# 4. Lubrication System

| Service Information        | 4-1 | Oil Pump Removal/Installation | 4-3 |
|----------------------------|-----|-------------------------------|-----|
| Troubleshooting            | 4-1 | Oil Tank Removal/Installation | 4-4 |
| Lubrication System Diagram | 4-2 |                               |     |

### **Service Information**

#### **CAUTION**

- · Air in oil system will block or restrict oil flow and may result in severe engine damage.
- · Bleed air from the oil lines whenever the oil lines or pump have been removed or there is air in the oil lines
- · Bleed air from the oil inlet line first, then bleed air from the oil outlet line.
- The oil pump servicing can be performed with the engine installed.
- · When removing and installing the oil pump, be careful not to let any foreign material enter the engine.
- · Do not attempt to disassemble the oil pump.
- Fill the oil outlet line with oil whenever the oil outlet line is disconnected.
- Refer to section 2 of the Common Service Manual for oil strainer screen cleaning.
- · When disconnecting the oil inlet tube, clamp or plug the tube to prevent oil from flowing out.

## **Troubleshooting**

### Excessive smoke and/or carbon on spark plug

- · Faulty oil pump (too much oil flow)
- · Low quality engine oil

### Overheating or seized piston

- · No oil in tank or clogged oil line
- · Air in oil lines or oil pump
- · Faulty oil pump (too little oil flow)
- · Clogged oil strainer
- · Clogged oil tank cap breather hole