



# TECHNICAL SERVICE BULLETIN

## Cadillac Water Pump Installation Procedures – 4.1L, 4.5L and 4.9L (1985-1995)

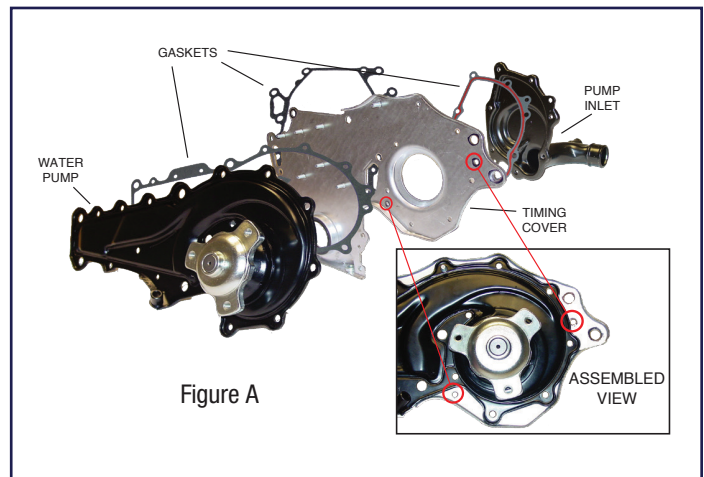
CARTER PART NUMBER: W627M

### #1

**CONDITION:** The inlet cover gasket, located between the timing cover and the inlet cover, shifts and causes a coolant leak that appears to be a leak from the water pump.

**CAUSE:** These particular Cadillac models' water pumps are tough to get to under the hood because of their tight location, and the pumps are secured with many fasteners. There are two bolts located very close to the outside edge of the water pump that must not be disturbed during the pump's replacement.

**CORRECTION:** Avoid unnecessary removal of these particular bolts when replacing the water pump. (See figure A)



### #2

**CONDITION:** A dimpled timing cover can prevent proper gasket sealing causing an additional coolant leak.

**CAUSE:** The timing cover may be dimpled where the 6mm studs protrude from the cover because of prior over tightening of the corresponding nuts.

**CORRECTION:** The fasteners on the timing cover should be tightened to proper torque value in a staggered pattern, alternating from one side of the pump to the other in a circular fashion, to make sure the gasket seats evenly. The torque specifications and sequence for the fasteners are as follows:

1. 4 torx head bolts = 30 FT. LBS.
2. 7 hex head nuts = 5 FT. LBS.
3. 1 stud = 30 FT. LBS.
4. 7 hex head bolts = 5 FT. LBS.