

|   |   |   |  |
|---|---|---|--|
| <b>SUBJECT: VALVE LASH ADJUSTER CLEANING</b>        |   |   | No: <b>TSB-99-11-006</b>                       |
|   |   |   | DATE: <b>June, 1999</b>                        |
|   |   |   | MODEL: <b>See below</b>                        |
| CIRCULATE TO:                                       | <input type="checkbox"/> GENERAL MANAGER            | <input checked="" type="checkbox"/> PARTS MANAGER | <input checked="" type="checkbox"/> TECHNICIAN |
| <input checked="" type="checkbox"/> SERVICE ADVISOR | <input checked="" type="checkbox"/> SERVICE MANAGER | <input type="checkbox"/> WARRANTY PROCESSOR       | <input type="checkbox"/> SALES MANAGER         |

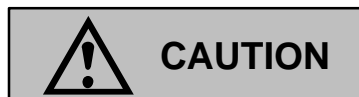
## PURPOSE

This bulletin contains cleaning procedures for valve lash adjusters. In many cases, cleaning valve lash adjusters can extend their service life. Mitsubishi Motors strongly suggests cleaning and inspecting lash adjusters before considering lash adjuster replacement.

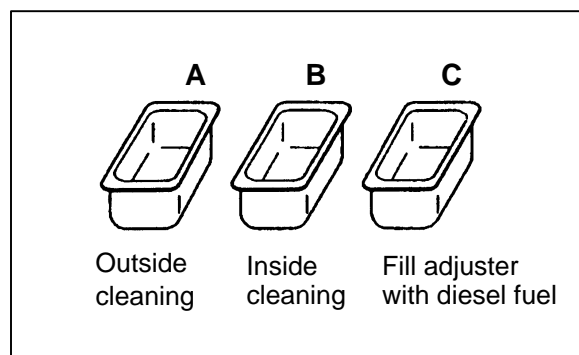
## AFFECTED VEHICLES

All models equipped with valve lash adjusters

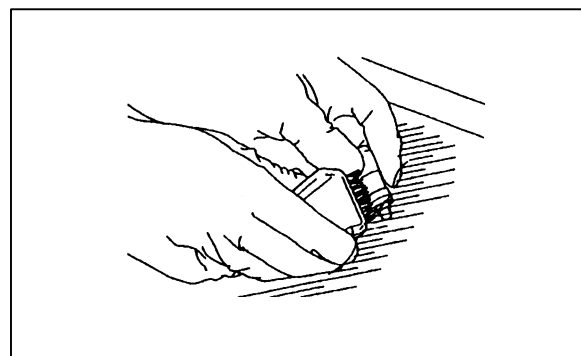
## PROCEDURE



Valve lash adjusters are precision mechanisms. Do not allow them to become contaminated by dirt or other foreign substances. Do not attempt to disassemble valve lash adjusters. Use only clean diesel fuel to clean valve lash adjusters.

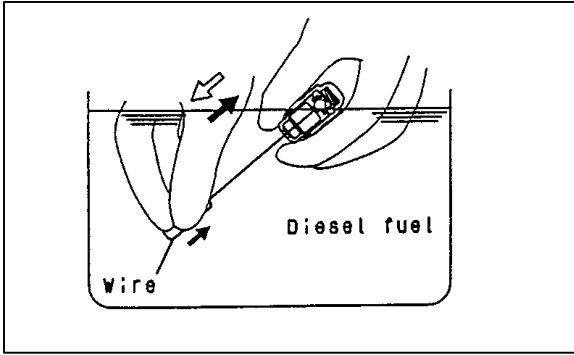


1. Prepare three containers. Place enough diesel fuel into each container to cover a lash adjuster when it is standing upright.
  - Container A will be used to clean the outside of the lash adjuster.
  - Container B will be used to clean the inside of the lash adjuster.
  - After cleaning the adjuster, use Container C to fill it with clean diesel fuel.
  
2. Place the lash adjuster into container A and clean its outside surface, using a nylon brush if necessary.



Continued

|             |   |               |
|-------------|---|---------------|
| FILE UNDER: | <b>Group 11 Engine in the Dealer Service Information Binder</b> | <b>(1983)</b> |
|-------------|---|---------------|



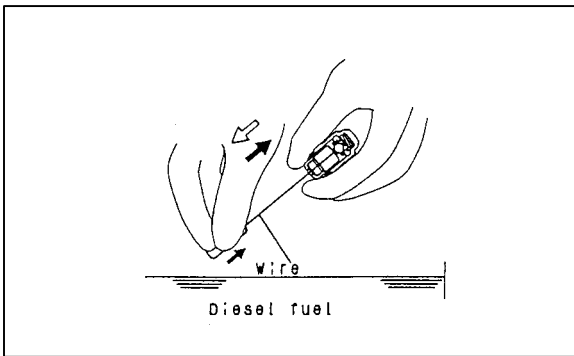
3. While gently pushing down the internal steel ball using stiff wire (0.5 mm diameter), move the plunger through 5 to 10 strokes until it slides smoothly. This will remove dirty oil from the lash adjuster and loosen the plunger.



**CAUTION**

**The steel ball spring is extremely weak. If the wire is pushed in with too much force, the lash adjuster will be damaged.**

If the plunger remains stiff or the mechanism appears to be abnormal, replace the lash adjuster.

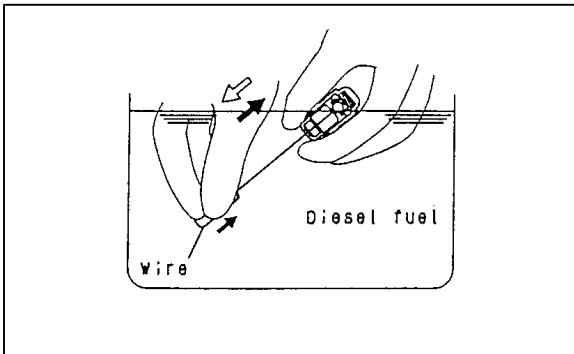


4. Remove the lash adjuster from container A. Then gently push down the steel ball and push the plunger to remove the diesel fuel from its pressure chamber.

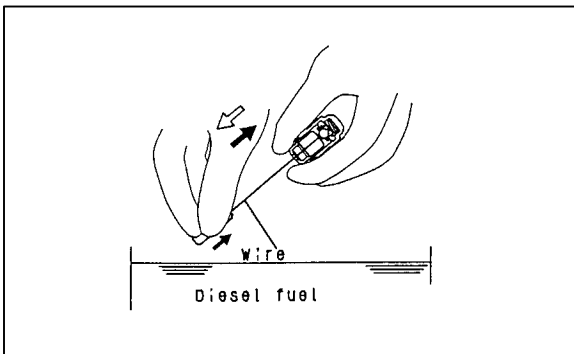


**CAUTION**

**On DOHC engines, point the oil hole toward container A. Do not point the oil hole toward anyone.**

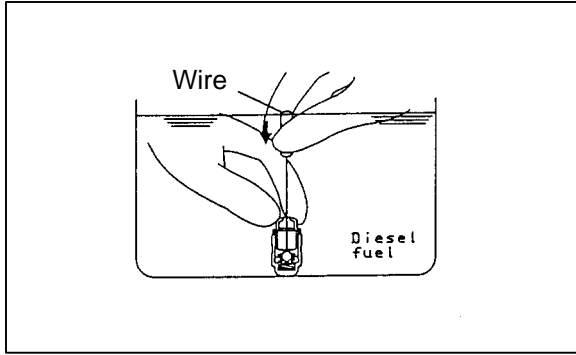


5. Place the lash adjuster in container B. Then gently push down the internal steel ball using stiff wire (0.5 mm diameter). Move the plunger through 5 to 10 strokes until it slides smoothly. This will clean the lash adjuster's pressure chamber.



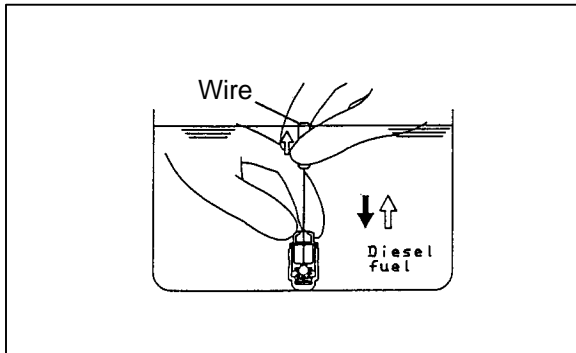
6. Remove the lash adjuster from container B. Then gently push down the steel ball and push the plunger to remove the diesel fuel from its pressure chamber.

Continued

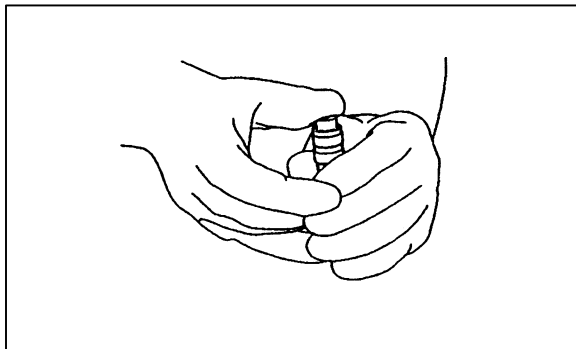


7. Place the lash adjuster in container C. Then gently push down the internal steel ball using a stiff wire (0.5 mm).

Do not use container C for cleaning. Foreign matter could enter the pressure chamber.



8. Stand the lash adjuster upright with its plunger at the top, then push the plunger downward firmly until it moves through its furthest possible stroke. Return the plunger slowly, then release the steel ball and allow the pressure chamber to fill with diesel fuel.



9. Remove the lash adjuster from container C and stand it upright with its plunger at the top. Push the plunger firmly and check that it does not move.

If the lash adjuster contracts, repeat Steps 7 through 9 to fill it completely with diesel fuel. If it contracts again, replace it.

10. Stand the lash adjuster upright to prevent the diesel fuel from spilling out. Do not allow it to become contaminated by dirt or other foreign substances. Install it in the engine as soon as possible.

## WARRANTY INFORMATION

Standard warranty procedures apply. Use the appropriate "Auto Lash Adjuster Cleaning" labor operation code.

Produced by the MMSA Technical Information Department.