



# SERVICE BULLETIN

DIVISION OF ONAN CORPORATION  
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## GASOLINE FUEL

### LEADED VS NONLEADED

Most gasoline contains some lead additives (Tetraethyl lead) which accumulate in engine combustion chambers.

Since generator sets operate at constant (governor-controlled) speeds, it is difficult for the engine to "blow out" these lead deposits through the exhaust ports as is possible with engines operating at variable speeds. Therefore constant speed engines may require more frequent removal of deposits and more maintenance.

For this reason, Onan recommends the use of low-lead and nonleaded gasoline. Onan has run several conclusive tests with leaded vs nonleaded gasoline on various governor controlled engines. We find that using nonleaded gasoline helps reduce problems such as:

- Cylinder Head Deposits (low power)
- Sticking Valves or Burned Valves
- Spark Plug Fouling
- Piston Wear
- Ring Wear and Sticking
- Cylinder Wall Wear, etc.
- Poor Oil Control After Ring Fouling

For new Onan engines, we recommend using nonleaded gasoline from the start. On older engines, if you desire to change from leaded gasoline to nonleaded, the engine head must be taken off and all lead deposits removed from the engine.

**CAUTION** *If lead deposits are not removed from the engine before switching from leaded to nonleaded gasoline, preignition could occur causing severe damage to the engine.*

**NOTE:** The information in this bulletin on the use of lead free or low lead gasoline pertains to Onan-built engines ONLY. For Onan generator sets of all sizes having Ford, International, Waukesha, Tecumseh, or Briggs and Stratton engines, consult the engine manufacturers owner's manual accompanying the unit for specific fuel recommendations. This is a separate manual from the Onan Operator's manual which also comes with each unit.