

***** ATTENTION: Manual transmission Corvette owners *****

A very small percentage of manual transmission equipped Corvettes had a balance issue from the factory. GM has addressed this issue in the repair manual. They inserted a 1/4" dowel in the appropriate hole in the outer ring of the damper. Each car is different. You **MUST** look at your OEM damper **BEFORE** you remove it and see if it has a weight applied. If so, you must make note of its location in reference to the crank position. Since the LS crankshafts are not keyed, once the damper is removed, there is no point of reference and no chance of reattaching it correctly.

1. Remove existing damper bolt and damper from engine. **Save your old bolt for installation in the last step. (OEM bolts are a 1-time use only bolt - do not reuse as a primary bolt!)**
2. Depending on the year of your engine / vehicle you may notice a thin "friction" washer behind the damper hub in front of the first oil pump gear. This washer should be left in place and will not hurt anything if you are or are not pinning or keying your crankshaft. If your year does not have this washer and you would like to add one, there must be a machined "lip" provision on the back of the hub to do so.
If you are not using a key or pin, you must fill the key slot with some high temp silicone so no oil leaks past the damper bolt washer!
3. This would be the time to consider whether or not you would like to pin the crankshaft as the damper has a keyway in the hub unlike many OEM dampers. If you decide to pin the crankshaft (a must for super charging), you will need to purchase LS1 Crank Pin Drill Fixture.
4. If a rear pulley (i.e. 4 rib A/C) is being used, it must be placed on the back of the hub before the hub is pressed on the crank.

Installing an Accessory Pulley

Note! Most LS dampers will include a front or rear pulley for OEM accessory drives. If no front pulley is used and/or you choose not to use a front or rear mounted pulley, you **MUST** still put the additional (3) bolts through the unit for a total of (9) bolts holding the assembly together and to the hub. Some applications require the damper shell or hub to be modified if a rear pulley is not used.

⚠ Damper damage will occur if you do not use at least nine bolts total!

Using the GM Factory Bolt

Note! The GM factory bolt is a 1-time use bolt! Directions are for installing a new bolt only, part #12557840 for wet sump LS or part #11570163 for LS7 / LS9.

1. Use your old bolt to install the damper and torque to 240 ft/lbs, then remove it. This is to seat the damper completely.
2. Install your new bolt and tighten to 37 ft/lbs. We recommend Blue or Red Loctite here if you are doing any high performance driving with this engine.
3. This step is to get a reference on the front of the engine. With the torque wrench hanging at the spot where the 37 ft/lbs was achieved, reference 140° clockwise for another tightening cycle. Put a mark or a piece of tape where you need to tighten.
4. Then go another 140° from the 37 ft/lbs starting point and you are now tight.
5. Apply high temperature RTV to both sides of the washer prior to installation.
6. Use 262 Red Loctite and tighten to 230 ft/lbs.