

## Oil Injection Gear Failures 135 thru 200 - 2.0L, 2.4L & 2.5L V6

**IMPORTANT:** Service/repair information for the following models:

### MERCURY/MARINER

135-200 hp Models  
Serial Number 0C239553 & up

### SPORTJET

175 hp Model  
Serial Number 0E203000 & up

### Problem

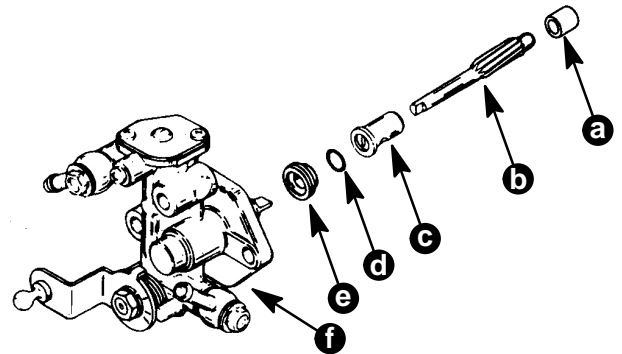
When repairing an oil injection gear failure on 2.0L, 2.4L, and 2.5L V6 Outboards and V6 Sportjets, perform the following procedure in order to prevent recurrence of failure.

### Inspection

Remove cylinder heads to inspect cylinder bore for scoring caused by lack of lubrication.

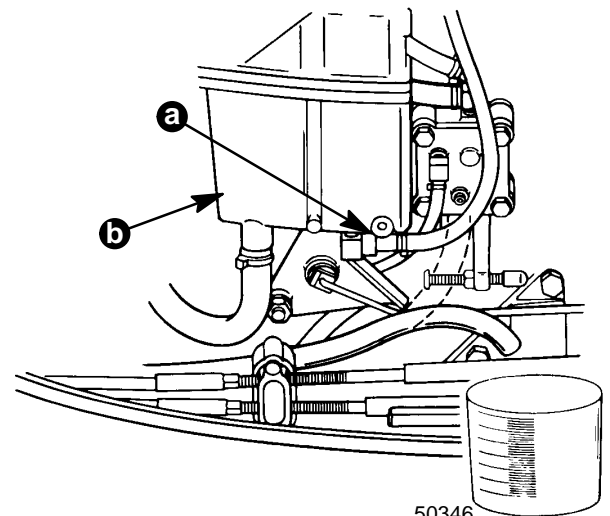
### Correction

- If the cylinders are not damaged, replace the oil injection check valve, the crankshaft mounted drive gear, the driven gear, the drive gear bearing assembly, and the oil pump with worm bushing and o-ring. Thoroughly clean the crankcase and bleed system, inspect bronze bushing in cylinder block for damage, and check the warning horn system for proper operation.



- a - Oil Pump Driven Gear Bushing Located in Cylinder Block
- b - Driven Gear
- c - Drive Gear Bearing Assembly
- d - O-Ring
- e - Worm Bushing
- f - Oil Pump

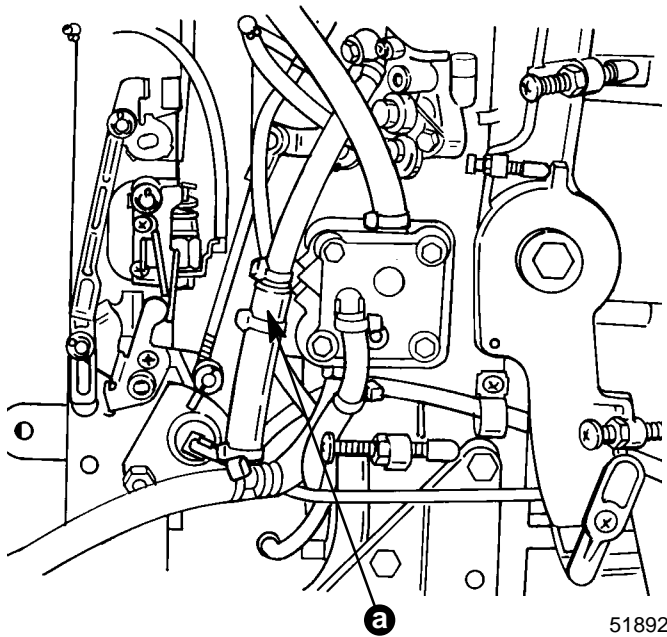
### EFI Check Valve Location



- a - Check Valve
- b - Vapor Separator

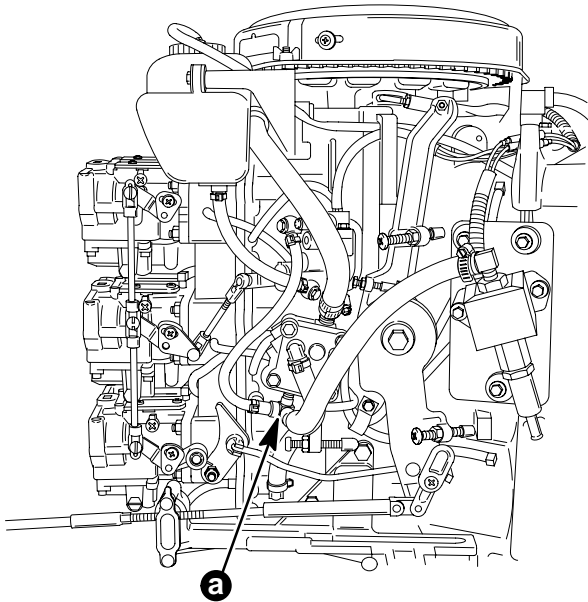
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## Carb Version Check Valve Location



a - Check Valve (In-Line)

## Carb Version and 175 Sport Jet Check Valve Location (Tee)



a - Check Valve (Tee)

- If the cylinders are damaged, repair or replace powerhead as appropriate, replace the oil injection check valve, oil pump, drive gear bearing assembly, and driven gear. Check the warning horn system for proper operation and instruct the customer on proper break-in procedure.

## Parts Required

For Oil Injection Gear Replacement –

- |        |                  |  |
|--------|------------------|--|
| Qty. 1 | P/N 22-814964    | Tee Check Valve (carb version below ser#0D082000)<br>Sport Jet 175 |
|        | <b>or</b>        |  |
|        | P/N 22-818994--1 | Check Valve (carb version ser#0D082000 and above)                  |
|        | <b>or</b>        |  |
|        | P/N 21-42481--1  | Check Valve (all EFI models)                                       |
| Qty. 1 | P/N 815698       | Oil Pump (135/150 carb version)                                    |
|        | <b>or</b>        |  |
|        | P/N 815699       | Oil Pump (175/200 carb versions and all EFI versions)              |
| Qty. 1 | P/N 23-41429A2   | Drive gear bearing assembly  |
| Qty. 1 | P/N 43-14563     | Driven gear  |
| Qty. 1 | P/N 43-14513A2   | Drive gear   |

For Complete Powerhead Replacement –

- |        |                     |  |
|--------|---------------------|--|
| Qty. 1 | P/N (as applicable) | Powerhead Assembly   |
| Qty. 1 | P/N 22-814964       | Tee Check Valve (carb version below ser#0D082000)<br>Sport Jet 175 |
|        | <b>or</b>           |  |
|        | P/N 22-818994--1    | Check Valve (carb version ser#0D082000 and above)                  |
|        | <b>or</b>           |  |
|        | P/N 21-42481--1     | Check Valve (all EFI models)                                       |
| Qty. 1 | P/N 815698          | Oil Pump (135/150 carb version)                                    |
|        | <b>or</b>           |  |
|        | P/N 815699          | Oil Pump (175/200 carb versions and all EFI versions)              |
| Qty. 1 | P/N 23-41429A2      | Drive gear bearing assembly  |
| Qty. 1 | P/N 43-14563        | Driven gear  |

**NOTE:** This bulletin is *informational only* and is not intended as a service authorization or fix program.