

# **TECHNICAL SERVICE BULLETIN**

## General Motors Quad 4 Installation Advisory – 2.3L (1987-1995)

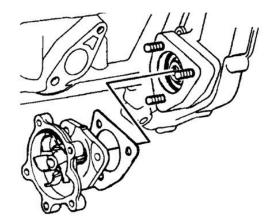
#### **CARTER PART NUMBER: W721M**

#### #1

**CONDITION:** The replacement water pump bearing is pressed downward as the mounting bolts are tightened, damaging the bearing.

**CAUSE:** Improper seating of the water pump bearing shaft into the bore in the timing chain idler bearing.

**CORRECTION:** To ensure proper installation, special attention must be paid to the proper seating of the splined end of the bearing shaft into the splined bore in the timing chain idler bearing.



### #2

**CONDITION:** The replacement water pump may not appear to seat fully, exposing a 1/4" gap between the timing chain cover and the pump's gasket surface.

CAUSE: The gap spacing is normal. The timing chain idler gear is internally spring-loaded to eliminate spline noise.

**CORRECTION:** The gap will diminish as the pump is tightened down. The pump to timing cover mounting bolts should be tightened in a staggered, side-to-side fashion to their proper torque. Refer to the repair manual for proper bolt torque values.