



**JX6H SHOWN  
WITH SINGLE WALL FUEL TANK**

- TYPICAL -

TABLE 1	
ENGINE MODEL	X
JU4H	14.33' [364.0]
JU6H	14.33' [364.0]
JW6H	8.52' [216.4]
JX6H	23.50' [597.0]

TABLE 2		
ENGINE MODEL	MINIMUM FUEL SUPPLY SIZE IN [MM]	MINIMUM FUEL RETURN SIZE IN [MM]
JU4H	1/2"	3/8"
JU6H	1/2"	3/8"
JW6H	1/2"	3/8"
JX6H	3/4"	1/2"

REV	DESCRIPTION	ECN#	DWN	APVD	DATE
A	ISSUED ENGINEERING DRAWING	1022	JJW	KRW	28NOV06
B	REVISED FOR CLARITY	1022	MWL	KRW	10JAN07
C	ADDED TABLE 2	1022	MWL	KRW	08JUN07

- NOTES:
- REFER TO THE LATEST EDITION OF NFPA 20 FOR ADDITIONAL REQUIREMENTS. ALSO, INSTALL TANK IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION
  - FUEL SUPPLY TANK SHALL HAVE A CAPACITY AT LEAST EQUAL TO 1 GAL PER HP (5.07L PER KW), PLUS 5 PERCENT VOLUME FOR EXPANSION AND 5 PERCENT VOLUME FOR SUMP
  - DOWNPIPE RECOMMENDED FOR FUEL RETURN LINE TO PREVENT FOAMING INSIDE TANK. TERMINATE 3'-6" [76.2mm-152.4mm] FROM TANK BOTTOM
  - DOWNPIPE RECOMMENDED FOR FUEL LINE TO PREVENT FOAMING INSIDE TANK. TERMINATE 3'-6" [76.2mm-152.4mm] FROM TANK BOTTOM
  - THE ENGINE MANUFACTURER'S FUEL PUMP STATIC HEAD PRESSURE LIMITS SHALL NOT BE EXCEEDED WHEN THE LEVEL OF FUEL IN THE TANK IS AT A MAXIMUM
  - FUEL PIPING SHALL NOT BE GALVANIZED STEEL OR COPPER
  - THE FUEL SUPPLY TANK AND FUEL SHALL BE RESERVED EXCLUSIVELY FOR THE FIRE PUMP DIESEL ENGINE
  - THE FUEL RETURN LINE SHALL BE INSTALLED ACCORDING TO THE ENGINE MANUFACTURER'S RECOMMENDATION. IN ZONES WHERE FREEZING TEMPERATURES [32°F (0°C)] COULD BE ENCOUNTERED, THE FUEL TANK SHALL BE LOCATED IN THE PUMP ROOM
  - IN AREAS WHERE LOCAL AIR QUALITY MANAGEMENT REGULATIONS ONLY ALLOW THE USE OF DF#1 FUEL, AND NO DIESEL FIRE PUMP DRIVER IS AVAILABLE LISTED FOR USE WITH DF#1 FUEL, AN ENGINE LISTED FOR DF#2 SHALL BE PERMITTED TO BE USED BUT SHALL HAVE THE NAMEPLATE RATED HORSEPOWER DERATED 10 PERCENT, PROVIDED THE ENGINE MANUFACTURER APPROVES THE USE OF DF#1 FUEL
  - THE GRADE OF THE FUEL OIL SHALL BE INDICATED ON THE FUEL TANK BY LETTERS THAT ARE A MINIMUM OF 6" (152mm) IN HEIGHT AND IN CONTRASTING COLOR TO THE TANK
  - CONSULT ENGINE MANUFACTURER'S INSTALLATION AND OPERATION DATA SHEET FOR THE SPECIFIC ENGINE MODEL TO DETERMINE MINIMUM FUEL SUPPLY AND RETURN PIPE DIAMETERS.

ITEM	QTY.	DESCRIPTION (ALL FITTINGS BY OTHERS)
1	1	2" FILL CAP- WITH PROVISION FOR PADLOCK, COMBINED WITH REMOVABLE STRAINER (MAX. .06 MESH)
2	1	DOUBLE TAP BUSHING, 1" X .50"
3	1	VENT CAP, 1.25" NPT
4	1	DIRECT READING TANK GAUGE, 2" NPT
5	1	PIPE PLUG FOR DRAIN, 1" NPT
6	1	PIPE TEE, 1.25" x 1.25" x TABLE 2 (MIN. FUEL RETURN SIZE)
7	1	PIPE PLUG, 4" NPT (PROVISION FOR EMERGENCY RELIEF VENT)
8	1	PIPE PLUG, 2" NPT (PROVISION FOR LOW FUEL ALARM ACCESS)
9	1	PIPE NIPPLE, TABLE 2 (MIN. FUEL SUPPLY SIZE) x CLOSE
10	1	PIPE TEE, .50" x .50" x TABLE 2 (MIN. FUEL RETURN SIZE)
11	1	STOP COCK, TABLE 2 (MIN. FUEL SUPPLY SIZE) (WITH PROVISION FOR PADLOCK)
12	1	DOUBLE TAP BUSHING, 3" x 2"
13	1	CHECK VALVE, TABLE 2 (MIN. FUEL RETURN SIZE) (PREVENTS SIPHONING)

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**CLARKE**  
Fire Protection Products, Inc.

DRWN: JWOJTKIEWICZ  
DATE: 28NOV06  
ENGR: KRWAULIGMAN

NAME: FUEL TANK AND FUEL SUPPLY SCHEMATIC PER NFPA 20

DWG. NO: C132026

SCALE: NTS  
UNITS: INCH [MM]

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