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Alternate Priming Procedure for Fuel System on New MPI Engine Installations

Models Affected

All MPI models

Situation

A new procedure has been developed to reduce the time required to prime the fuel system and ease the starting process on all new MerCruiser fuel injected engines.

Correction

This procedure is an alternative to the current priming procedure presented in the Mercury MerCruiser installation manuals. Either the original published method or the following alternative method produce an easy first start for a newly installed engine.

Fabricating a Pressure-Relief Collection Tool

In order to take advantage of the alternative Priming Procedure a new pressure relief collection tool will need to be fabricated.

A 1.5 m (5 ft.) length of hose will work for most applications. A longer or shorter length of hose may be used to meet your specific needs. **Example:** To ensure the hose is visible from the helm of a cruiser would require a much longer hose than would be required for a runabout. The smaller diameter hose works best when using a long hose to reduce the amount of time and fuel needed to become visible in the hose.

IMPORTANT: All components must be fuel rated and must be inspected regularly to ensure the tool is in safe working condition.

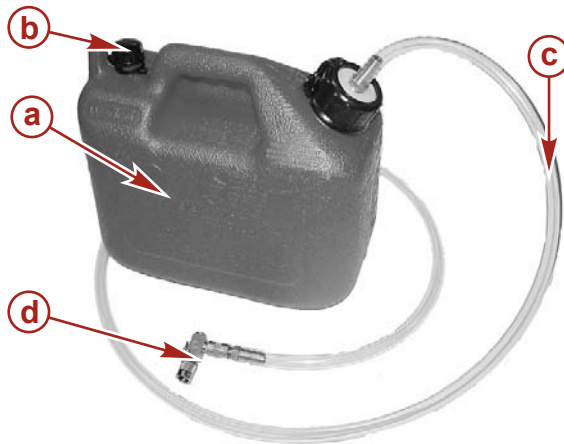
Supplies needed:

- One-gallon fuel can (collection tank) with separate vent.
- Clear hose (The hose can be from 3 mm to 9 mm (1/8 in. to 3/8 in.) diameter. The smaller diameter hose works best when using a long hose to reduce the amount of time and fuel needed to become visible in the hose.
- Appropriate sized barbed hose fitting.

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- Fuel pressure adapter (90-803135) from Mercury or other equivalent adapter.

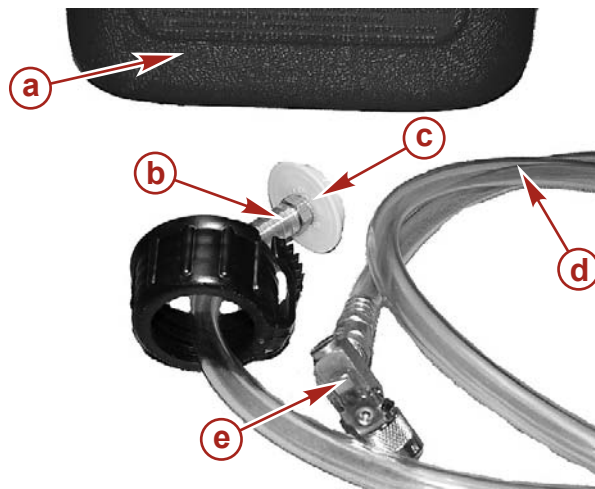


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Pressure Relief Collection Tool

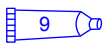
- a - One-gallon fuel can (collection tank)
- b - Separate fuel can vent
- c - Clear hose
- d - Fuel pressure adapter (90-803135)

In the following example a hole was drilled through the cap. The cap was tapped according to the size of the barbed hose fitting being used. Sealant was applied to the threads of the barbed hose fitting and the fitting was threaded into the cap. The clear hose was connected to the barbed hose fitting and the fuel pressure adapter attached to the other end of the clear hose.



26855

- a - One-gallon fuel can (collection tank)
- b - Barbed hose fitting
- c - Cap
- d - Clear hose
- e - Fuel pressure adapter

Tube Ref No.	Description	Where Used	Part No.
	Loctite 567 PST Pipe Sealant	The threads of the barbed hose fitting	92-809822

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Priming the Fuel System

⚠ WARNING

Fuel is flammable and explosive. Ensure the key switch is off and the lanyard is positioned so that the engine cannot start. Do not smoke or allow sources of spark or open flame in the area while servicing. Keep the work area well ventilated and avoid prolonged exposure to vapors. Always check for leaks before attempting to start the engine, and wipe up any spilled fuel immediately.

Using Fuel from the Boat Tank

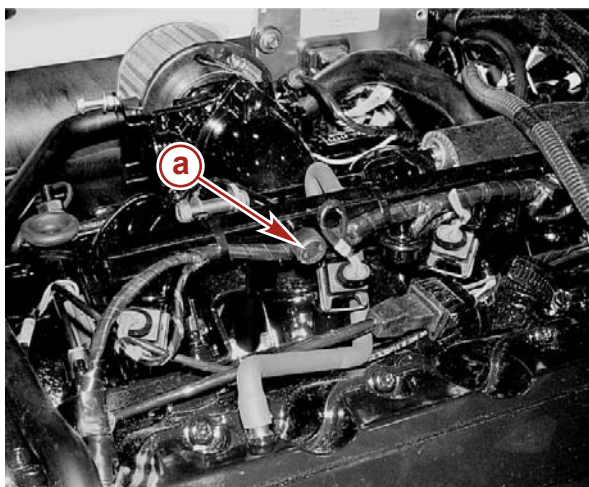
The fuel system is connected to the fuel tank on the boat and fuel is in the tank. This method does not require the use of a portable fuel tank.

Using Fuel from a Portable Tank

A portable fuel tank is connected to the engine and no fuel is in the boat fuel tank. After test running the engine connect the fuel line from the boat fuel tank to the fuel system. Follow the precautions in the appropriate **Mercury MerCruiser Installation Manual** for disconnecting the portable fuel tank and reconnecting the fuel line from the boat fuel tank to the boat fuel system.

The following procedure is the alternative method for priming the fuel system on all MPI models.

1. Remove the cap from the fuel pressure test port.



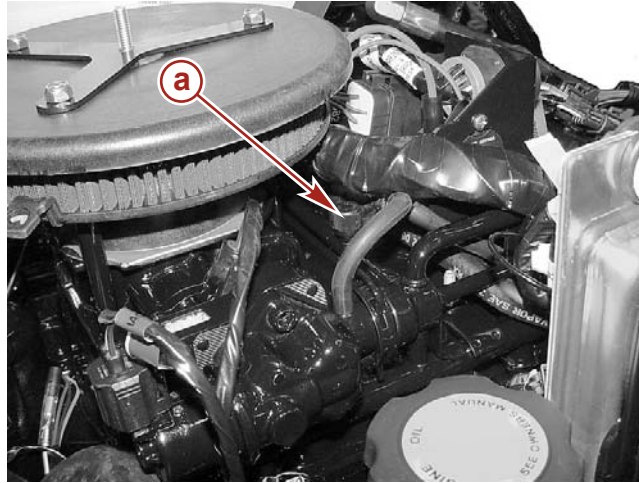
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100 Vazer

a - Fuel pressure test port

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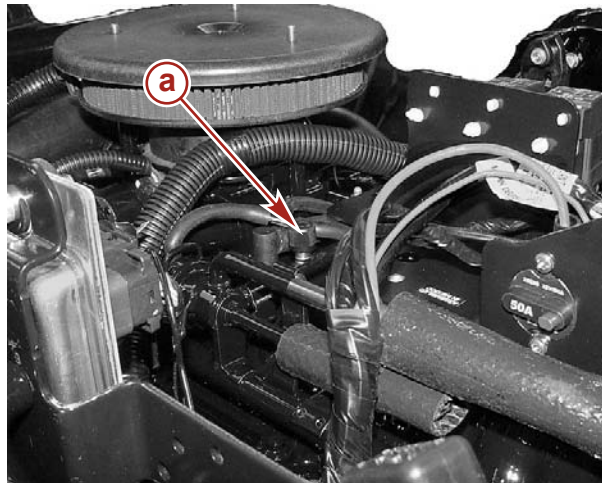
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26857

4.3L MPI

a - Fuel pressure test port



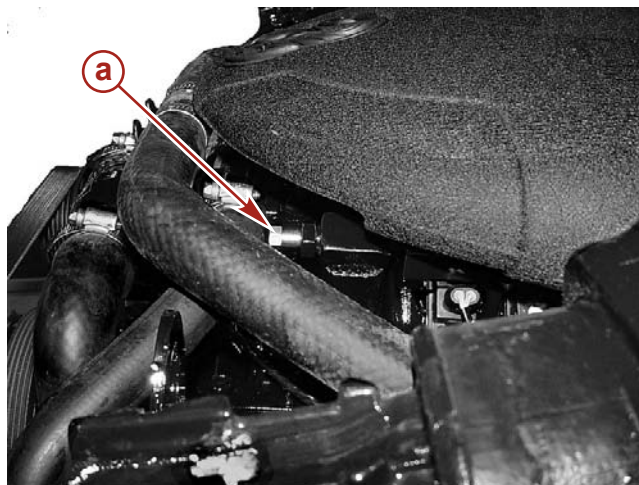
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5.0L, 350 MAG and 6.2L Models

a - Fuel pressure test port

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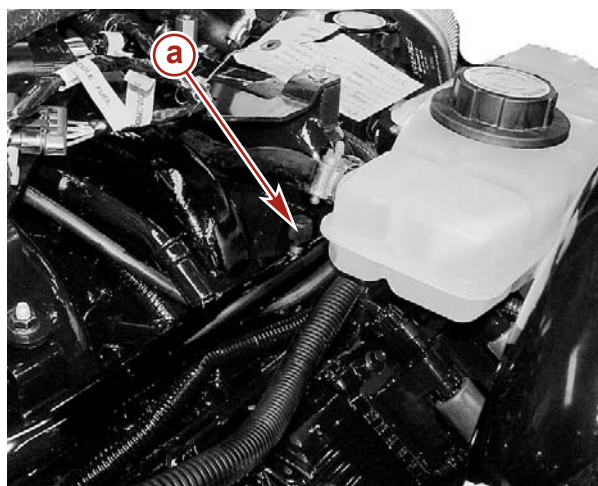
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26859

Black Scorpion and 6.2 Black Scorpion Models

a - Fuel pressure test port



26860

496 and 8.1L Models

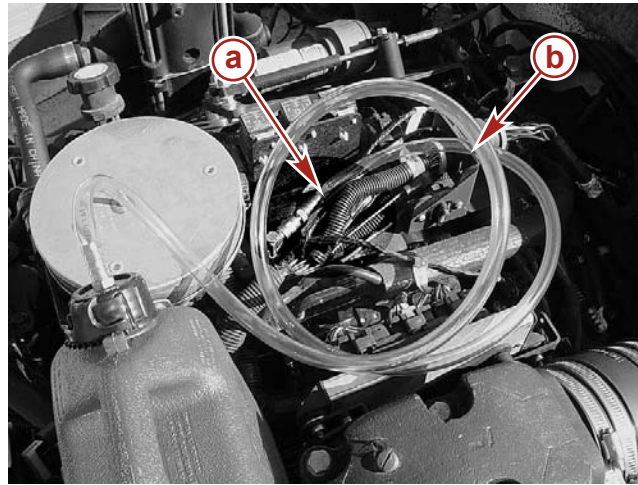
a - Fuel pressure test port

2. Connect the pressure relief tool to the fuel pressure test port and open the vent on the pressure relief collection tank.
3. Place the collection tank in a convenient location to ensure the clear hose is viewable from the helm.
4. Turn the ignition key to the "ON" position. Do not turn the ignition key to the start position.
5. When the fuel pump stops running, turn the key off.
6. Again, turn the key back to the "ON" position. Do not turn the ignition key to the start position.

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7. Repeat this cycle until fuel is visible in the clear hose. Fuel does not have to reach the collection tank. Once fuel is visible in the clear line, the air has been evacuated and the system is primed.



a - Fuel

b - Clear hose

8. Remove the pressure relief tool from the fuel pressure test port and install the cap.
9. Wipe up any fuel that may have spilled.
10. Ventilate the engine compartment.
11. After priming the fuel system, continue the engine preparation. Refer to the appropriate **Mercury MerCruiser Installation Manual**. All other procedures in the installation manual remain the same.

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