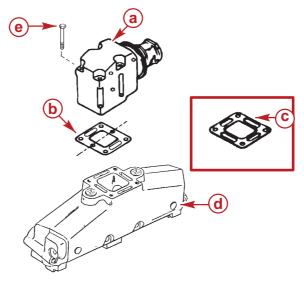
6. Remove exhaust manifold fasteners. Remove manifold assembly and discard gaskets.



75749

- a Exhaust Elbow
- **b** Restrictor Gasket
- c Open Gasket (Later Models and Service)
- d Exhaust Manifold
- e Bolts

# **Cleaning and Inspection**

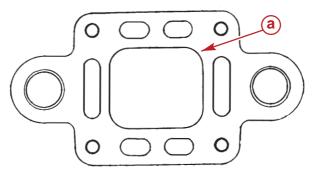
- 1. Clean gasket material from all surfaces and wash parts in solvent.
- 2. Check water passages for foreign material. Passages must be clean for efficient cooling.
- 3. If more thorough inspection is desired, pipe plugs may be removed from exhaust manifold and exhaust elbow.

# IMPORTANT: If plugs are removed, coat threads with Quicksilver Perfect Seal before reinstalling.

- 4. Check for cracks.
- 5. To test manifold body for leaks, block-off plates, plugs or short hoses with plugged ends must be used. One block-off plate must have a threaded hole for attaching compressed air hose. Use new gaskets when installing block-off plate(s). Apply 40 psi (276 kPa) of air pressure and submerge manifold in water. Air bubbles will indicate a leak.
- 6. Inspect all parts carefully. Machined surfaces must be clean and free of all marks and deep scratches, or water and exhaust leaks may result.
- 7. Check the flatness of all gasket surfaces. Maximum overall is .003 in. (0.07 mm), with not more than a .001 in. (0.02 mm) difference within 1in. (25 mm).

**NOTE:** Maximum material that can be removed is .010 in. (0.25 mm) to true a gasket surface up. When torquing the attaching bolts, make sure that they are not bottoming out in the manifold's threaded hole.

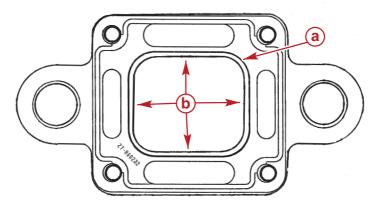
8. Look at the condition of the metal around the exhaust outlet in the casting. Inspect for damaged metal caused by salt water or exhaust gas corrosion in the manifold, elbow and riser, if equipped. Replace all damaged parts.



76341

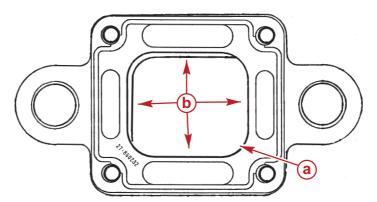
- a Inspect Area Around Exhaust Outlet
- 9. Check the fire ring gasket fit on the manifold gasket surface. Place a new gasket on the surface. Thread 4 short 3/8-16 bolts into the bolt holes. Move the gasket fore and aft, then side to side to make sure the gasket's fire ring has manifold gasket surface under it in all 4 positions.

**NOTE:** If the gasket's fire ring does not have a solid gasket surface in all 4 positions, the manifold should be replaced.



76355

- a Gasket's Fire Ring has Manifold Gasket Surface Under It in All 4 Positions
- Manifold Gasket Surface



76359

- a Gasket's Fire Ring Does Not have Manifold Gasket Surface Under It in All 4 Positions
- Manifold Gasket Surface

# Installation

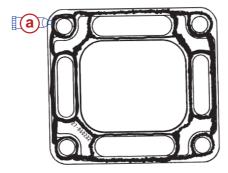
## **Gaskets**

**NOTE:** The service replacement gasket may not be the same type of gasket that was used in production.

The fire ring gasket with 4 slots is used between all manifolds, risers and exhaust elbows.

IMPORTANT: After applying Loctite 510 to the gasket, assemble components immediately.

1. Apply a 1/8 in. (3 mm) bead of LOCTITE 510 Sealant P/N 92-804874 around all holes on both sides of a new fire ring gasket.

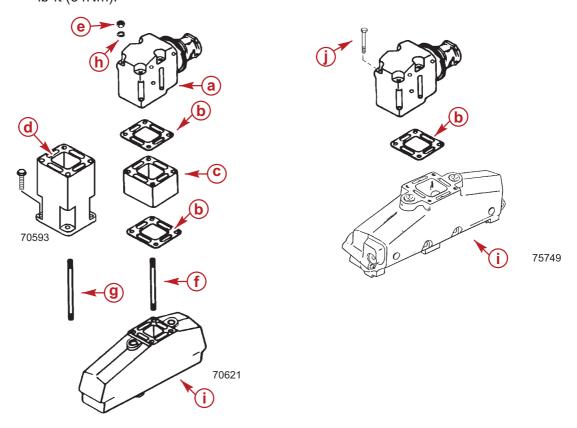


76360

- a 1/8 in. (3 mm) Bead of LOCTITE 510 Sealant
- 2. Assemble parts immediately and torque fasteners to specifications.
- 3. Allow sealant to cure 2-3 hours before starting the engine.

## **Manifold**

- 1. Using new gasket, install exhaust manifold to cylinder head. Torque fasteners to 25 lb-ft (34Nm).
- 2. Using a new gasket, install exhaust elbow to exhaust manifold. Torque fasteners to 25 lb-ft (34Nm).



#### **Elbows With Risers**

#### **Elbows Without Risers**

- a Exhaust Elbow
- **b** 4 Slot Gasket
- c 3 in. (76 mm) Exhaust Riser
- d 6 in. (152 mm) Exhaust Riser
- e Nut (8)
- f Stud (8) 9-3/8 in. (238 mm)
- g Stud (8) 10-3/8 in. (264 mm) Used With Some MIE Remote Oil Filters
- h Washer (8)
- i Exhaust Manifold
- j Bolts

## 3. Port Manifold:

- a. Install remote oil filter and bracket.
- b. Install components on exhaust elbow (if necessary).

#### 4. Starboard Manifold:

- a. Install bolt to secure water separating fuel filter bracket to exhaust manifold.
- b. Install shift plate assembly on exhaust elbow (MCM only).
- c. Connect instrument harness plug to engine harness, if disconnected previously.
- d. Connect both shift cables (MCM only).
- 5. Install exhaust elbows and cooling hoses.
- 6. **On Closed Cooled Models:** Refill closed cooling system to operating level with properly mixed coolant. Refer to SECTION 6B.
- 7. Reconnect battery cables to battery. Tighten securely.
- 8. Start engine and check for fuel, exhaust and water leaks.

## **Sterndrive Exhaust Extension**

- 1. Install appropriate exhaust extension for MCM Models with thru prop exhaust, using two hose clamps at each end.
- 2. Cut along bottom edge of raised bead for 3 in. (76 mm) risers or use full length for 6 in. (152 mm) risers.



50930

# **Typical Exhaust Extension**

- a Bottom Edge Of Raised Bead
- 3. Tighten hose clamps securely.
- 4. Upon first start-up of engine, check for leaks.

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