



Polk City Fire Department

Standard Operating Guidelines

308a

#308 – Pump Operations – Brush 457

Date Issued: 04/14/2005

Date Last Revised: 1/31/2016

Purpose:

To outline the steps to effectively operate the pump on Brush 457.

Procedure:

1. Vehicle must be running and master switch turned on.
2. Turn gas on for pump.
3. Turn pump key to start.
4. Pull choke lever (if necessary).
5. Open tank to pump valve.
6. Open recirculation valve to approximately ½ open.
7. Open required discharge line(s).
8. Adjust throttle.
 - a. Start at SLOW idle.
 - b. SLOWLY increase to desired pressure/ RPM.
 - c. Approximately ½ throttle is 60 psi. – TYPICALLY sufficient.
 - d. Performance
 - i. 250 GPM @ 50psi
 - ii. 160 GPM @ 100 psi
 - iii. 100 GPM @ 150 psi
 - iv. 25 PGM @ 200 psi
9. Prime if necessary.
 - a. Open priming valve.
 - b. Close exhaust port.
 - c. Throttle engine up.
 - d. When water comes out of venturi – close priming valve.
 - e. Open exhaust port.
 - f. Adjust throttle to desired pressure/ RPM.
10. Shut down.
 - a. Adjust throttle to idle.
 - b. Close all open valves.
 - c. Shut key off.
 - d. Shut off fuel.
 - e. Open and close garden hose valve to release pressure from gauge.

FoamPro Auto Foam Proportioning Unit

1. Start pump as above.
2. Switch foam unit on.
3. Set desired concentration.
4. Open desired discharge line.
5. Flush line when complete.
6. Shut down pump.



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Sidewinder Operation

1. Start pump as above.
2. Adjust sidewinder with joystick to desired location.
3. Squeeze trigger.
4. Adjust water pattern with top rocker switch.
5. Release trigger to shut off flow.
6. Red switch on joystick.
 - a. Opens valve full time.
 - b. Allows connection of 1 ½" line to unit if nozzle is removed.
7. Shut down pump.

After Call:

1. Ensure water tank has been refilled.
2. Pump on/off switch should be in off position.
3. Gas valve should be in the off position.
4. Open (3) drain valves.
 - a. Pump
 - b. Manifold
 - c. Sidewinder
5. Verify pump fuel level is appropriate.
6. Verify master switch is OFF.