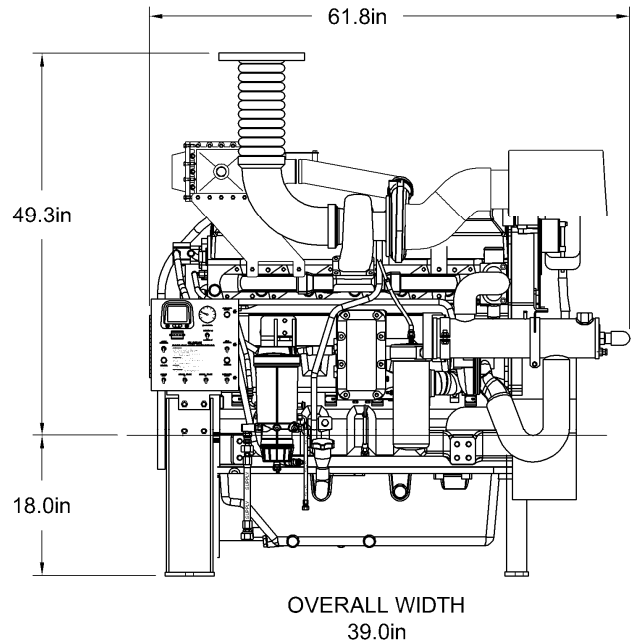


USA Purchased - Installed Outside the USA

FM-UL-cUL APPROVED RATINGS BHP/KW

JX6H MODEL	RATED SPEED					
	1470		1760		2100	
UF40	380	283	460	343	485	362
UF50	405	302	485	362	510	380
UF60	430	321	510	380	525	392
UF70	485	362	575	429	575	429



SPECIFICATIONS

ITEM	JX6H MODELS			
	UF40	UF50	UF60	UF70
Number of Cylinders	6			
Aspiration	TRWA			
Rotation*	CW			
Weight - lb (kg)	3250 (1474)			
Compression Ratio	14.7:1			
Displacement - cu. in. (l)	766 (12.5)			
Engine Type	4 Stroke Cycle - In-line Construction			
Bore & Stroke - in. (mm)	5.00 X 6.50 (127 X 165)			
Installation Drawing	D546			
Wiring Diagram AC	C07651			
Wiring Diagram DC	C07957			
Engine Series	John Deere 6125 Series			
Speed Interpolation	None			

Abbreviations: CW - Clockwise TRWA - Turbocharged with Raw Water Aftercooling

\*Rotation viewed from Heat Exchanger / Front of engine

CERTIFIED POWER RATING

- Each engine is factory tested to verify power and performance.
- FM-UL power ratings are shown at specific speeds. Clarke engines can be applied at a single rated RPM setting ± 50 RPM.

ENGINE RATINGS BASELINES

- Engines are to be used for stationary emergency standby fire pump service only. Engines are to be tested in accordance with NFPA 25.
- Engines are rated at standard SAE conditions of 29.61 in. (752.1 mm) Hg barometer and 77°F (25°C) inlet air temperature [approximates 300 ft. (91.4 m) above sea level] by the testing laboratory (see SAE Standard J 1349).
- A deduction of 3 percent from engine horsepower rating at standard SAE conditions shall be made for diesel engines for each 1000 ft. (305 m) altitude above 300 ft. (91.4 m)
- A deduction of 1 percent from engine horsepower rating as corrected to standard SAE conditions shall be made for diesel engines for every 10°F (5.6°C) above 77°F (25°C) ambient temperature.



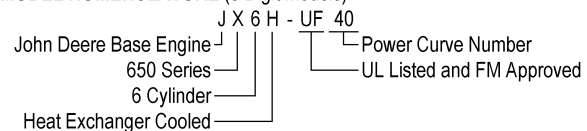
## ENGINE EQUIPMENT

EQUIPMENT	STANDARD	OPTIONAL
Air Cleaner	Direct Mounted, Washable, Indoor Service with Drip Shield	Disposable, Drip Proof, Indoor Service Outdoor Type
Alternator	24V-DC, 40 Amps with Poly-Vee Belt and Guard	
Exhaust Protection	Blankets on Manifolds and Turbocharger	
Coupling	Bare Flywheel	UL Listed Driveshaft and Guard, CDS50-SC on UF30 at 2100 RPM; Drive Shaft and Guard SC2140 UF30/40; SC2155 UF50/60/70
Electronic Control Module	24V-DC, Energized to Stop, Primary ECM always Powered on	
Exhaust Flex Connection*	Stainless Steel Flex, 150# ANSI Flanged Connection, 6"	Stainless Steel Flex, 150# ANSI Flanged Connection, 8"
Flywheel Housing	SAE #1	
Flywheel Power Take Off	11.5" SAE Industrial Flywheel Connection	
Fuel Connections	Fire Resistant, Flexible, USA Coast Guard Approved, Supply and Return Lines	Stainless Steel, Braided, cUL Listed, Supply and Return Lines
Fuel Filter	Primary Filter with Priming Pump	
Fuel Injection System	Unit Injectors with Electronic Control	
Engine Heater	230V-AC, 2500 Watt	115V-AC, 2500 Watt
Governor, Speed	Electronic, Dual Electronic Engine Control Modules	
Heat Exchanger	Tube and Shell Type, 60 PSI (4 BAR), NPT(F) Connections	
Instrument Panel	Multimeter to Display English and Metric, Tachometer, Hourmeter, Water Temperature, Oil Pressure and One (1) Voltmeter with Toggle Switch, Front Opening	
Junction Box	Integral with Instrument Panel; For DC Wiring Interconnection to Engine Controller	
Lube Oil Cooler	Engine Water Cooled, Plate Type	
Lube Oil Filter	Full Flow with By-Pass Valve	
Lube Oil Pump	Gear Driven, Gear Type	
Manual Start Control	On Instrument Panel with Control Position Warning Light	
Overspeed Control	Electronic, Factory Set, Not Field Adjustable	
Raw Water Solenoid Operation	Automatic from Fire Pump Controller and from Engine Instrument Panel	
Run – Stop Control	On Instrument Panel with Control Position Warning Light	
Starters	One (1) 24V-DC with Two (2) Start Contactors	
Throttle Control	Adjustable Speed Control by Increase/Decrease Button, Tamper Proof in Instrument Panel	
Water Pump	Centrifugal Type, Gear Driven	

Abbreviations : DC – Direct Current, AC – Alternating Current, SAE – Society of Automotive Engineers, NPT(F) – National Pipe Tapered Thread (Female), NPT(M) – National Pipe Tapered Thread (Male), ANSI – American National Standards Institute

Note : Engine Controller needs two (2) additional signals: Injector Failure, Alternate ECM Selected

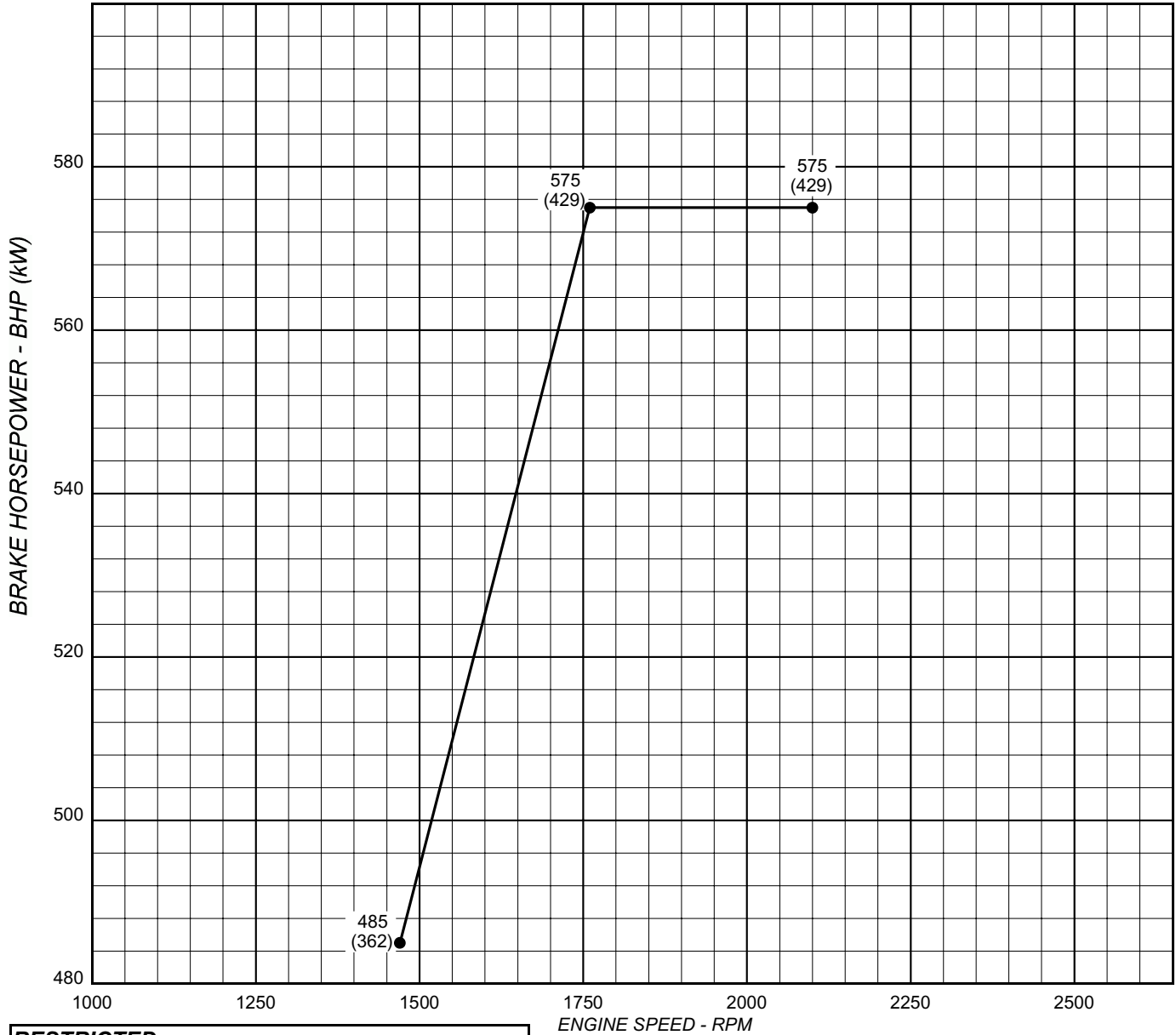
### MODEL NOMENCLATURE (8 Digit Models)





*Fire Protection Products, Inc.*

**FIRE PUMP MODEL: JX6H-UF70**  
**Heat Exchanger Cooled**  
**RE501587 Turbocharger**  
**Raw Water Charge Cooling**



**RESTRICTED:**  
USE ONLY FOR STAND-BY FIRE PUMP APPLICATIONS

**ENGINE PERFORMANCE:**  
STANDARD CONDITIONS: (SAE J1349, ISO 3046)  
77°F (25°C) AIR INLET TEMPERATURE  
29.61 IN. (751.1MM) HG BAROMETRIC PRESSURE  
#2 DIESEL FUEL (SEE C13940)

*Ken Wauligman*  
KEN WAULIGMAN 11MAY04

ENGINE SPEED - RPM

● — ● NAMEPLATE BHP (MAXIMUM PUMP LOAD)

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CREATED <i>KW</i>	DATE CREATED 05/11/04
<b>ENGINE MODEL JX6H-UF70</b>	
DRAWING NO. C131087	REV A

**JX6H-UF70**

**INSTALLATION & OPERATION DATA (I&O Data)**  
**USA Produced**

**Basic Engine Description**

Engine Manufacturer	John Deere Co.
Ignition Type	Compression (Diesel)
Number of Cylinders	6
Bore and Stroke - in (mm)	5 (127) X 6.5 (165)
Displacement - in <sup>3</sup> (L)	763 (12.5)
Compression Ratio	14.7:1
Valves per cylinder	
Intake	2
Exhaust	2
Combustion System	Unit Injection
Engine Type	In-Line, 4 Stroke Cycle
Fuel Management Control	Electronic, Unit Injector
Firing Order (CW Rotation)	1-5-3-6-2-4
Aspiration	Turbocharged
Charge Air Cooling Type	Raw Water Cooled
Rotation, viewed from front of engine, Clockwise (CW)	Standard
Engine Crankcase Vent System	Open
Installation Drawing	D546
Weight - lb (kg)	3250 (1470)

**Power Rating**

	<b>1470</b>	<b>1760</b>	<b>2100</b>
Nameplate Power - HP (kW)	485 (362)	575 (429)	575 (429)

**Cooling System - [C051138]**

	<b>1470</b>	<b>1760</b>	<b>2100</b>
Engine Coolant Heat - Btu/sec (kW)	119 (126)	149 (157)	153 (161)
Engine Radiated Heat - Btu/sec (kW)	51 (53.8)	61 (64.4)	61 (64.4)
Heat Exchanger Minimum Flow			
60°F (15°C) Raw H <sub>2</sub> O - gal/min (L/min)	28 (106)	32 (121)	30 (114)
95°F (35°C) Raw H <sub>2</sub> O - gal/min (L/min)	30 (114)	36 (136)	36 (136)
Heat Exchanger Maximum Cooling Raw Water			
Inlet Pressure - psi (bar)	60 (4.1)		
Flow - gal/min (L/min)	80 (303)		
Typical Engine H <sub>2</sub> O Operating Temp - °F (°C) <sup>[1]</sup>	175 (79.4) - 190 (87.8)		
Thermostat			
Start to Open - °F (°C)	180 (82.2)		
Fully Opened - °F (°C)	202 (94.4)		
Engine Coolant Capacity - qt (L)	29.6 (28)		
Coolant Pressure Cap - lb/in <sup>2</sup> (kPa)	10 (68.9)		
Maximum Engine Coolant Temperature - °F (°C)	212 (100)		
Minimum Engine Coolant Temperature - °F (°C)	160 (71.1)		
High Coolant Temp Alarm Switch - °F (°C)	205 (96.1)		

**Electric System - DC**

	<b>Standard</b>	
System Voltage (Nominal)	24	
Battery Capacity for Ambients Above 32°F (0°C)		
Voltage (Nominal)	12	[C07633]
Qty. Per Battery Bank	2	
SAE size per J537	8D	
CCA @ 0°F (-18°C)	1375	
Reserve Capacity - Minutes	430	
Battery Cable Circuit, Max Resistance - ohm	0.0012	
Battery Cable Minimum Size		
0-120 in. *	00	
121-160 in. <sup>[2]</sup>	000	
161-200 in. Circuit Length <sup>[2]</sup>	0000	
Charging Alternator Maximum Output - Amp,	40	[C071048]
Starter Cranking Amps, Rolling - @60°F (15°C)	300	[RE522852]

NOTE: This engine is intended for indoor installation or in a weatherproof enclosure. <sup>1</sup>Engine H<sub>2</sub>O temperature is dependent on raw water temperature and flow. <sup>2</sup>Positive and Negative Cables Combined Length.

**JX6H-UF70**

**INSTALLATION & OPERATION DATA (I&O Data)**  
**USA Produced**

**Exhaust System**

	<b>1470</b>	<b>1760</b>	<b>2100</b>
Exhaust Flow - ft. <sup>3</sup> /min (m <sup>3</sup> /min) .....	2200 (62.3)	2904 (82.2)	3071 (87)
Exhaust Temperature - °F (°C) .....	943 (506)	918 (492)	871 (466)
Maximum Allowable Back Pressure - in H <sub>2</sub> O (kPa) .....	30 (7.5)	30 (7.5)	30 (7.5)
Minimum Exhaust Pipe Dia. - in (mm) <sup>[3]</sup> .....	6 (152)	6 (152)	6 (152)

**Fuel System**

	<b>1470</b>	<b>1760</b>	<b>2100</b>
Fuel Consumption - gal/hr (L/hr) .....	23 (87.1)	29 (110)	29 (110)
Fuel Return - gal/hr (L/hr) .....	69 (261)	68 (257)	67 (254)
Fuel Supply - gal/hr (L/hr) .....	92 (348)	97 (367)	96 (363)
Fuel Pressure - lb/in <sup>2</sup> (kPa) .....	70 (483) - 90 (621)		
Minimum Line Size - Supply - in. ....	.75 Schedule 40 Steel Pipe		
Pipe Outer Diameter - in (mm) .....	1.05 (26.7)		
Minimum Line Size - Return - in. ....	.50 Schedule 40 Steel Pipe		
Pipe Outer Diameter - in (mm) .....	0.848 (21.5)		
Maximum Allowable Fuel Pump Suction Lift with clean Filter - in H <sub>2</sub> O (mH <sub>2</sub> O) .....	100 (2.5)		
Maximum Allowable Fuel Head above Fuel pump, Supply or Return - ft (m) ..	9 (2.7)		
Fuel Filter Micron Size .....	2		

**Heater System**

	<b>Standard</b>	<b>Optional</b>
Engine Coolant Heater		
Wattage (Nominal) .....	2500	2500
Voltage - AC, 1 Phase .....	230 (+5%, -10%)	115 (+5%, -10%)
Part Number .....	[C122194]	[C122190]

**Air System**

	<b>1470</b>	<b>1760</b>	<b>2100</b>
Combustion Air Flow - ft. <sup>3</sup> /min (m <sup>3</sup> /min) .....	842 (23.8)	1132 (32.1)	1239 (35.1)
Air Cleaner	<b>Standard</b>		<b>Optional</b>
Part Number .....	[C03244]		[C03330]
Type .....	Indoor Service Only, with Shield		Canister, Single-Stage
Cleaning method .....	Washable		Disposable
Air Intake Restriction Maximum Limit			
Dirty Air Cleaner - in H <sub>2</sub> O (kPa) .....	14 (3.5)		14 (3.5)
Clean Air Cleaner - in H <sub>2</sub> O (kPa) .....	7 (1.7)		7 (1.7)
Maximum Allowable Temperature (Air To Engine Inlet) - °F (°C) <sup>[4]</sup> .....	130 (54.4)		

**Lubrication System**

Oil Pressure - normal - lb/in <sup>2</sup> (kPa) .....	42 (290)
Low Oil Pressure Alarm Switch - lb/in <sup>2</sup> (kPa) .....	20 (138)
In Pan Oil Temperature - °F (°C) .....	190 (87.8)
Total Oil Capacity with Filter - qt (L) .....	44.7 (42.3)

**Lube Oil Heater**

	<b>Optional</b>
Wattage (Nominal) .....	150
Voltage .....	240V (+5%, -10%)
Part Number .....	C04533

**Performance**

	<b>1470</b>	<b>1760</b>	<b>2100</b>
BMEP - lb/in <sup>2</sup> (kPa) .....	342 (2360)	339 (2340)	284 (1960)
Piston Speed - ft/min (m/min) .....	1593 (486)	1907 (581)	2275 (693)
Mechanical Noise - dB(A) @ 1m .....	C131521		
Power Curve .....	C131087		

<sup>3</sup>Based on Nominal System. Back pressure flow analysis must be done to assure maximum allowable back pressure is not exceeded. (Note: minimum exhaust Pipe diameter is based on: 15 feet of pipe, on 90° elbow, and a silencer pressure drop no greater than one half of the maximum allowable back pressure.) <sup>4</sup>Review for horsepower derate if ambient air entering engine exceeds 77°F (25°C). [ ] indicates component reference part number.

## JX6H ENGINE MATERIALS AND CONSTRUCTION

**Air Cleaner**

Type..... Indoor Usage Only  
Oiled Fabric Pleats  
Material..... Surgical Cotton, Aluminum Mesh

**Air Cleaner - Optional**

Type..... Canister  
Material..... Pleated Paper  
Housing..... Enclosed

**Camshaft**

Material..... Forged Steel, Hardened  
Location..... In Head  
Drive..... Gear, Spur  
Type of Cam..... Ground

**Charge Air Cooler**

Type..... Jacket Water Cooled - JX6H-UF30  
Raw Water Cooled - All JX6H Except -UF30  
Materials (in contact with raw water)  
Tubes..... 90/10 CU/NI  
Headers ..... 36500 Muntz  
Covers ..... 83600 Red Brass  
Plumbing ..... 316 Stainless Steel/ Brass  
90/10 Silicone

**Coolant Pump**

Type..... Centrifugal  
Drive..... Gear

**Coolant Thermostat**

Type..... Full Blocking  
Qty..... 2-12.5L / 3-13.5L

**Cooling Loop (Galvanized)**

Tees, Elbows, Pipe..... Galvanized Steel  
Ball Valves..... Brass ASTM B 124  
Solenoid Valve..... Brass  
Pressure Regulator..... Bronze  
Strainer..... Cast Iron (1/2"- 1" Loops)  
or Bronze (1.25" - 2" Loops)

**Cooling Loop (Sea Water)**

Tees, Elbows, Pipe..... 316 Stainless Steel  
Ball Valves..... 316 Stainless Steel  
Solenoid Valve..... 316 Stainless Steel  
Pressure Regulator/Strainer..... Cast Brass ASTM B176 C87800

**Cooling Loop (316SS)**

Tees, Elbows, Pipe..... 316 Stainless Steel  
Ball Valves..... 316 Stainless Steel  
Solenoid Valve..... 316 Stainless Steel  
Pressure Regulator/Strainer..... 316 Stainless Steel

**Connecting Rod**

Type..... I-Beam Taper  
Material..... Forged Steel Alloy

**Crank Pin Bearings**

Type..... Precision Half Shell  
Number..... 1 Pair Per Cylinder  
Material..... Wear-Guard

**Crankshaft**

Material..... Forged Steel  
Type of Balance..... Dynamic

**Cylinder Block**

Type..... One Piece with  
Non-Siamese Cylinders  
Material..... Cast Iron Alloy

**Cylinder Head**

Type..... Slab 4 Valve  
Material..... Cast Iron

**Cylinder Liners**

Type..... Centrifugal Cast, Wet Liner  
Material..... Alloy Iron Plateau, Honed

**Valves**

Type..... Poppet  
Material..... Steel Alloy  
Arrangement..... Overhead Valve  
Number/Cylinder..... 2 intake/2 exhaust  
Operating Mechanism..... Mechanical Rocker Arm  
Type of Lifter..... Solid Roller  
Valve Seat Insert..... Replaceable

**Exhaust Manifold**

Material..... Iron Alloy

**Fuel Pump**

Type..... Gear  
Drive..... Cam Lobe

**Heat Exchanger**

Type..... Tube & Shell

**Materials**

Tube & Headers..... 90/10 CU/NI  
Shell..... Copper  
Electrode..... Zinc

**Injection Pump**

Type..... Electronic Unit Injector  
Drive..... Cam Shaft

**Lubrication Cooler**

Type..... Plate

**Lubrication Pump**

Type..... G Rotor  
Drive..... Gear

**Main Bearings**

Type..... Precision Half Shells  
Material..... Steel Backed-Aluminum Lined

**Piston**

Type and Material..... 12.5L - 2 piece- Steel Crown, Al. skirt  
13.5L Steel- Monolithic  
Cooling..... Oil Jet Spray

**Piston Pin**

Type..... Full Floating - Offset

**Piston Rings**

Number/Piston..... 3  
Top..... Keystone Barrel Faced -  
Plasma Coated  
Second..... Tapered Cast Iron  
Third..... Chromium Faced

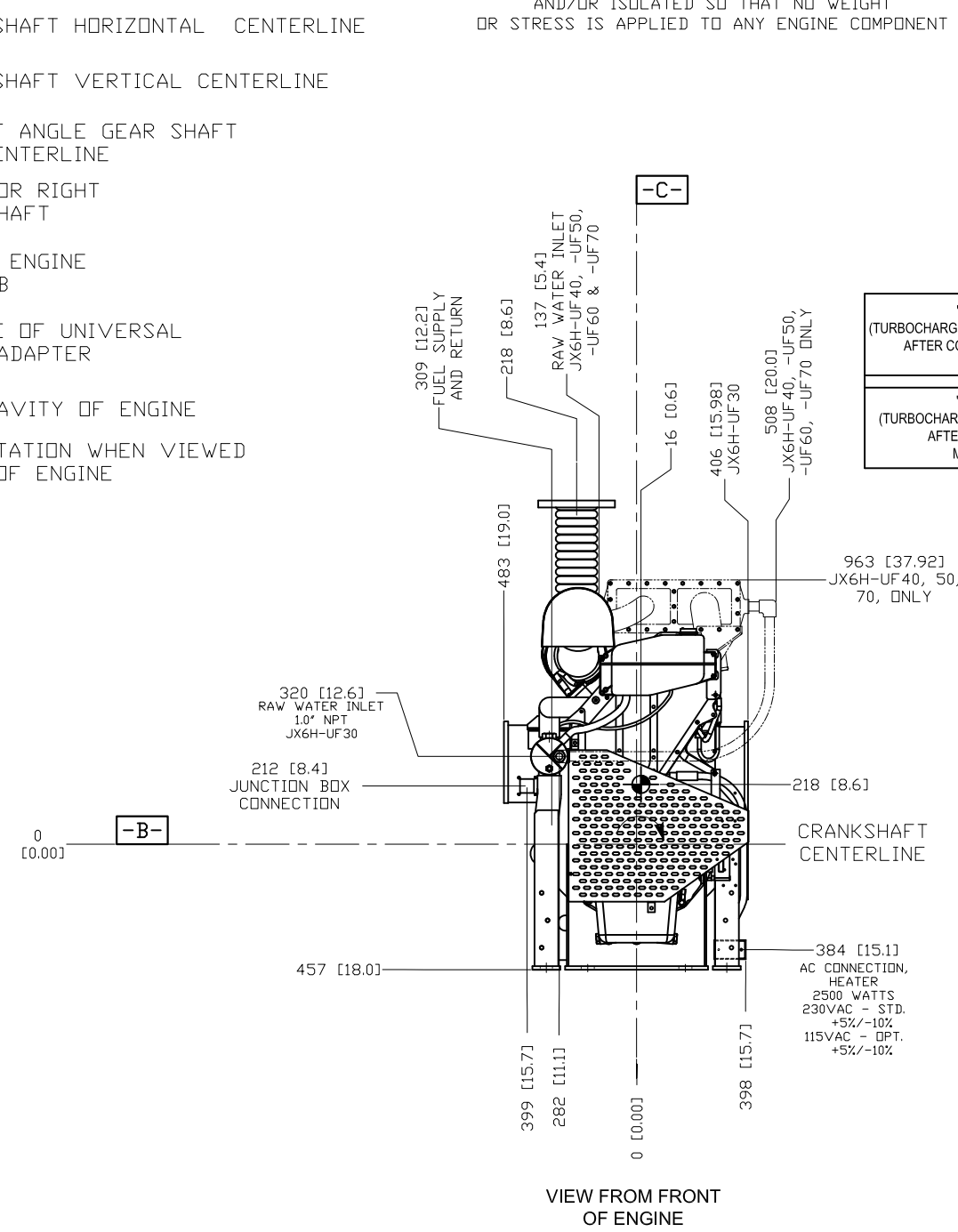
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DATUMS:

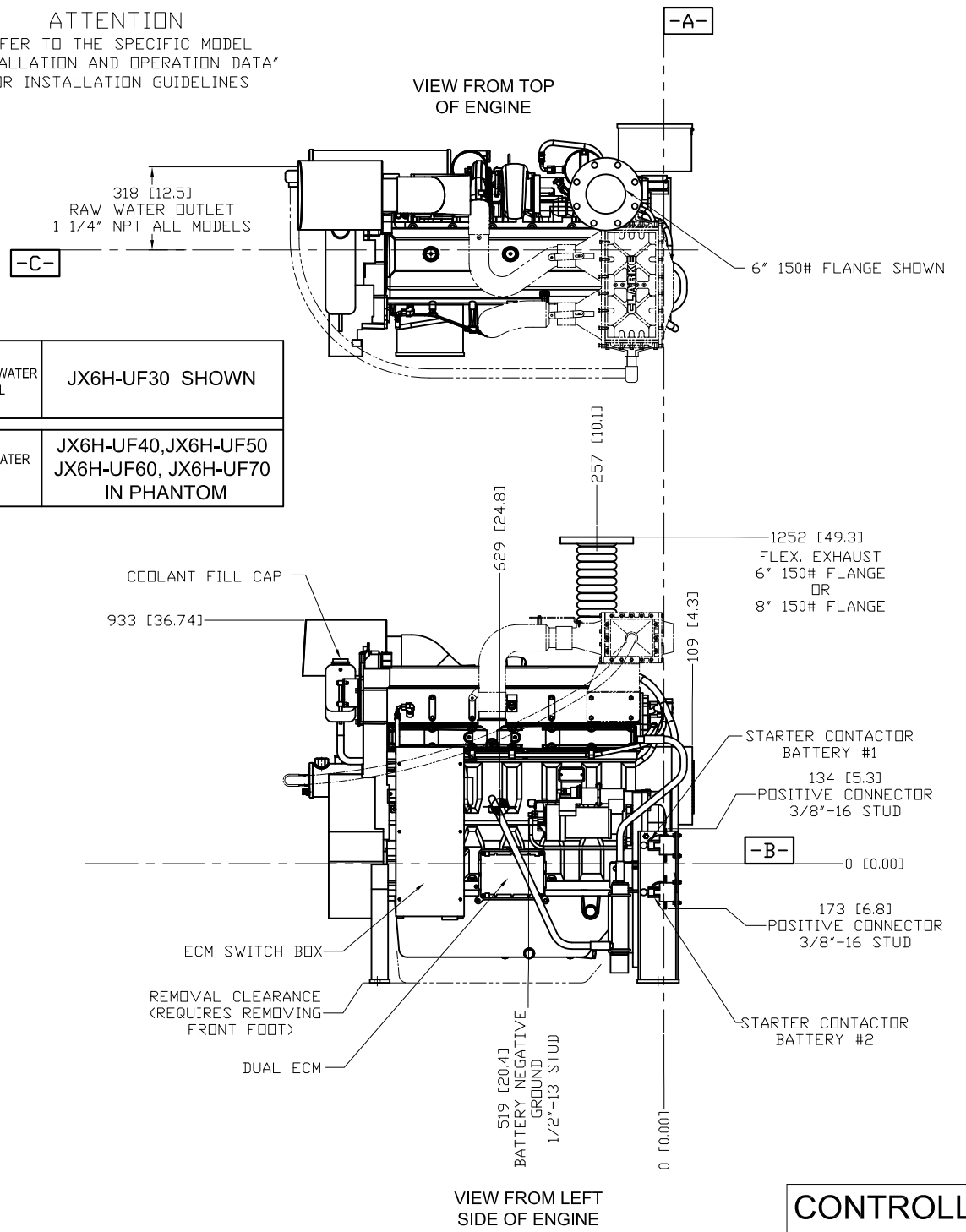
- A- - MOUNTING FACE OF FLYWHEEL
- B- - ENGINE CRANKSHAFT HORIZONTAL CENTERLINE
- C- - ENGINE CRANKSHAFT VERTICAL CENTERLINE
- D- - PUMP OR RIGHT ANGLE GEAR SHAFT HORIZONTAL CENTERLINE
- E- - END OF PUMP OR RIGHT ANGLE GEAR SHAFT
- F- - REAR FACE OF ENGINE HALF FALK HUB
- G- - MOUNTING FACE OF UNIVERSAL DRIVE SHAFT ADAPTER
- ☉ - CENTER OF GRAVITY OF ENGINE
- ↻ - CLOCKWISE ROTATION WHEN VIEWED FROM FRONT OF ENGINE

CAUTION:  
ALL PLUMBING MUST BE SUPPORTED AND/OR ISOLATED SO THAT NO WEIGHT OR STRESS IS APPLIED TO ANY ENGINE COMPONENT

ATTENTION  
REFER TO THE SPECIFIC MODEL "INSTALLATION AND OPERATION DATA" FOR INSTALLATION GUIDELINES



"TJWA" (TURBOCHARGED w/ JACKET WATER AFTER COOLING) MODEL	JX6H-UF30 SHOWN
"TRWA" (TURBOCHARGED w/ RAW WATER AFTER COOLING) MODELS	JX6H-UF40, JX6H-UF50 JX6H-UF60, JX6H-UF70 IN PHANTOM



**CONTROLLED DRAWING**  
THIS IS A REGISTERED PART WITH A THIRD PARTY AGENCY FOR USE ON A PRODUCT. NO SUBSTITUTIONS ARE ALLOWED. CONSULT ENGINEERING PRIOR TO AND REGARDING ANY CHANGE.

**DRAWING SUBJECT TO CHANGE WITHOUT NOTICE**      **DO NOT SCALE**

REV	DESCRIPTION	ECN#	DWN	APVD	DATE
E	ADDED TOP VIEW OF ENGINE	935	SK	KRE	13FEB06
F	REWORD FUEL SIZE CALLOUT, ADDED NOTES 1&2, DIM FROM DATUM -A- TO REAR MOUNT HOLE WAS 37mm, DIM FROM DATUM -A- TO FRONT MOUNT HOLE WAS 1114mm, DIM FROM DATUM -A- TO FLEX EXHAUST CENTER LINE WAS 223mm	1022	MWL	KRE	31AUG06
G	REMOVED "OPTIONAL" WORDING FROM FLEX EXHAUST CALLOUT ADDED ENGINE MODEL BOX- "SHOWN" & "PHANTOM", REWORDED TITLE BLOCK NAME	1157	JJW	KRW	19DEC06
H	<P.2> DISTANCE BETWEEN ENGINE FEET BOLT HOLES WAS 1082	1408	ASC	KRW	29NOV07
J	ADDED DRIP GUARD TO NEW LOCATION	1201	KJM	KRE	12MAY09
K	SAE HOUSING WAS A #2	1943	SK	KRW	08JUL10
L	UPDATED FLYWHEEL INFO LAYOUT	4179	JGV	KRE	10AUG15
-	ADDED CONTROLLED DRAWING NOTATION	6309	EJT	KRE	09JUL21

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YES  NO

**CONTROLLED DRAWING**

DRWN: S.KORENBLIT      NAME: S.KORENBLIT

DATE: 21SEP04

ENGR: K.J.KUNKLER

MATERIAL:

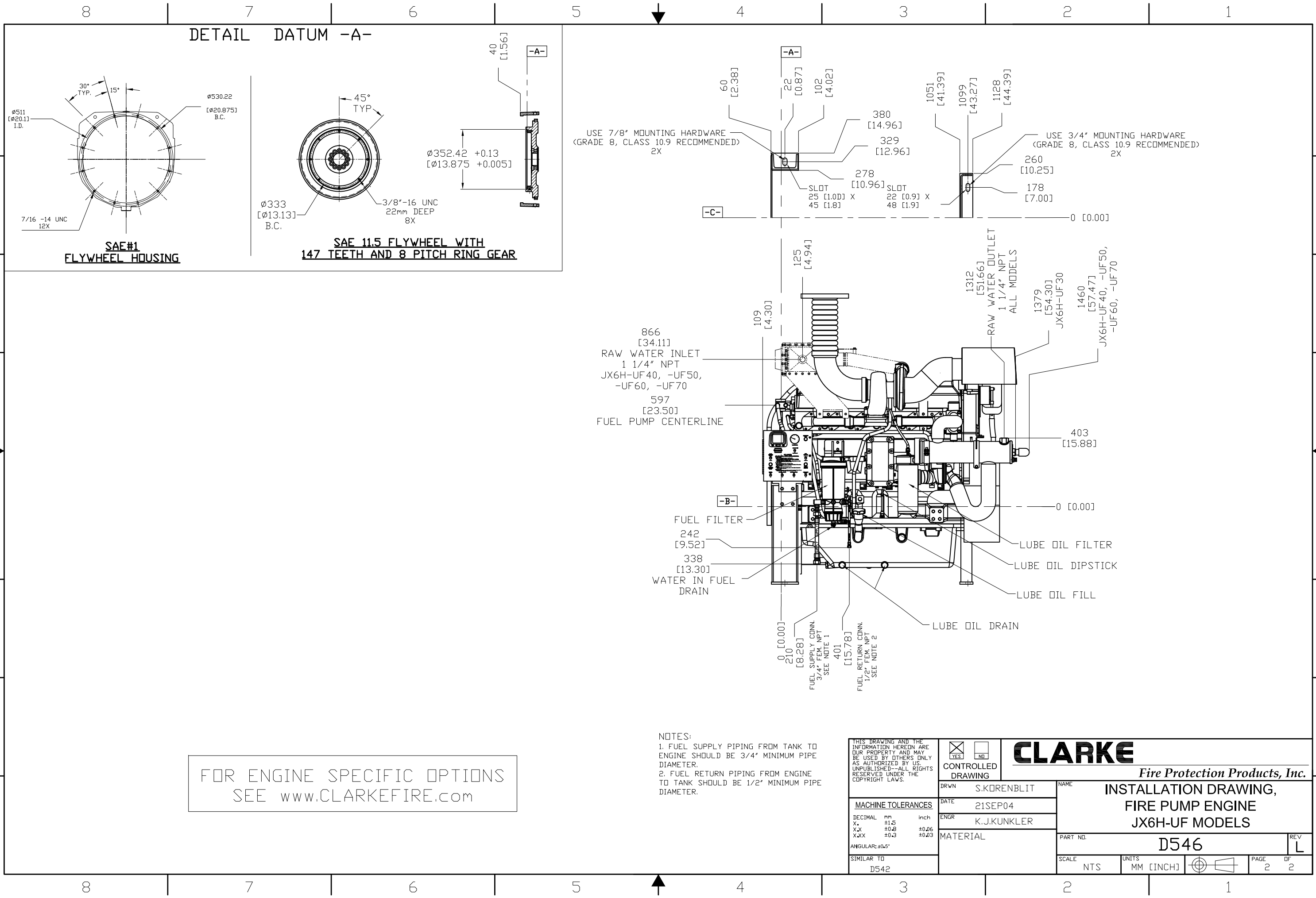
**CLARKE**      Fire Protection Products, Inc.

INSTALLATION DRAWING, FIRE PUMP ENGINE JX6H-UF MODELS

PART NO. D546      REV L

SCALE: NTS      UNITS: MM [INCH]      PAGE 1 OF 2

8 7 6 5 4 3 2 1



USE 7/8" MOUNTING HARDWARE  
(GRADE 8, CLASS 10.9 RECOMMENDED)  
2X

USE 3/4" MOUNTING HARDWARE  
(GRADE 8, CLASS 10.9 RECOMMENDED)  
2X

866 [34.11]  
RAW WATER INLET  
1 1/4" NPT  
JX6H-UF40, -UF50,  
-UF60, -UF70

597 [23.50]  
FUEL PUMP CENTERLINE

242 [9.52]  
338 [13.30]  
WATER IN FUEL  
DRAIN

LUBE OIL FILTER  
LUBE OIL DIPSTICK  
LUBE OIL FILL

LUBE OIL DRAIN

FOR ENGINE SPECIFIC OPTIONS  
SEE [www.CLARKEFIRE.com](http://www.CLARKEFIRE.com)

NOTES:  
1. FUEL SUPPLY PIPING FROM TANK TO  
ENGINE SHOULD BE 3/4" MINIMUM PIPE  
DIAMETER.  
2. FUEL RETURN PIPING FROM ENGINE  
TO TANK SHOULD BE 1/2" MINIMUM PIPE  
DIAMETER.

THIS DRAWING AND THE INFORMATION HEREON ARE OUR PROPERTY AND MAY BE USED BY OTHERS ONLY AS AUTHORIZED BY US. UNPUBLISHED--ALL RIGHTS RESERVED UNDER THE COPYRIGHT LAWS.		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <b>CONTROLLED DRAWING</b>	<b>CLARKE</b> <i>Fire Protection Products, Inc.</i>	
<b>MACHINE TOLERANCES</b> DECIMAL mm inch X. ±1.5 XX ±0.2 ±0.06 XXX ±0.3 ±0.03 ANGULAR: ±0.5°		DRWN S.KORENBLIT DATE 21SEP04 ENGR K.J.KUNKLER	NAME <b>INSTALLATION DRAWING,          FIRE PUMP ENGINE          JX6H-UF MODELS</b>	
SIMILAR TO D542		MATERIAL		PART NO. <b>D546</b>
		SCALE NTS	UNITS MM [INCH]	PAGE 2 OF 2



# JX6H-UF70

## Stationary Fire Pump Engine Driver

### EMISSION DATA

#### EPA 40 CFR Part 60

6 Cylinders  
 Four Cycle  
 Lean Burn  
 Turbocharged & Raw Water Aftercooler

500 PPM SULFUR #2 DIESEL FUEL								
RPM	BHP <sup>(3)</sup>	FUEL GAL/HR (L/HR)	GRAMS / HP- HR				EXHAUST	
			NMHC	NOx	CO	PM <sup>(4)</sup>	°F (°C)	CFM (m <sup>3</sup> /min)
1760	575	29 (111)	0.07	4.83	0.75	0.08	918 (492)	2904 (82)
2100	575	29 (111)	0.12	4.63	0.29	0.06	871 (466)	3071 (87)

*Notes:*

- 1) 6125HF070 Base Engine Model manufactured by John Deere Corporation.  
For John Deere Emissions Conformance to EPA 40 CFR Part 60 see Page 2 of 2.
- 2) The Emission Warranty for this engine is provided directly to the owner by John Deere Corporation. A copy of the John Deere Emission Warranty can be found in the Clarke Operation and Maintenance Manual.
- 3) Engines are rated at standard conditions of 29.61in. (7521 mm) Hg barometer and 77°F (25° C) inlet air temperature. (SAE J1349)
- 4) PM is a measure of total particulate matter, including PM<sub>10</sub>.

# CLARKE

**FIRE PROTECTION PRODUCTS**  
 3133 EAST KEMPER ROAD  
 CINCINNATI, OH 45241

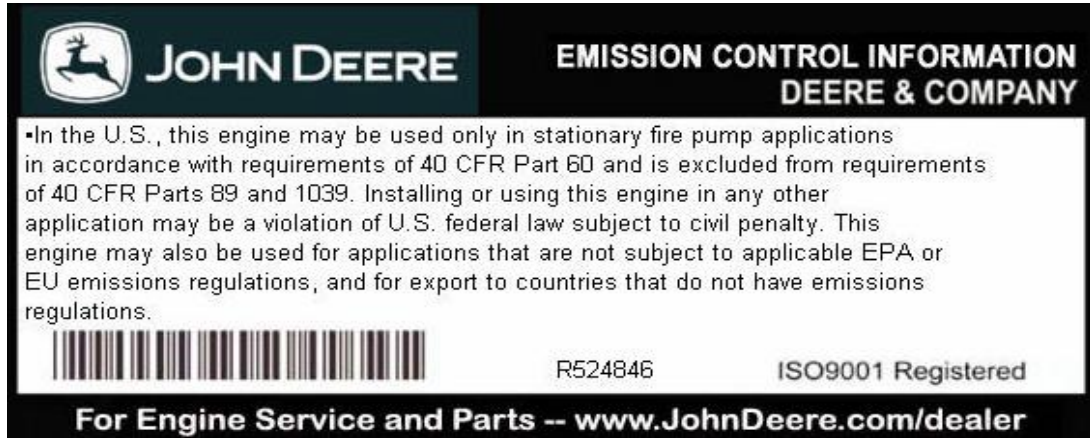


John Deere Power Systems  
 3801 W. Ridgeway Ave., PO Box 5100  
 Waterloo, Iowa USA 50704-5100

31 October 2007

**Subject: Fire Pump Ratings – Conformance to EPA 40 CFR Part 60 (NSPS requirements)**

All John Deere stationary fire pump engines conform to the requirements of 40 CFR Part 60. All such engines include an emission label, stating the engine conforms to the requirements of 40 CFR Part 60. An example of the emission label is show below:



This label applies to all of the following engine models, sold to Clarke Fire Protection, for use in stationary fire pump applications:

John Deere Engine Model
<b>4045DF120</b>
<b>4045DF159</b>
<b>4045TF252</b>
<b>4045TF254</b>
<b>4045TF220</b>
<b>6068TF252</b>
<b>6068TF254</b>
<b>6068HF252</b>
<b>6068HF254</b>
<b>6068HF120</b>
<b>6068TF220</b>
<b>6081AF001</b>
<b>6081HF001</b>
<b>6125AF001</b>
<b>6125HF070</b>

All engines conforming to 40 CFR Part 60 (identified by emission label, as shown above) are covered under the emissions warranty of 40 CFR Part 89.

Sincerely,

Kyle J. Tingle  
 Regional Sales Manager, JDPS

## JX6H-UF70 FIRE PUMP DRIVER NOISE DATA

### Mechanical Engine Noise \*

RPM	BHP	OVERALL dB(A)	Octave Band									
			31.5 Hz dB(A)	63 Hz dB(A)	125 Hz dB(A)	250 Hz dB(A)	500 Hz dB(A)	1k Hz dB(A)	2k Hz dB(A)	4k Hz dB(A)	8k Hz dB(A)	16k Hz dB(A)
1470	485	113.3	77.9	89	97.1	102.2	105.2	106.2	107.2	104.2	107.2	94.1
1760	575	113.3	77.9	89	97.1	102.1	105.2	106.2	107.2	104.2	107.2	94
2100	575	112.3	77.2	88.2	96.2	101.2	104.2	105.2	106.2	103.2	106.2	93.2

### Raw Exhaust Engine Noise \*\*

RPM	BHP	OVERALL dB(A)	Octave Band									
			31.5 Hz dB(A)	63 Hz dB(A)	125 Hz dB(A)	250 Hz dB(A)	500 Hz dB(A)	1k Hz dB(A)	2k Hz dB(A)	4k Hz dB(A)	8k Hz dB(A)	16k Hz dB(A)
1470 - 2100	485 - 575	117.7		107.6	108	108.4	108.9	110.5	111.2	108.4	98.1	91.7

\* Values above are provided at 3.3ft (1m) from engine block and do not include the raw exhaust noise.

\*\* Values above are provided at 23ft (7m), 90° horizontal, from a vertical exhaust outlet and does not include noise created mechanically by the engine.

The above data reflects values for a typical engine of this model, speed and power in a free-field environment.

Installation specifics such as background noise level and amplification of noise levels from reflecting off of surrounding objects, will affect the overall noise levels observed. As a result of this, Clarke makes no guarantees to the above levels in an actual installation.