



Fire Academy Pump House

Pump and Hydrant System Operation

Pump House access

unlock and open

requires #2 BEST key (Academy key)

chock it open - it cannot be locked open

lights

switch to right of door

vents

switch to left of door

may be left open during the summer

must be closed during freezing weather

engine checks

oil level

remove dipstick to observe: oil level should be within the cross-hatched area

add as required: 15w40 diesel engine oil

observed consumption: approx. 1qt. per 100 hours of use

coolant

remove reservoir cap to observe: if you can see coolant, its OK !

add as required **DO NOT OVERFILL! DO NOT OPEN HOT !**

50% ethylene glycol / 50% water

approx. 1/3 tank height COLD

pump and valve checks

ensure that the 6" OS&Y valve (inlet) is open - JD powered pump

inlet piping just prior to JD powered pump

ensure that the 6" butterfly valve (discharge) is open - JD powered pump

in discharge piping - right corner

ensure that the 4" OS&Y valve (inlet) is closed - VW powered pump

inlet piping just prior to VW powered pump

ensure that the 4" butterfly valve (discharge) is closed - VW powered pump

in discharge piping - just after VW powered pump

ensure that the pump cooler/by-pass valve is closed

3/4" quarter-turn ball valve, on right side discharge pipe (behind you)

start engine (John Deere engine with Hale/Godiva pump)

turn key clockwise

observe display

follow instruction to start: "Push & Hold ENTER to CRANK"

hold until engine starts, then release

CAUTION! ***Don't turn the key counter clockwise!***

turning the key counter clockwise will also cause the engine to start - ***and STOP*** automatically at 125 psi. As the pressure drops and after about 10 seconds, the engine will restart and return to the previously set rpm and pressure.

two (2) dangerous situations can result:

the loss of water during a live-fire evolution & sudden repressurization of a hand line

prime the pump (if needed)

pull the Hale primer "T" handle up - hold for up to 60 seconds or until prime is attained

open the pump cooler/by-pass valve

set system operation pressure

DO NOT OPERATE AT IDLE RPM FOR PROLONGED PERIODS OF TIME!

push "rabbit" button to raise engine speed and discharge pressure - push "turtle" to lower

1000 rpm 60 - 65 psi 650 gpm

ordinary hydrant operation

1300 rpm 90 - 95 psi 1000 gpm

smoke house safety line: 100' - 1 3/4" w/TFT set on Low Pressure

1600 rpm 120 - 125 psi 1000 gpm

note: the relief valve should have a slight discharge at this pressure

vehicle fires safety line: 200' - 1 3/4" w/TFT set on Low Pressure

smoke house safety line: 100' - 1 3/4" w/standard TFT

tower hi-rise evolutions: 2 - 200' w/1 1/8" smooth bore nozzle

electrical safety demonstration

shut down

reduce engine speed to idle

press "turtle" soft key

allow the engine to cool - WAIT - a minute or two

turn key to "OFF" - straight up and down

DO NOT turn key fully counter clockwise - see CAUTION above

close the pump house

close vents (if not summer)

turn lights off

close door - check that it is locked

Hydrant System Pump/Engine Control Panel

current engine coolant temperature
(normally 179° F.)

Engine Control Module message display
(shown is one of several possible screens)

current battery voltage
(normally 14.0 volts)

current pump discharge pressure (psi)

three position Key Switch

“AUTO” DO NOT select
(produces an undesirable operational profile for MCFA fire ground operations)

“OFF” when not in use
(key removable
this position only)

“RUN” normal operation

NO “START” position

Morrmouth County
3441

Morrmouth County inventory control label

TEMP 179° F
RPM 1300
OIL 40
BAT 14.0
PSI 90
HOURS 01234.5

PUSH & HOLD ENTER to CRANK

current engine operating speed (rpm's)

current engine oil pressure
(normally 40 psi)

accumulated engine hours to date

For diagnostic use only
NOT for use by MCFA personnel

press here to increase:
engine speed (rpm)
and/or pump pressure (psi)

Push & Hold ENTER to CRANK the “STARTER” button

press here to decrease:
engine speed (rpm)
and/or pump pressure (psi)

ECM circuit protection

