

ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-HX	

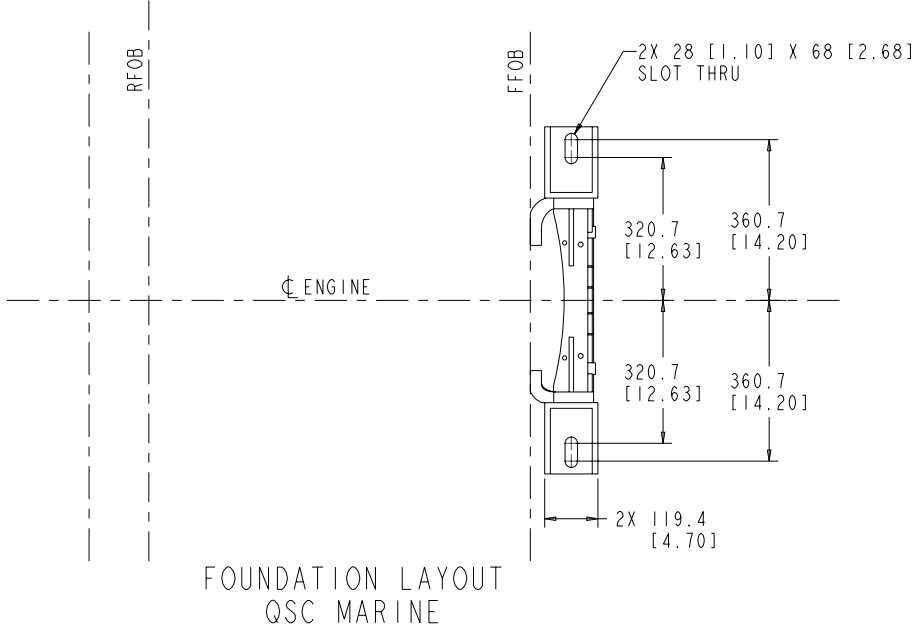
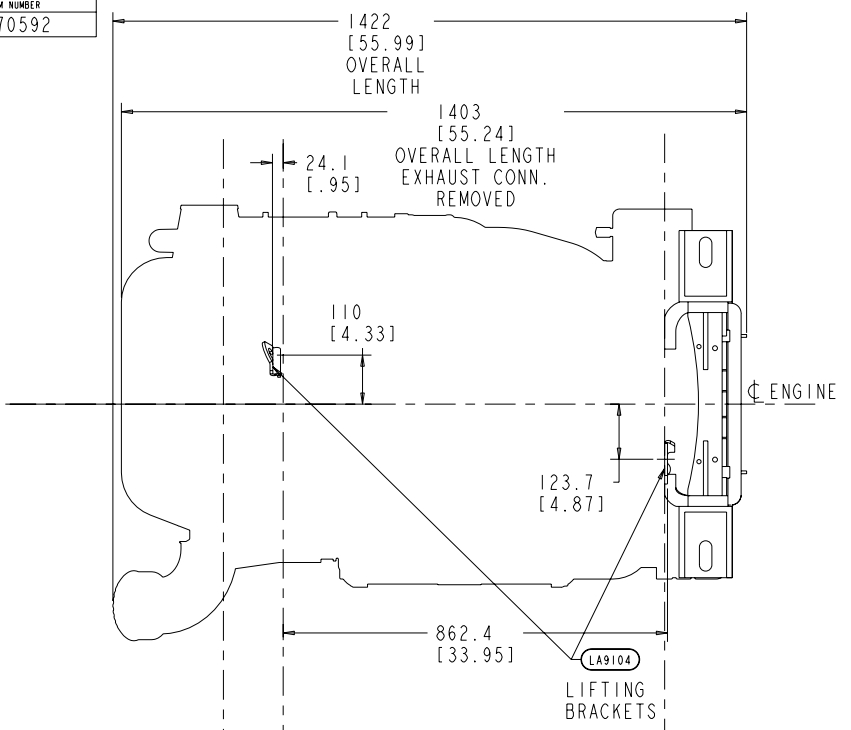
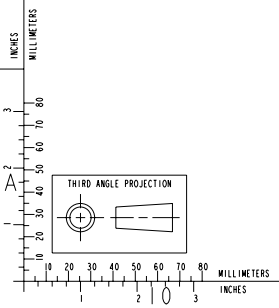
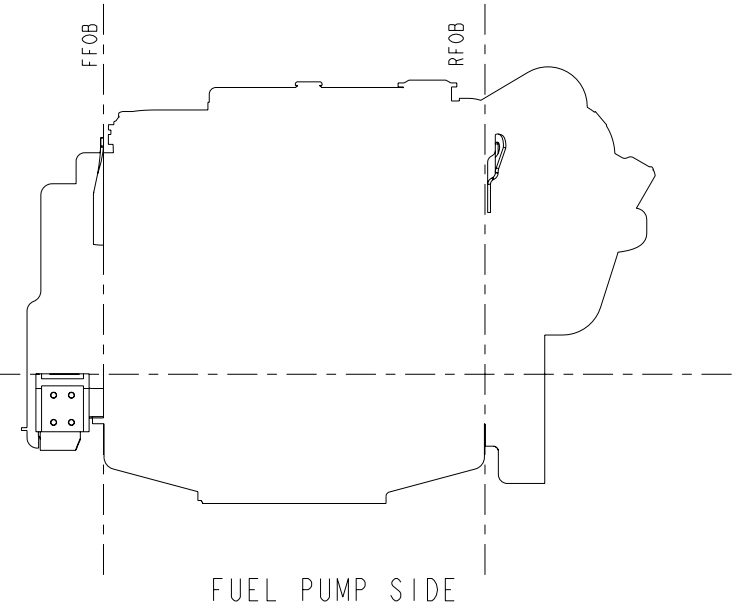
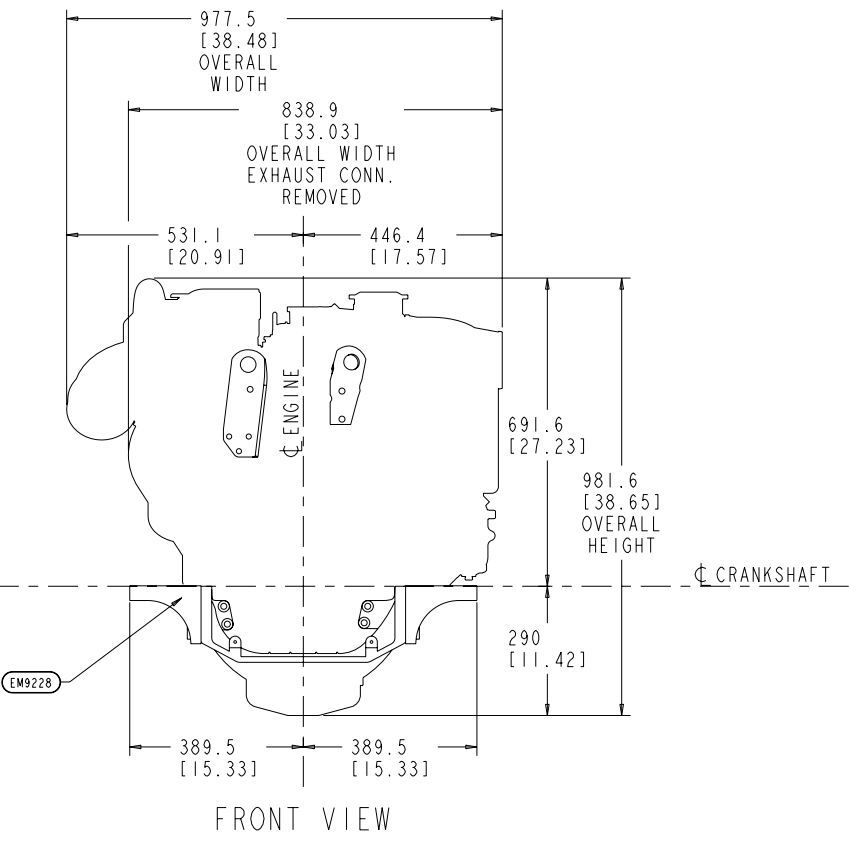
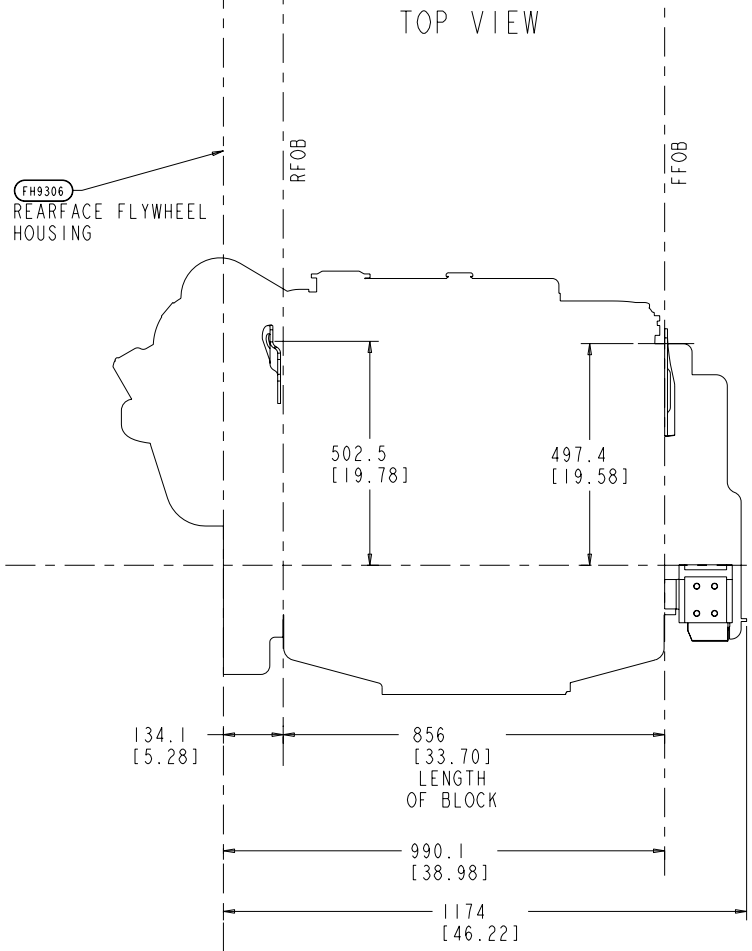


TABLE OF CONTENTS	
DRAWING / SUB-SYSTEM	SHEET
DIMENSION OUTLINE	1
ASSEMBLY DRAWING	2
ACCESSORY DRIVES & PTOS	3
AIR INDUCTION SYSTEM	4-5
COOLING SYSTEM	6-7
CONTROLS, GAUGES AND ALARMS	8
ELECTRICAL SYSTEM	9-11
EXHAUST SYSTEM	12
FUEL SYSTEM	13-14
LUBE OIL SYSTEM	15-21
MOUNTING SYSTEM	22-29
STARTING SYSTEM	30



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.

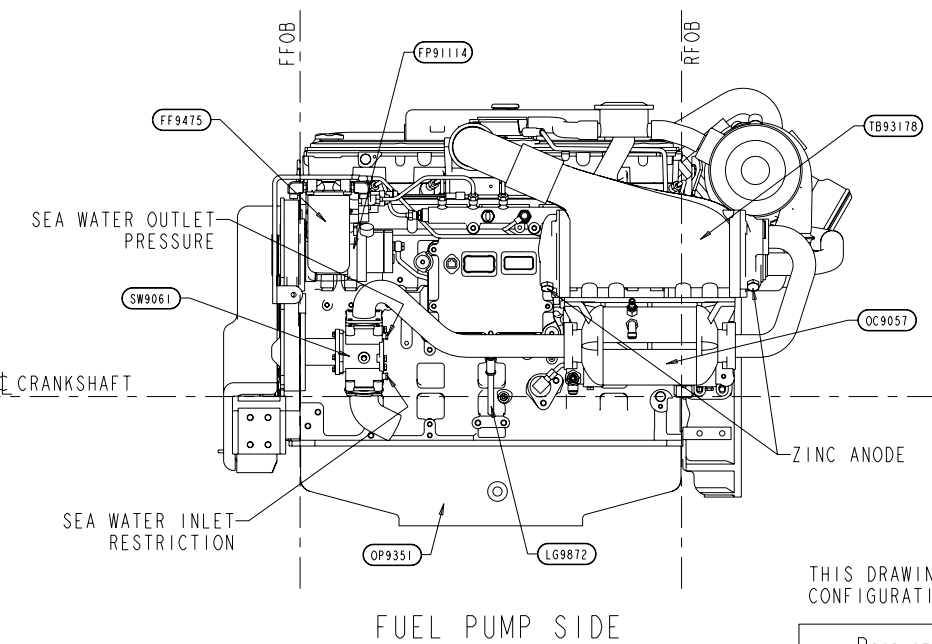
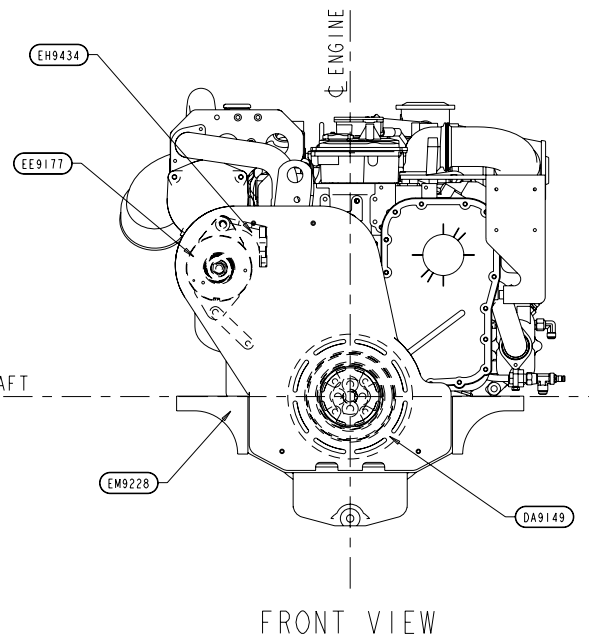
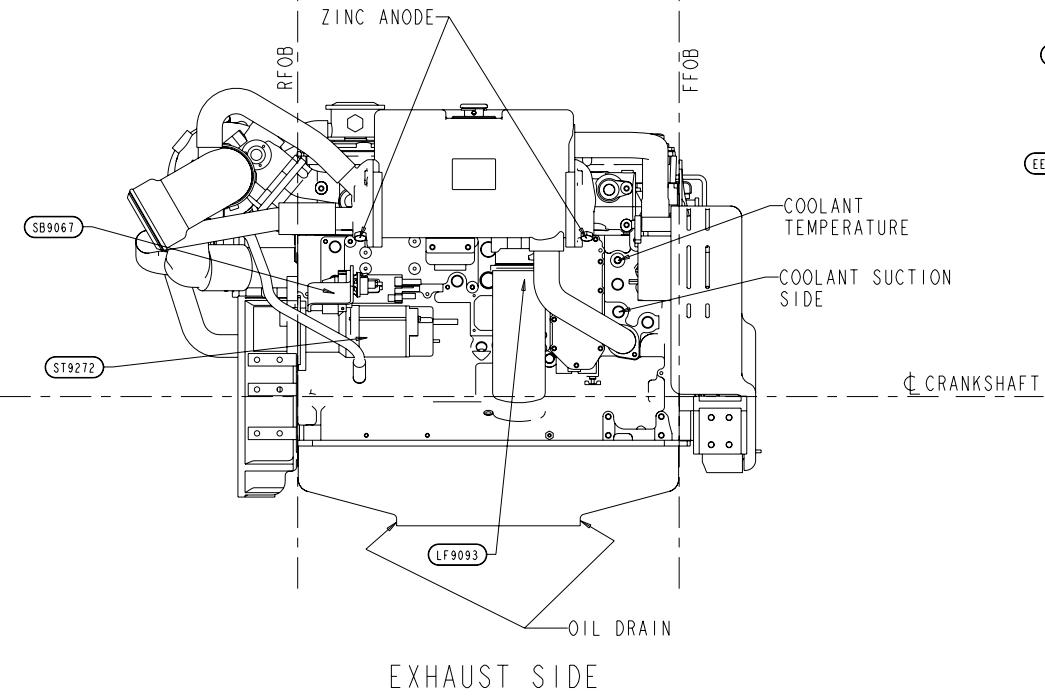
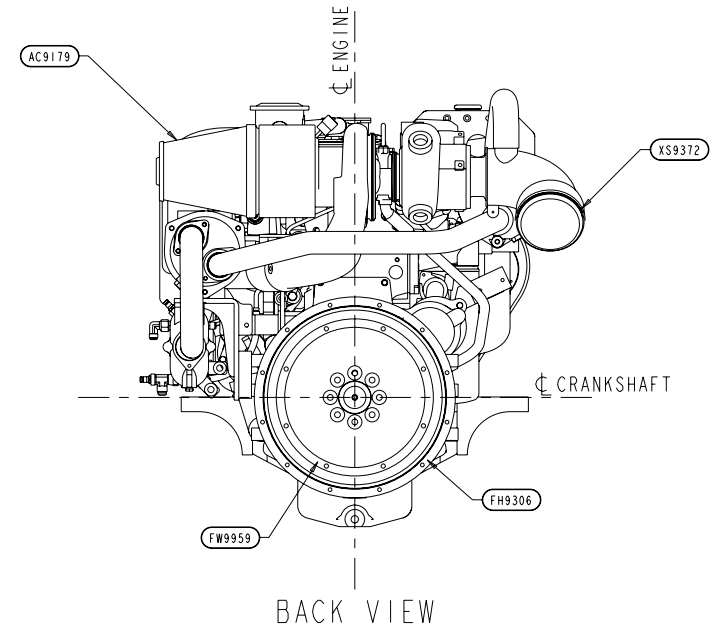
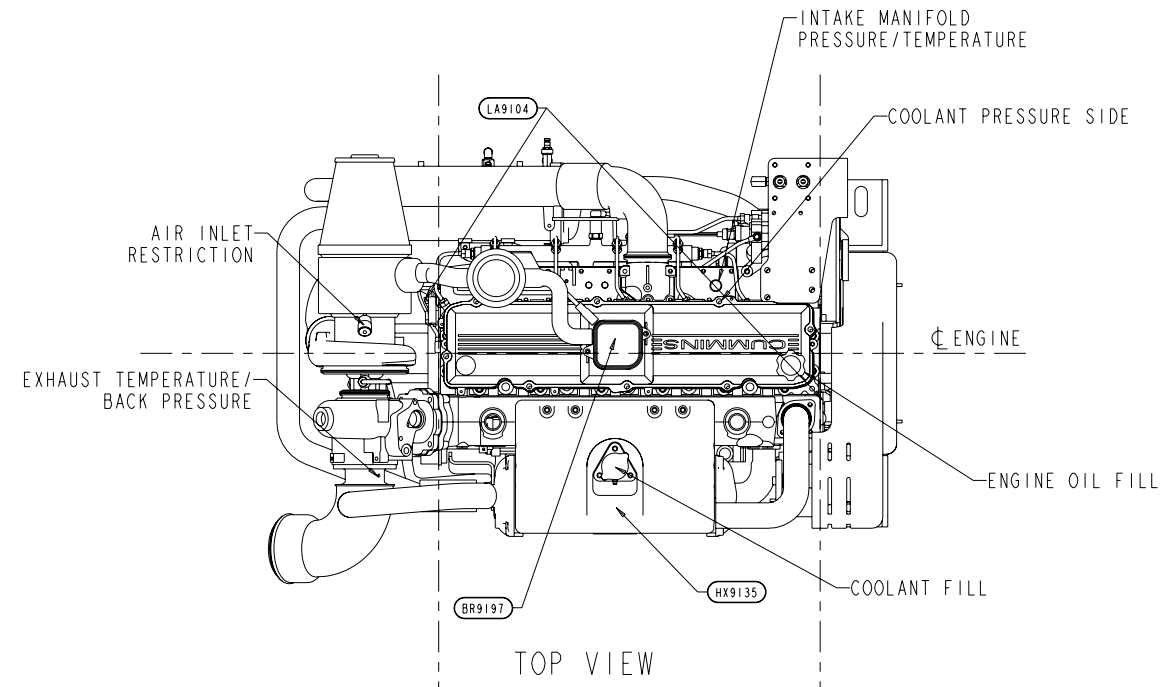
DO NOT SCALE THIS DRAWING

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 QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM
DWN: TMO/TGANG CHD: UNCHECKED APPD:	SIZE CODE IDENT. NO. J	ITEM NUMBER 3170592
	SCALE: 2x	ITEM CONTROL: MCS SHEET 1 OF 30

ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	



THIS DRAWING IS BASED ON CONFIGURATION D413038MX03

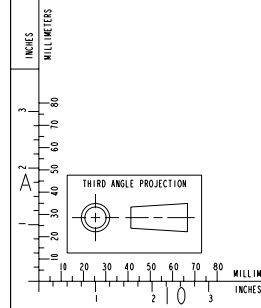
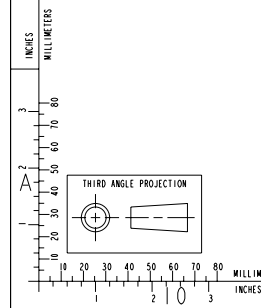
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

ENGINE SERVICE TEST PORTS

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

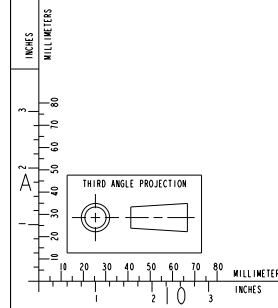
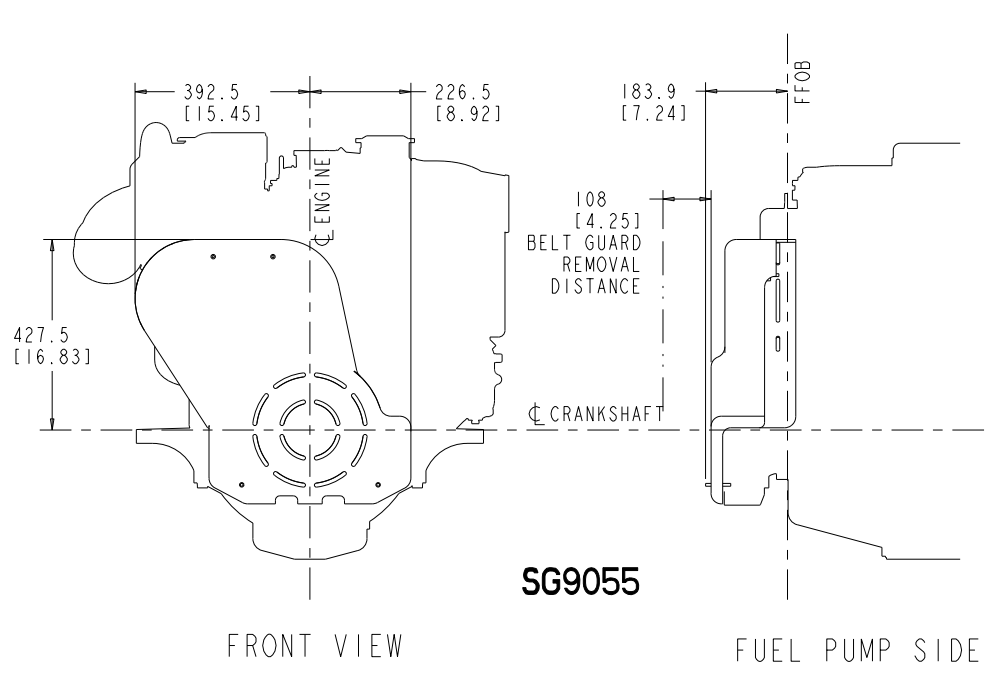
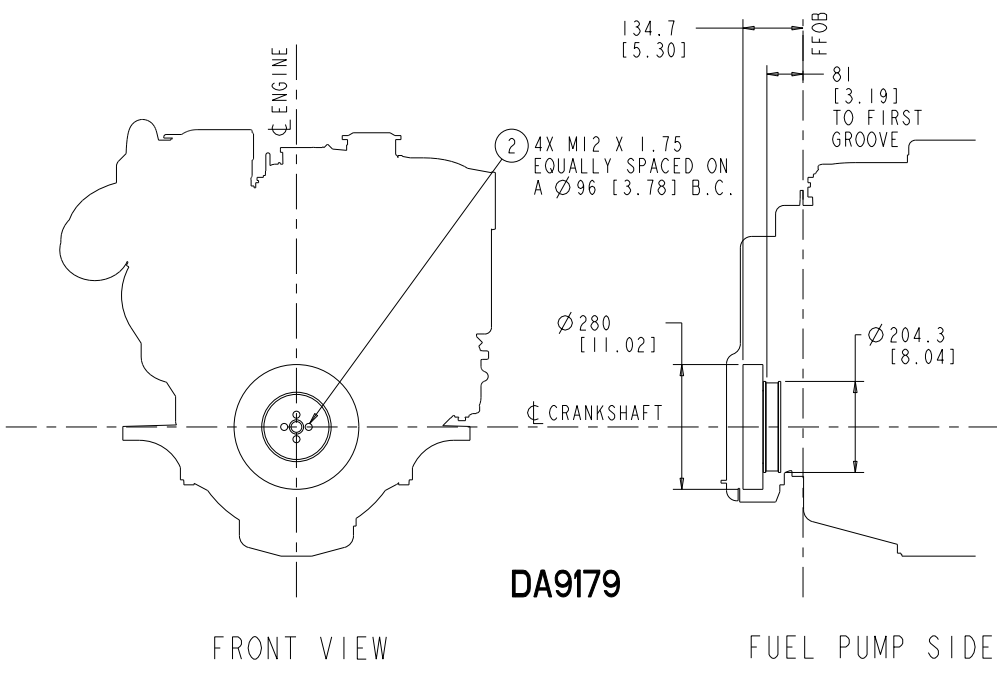
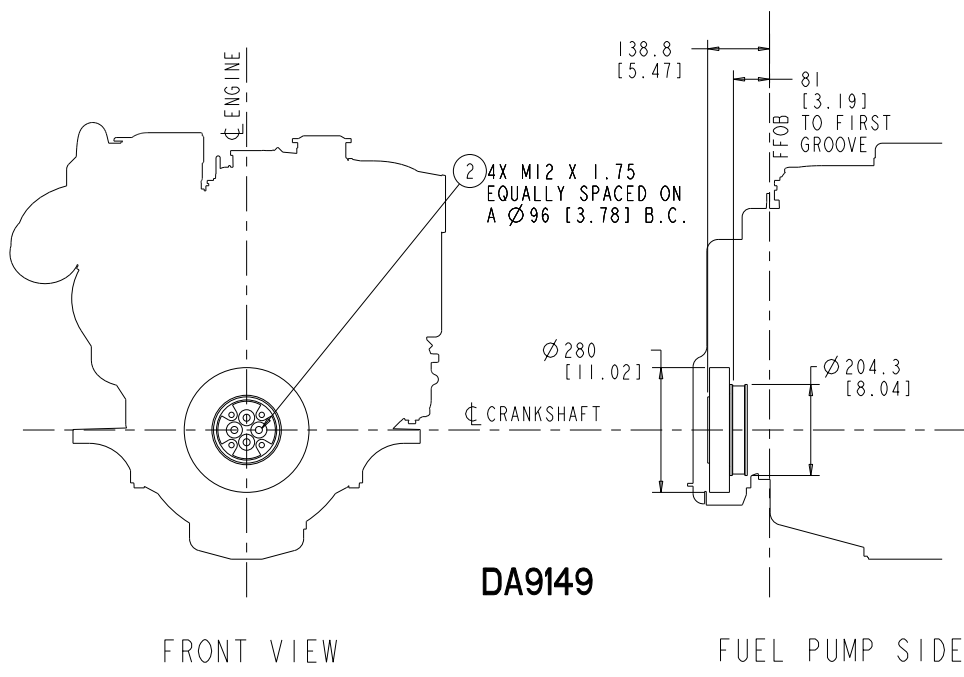
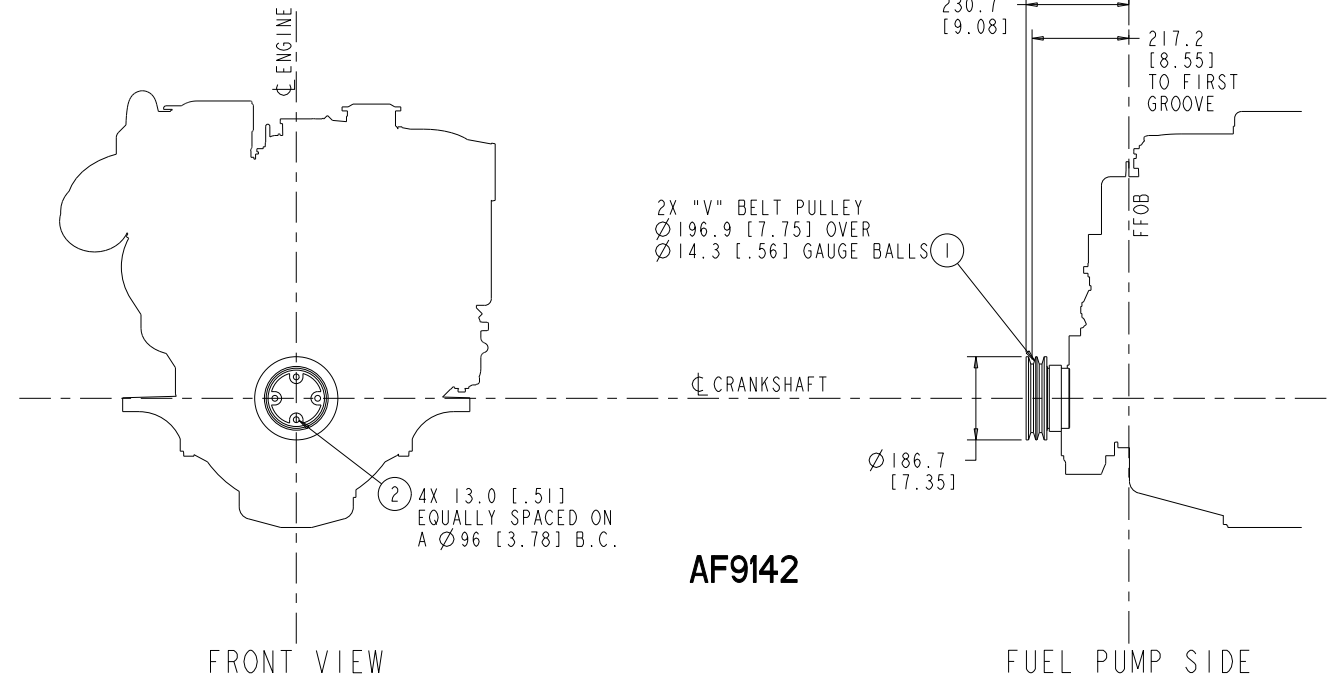
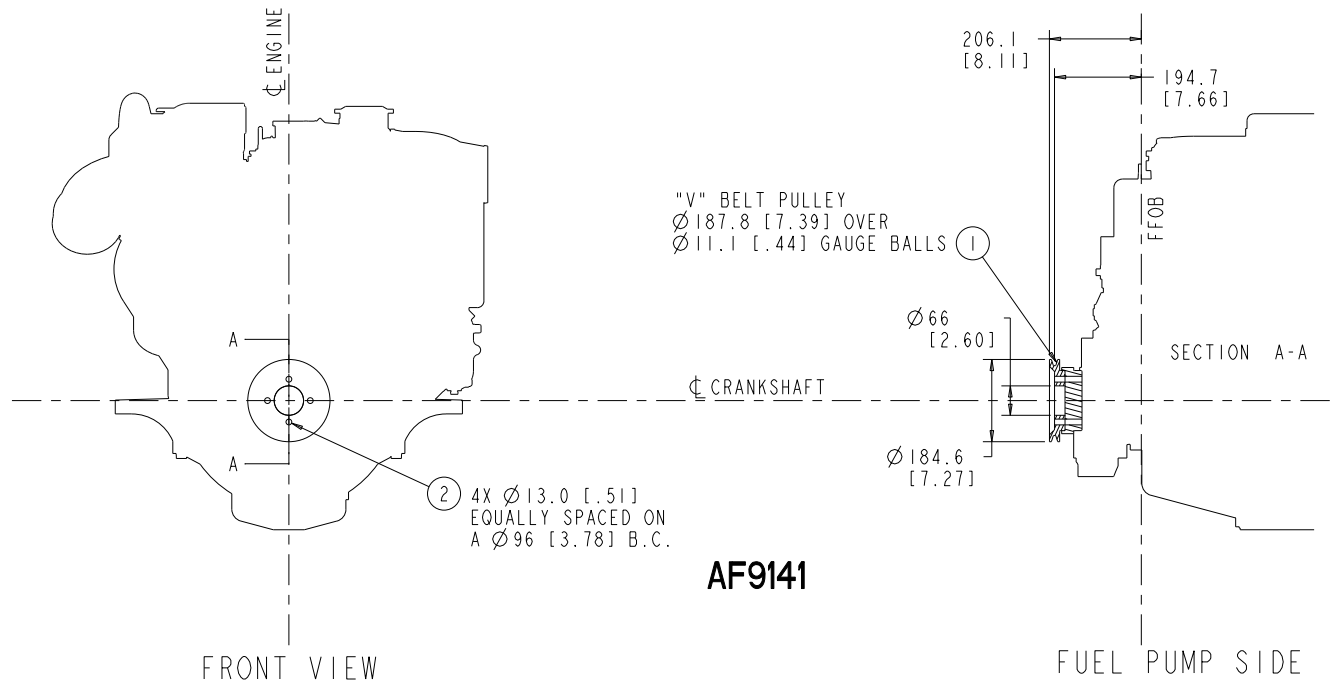
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING 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 QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN: UNCHECKED APPD: UNCHECKED	SIZE CODE IDENT. NO. ITEM NUMBER J 3170592	SCALE: 2X ITEM CONTROL: MCS SHEET 2 OF 30	



ITEM NUMBER
3170592

REVISIONS		DWN	APP'D
04	QSC 8.3-HX	J	



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

ACCESSORY DRIVES & PTO'S

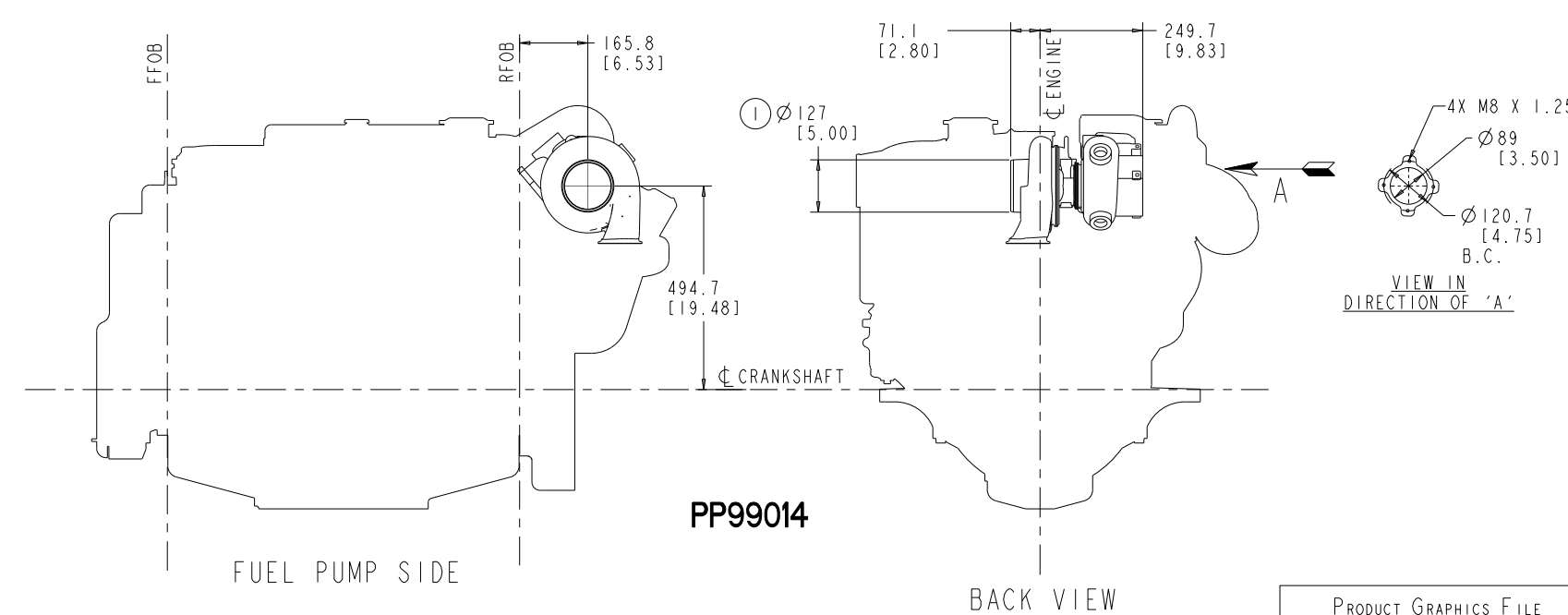
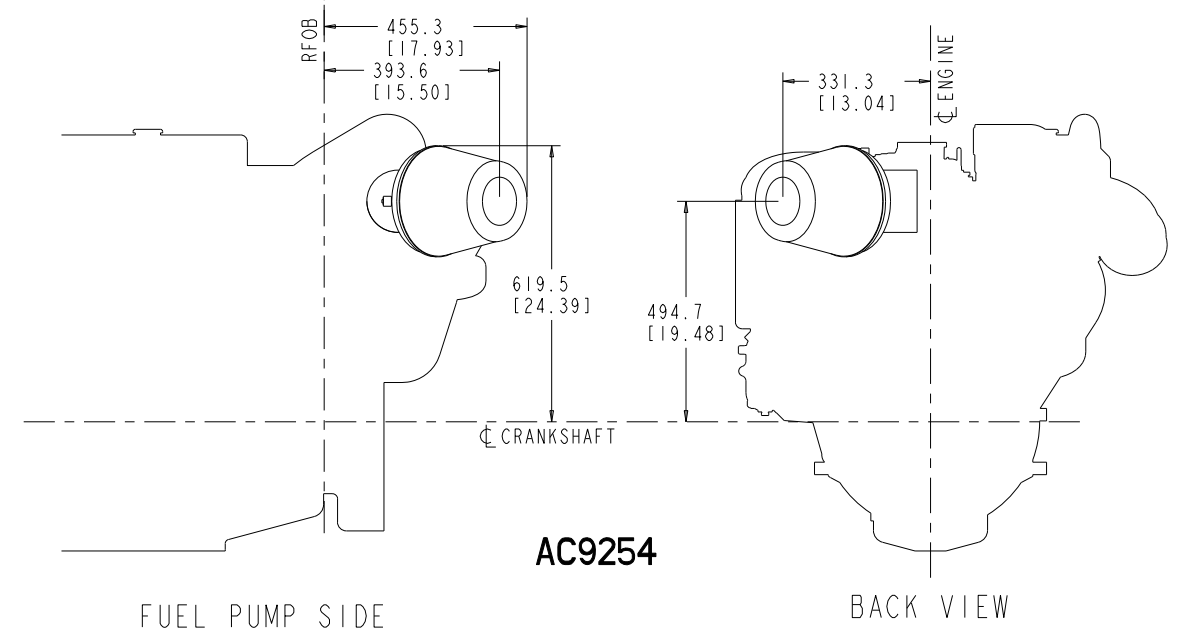
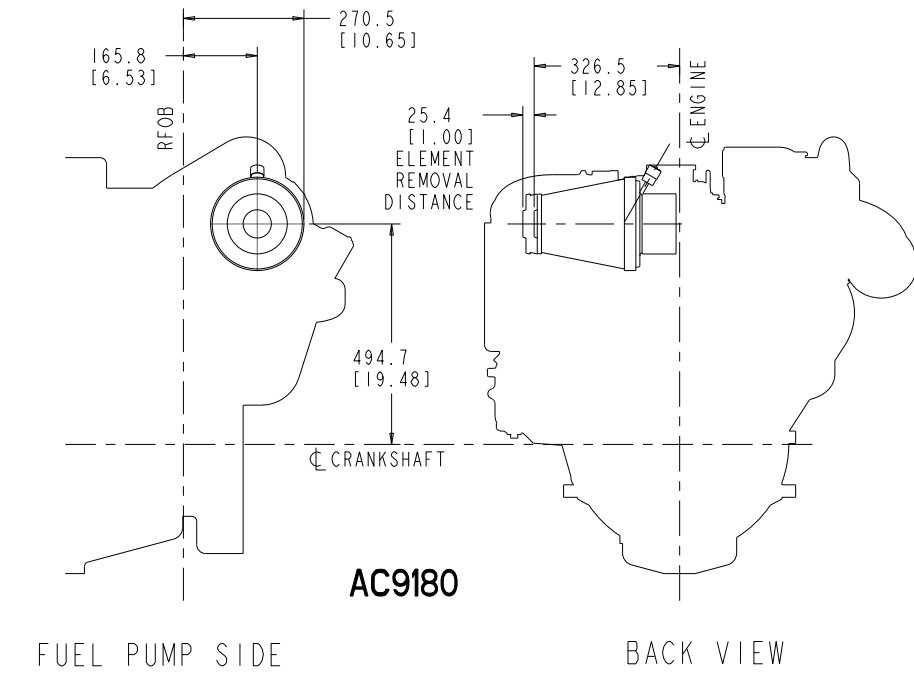
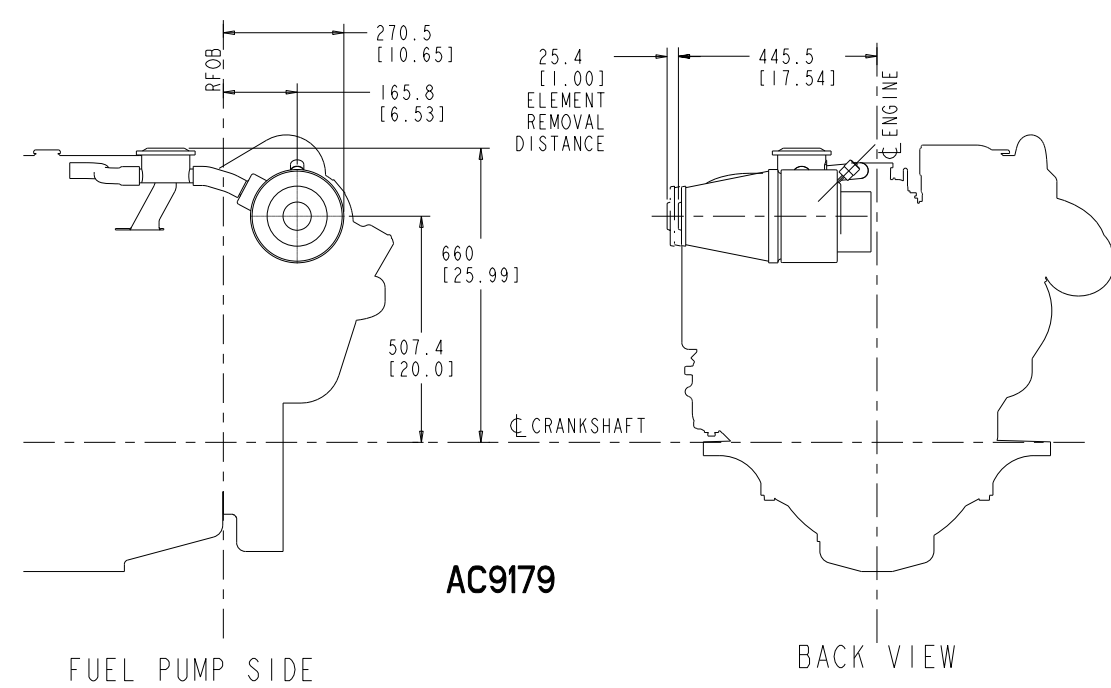
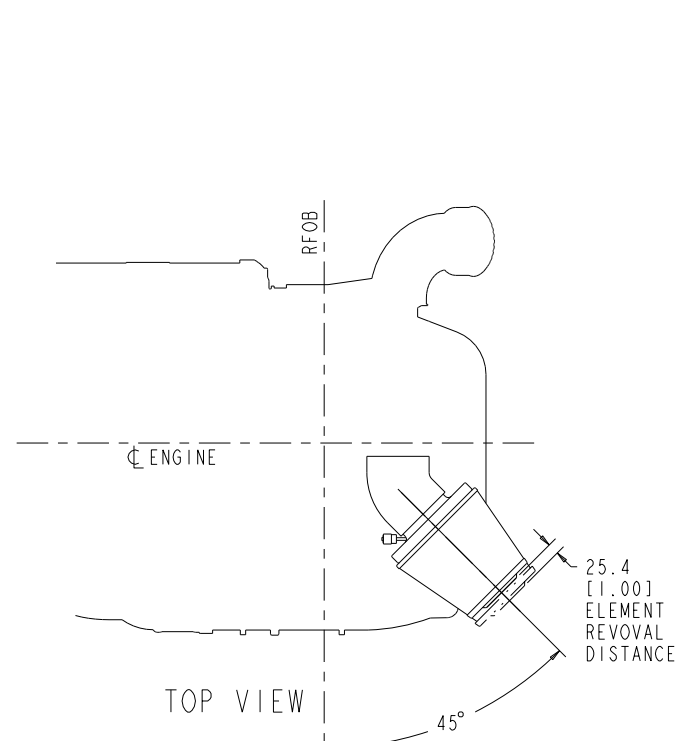
DO NOT SCALE THIS DRAWING
 THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING 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 QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN	TWO/TANG	SIZE	CODE IDENT. NO.	ITEM NUMBER
CHD	UNCHECKED			3170592
APPD		SCALE: 2x	ITEM CONTROL: MCS	SHEET 3 OF 30

ITEM NUMBER
3170592

REVISIONS		DWN	APP'D
04	QSC 8.3-HX	J	



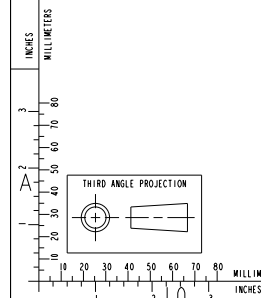
- ① AIR INLET CONNECTION, COMPRESSOR
- ② AIR INLET RESTRICTION GAUGE/PORT
- ③ INTAKE MANIFOLD PRESSURE PORT
- ④ INTAKE MANIFOLD TEMPERATURE PORT
- ⑤ TURBO BOOST PRESSURE PORT- N/A

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.

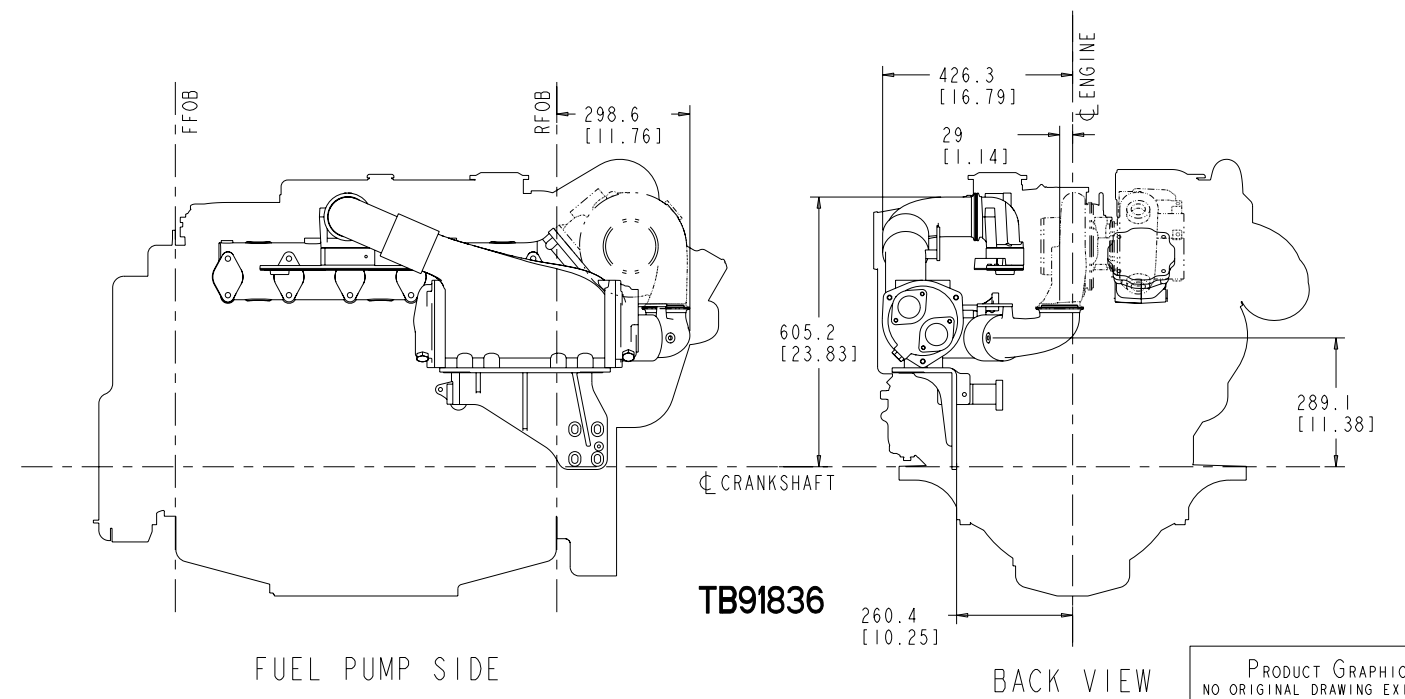
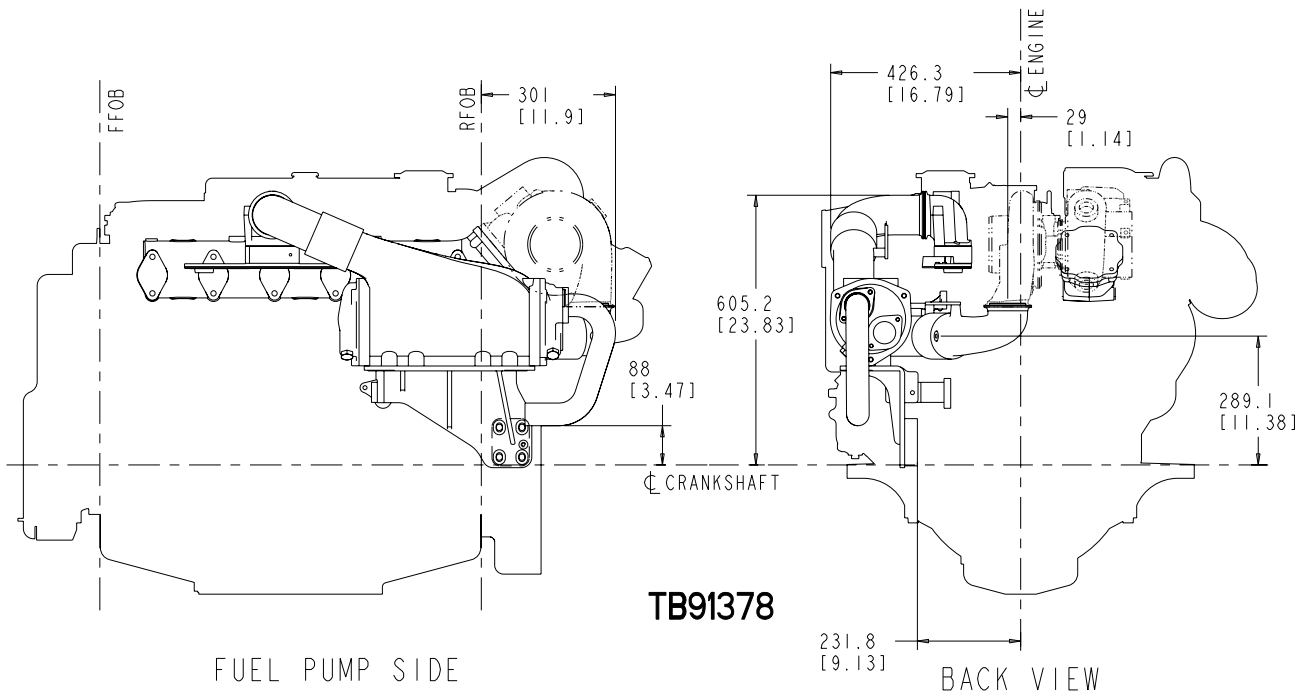
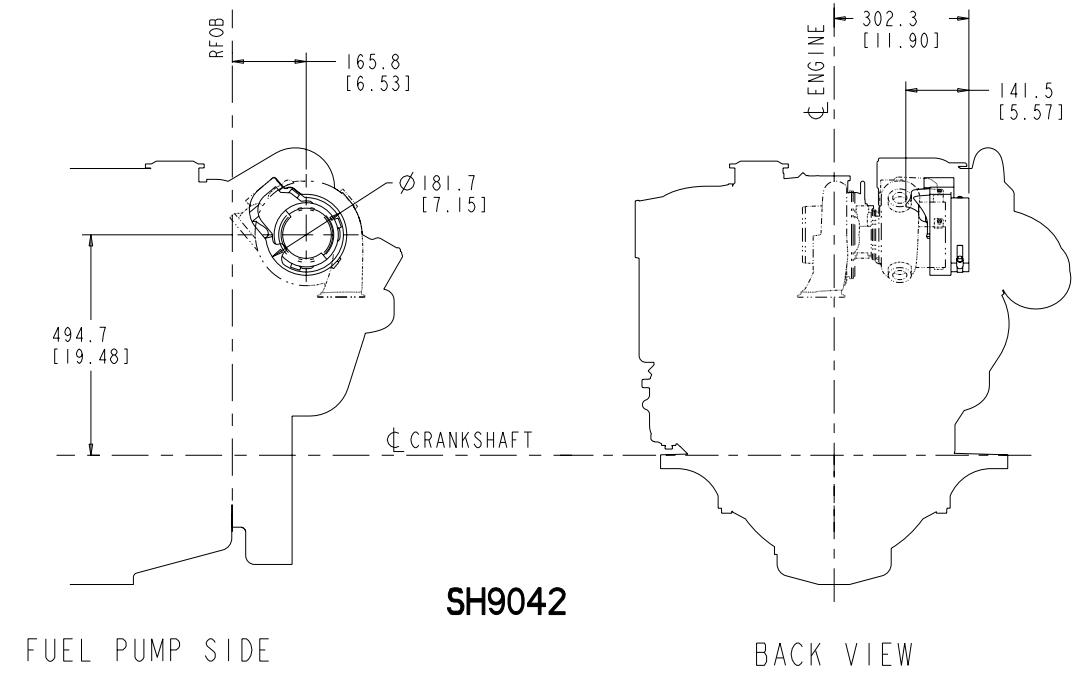
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSC 8.3-HX	IDENTIFIER	ITEM NUMBER
DWN: UNCHECKED CHD: UNCHECKED APPD:	SIZE CODE (IDENT. NO.) J	3170592	
	SCALE: 2x	ITEM CONTROL: MCS	SHEET 4 OF 30

AIR INDUCTION SYSTEM

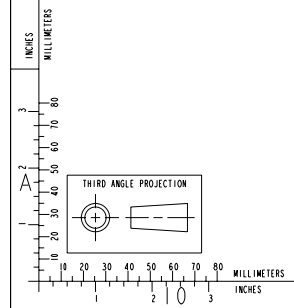


ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-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



AIR INDUCTION SYSTEM

DO NOT SCALE THIS DRAWING

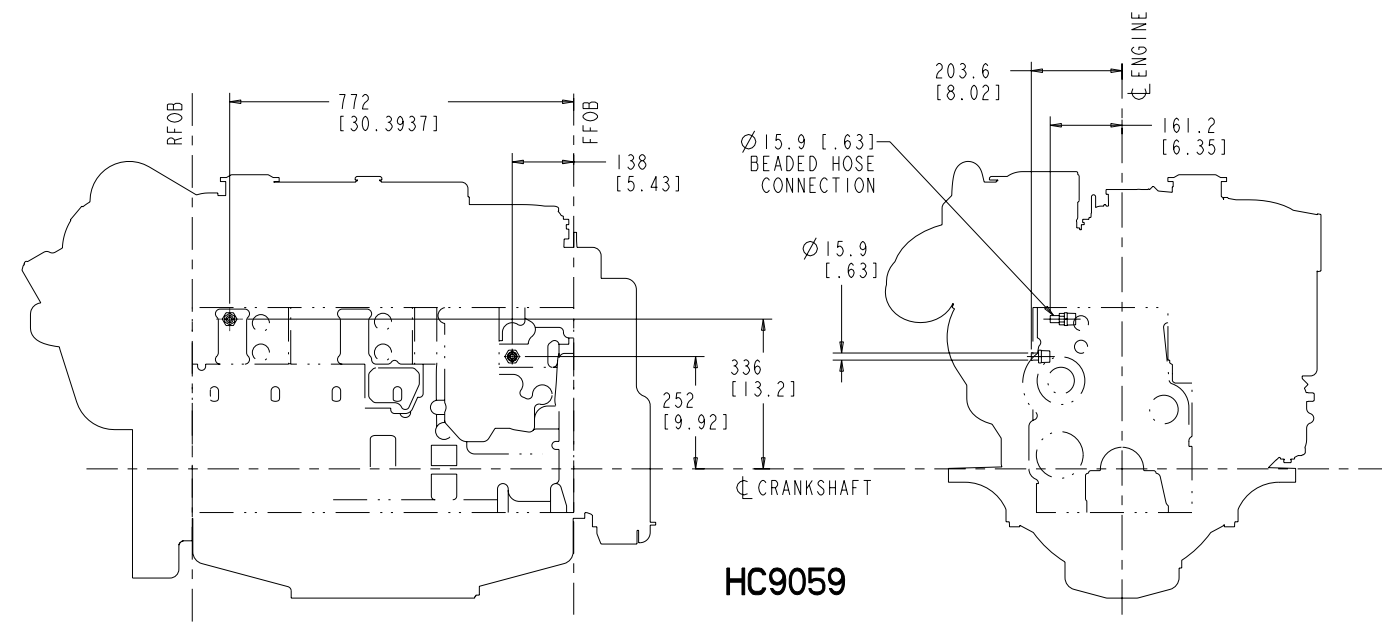
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

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.

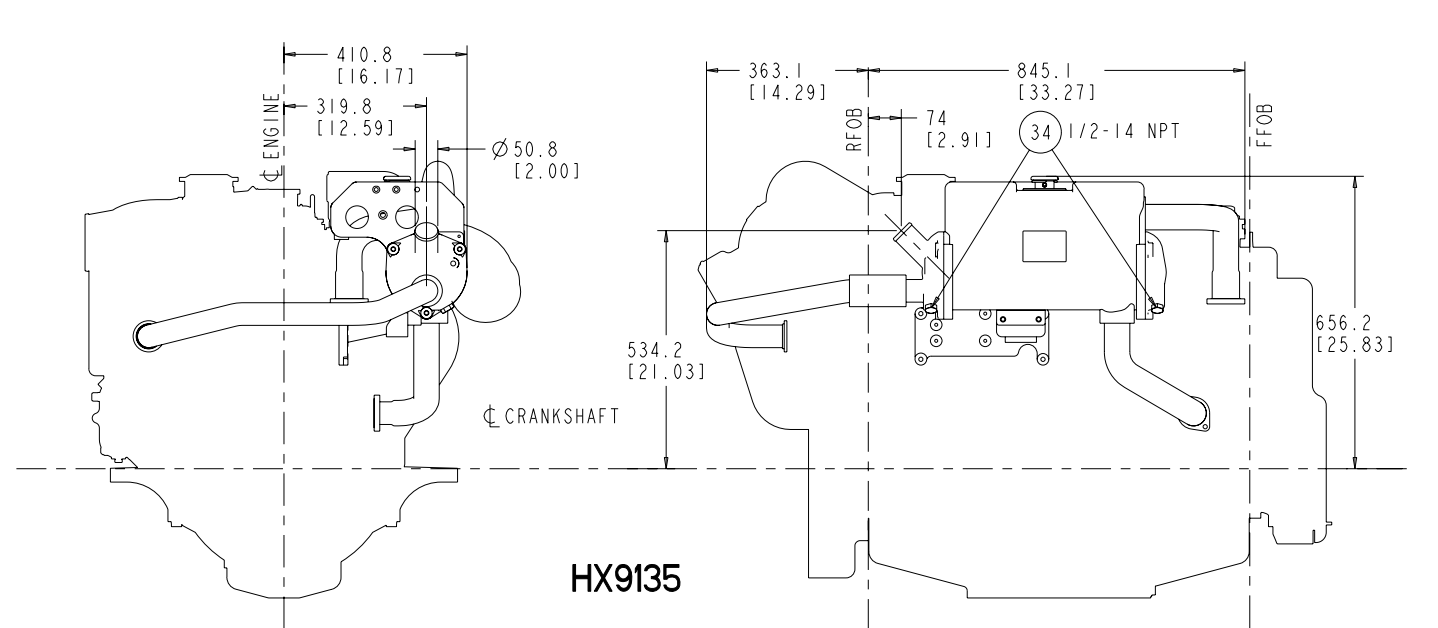
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSC 8.3-HX	IDENTIFIER	
DWN: TMO/TGANG CHD: UNCHECKED APPD:	SIZE CODE (IDENT. NO.) J	ITEM NUMBER 3170592	ITEM CONTROL: MCS
SCALE: 2x		SHEET 5 OF 30	

ITEM NUMBER
3170592

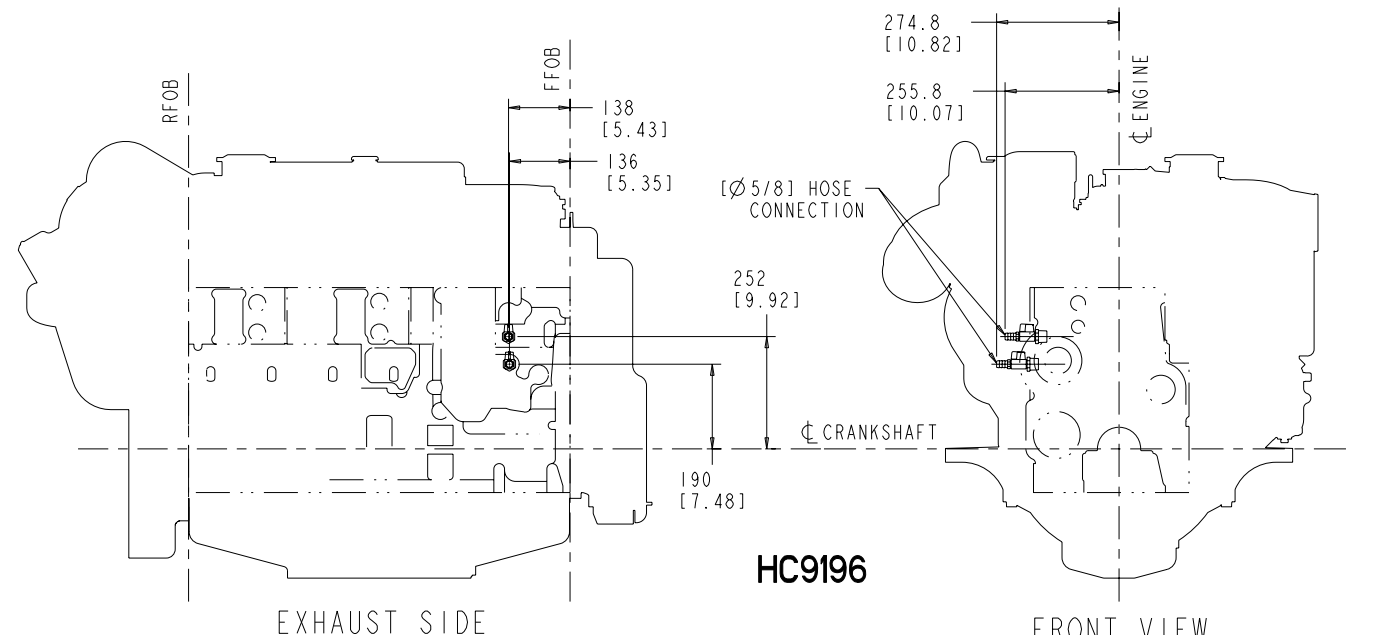
REVISIONS		DWN	APP'D
04	QSC 8.3-HX	J	



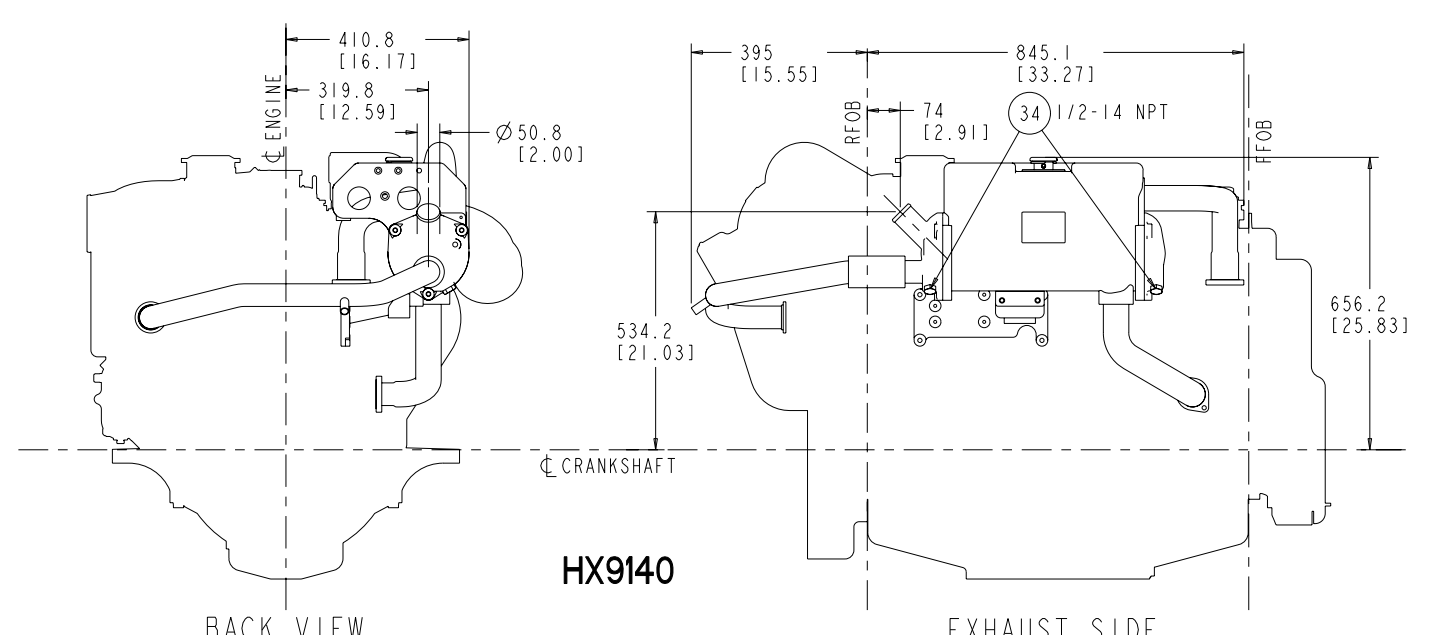
EXHAUST SIDE FRONT VIEW



BACK VIEW EXHAUST SIDE



EXHAUST SIDE FRONT VIEW



BACK VIEW EXHAUST SIDE

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

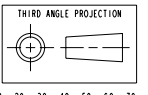
COOLING SYSTEM

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.

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 QSC 8.3-HX		
DWN: TMO/TGANG		SIZE CODE IDENT. NO. ITEM NUMBER		
CHD: UNCHECKED		J		
APPD:		3170592		
APPD:		SCALE: 2:1 ITEM CONTROL: MCS SHEET 6 OF 30		

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.

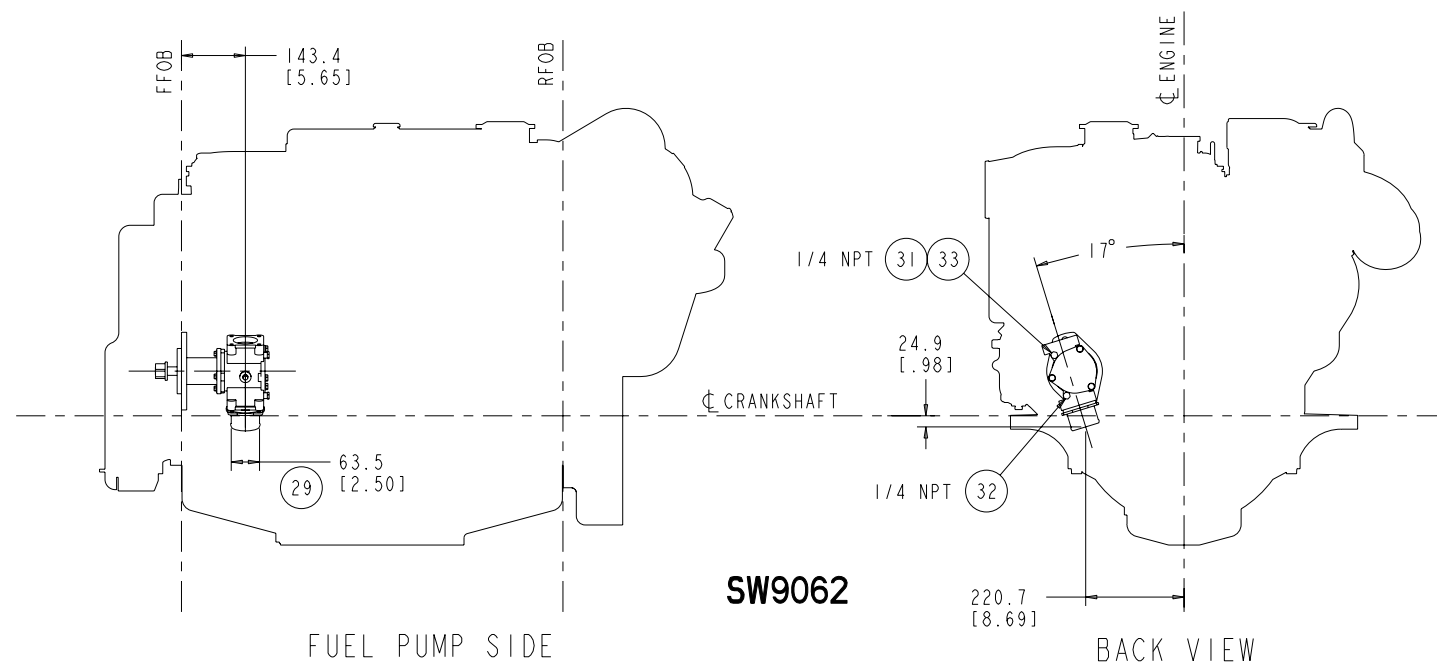
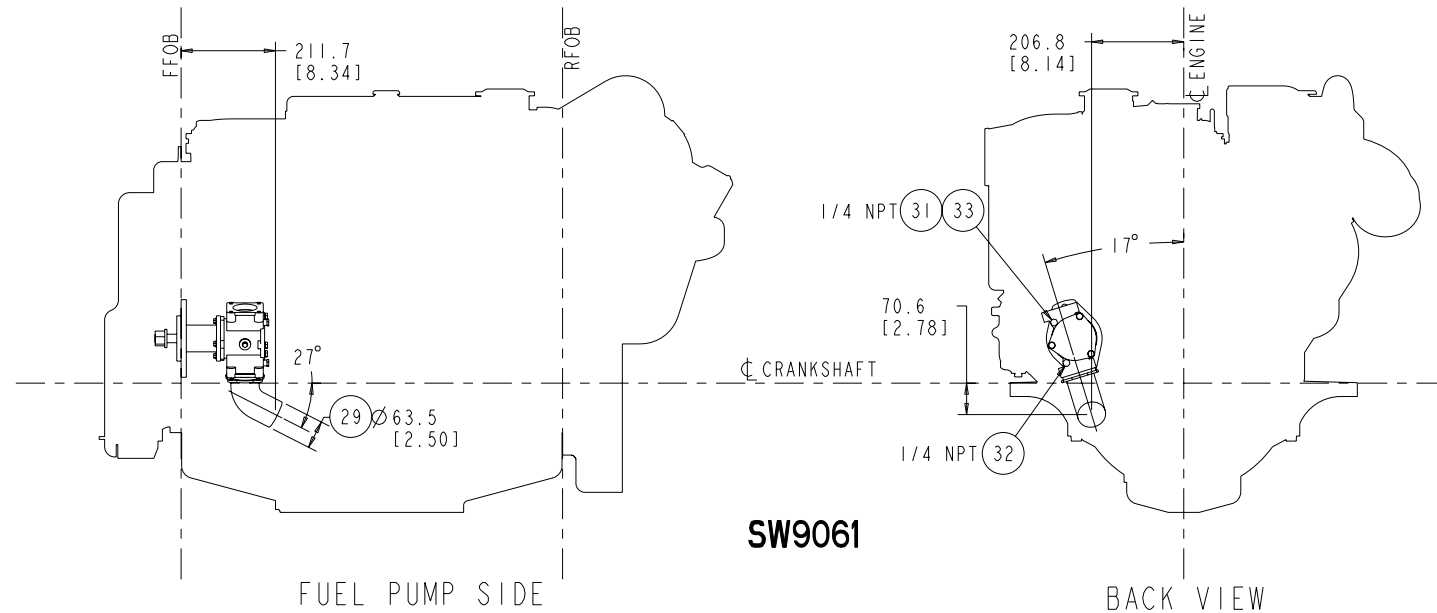
INCHES
MILLIMETERS



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 30 40 50 60 70 80
INCHES
MILLIMETERS

ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	



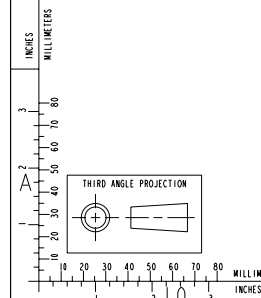
① COOLANT ACCESSORY RETURN CONNECTION	⑩ COOLANT INLET TEMPERATURE PORT	⑲ COOLANT RETURN PRES. PORT, GEAR OIL COOLER- N/A	⑳ LTA COOLANT RETURN TEMP. PORT INLET
② COOLANT ACCESSORY SUPPLY CONNECTION	⑪ COOLANT LEVEL SWITCH PORT	⑳ COOLANT RETURN TEMP. PORT, GEAR OIL COOLER- N/A	㉑ SEA WATER INLET CONNECTION
③ COOLANT BLOCK HEATER PORT	⑫ COOLANT OUTLET CONNECTION- N/A	㉑ COOLANT VENT FITTING PORT	㉒ SEA WATER OUTLET CONNECTION
④ COOLANT BLOCK PRESSURE PORT	⑬ COOLANT OUTLET PRESSURE PORT	㉒ EXPANSION TANK MAKE-UP CONNECTION	㉓ SEA WATER OUTLET TEMPERATURE
⑤ COOLANT DRAIN, AFTERCOOLER	⑭ COOLANT OUTLET TEMPERATURE PORT	㉓ LTA COOLANT OUTLET CONNECTION	㉔ 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	㉕ 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	㉖ 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.

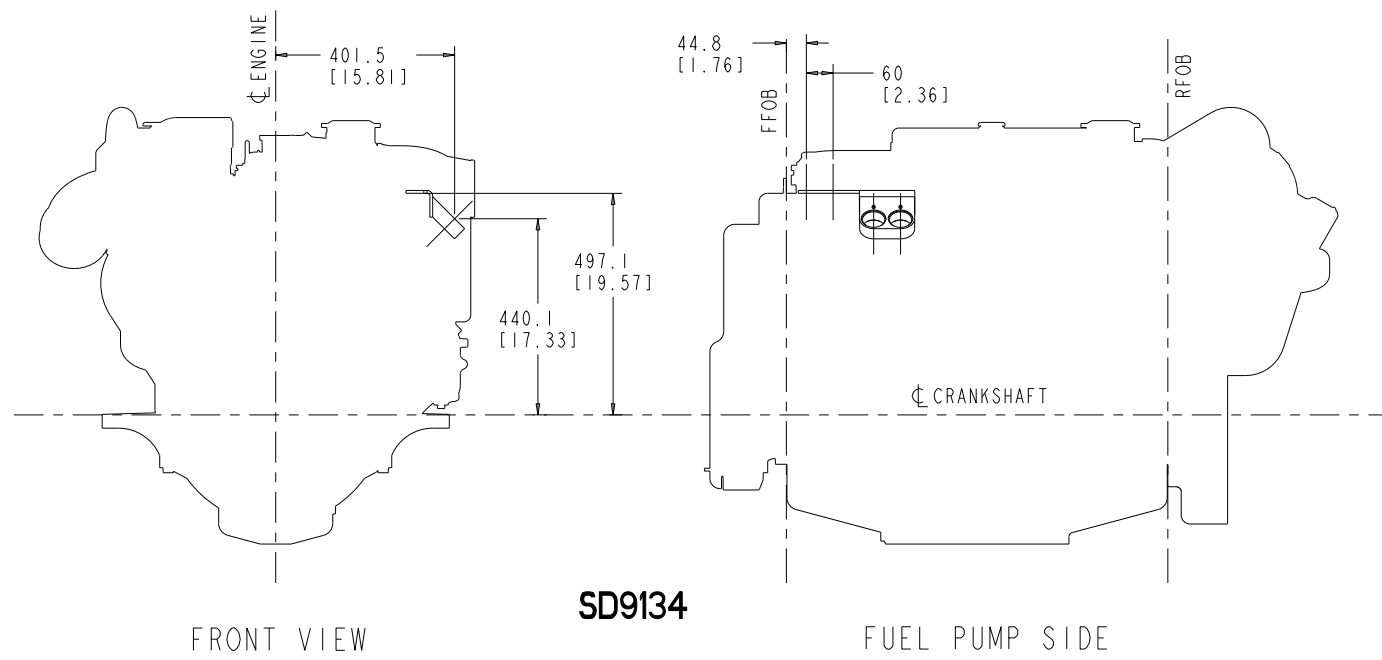
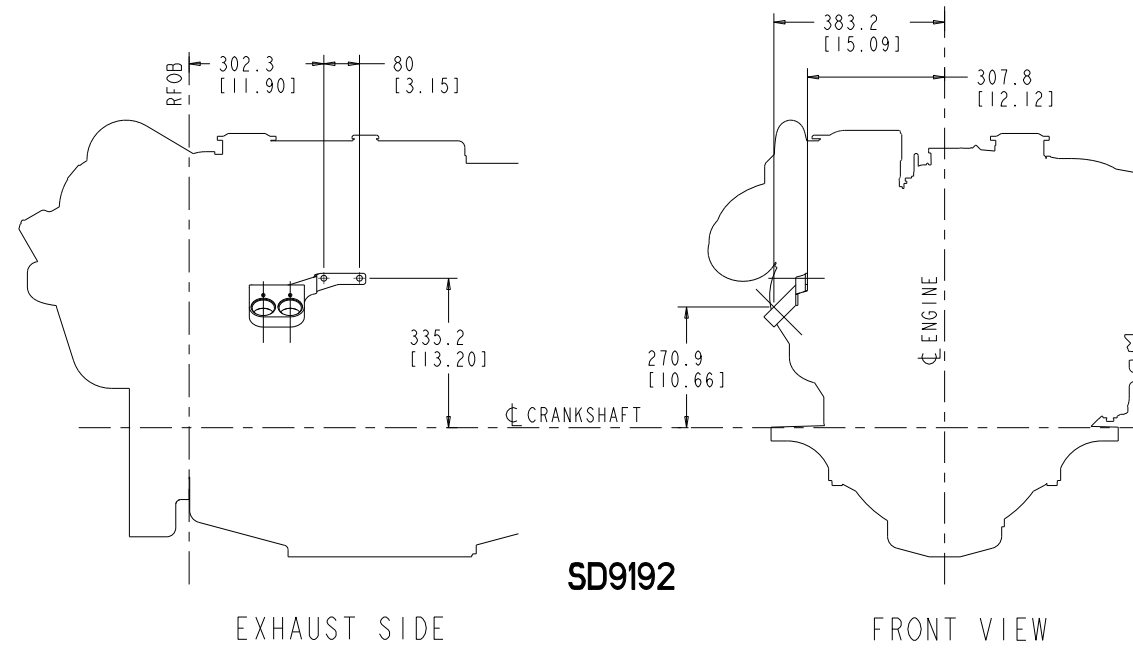
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	ITEM NAME CUMMINS INC.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	IDENTIFIER QSC 8.3-HX	SIZE CODE (IDENT. NO.) J
DWN: UNCHECKED	APPD: UNCHECKED	ITEM NUMBER 3170592
		SCALE: 2x ITEM CONTROL: MCS SHEET 7 OF 30

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
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-HX	

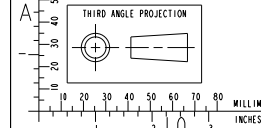


PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

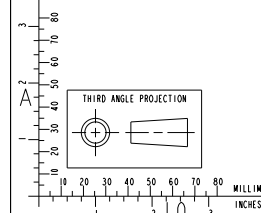
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES		ITEM NAME QSC 8.3-HX	IDENTIFIER
DWN TWO/TANG	APPD UNCHECKED	SIZE CODE IDENT. NO.	ITEM NUMBER 3170592
SCALE: 2x		ITEM CONTROL: MCS	SHEET 8 OF 30

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.

CONTROLS, GUAGES AND ALARMS

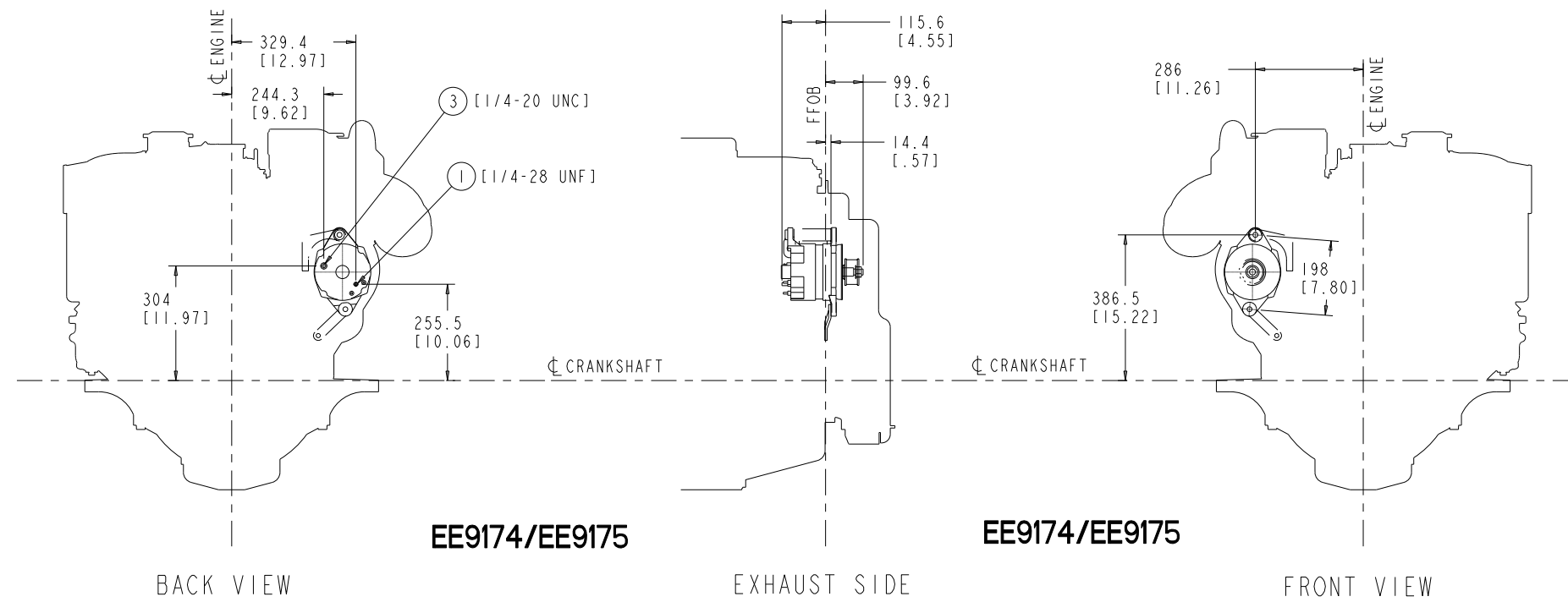
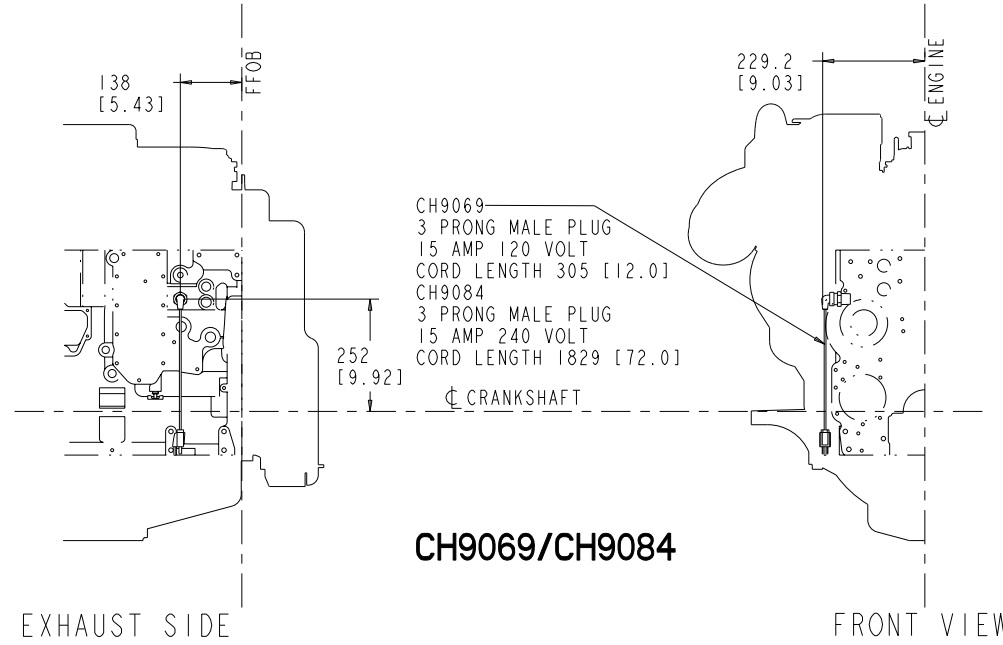


INCHES
MILLIMETERS



ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	



- ① ALTERNATOR POSITIVE B+ TERMINAL
- ② WIRE HARNESS INTERCONNECT
- ③ GROUND TERMINAL

DO NOT SCALE THIS DRAWING

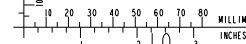
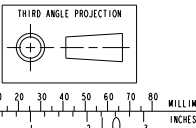
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

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 QSC 8.3-HX	IDENTIFIER
DWN: TMO/TGANG	CHD: UNCHECKED	SIZE CODE (IDENT. NO.)	ITEM NUMBER 3170592
APPD:		SCALE: 2x	ITEM CONTROL: MCS SHEET 9 OF 30

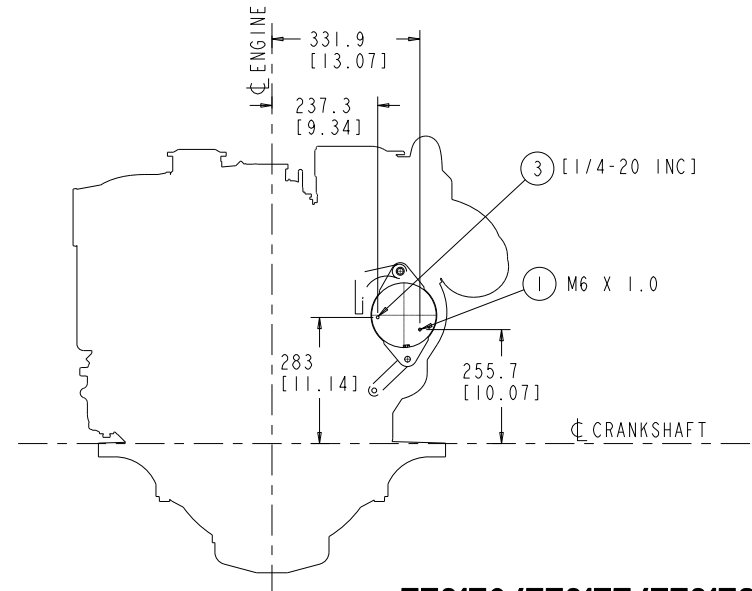
ELECTRICAL SYSTEM

INCHES
MILLIMETERS



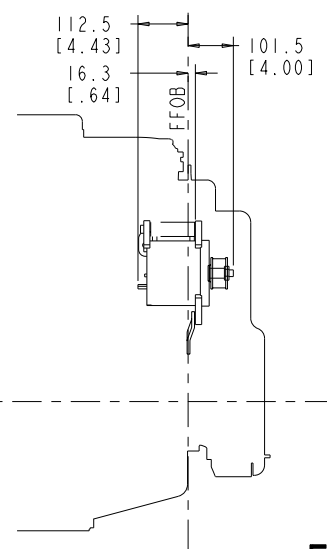
ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	



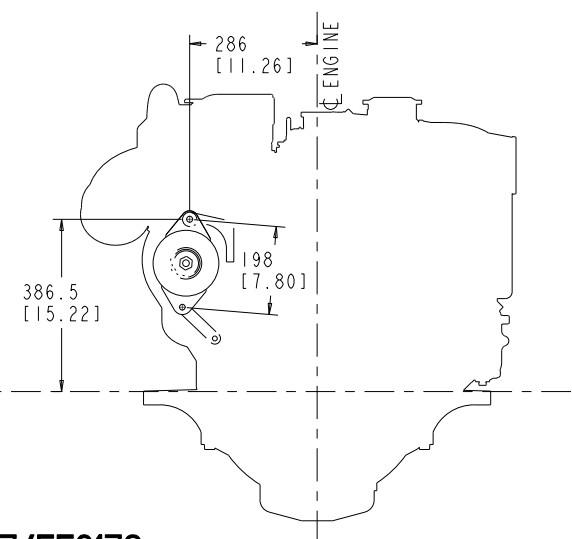
BACK VIEW

EE9176/EE9177/EE9178

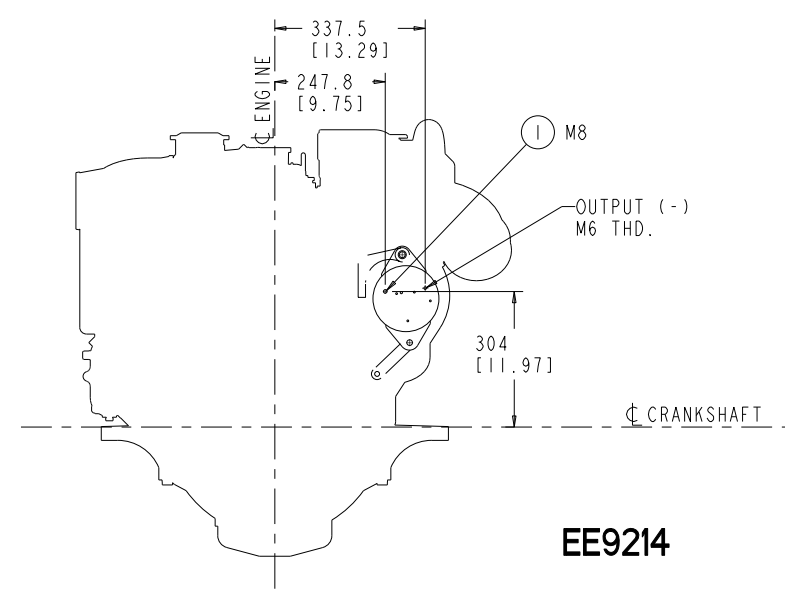


EXHAUST SIDE

EE9176/EE9177/EE9178

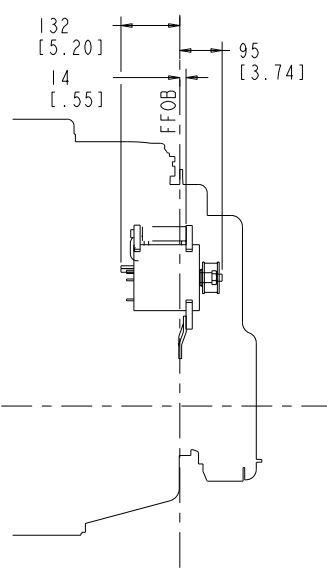


FRONT VIEW



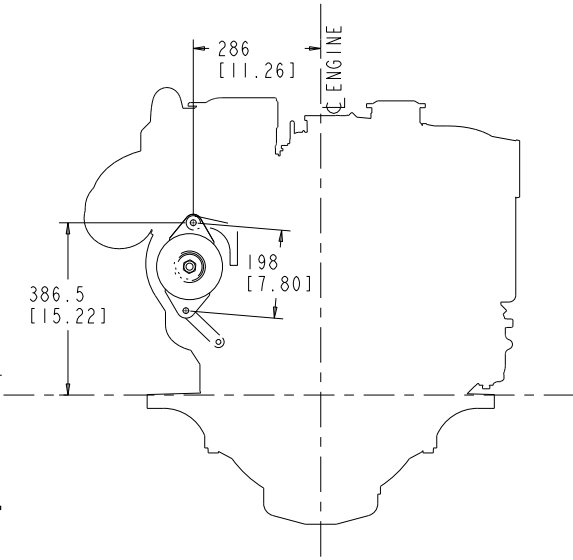
BACK VIEW

EE9214



EXHAUST SIDE

EE9214



FRONT VIEW

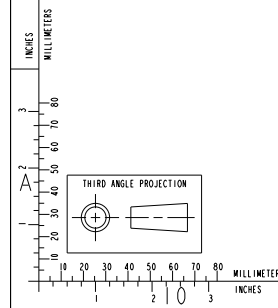
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

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 QSC 8.3-HX	IDENTIFIER	ITEM NUMBER
DWN: UNCHECKED	SIZE CODE (IDENT. NO.)	3170592	
APPD:	SCALE: 2x	ITEM CONTROL: MCS	SHEET 10 OF 30

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.

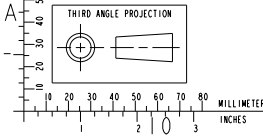
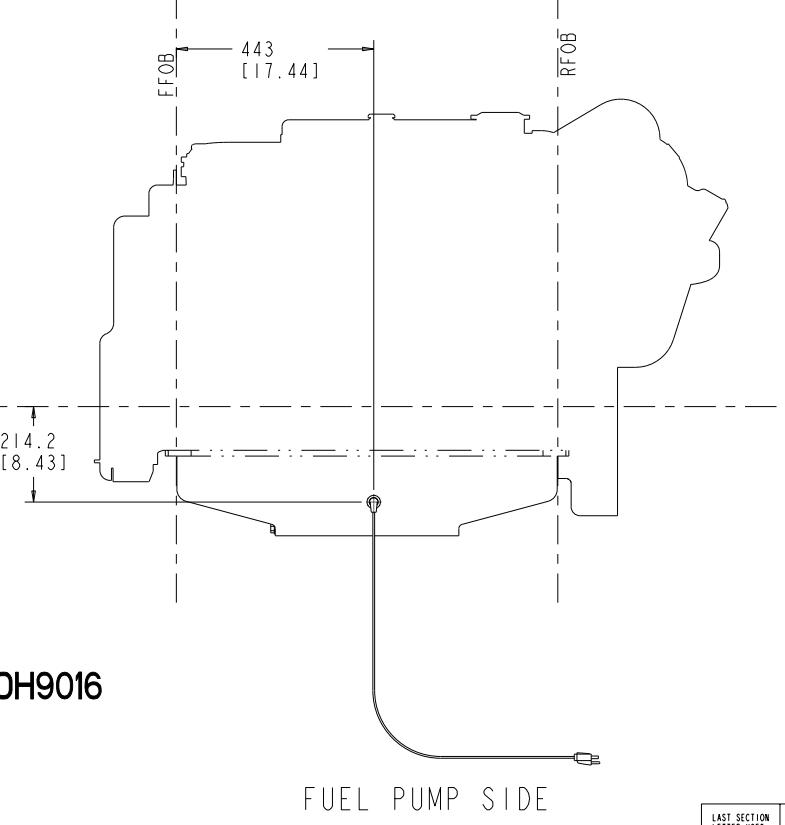
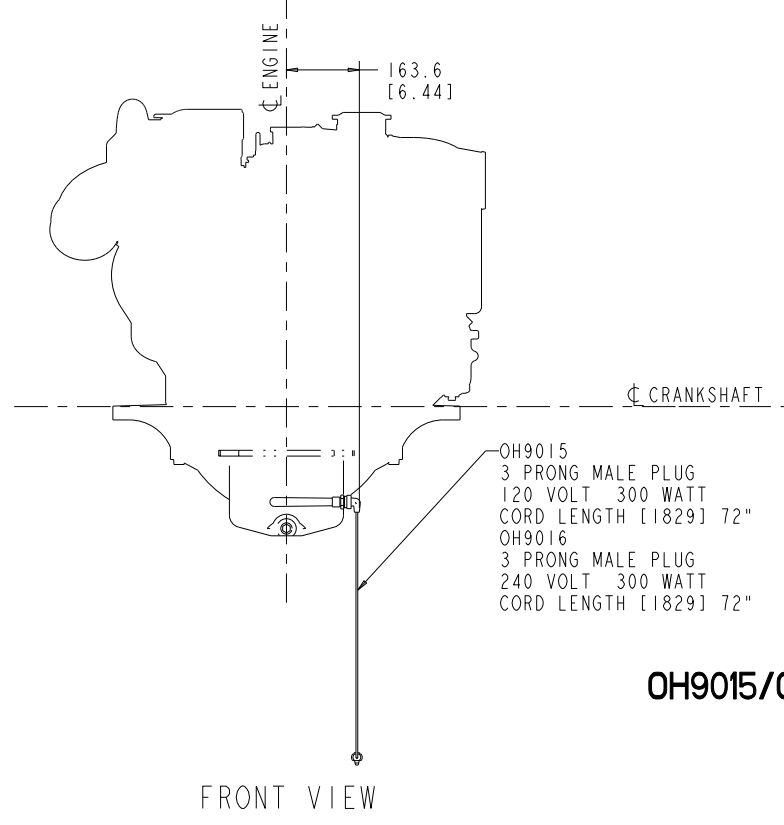
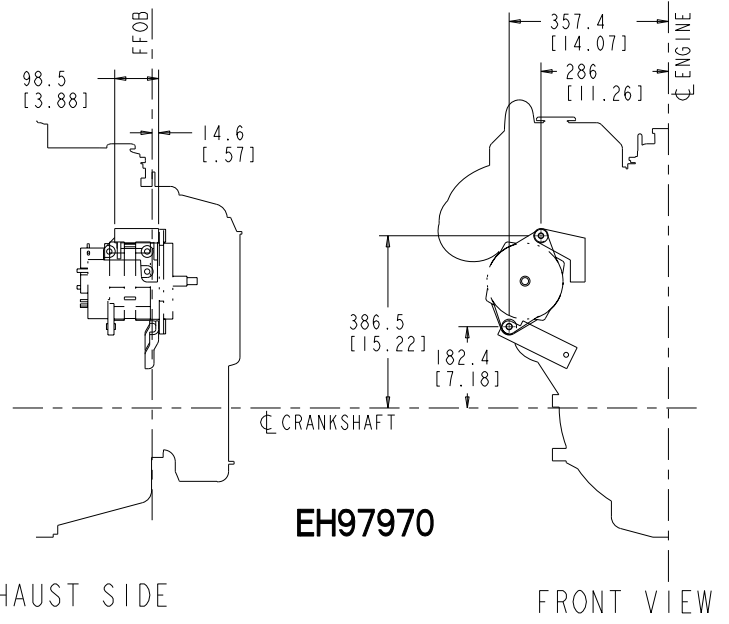
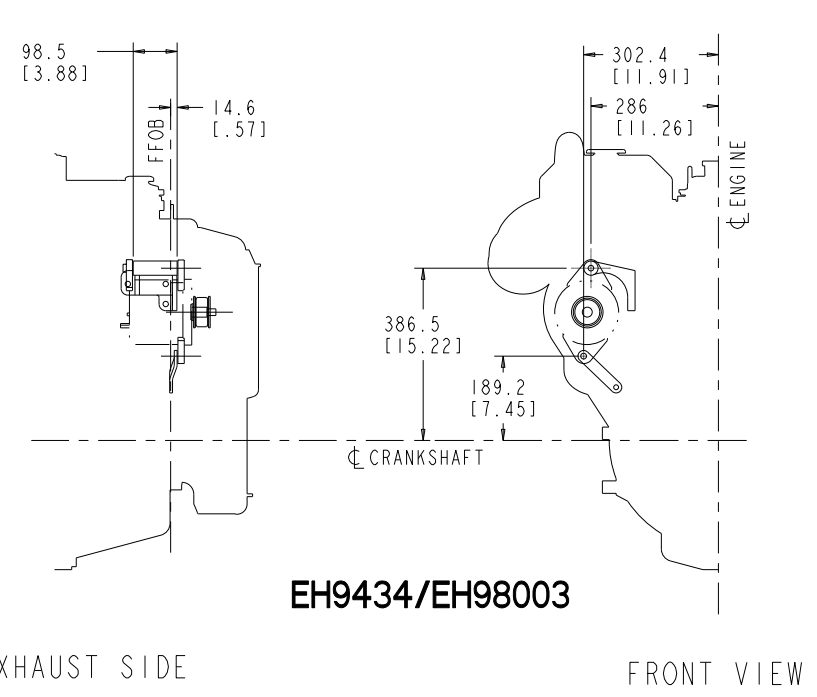
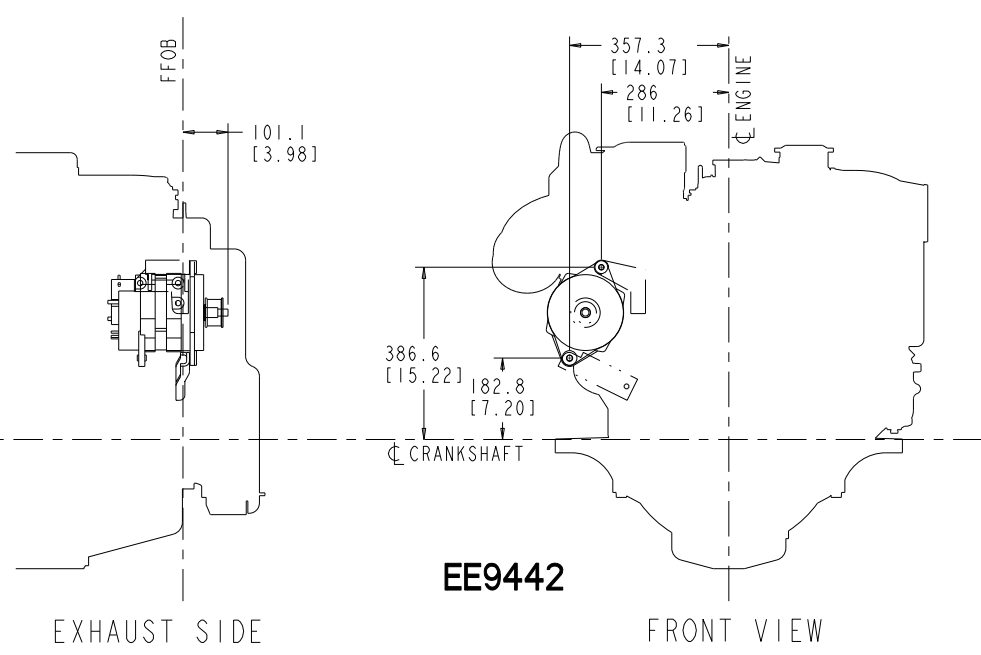
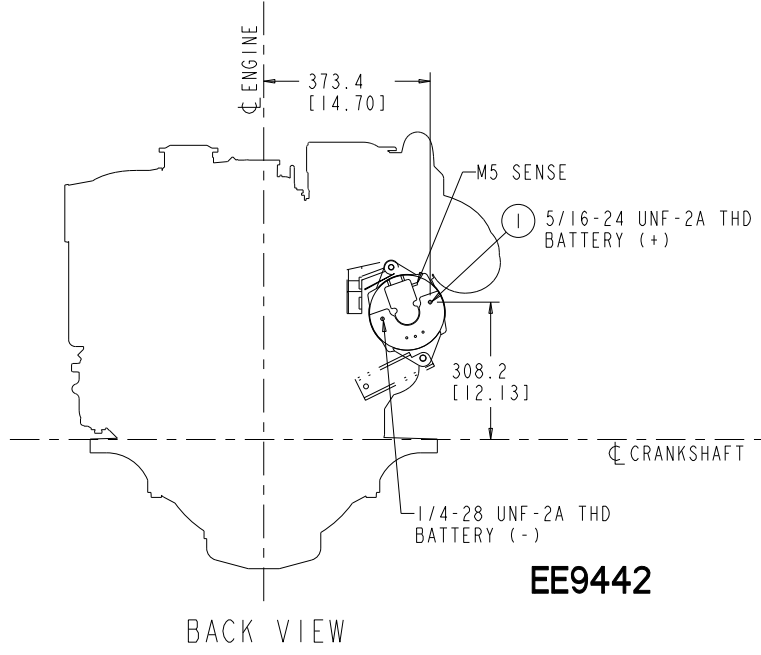
ELECTRICAL SYSTEM

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



ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-HX	



- ① ALTERNATOR POSITIVE B+ TERMINAL
- ② WIRE HARNESS INTERCONNECT
- ③ GROUND TERMINAL

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.

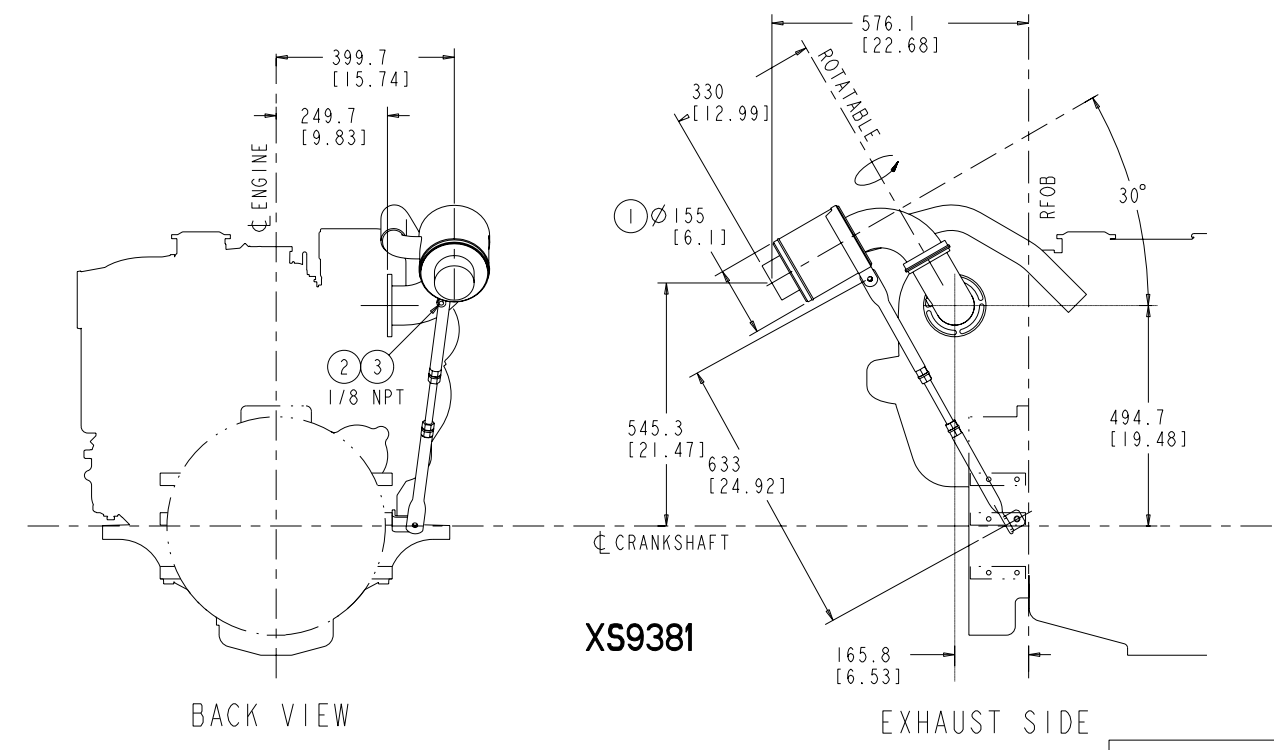
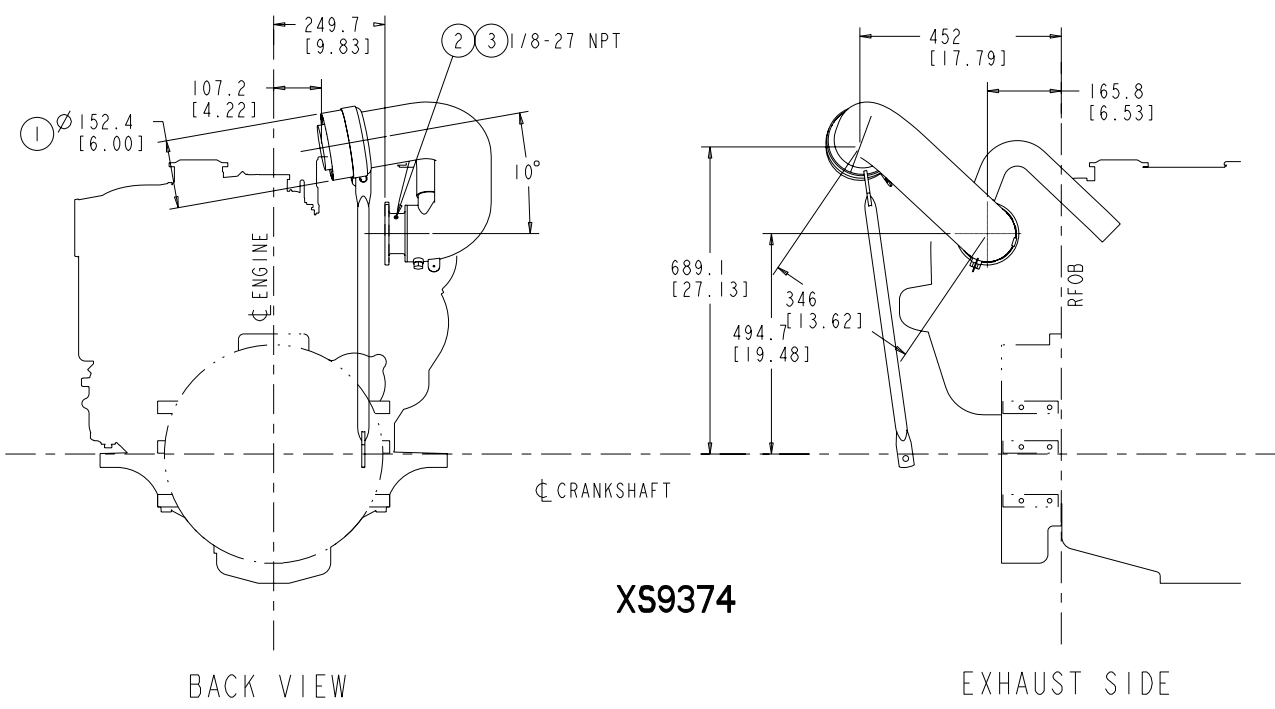
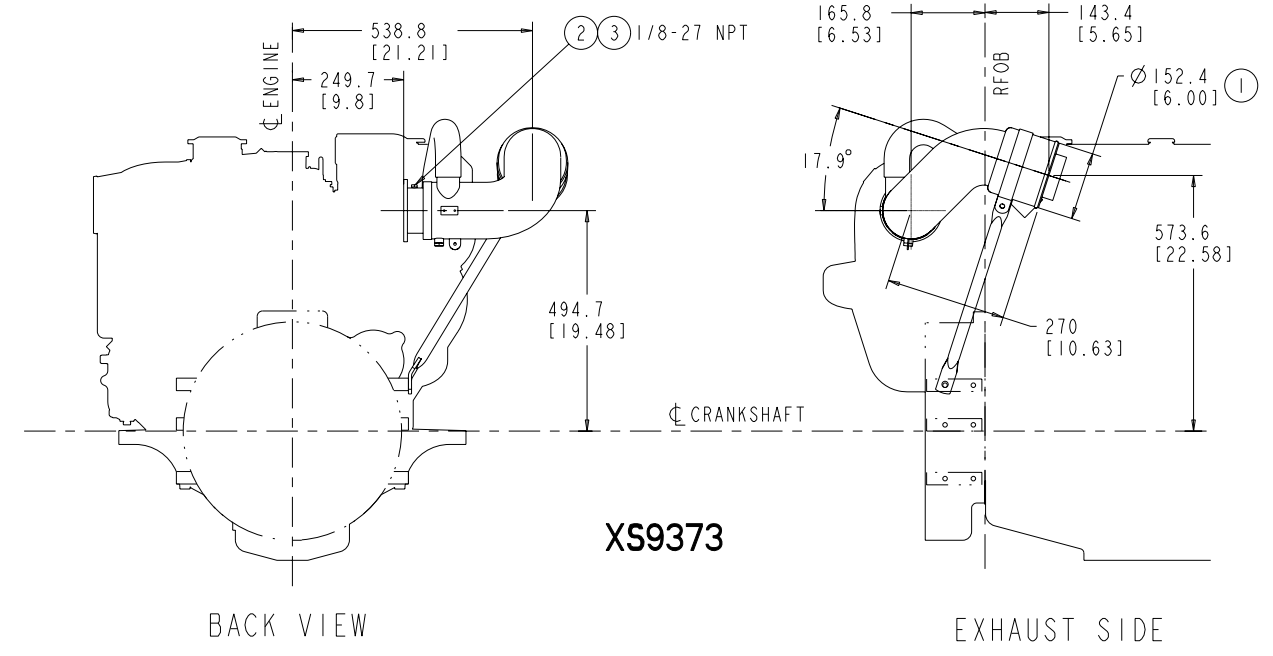
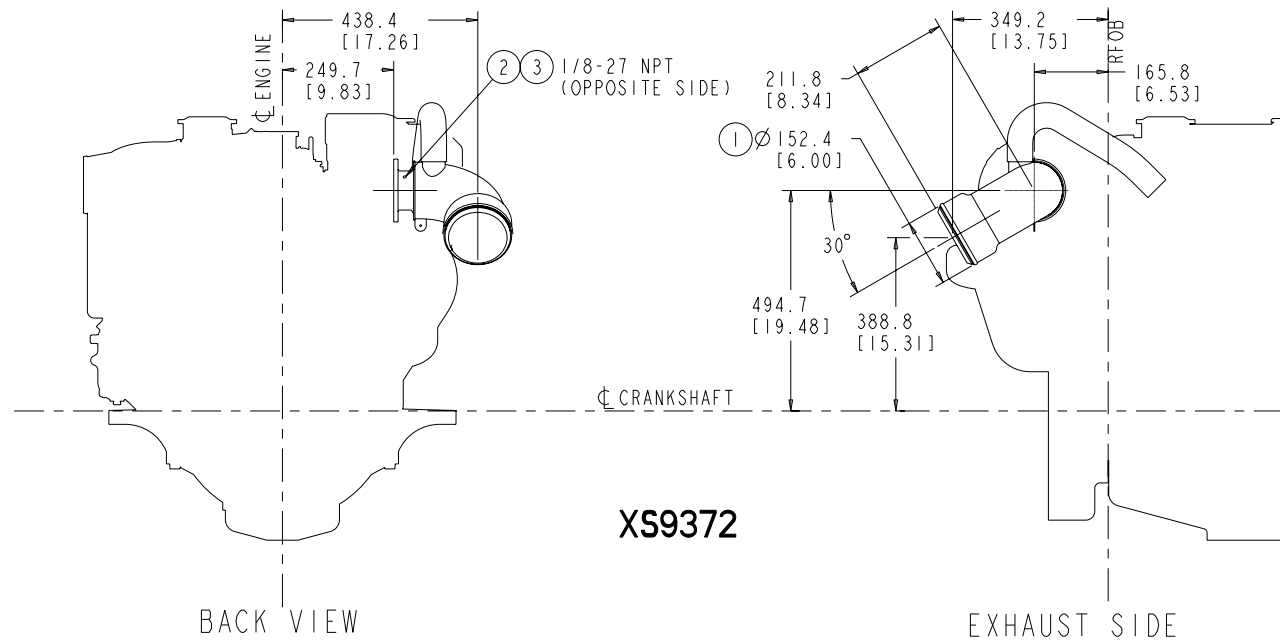
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

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 QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN: UNCHECKED	SIZE CODE (IDENT. NO.):	ITEM NUMBER 3170592	
APPD:	SCALE: 2x	ITEM CONTROL: MCS	SHEET 11 OF 30

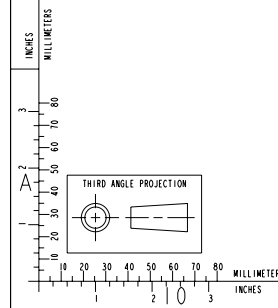
ELECTRICAL SYSTEM

ITEM NUMBER
3170592

REVISIONS		DWN	APP'D
ZONE REV	DESCRIPTION		
04	OSC 8.3-HX		



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

DO NOT SCALE THIS DRAWING

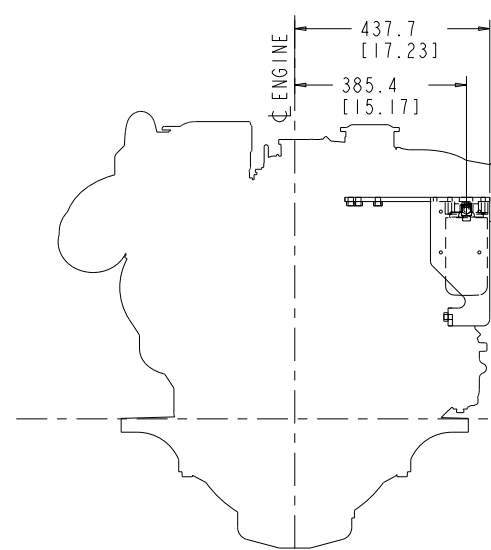
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

EXHAUST 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 QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM
DWN: TMO/CSG CHD: UNCHECKED APPD: UNCHECKED	SIZE CODE IDENT. NO.: J	ITEM NUMBER 3170592
	SCALE: 2x	ITEM CONTROL: MCS SHEET 12 OF 30

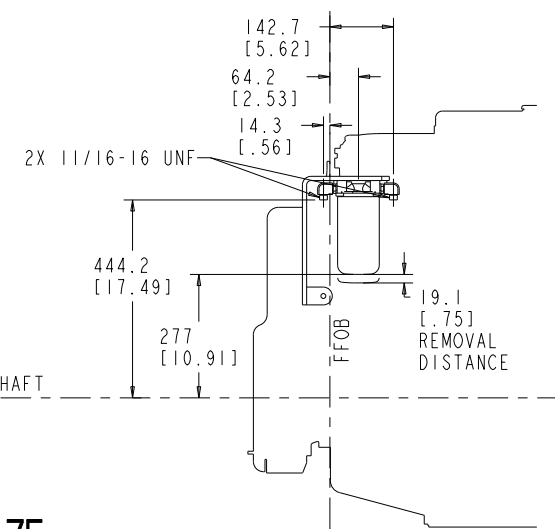
ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-HX	

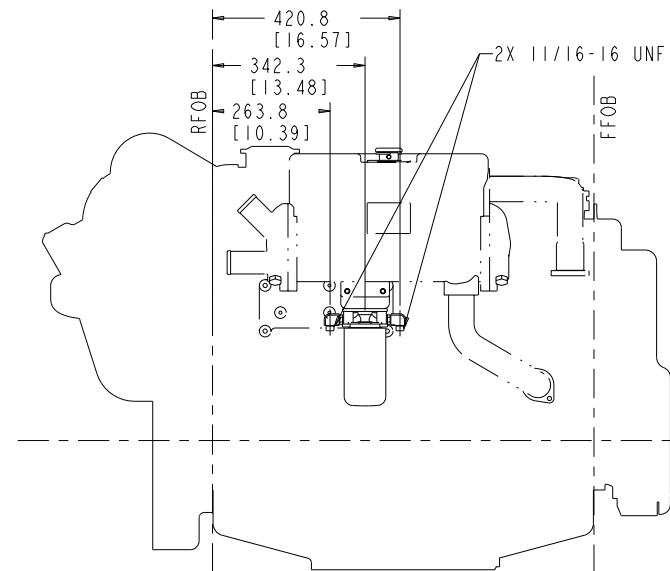


FF9475

FRONT VIEW

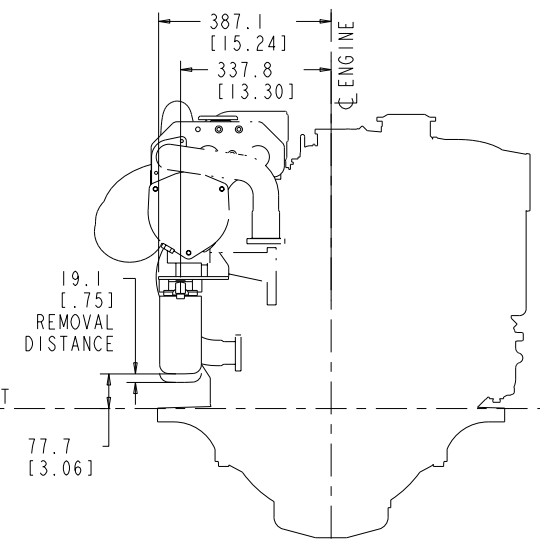


FUEL PUMP SIDE

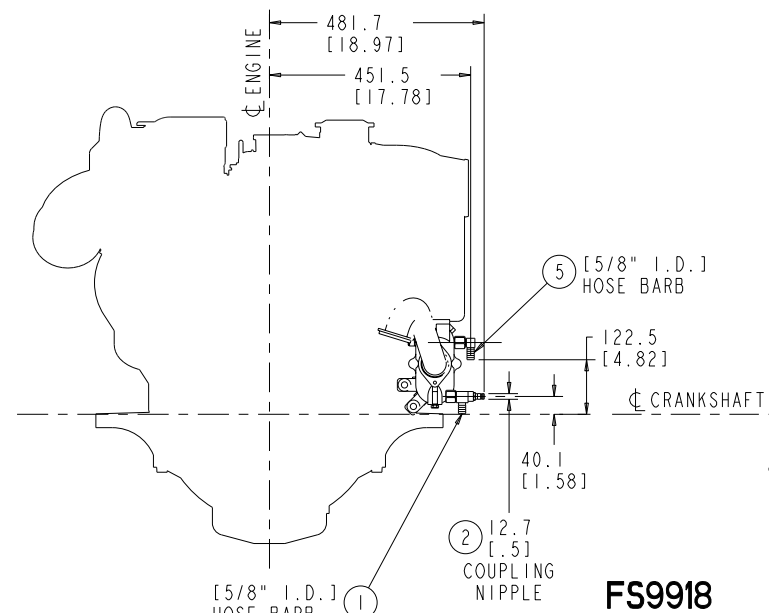


FF9493

EXHAUST SIDE

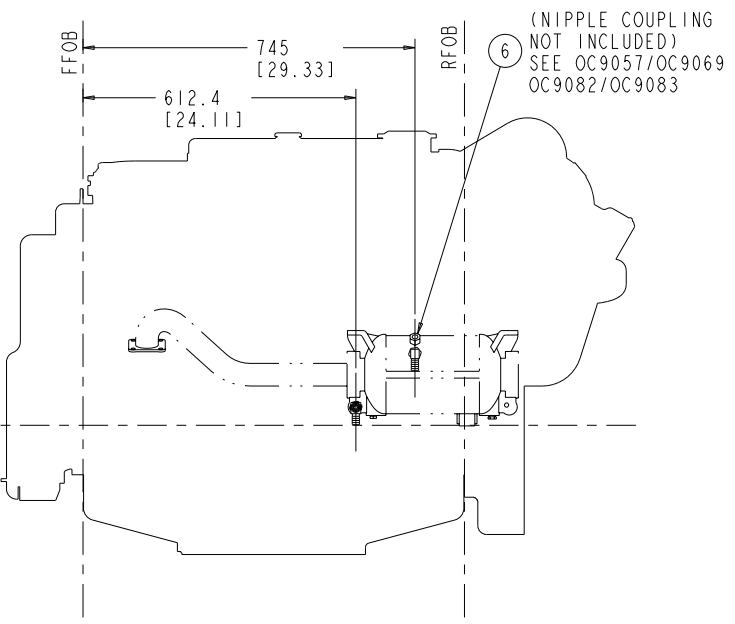


FRONT VIEW

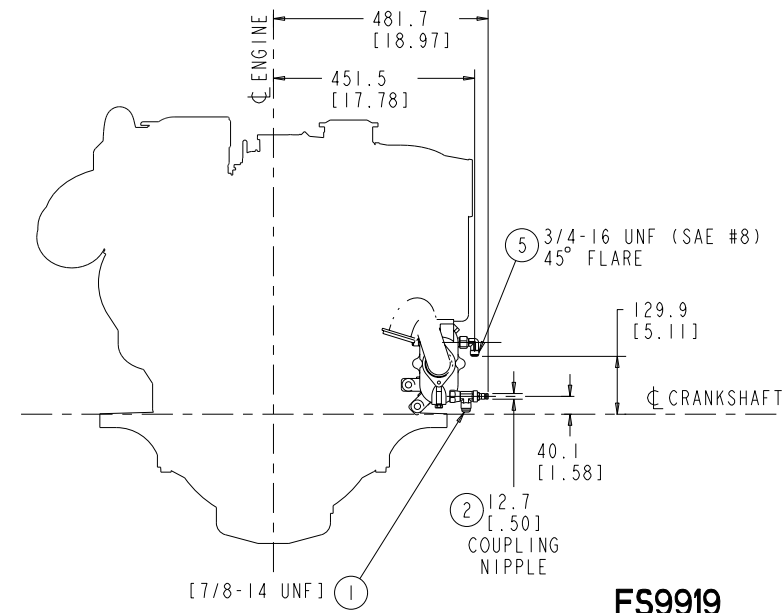


FS9918

FRONT VIEW

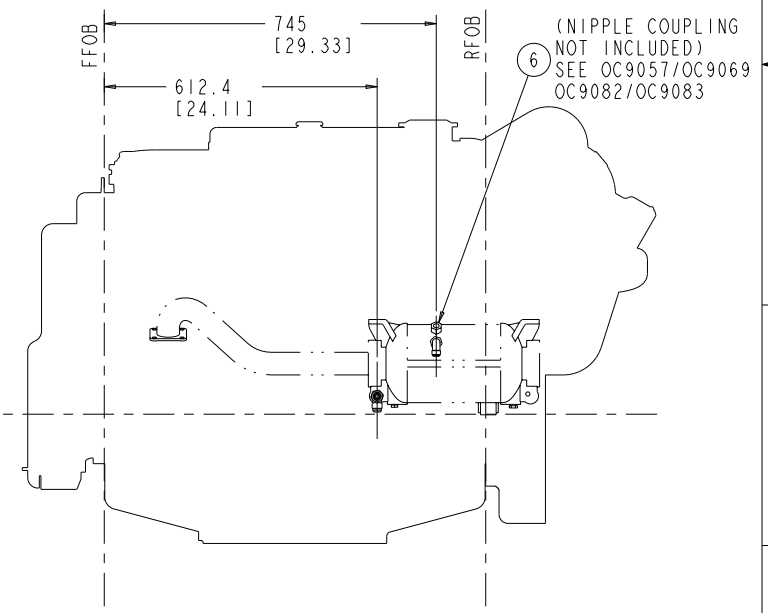


FUEL PUMP SIDE

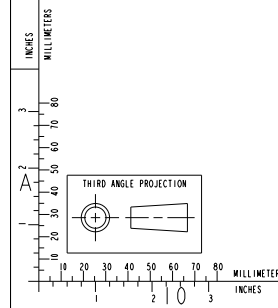


FS9919

FRONT VIEW



FUEL PUMP SIDE



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

FUEL SYSTEM

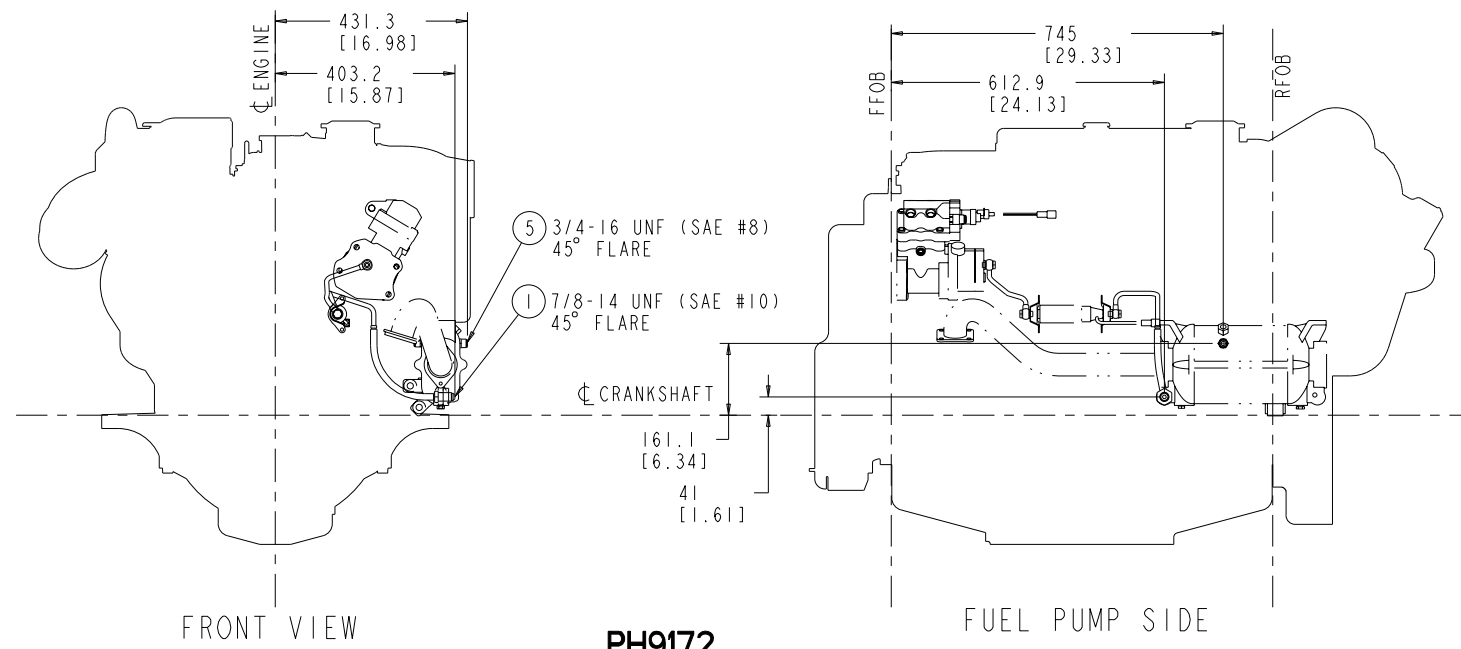
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING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

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.

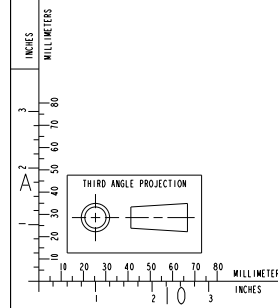
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSC 8.3-HX	IDENTIFIER
DWN UNCHECKED	SIZE CODE (IDENT. NO.)	ITEM NUMBER
APPD UNCHECKED	J	3170592
APPD UNCHECKED	SCALE: 2X	ITEM CONTROL: MCS
		SHEET 13 OF 30

ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	



PH9172
W/ OC9057/FP91114/FS9932



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

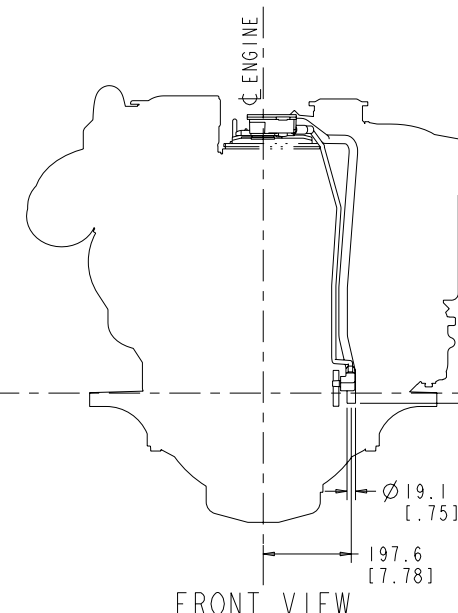
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING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

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 QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN: UNCHECKED CHD: UNCHECKED APPD:	SCALE: 2x	SIZE CODE IDENT. NO. ITEM NUMBER J 3170592	ITEM CONTROL: MCS SHEET 14 OF 30

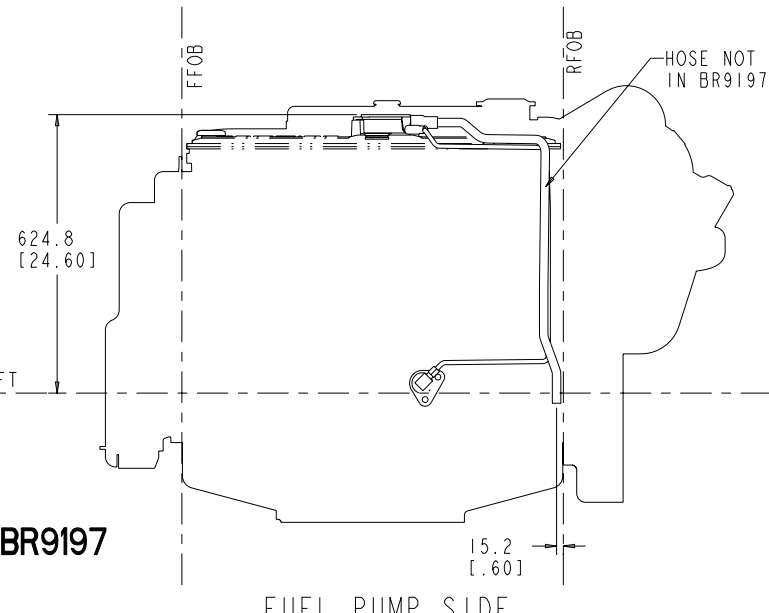
ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-HX	

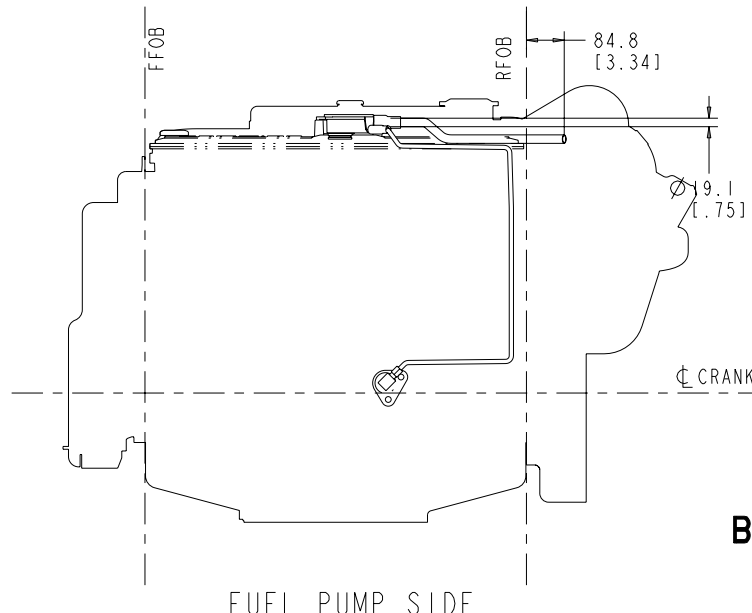


BR9183/BR9197

FRONT VIEW

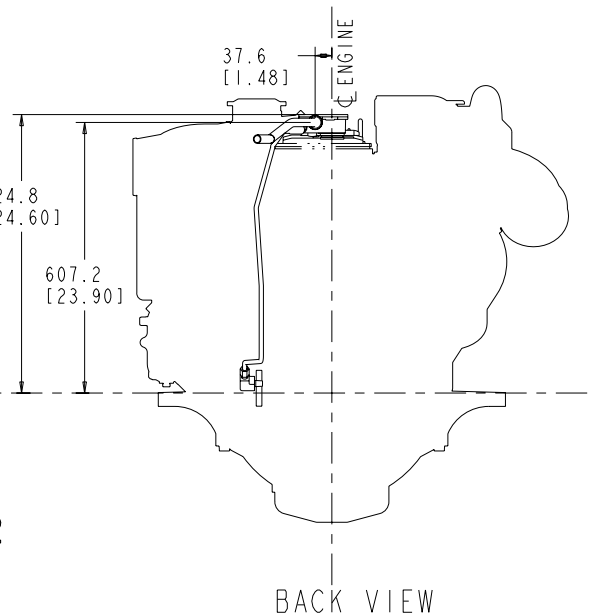


FUEL PUMP SIDE

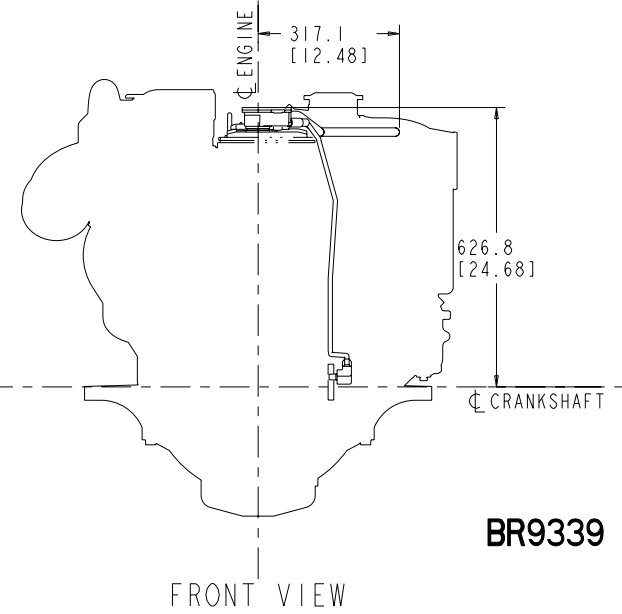


BR9262

FUEL PUMP SIDE

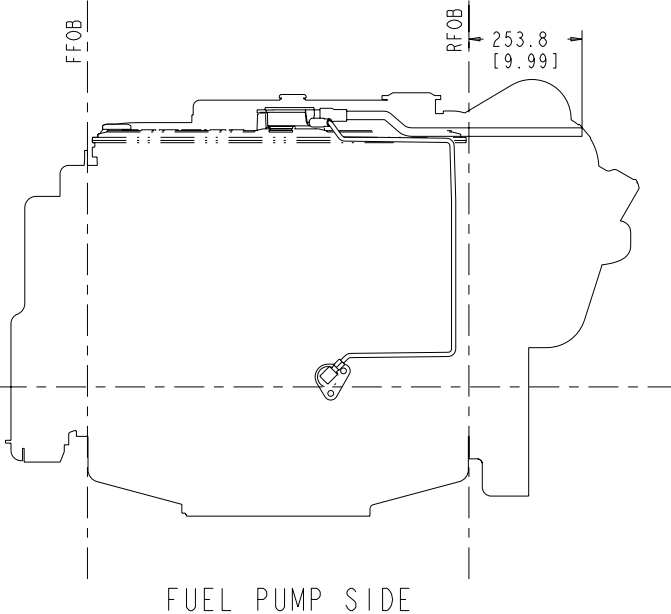


BACK VIEW

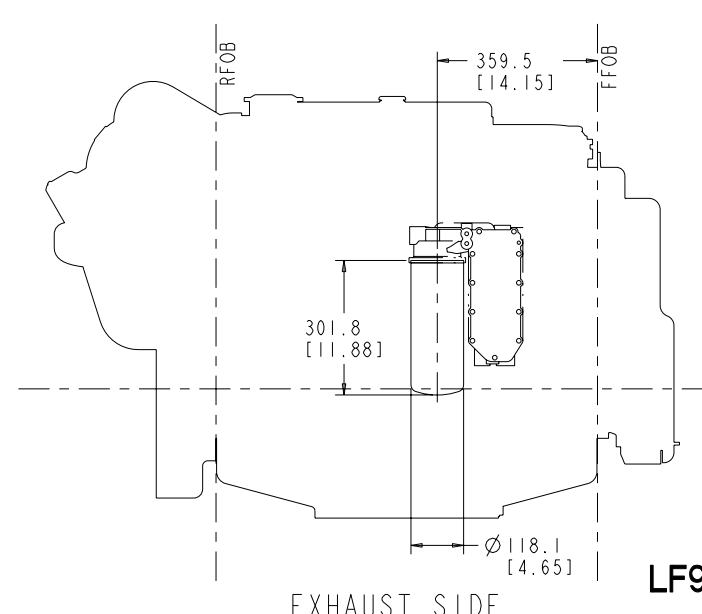


BR9339

FRONT VIEW

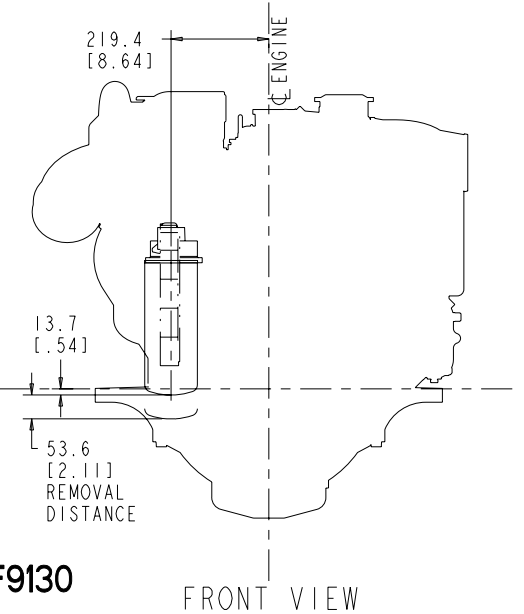


FUEL PUMP SIDE

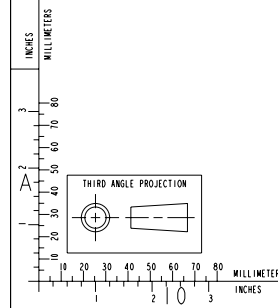


LF9093 W/LF9130

EXHAUST SIDE



FRONT 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

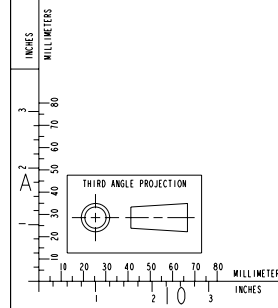
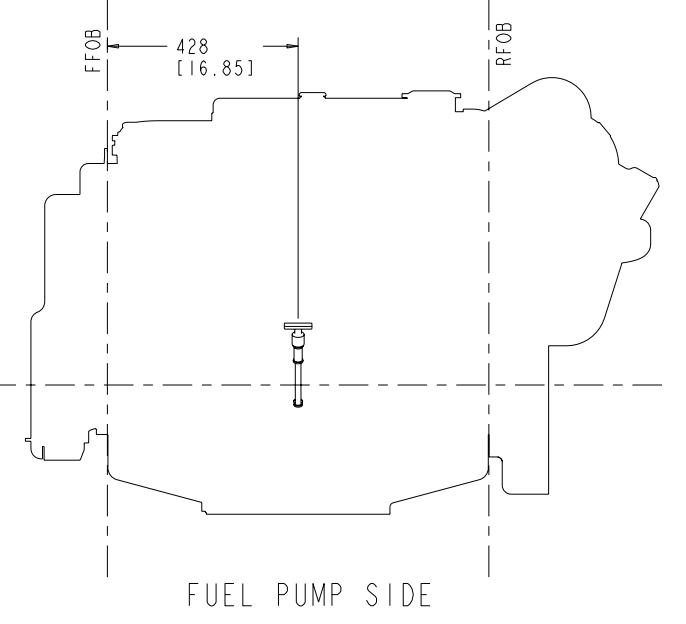
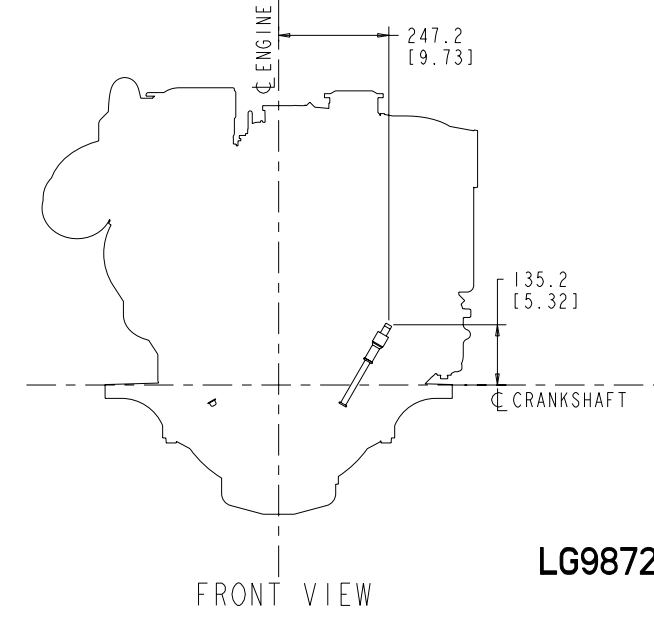
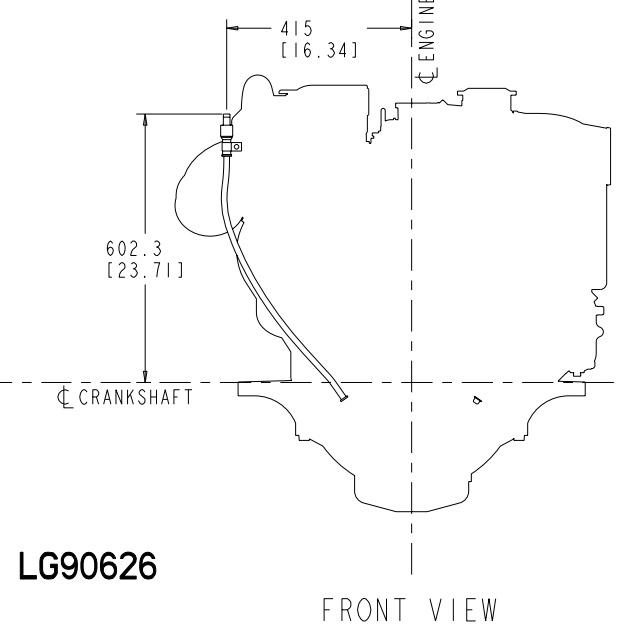
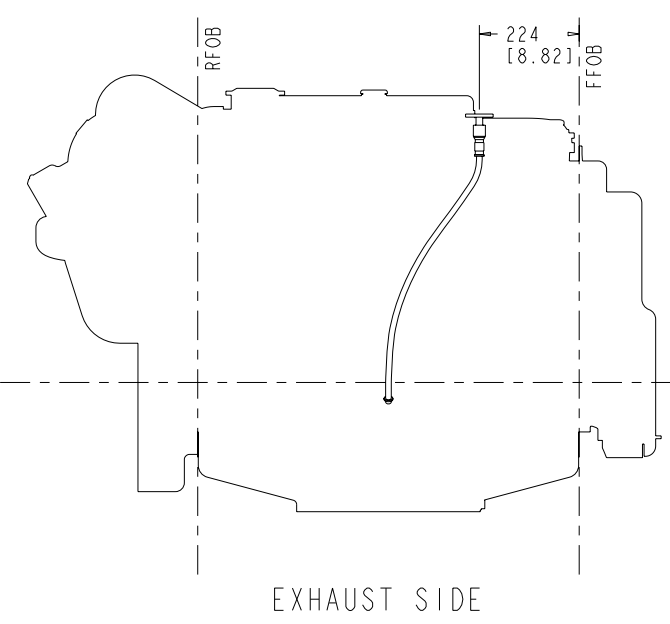
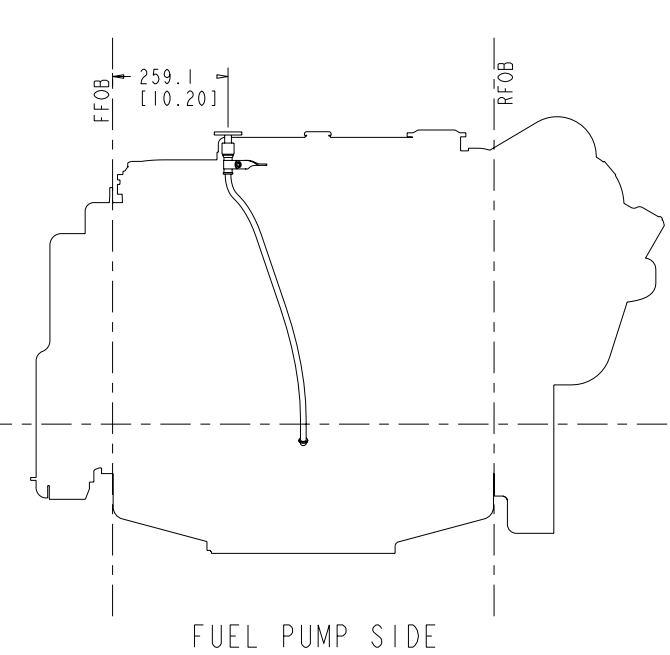
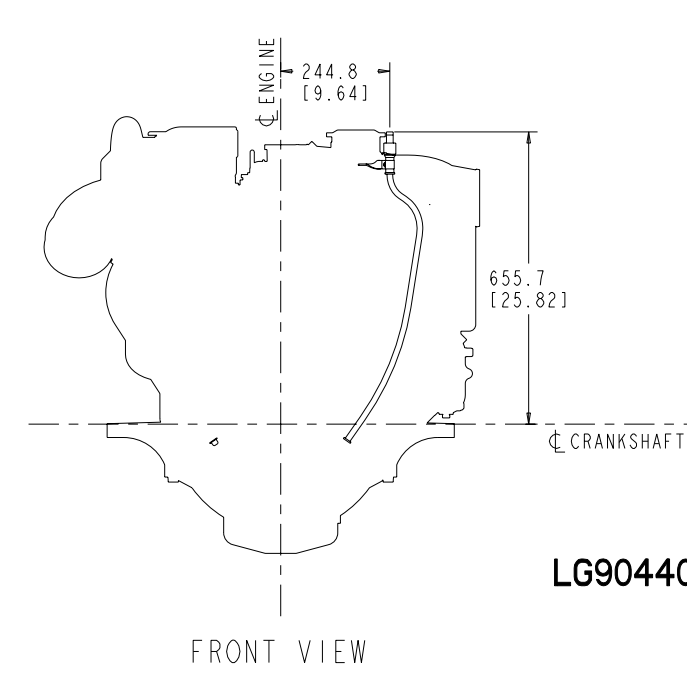
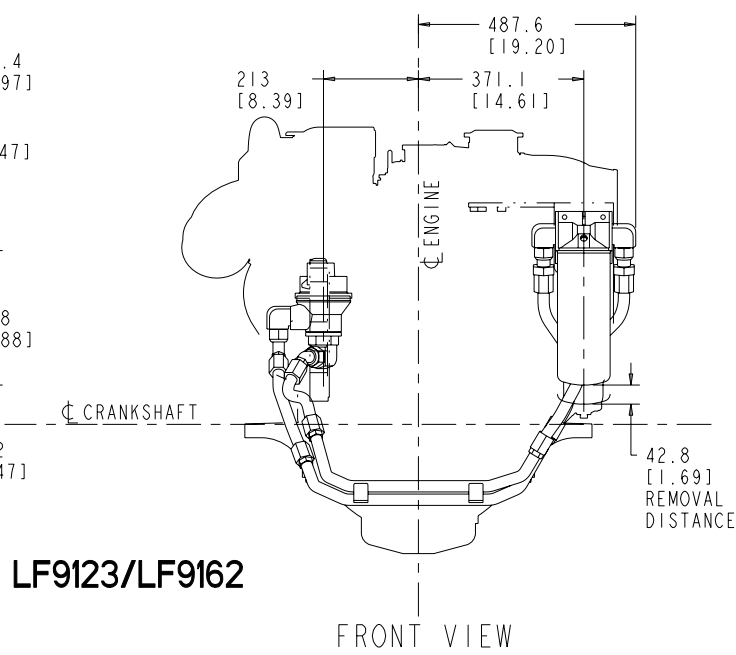
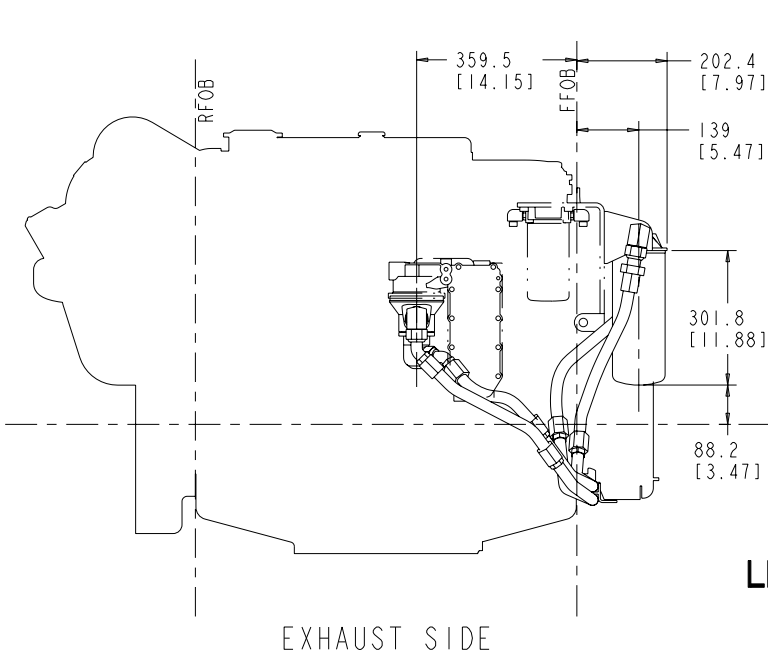
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING 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 () ARE IN: INCHES	ITEM NAME QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN: TMO/ANG CHD: UNCHECKED APPD:	SCALE: 2X	SIZE CODE (IDENT. NO.) J	ITEM NUMBER 3170592
		ITEM CONTROL: MCS	SHEET 15 OF 30

ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-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

- ⑥ GEAR OIL OUTLET FROM COOLER CONNECTION
- ⑦ GEAR OIL OUTLET FROM COOLER PRESSURE PORT
- 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

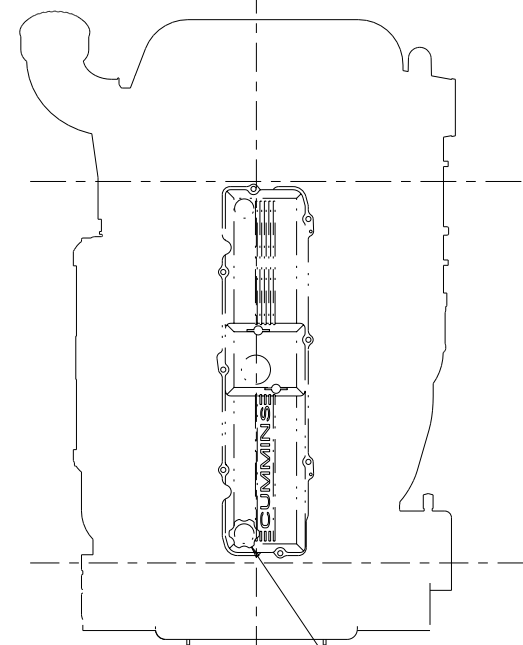
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING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

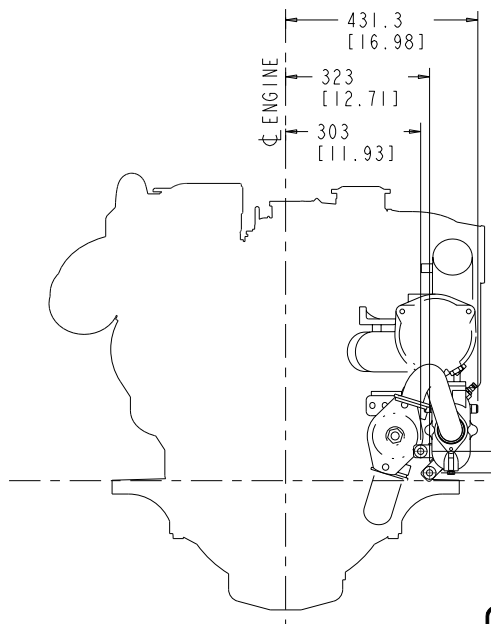
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSC 8.3-HX	IDENTIFIER	
DWN: TMO/ANG CHD: UNCHECKED APPD:	SIZE CODE (IDENT. NO.) J	ITEM NUMBER 3170592	ITEM CONTROL: MCS
SCALE: 2x		SHEET 16 OF 30	

ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	

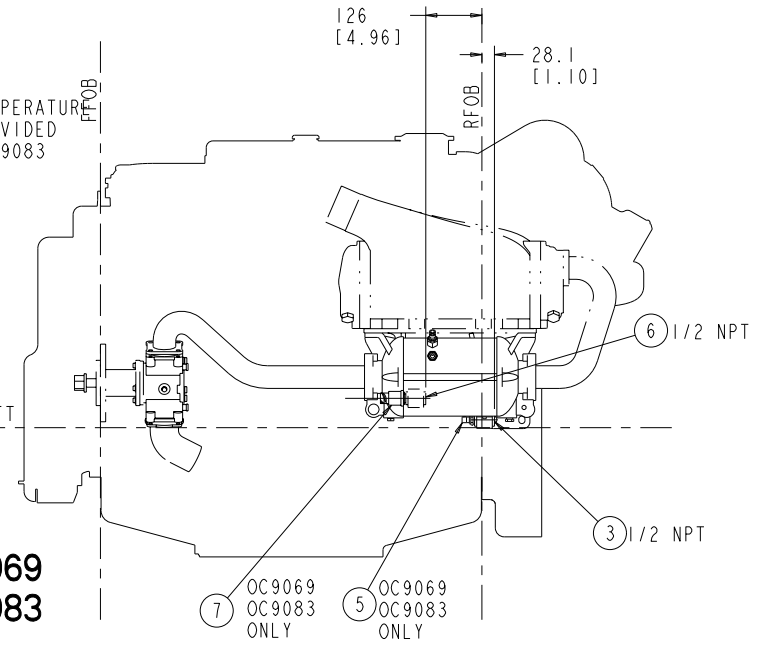


NOTE
FILL LOCATION FOR OB9291
TOP OF VALVE COVER.

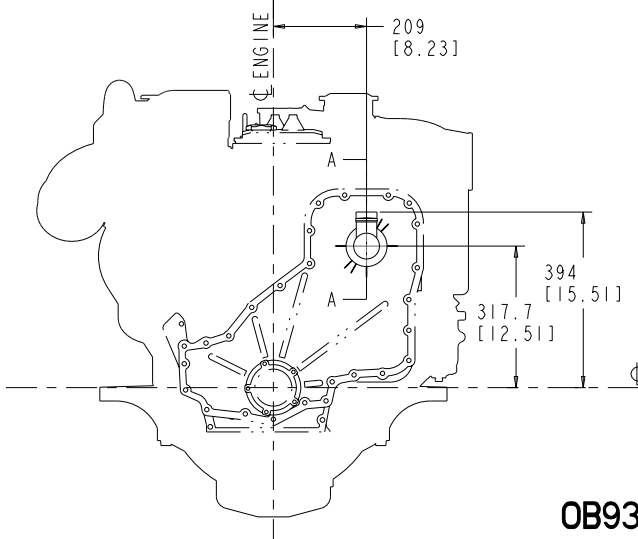


FRONT VIEW

OC9057/OC9069
OC9082/OC9083

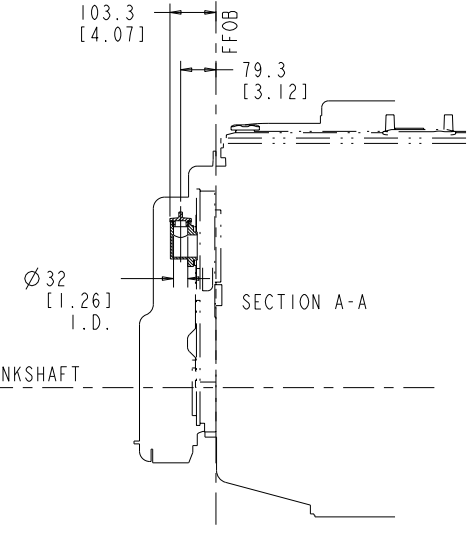


FUEL PUMP SIDE

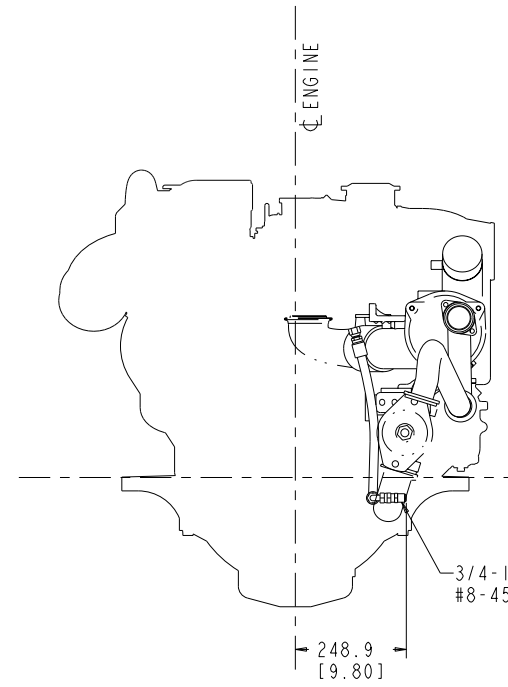


FRONT VIEW

OB9340

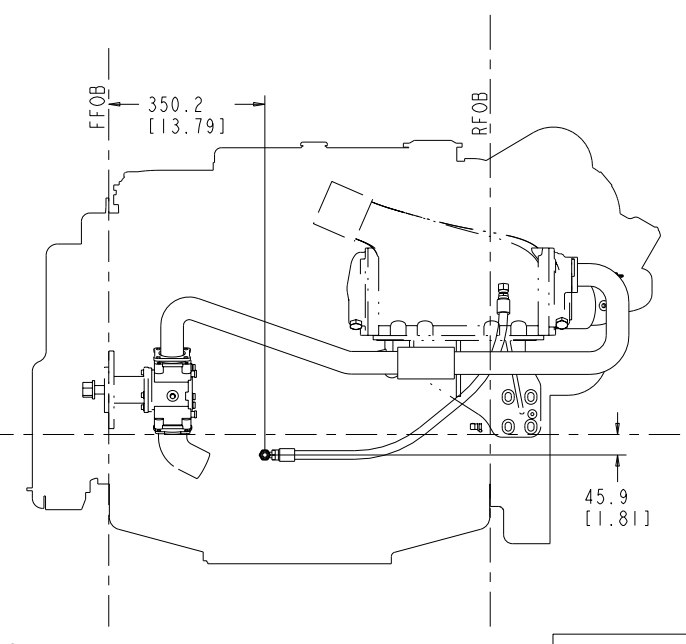


FUEL PUMP SIDE



FRONT VIEW

OC9106



FUEL PUMP SIDE

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 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

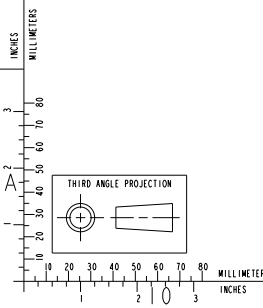
- ⑥ GEAR OIL OUTLET FROM COOLER CONNECTION
- ⑦ GEAR OIL OUTLET FROM COOLER PRESSURE PORT
- ⑧ GEAR OIL OUTLET FROM COOLER TEMPERATURE PORT- N/A
- ⑨ OIL DRAIN BOSS
- ⑩ OIL GALLERY TEMPERATURE PORT

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

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.

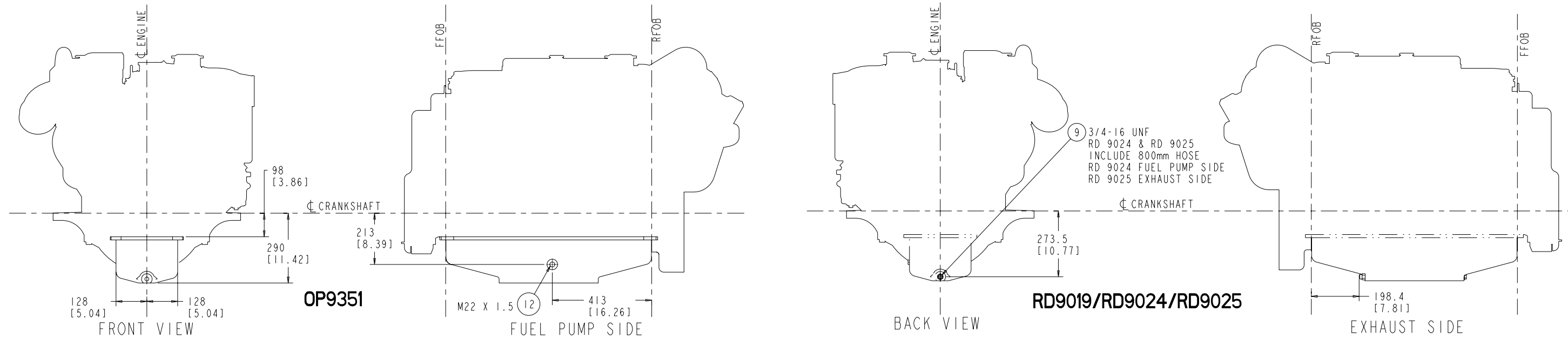
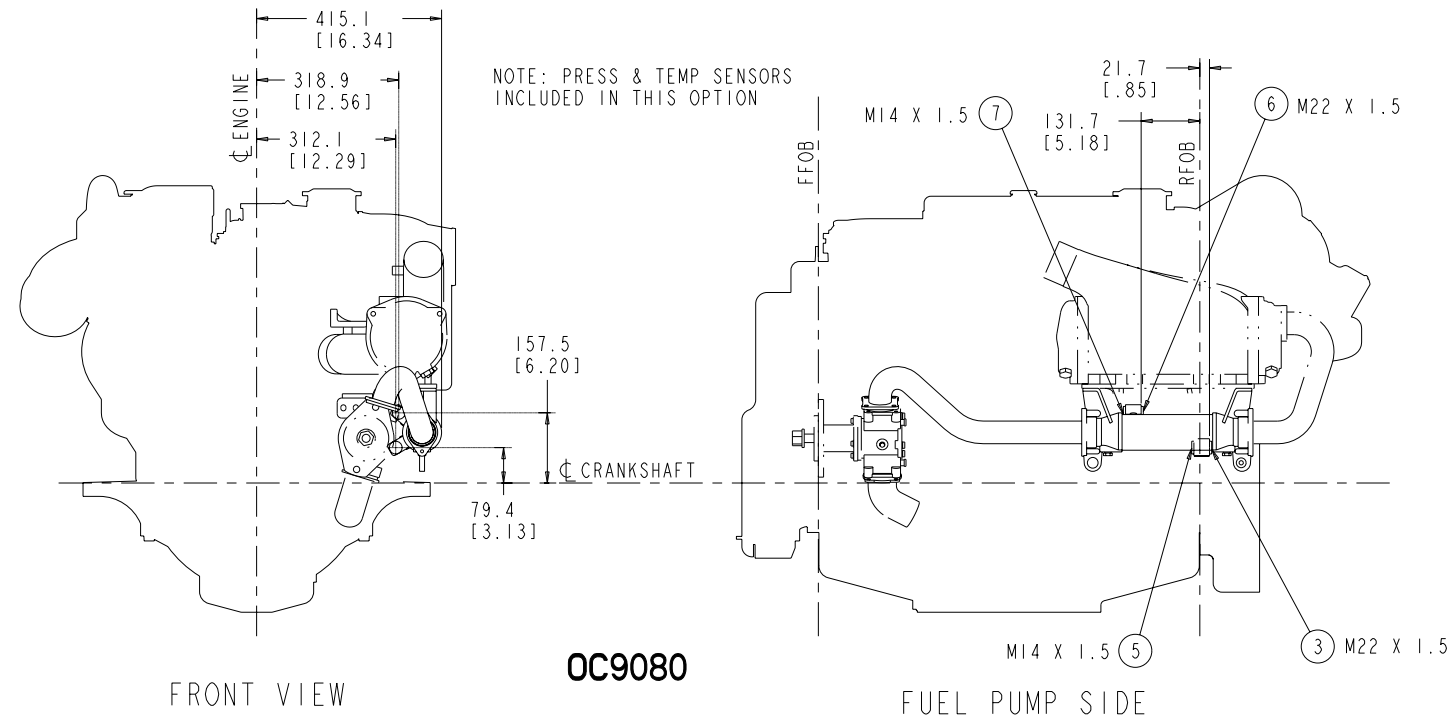
LUBE OIL SYSTEM

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 QSC 8.3-HX	IDENTIFIER
DWN: TMO/ANG CHD: UNCHECKED APPD:	SIZE CODE (IDENT. NO.) J	ITEM NUMBER 3170592
	SCALE: 2x	ITEM CONTROL: MCS SHEET 17 OF 30



ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-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

- ⑥ GEAR OIL OUTLET FROM COOLER CONNECTION
- ⑦ GEAR OIL OUTLET FROM COOLER PRESSURE PORT
- 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

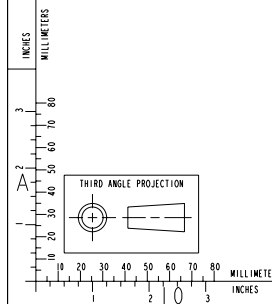
DO NOT SCALE THIS DRAWING

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.

LUBE OIL SYSTEM

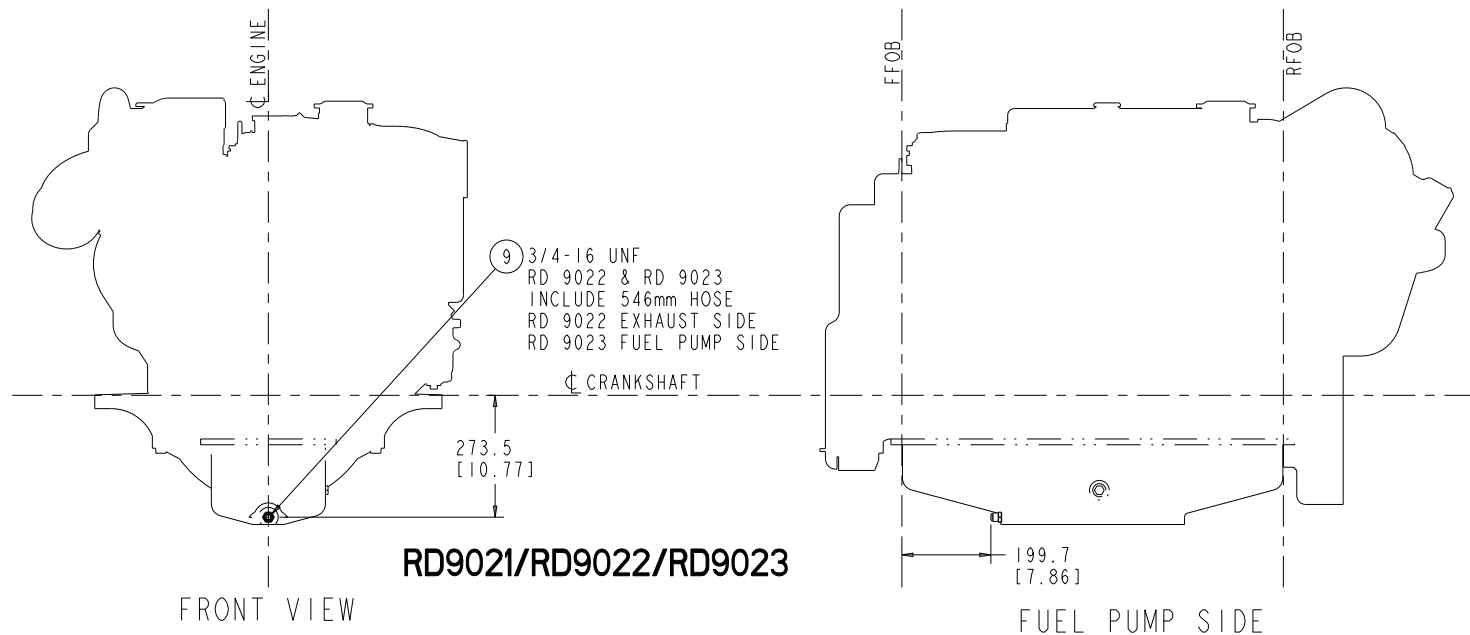
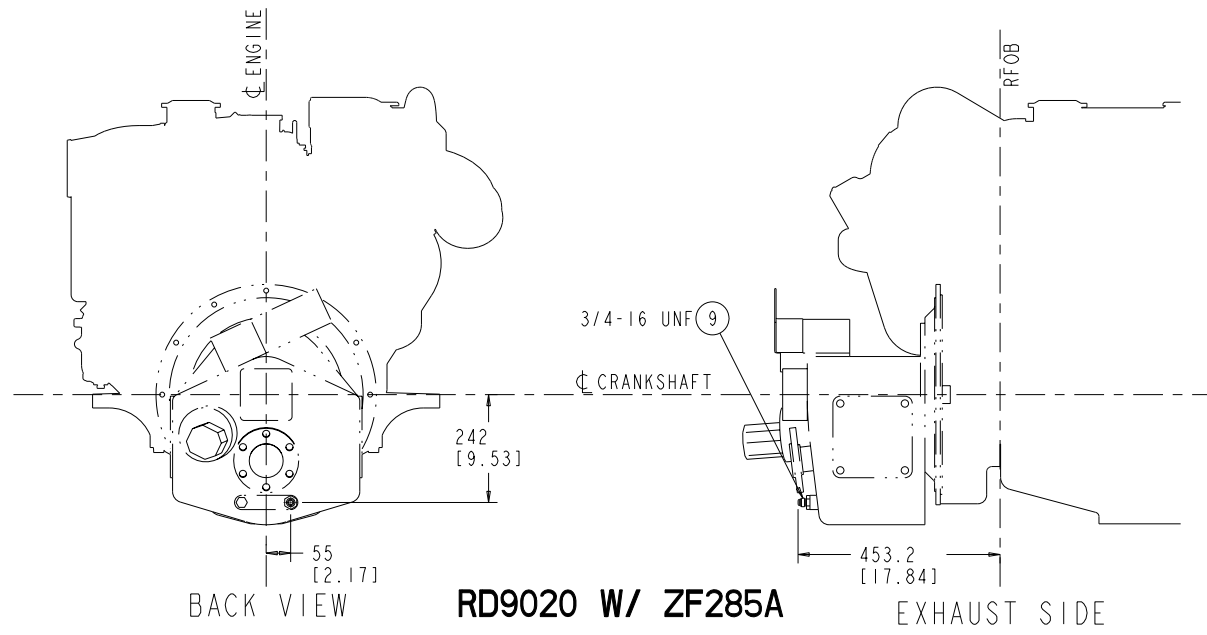
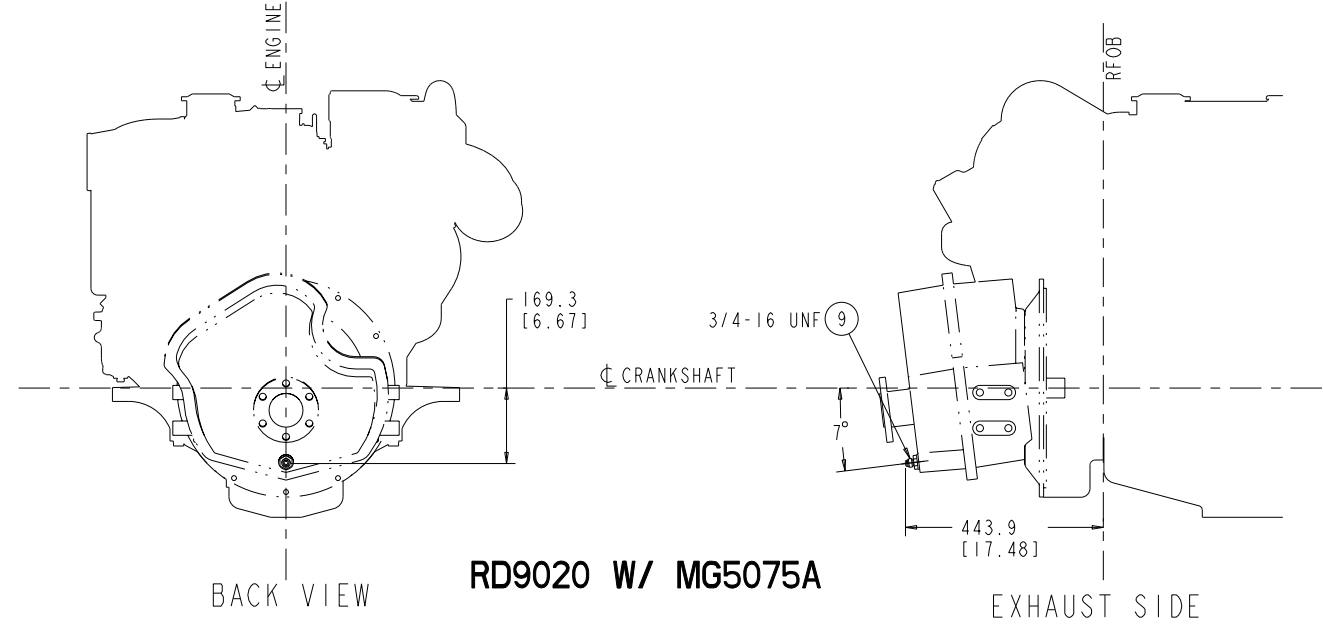
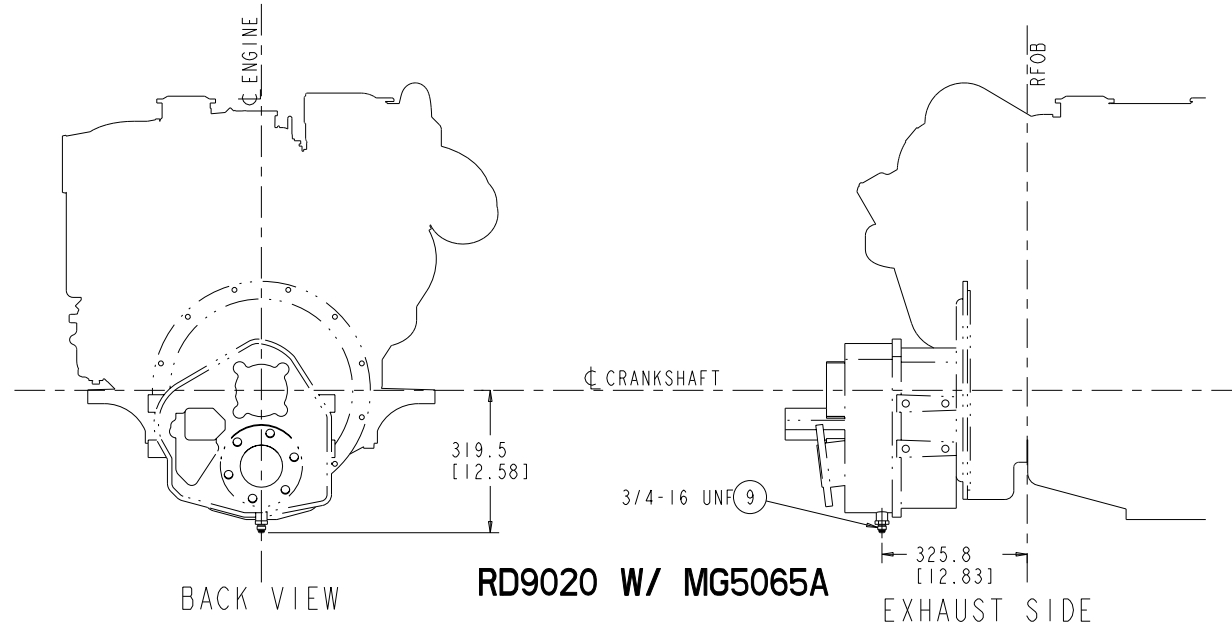
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSC 8.3-HX	IDENTIFIER	
DWN: TMO/TGANG CHD: UNCHECKED APPD:	SIZE CODE (IDENT. NO.) J	ITEM NUMBER 3170592	ITEM CONTROL: MCS
	SCALE: 2x		SHEET 18 OF 30



ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	



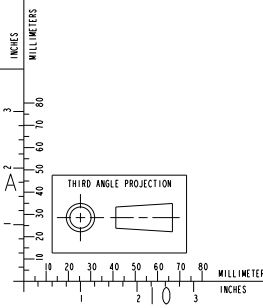
- | | | |
|---|--|--|
| <ul style="list-style-type: none"> ① CENTINEL VALVE OIL SUPPLY CONNECTION- N/A ② CRANKCASE PRESSURE PORT ③ GEAR OIL INLET TO COOLER CONNECTION ④ GEAR OIL INLET TO COOLER PRESSURE PORT- N/A ⑤ GEAR OIL INLET TO COOLER TEMPERATURE PORT | <ul style="list-style-type: none"> ⑥ GEAR OIL OUTLET FROM COOLER CONNECTION ⑦ GEAR OIL OUTLET FROM COOLER PRESSURE PORT 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.

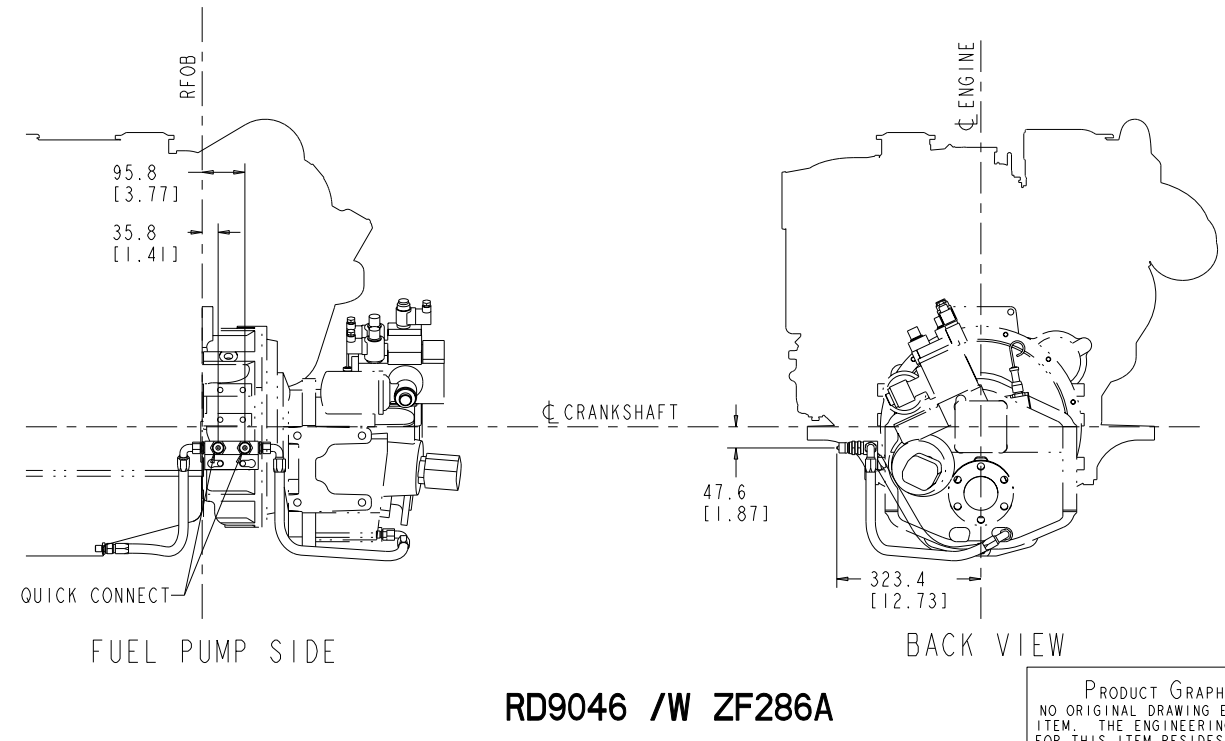
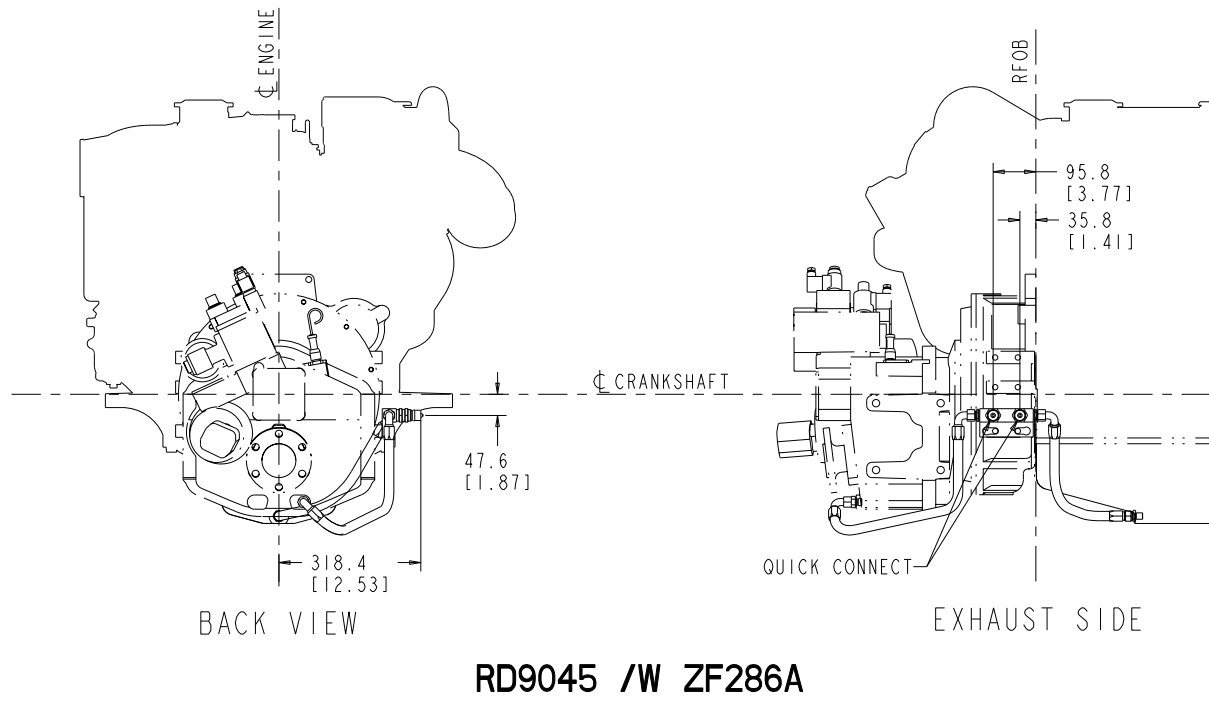
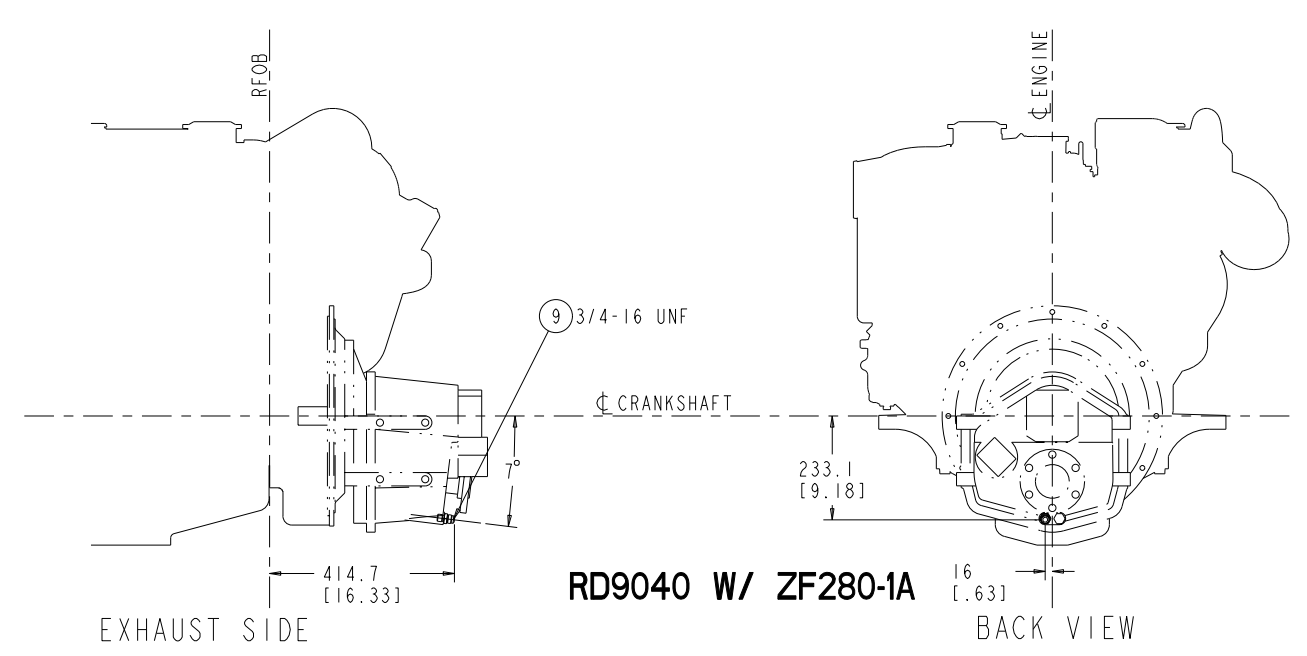
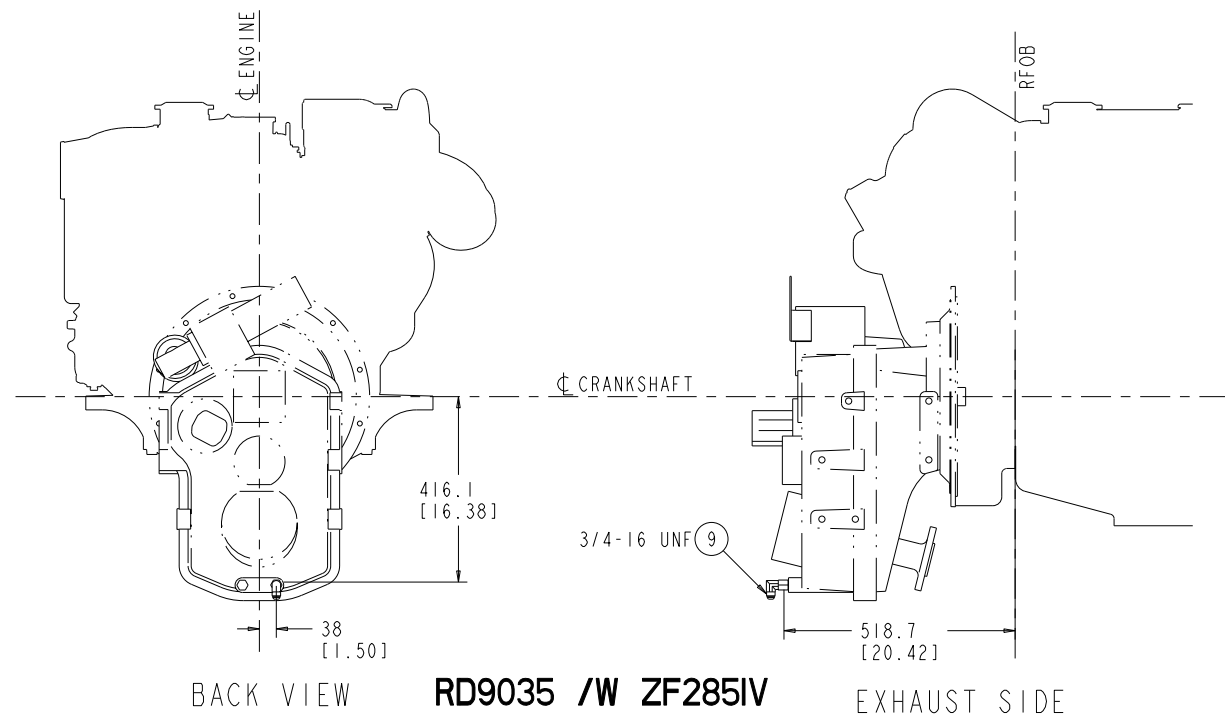
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

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 QSC 8.3-HX	IDENTIFIER	ITEM NUMBER
DWN UNCHECKED	SIZE CODE (IDENT. NO.)	J	3170592
APPD UNCHECKED	SCALE: 2x	ITEM CONTROL: MCS	SHEET 19 OF 30



ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	



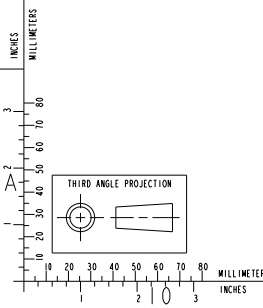
- ① CENTINEL VALVE OIL SUPPLY CONNECTION- N/A
- ② CRANKCASE PRESSURE PORT
- ③ GEAR OIL INLET TO COOLER CONNECTION
- ④ GEAR OIL INLET TO COOLER PRESSURE PORT- N/A
- ⑤ GEAR OIL INLET TO COOLER TEMPERATURE PORT
- ⑥ GEAR OIL OUTLET FROM COOLER CONNECTION
- ⑦ GEAR OIL OUTLET FROM COOLER PRESSURE PORT
- ⑧ 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.

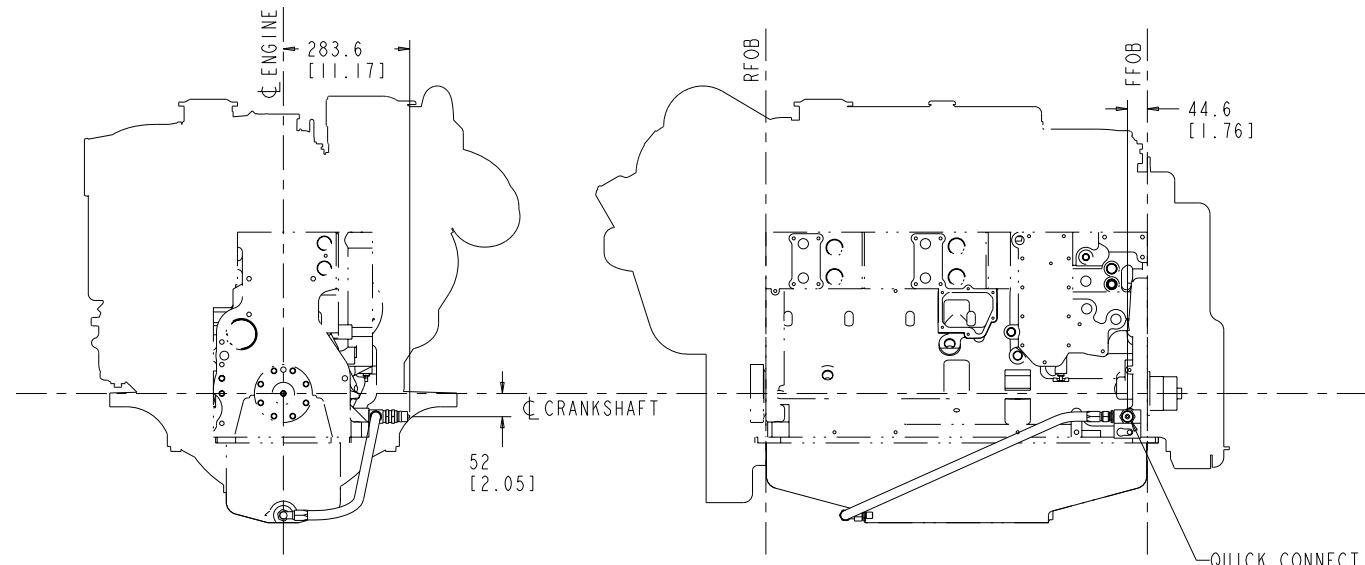
LAST SECTION LETTER USED: A		REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES		ITEM NAME QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN CHD APPD	TWOLGANG UNCHECKED	SCALE: 2x	SIZE CODE (IDENT. NO.) J	ITEM NUMBER 3170592
		ITEM CONTROL: MCS	SHEET 20 OF 30	



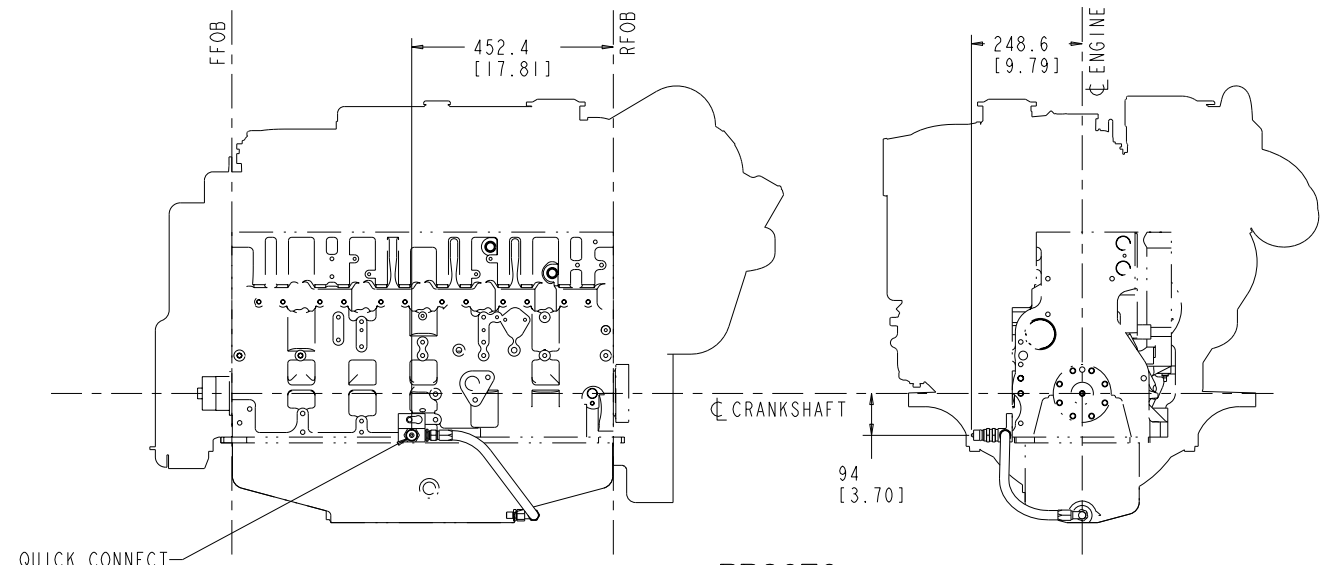
INCHES
MILLIMETERS
0 10 20 30 40 50 60 70 80
0 1 2 3 4 5 6 7 8 9 10

ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	



RD9055



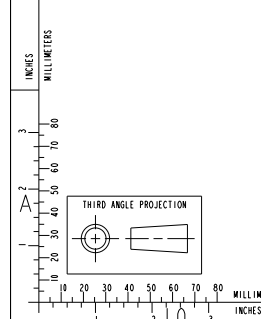
RD9056

BACK VIEW

EXHAUST SIDE

FUEL PUMP SIDE

BACK 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

- ⑥ GEAR OIL OUTLET FROM COOLER CONNECTION
- ⑦ GEAR OIL OUTLET FROM COOLER PRESSURE PORT
- 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

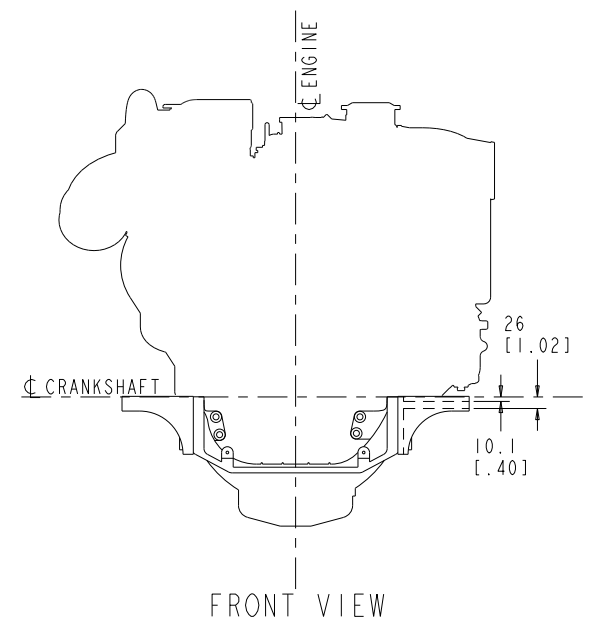
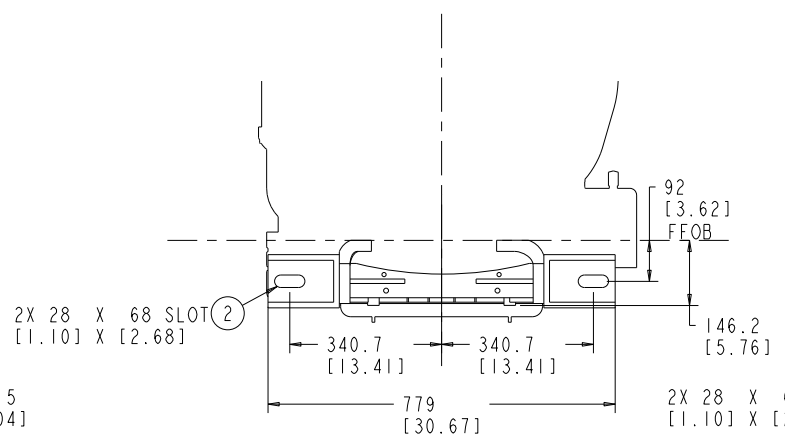
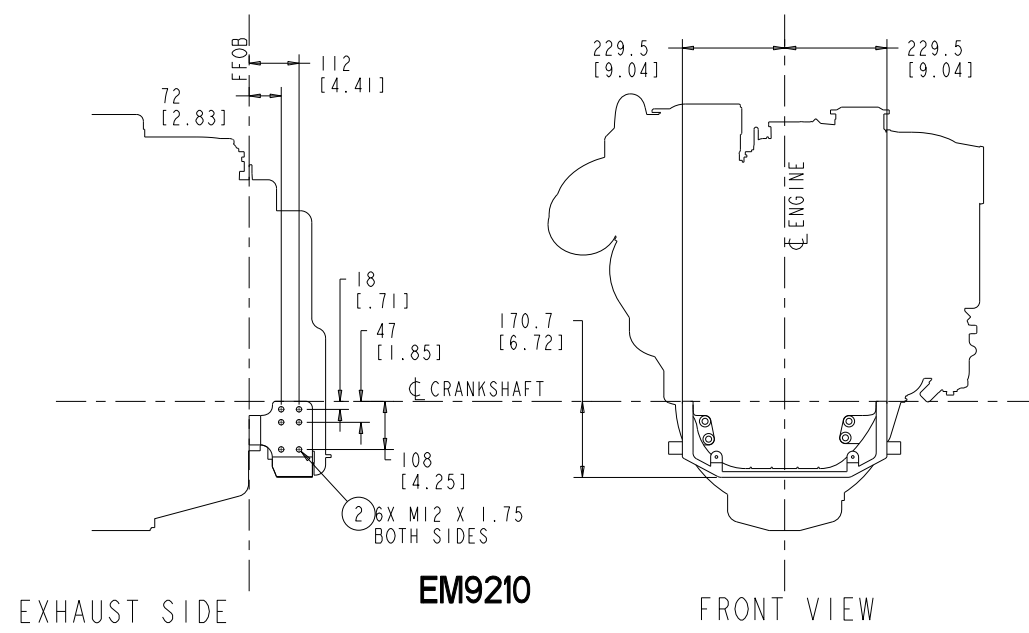
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING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

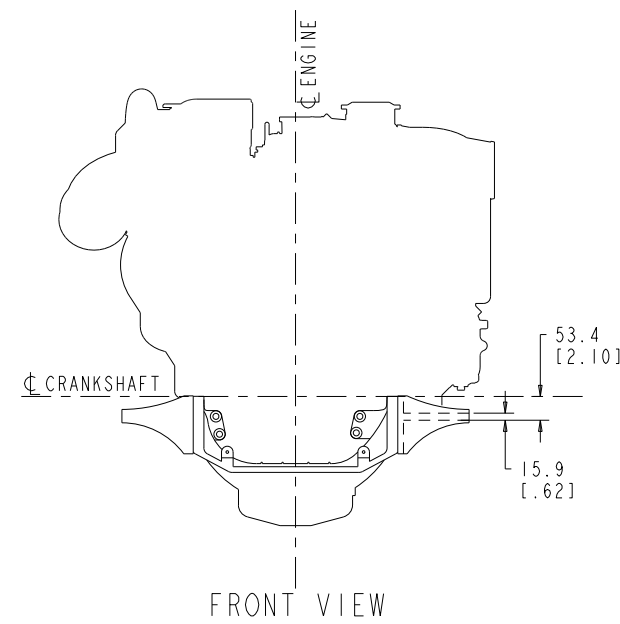
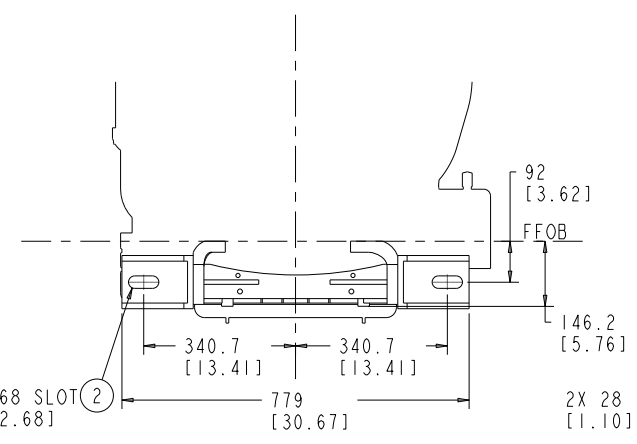
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSC 8.3-HX	IDENTIFIER	
DWN: UNCHECKED CHD: UNCHECKED APPD: UNCHECKED	SIZE CODE IDENT. NO. ITEM NUMBER J 3170592	SCALE: 2X ITEM CONTROL: MCS SHEET 21 OF 30	

ITEM NUMBER
3170592

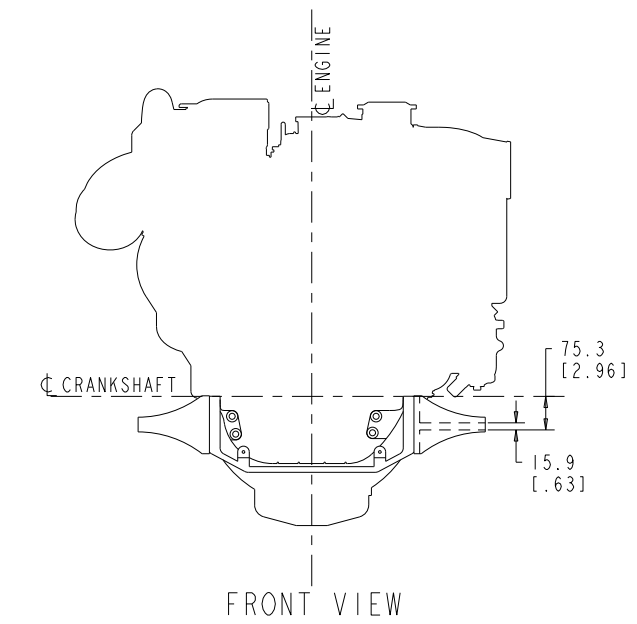
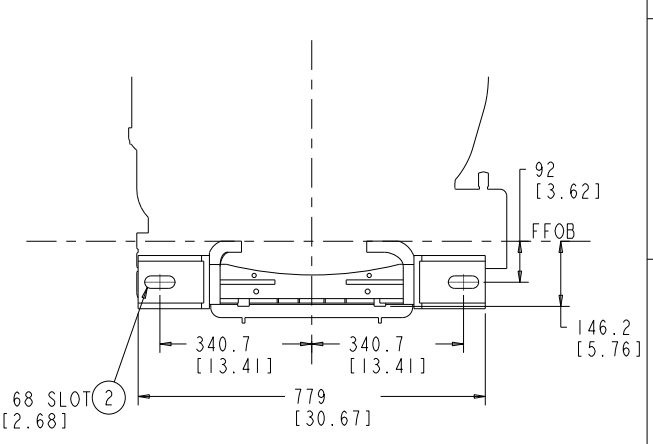
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC 8.3-HX		



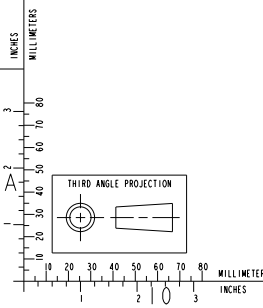
EM9228



EM9229



EM9230



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

DO NOT SCALE THIS DRAWING

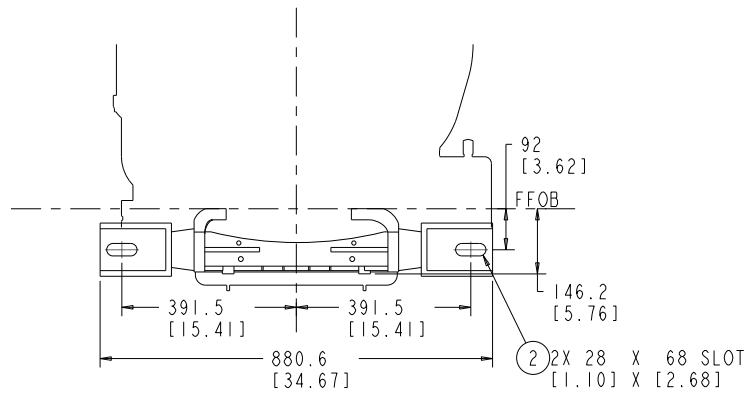
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

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 QSC 8.3-HX	IDENTIFIER
DWN: TMO/TGANG	CHK: UNCHECKED	SIZE CODE (IDENT. NO.):	ITEM NUMBER
APPD:		J	3170592
		SCALE: 2x	ITEM CONTROL: MCS SHEET 22 OF 30

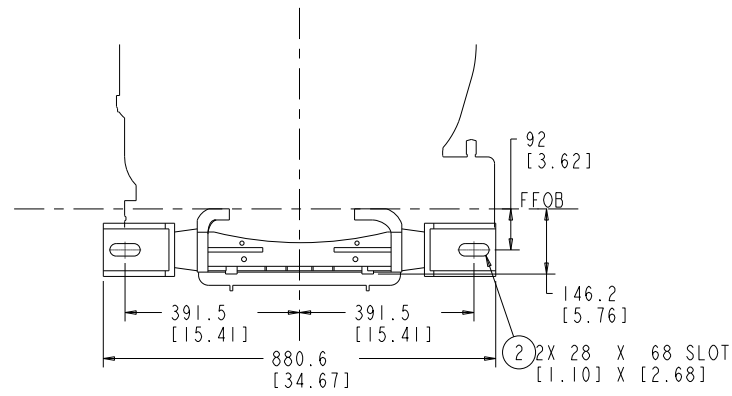
MOUNTING SYSTEM

ITEM NUMBER
3170592

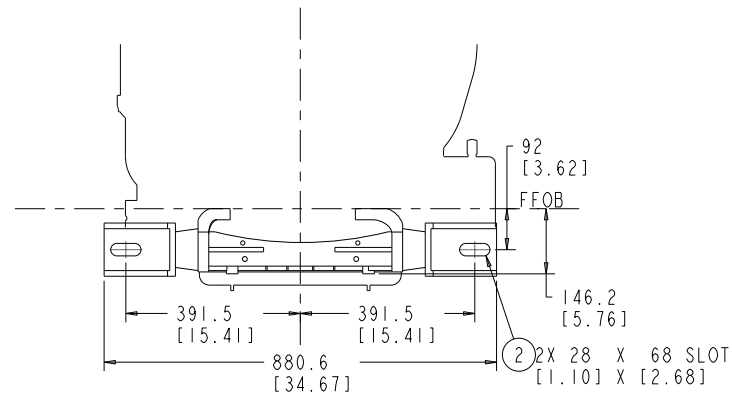
REVISIONS		DWN	APP'D
04	QSC 8.3-HX	J	



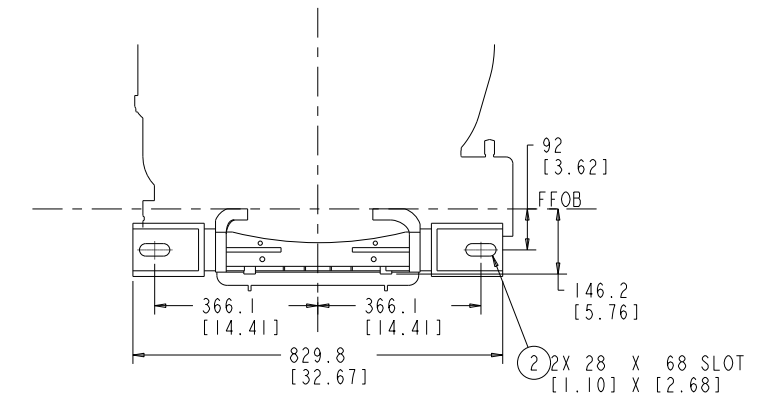
TOP VIEW



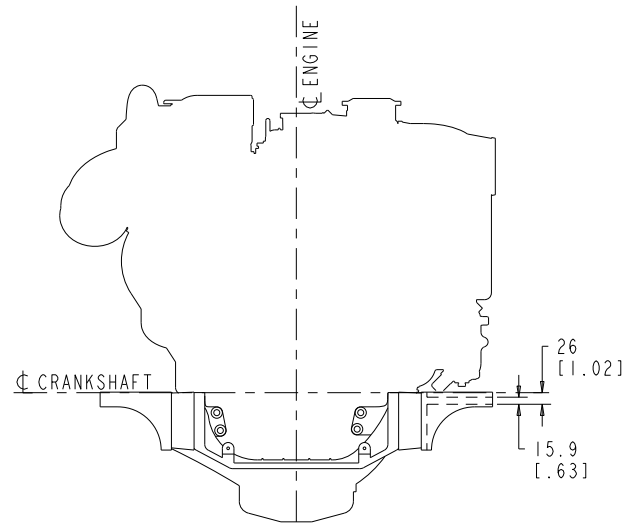
TOP VIEW



TOP VIEW

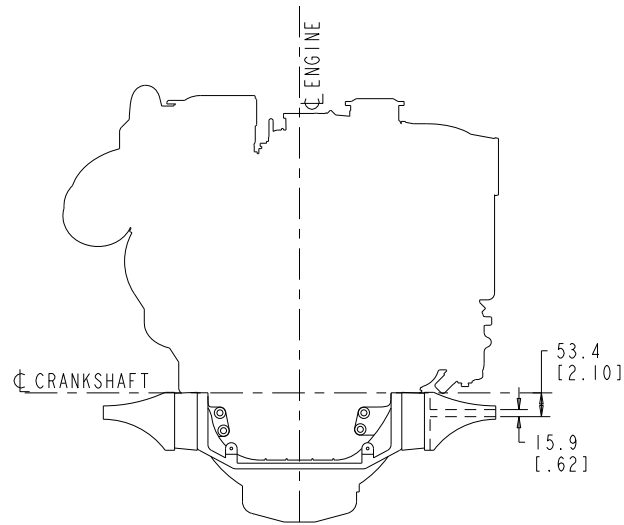


TOP VIEW



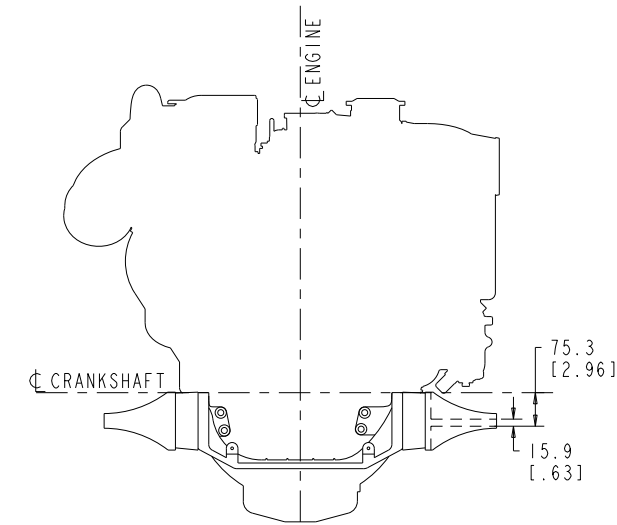
FRONT VIEW

EM9231



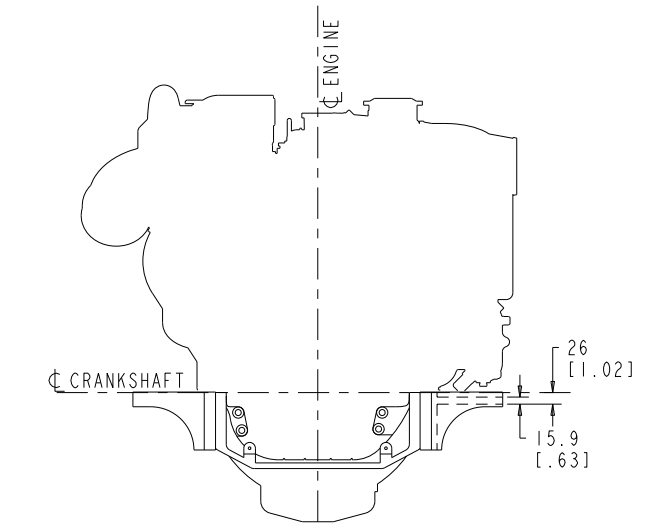
FRONT VIEW

EM9232



FRONT VIEW

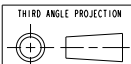
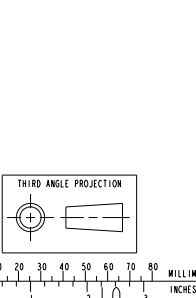
EM9233



FRONT VIEW

EM9252

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.

DO NOT SCALE THIS DRAWING

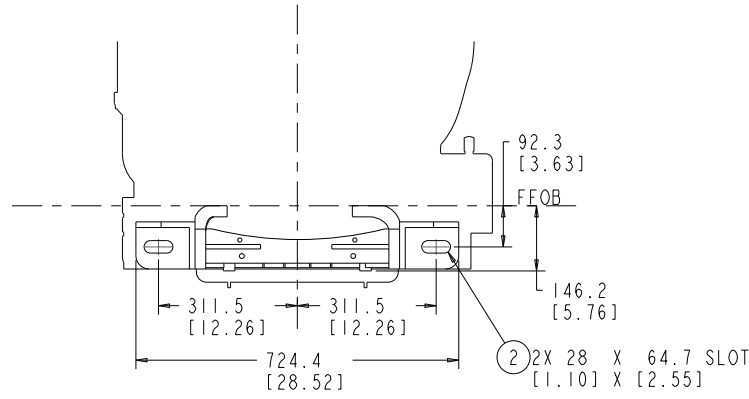
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

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 QSC 8.3-HX	IDENTIFIER J	ITEM NUMBER 3170592
DWN: TMO/TGANG CHD: UNCHECKED APPD:	SIZE CODE (IDENT. NO.) J	ITEM CONTROL: MCS	SHEET 23 OF 30

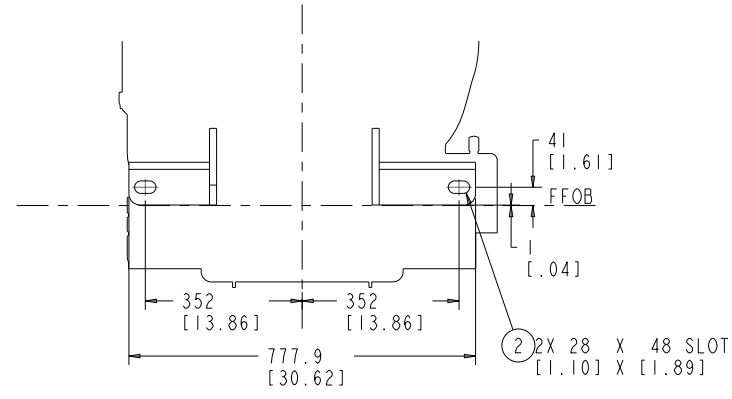
MOUNTING SYSTEM

ITEM NUMBER
3170592

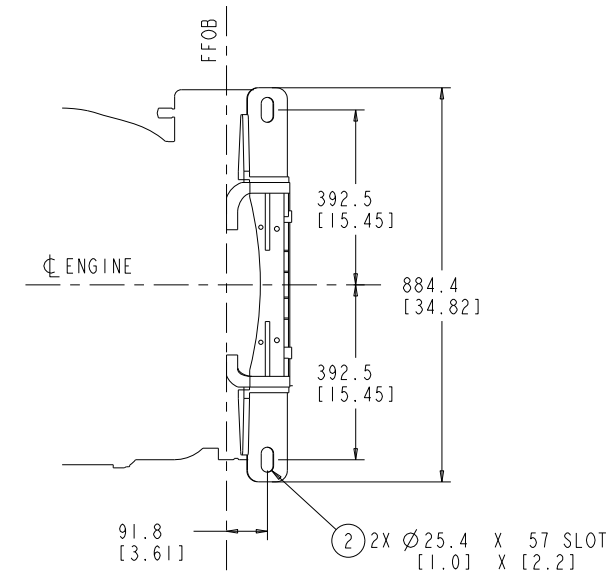
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	



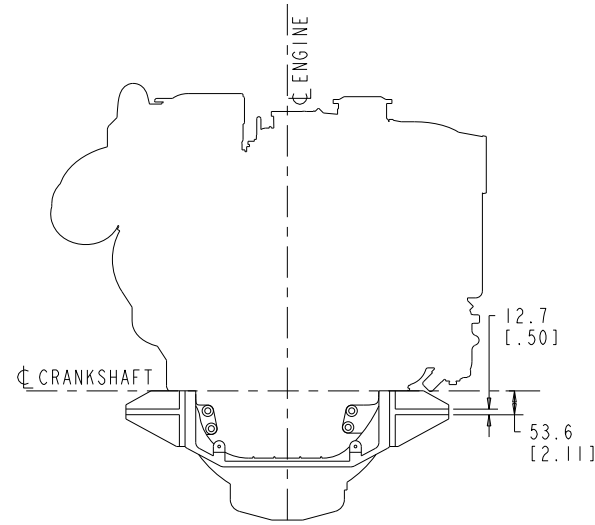
TOP VIEW



TOP VIEW

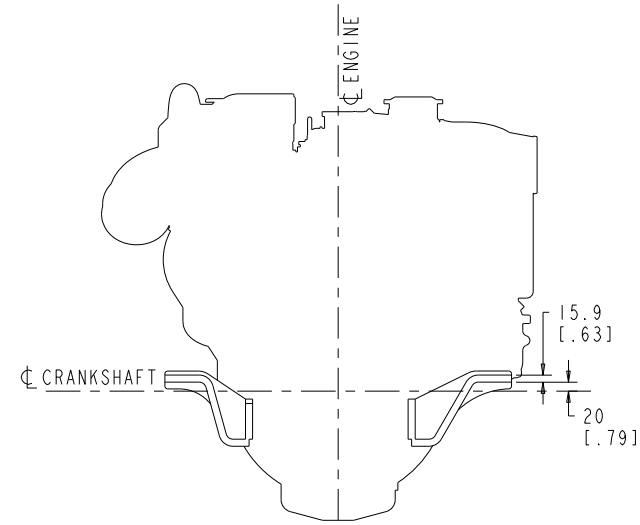


TOP VIEW



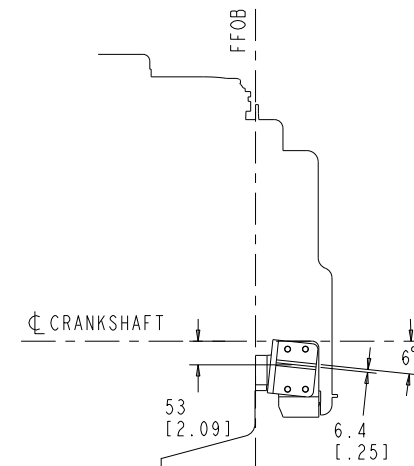
FRONT VIEW

EM9259



FRONT VIEW

EM9261



EXHAUST SIDE

EM9286

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.

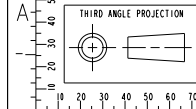
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES	ITEM NAME QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN: UNCHECKED	SIZE CODE (IDENT. NO.) J	ITEM NUMBER 3170592	SCALE: 2X
APPD:	ITEM CONTROL: MCS	SHEET 24 OF 30	

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

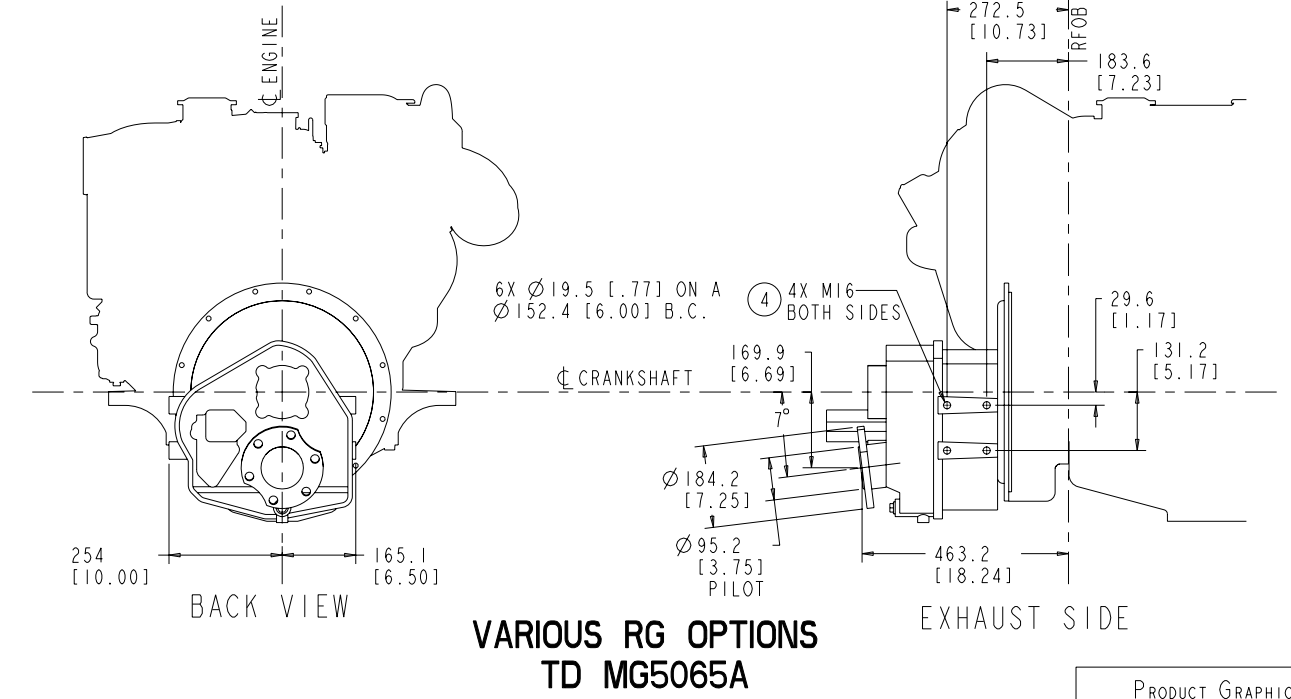
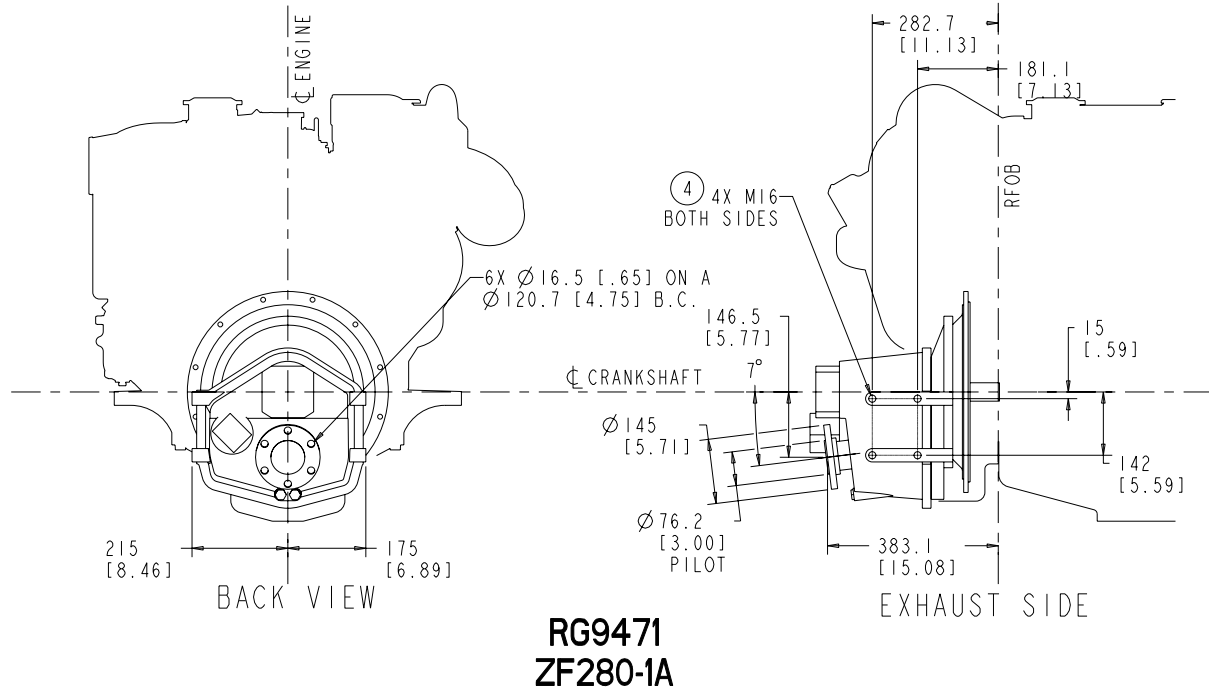
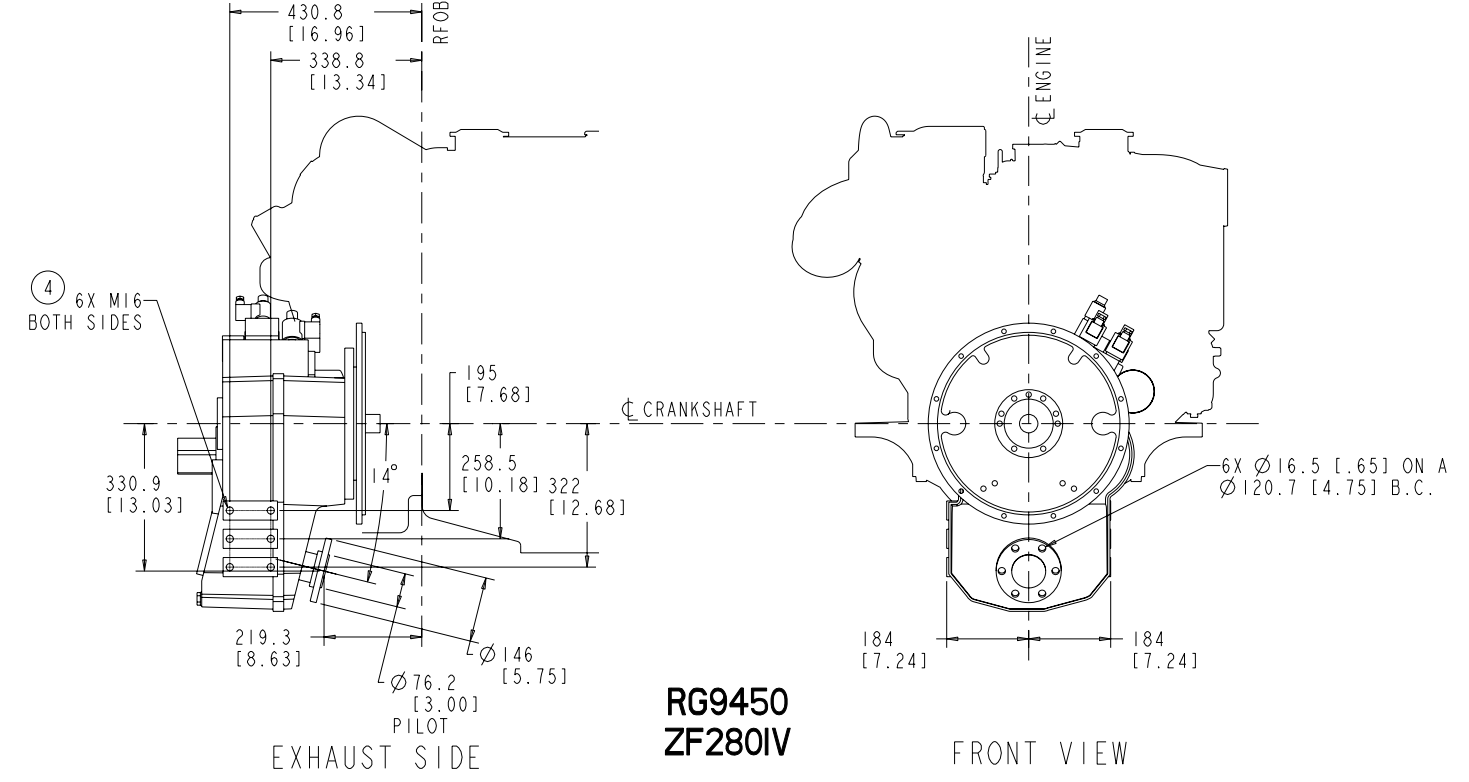
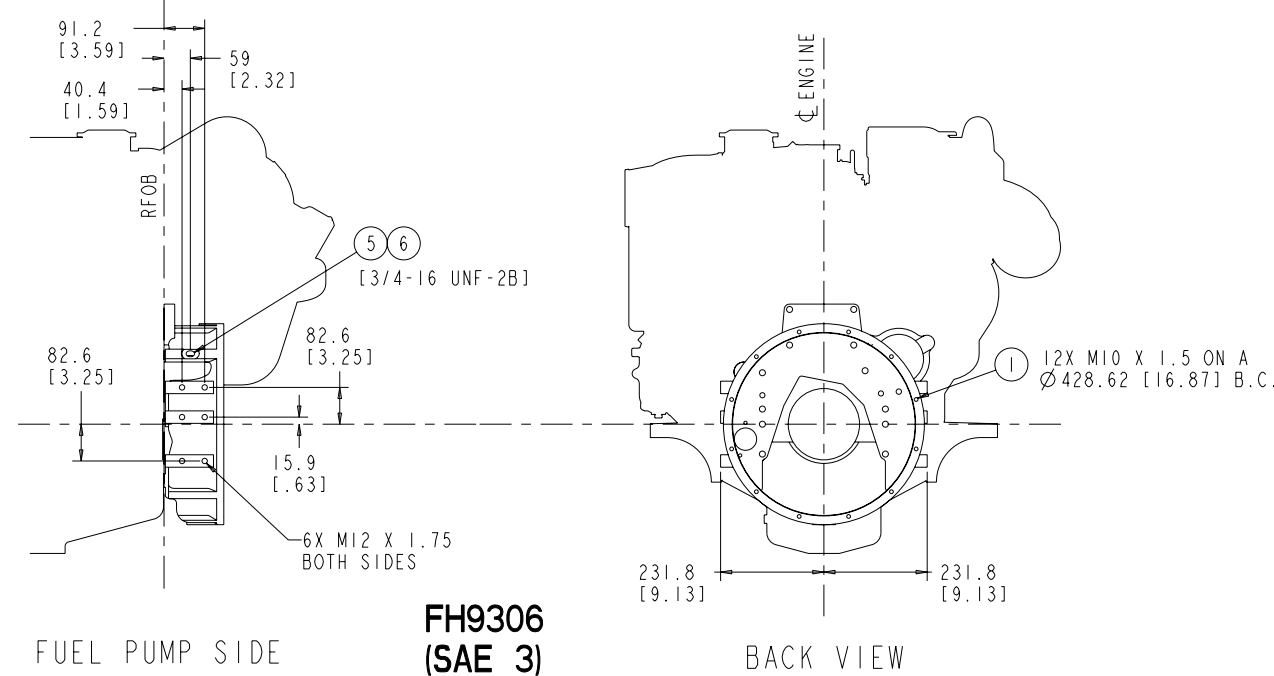
- | | |
|-------------------------------|----------------------------------|
| ① FLYWHEEL HOUSING BOLT HOLES | ④ REAR MOUNT BOLT HOLE |
| ② FRONT MOUNT BOLT HOLE | ⑤ SPEED SENSOR (ECM) PORT |
| ③ JACKING SCREW BOLT HOLE | ⑥ SPEED SENSOR (TACHOMETER) PORT |



INCHES
MILLIMETERS

ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-HX	



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

DO NOT SCALE THIS DRAWING

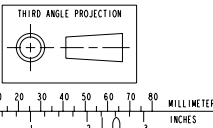
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

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 QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM
DWN: TMO/TGANG CHD: UNCHECKED APPD: UNCHECKED	SIZE CODE IDENT. NO.: J	ITEM NUMBER 3170592
	SCALE: 2x	ITEM CONTROL: MCS SHEET 25 OF 30

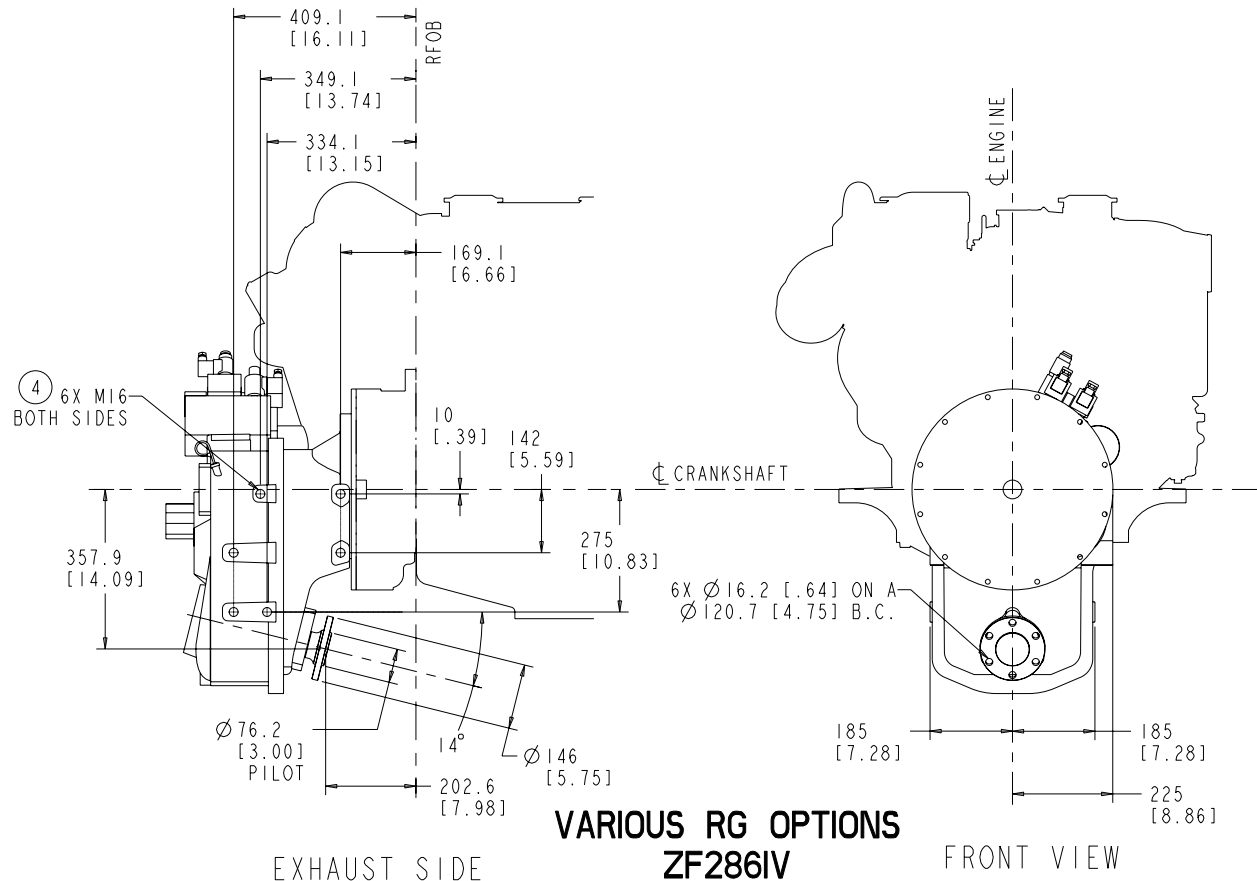
MOUNTING SYSTEM

INCHES
MILLIMETERS

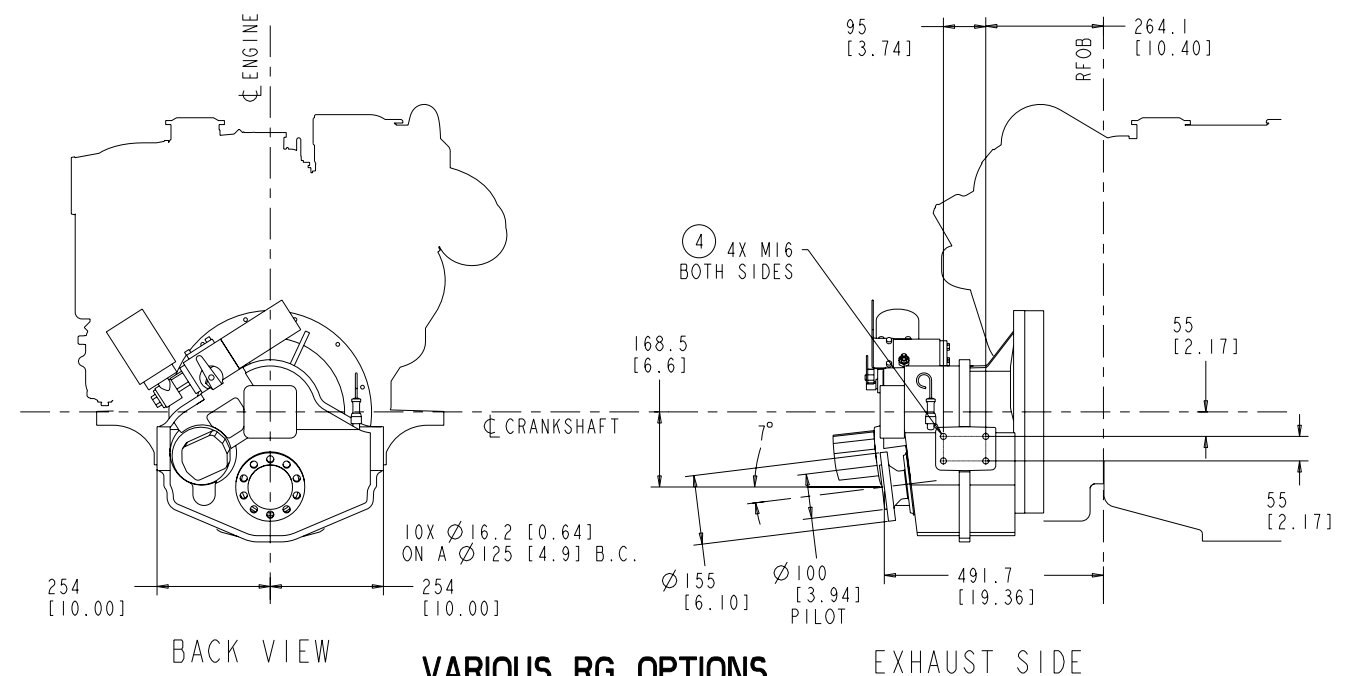


ITEM NUMBER
3170592

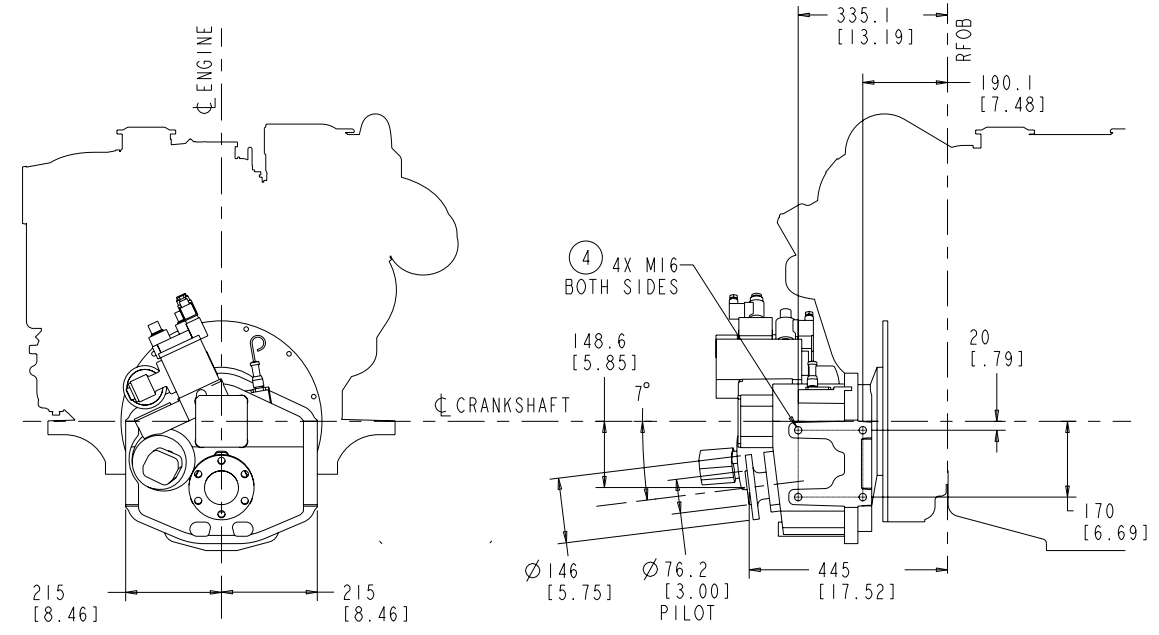
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-HX	



**VARIOUS RG OPTIONS
ZF286IV**



**VARIOUS RG OPTIONS
ZF305-2A**



**VARIOUS RG OPTIONS
ZF286A**

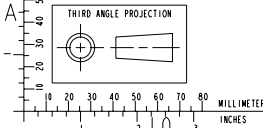
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

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 QSC 8.3-HX	IDENTIFIER
DWN: TMO/TGANG	APPD: UNCHECKED	SIZE CODE (IDENT. NO.)	ITEM NUMBER
APPD:		J	3170592
		SCALE: 2x	ITEM CONTROL: MCS SHEET 26 OF 30

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

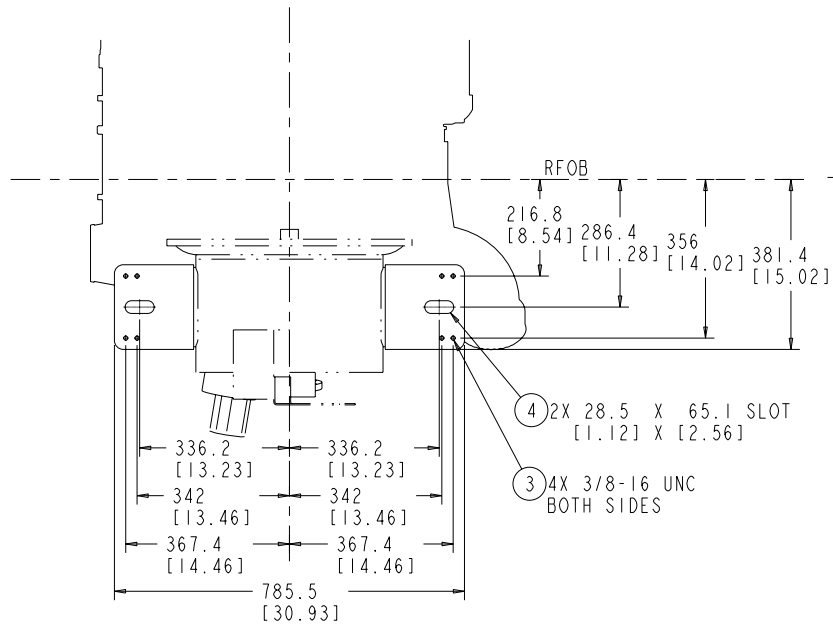
- ① FLYWHEEL HOUSING BOLT HOLES
- ② FRONT MOUNT BOLT HOLE
- ③ JACKING SCREW BOLT HOLE
- ④ REAR MOUNT BOLT HOLE
- ⑤ SPEED SENSOR (ECM) PORT
- ⑥ SPEED SENSOR (TACHOMETER) PORT



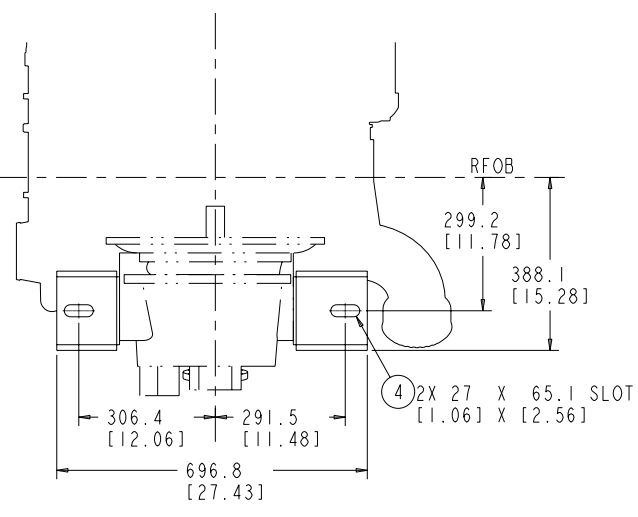
INCHES
MILLIMETERS

ITEM NUMBER
3170592

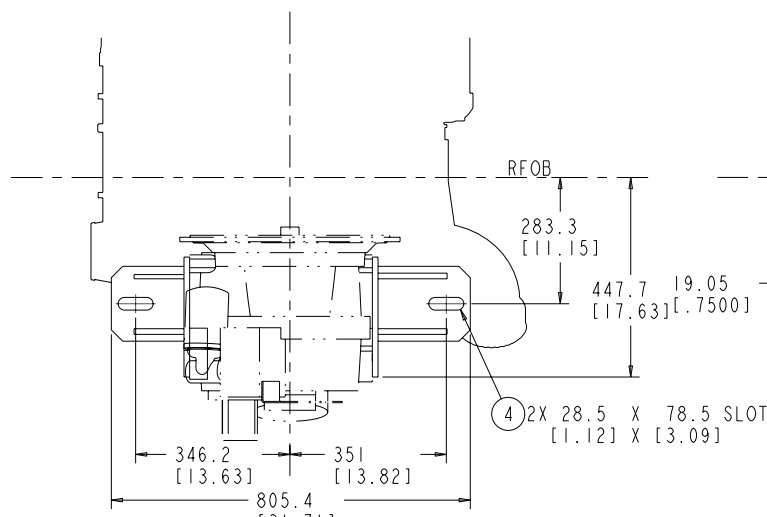
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-HX	



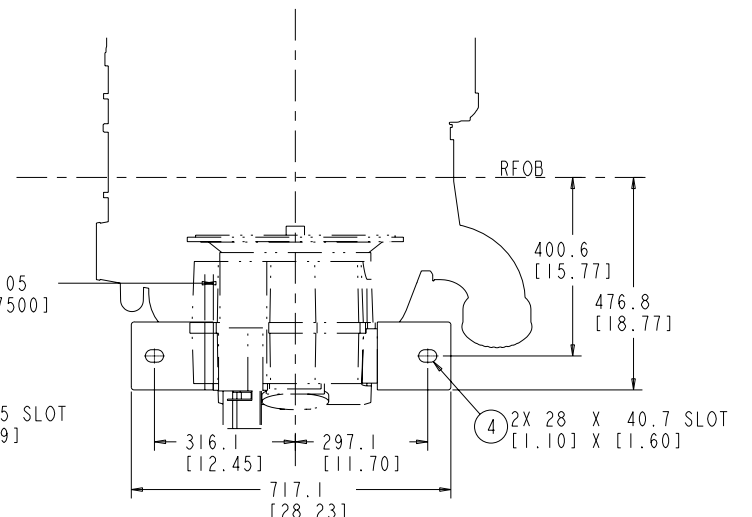
TOP VIEW



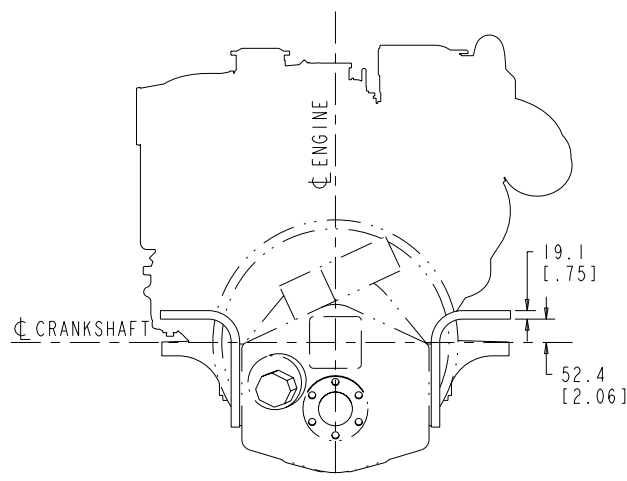
TOP VIEW



TOP VIEW

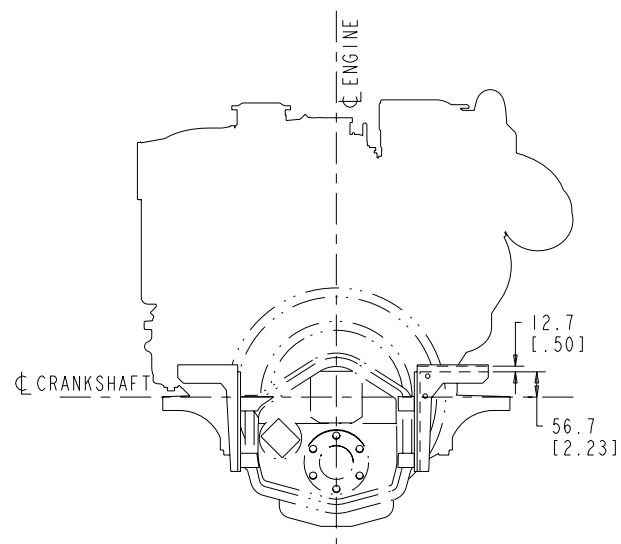


TOP VIEW



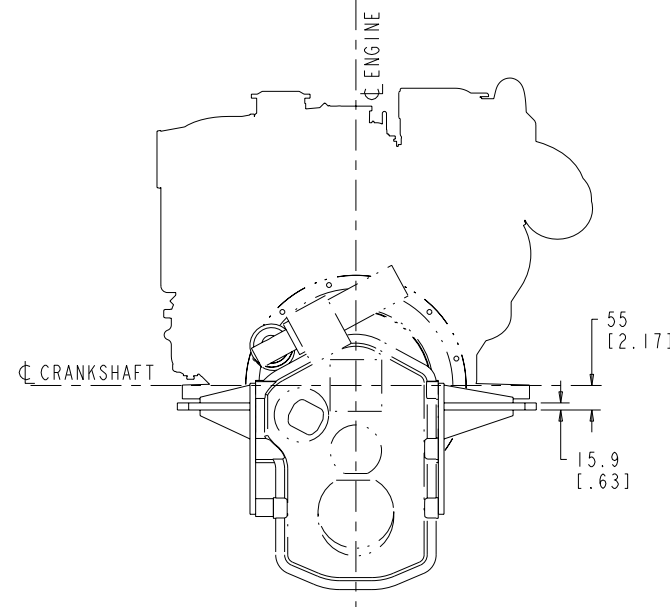
BACK VIEW

SA9035
ZF285A/ZF286A



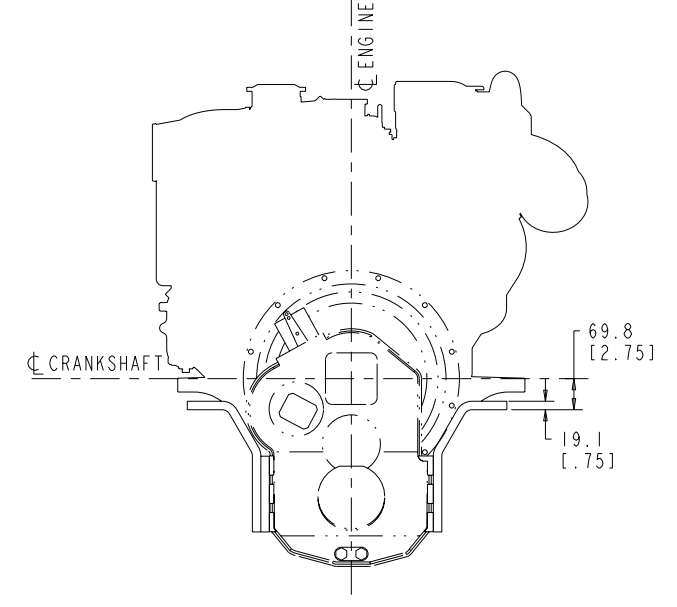
BACK VIEW

SA9046
ZF280-1A



BACK VIEW

SA9051
ZF285IV/ZF286IV



BACK VIEW

SA9058
ZF280IV

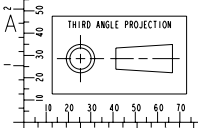
PRODUCT GRAPHICS FILE
NO ORIGINAL DRAWING EXISTS FOR THIS ITEM. THE ENGINEERING GRAPHICS DATA FOR THIS ITEM RESIDES IN THE PRODUCT GRAPHICS FILE AND IS CONTROLLED BY THE AGENCY DESIGNATED AS HAVING ITEM CONTROL.

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 QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN	TWO	SCALE	SIZE	ITEM NUMBER
CHD	UNCHECKED			3170592
APPD				ITEM CONTROL: MCS
APPD				SHEET 27 OF 30

DO NOT SCALE THIS DRAWING

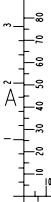
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING CAD SERVICES DEPARTMENT.

MOUNTING SYSTEM



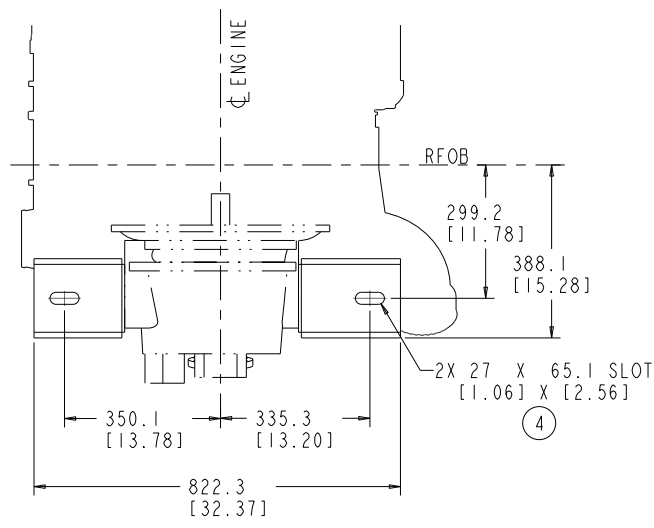
- | | |
|-------------------------------|----------------------------------|
| ① FLYWHEEL HOUSING BOLT HOLES | ④ REAR MOUNT BOLT HOLE |
| ② FRONT MOUNT BOLT HOLE | ⑤ SPEED SENSOR (ECM) PORT |
| ③ JACKING SCREW BOLT HOLE | ⑥ SPEED SENSOR (TACHOMETER) PORT |

INCHES
MILLIMETERS

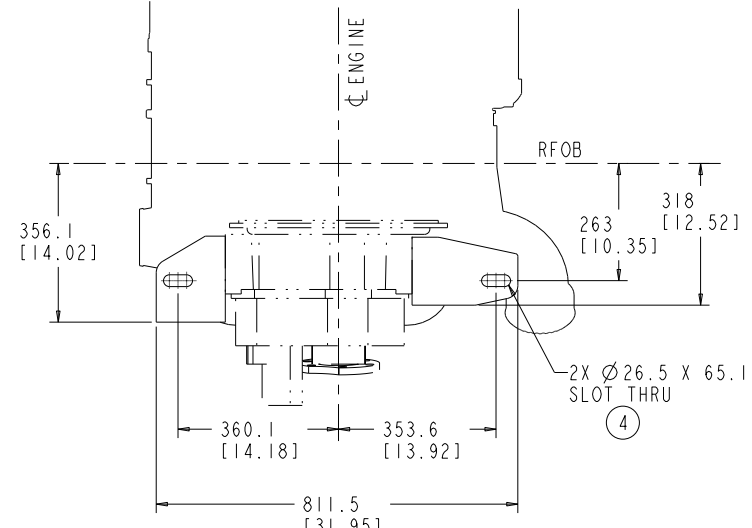


ITEM NUMBER
3170592

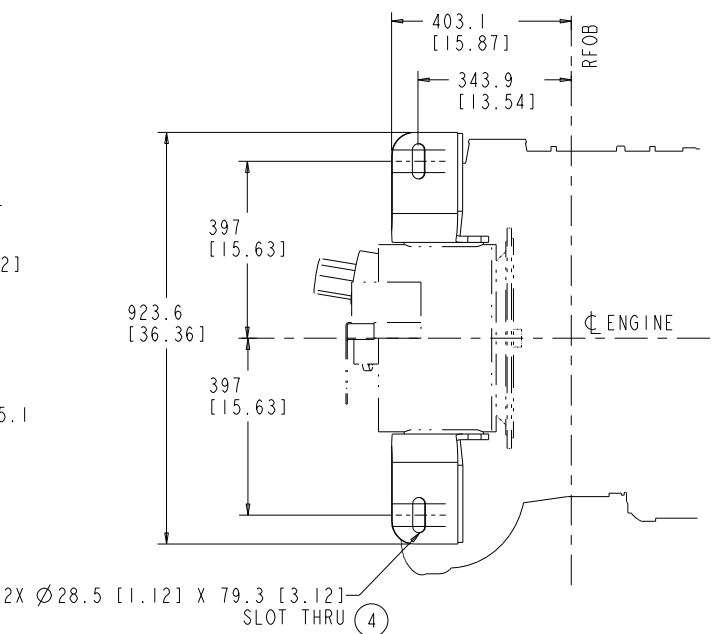
REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-HX	



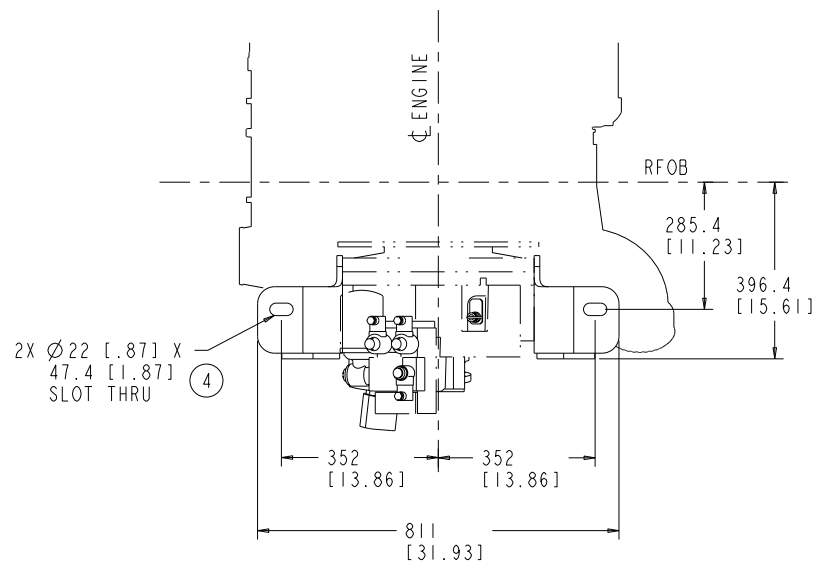
TOP VIEW



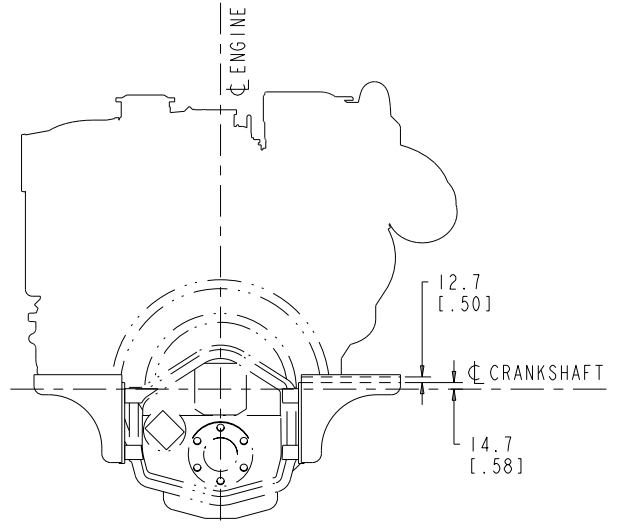
TOP VIEW



TOP VIEW

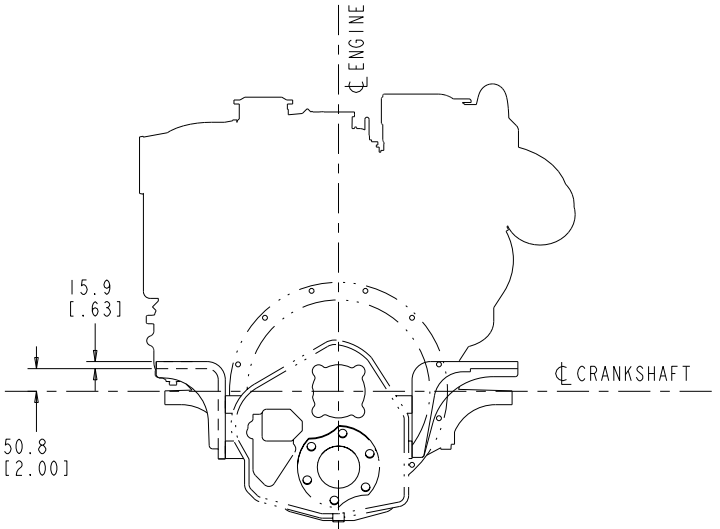


TOP VIEW



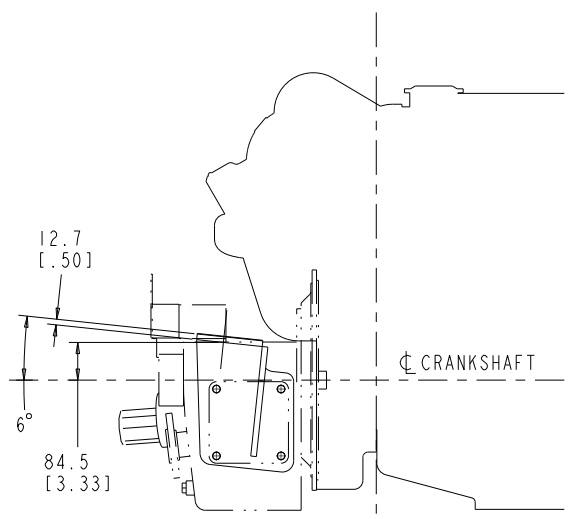
BACK VIEW

SA9060
ZF280-1A



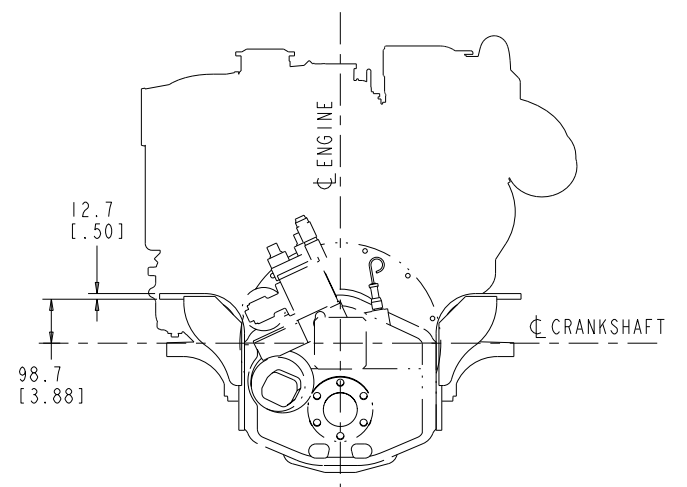
BACK VIEW

SA9063
TD MG5065A



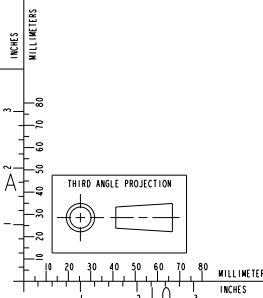
EXHAUST SIDE

SA9065
ZF285A/ZF286A



BACK VIEW

SA9068
ZF285A/ZF286A



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

MOUNTING SYSTEM

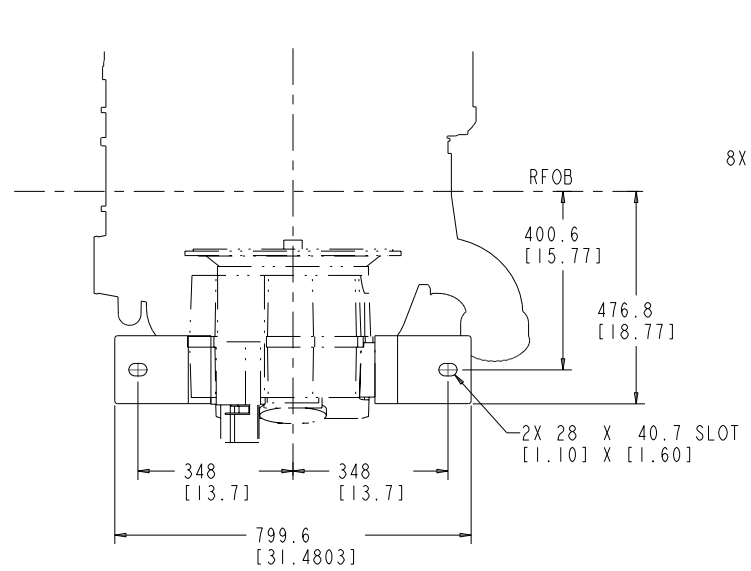
DO NOT SCALE THIS DRAWING
THIS DRAWING/DATA FILE (AND THE INFORMATION SHOWN THEREON) IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DISCLOSED TO OTHERS, OR REPRODUCED BY ANY MEANS FOR ANY PURPOSE IN HARD COPY FORM OR IN MACHINE READABLE FILES, WITHOUT WRITTEN CONSENT OF CUMMINS INC., MARKETING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

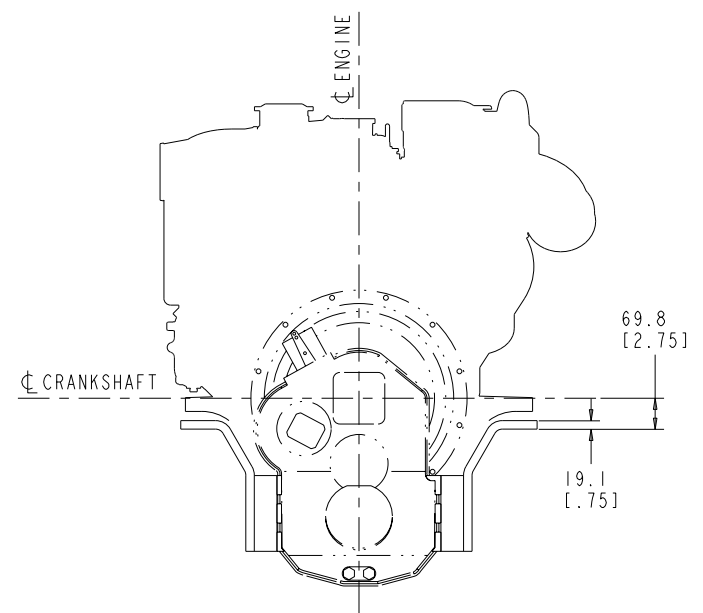
LAST SECTION LETTER USED: A	REF. DRAWING STANDARDS: ANSI Y14.5M ISO 81101	CUMMINS INC.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN: MILLIMETERS () ARE IN: INCHES		ITEM NAME QSC 8.3-HX	IDENTIFIER
DWN: TMO/TGANG	CHK: UNCHECKED	SIZE CODE (IDENT. NO.)	ITEM NUMBER
APPD:		J	3170592
		SCALE: 2x	ITEM CONTROL: MCS SHEET 28 OF 30

ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	QSC	8.3-HX	J

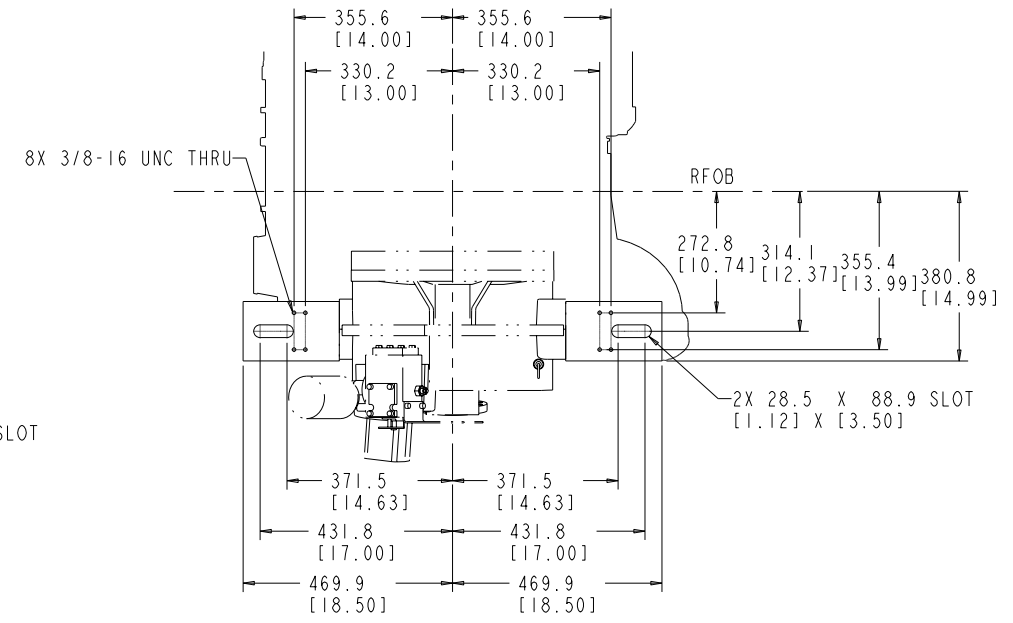


TOP VIEW

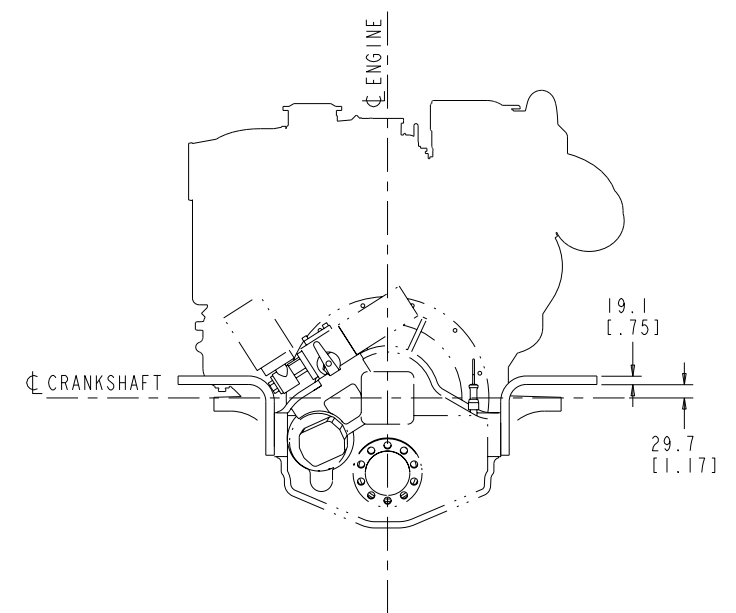


BACK VIEW

SA9071
ZF280IV



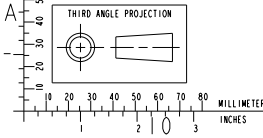
TOP VIEW



BACK VIEW

SA9045
ZF305-2A

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

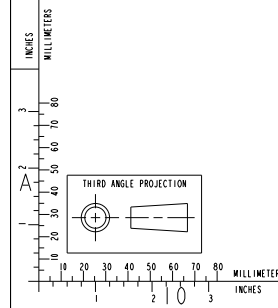
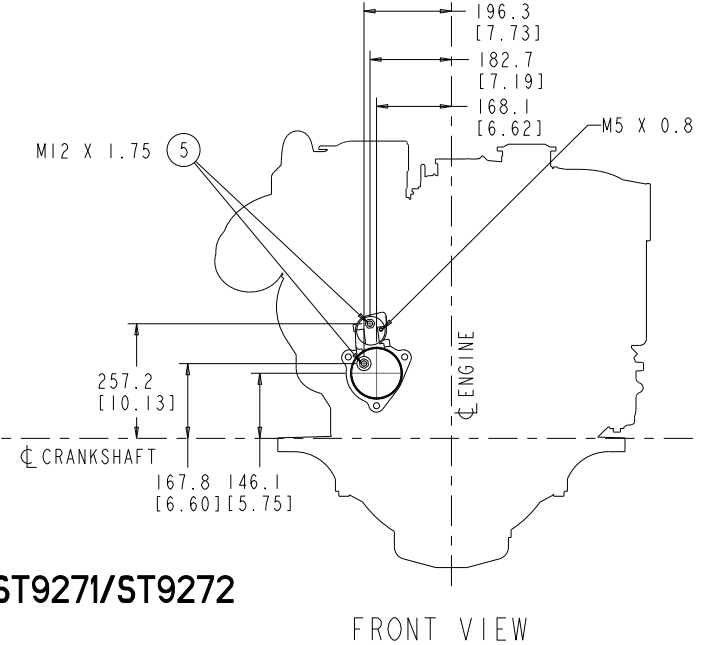
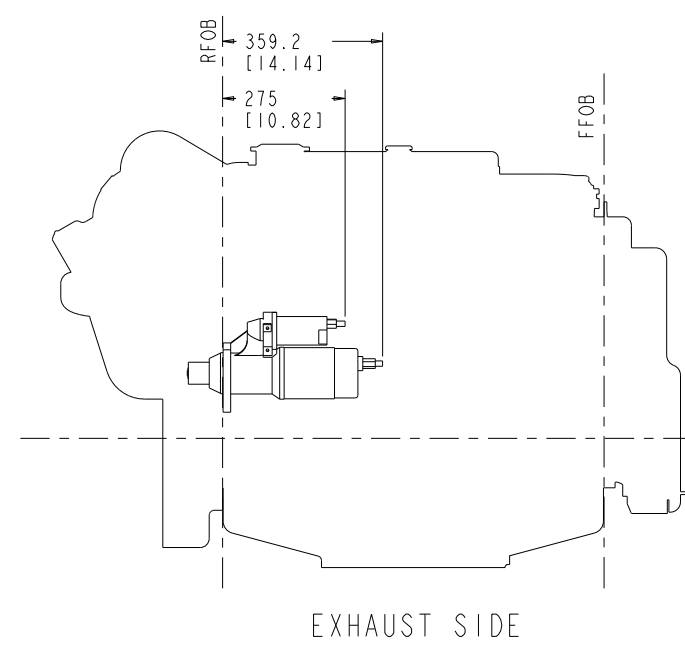
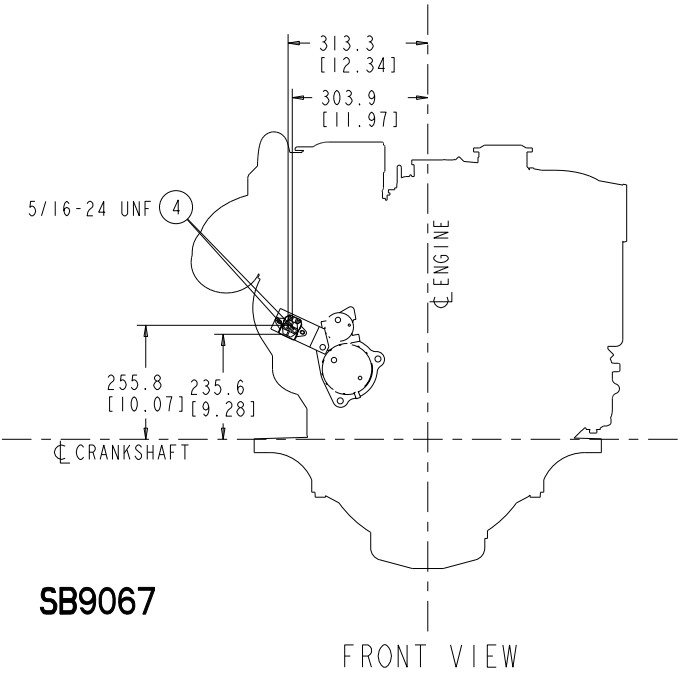
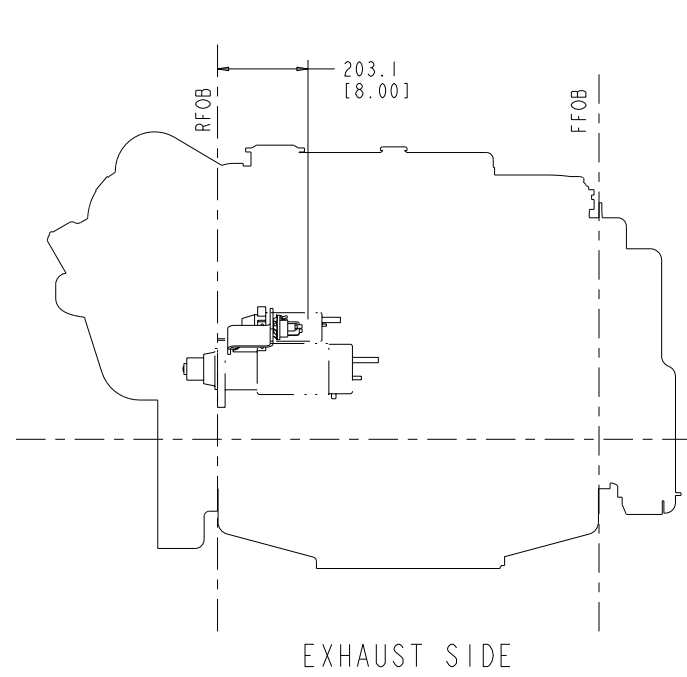
MOUNTING SYSTEM

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 QSC 8.3-HX	IDENTIFIER INSTALLATION DIAGRAM	
DWN: TMO/TGANG CHD: UNCHECKED APPD:	SIZE CODE IDENT. NO. J	ITEM NUMBER 3170592	SCALE: 2x ITEM CONTROL: MCS SHEET 29 OF 30

ITEM NUMBER
3170592

REVISIONS			
ZONE	REV	DESCRIPTION	APP'D
04	OSC	8.3-HX	



- 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 QSC 8.3-HX	IDENTIFIER
DWN: TMO/EGANG	CHK: UNCHECKED	SIZE CODE IDENT. NO.:	ITEM NUMBER
APPD:		SCALE: 2x	3170592
		ITEM CONTROL: MCS	SHEET 30 OF 30