

## MAINTENANCE BULLETIN #32

**Subject: Policy: Lubrication, Oil Service, Maintenance and Testing Interval. Cal OES Fire Engines, Water Tenders, Communications and Support Apparatus.**

This bulletin supersedes Maintenance Bulletin #32 of 3-2011. In order to operate a safe, dependable and cost-effective fleet of fire, urban search & rescue, communications and support vehicles, the following minimum standards shall apply:

### I. ANNUALLY OR EVERY 6000 MILES, WHICHEVER OCCURS FIRST:

1. OIL AND OIL FILTER CHANGE (This and all other applicable servicing shall include auxiliary pump engines on apparatus so equipped.) Use the grade and viscosity of oil recommended by the engine manufacturer. For any apparatus built in 2007 and newer that has a diesel particulate filter (DPF) use CJ-4 oil only.
2. CHASSIS LUBRICATION  
  
Lubricate the entire chassis and check all fluid levels.
3. AIR CLEANERS  
  
Replace air cleaner element. Inspect mounting brackets, inlet hoses and gasket sealing surfaces. Check all ember protection screens.
4. FUEL-WATER SEPARATOR  
  
Drain water from the separator. Replace the element any time water separator becomes contaminated enough that water level cannot be seen through the transparent cover. Note: The water separator is not a filter. Replace fuel filter(s) at the scheduled interval or more frequently depending on operating conditions. Whenever the fuel-water separator cartridge is replaced, do not fill the water separator with fuel and then install on motor. Once the water-separator has been replaced, utilize the manual or electric fuel priming system to refill the system with fuel. See also #10 FUEL FILTER below.
5. COOLING SYSTEM  
  
Check for proper solution of coolant and rust inhibitor.
6. BRAKE ADJUSTMENT  
  
Now and whenever necessary.

State of California  
**GOVERNOR'S OFFICE OF EMERGENCY SERVICES**  
Fire and Rescue Division

7. DISCHARGE AND DRAIN VALVES

Lubricate and exercise.

8. BRAKE INSPECTION – MAJOR

Per Cal OES Maintenance Bulletin No. 27

9. ENGINE TUNE UP

Per engine manufacturer's recommendations.

10. FUEL FILTER(S)

Replace. Do not fill the fuel filter with fuel and then install on motor.

11. TEST PUMP - FROM DRAFT

Record results and forward a copy to Cal OES Sacramento. **Check any sacrificial anodes on midship and auxiliary pump plumbing and replace as necessary.**

12. TEST ALL HOSE

Report failures to Cal OES Sacramento. Cal OES will replace hose which cannot be recoupled or is otherwise unserviceable.

13. PERFORM SMOKE OPACITY TEST – Diesel powered vehicles 4 years and older, having a Gross Vehicle Weight of over 6000#. ***Send copy of results to -***

***Cal OES Fire & Rescue, 3650 Schriever Ave., Mather CA 95655***

14. **For any apparatus built in 2007 and newer that has a diesel particulate filter (DPF), initiate a regeneration and record in vehicle's STD 271 Automobile Maintenance Log.**

15. **For any New, Retran, or Overhauled Allison Transmission, an initial filter change at 5,000 miles is required.**

16. **Replace internal and external filters (as equipped) on Allison Automatic Transmission.**

**II. 48 Months or 4000 Hours, WHICHEVER OCCURS FIRST**

1. Service Allison Automatic Transmission. Use only TranSynd TES 295 fluid.
2. Drain and refill all gear boxes and differentials. Use the correct lubricant, to the proper level.
3. Drain radiator, replace with proper solution of coolant and rust inhibitor, and change engine cooler filter.

**Note: This Maintenance Bulletin replaces Maintenance Bulletin #25 of 3/2011 regarding Allison Automatic Transmissions.**

**GENERAL**

Record all maintenance and repair work in the State Automotive Maintenance Record Book #STD 271 (located in the Apparatus Log Book). All repairs or maintenance involving expenditure of State funds must have prior approval of Cal OES Sacramento before proceeding.

Chassis lubrication, oil and filter service and air cleaner service shall be completed any time the apparatus has been subjected to severe adverse operating conditions such as prolonged use on wildland fires. Wheel bearings shall be serviced when apparatus is subjected to fording muddy water during flood emergencies.

*NOTE: Daily, weekly and monthly visual checks, inspections and service as defined on the reverse of Cal OES Form F-101 (Daily Apparatus Report) shall also continue to be performed.*