

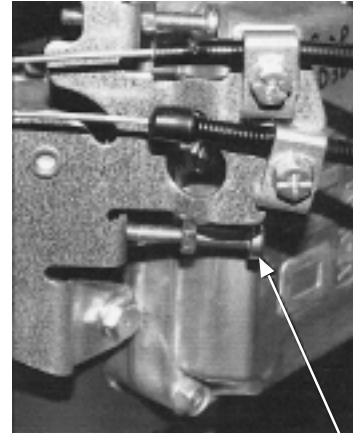
Propane Conversion - Final Stage

The following explains how to do the fuel system set-up on a commercial lawnmower using propane (LPG) fuel.

CARBURETOR AND PRESSURE REGULATOR ADJUSTMENT PROCEDURE

Pre-adjustment Check List

- Be sure the air filter is clean and properly installed.
- Remove the primary pressure test port plug noted in drawing below.
- Screw a 0-10 psig pressure gauge into the primary pressure test port.
- Open the valve on the propane tank to pressurize the fuel system.
- Verify there are no fuel leaks with a liquid leak detector.
- While the exhaust pipe is still cool, install the exhaust pipe extension tube per Technical Bulletin TB-SE0714.
- Start the engine.
- Set the primary pressure to 4 psig using the primary pressure adjustment screw noted in the drawing below.
- With the engine at operating temperature, check to insure the idle RPM is set at factory specified speed, usually about 1800 RPM, using the idle speed adjustment screw in the photo to the right.



Idle speed adjustment screw

Preliminary Idle Adjustment Procedure

- Insert the exhaust probe fully into the exhaust pipe extension tube and the muffler.
- At idle, CO in the exhaust should be 0.5%.
- Turn the idle fuel mixture screw in (richer) to raise the CO.
- Turn the idle fuel mixture screw out (leaner) to lower the CO.

Mixture Check Under Governed Throttle & Full Load

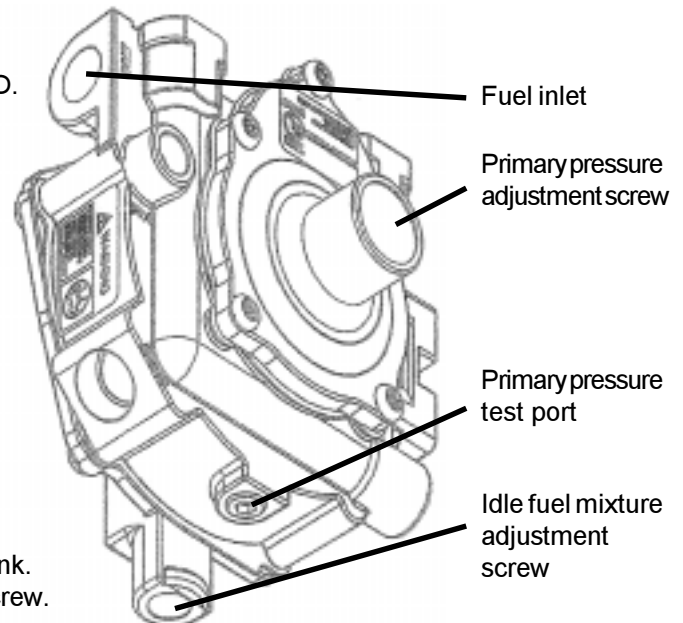
- Bring the engine to full governed RPM.
- Engage power to the blades.
- Check CO under load and adjust to 1.5% with the primary pressure adjustment screw.
- Disengage the blades and return to idle.

Final Idle Adjustment Procedure (If Needed)

- If primary pressure is changed in the previous steps, check CO at idle and adjust to 0.5%.
- Check engine speed and set to 1800 RPM.

Wrap Up

- Turn off the engine and close the valve on the propane tank.
- Replace the plug covering the idle mixture adjustment screw.
- Install the cap over the primary pressure adjustment screw.
- Remove the pressure gauge and reinstall the plug covering the primary pressure test port.
- Remove the exhaust probe and the exhaust pipe extension tube. **Warning: Both will be extremely hot.**



Fuel inlet

Primary pressure adjustment screw

Primary pressure test port

Idle fuel mixture adjustment screw

These are **general** CO levels where most small engines will deliver reliable power and good fuel efficiency. Always refer to the OEM's specifications for CO exhaust emissions.

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