

## ACDelco Professional Steering Products

### Remanufactured Power Steering Pumps

Does your remanufactured power steering pump supplier use.....

- ⇒ *100% new OE specification hi-temp seals and o-rings?*
- ⇒ *Shafts that are precision micro-finished?*
- ⇒ *Cam packs that are precision ground and tested?*
- ⇒ *Factory pre-adjusted relief valves?*

ACDelco does! ACDelco's high quality remanufactured power steering pumps also include:

- *EVO installation instructions*
- *O-ring kit for reservoir and fittings*
- *Pulley assembly kit*



### Product testing ensures quality

ACDelco Professional Power Steering Pumps go through rigorous testing to ensure you get the quality you expect, reducing costly comebacks. Below are some of the tests that ACDelco's remanufactured power steering pumps must pass before they ever leave the manufacturing facility:

- *Cam packs are precision ground and tested*
- *Every unit tested twice for submersion and flow*
- *Submerge tested for reservoir leaks*
- *Pressure tested at variable speed, flow and noise levels*
- *Tested with magnetic probe plus and acoustical microphone system for detecting vibration and accepted db noise levels*

## ACDelco Professional Steering Products

### Remanufactured Rack and Pinion Gears

Does your remanufactured rack and pinion gear supplier use.....

- ⇒ 100% new OE quality seals and Teflon o-rings?
- ⇒ Proprietary micro-finish sleeving of the valve housing?
- ⇒ Shafts are centerless and polished to OE specifications?
- ⇒ The latest technology, including GM's Magnasteer?
- ⇒ Shafts that are checked for straightness to .005" TIR?
- ⇒ Valves that have been "power flushed?"
- ⇒ New OE Saginaw Teflon Rings in assembly

High quality ACDelco Professional rack and pinion gears uses all of the above to help give you the quality you expect from ACDelco.



### Product testing ensures quality

ACDelco Professional Rack and Pinion gears go through rigorous testing to ensure you get the quality you expect, reducing costly comebacks. Below are some of the tests that ACDelco's remanufactured rack and pinion gears must pass before they ever leave the manufacturing facility:

- *Valve bypass testing*
- *Return to Center test*
- *Tests for smoothness of operation*
- *Returnability test*
- *Internal and external leakage testing*
- *Special Magnasteer test fixture runs electro-magnet testing for both designs along with torque difference testing between left and right turns, this testing procedure is approved by GM Process Engineering*

## ACDelco Professional Steering Products

### Remanufactured Integral Gears

Does your remanufactured integral gear supplier use.....

- ⇒ *OE seals and o-rings?*
- ⇒ *100% new rolling steel balls?*
- ⇒ *Chased threads?*
- ⇒ *A precision shaft surface?*
- ⇒ *Precision micro-finished valves?*
- ⇒ *A Heavy duty carton packed with instapak foam to cut down on shipping damage?*

High quality ACDelco Professional integral gears use all of the above to help give you the quality you expect from ACDelco.



### Product testing ensures quality

ACDelco Professional Integral Gears go through rigorous testing to ensure you get the quality you expect, reducing costly comebacks. Below are some of the tests that ACDelco's remanufactured Integral Gears must pass before they ever leave the manufacturing facility:

- *100% testing of all splines and threads*
- *All units are tested on our proprietary multi-stage "Performance Simulator"*
- *Internal component wear & noise tests*
- *Internal and external leak tests*
- *Tested to meet OE performance specifications*

## ACDelco Professional Steering Products

### Repairs

When making repairs on steering systems it is very important to:



1. Use only OE approved fluid
2. Flush out the power steering fluid in the lines before removing the old pump
  - Not flushing the line can result in early pump failure.
  - Flushing may require 2 or more quarts of OE fluid
3. Bleed air out of the system following proper bleeding procedures (air in a power steering system will cause noise.)

### Product testing ensures quality

ACDelco remanufactured steering products are tested throughout the remanufacturing process and at the end of final assembly. In addition, to ensure continuous improvement, all returned failed units are torn down to determine the root cause of failure. Failures help determine corrective actions to help ensure ACDelco delivers the high quality parts you expect.



### Support and Training

Be sure to check out the following seminars:

**Steering Comeback Prevention Seminar** - part of a larger group of Comeback Prevention Seminars, including power steering, generators, starters, fuel pumps and HVAC (#S-DS11-01.01SEM)

**Power Steering Servicing Tips Seminar** - #S-DS11-05.01

Power Steering VCT - virtual seminar found on [acdelcotechconnect.com](http://acdelcotechconnect.com) under "product information" and then "Technical Product Service Aides" links.