

## **Recommended Engine Oil Supply System for Small Governors and Actuators**

**(SG, PSG, EG-3, EGB-2, EG-10P, EGR)**

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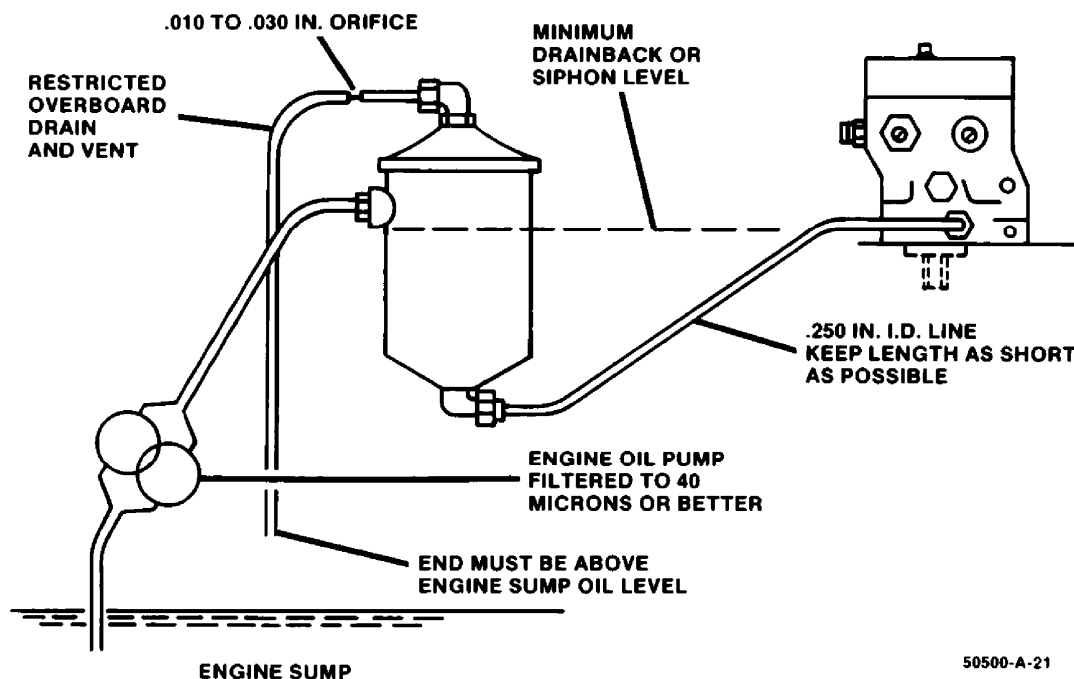
During extended shutdown periods, the oil supply line to the governor may drain back to the sump. Due to the lack of supply oil to the governor pump, the governor may not be able to open the fuel racks during cranking. This situation is more likely to occur with engines used for standby or emergency applications.

To prevent this situation, the supply system shown in Figure 1 is recommended for all small governors or actuators (SG, PSG, EG-3, EGB-2, EG-10P, or EGR). With this system, oil remains in the tank, thus supplying oil for the governor or actuator during engine start, even after long shutdown periods. Use 0.250" (6.35 mm) ID oil supply line, and keep length as short as possible.

The restricted overboard drain and vent permits the governor pump to draw oil before engine oil pressure is established and bleeds off any air accumulated in the tank. The end of the overboard drain line must be above the engine sump oil level, and the orifice in the drain line must be 0.010 to 0.030" (0.25 to 0.076 mm).

Most standard 1 to 2 quart housings (approximately 1 to 2 liters), with filter omitted, can be adapted for this system.

The minimum drainback or siphon level (Figure 1) is that oil level in the governor below which the governor pump gears are no longer submerged in oil. Oil level in the oil tank must always be as high as, or higher than, this line. If not, governor pump gears are no longer submerged in oil and will cavitate when the prime mover is started, causing possible loss of governor control.



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Figure 1. Recommended Engine Oil System

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