

Recirculation System Servicing

Important A dysfunctional recirculation system will cause one or more of the following operational symptoms:

- Erratic or poor idle characteristics
- Fouled spark plugs in lower cylinders
- Excessive smoke when accelerated after extended idle
- Idle quality unusually sensitive to trim angle

Before proceeding with these tests, the engine's operating temperature **must be above** the minimum specifications listed in **Section 4**.

Function Test at Cylinder Block – All Models

1. Connect an 1/8 in. I.D. clear vinyl hose between the cylinder block hose fitting and a syringe filled with isopropyl alcohol.
2. Press lightly on the syringe plunger:
 - Fluid should move freely through the fitting.
2. If fluid does not move freely through the fitting, clean fitting with OMC Cleaning Tool, P/N 326623.
3. Repeat Steps 1 and 2 for each cylinder block fitting.

Function Test at Inline Check Valve – V4, V8

1. Disconnect the inline check valve from the recirculation system.
2. Connect an 1/8 in. I.D. clear vinyl hose between fitting (A) and a syringe filled with isopropyl alcohol.
3. Press lightly on the syringe plunger:
 - Fluid should only move freely through fitting (C).
 - If fluid moves freely through fitting (B), replace the inline check valve.
3. Move the vinyl hose to fitting (B). Press lightly on the syringe plunger:
 - Fluid should only move freely through fitting (C).
 - If fluid moves freely through fitting (A), replace the inline check valve.
3. Move the vinyl hose to fitting (C). Press lightly on the syringe plunger:
 - Fluid should not move freely through either fitting (A) or (B).
 - If fluid moves freely through fitting (A) or (B), replace the inline check valve.

Function Test at Inline Check Valve – V6

1. Disconnect the inline check valve from the recirculation system.
2. Connect an 1/8 in. I.D. clear vinyl hose between fitting (A) and a syringe filled with isopropyl alcohol.

