

SND003, SND004, SND028, SND028GQ

JAS has had the above starters returned with broken drive end housings.

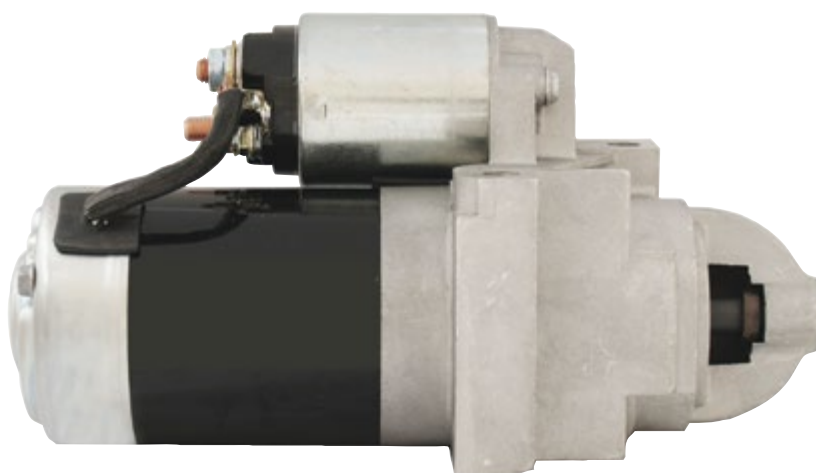


Please note that in normal operation a starter is not capable of developing enough torque to cause the drive end housing to break. Damage of this type is not covered by warranty.

This type of damage is typically caused by an engine backfire or “kickback”. General Motors have released Tech Service Bulletins addressing this issue; the cause is usually one of the following:

- Crank Position Sensors
- Fuel Pressure Regulator
- Timing Belt
- PCM or ECM
- Distributor cap
- Valve Adjustment
- Use of starting fluid
- Misaligned / improperly mounted starter, please see correct fitment of shims below.

Repairs to rectify any of the above issues should be carried out prior to fitment of new starter motor.



Correct Use of Shims on GM Starters

GM Starters require the use of shims or a shim, to ensure that the starter drive engages correctly with the flywheel.

When replacing a GM Starter, remove the old unit; remove the old shim(s).

NOTE: Sometimes Shim(s) are required even if none were present in the original installation.

- A high pitched whining sound as the starter disengages indicates that an increase in clearance is required.
- A clanging sound when the starter is engaged indicates that a decrease in clearance is required.

TO INCREASE CLEARANCE:

- Shim(s) may be placed at both the mounting holes for gradual clearance (See Figure 1).
- For greater clearance, insert Shim(s) only at the inboard mounting hole (See Figure 2).

TO DECREASE CLEARANCE:

- Place Shim(s) only at the outboard mounting hole (See Figure 3).

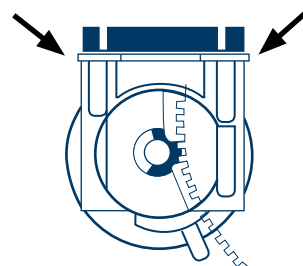


Figure 1

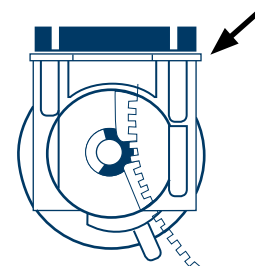


Figure 2

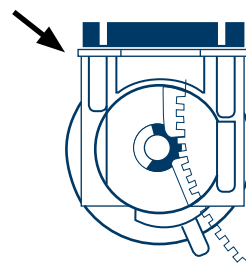


Figure 3

