### **NEW PROCESS MAGNESIUM CASES**

**PART NUMBER 100246-02K** 

### Complaint

SECONDARY COMPLAINTS

### Pin-hole oil leaks in rear transfer case housing

• Wear of rear housing from pump tab contact • Damaged transfer cases must be scrapped

## CAUSE

Constant movement of the transfer case pump locating tabs in the rear half of the magnesium housing creates wear due to the abrasiveness of the aluminum and the concentrated contact of the pump tabs against the magnesium housing.

# CORRECTION

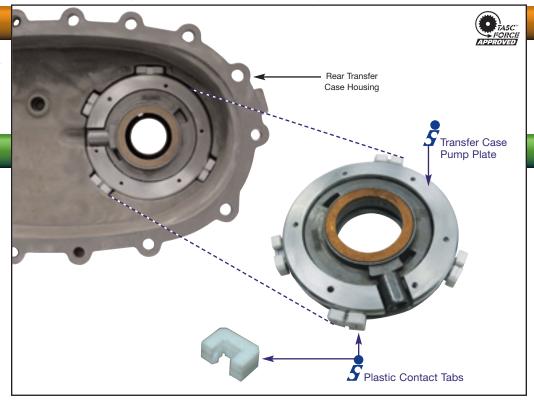
Eliminate all aluminum and steel contact of the OEM pump parts with the soft magnesium housing by using the easily installed Sonnax pump plate with abrasion-resistant plastic contact tabs.

# **Transfer Case Pump Plate**

#### 100246-02K

- 1 Plate
- 8 Plastic Tabs
- 6 Screws

Patent pending



#### **Sonnax Part Summary**

Accelerated wear of magnesium transfer case housings has been documented any time internal parts move against the magnesium. This is especially evident in New Venture/New Process 136, 149, 236, 246, 261 and 263 transfer cases. The sharp edges of the aluminum pump locating tabs cut through the soft magnesium, or other times the sharp edges of the OEM U-shaped insert wear a larger area above the pump tabs. A small amount of movement of the pump is necessary to keep the pump centered on the output shaft. Experience has shown that any metal in contact with the magnesium causes rapid fretting wear of the soft magnesium, resulting in pin hole leaks. The new Sonnax pump plate 100246-02K eliminates all metal-to-magnesium contact of the pump by replacing the OEM pump tabs with low-friction plastic inserts, and eliminating and the U-shaped steel insert. The new tab design relocates contact away from the original wear points, so any weld or patches on worn housings will not be disturbed.

#### **Features & Benefits**

- Quick bolt-on plate is easy to install.
- Abrasion-resistant plastic contact tabs replace thin OEM lugs and U-shaped steel insert.
- May be used with previously patched/welded case.
- Eliminates future wear issues.

