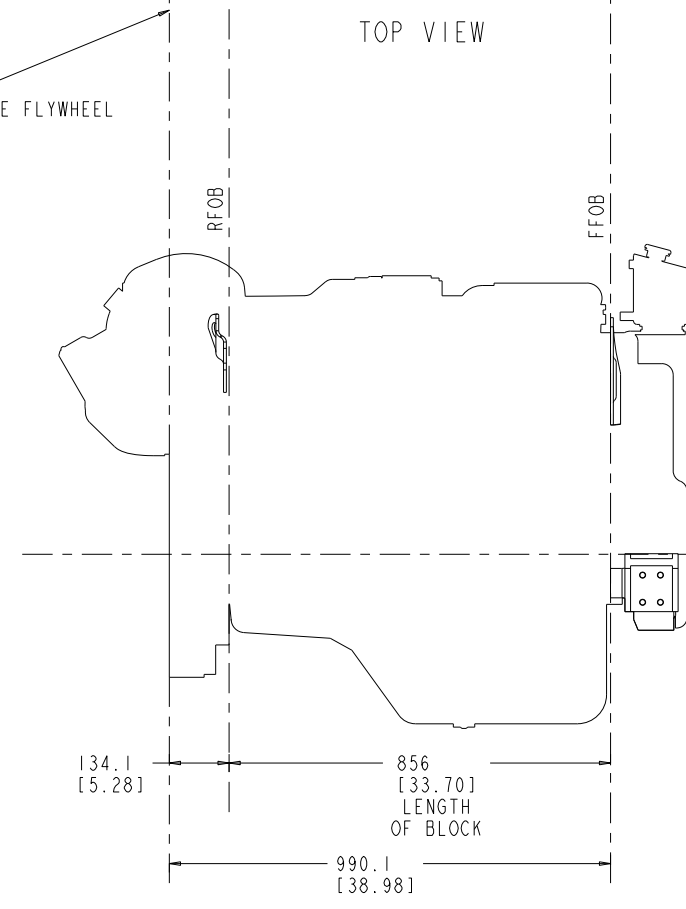
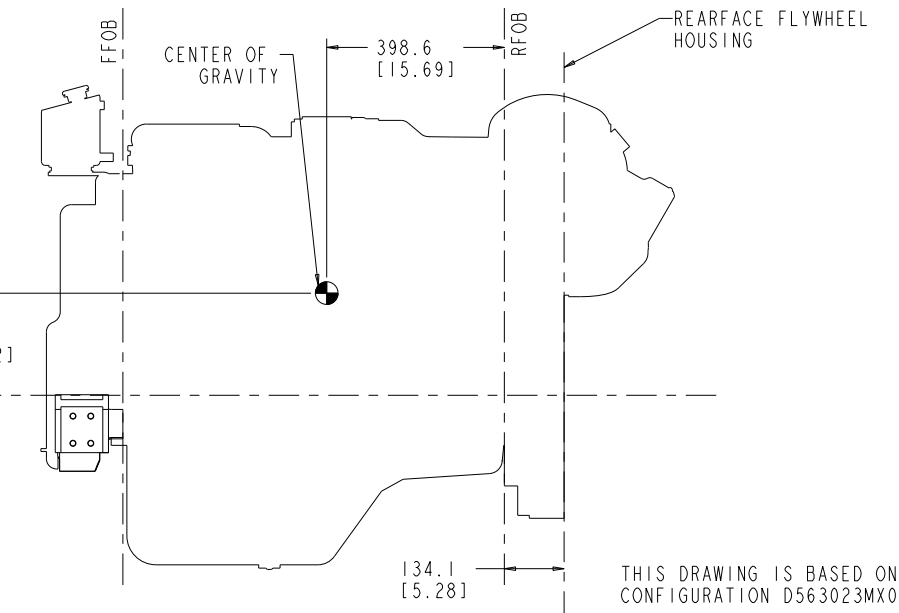
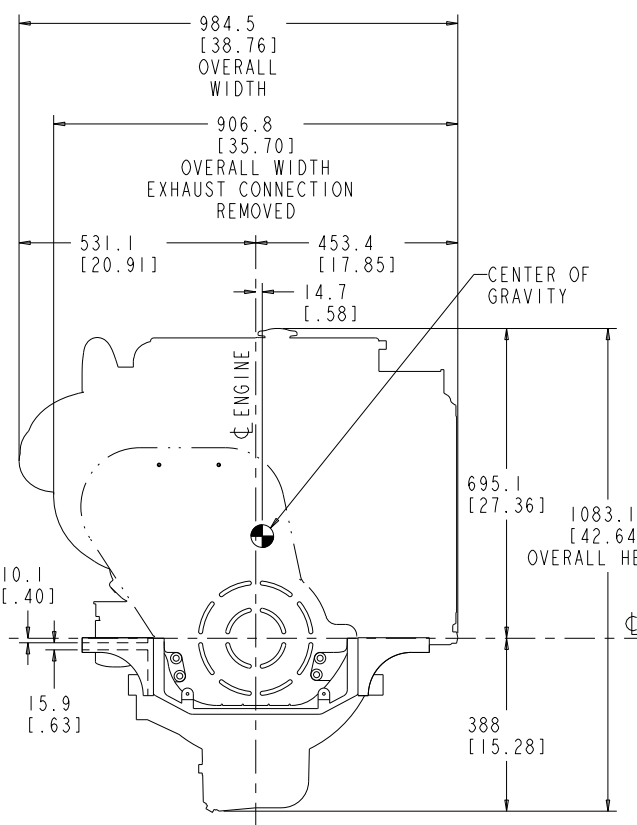
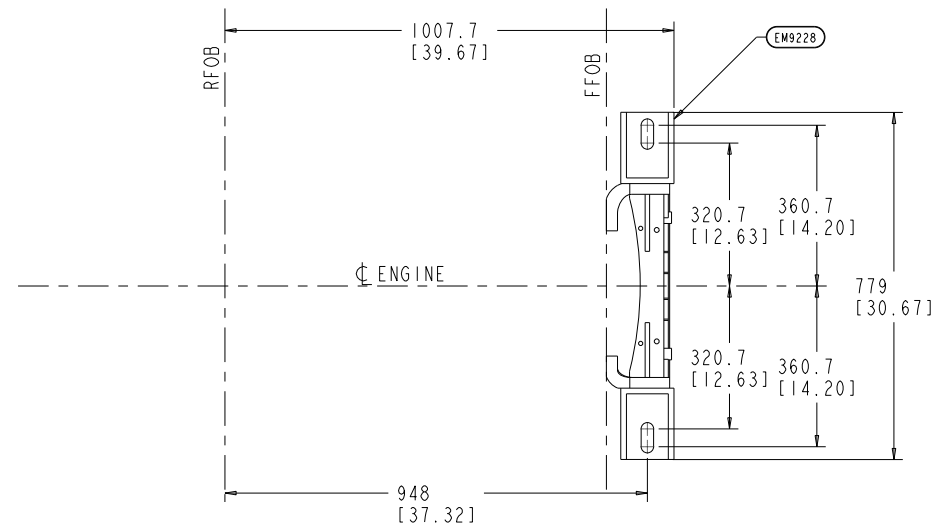
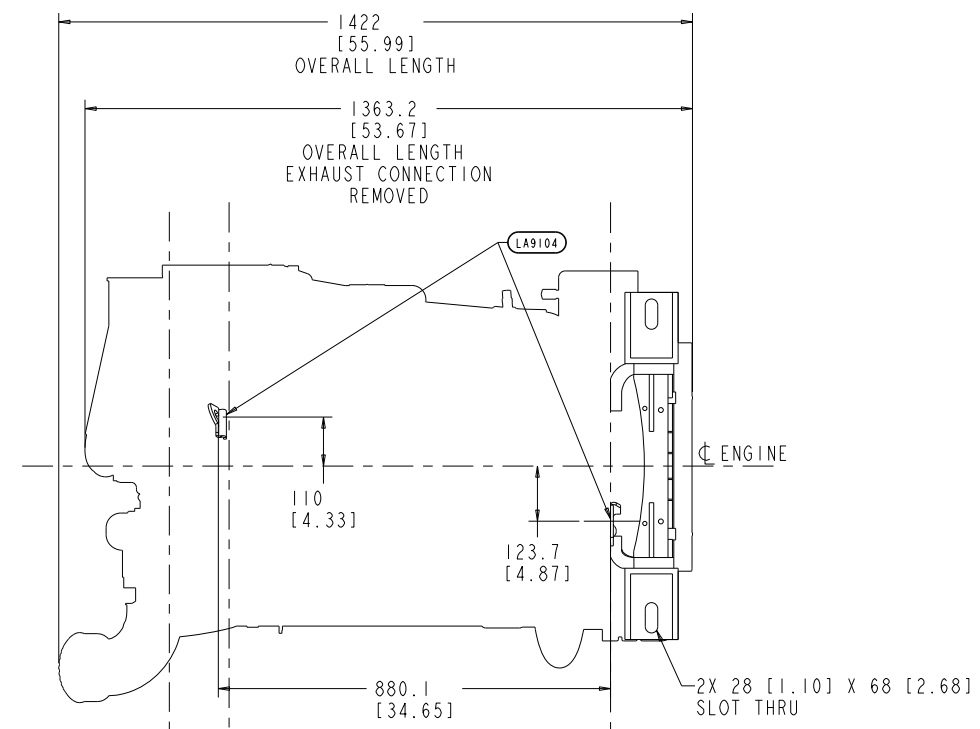


ITEM NUMBER
4954107

REVISIONS		OWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		

TABLE OF CONTENTS

DRAWING / SUB-SYSTEM	SHEET
DIMENSION OUTLINE	1
ASSEMBLY DRAWING	2
ACCESSORY DRIVES & PTOS	3-4
AIR INDUCTION SYSTEM	5-6
COOLING SYSTEM	7-9
ELECTRICAL SYSTEM	10-11
EXHAUST SYSTEM	12
FUEL SYSTEM	13-14
LUBE OIL SYSTEM	15-19
MOUNTING SYSTEM	20-22
STARTING SYSTEM	23



FRONT VIEW

PORT VIEW

STARBOARD VIEW

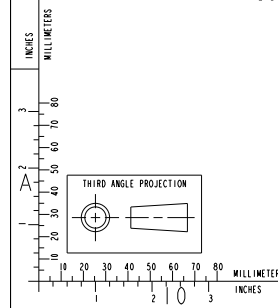
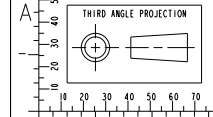
THIS DRAWING IS BASED ON CONFIGURATION D563023MX03

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

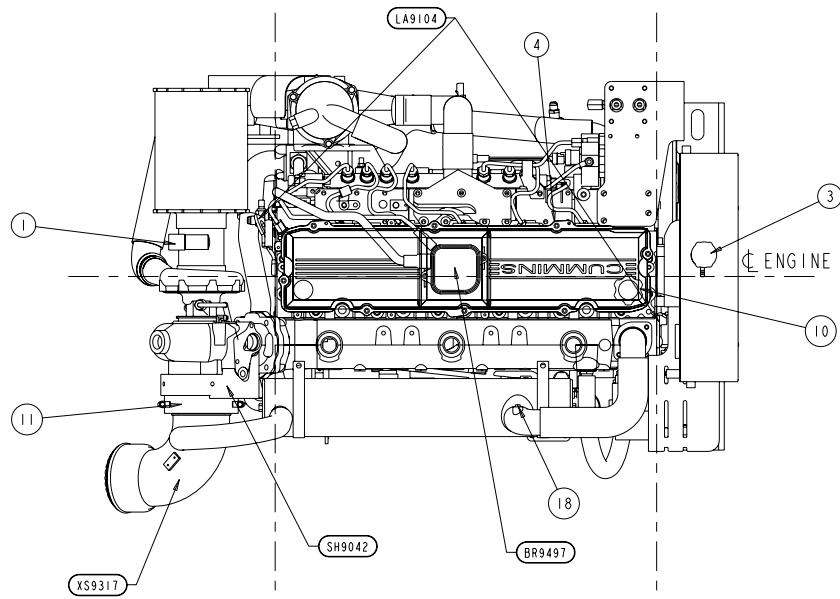
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER INSTALLATION DIAGRAM	
DWN: J. HANSEN	APPD: UNCHECKED	SIZE CODE IDENT. NO.: J	ITEM NUMBER 4954107
SCALE: 2:1	ITEM CONTROL: MCS	SHEET 1 OF 23	

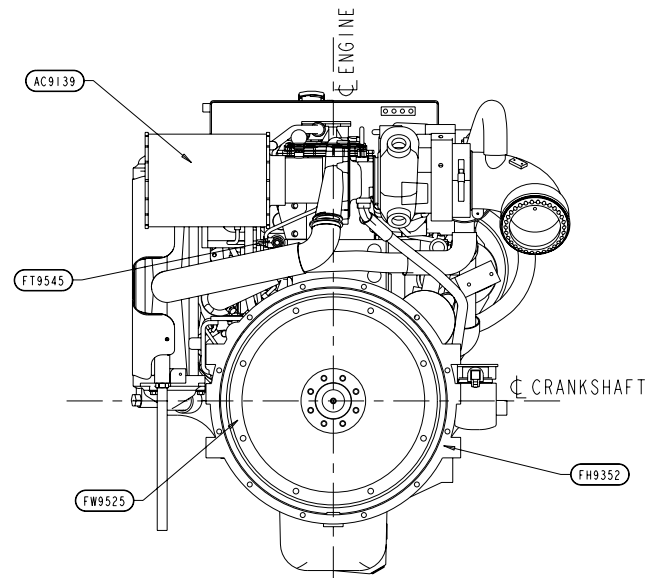


ITEM NUMBER
4954107

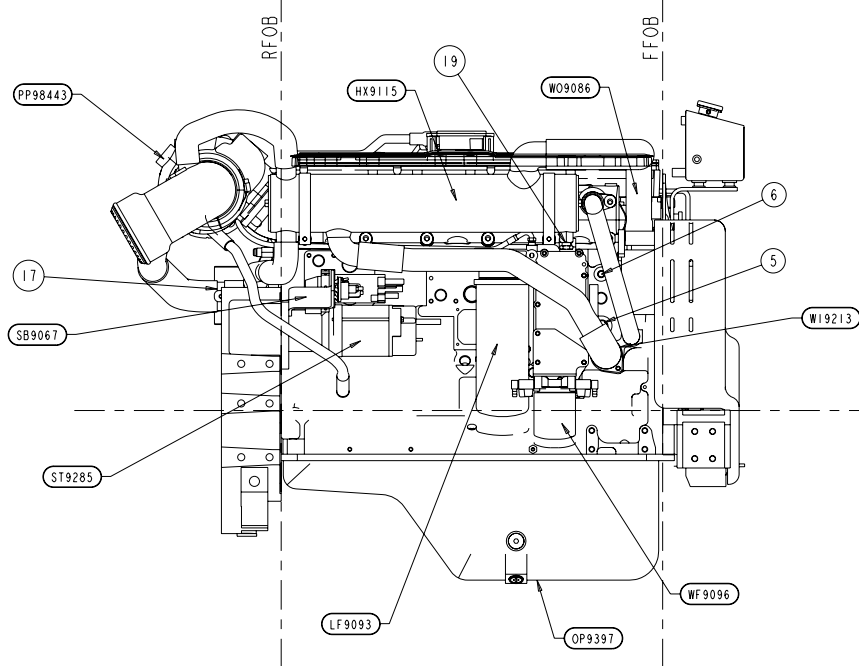
REVISIONS		OWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		



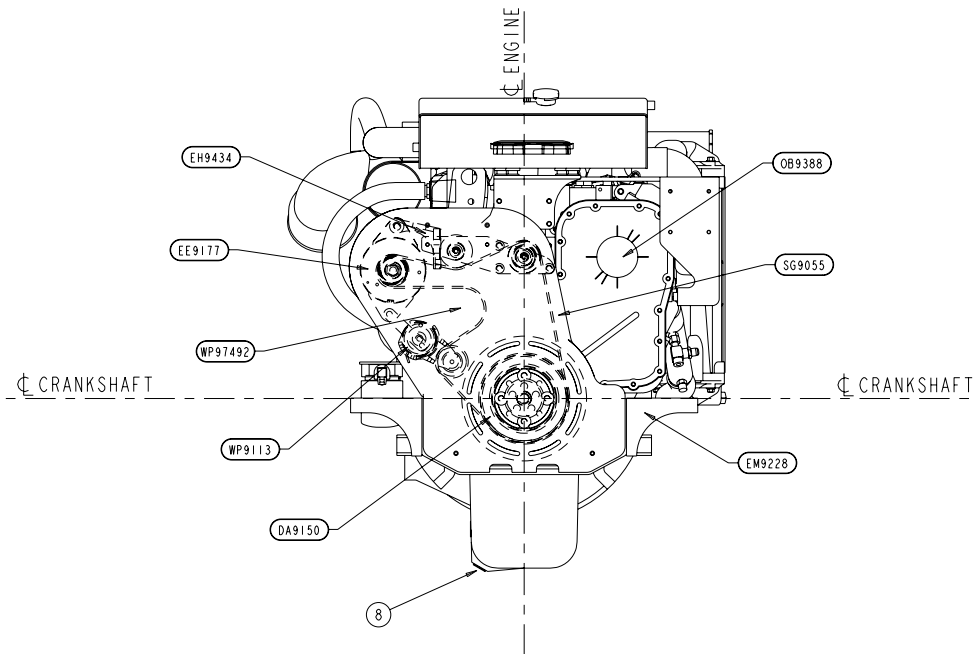
TOP VIEW



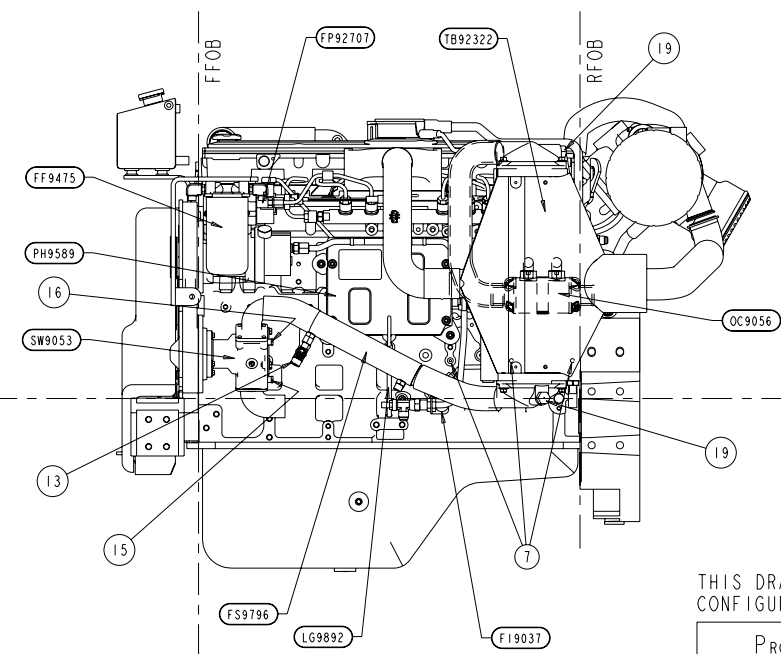
BACK VIEW



STARBOARD VIEW



FRONT VIEW



PORT VIEW

ENGINE SERVICE TEST PORTS

1 AIR INLET RESTRICTION: 1/8-27 NPT	8 ENGINE OIL DRAIN FRONT: M18 X 1.5	15 SEA WATER INLET RESTRICTION: 1/4-18 NPT
2 BLOW-BY CONNECTION: Ø19.1 [.75] O.D.	9 ENGINE OIL DRAIN REAR: N/A	16 SEA WATER OUTLET PRESSURE: 1/4-18 NPT
3 COOLANT FILL: F8	10 ENGINE OIL FILL: 29.5 [1.16], F8	17 TURBO BOOST PRESSURE: M8 X 1.25
4 COOLANT PRESSURE SIDE: 1/2 NPT	11 EXHAUST TEMPERATURE/BACK PRESSURE: 1/8 NPT	18 VENT PETCOCK: 1/8 NPT
5 COOLANT SUCTION SIDE: 3/4 NPT	12 FUEL INLET RESTRICTION: M10	19 ZINC ANODE: 3X 1/2 NPT
6 COOLANT TEMPERATURE: M14 X 1.5	13 FUEL RETURN PRESSURE: 1/4 NPT	
7 ENGINE LUBRICATION OIL PRESSURE: M10 X 1.0	14 INTAKE MANIFOLD PRESSURE/TEMPERATURE: 3/4 NPT	

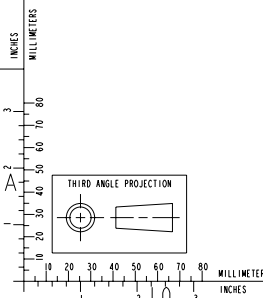
THIS DRAWING IS BASED ON CONFIGURATION D563023MX03

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: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER
DWN: J. HANSEN CHD: UNCHECKED APPD:	SIZE CODE IDENT. NO. ITEM NUMBER J 4954107	INSTALLATION DIAGRAM
	SCALE: 200	ITEM CONTROL: MCS

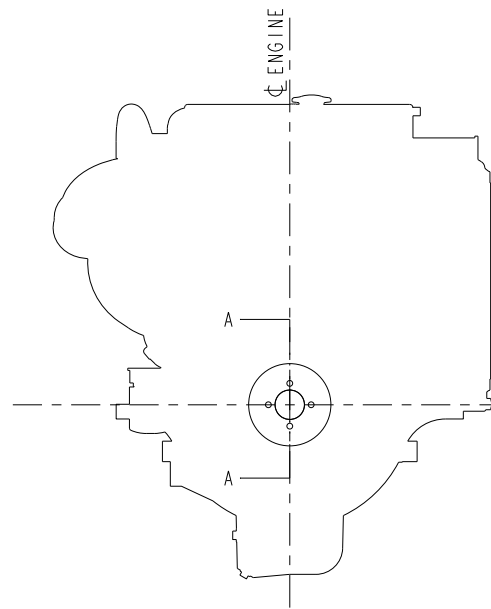
DO NOT SCALE THIS DRAWING

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.



ITEM NUMBER
4954107

REVISIONS		DWN	APP'D
ZONE	REV	DESCRIPTION	DATE
01	RELEASED		

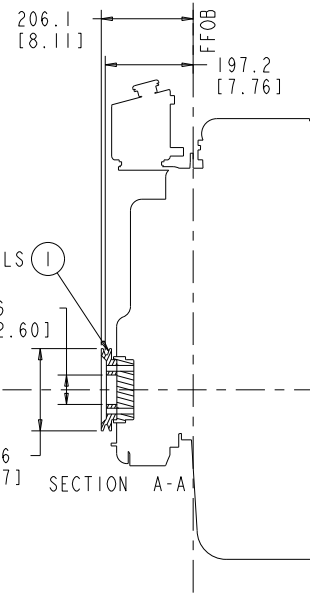


FRONT VIEW

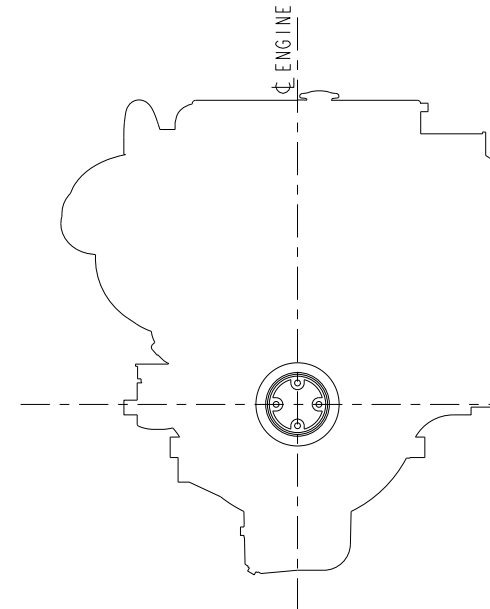
"V" RIBBED PULLEY
Ø187.8 [7.39] OVER
Ø11.1 [.44] GAUGE BALLS

Ø66 [2.60]
Ø184.6 [7.27]

AF9141



PORT VIEW

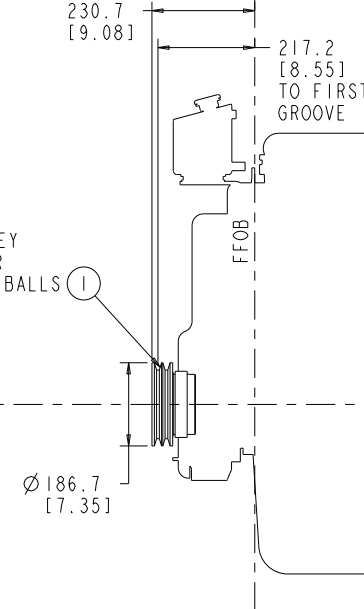


FRONT VIEW

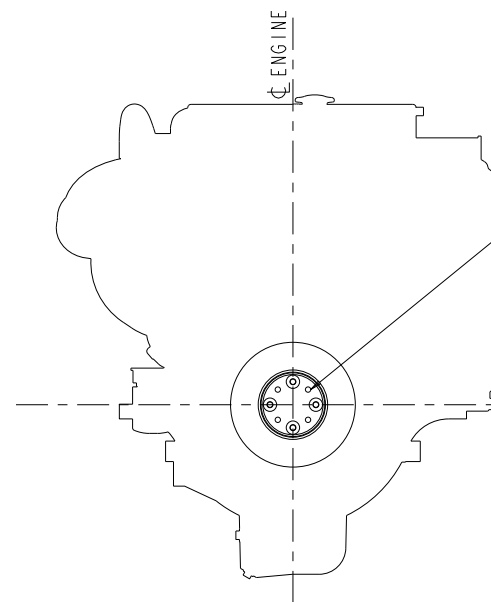
2X "V" RIBBED PULLEY
Ø196.9 [7.75] OVER
Ø14.3 [.56] GAUGE BALLS

Ø186.7 [7.35]

AF9142



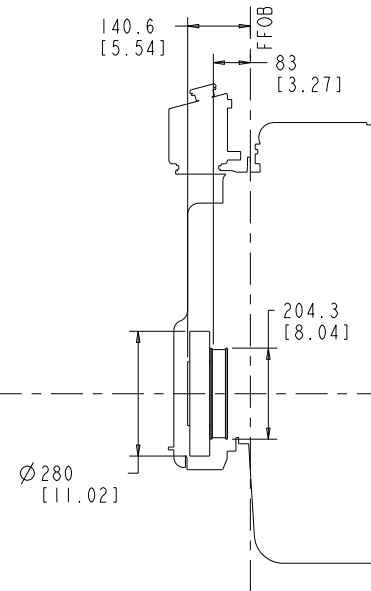
PORT VIEW



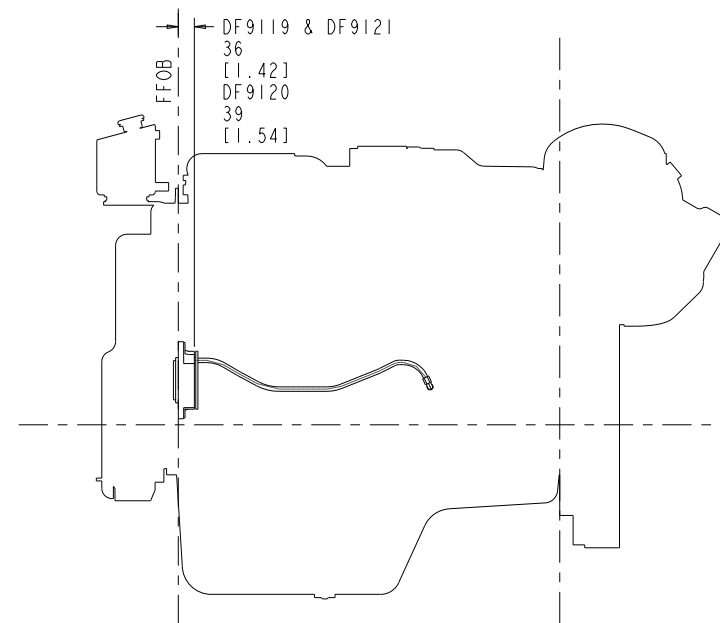
FRONT VIEW

② 4X M12 X 1.75
EQUALLY SPACED ON
A Ø96 [3.78] B.C.

DA9150



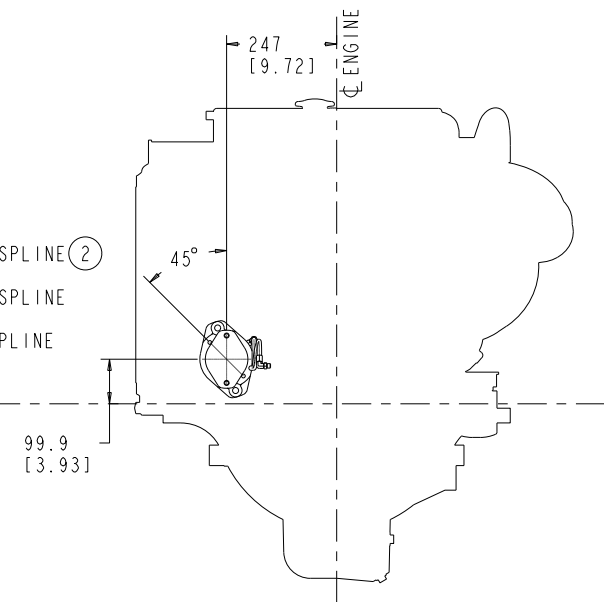
PORT VIEW



PORT VIEW

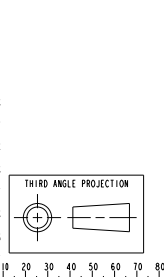
DA9119
SAE "A" 11 TOOTH SPLINE ②
DF9120
SAE "B" 13 TOOTH SPLINE
DF9121
SAE "A" 9 TOOTH SPLINE

DF9119/DF9120/DF9121



BACK VIEW

INCHES
MILLIMETERS



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

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: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES		ITEM NAME QSL9 MARINE	IDENTIFIER
DWN: J. HANSEN	CHKD: UNCHECKED	SIZE CODE (IDENT. NO.)	ITEM NUMBER 4954107
APPD:	APPD:	SCALE: 2:1	ITEM CONTROL: MCS SHEET 3 OF 23

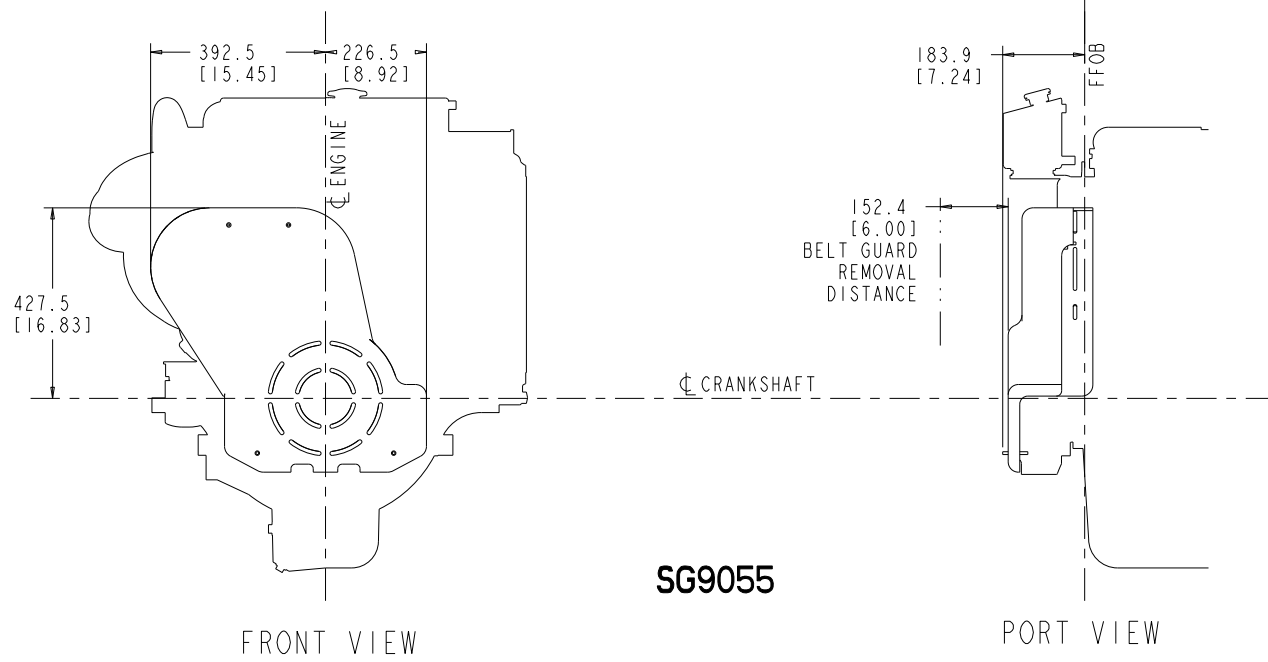
DO NOT SCALE THIS DRAWING

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

ITEM NUMBER
4954107

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
	01	RELEASED	



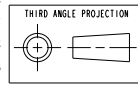
SG9055

FRONT VIEW

PORT VIEW

INCHES
MILLIMETERS

80
70
60
50
40
30
20
10
0



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

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: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES		ITEM NAME QSL9 MARINE	IDENTIFIER
DWN: J HANSEN	CHKD: UNCHECKED	SIZE CODE IDENT. NO.:	ITEM NUMBER
APPD:		J	4954107
		SCALE: 200	ITEM CONTROL: MCS SHEET 4 OF 23

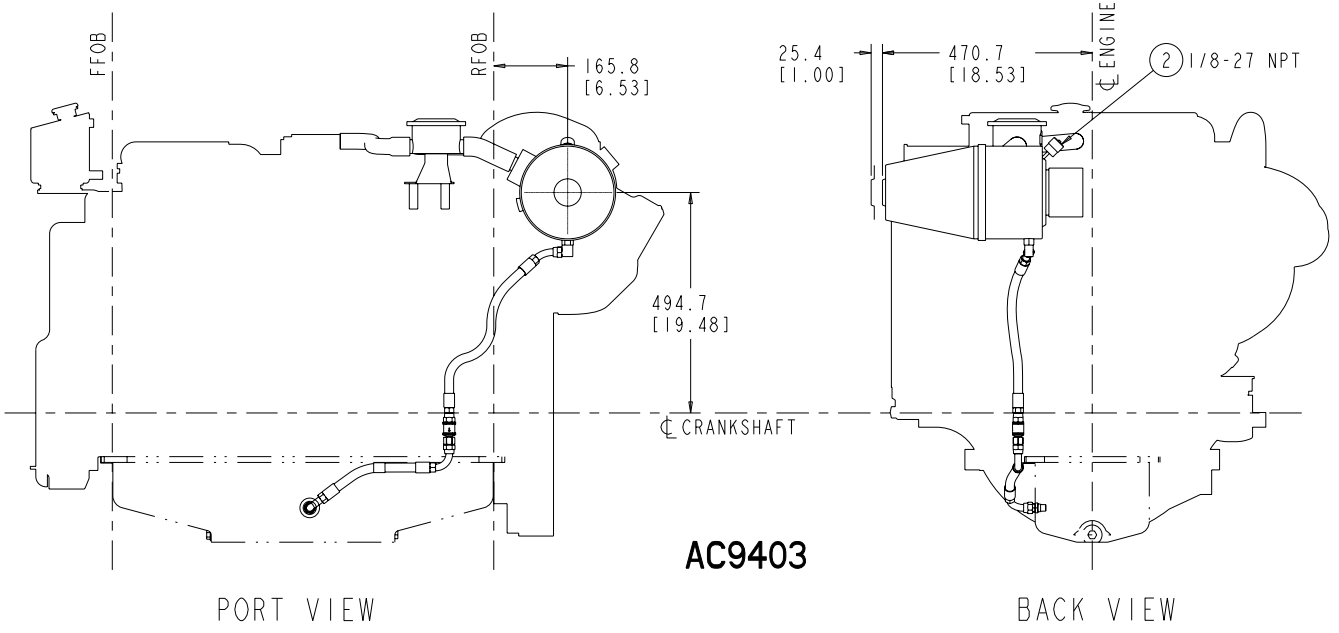
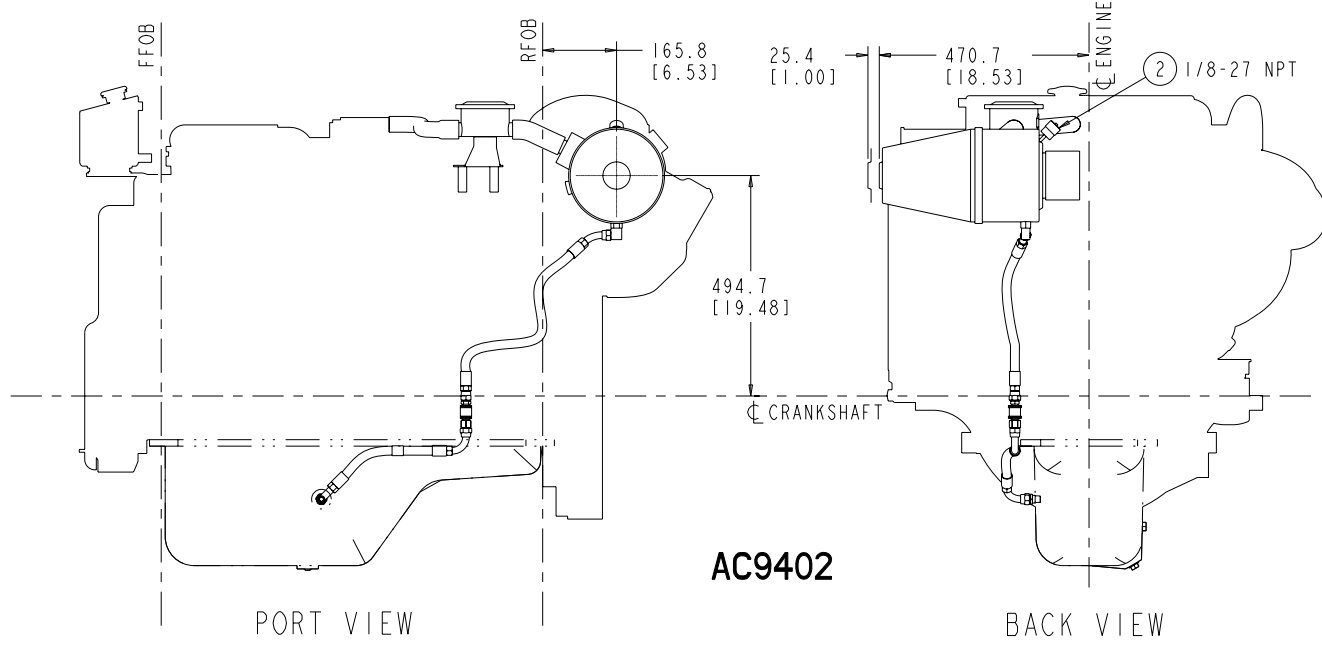
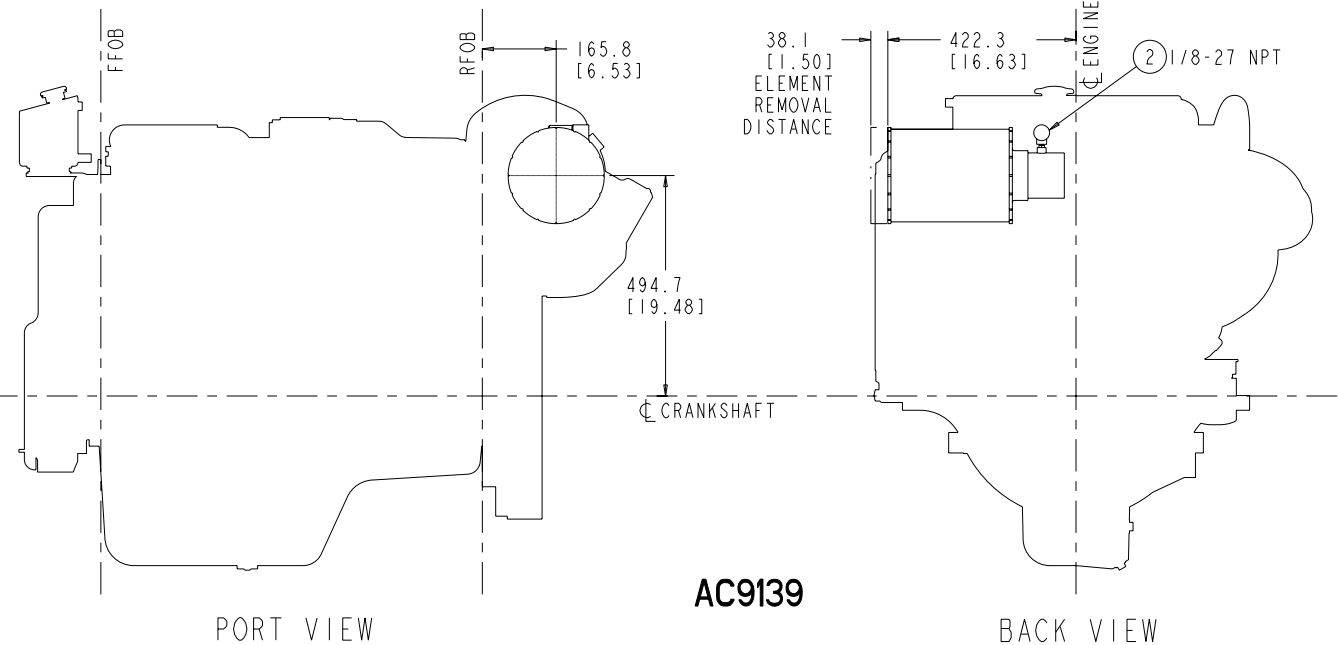
DO NOT SCALE THIS DRAWING

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.

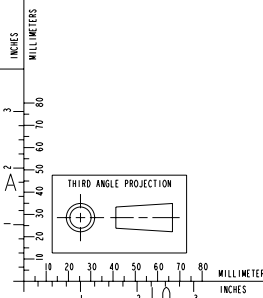
ACCESSORY DRIVES & PTO'S

ITEM NUMBER
4954107

REVISIONS		DWN	APP'D
ZONE	REV	DATE	DESCRIPTION
01	RELEASED	16.AUG.15	CUS31 KB



- 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



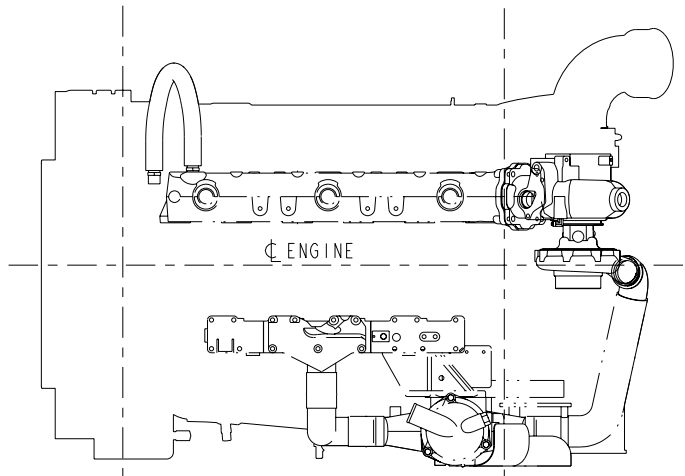
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES		ITEM NAME QSL9 MARINE	IDENTIFIER
DO NOT SCALE THIS DRAWING		SIZE CODE (IDENT. NO.)	ITEM NUMBER
DWN: J. HANSEN	CHK: UNCHECKED	SCALE: 2:1	4954107
APPD:		ITEM CONTROL: MCS	SHEET 5 OF 23

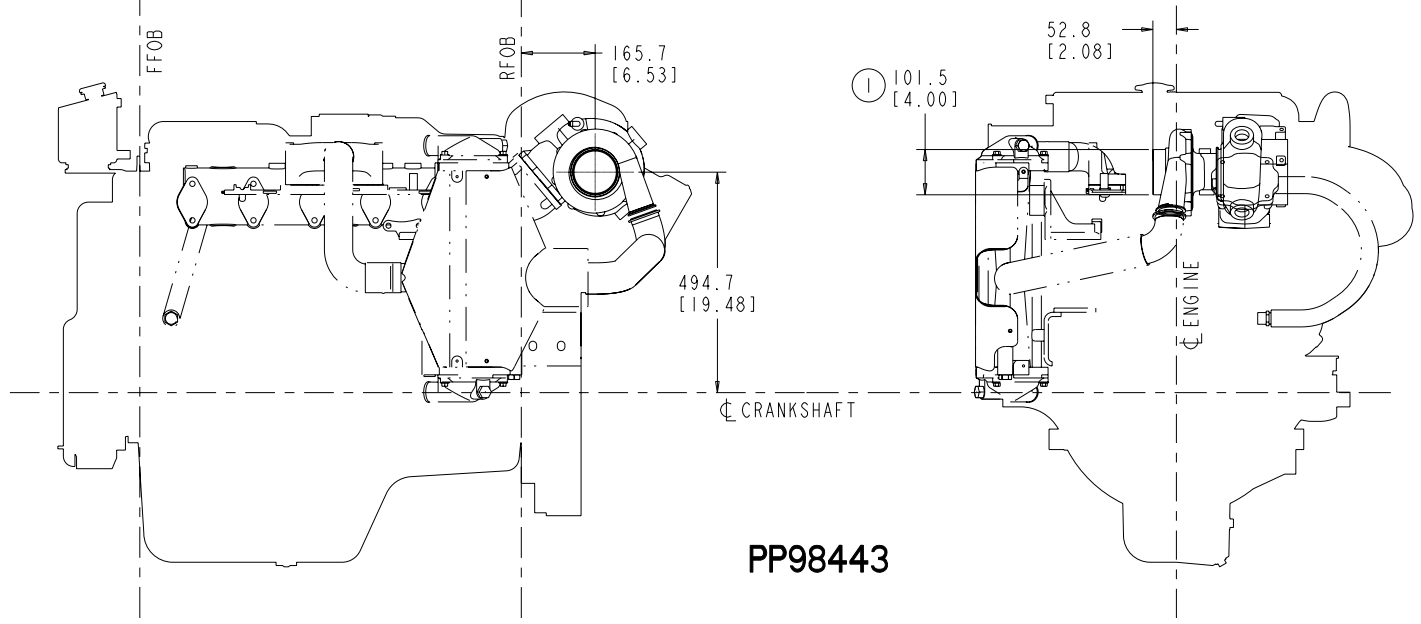
AIR INDUCTION SYSTEM

ITEM NUMBER
4954107

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
	01	RELEASED	



ENGINE



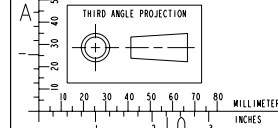
PP98443

PORT VIEW

BACK VIEW

CRANKSHAFT

INCHES
MILLIMETERS



- 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

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.

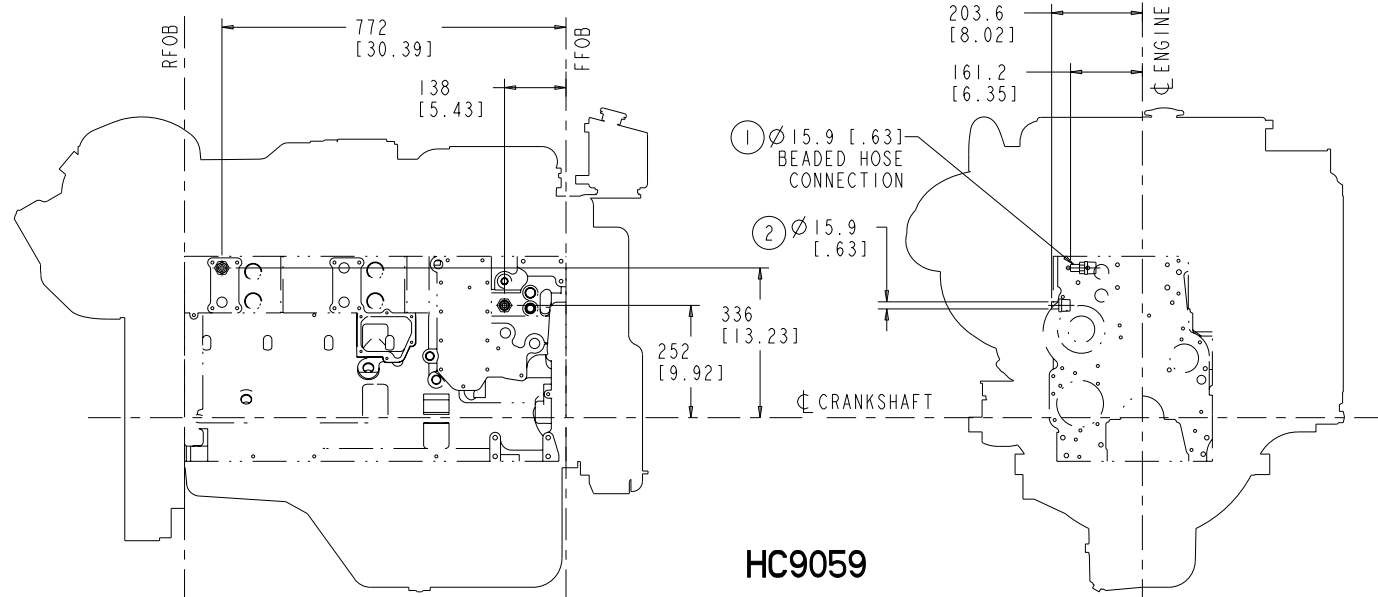
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER J	ITEM NUMBER 4954107
DWN: J HANSEN CHD: UNCHECKED APPD:	SCALE: 200	ITEM CONTROL: MCS	SHEET 6 OF 23

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.

AIR INDUCTION SYSTEM

ITEM NUMBER
4954107

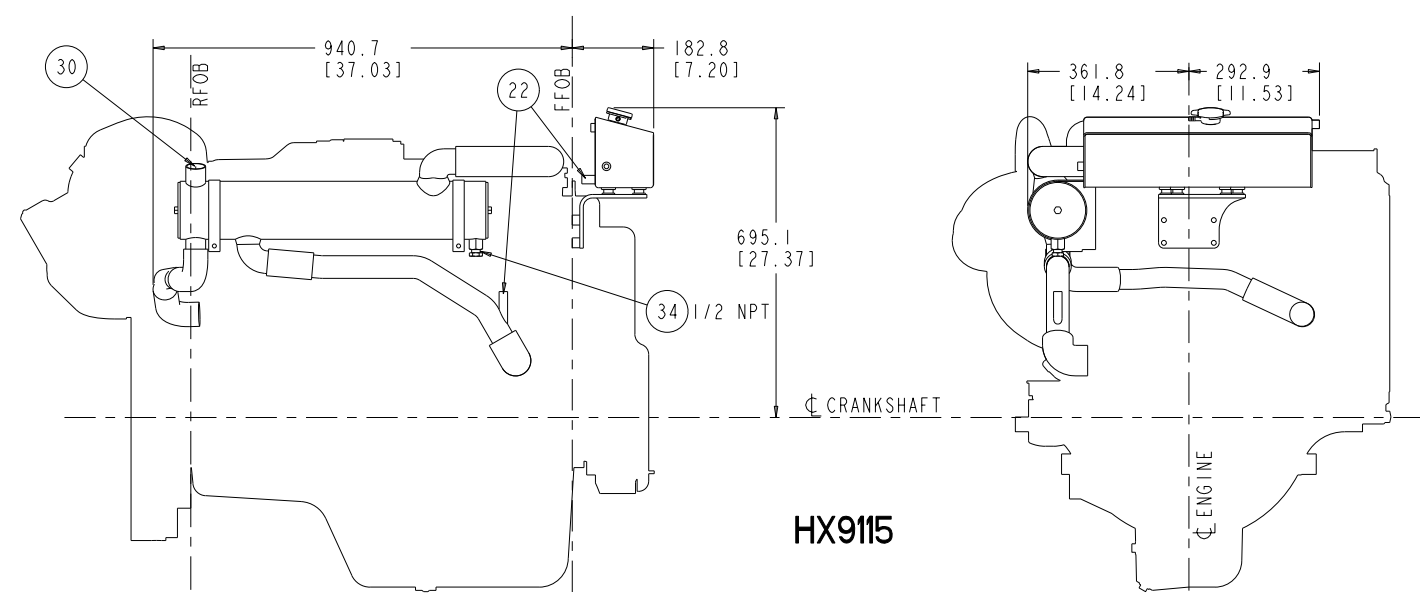
REVISIONS		DWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		



STARBOARD VIEW

FRONT VIEW

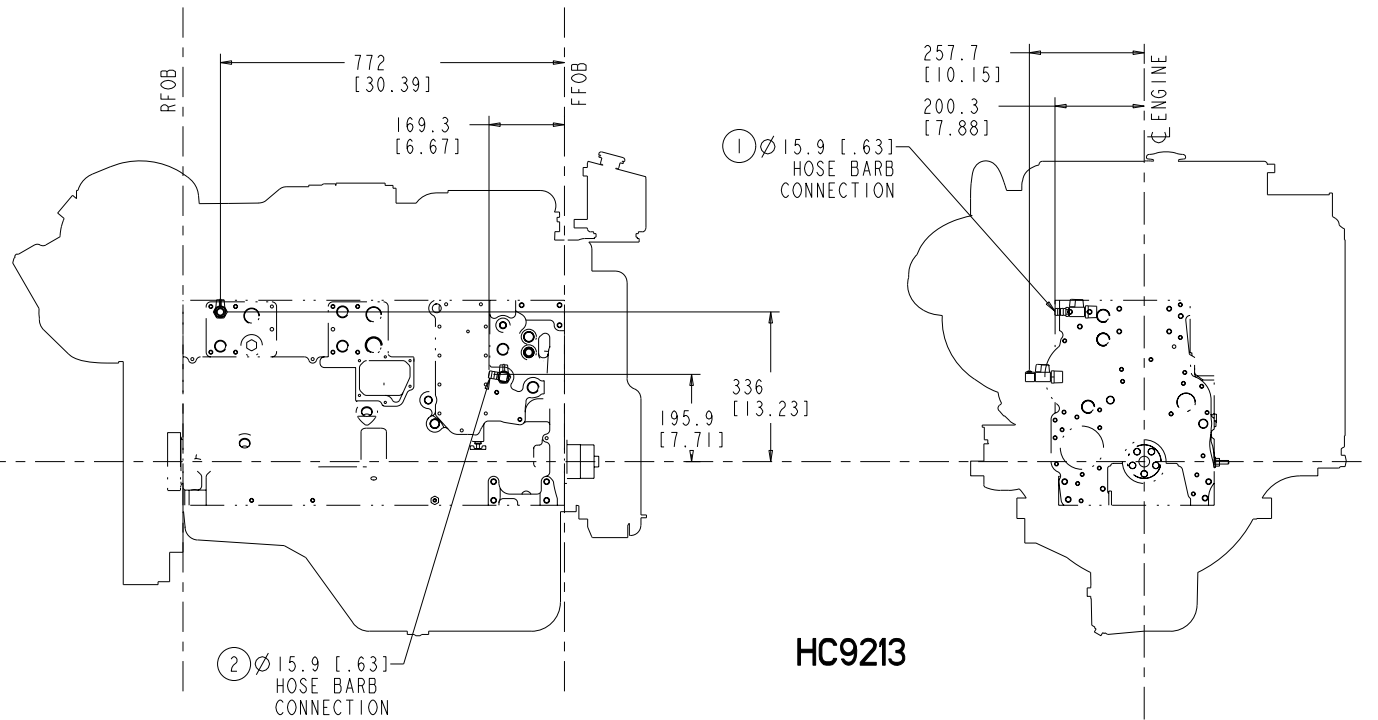
HC9059



STARBOARD VIEW

FRONT VIEW

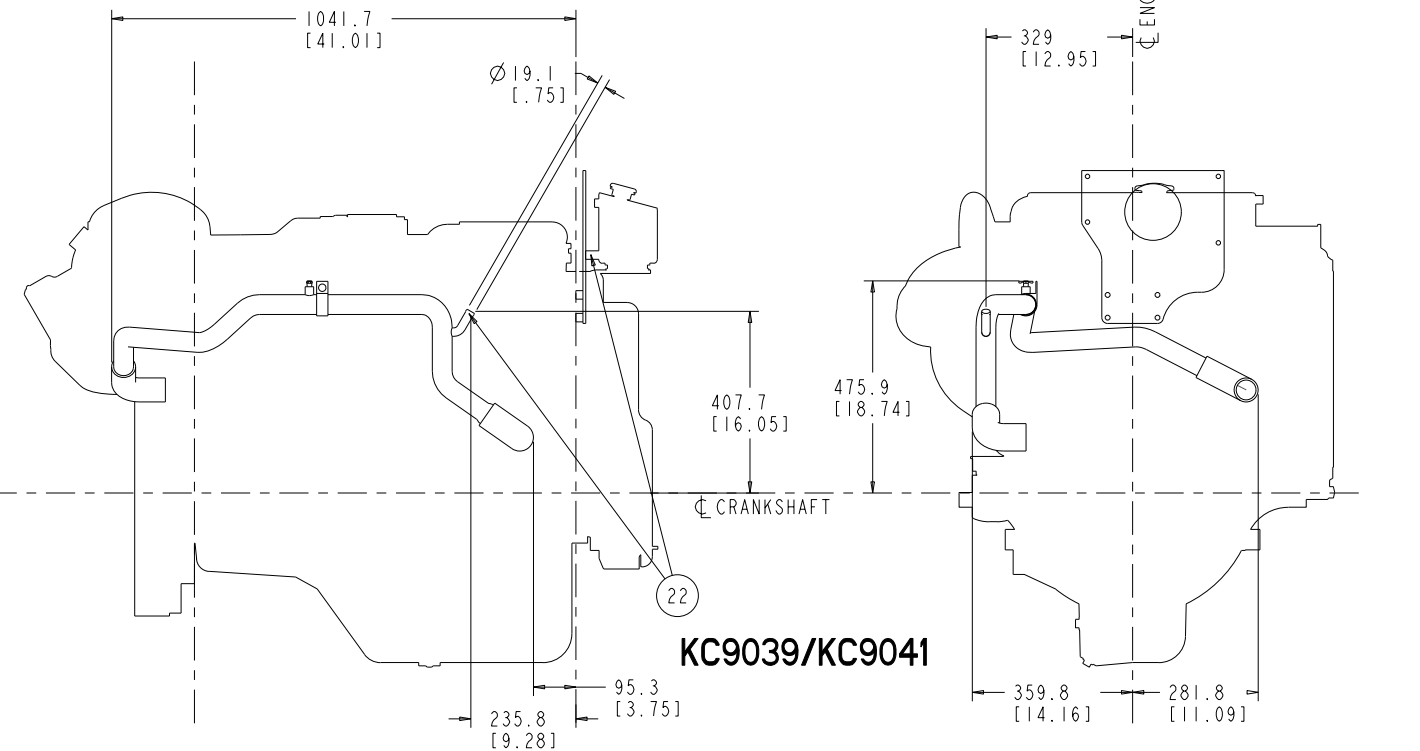
HX9115



STARBOARD VIEW

FRONT VIEW

HC9213



STARBOARD VIEW

FRONT VIEW

KC9039/KC9041

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	

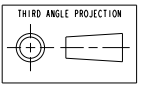
COOLING SYSTEM

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: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	ITEM NAME CUMMINS INC.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS 1:1 ARE IN: INCHES	IDENTIFIER QSL9 MARINE	ITEM NUMBER 4954107
DWN: J HANSEN CHD: UNCHECKED APPD: UNCHECKED	SCALE: 2:1	ITEM CONTROL: MCS SHEET 7 OF 23

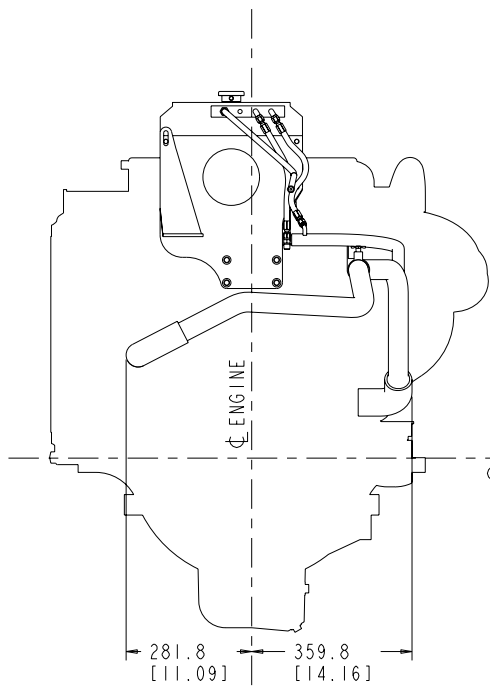
INCHES
MILLIMETERS



INCHES
MILLIMETERS

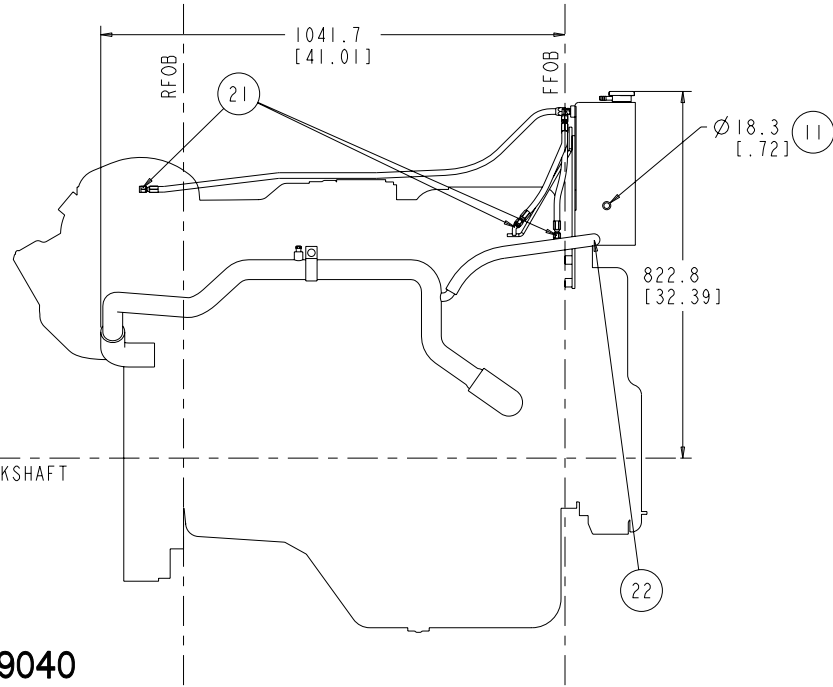
ITEM NUMBER
4954107

REVISIONS		DWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		

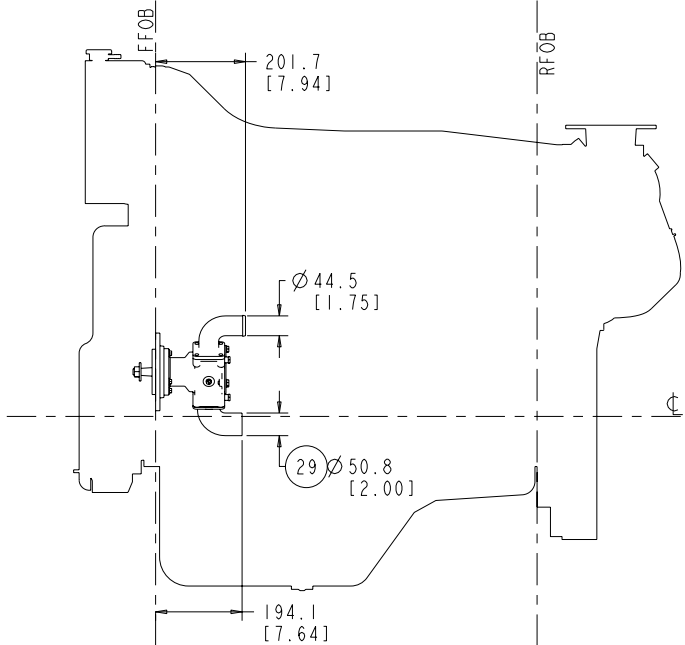


KC9040

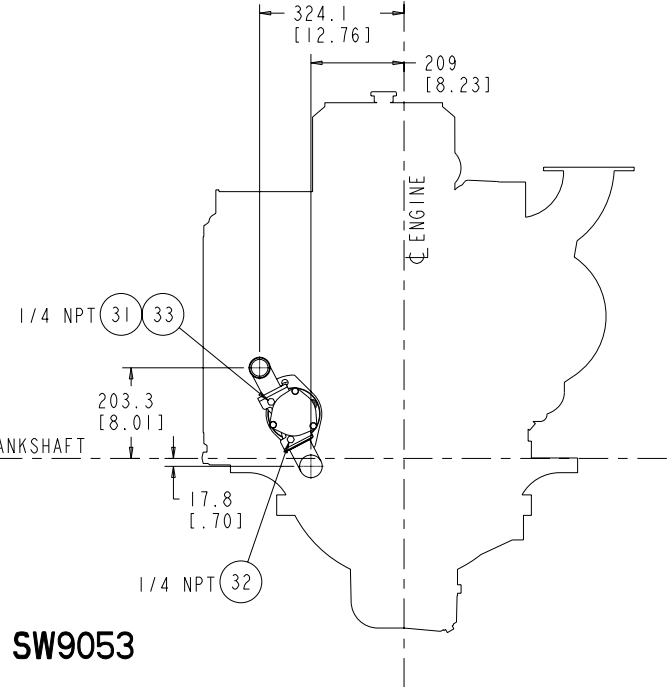
BACK VIEW



STARBOARD VIEW

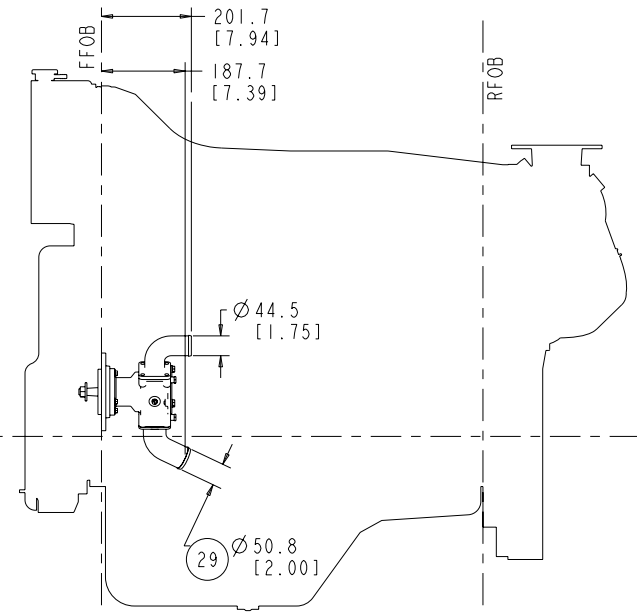


PORT VIEW

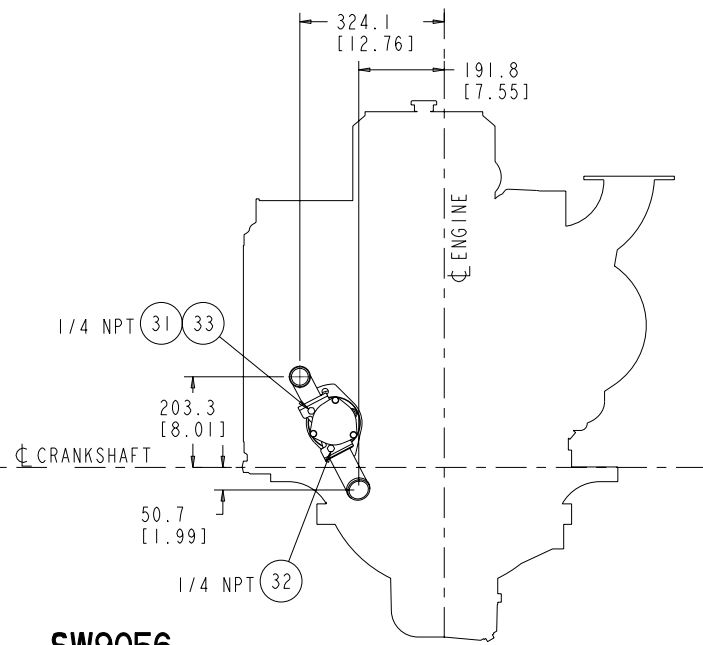


SW9053

BACK VIEW

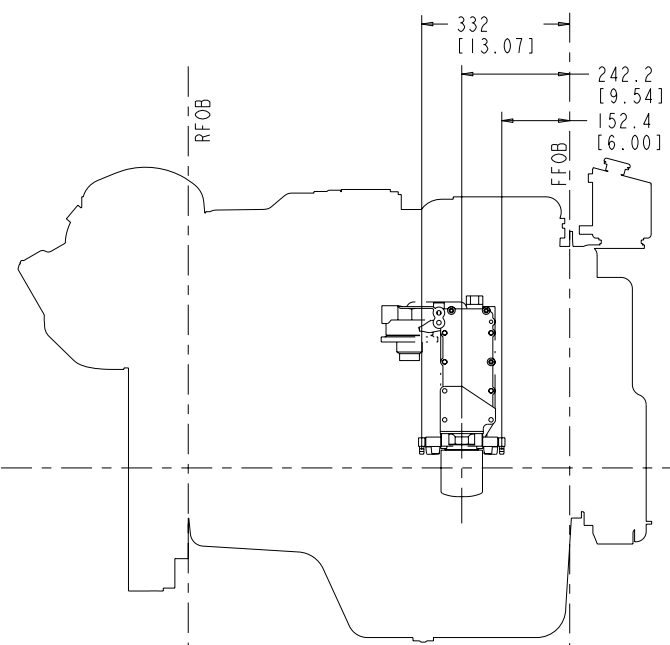


PORT VIEW

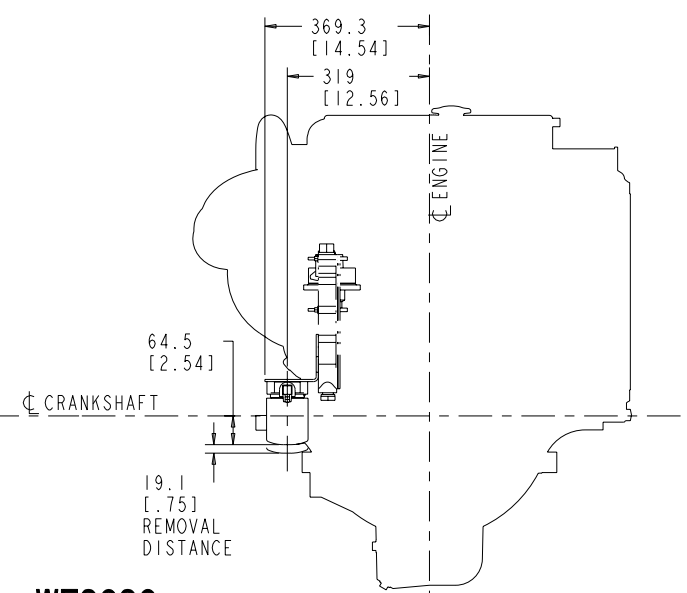


SW9056

BACK VIEW



STARBOARD VIEW



WF9096

FRONT VIEW

- 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

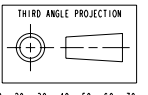
COOLING SYSTEM

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.

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: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	ITEM NAME QSL9 MARINE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS 1/8 ARE IN: INCHES	IDENTIFIER J	ITEM NUMBER 4954107
DWN: J HANSEN CHD: UNCHECKED APPD: [blank]	SCALE: 2:1	ITEM CONTROL: MCS SHEET 8 OF 23

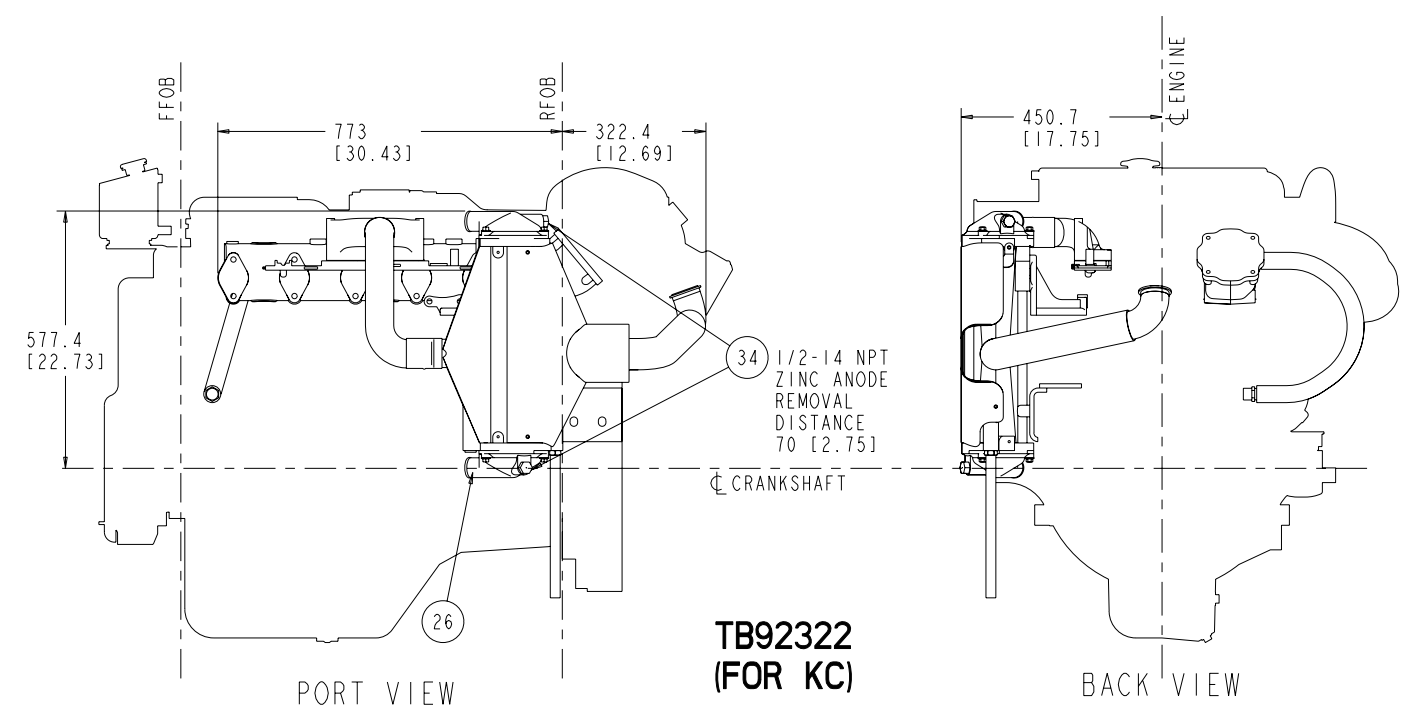
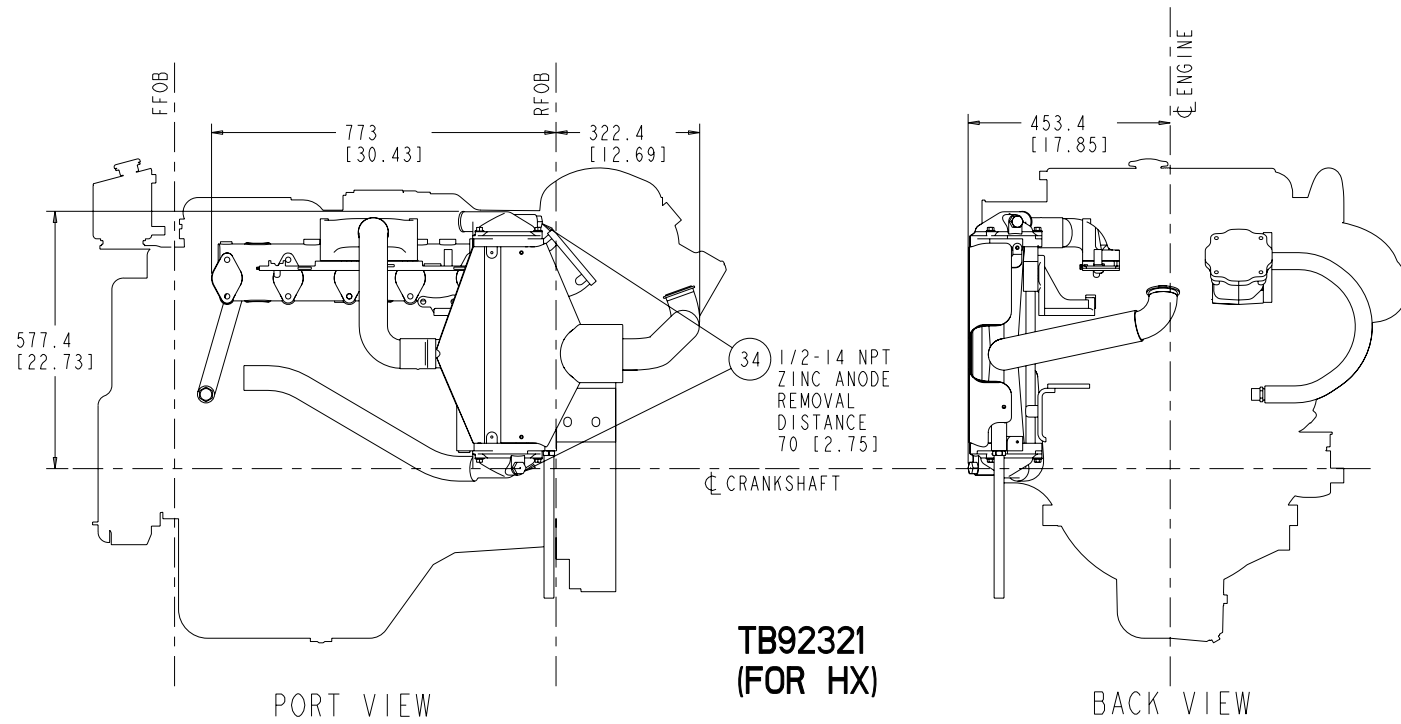
INCHES
MILLIMETERS



INCHES
MILLIMETERS

ITEM NUMBER
4954107

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
01	RELEASED		



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

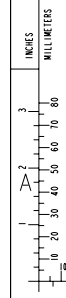
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	ITEM NAME CUMMINS INC.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	IDENTIFIER QSL9 MARINE	SIZE CODE IDENT. NO. ITEM NUMBER
DWN: J HANSEN CHD: UNCHECKED APPD:	SCALE: 200	ITEM CONTROL: MCS SHEET 9 OF 23

H
G
F
E
D
C
B
A

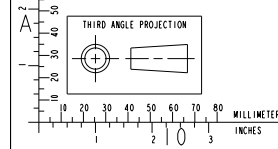
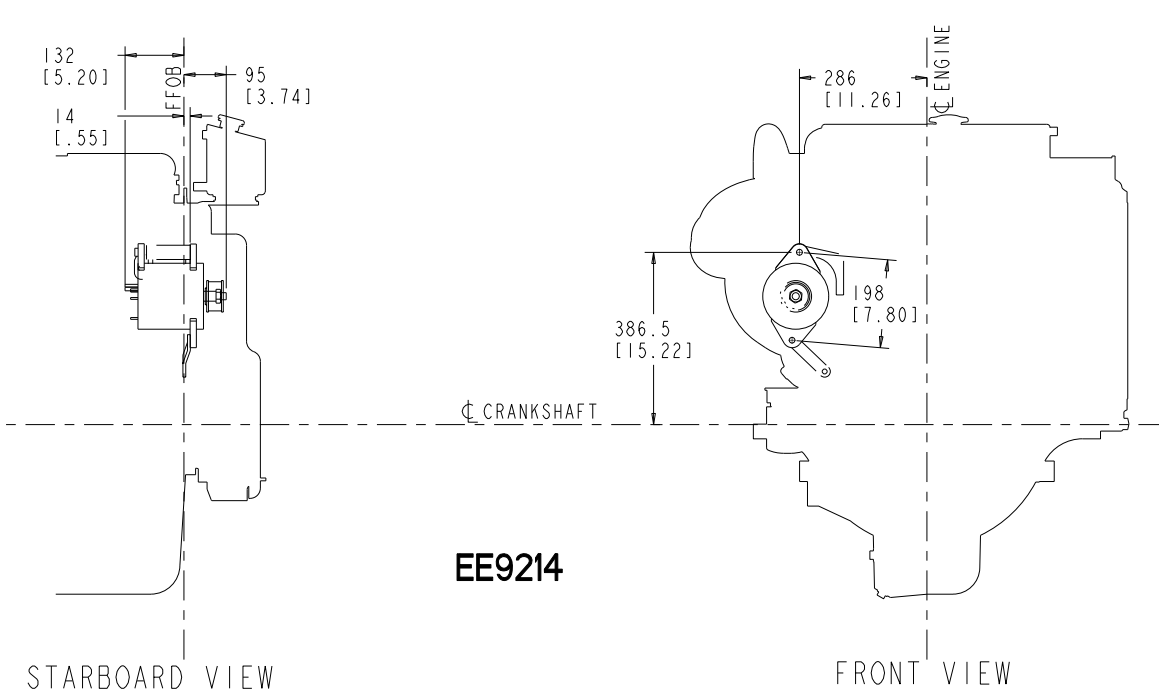
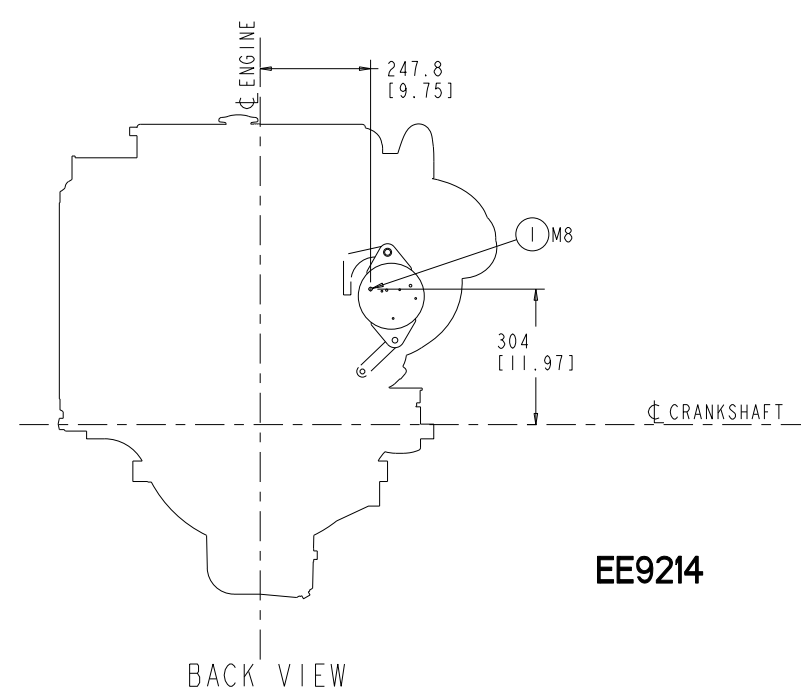
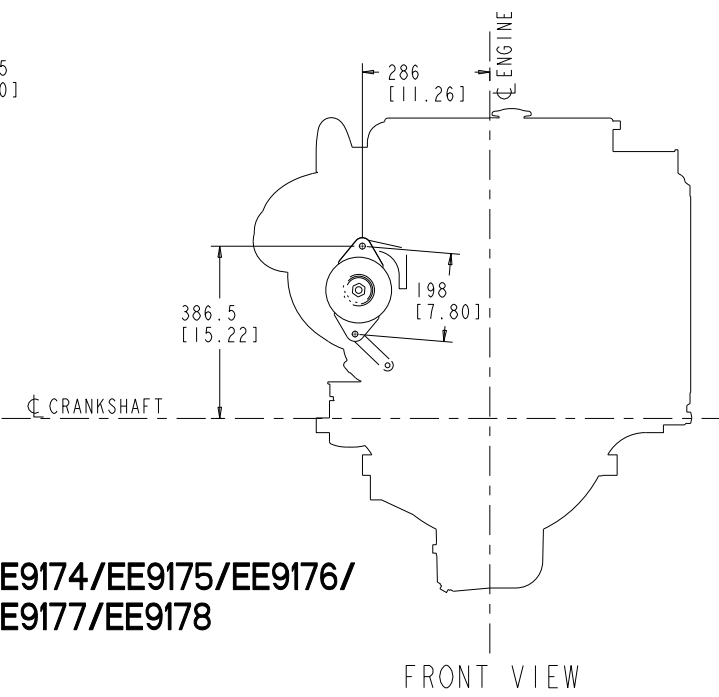
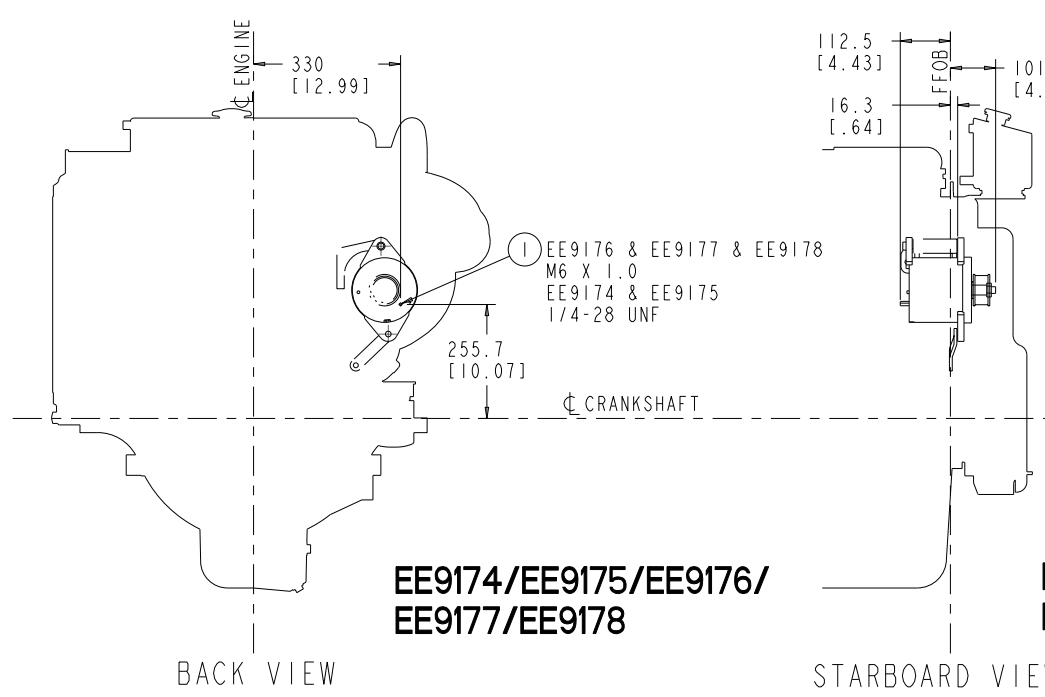
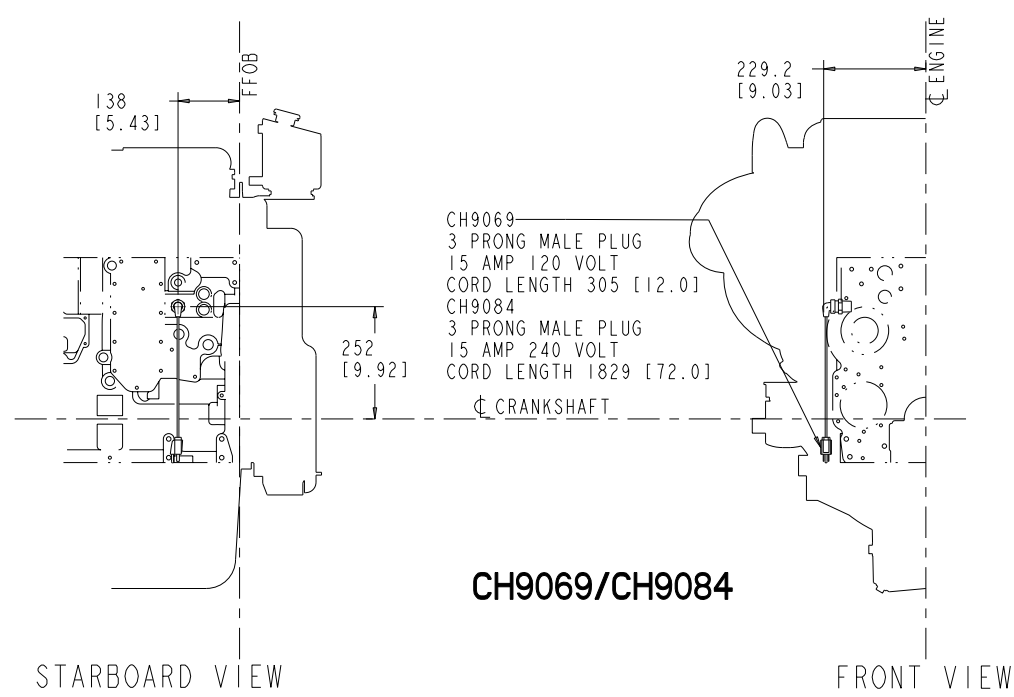
H
G
F
E
D
C
B
A

10 9 8 7 6 5 4 3 2 1



ITEM NUMBER
4954107

REVISIONS		DWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		



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

ELECTRICAL SYSTEM

DO NOT SCALE THIS DRAWING

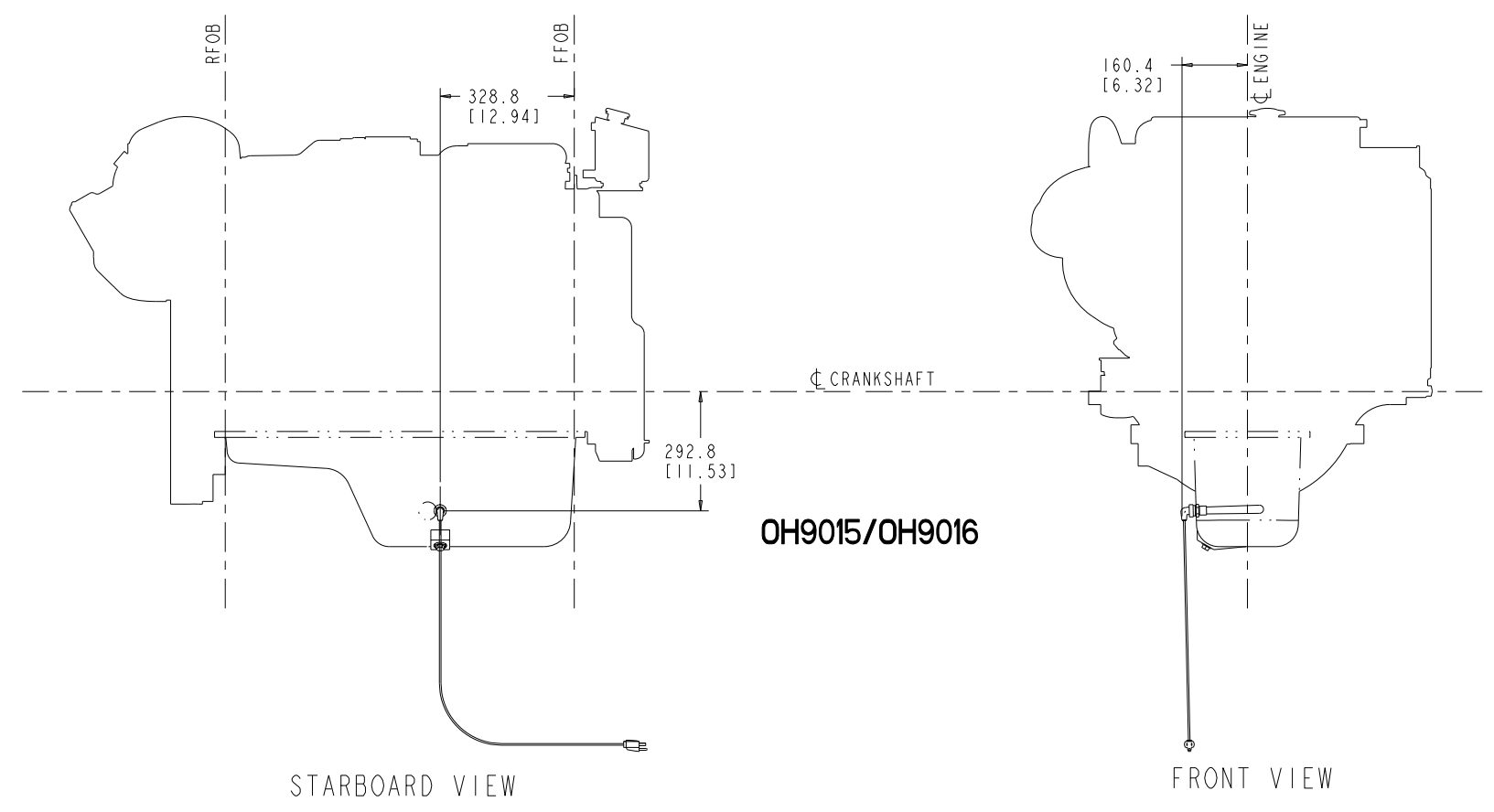
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

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: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER	ITEM NUMBER
DWN: J. HANSEN CHD: UNCHECKED APPD:	SIZE CODE (IDENT. NO.): J	4954107	ITEM CONTROL: MCS SHEET 10 OF 23

ITEM NUMBER
4954107

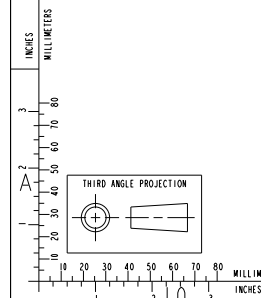
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
01	RELEASED		



OH9015/OH9016

STARBOARD VIEW

FRONT VIEW



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

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.

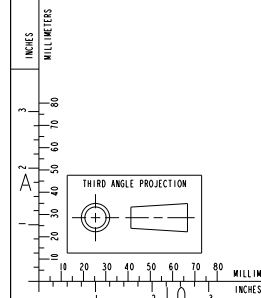
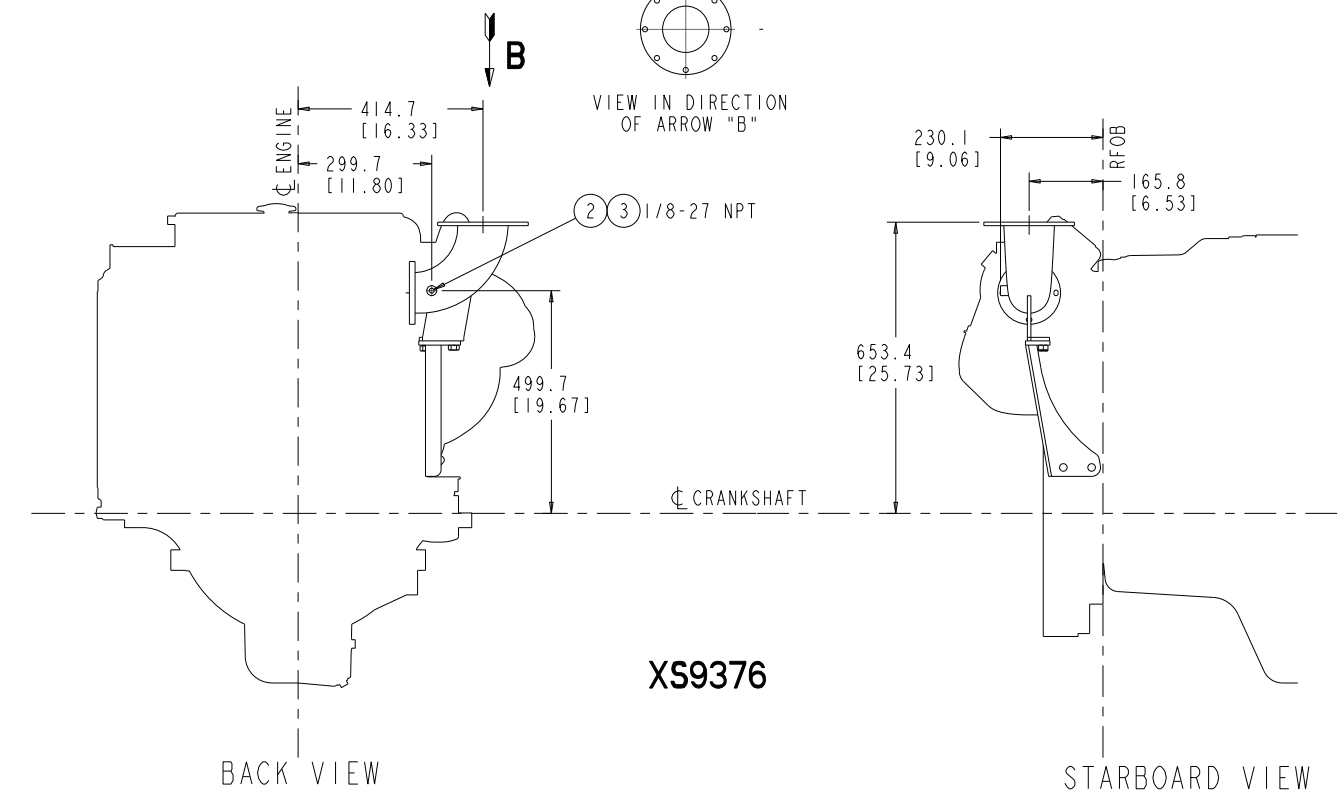
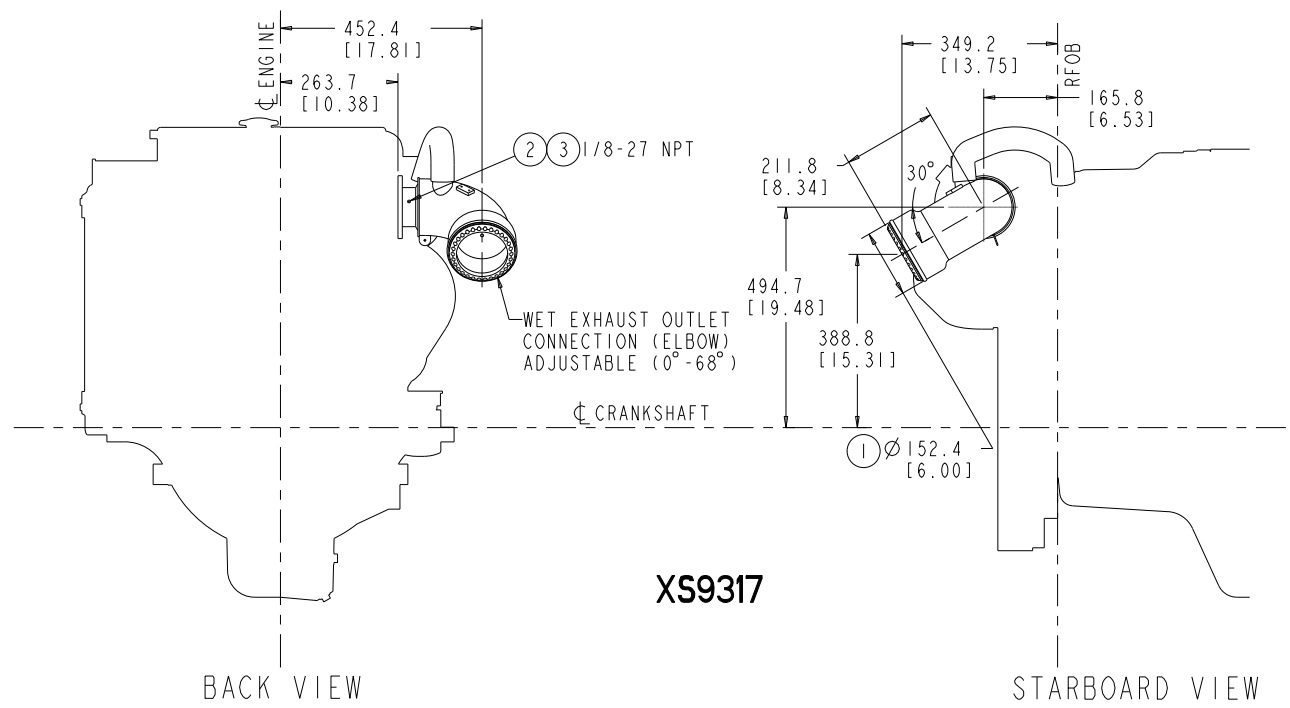
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER	ITEM NUMBER
DWN: J HANSEN CHD: UNCHECKED APPD:	SIZE CODE IDENT. NO.: J	4954107	
	SCALE: 2:1	ITEM CONTROL: MCS	SHEET 11 OF 23

ELECTRICAL SYSTEM

ITEM NUMBER
4954107

REVISIONS		DWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		

1 8X Ø11.5 [.45] ON A
Ø182.63 [7.19] B.C.



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

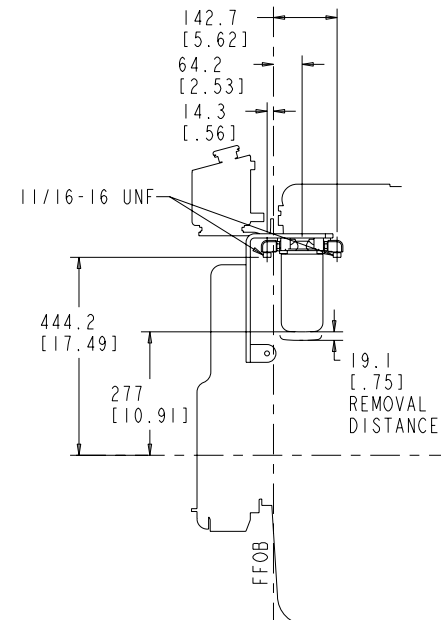
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER	ITEM NUMBER
DWN: J. HANSEN CHD: UNCHECKED APPD:	SCALE: 2:1	SIZE CODE IDENT. NO.:	4954107
		ITEM CONTROL: MCS	SHEET 12 OF 23

EXHAUST SYSTEM

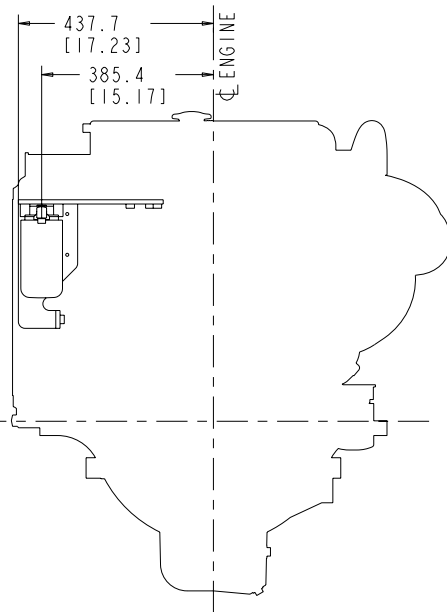
ITEM NUMBER
4954107

REVISIONS		OWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		

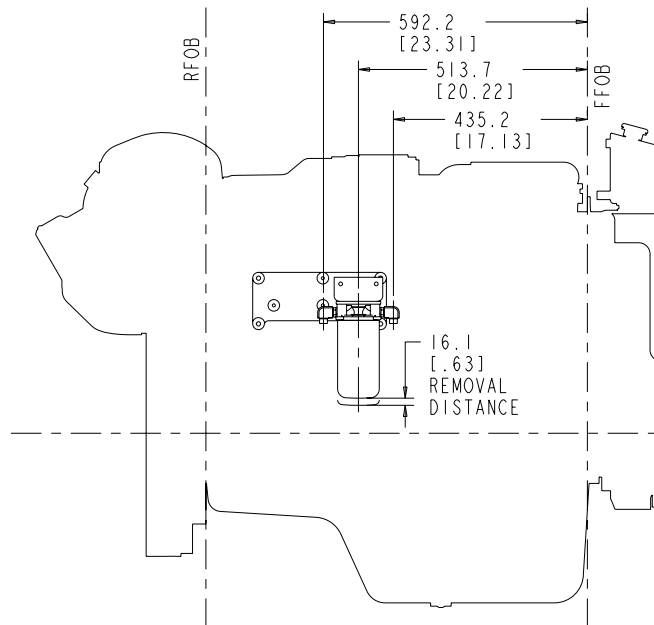


FF9475

PORT VIEW

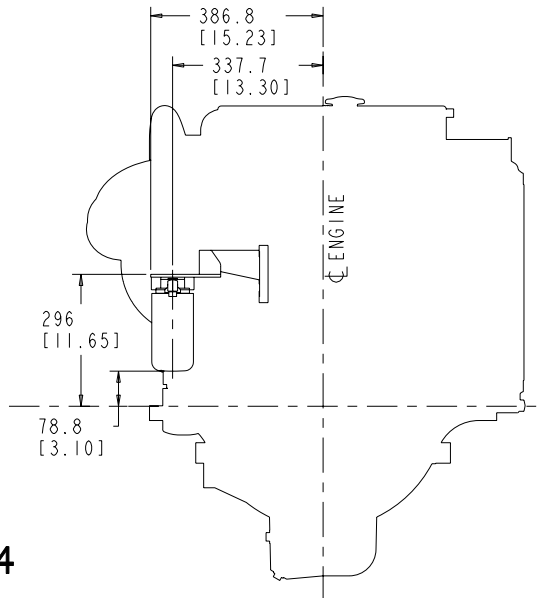


BACK VIEW

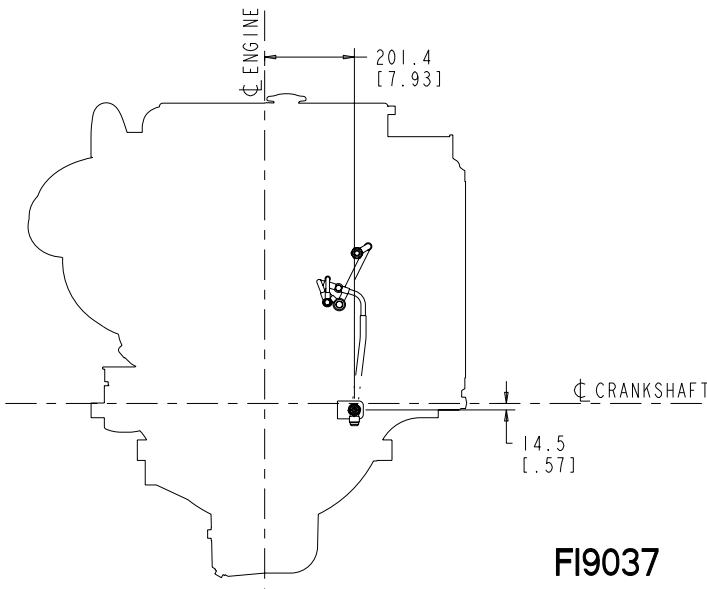


FF9494

STARBOARD VIEW

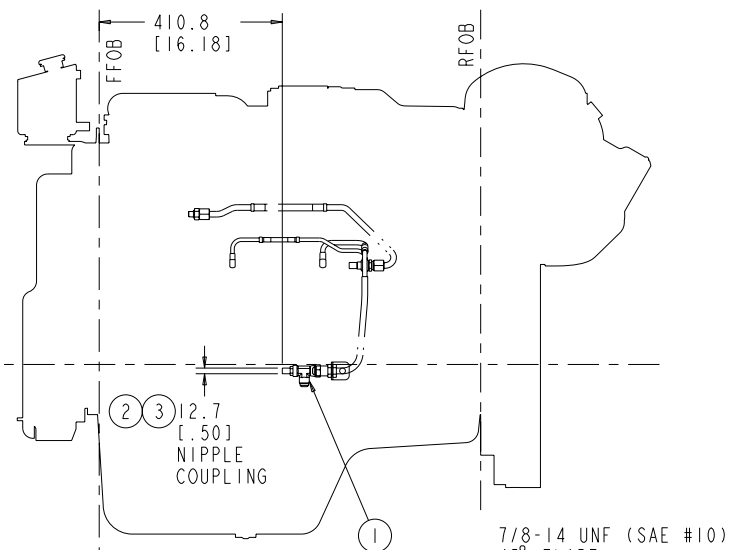


FRONT VIEW

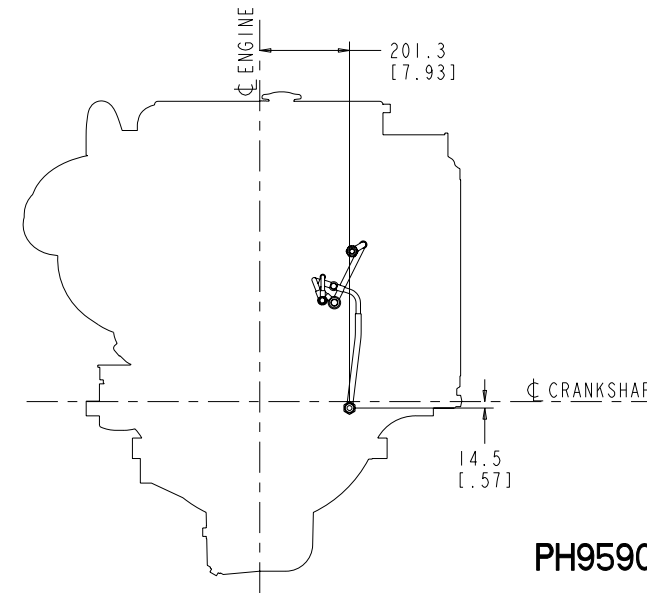


FI9037

FRONT VIEW

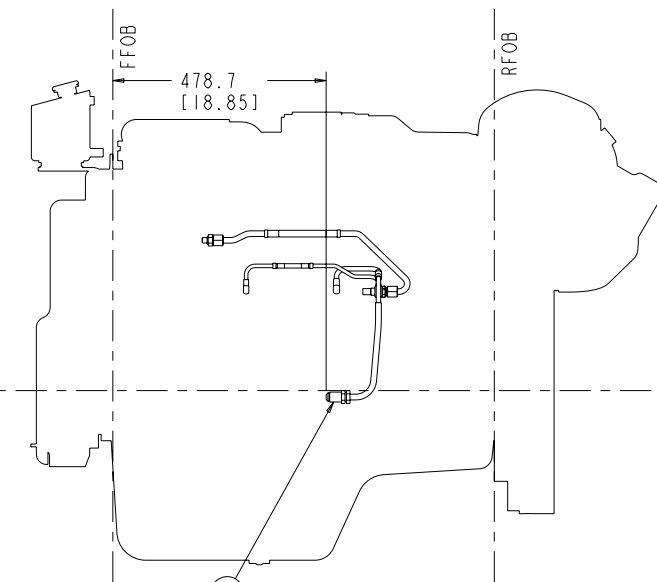


PORT VIEW



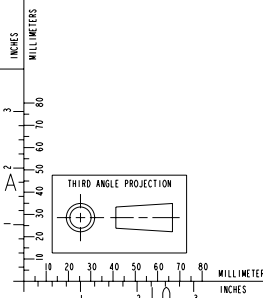
PH9590

FRONT VIEW



PORT VIEW

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.



- | | |
|--------------------------------------|---------------------------------|
| 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 | |

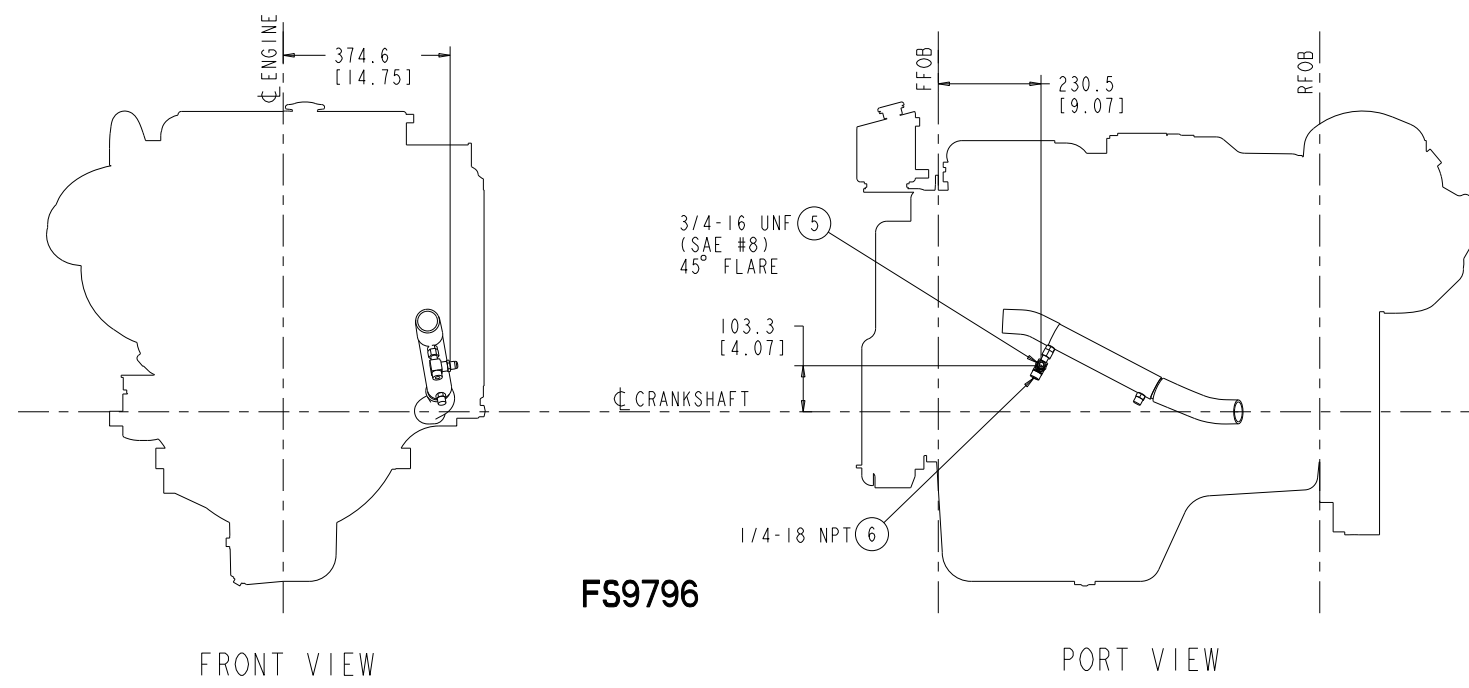
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING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

FUEL SYSTEM

LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES		ITEM NAME QSL9 MARINE	IDENTIFIER
DWN: J. HANSEN CHD: UNCHECKED APPD:		SIZE CODE (IDENT. NO.) J	ITEM NUMBER 4954107
		SCALE: 2:1	ITEM CONTROL: MCS SHEET 13 OF 23

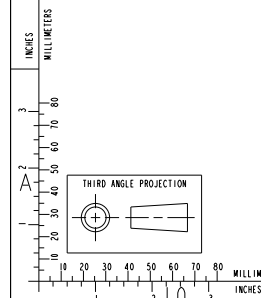
ITEM NUMBER
4954107

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
01	RELEASED		



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.

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: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER INSTALLATION DIAGRAM	
DWN: J HANSEN CHD: UNCHECKED APPD:	SCALE: 200	SIZE CODE IDENT. NO.: J	ITEM NUMBER 4954107
		ITEM CONTROL: MCS	SHEET 14 OF 23

FUEL SYSTEM

10

9

8

7

6

5

4

3

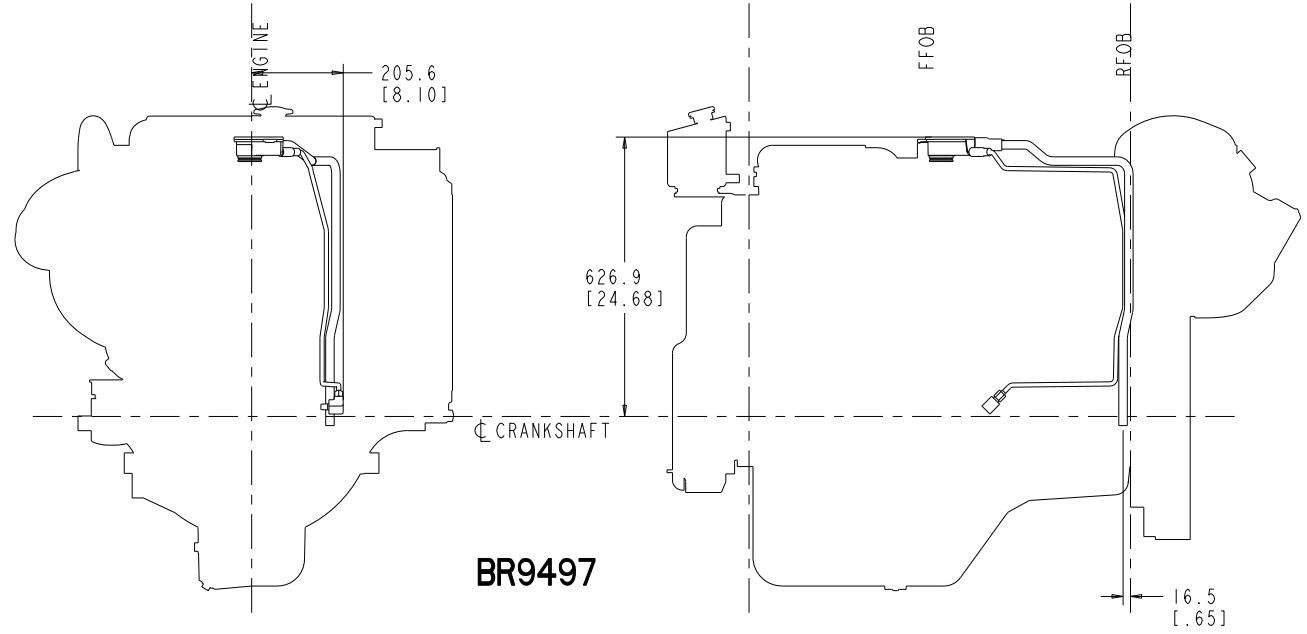
2

1

▲

ITEM NUMBER
4954107

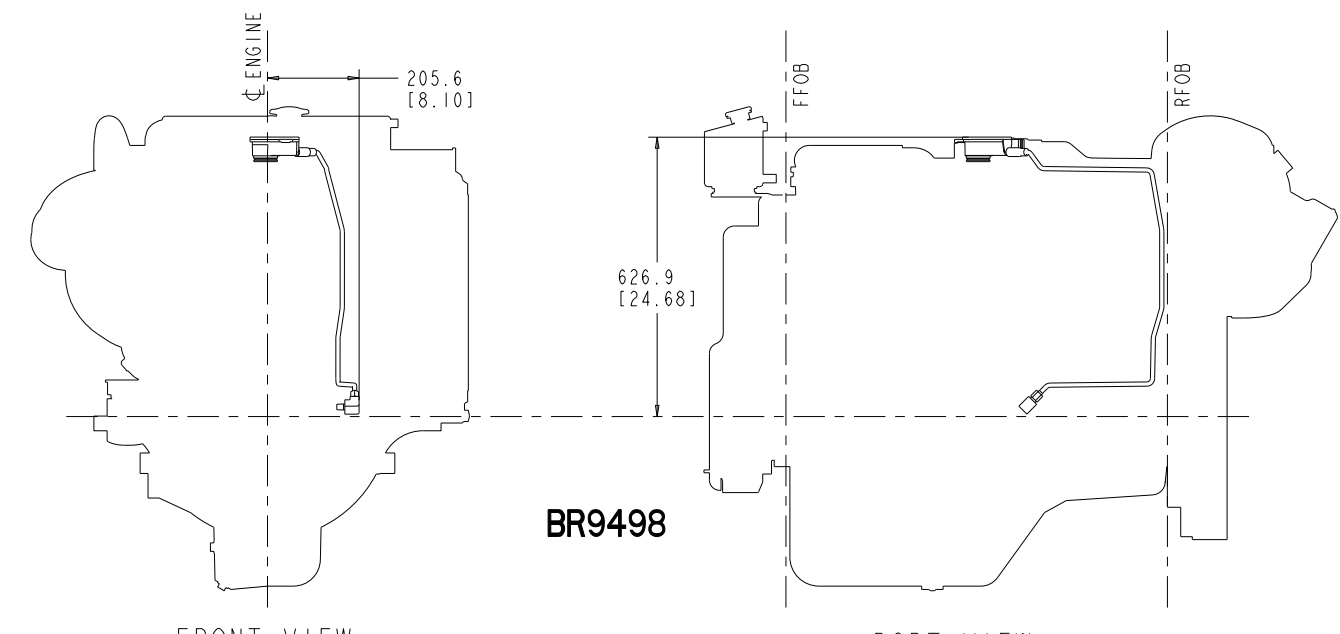
REVISIONS		OWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		



BR9497

FRONT VIEW

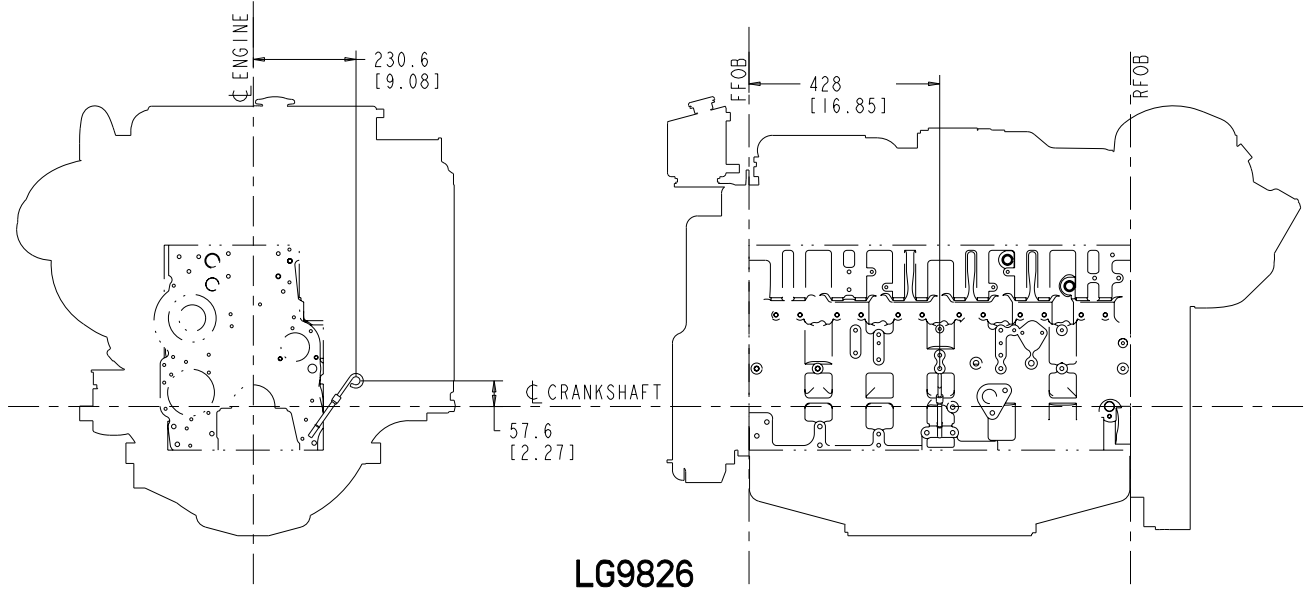
PORT VIEW



BR9498

FRONT VIEW

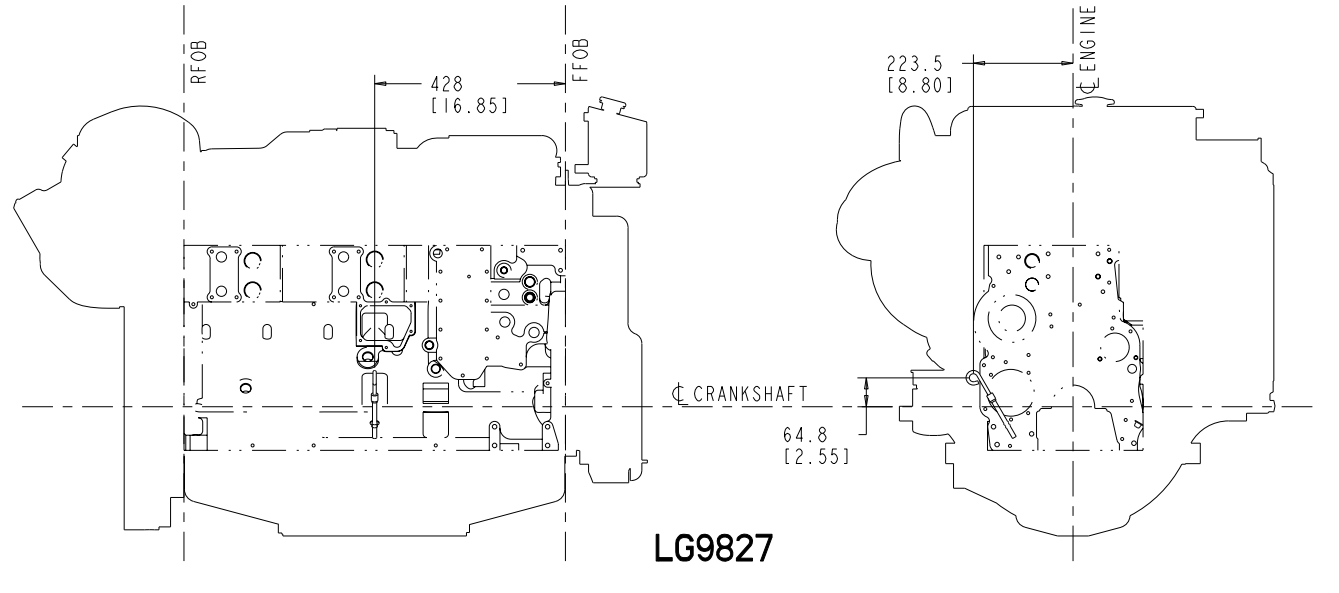
PORT VIEW



LG9826

FRONT VIEW

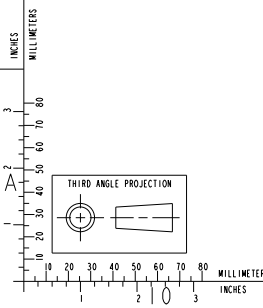
PORT VIEW



LG9827

STARBOARD VIEW

FRONT VIEW



- | | | |
|--|---|---|
| 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

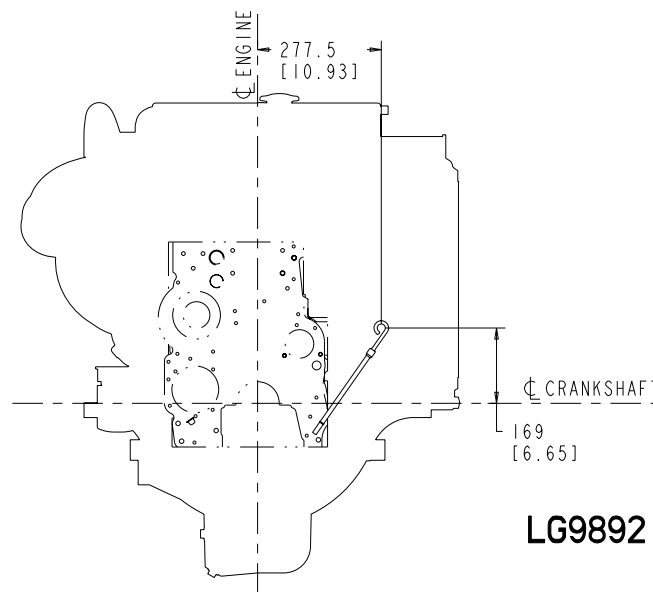
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING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

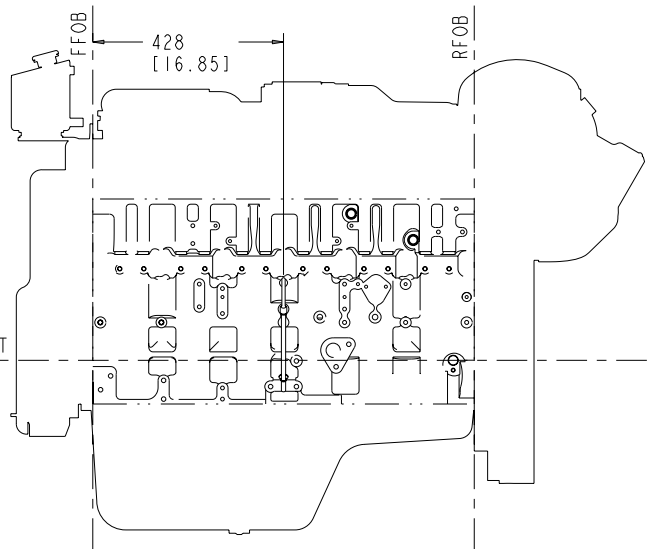
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER	
DWN: J. HANSEN CHD: UNCHECKED APPD:	SIZE: EOOD (IDENT. NO.) J	ITEM NUMBER 4954107	SCALE: 2:1 ITEM CONTROL: MCS SHEET 15 OF 23

ITEM NUMBER
4954107

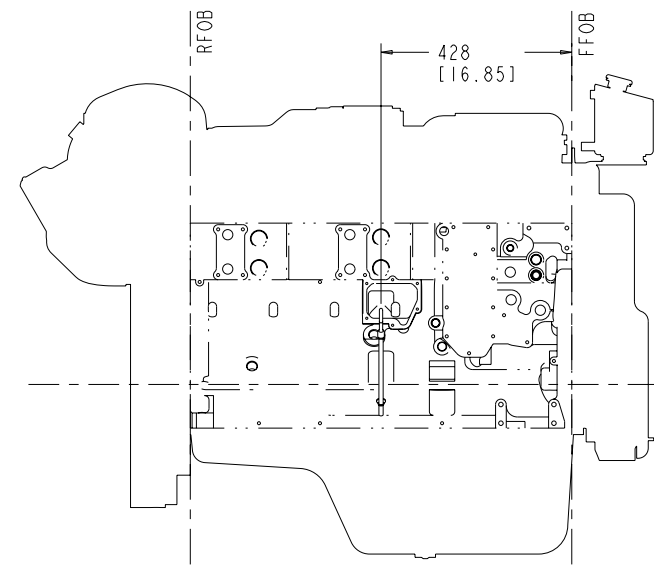
REVISIONS		OWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		



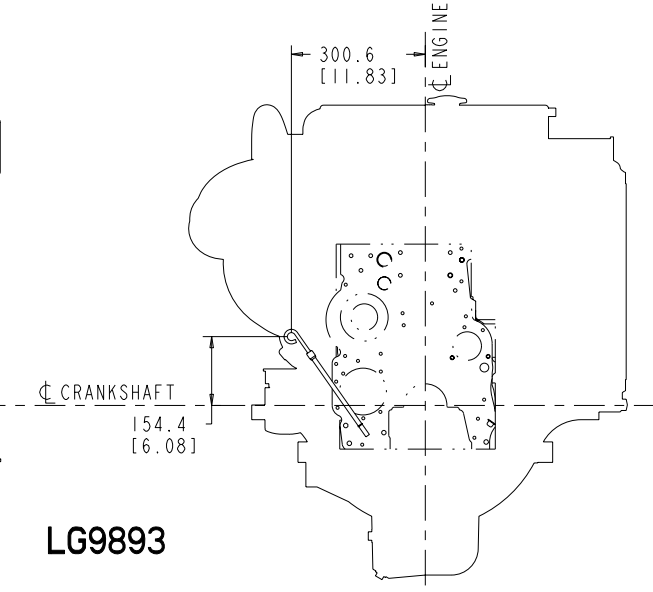
FRONT VIEW



PORT VIEW



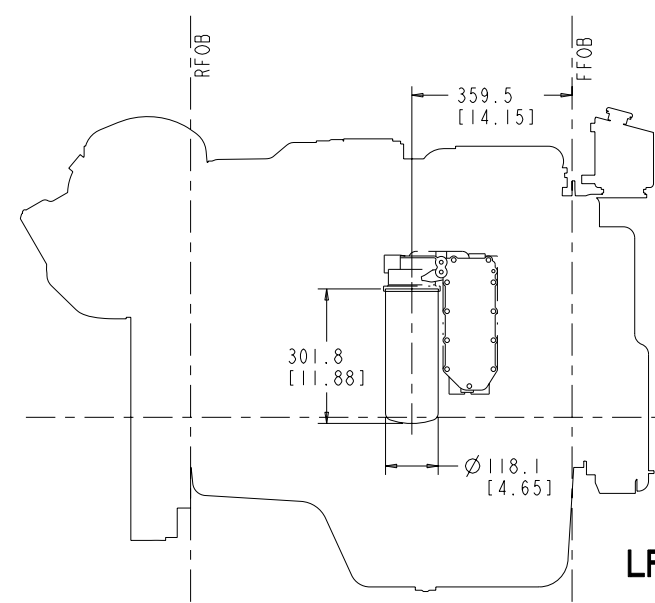
STARBOARD VIEW



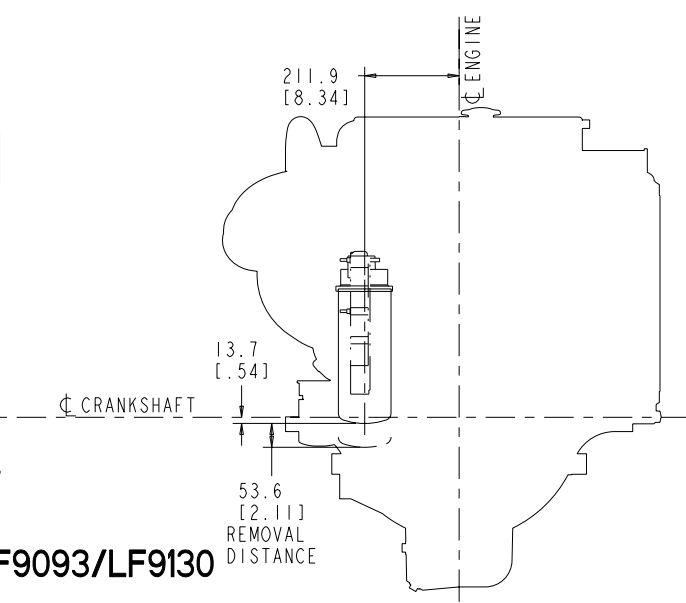
FRONT VIEW

LG9892

LG9893

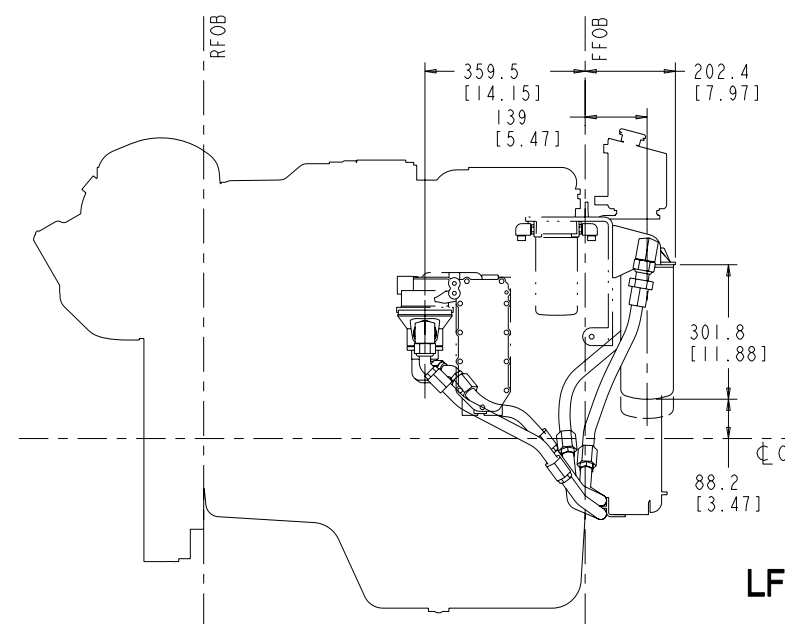


STARBOARD VIEW

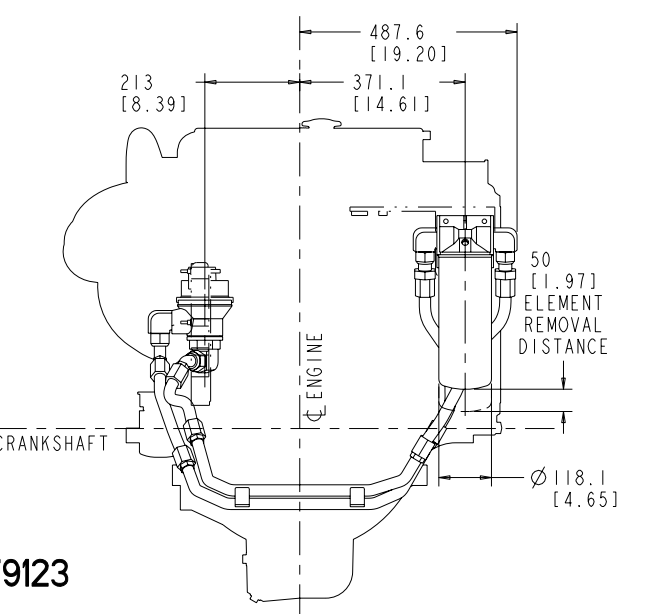


FRONT VIEW

LF9093/LF9130

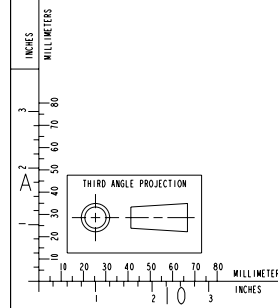


STARBOARD VIEW



FRONT VIEW

LF9123



- 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

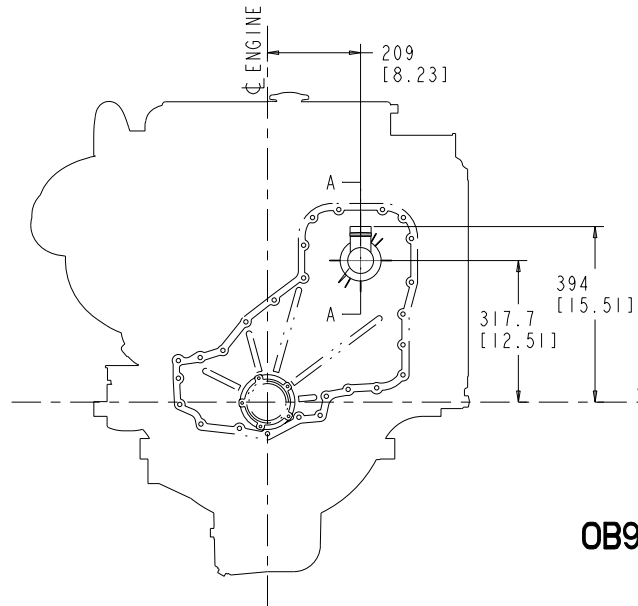
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING 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: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER	ITEM NUMBER
DWN: J. HANSEN CHD: UNCHECKED APPD:	SIZE CODE (IDENT. NO.) J	4954107	ITEM CONTROL: MCS SHEET 16 OF 23

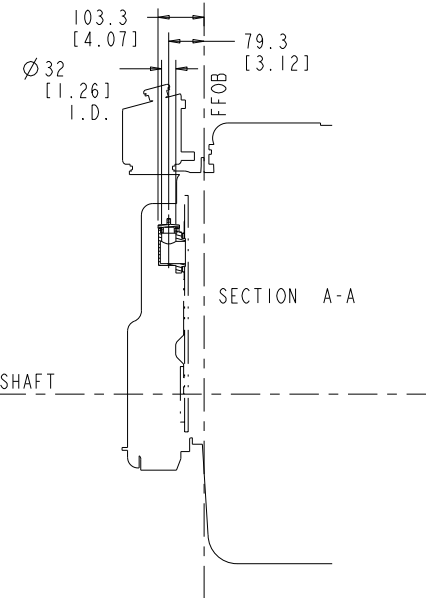
ITEM NUMBER
4954107

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
01	RELEASED		

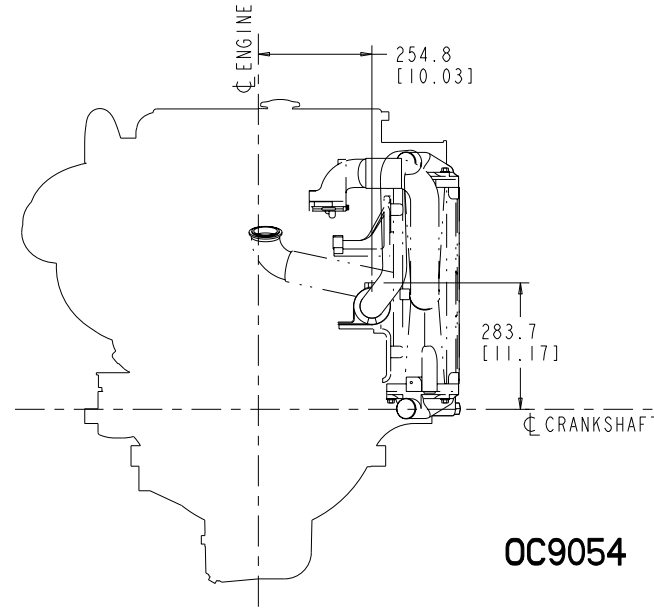


OB9340

FRONT VIEW

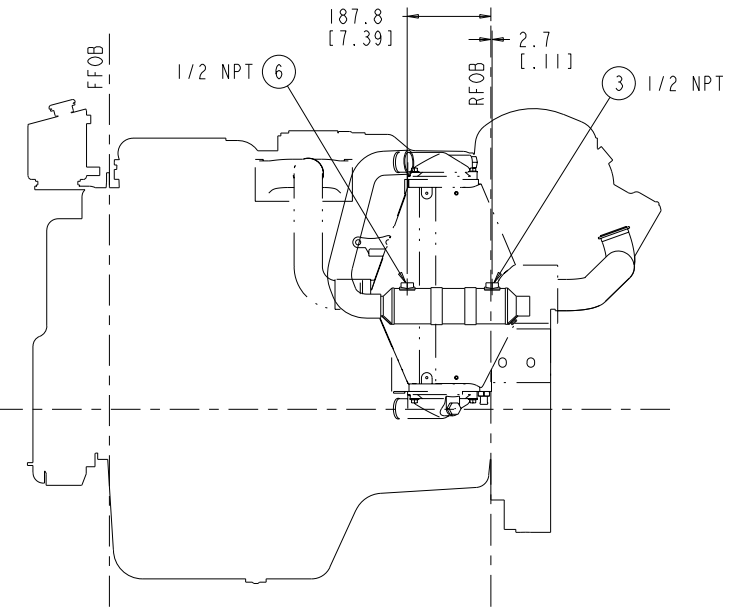


PORT VIEW

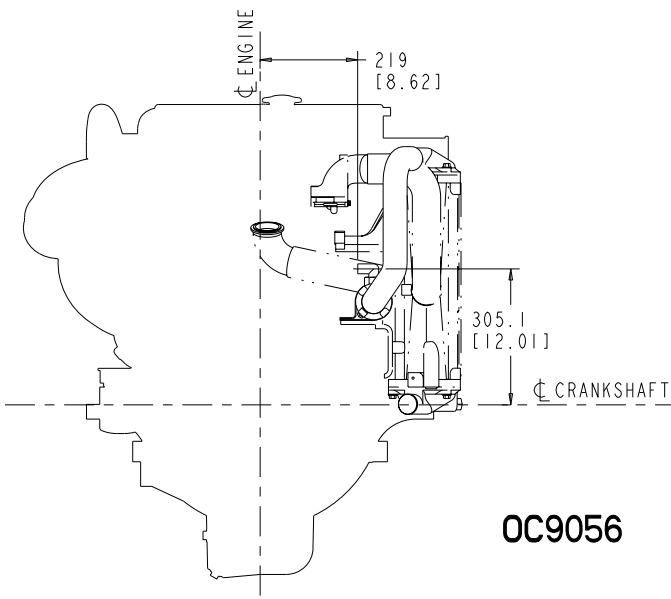


OC9054

FRONT VIEW

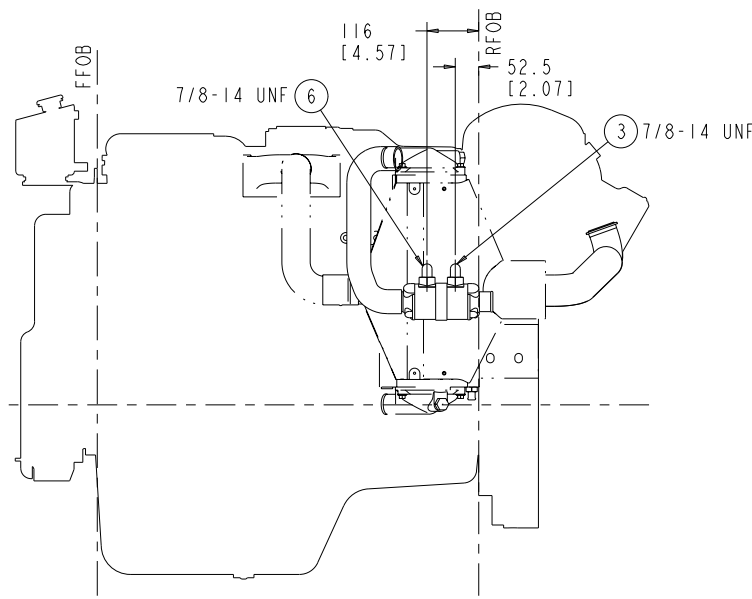


PORT VIEW

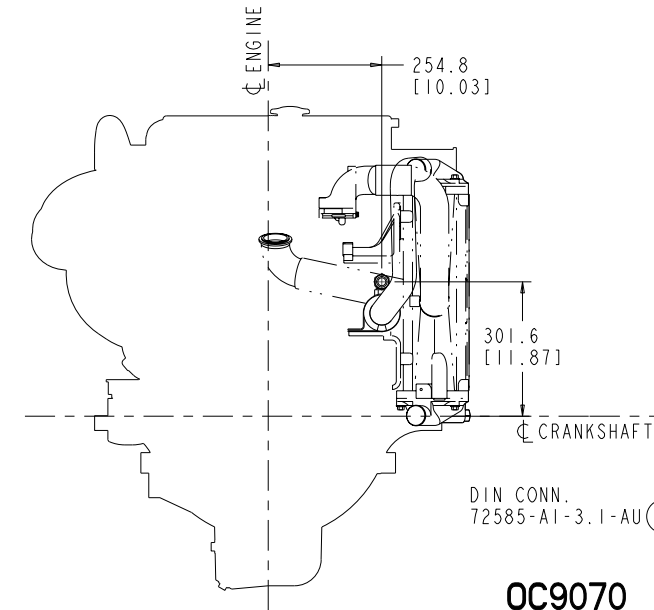


OC9056

FRONT VIEW

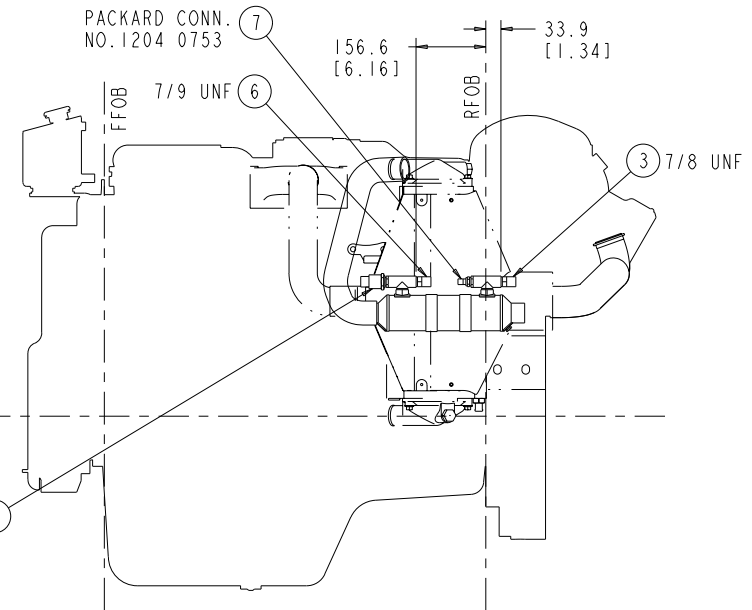


PORT VIEW



OC9070

FRONT VIEW



PORT VIEW

- 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

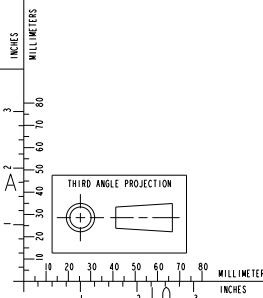
- ⑪ OIL PRESSURE GAUGE PORT, AFTER FILTER
- ⑫ OIL SUMP TEMPERATURE PORT
- ⑬ REMOTE OIL FILTER RETURN CONNECTION
- ⑭ REMOTE OIL FILTER SUPPLY CONNECTION

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.

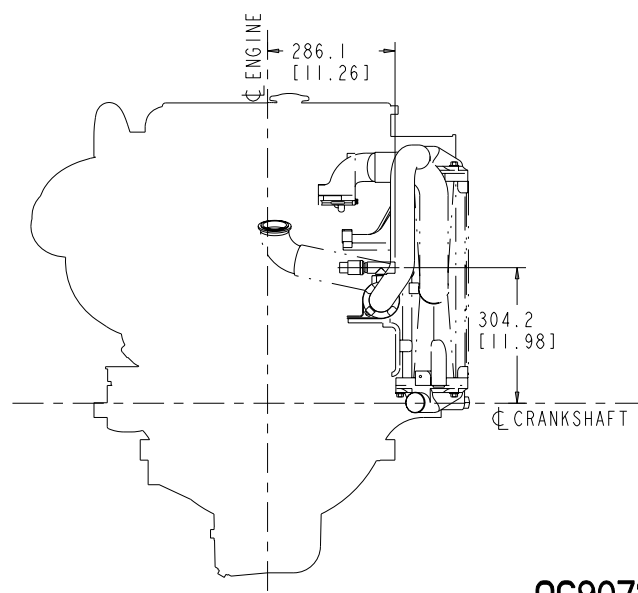
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS 1:1 ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER	SIZE CODE (CONT. NO.)
DWN: J. HANSEN CHD: UNCHECKED APPD: APPD	MARKING	ITEM NUMBER 4954107	ITEM CONTROL: MCS
			SHEET 17 OF 23

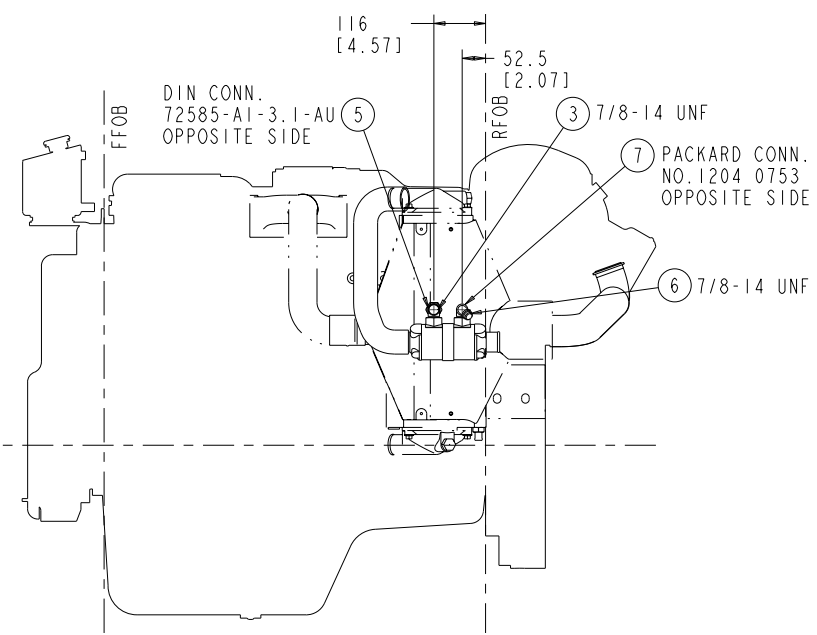


ITEM NUMBER
4954107

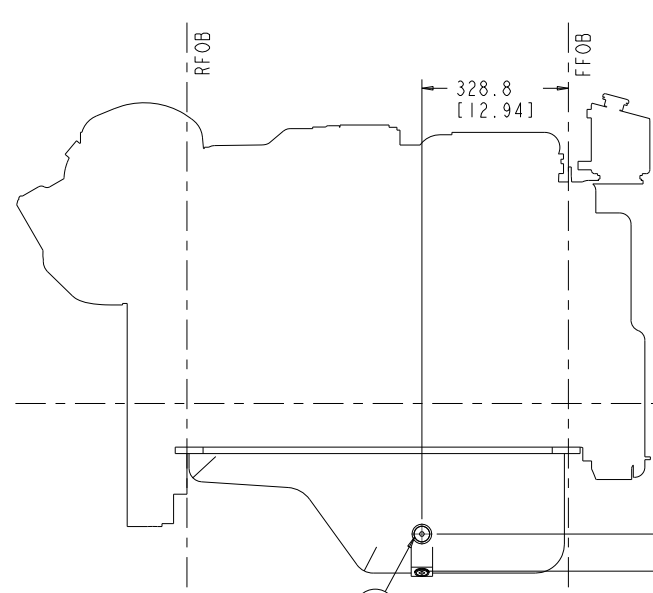
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
01	RELEASED		



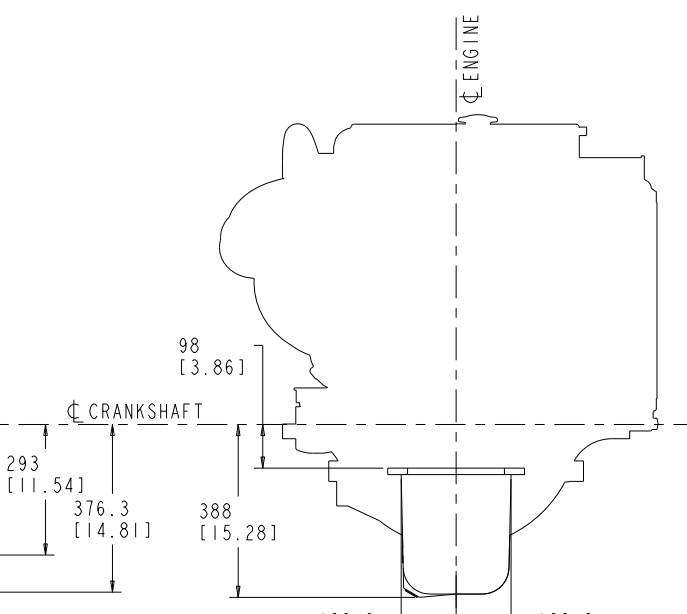
FRONT VIEW
OC9071



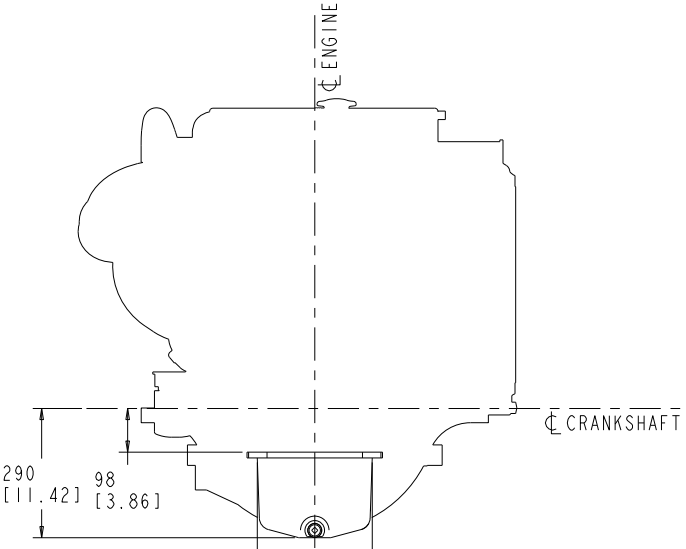
PORT VIEW



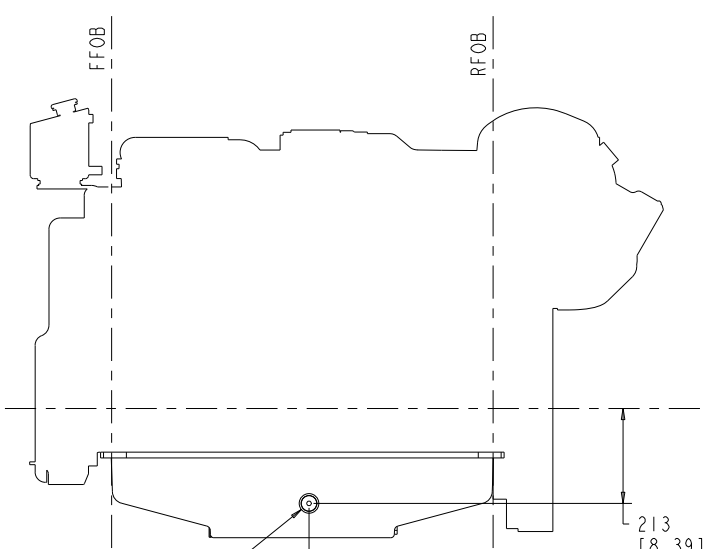
STARBOARD VIEW
OP9397



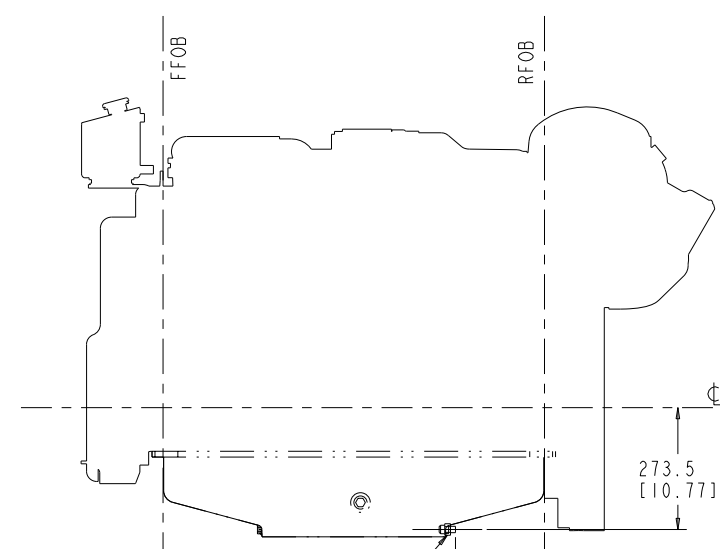
FRONT VIEW



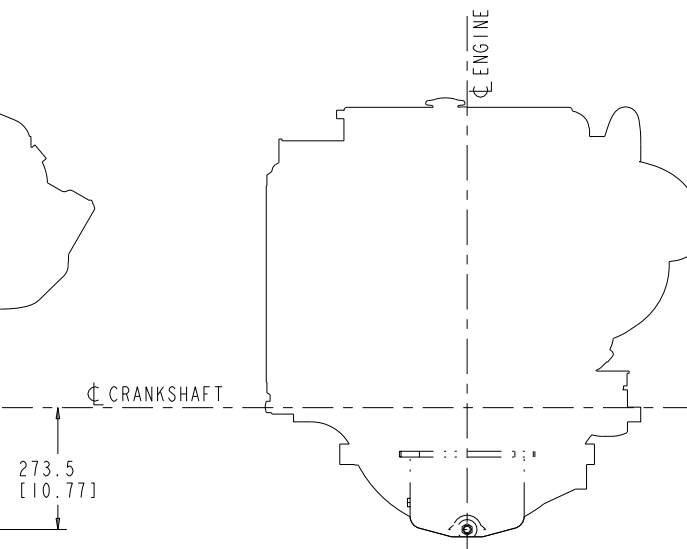
FRONT VIEW
OP9467



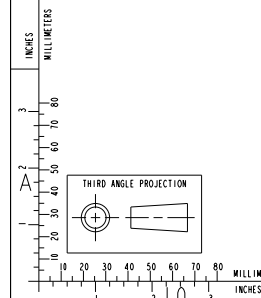
PORT VIEW



PORT VIEW
**RD9024/RD9025
W/ OP9467**



BACK VIEW



- | | | |
|--|---|--|
| <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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

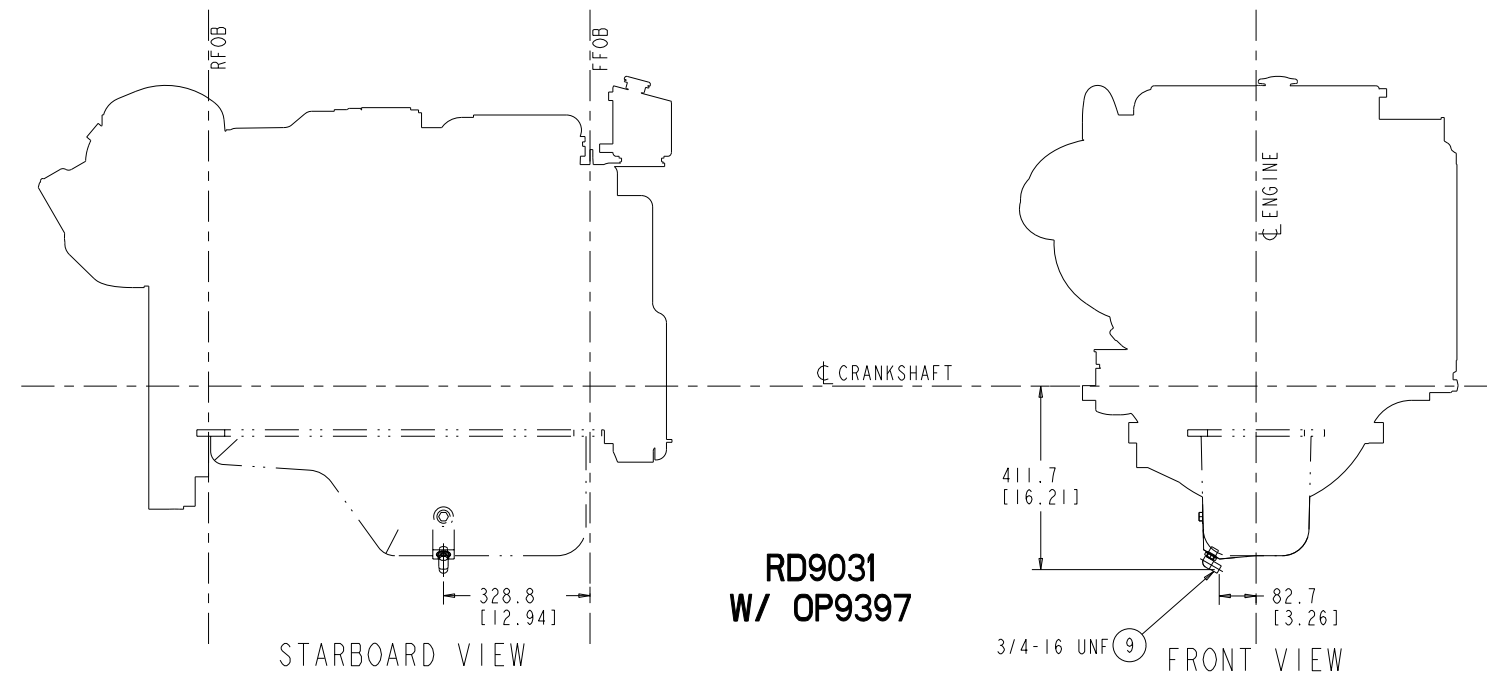
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING 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: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER	SIZE FOOD IDENT. NO. ITEM NUMBER
DWN: J. HANSEN CHD: UNCHECKED APPD: APPD	MARKING	J	4954107
	SCALE: 2:1	ITEM CONTROL: MCS	SHEET 18 OF 23

ITEM NUMBER
4954107

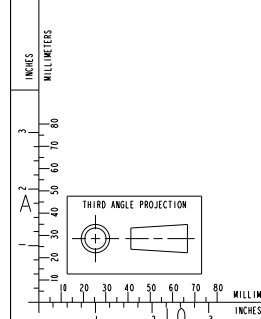
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
01	RELEASED		



RD9031
W/ OP9397

STARBOARD VIEW

FRONT VIEW



- | | | |
|--|---|--|
| <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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

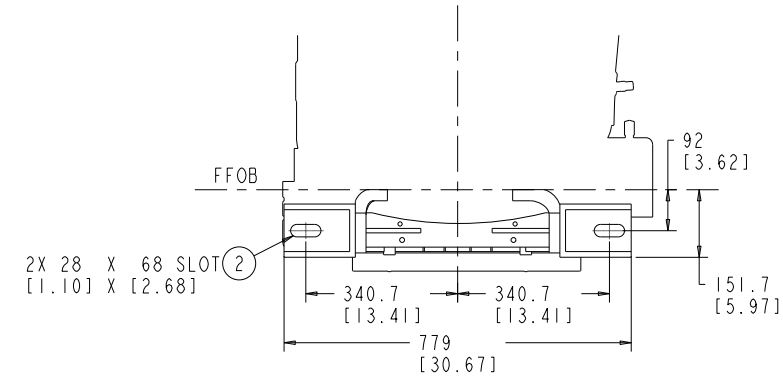
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING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

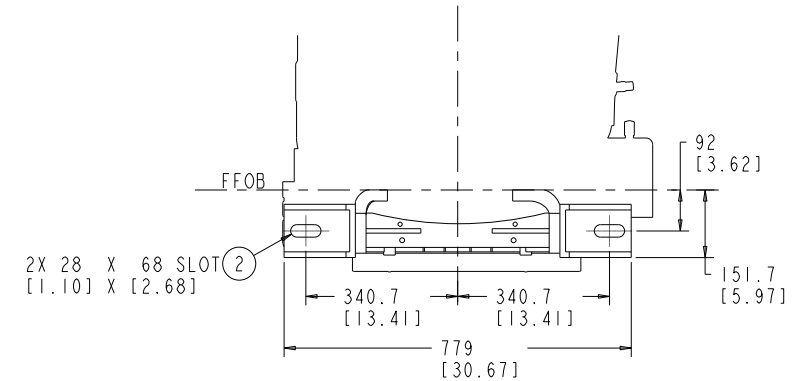
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER	ITEM NUMBER
DWN: J HANSEN CHD: UNCHECKED APPD:	SIZE CODE (IDENT. NO.) J	4954107	
	SCALE: 2:1	ITEM CONTROL: MCS	SHEET 19 OF 23

ITEM NUMBER
4954107

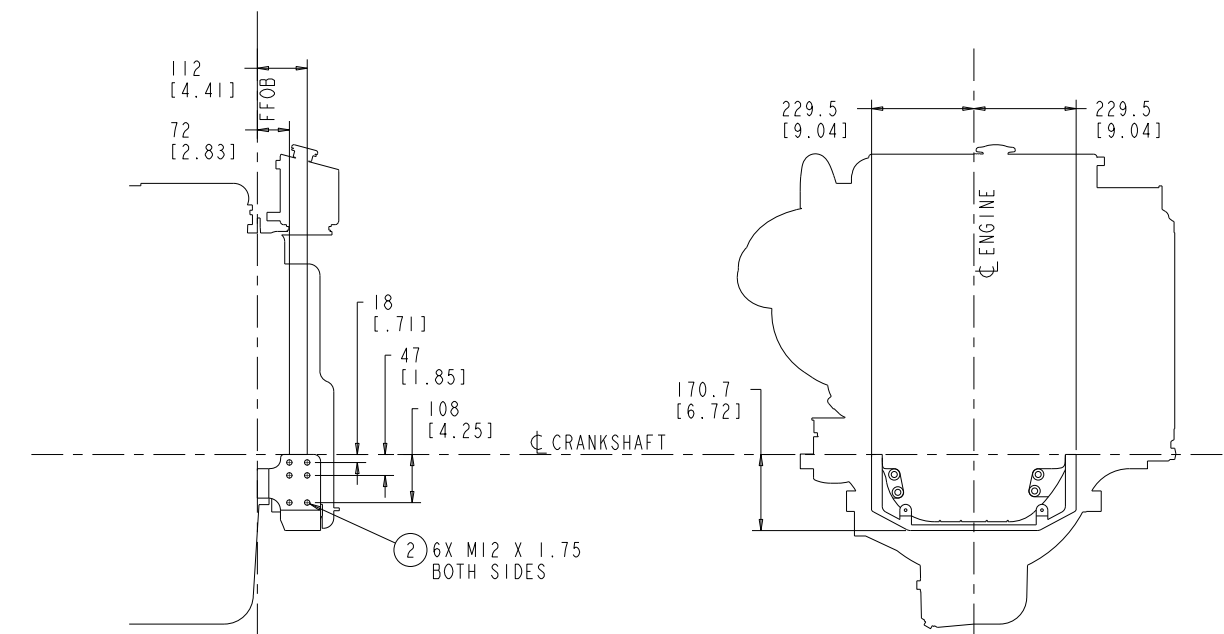
REVISIONS		OWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		



TOP VIEW



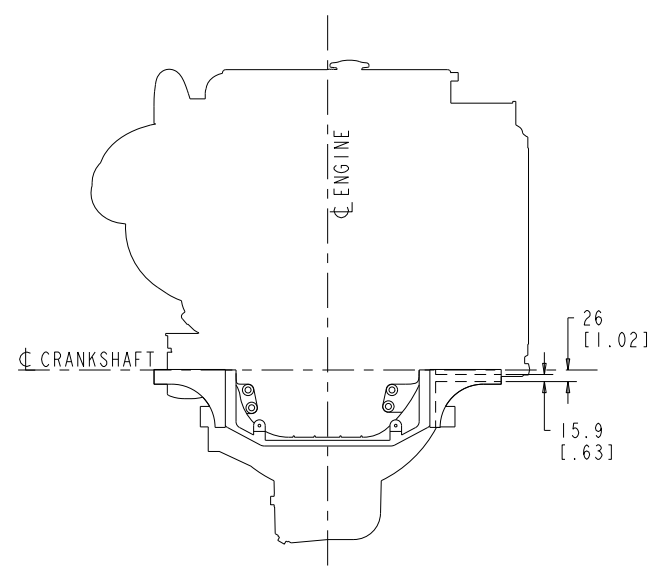
TOP VIEW



STARBOARD VIEW

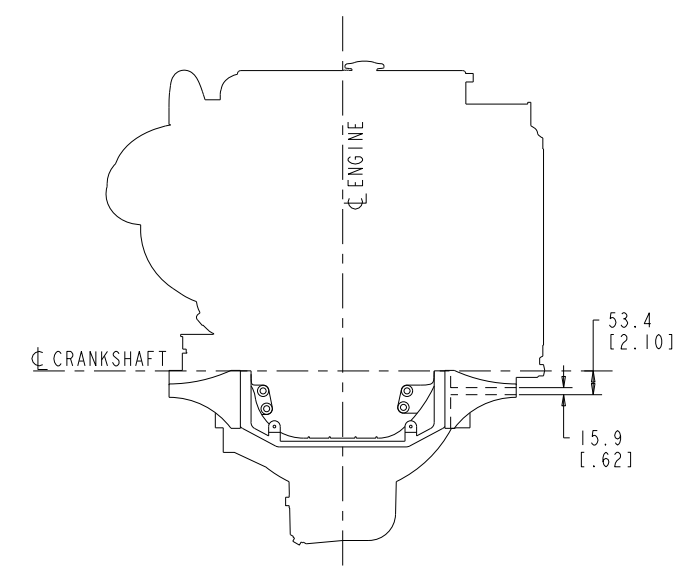
EM9210

FRONT VIEW



FRONT VIEW

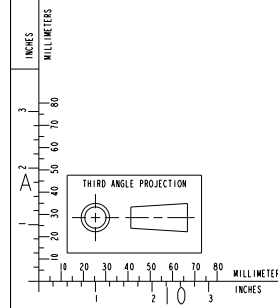
EM9228



FRONT VIEW

EM9229

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.



- | | |
|-------------------------------|----------------------------------|
| 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

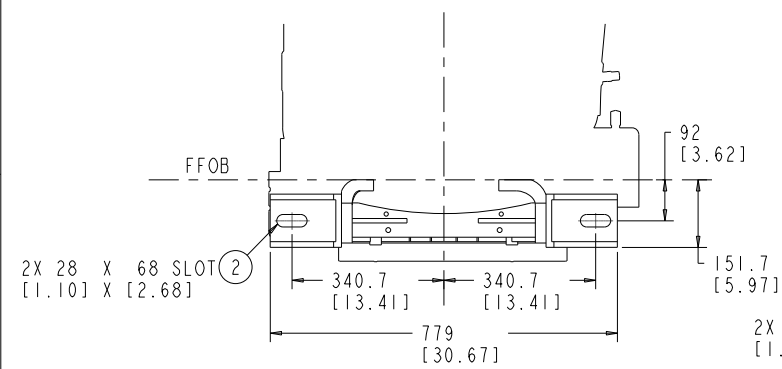
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

MOUNTING SYSTEM

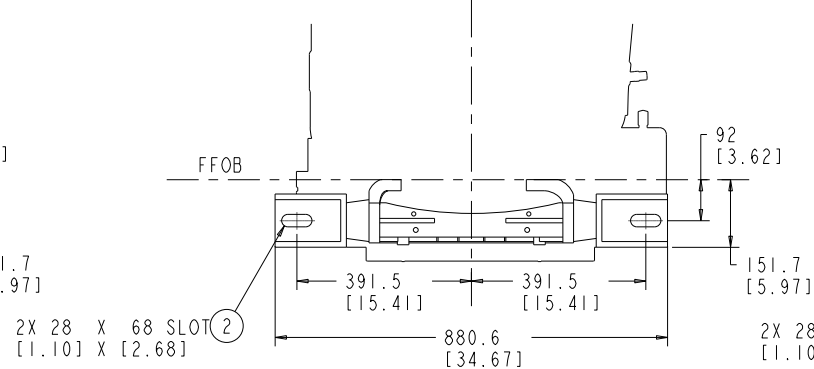
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES		ITEM NAME QSL9 MARINE	IDENTIFIER
OWN: J. HANSEN CHK: UNCHECKED APPD:		SIZE CODE (IDENT. NO.): J	ITEM NUMBER 4954107
		SCALE: 2:1	ITEM CONTROL: MCS SHEET 20 OF 23

ITEM NUMBER
4954107

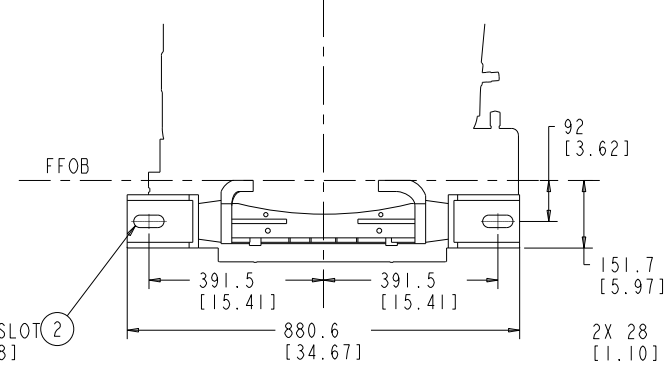
REVISIONS		DWN	APP'D
ZONE	REV	DESCRIPTION	
01	RELEASED		



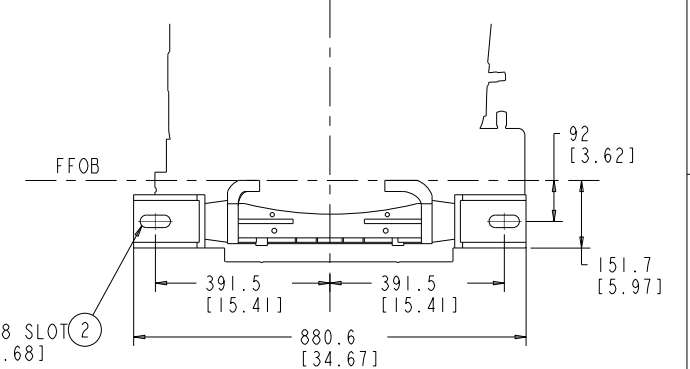
TOP VIEW



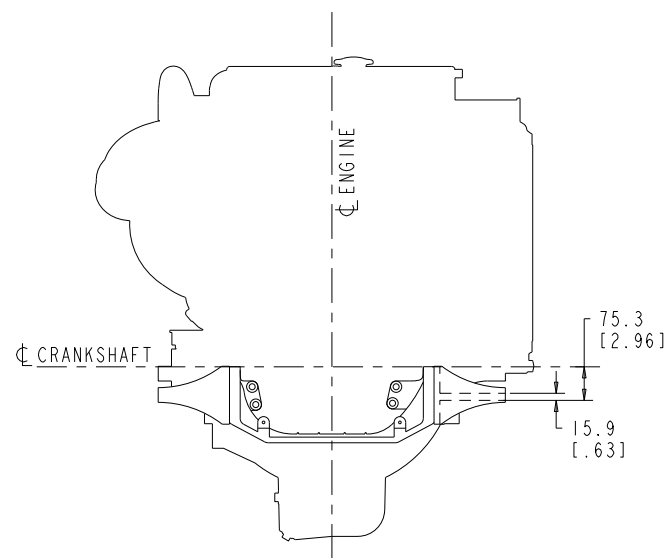
TOP VIEW



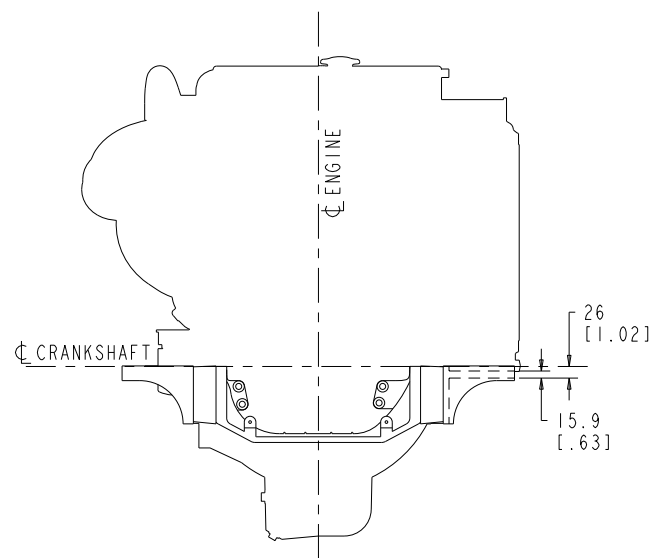
TOP VIEW



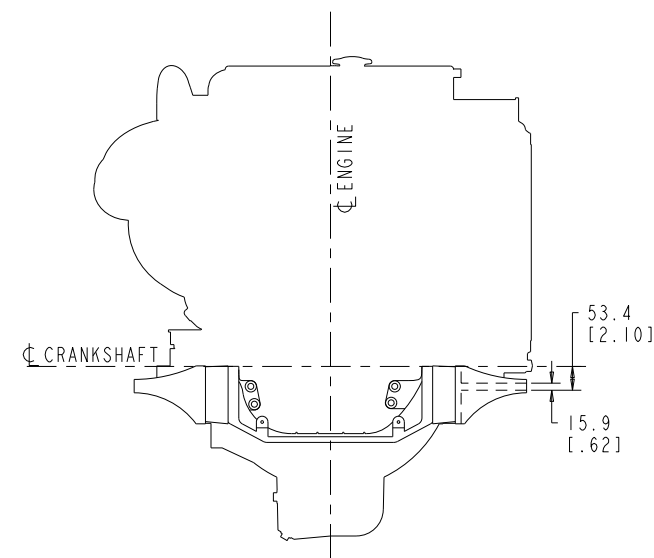
TOP VIEW



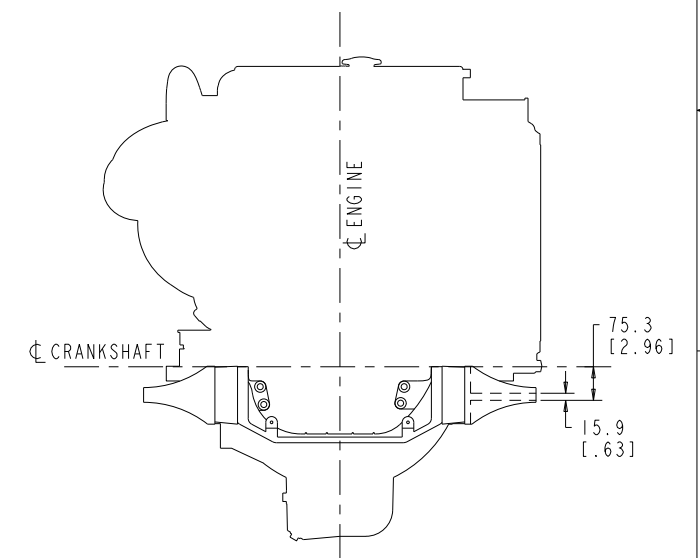
FRONT VIEW
EM9230



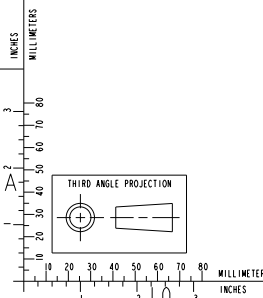
FRONT VIEW
EM9231



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 |

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.

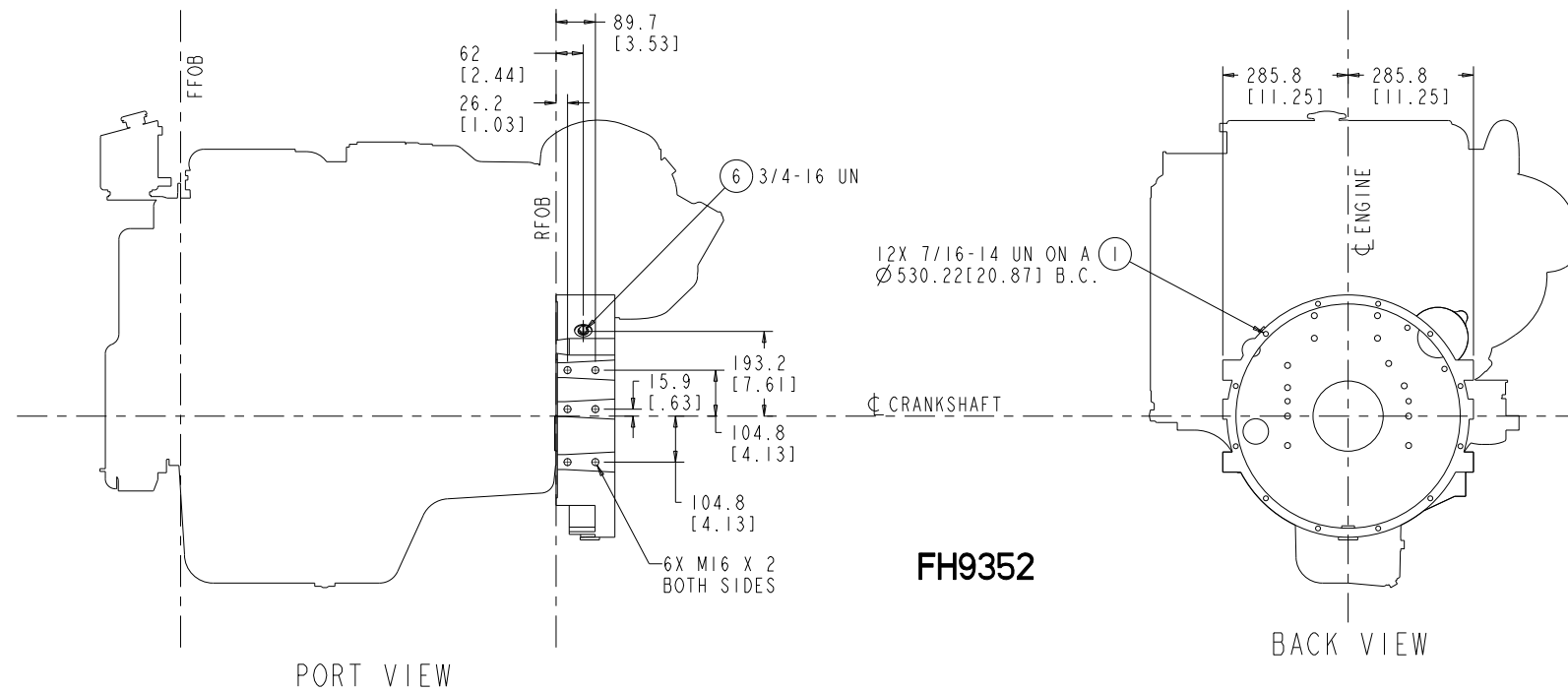
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES		ITEM NAME QSL9 MARINE	IDENTIFIER
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT 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.		SIZE CODE IDENT. NO.	ITEM NUMBER
DWN: J. HANSEN	CHKD: UNCHECKED	J	4954107
APPD:		SCALE: 2:1	ITEM CONTROL: MCS
			SHEET 21 OF 23

MOUNTING SYSTEM

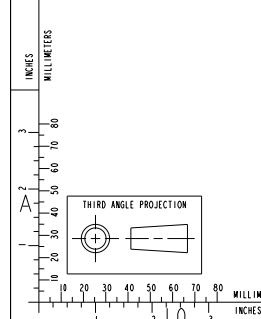
DO NOT SCALE THIS DRAWING

ITEM NUMBER
4954107

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
	01	RELEASED	



FH9352



- | | |
|-------------------------------|----------------------------------|
| 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.

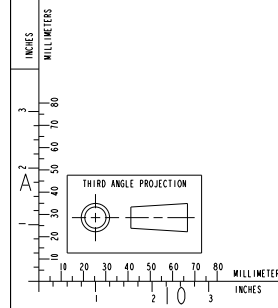
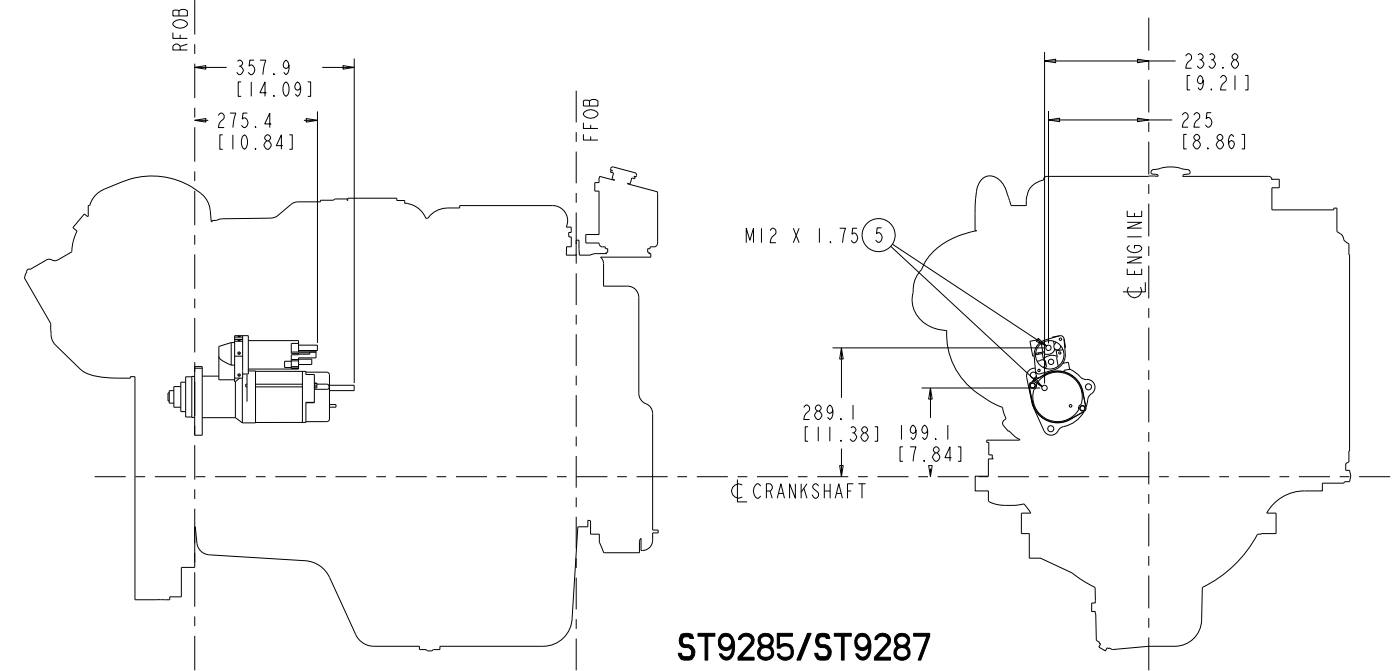
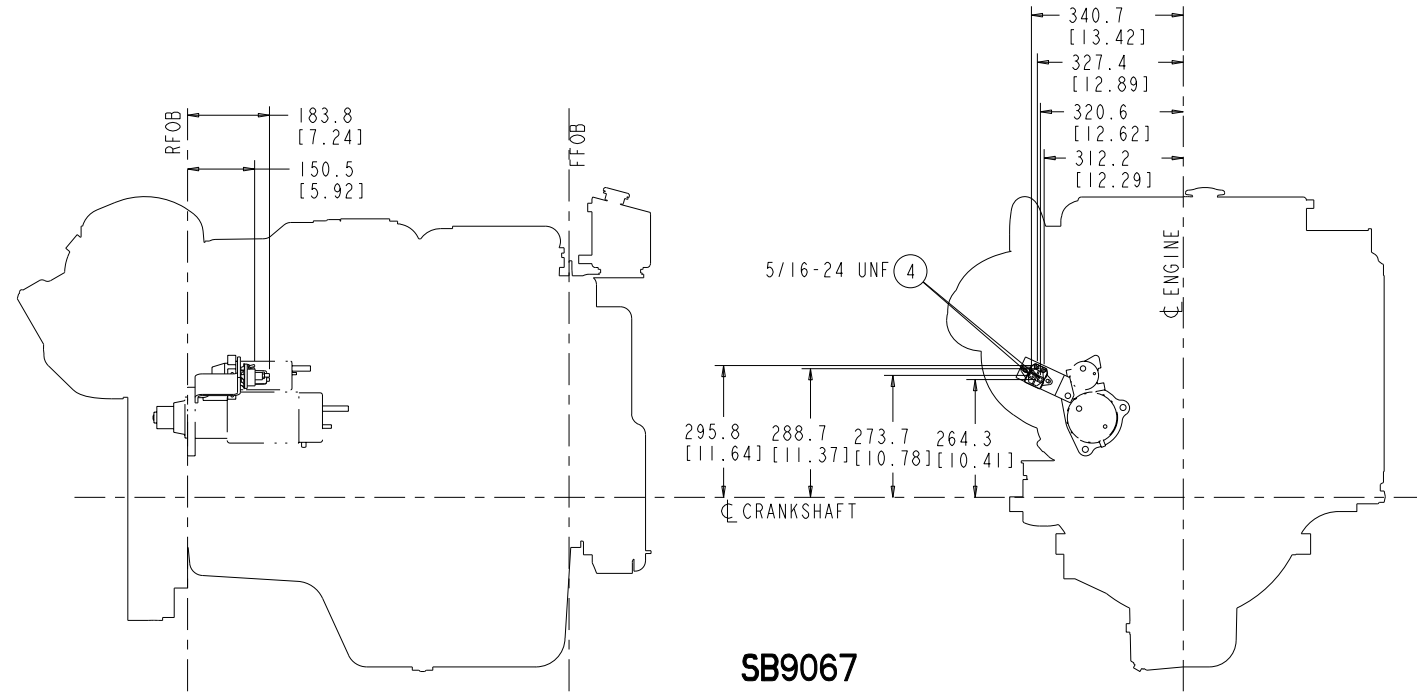
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER	ITEM NUMBER
DWN: J. HANSEN CHD: UNCHECKED APPD:	SCALE: 200	SIZE CODE (IDENT. NO.): J	4954107
		ITEM CONTROL: MCS	SHEET 22 OF 23

MOUNTING SYSTEM

ITEM NUMBER
4954107

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
01	RELEASED		



- 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: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSL9 MARINE	IDENTIFIER	ITEM NUMBER
DWN: J. HANSEN CHD: UNCHECKED APPD:	SCALE: 2:1	SIZE CODE (IDENT. NO.): J	4954107
		ITEM CONTROL: MCS	SHEET 23 OF 23