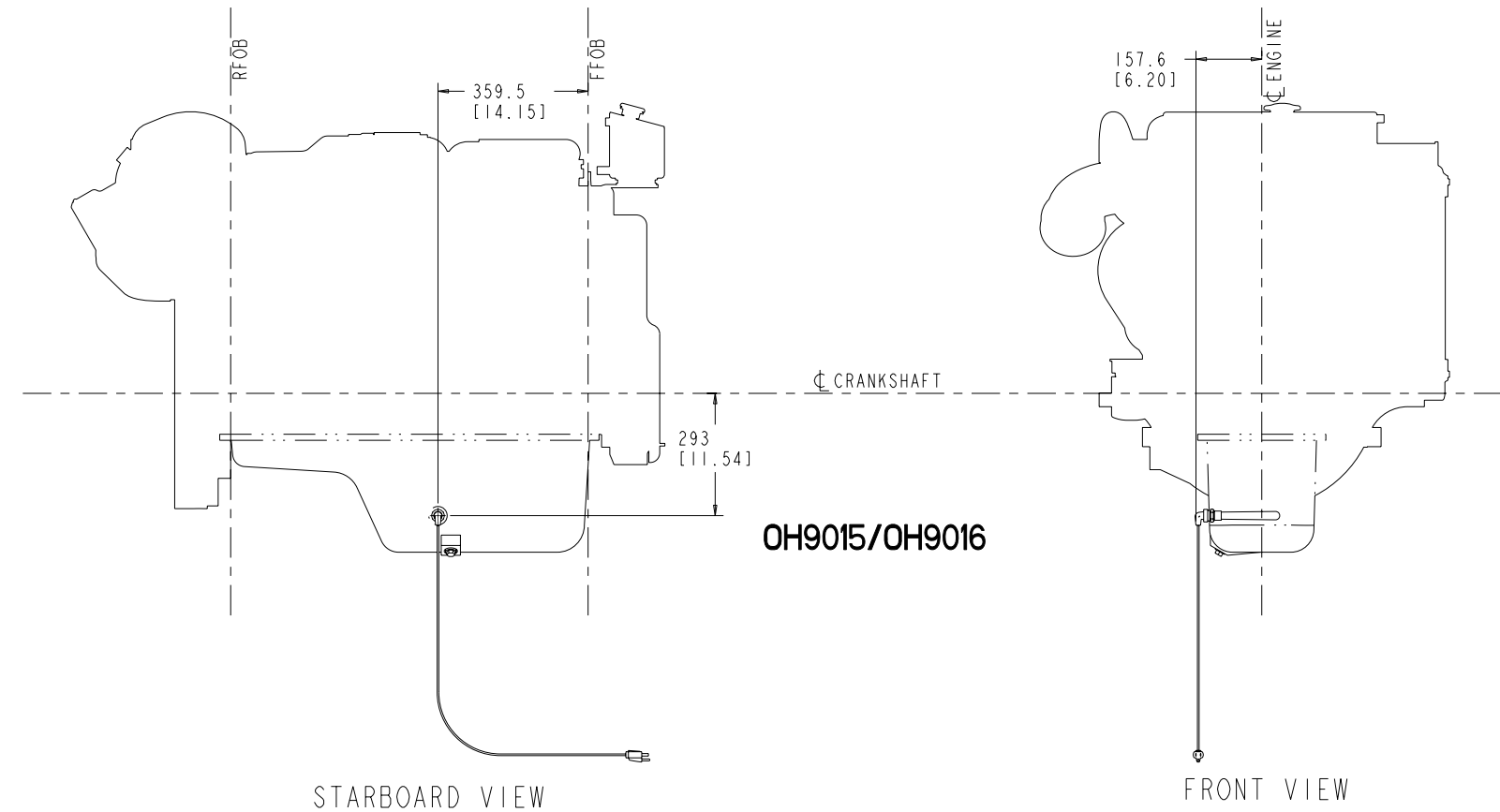
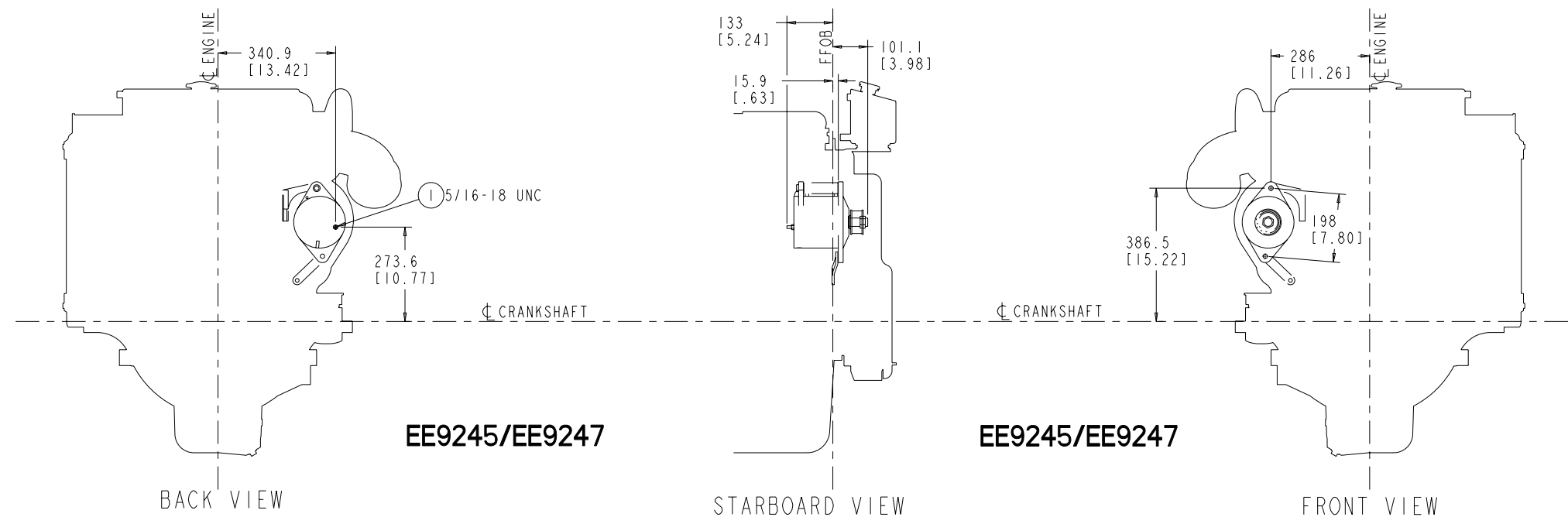
DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

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: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME QSL9-HX	IDENTIFIER INSTALLATION DIAGRAM	ITEM NUMBER 3170591
DWN: UNCHECKED	SIZE CODE (IDENT. NO.) <b>J</b>	SCALE: 2:1	ITEM CONTROL: MCS
APPD: UNCHECKED			SHEET 9 OF 21

ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



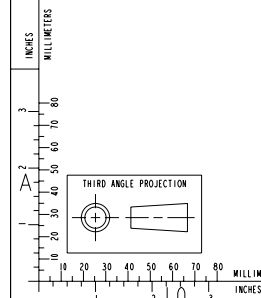
ELECTRICAL SYSTEM

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: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME QSL9-HX	IDENTIFIER	ITEM NUMBER
DWN: TMO/TGANG	SCALE: 2:1	SIZE CODE (IDENT. NO.)	3170591
CHD: UNCHECKED	ITEM CONTROL: MCS	SHEET 10 OF 21	
APPD:			

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

- ① ALTERNATOR POSITIVE B+ TERMINAL
- ② WIRE HARNESS INTERCONNECT

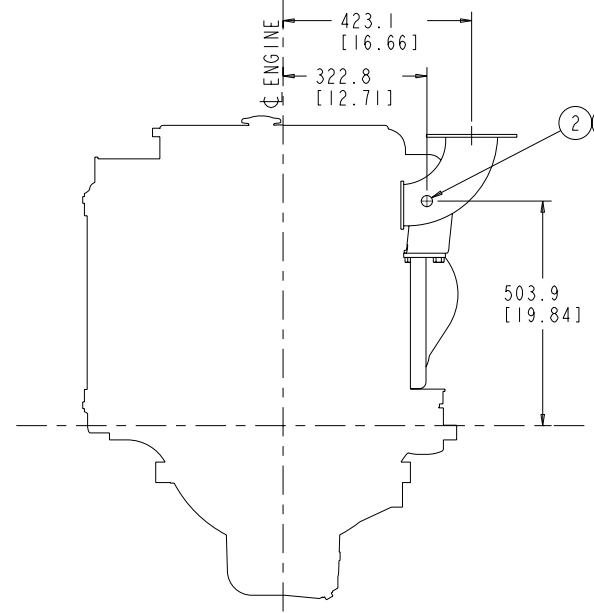


ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		

1 8X Ø11.5 [4.45] ON A  
Ø182.63 [7.19] B.C.

VIEW IN DIRECTION  
OF ARROW "A"



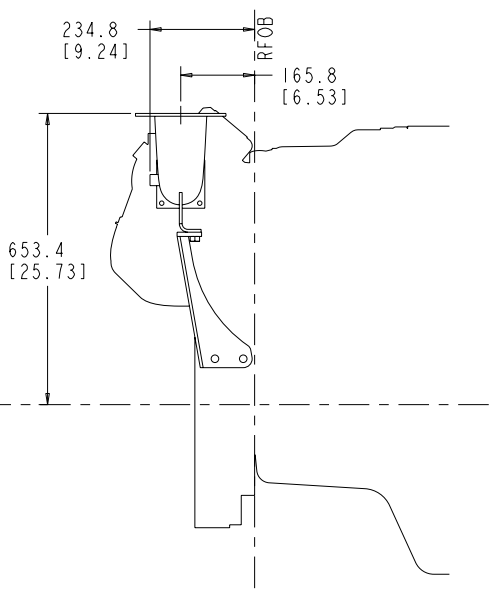
XS9314

BACK VIEW

2 3 1/8-27 NPT

211.8 [8.34]  
494.7 [19.48]  
388.8 [15.31]  
Ø152.4 [6.00]

234.8 [9.24]  
165.8 [6.53]  
653.4 [25.73]



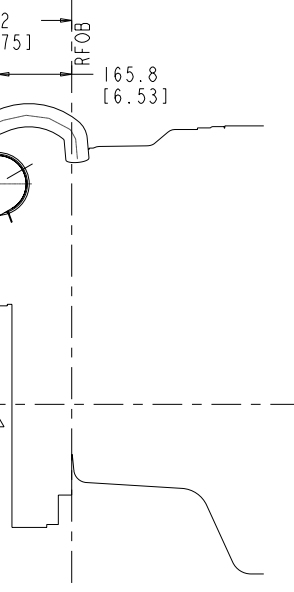
STARBOARD VIEW

452.4 [17.81]  
263.7 [10.38]  
211.8 [8.34]  
494.7 [19.48]  
388.8 [15.31]  
Ø152.4 [6.00]

WET EXHAUST OUTLET  
CONNECTION (ELBOW)  
ADJUSTABLE (0°-68°)

XS9317

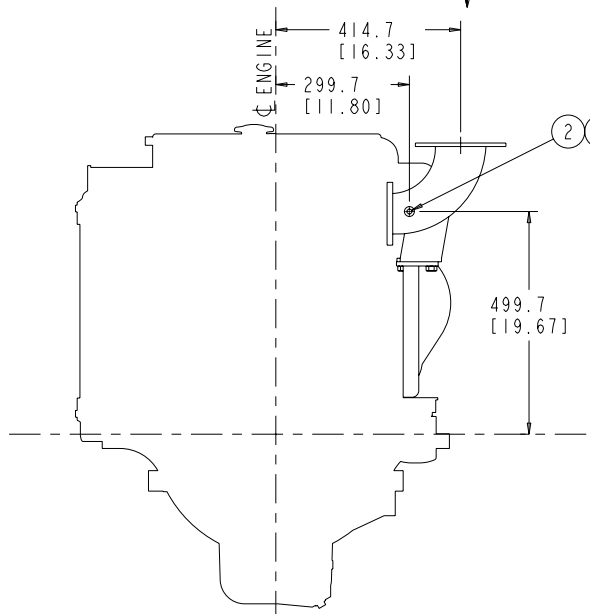
BACK VIEW



STARBOARD VIEW

1 8X Ø11.5 [4.45] ON A  
Ø182.63 [7.19] B.C.

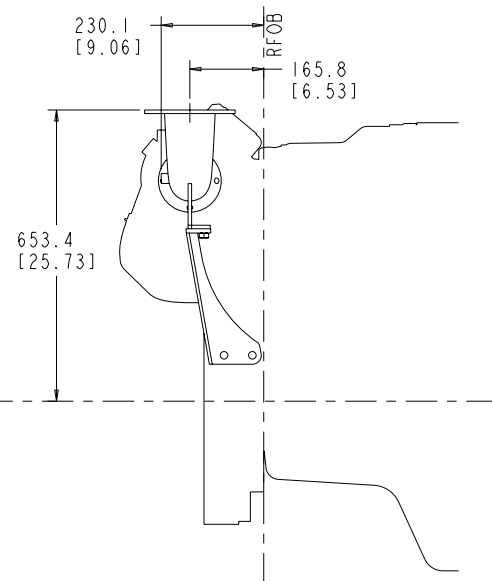
VIEW IN DIRECTION  
OF ARROW "B"



XS9376

BACK VIEW

2 3 1/8-27 NPT



STARBOARD VIEW

230.1 [9.06]  
165.8 [6.53]  
653.4 [25.73]

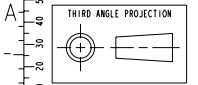
PRODUCT GRAPHICS FILE  
NO ORIGINAL DRAWING EXISTS FOR THIS  
ITEM. THE ENGINEERING GRAPHICS DATA  
FOR THIS ITEM RESIDES IN THE PRODUCT  
GRAPHICS FILE AND IS CONTROLLED BY  
THE AGENCY DESIGNATED AS HAVING  
ITEM CONTROL.

LAST SECTION LETTER USED: <b>A</b>		REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES		ITEM NAME QSL9-HX	IDENTIFIER	
DWN: TMO/TGANG		SIZE CODE (IDENT. NO.)	ITEM NUMBER	
CHD: UNCHECKED		3170591		
APPD:		SCALE: 2:1	ITEM CONTROL: MCS	SHEET 11 OF 21

DO NOT SCALE THIS DRAWING

THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

EXHAUST SYSTEM



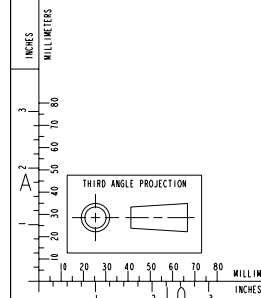
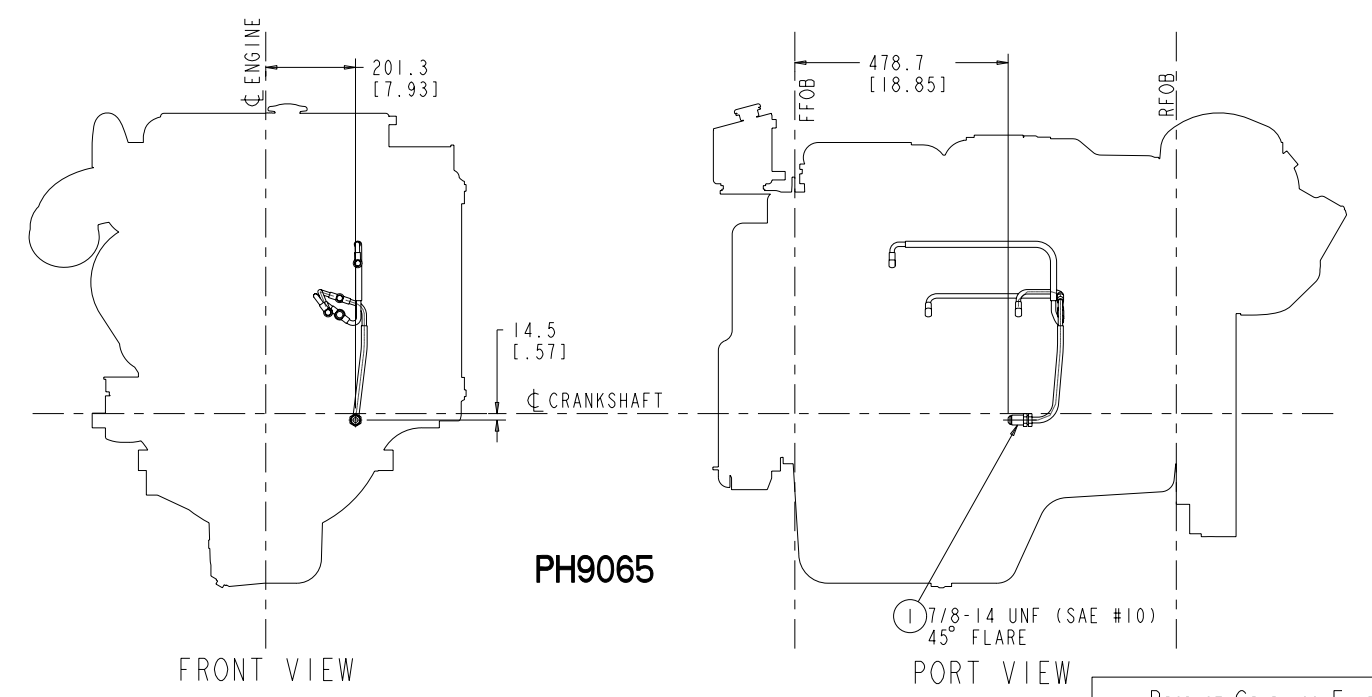
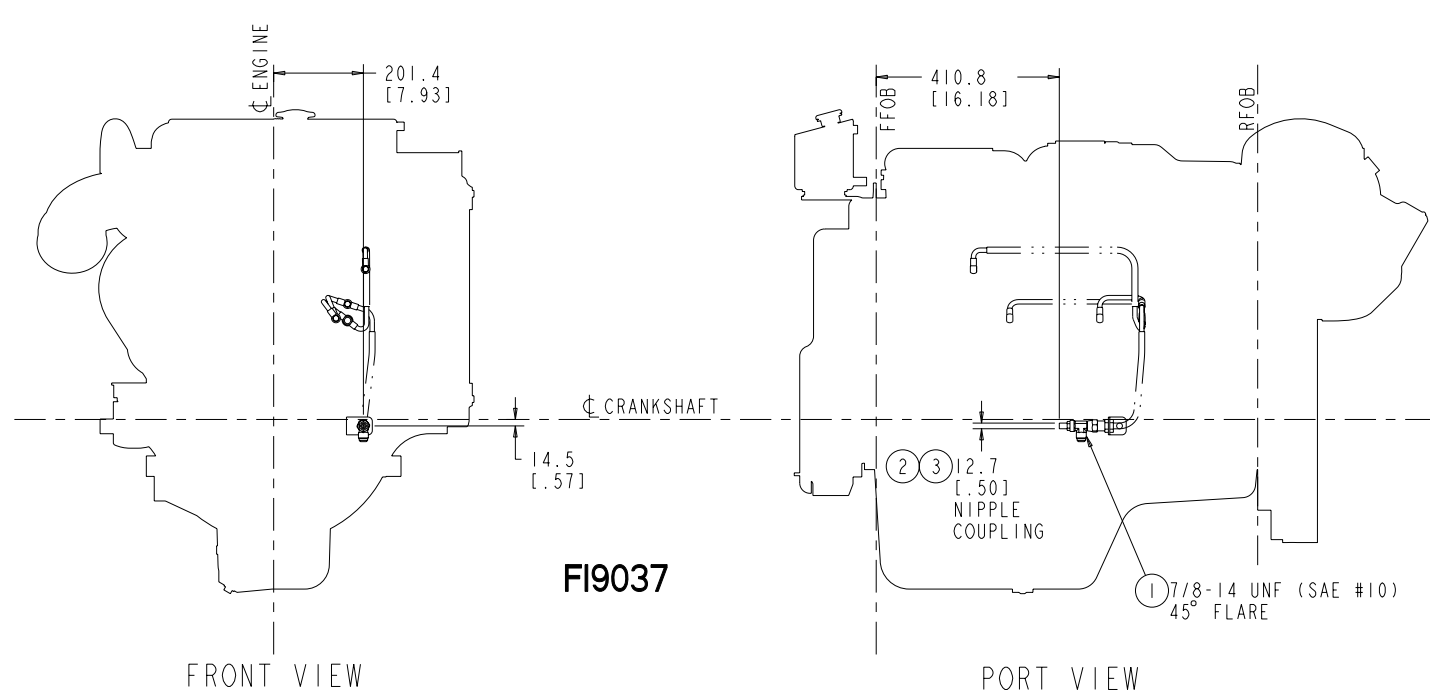
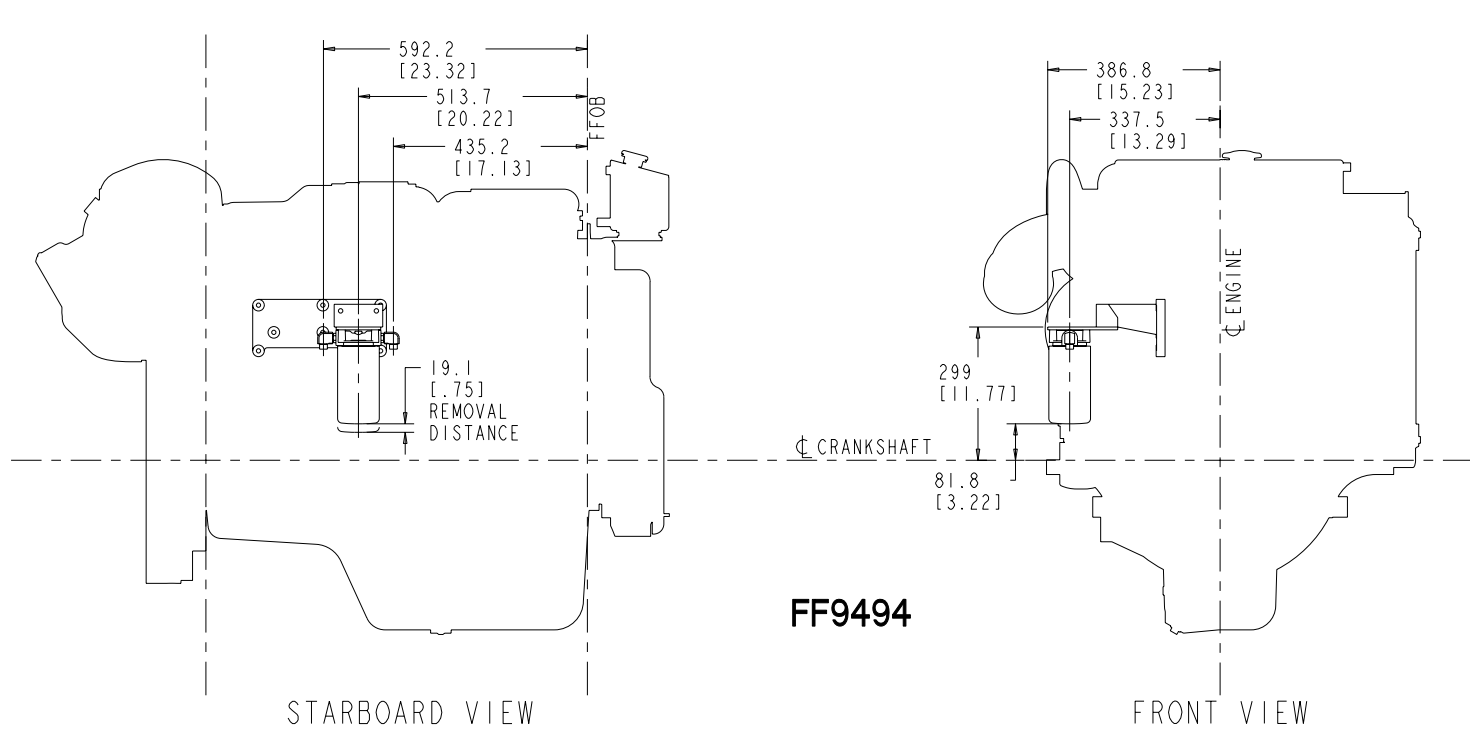
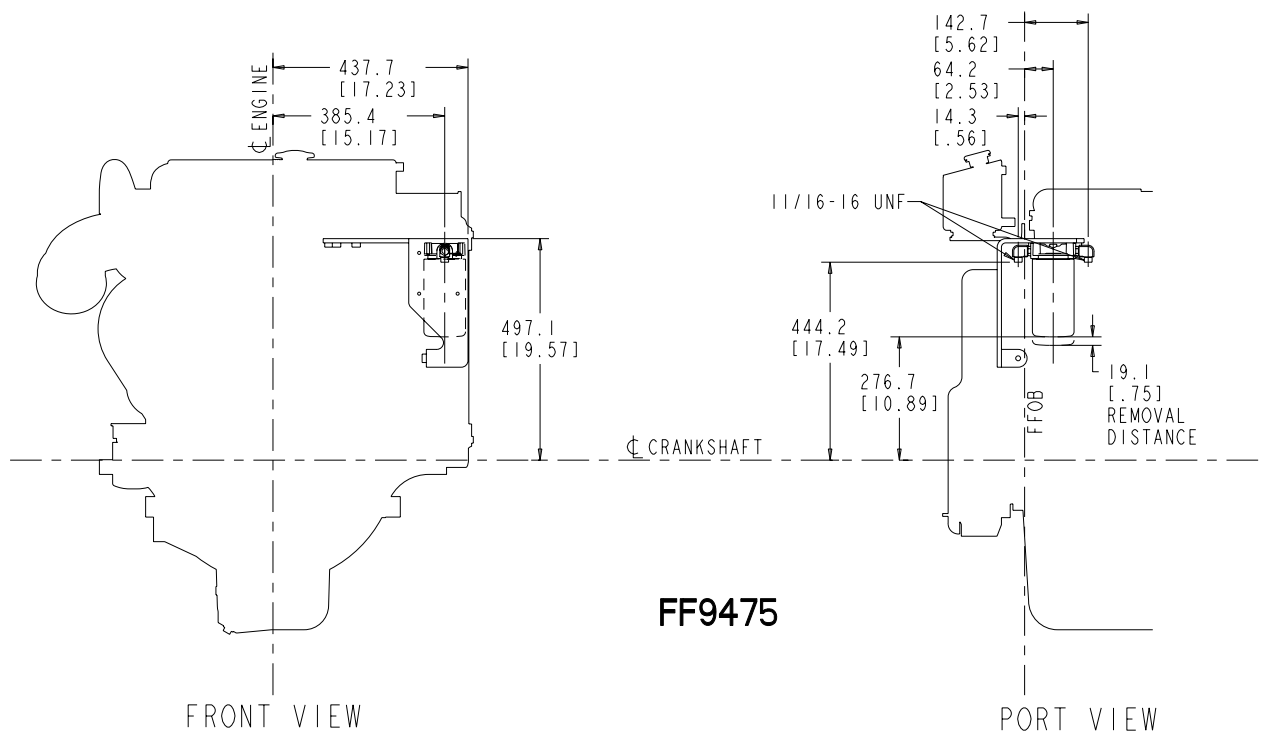
- 1 EXHAUST OUTLET CONNECTION
- 2 EXHAUST PRESSURE PORT
- 3 EXHAUST TEMPERATURE PORT

INCHES  
MILLIMETERS  
0 10 20 30 40 50 60 70 80

0 1 2 3 4 5 6 7 8 9 10  
INCHES

ITEM NUMBER  
3170591

REVISIONS		OWN	APP'D
ZONE REV	DESCRIPTION	9/5	
02	OSL9-HX		



- |                                      |                                 |
|--------------------------------------|---------------------------------|
| ① FUEL INLET CONNECTION              | ⑤ FUEL RETURN CONNECTION        |
| ② FUEL INLET PRESSURE PORT           | ⑥ FUEL RETURN PRESSURE PORT     |
| ③ FUEL INLET TEMPERATURE PORT        | ⑦ FUEL RETURN TEMPERATURE - N/A |
| ④ FUEL PUMP OUT (RAIL) PRESSURE PORT |                                 |

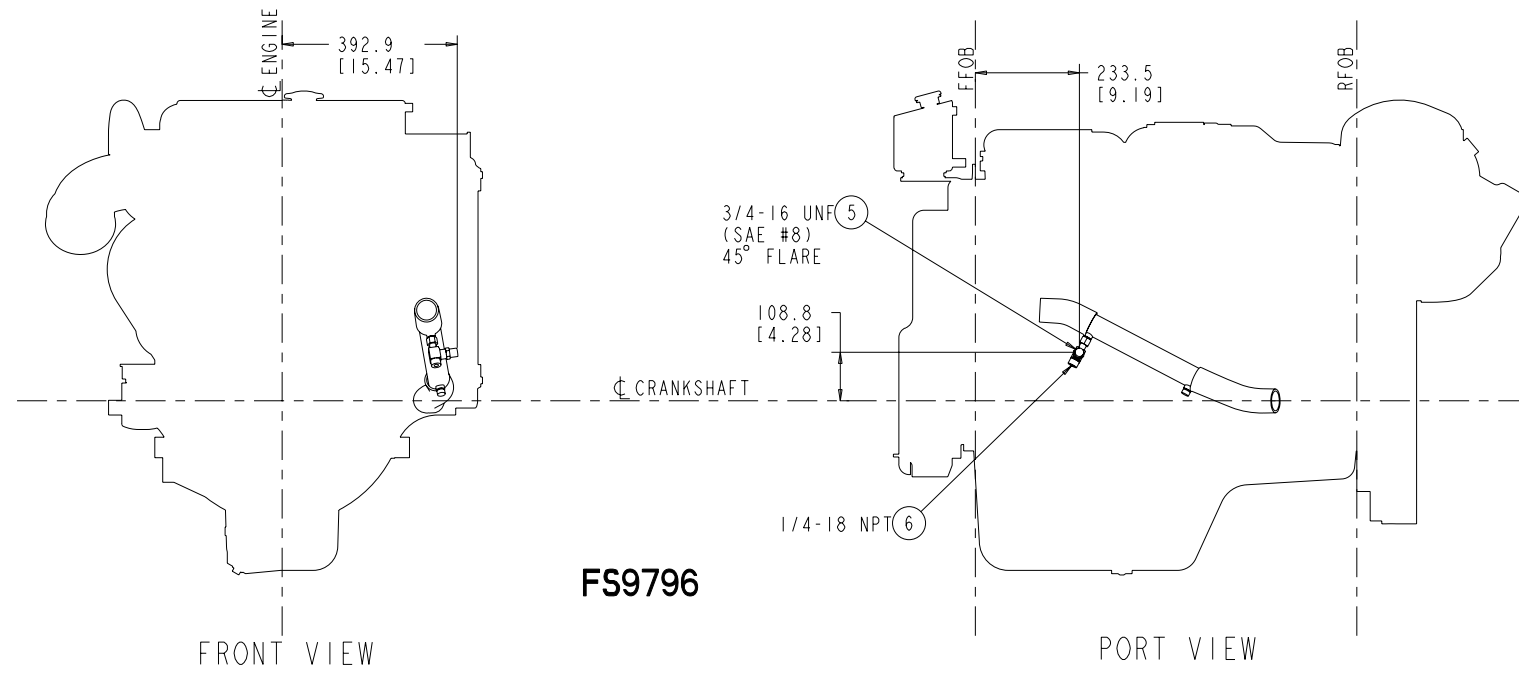
FUEL SYSTEM

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES		ITEM NAME OSL9-HX	IDENTIFIER
DWN: TMO/EGANG    J-20-H4		SIZE CODE (IDENT. NO.)	ITEM NUMBER
CHD: UNCHECKED	APPD: UNCHECKED	3170591	
SCALE: 2:00		ITEM CONTROL: MCS	SHEET 12 OF 21

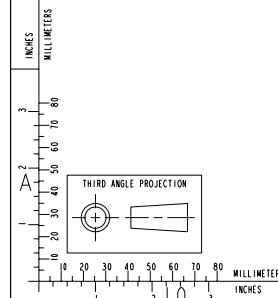
ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



H  
G  
F  
E  
D  
C  
B  
A

H  
G  
F  
E  
D  
C  
B  
A



- |                                      |                                |
|--------------------------------------|--------------------------------|
| ① FUEL INLET CONNECTION              | ⑤ FUEL RETURN CONNECTION       |
| ② FUEL INLET PRESSURE PORT           | ⑥ FUEL RETURN PRESSURE PORT    |
| ③ FUEL INLET TEMPERATURE PORT        | ⑦ FUEL RETURN TEMPERATURE- N/A |
| ④ FUEL PUMP OUT (RAIL) PRESSURE PORT |                                |

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

FUEL SYSTEM

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.

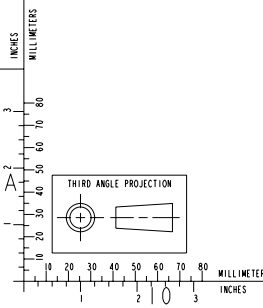
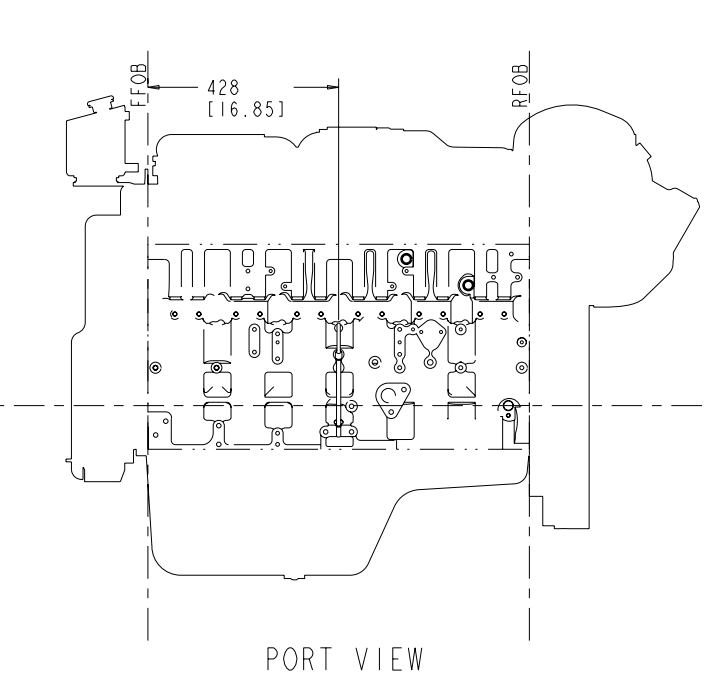
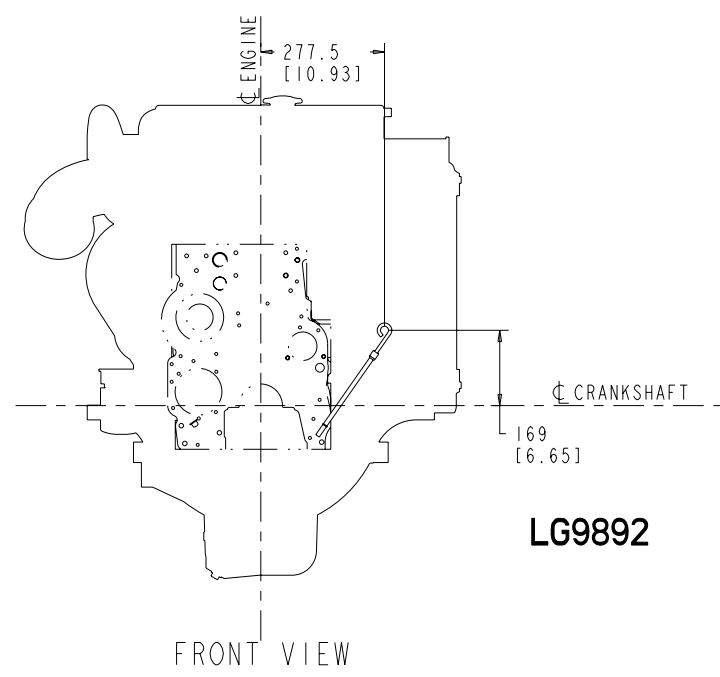
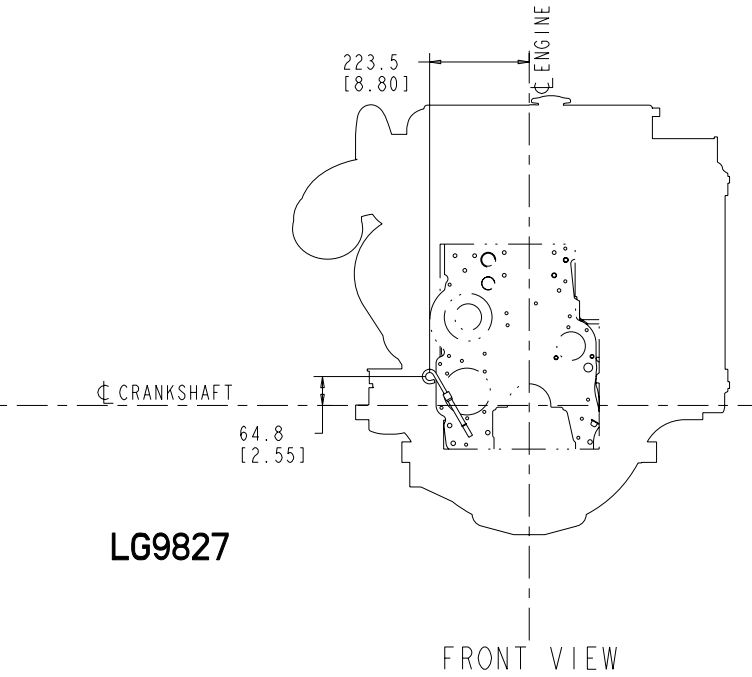
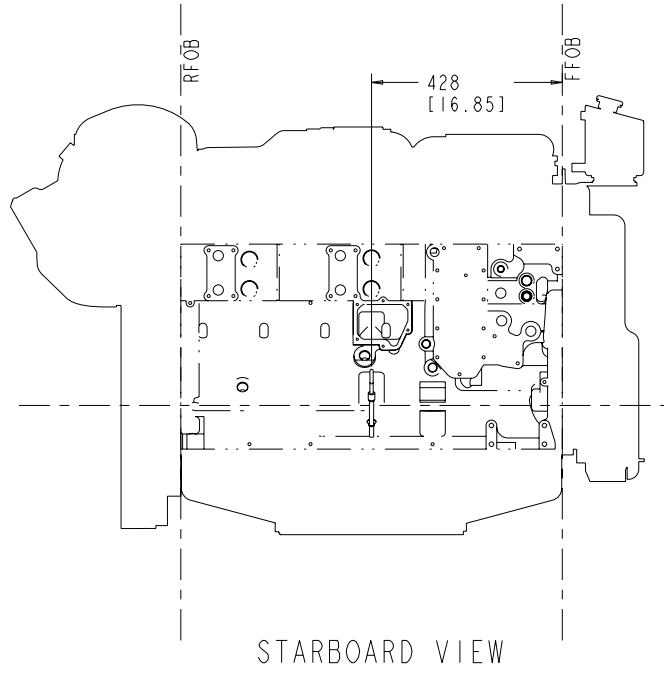
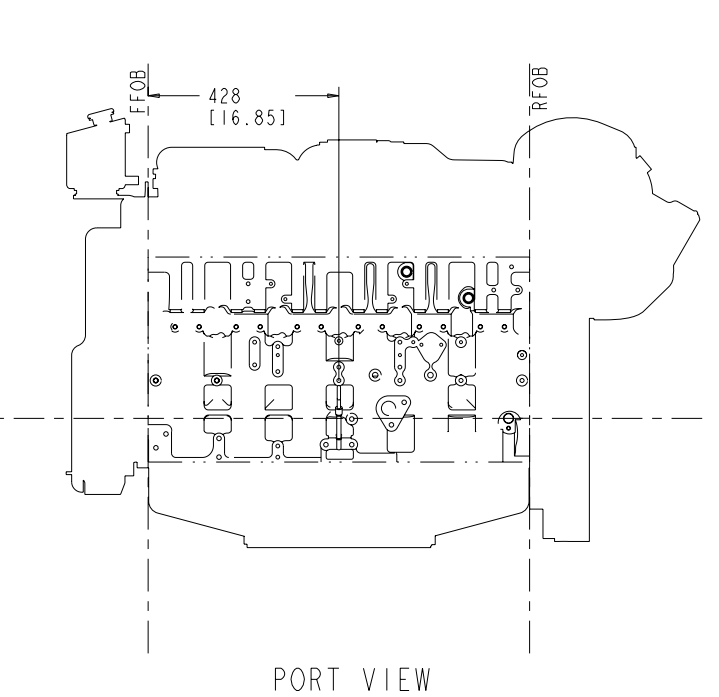
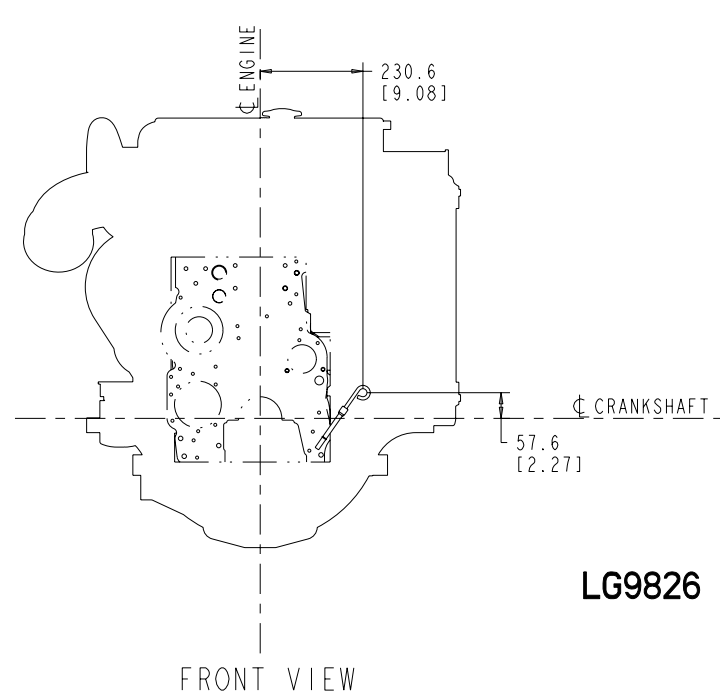
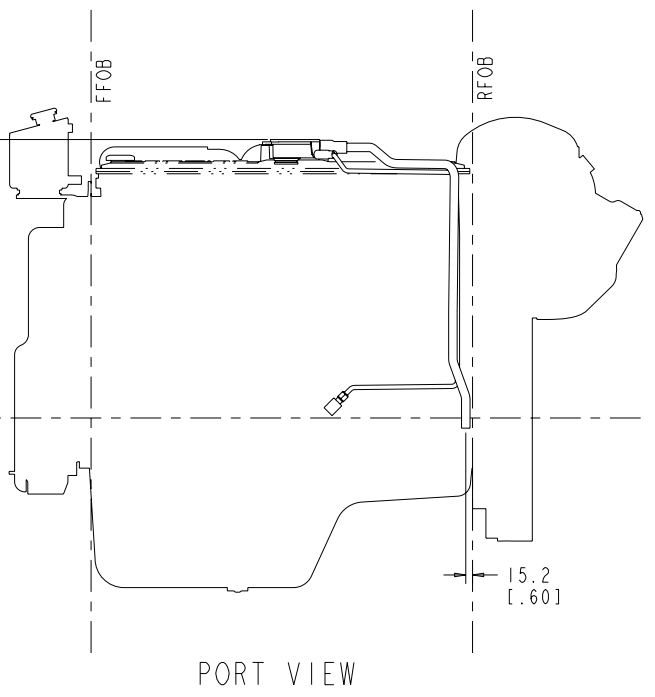
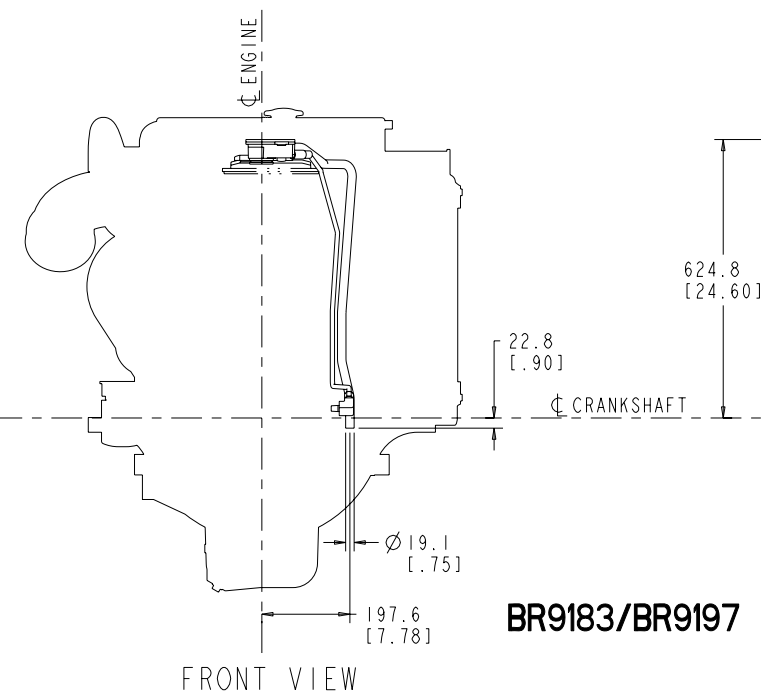
LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME OSL9-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN: TMO/STANG	SIZE CODE IDENT. NO.	ITEM NUMBER 3170591	
CHD: UNCHECKED	SCALE: 200	ITEM CONTROL: MCS	SHEET 13 OF 21
APPD:			

10 9 8 7 6 5 4 3 2 1

9 8 7 6 5 4 3 2 1

ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



- ① CENTINEL VALVE OIL SUPPLY CONNECTION- N/A
- ② CRANKCASE PRESSURE PORT
- ③ GEAR OIL INLET TO COOLER CONNECTION
- ④ GEAR OIL INLET TO COOLER PRESSURE PORT- N/A
- ⑤ GEAR OIL INLET TO COOLER TEMPERATURE PORT- N/A

- ⑥ GEAR OIL OUTLET FROM COOLER CONNECTION
- ⑦ GEAR OIL OUTLET FROM COOLER PRESSURE PORT- N/A
- ⑧ GEAR OIL OUTLET FROM COOLER TEMPERATURE PORT- N/A
- ⑨ OIL DRAIN BOSS
- ⑩ OIL GALLERY TEMPERATURE PORT

- ⑪ OIL PRESSURE GAUGE PORT, AFTER FILTER
- ⑫ OIL SUMP TEMPERATURE PORT
- ⑬ REMOTE OIL FILTER RETURN CONNECTION
- ⑭ REMOTE OIL FILTER SUPPLY CONNECTION

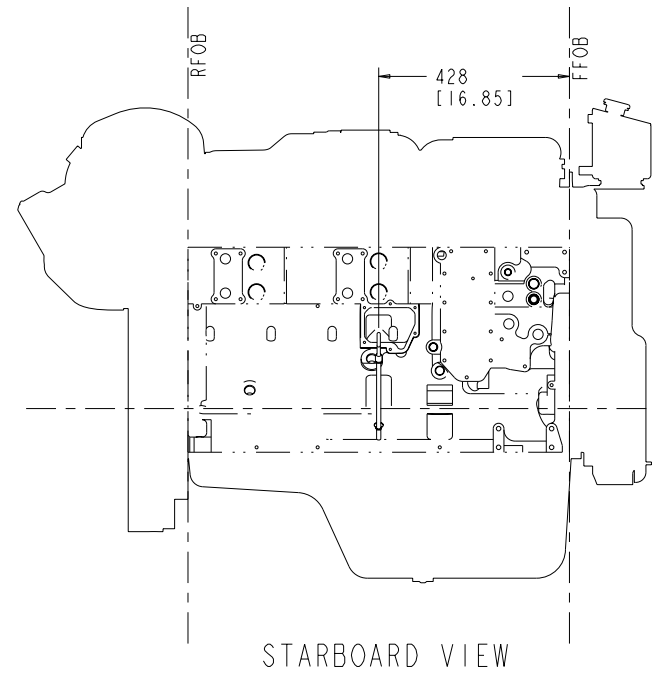
LUBE OIL SYSTEM

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME OSL9-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN: UNCHECKED CHD: UNCHECKED APPD: UNCHECKED	SIZE CODE IDENT. NO. ITEM NUMBER <b>J</b> 3170591	SCALE: 2:1	ITEM CONTROL: MCS SHEET 14 OF 21

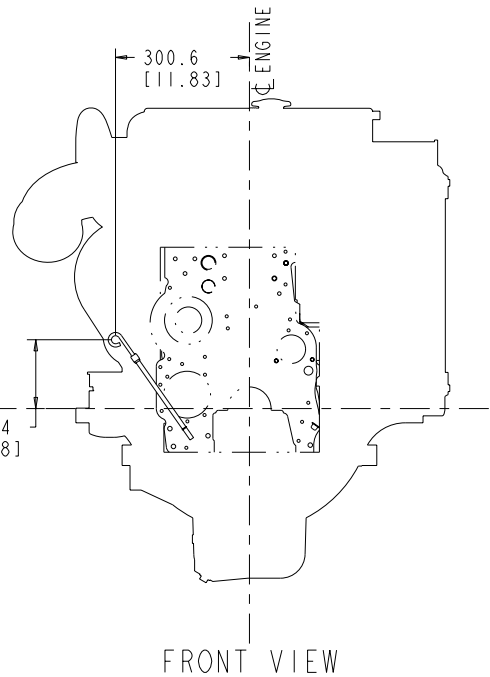
ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		

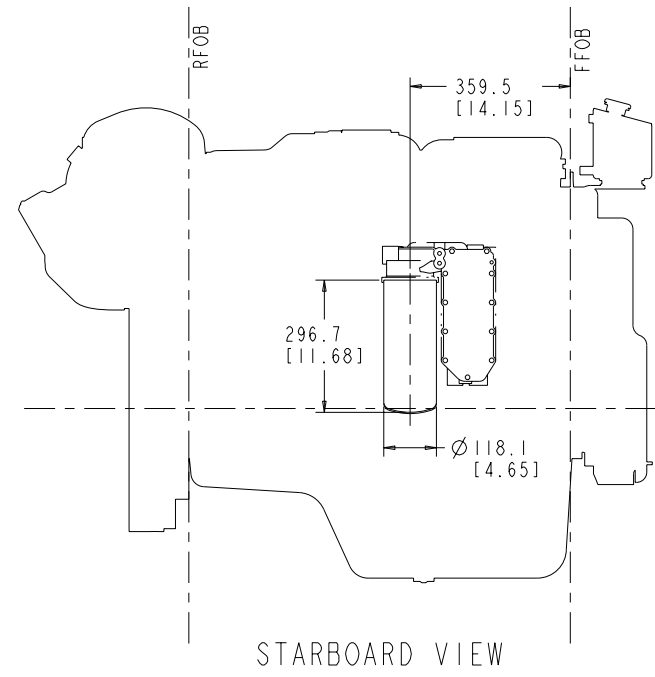


**LG9893**

STARBOARD VIEW

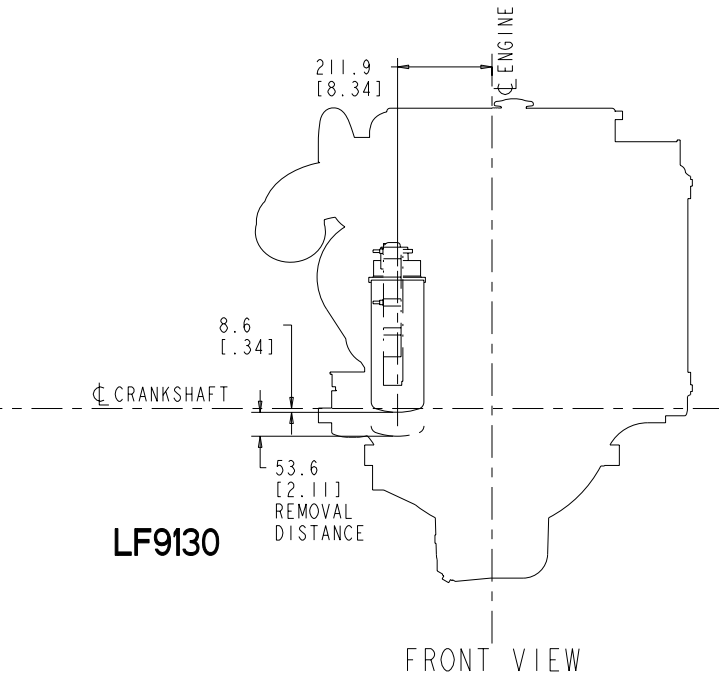


FRONT VIEW

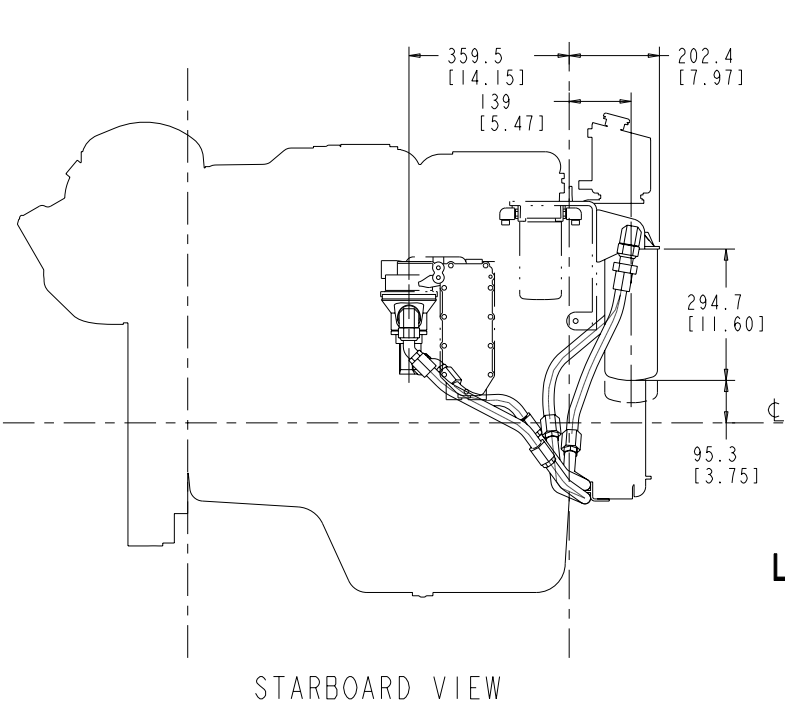


**LF9130**

STARBOARD VIEW

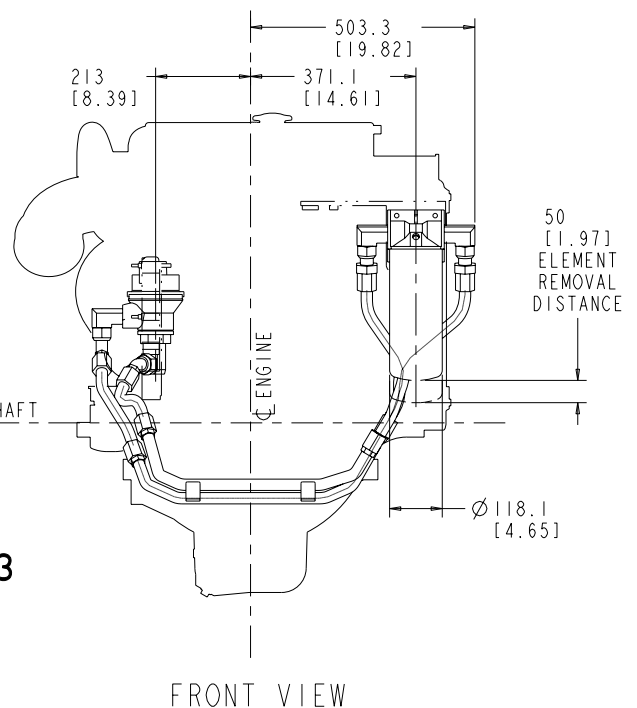


FRONT VIEW

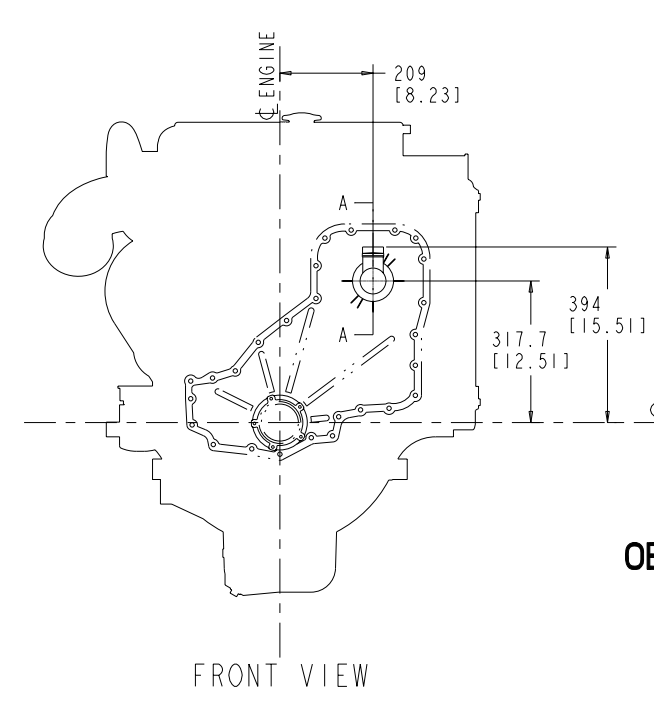


**LF9123**

STARBOARD VIEW

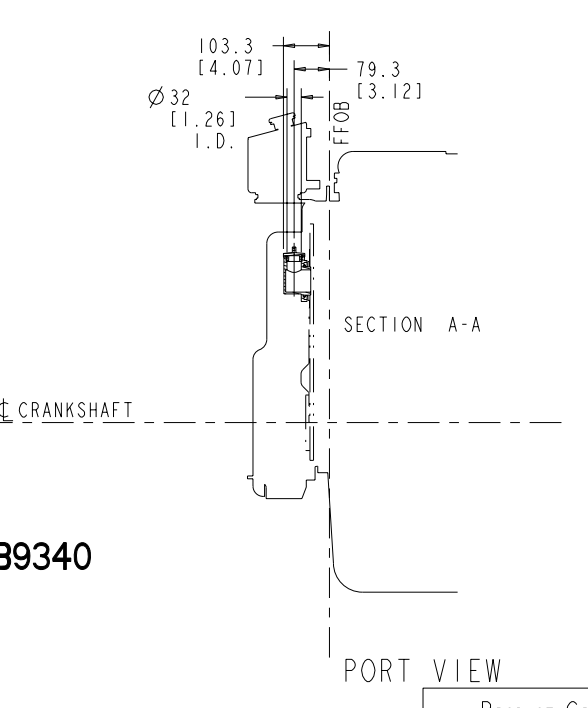


FRONT VIEW



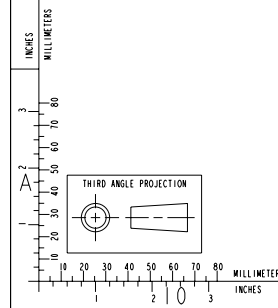
**OB9340**

FRONT VIEW



PORT VIEW

SECTION A-A



- ① CENTINEL VALVE OIL SUPPLY CONNECTION- N/A
- ② CRANKCASE PRESSURE PORT
- ③ GEAR OIL INLET TO COOLER CONNECTION
- ④ GEAR OIL INLET TO COOLER PRESSURE PORT- N/A
- ⑤ GEAR OIL INLET TO COOLER TEMPERATURE PORT- N/A

- ⑥ GEAR OIL OUTLET FROM COOLER CONNECTION
- ⑦ GEAR OIL OUTLET FROM COOLER PRESSURE PORT- N/A
- ⑧ GEAR OIL OUTLET FROM COOLER TEMPERATURE PORT- N/A
- ⑨ OIL DRAIN BOSS
- ⑩ OIL GALLERY TEMPERATURE PORT

- ⑪ OIL PRESSURE GAUGE PORT, AFTER FILTER
- ⑫ OIL SUMP TEMPERATURE PORT
- ⑬ REMOTE OIL FILTER RETURN CONNECTION
- ⑭ REMOTE OIL FILTER SUPPLY CONNECTION

LUBE OIL SYSTEM

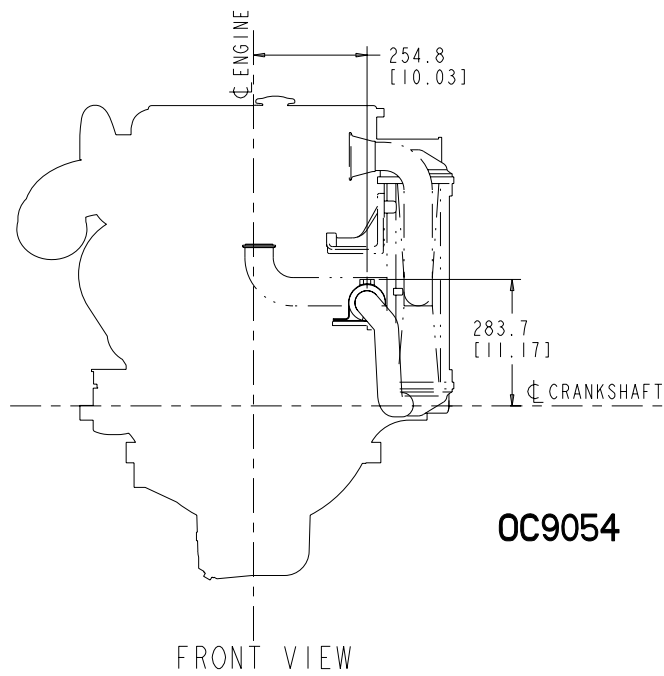
DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

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.

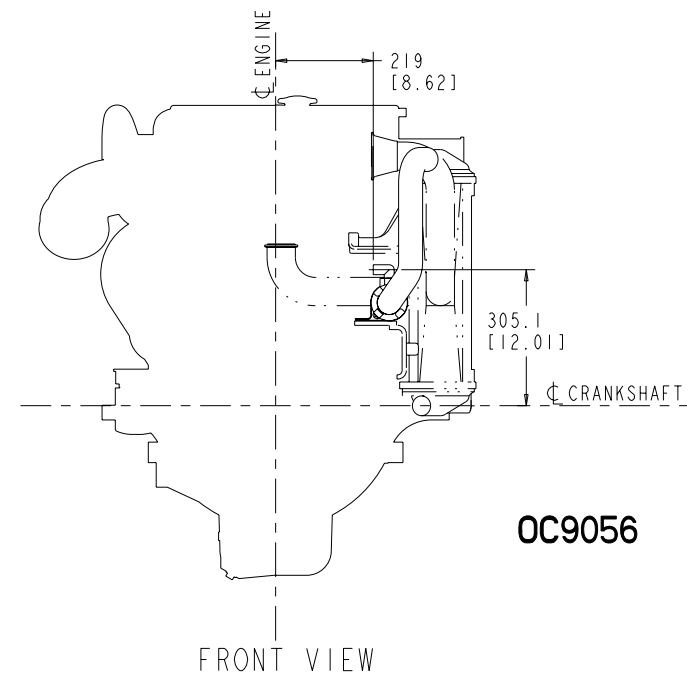
LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME OSL9-HX	IDENTIFIER	ITEM NUMBER
DWN: TMO/ANG CHD: UNCHECKED APPD:	SIZE CODE (IDENT. NO.) <b>J</b>	3170591	3170591
	SCALE: 2:1	ITEM CONTROL: MCS	SHEET 15 OF 21

ITEM NUMBER  
3170591

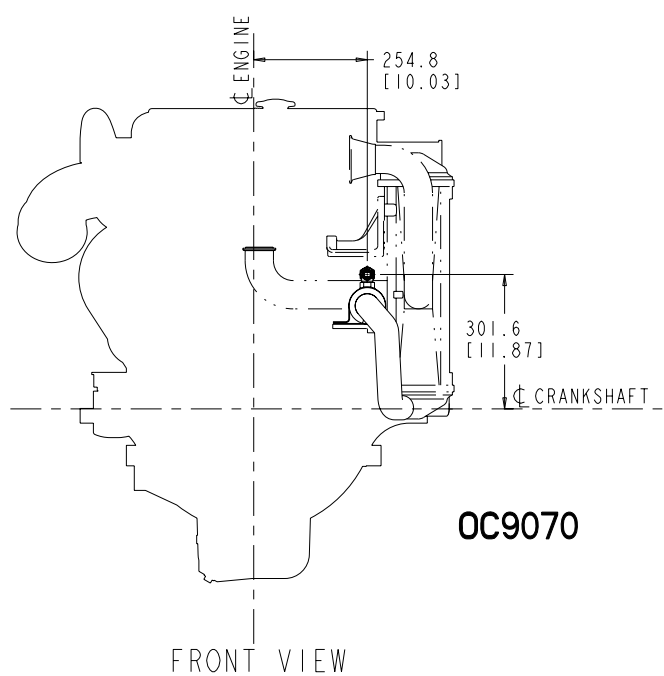
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



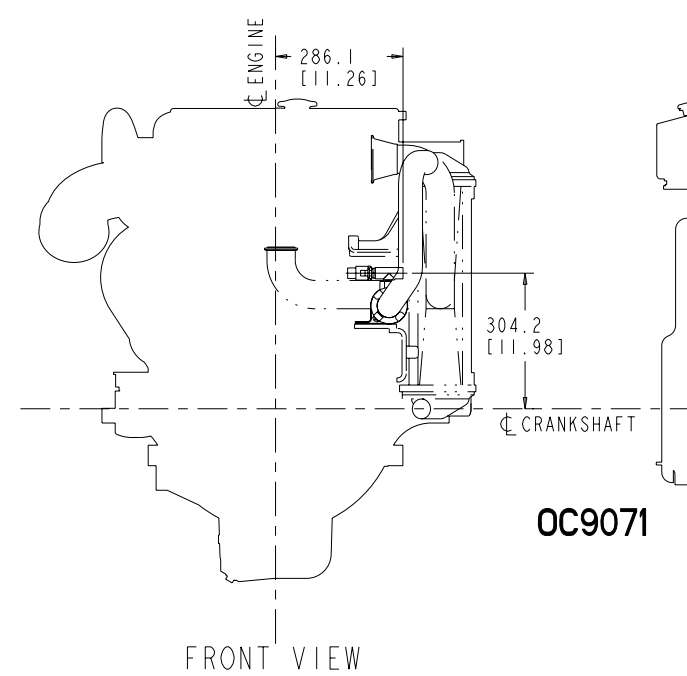
OC9054



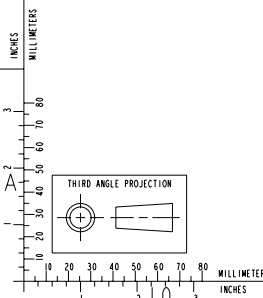
OC9056



OC9070



OC9071



- |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>① CENTINEL VALVE OIL SUPPLY CONNECTION- N/A</li> <li>② CRANKCASE PRESSURE PORT</li> <li>③ GEAR OIL INLET TO COOLER CONNECTION</li> <li>④ GEAR OIL INLET TO COOLER PRESSURE PORT- N/A</li> <li>⑤ GEAR OIL INLET TO COOLER TEMPERATURE PORT- N/A</li> </ul> | <ul style="list-style-type: none"> <li>⑥ GEAR OIL OUTLET FROM COOLER CONNECTION</li> <li>⑦ GEAR OIL OUTLET FROM COOLER PRESSURE PORT- N/A</li> <li>⑧ GEAR OIL OUTLET FROM COOLER TEMPERATURE PORT- N/A</li> <li>⑨ OIL DRAIN BOSS</li> <li>⑩ OIL GALLERY TEMPERATURE PORT</li> </ul> | <ul style="list-style-type: none"> <li>⑪ OIL PRESSURE GAUGE PORT, AFTER FILTER</li> <li>⑫ OIL SUMP TEMPERATURE PORT</li> <li>⑬ REMOTE OIL FILTER RETURN CONNECTION</li> <li>⑭ REMOTE OIL FILTER SUPPLY CONNECTION</li> </ul> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

LUBE OIL SYSTEM

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

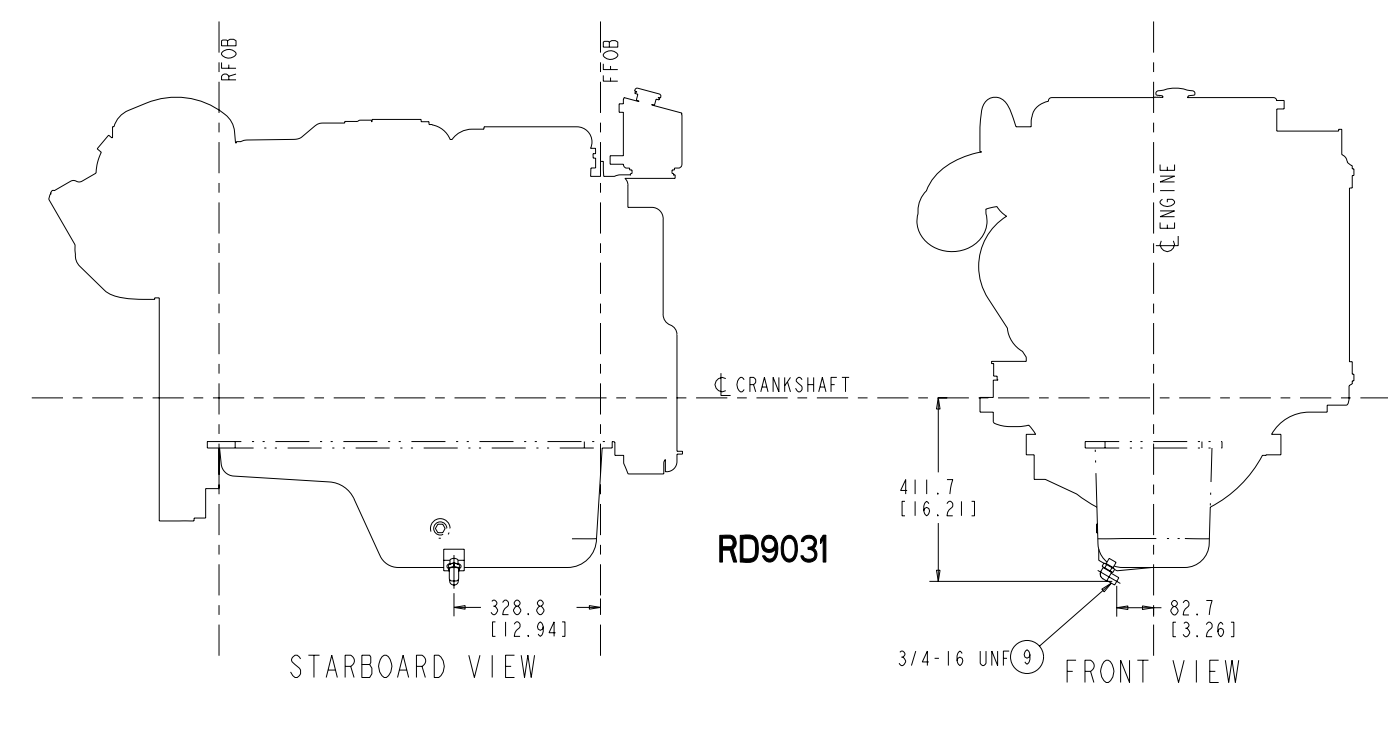
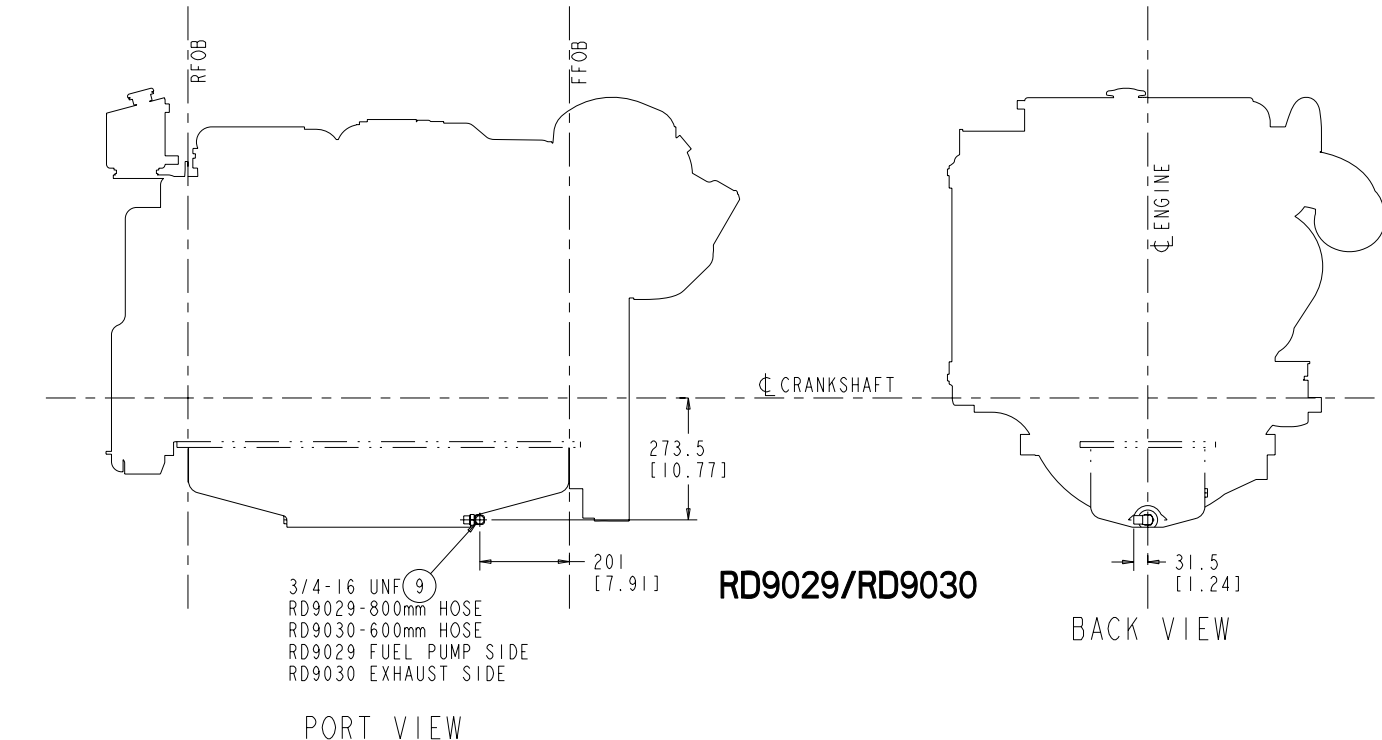
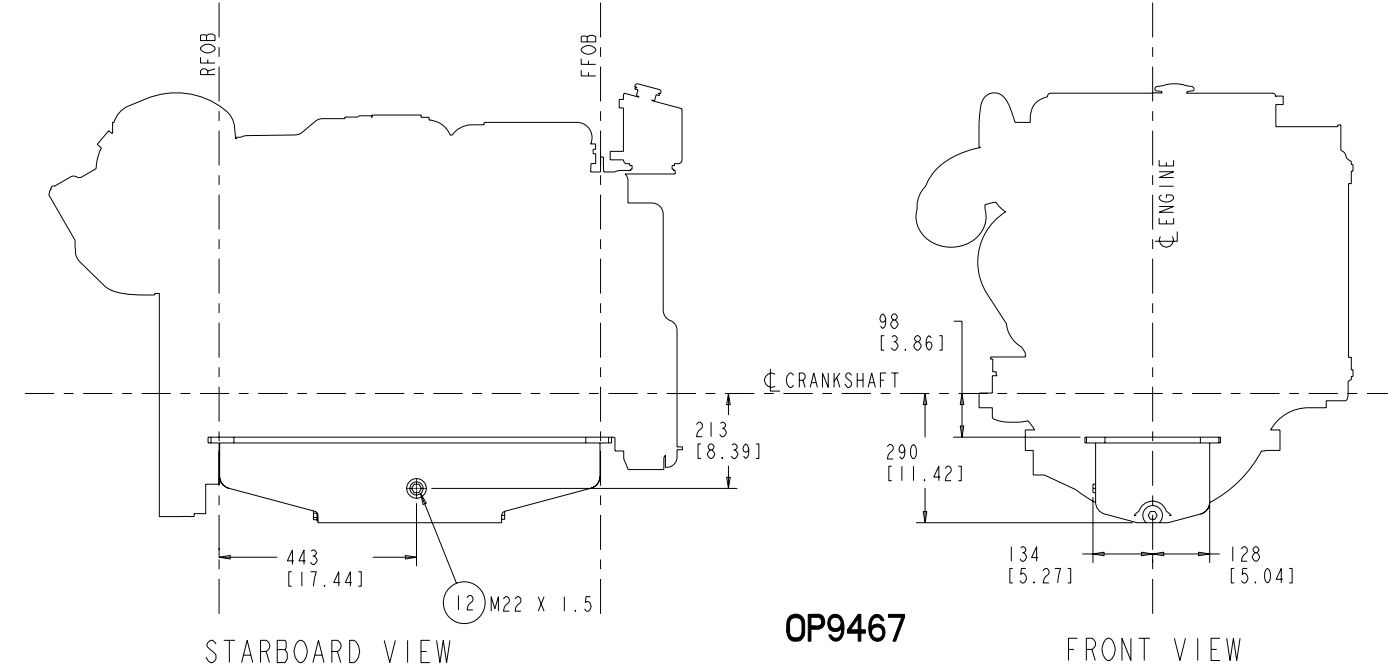
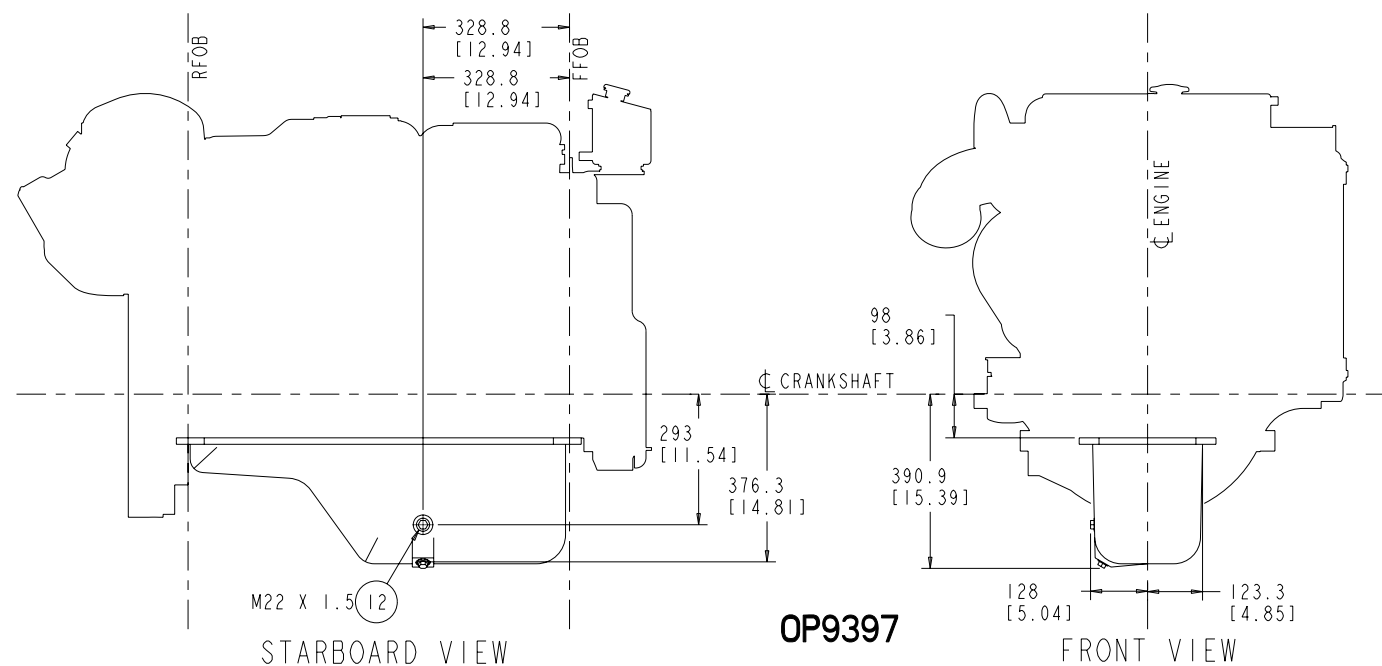
LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME OSL9-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN: TMO/TGANG	SIZE CODE (IDENT. NO.):	ITEM NUMBER 3170591	ITEM CONTROL: MCS
CHD: UNCHECKED	SCALE: 2:1	SHEET 16 OF 21	

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.



ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



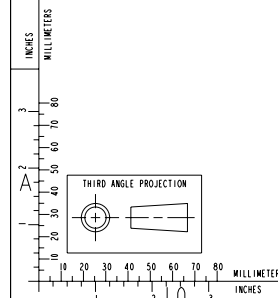
- |                                                  |                                                     |                                         |
|--------------------------------------------------|-----------------------------------------------------|-----------------------------------------|
| ① CENTINEL VALVE OIL SUPPLY CONNECTION- N/A      | ⑥ GEAR OIL OUTLET FROM COOLER CONNECTION            | ⑪ OIL PRESSURE GAUGE PORT, AFTER FILTER |
| ② CRANKCASE PRESSURE PORT                        | ⑦ GEAR OIL OUTLET FROM COOLER PRESSURE PORT- N/A    | ⑫ OIL SUMP TEMPERATURE PORT             |
| ③ GEAR OIL INLET TO COOLER CONNECTION            | ⑧ GEAR OIL OUTLET FROM COOLER TEMPERATURE PORT- N/A | ⑬ REMOTE OIL FILTER RETURN CONNECTION   |
| ④ GEAR OIL INLET TO COOLER PRESSURE PORT- N/A    | ⑨ OIL DRAIN BOSS                                    | ⑭ REMOTE OIL FILTER SUPPLY CONNECTION   |
| ⑤ GEAR OIL INLET TO COOLER TEMPERATURE PORT- N/A | ⑩ OIL GALLERY TEMPERATURE PORT                      |                                         |

LUBE OIL SYSTEM

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

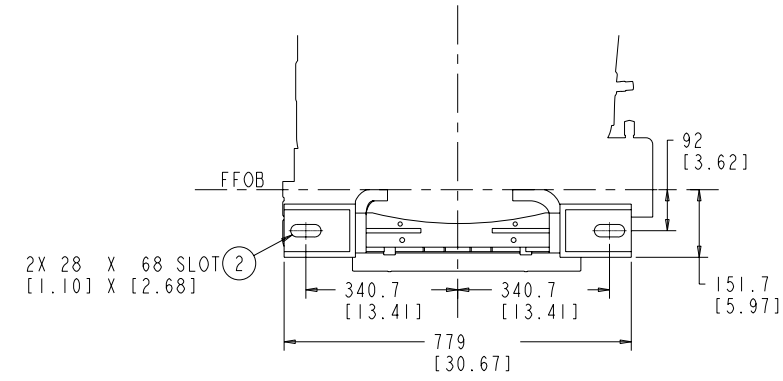
PRODUCT GRAPHICS FILE  
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME OSL9-HX	IDENTIFIER	ITEM NUMBER
DWN: UNCHECKED	SIZE CODE (IDENT. NO.):	3170591	
APPD: UNCHECKED	SCALE: 2:1	ITEM CONTROL: MCS	SHEET 17 OF 21

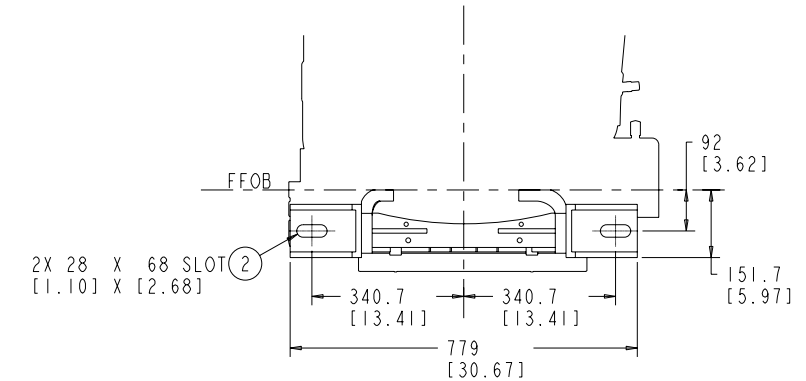


ITEM NUMBER  
3170591

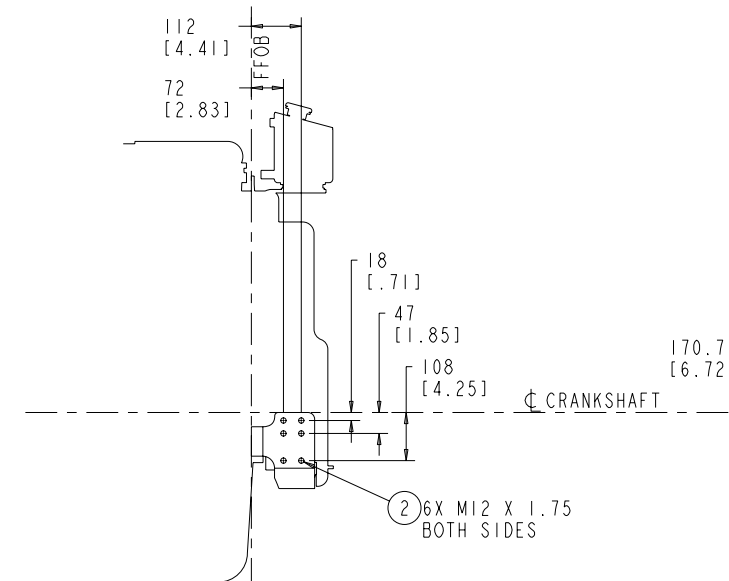
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



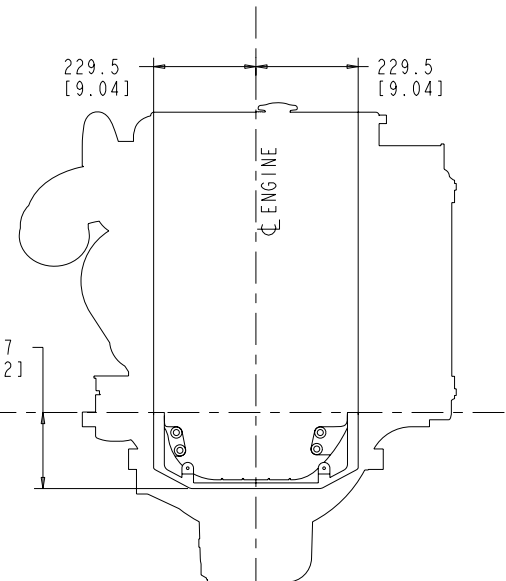
TOP VIEW



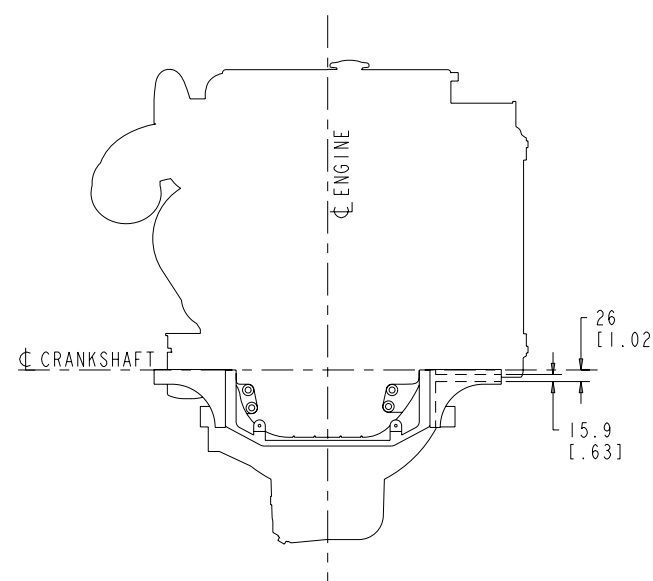
TOP VIEW



STARBOARD VIEW

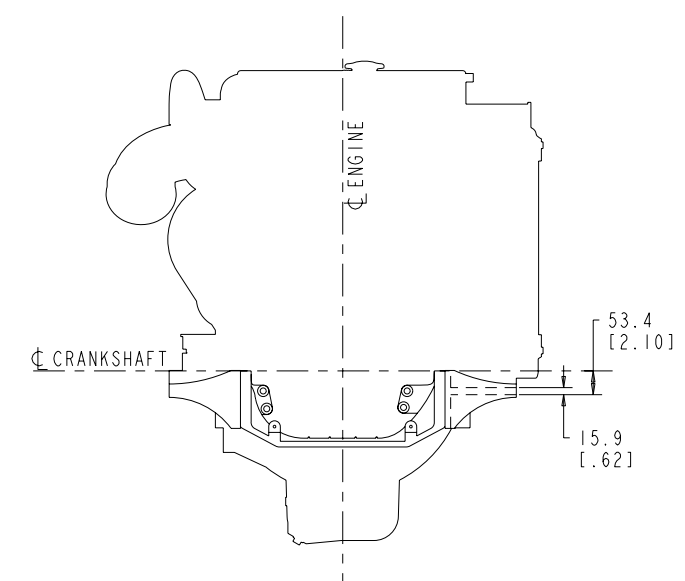


FRONT VIEW



FRONT VIEW

EM9228

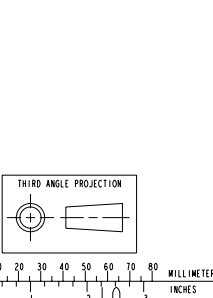


FRONT VIEW

EM9229

EM9210

INCHES  
MILLIMETERS



- |                               |                                  |
|-------------------------------|----------------------------------|
| ① FLYWHEEL HOUSING BOLT HOLES | ④ REAR MOUNT BOLT HOLE           |
| ② FRONT MOUNT BOLT HOLE       | ⑤ SPEED SENSOR (ECM) PORT        |
| ③ JACKING SCREW BOLT HOLE     | ⑥ SPEED SENSOR (TACHOMETER) PORT |

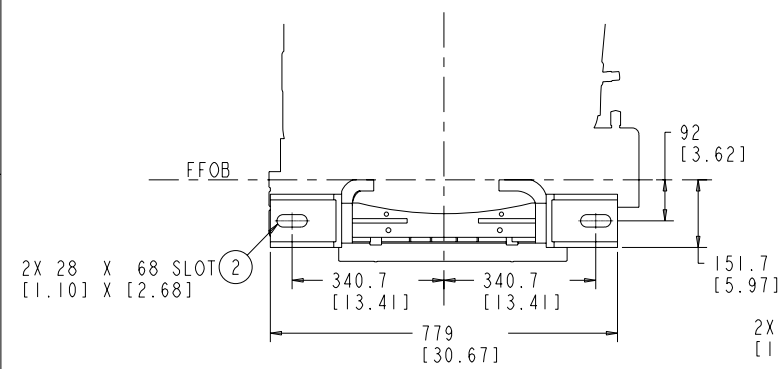
PRODUCT GRAPHICS FILE  
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES		ITEM NAME OSL9-HX	IDENTIFIER
DO NOT SCALE THIS DRAWING		SIZE CODE IDENT. NO.	ITEM NUMBER
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.		<b>J</b>	3170591
DWN: UNCHECKED	APPD: UNCHECKED	SCALE: 2:1	ITEM CONTROL: MCS
		SHEET 18 OF 21	

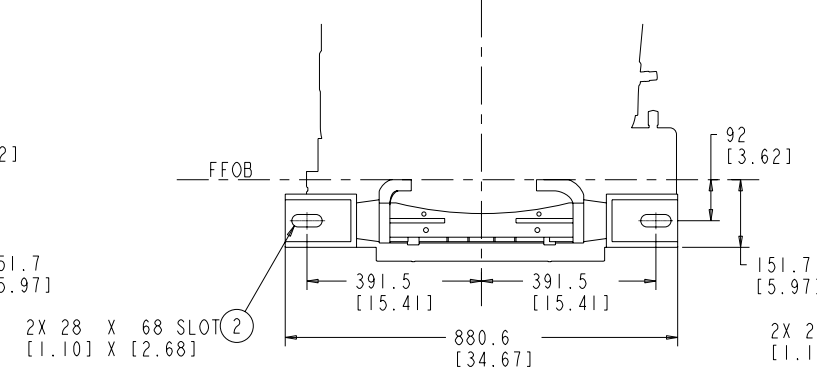
MOUNTING SYSTEM

ITEM NUMBER  
3170591

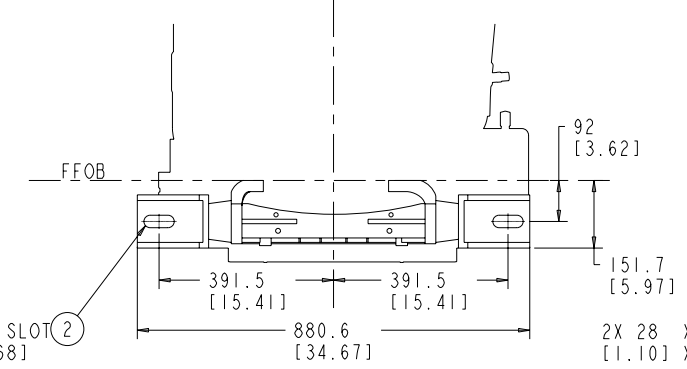
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



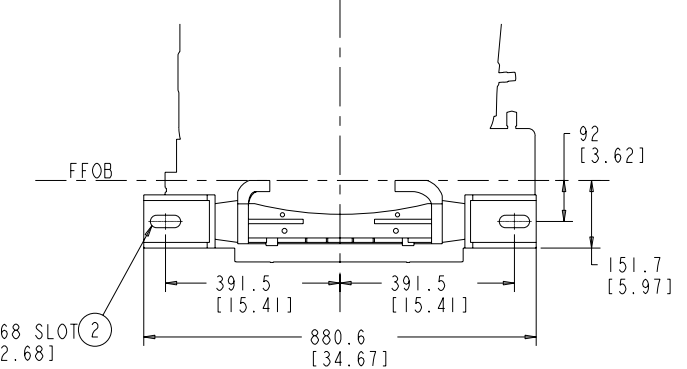
TOP VIEW



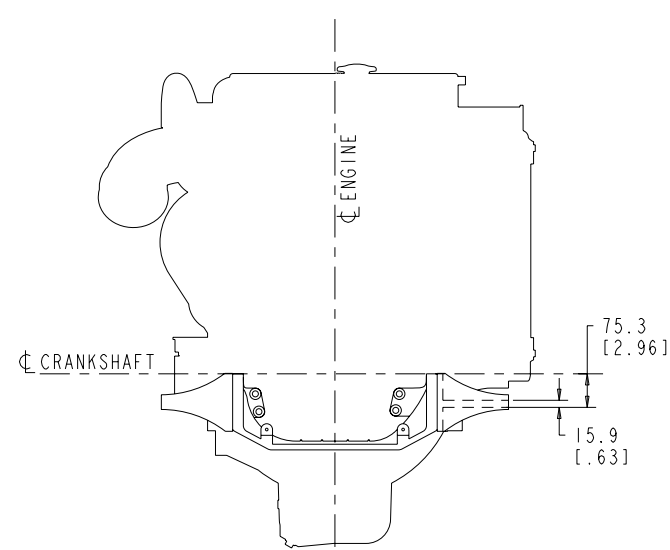
TOP VIEW



TOP VIEW

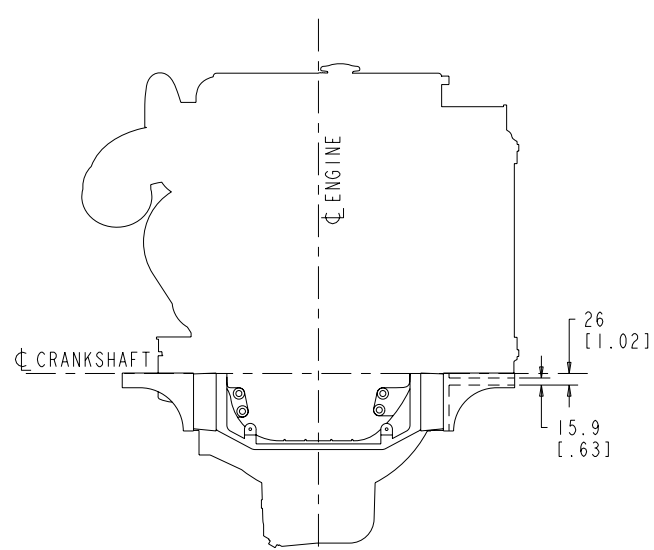


TOP VIEW



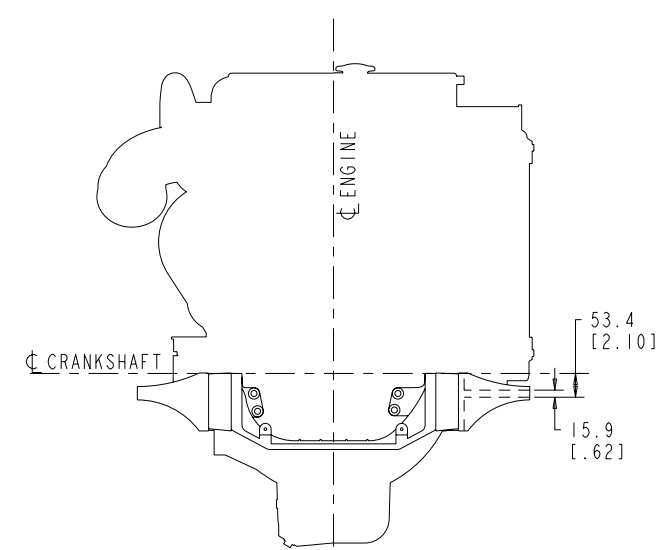
FRONT VIEW

EM9230



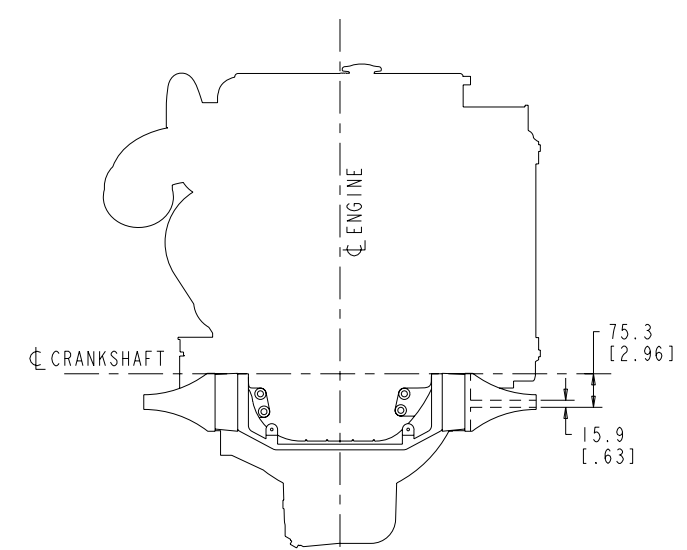
FRONT VIEW

EM9231



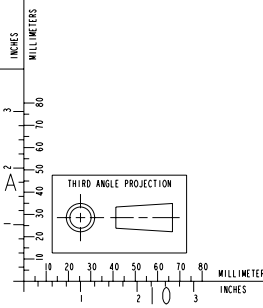
FRONT VIEW

EM9232



FRONT VIEW

EM9233



- |                               |                                  |
|-------------------------------|----------------------------------|
| ① FLYWHEEL HOUSING BOLT HOLES | ④ REAR MOUNT BOLT HOLE           |
| ② FRONT MOUNT BOLT HOLE       | ⑤ SPEED SENSOR (ECM) PORT        |
| ③ JACKING SCREW BOLT HOLE     | ⑥ SPEED SENSOR (TACHOMETER) PORT |

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

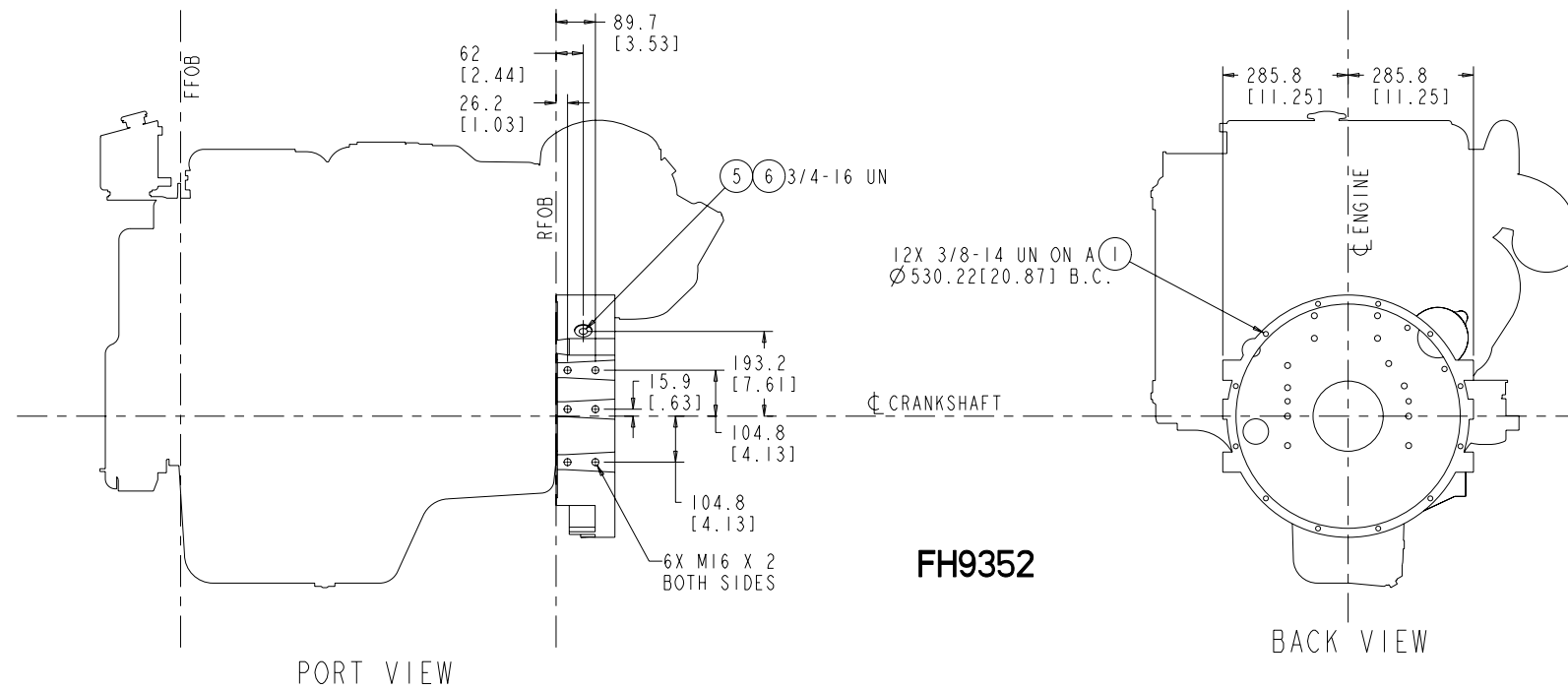
PRODUCT GRAPHICS FILE  
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME OSL9-HX	IDENTIFIER	ITEM NUMBER
DWN: TMO/ANG	SIZE CODE IDENT. NO.	J	3170591
CHD: UNCHECKED	SCALE: 2:1	ITEM CONTROL: MCS	SHEET 19 OF 21
APPD:			

MOUNTING SYSTEM

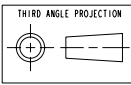
ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		



INCHES  
MILLIMETERS

0 10 20 30 40 50 60 70 80  
0 1 2 3 4 5 6 7 8 9 10 11 12



- |                               |                                  |
|-------------------------------|----------------------------------|
| 1 FLYWHEEL HOUSING BOLT HOLES | 4 REAR MOUNT BOLT HOLE           |
| 2 FRONT MOUNT BOLT HOLE       | 5 SPEED SENSOR (ECM) PORT        |
| 3 JACKING SCREW BOLT HOLE     | 6 SPEED SENSOR (TACHOMETER) PORT |

DO NOT SCALE THIS DRAWING

THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

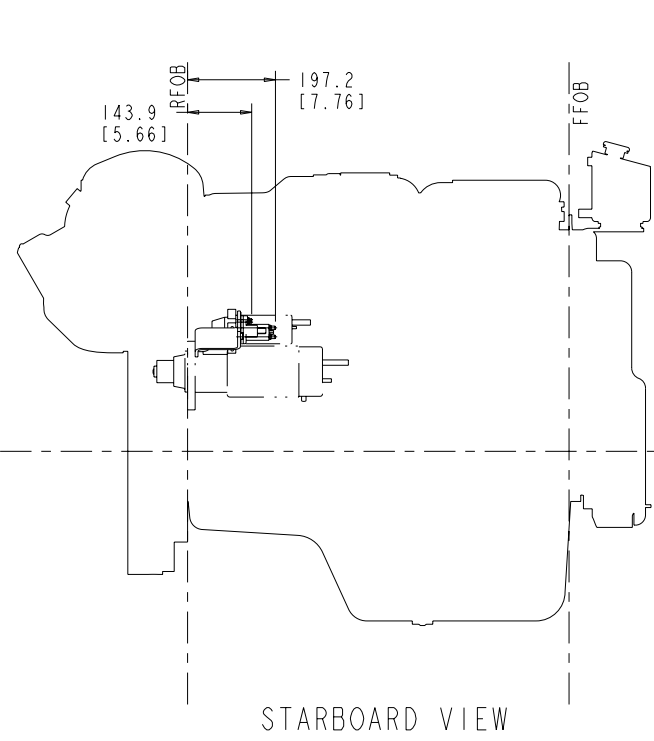
PRODUCT GRAPHICS FILE  
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME QSL9-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN: TMO/TGANG	SCALE: 2:1	SIZE CODE (IDENT. NO.) <b>J</b>	ITEM NUMBER 3170591
CHD: UNCHECKED	ITEM CONTROL: MCS	SHEET 20 OF 21	
APPD:			

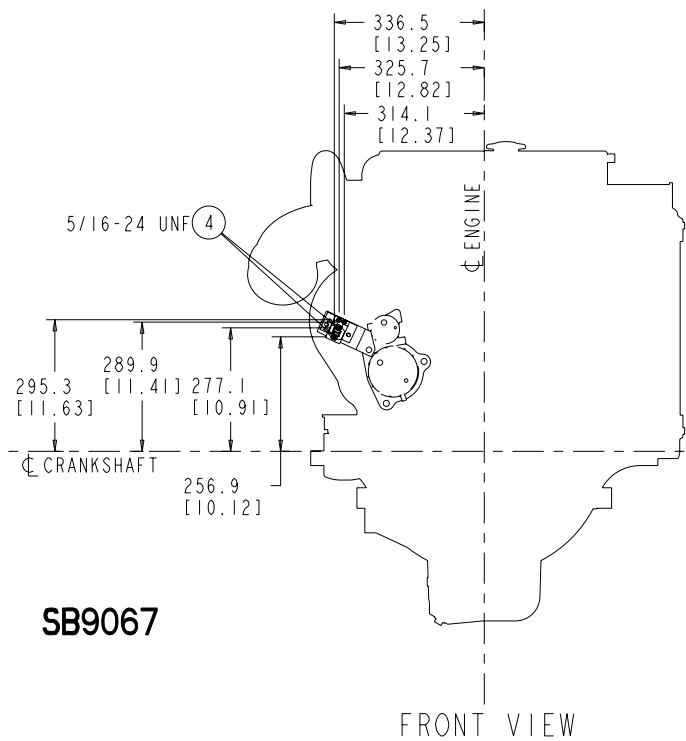
MOUNTING SYSTEM

ITEM NUMBER  
3170591

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
02	OSL9-HX		

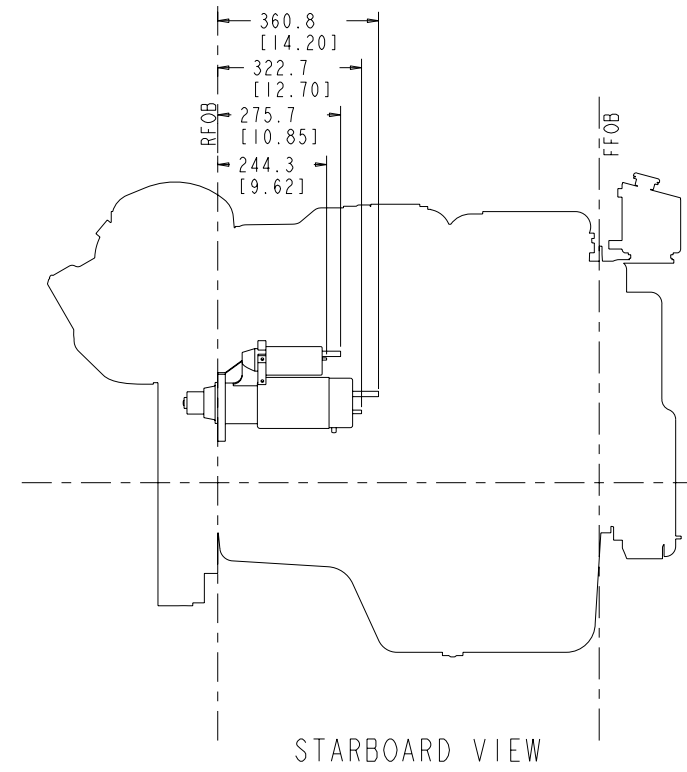


STARBOARD VIEW

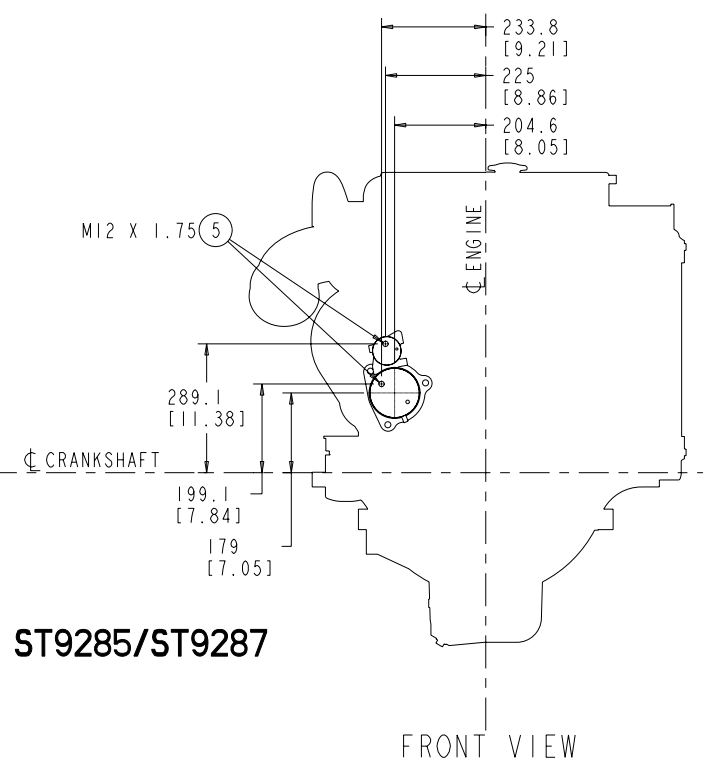


FRONT VIEW

**SB9067**

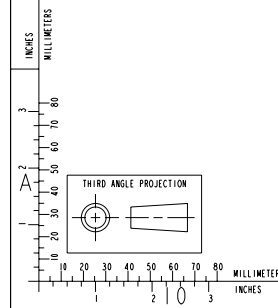


STARBOARD VIEW



FRONT VIEW

**ST9285/ST9287**



- ① COMPRESSED AIR SUPPLY CONNECTION- N/A
- ② ENGAGEMENT CONTROL (AIR IN)- N/A
- ③ ENGAGEMENT CONTROL (AIR OUT)- N/A
- ④ STARTER RELAY SWITCH TERMINALS
- ⑤ STARTER TERMINALS

**STARTING SYSTEM**

DO NOT SCALE THIS DRAWING  
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

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: <b>A</b>	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	<b>CUMMINS INC.</b>	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS ( ) ARE IN: INCHES	ITEM NAME OSL9-HX	IDENTIFIER	ITEM NUMBER
DWN: UNCHECKED	SIZE CODE IDENT. NO.:	3170591	
APPD:	SCALE: 2:1	ITEM CONTROL: MCS	SHEET 21 OF 21