STEETER Installation Instructions

Step 1 – Tools & Procedures

- EQUIPMENT: Damper Installation Tool
- · Anti-seize Compound
- · The Proper Key
- Paint Thinner Window Cleaner
- High Quality Automotive Type Enamel Paint
- DO NOT use a hammer during installation
- Honing or machining Streetdampr bore is not recommended. A diametrical press fit of .0005" to .0015" is recommended for proper damper function. If a micrometer is available, you may want to measure the crank snout and the inner bore of Streetdampr to assure proper fit.
- Streetdampr is coated with a corrosion inhibitor, once the bag is opened and the damper is handled, it <u>MUST</u> be painted to prevent rust & corrosion. Rust and corrosion is not covered under Streetdampr's 90 day limited warranty.

Step 2 - Painting Instructions

Please note that Streetdampr should feel "tacky", as it is coated with a corrosion inhibitor. This coating is water soluble; therefore, we recommend that, before you install Streetdampr on your engine, you paint it. The coating can be washed off with window cleaner. Before painting, prepare the damper with a solvent such as mineral spirits or paint thinners to assure there are no surface contaminants present. You will need to mask the bore and the surface area which contacts the timing cover oil seal. We suggest you paint Streetdampr with a high quality automotive type enamel paint. After the paint is dry, coat the inside bore with anti-seize or moly grease to prevent rust and help aid in assembly. Please note: heating the damper above 280°, is not recommended and will void warranty.

Step 3 - Balancing

INTERNALLY/EXTERNALLY BALANCED ENGINES

- Each Streetdampr component is precision balanced during manufacturing, so no balancing is required.
- Do not attempt to balance the crankshaft with Streetdampr installed- the inertia ring inside the streetdampr is balanced to a close tolerence at the factory and it rotates inside the streetdampr.
- Do not drill into Streetdampr- the inertia ring and silicone fluid are in a hermetically sealed housing.

Step 4 – Preperation of the Crank Snout

- Carefully remove burrs, scratches, or nicks on the crank snout by filing and polishing the snout so that it's smooth and free of surface irregularities.
- · Remove any sharp keyway corners.
- The key should fit snugly in the keyway
 - A heavy press fit creates high stress on the slot and should be avoided.
 - If you have to use a hammer for anything other than a light tap, the key is too wide.
 - Do not use a loose fitting key.
 - Replace any key if it doesn't fit properly, or if its condition is questionable.

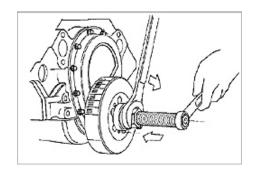
Step 5 – Streetdampr Installation

- Coat the crankshaft snout and inside diameter of Streetdampr with an anti-seize compound or moly grease to prevent galling during installation.
- Place the damper on the crank snout, thread the installation tool into place. (It will take a little effort to tighten the installation tool nut.)
- As you tighten the nut on the installation tool, you should meet smooth steady resistance until the damper is fully seated against the timing gear or spacer.
- If resistance increases dramatically, (aside from when the damper seats fully) something is wrong. Find out what it is before proceeding.
- BE SURE STREETDAMPR IS ALL THE WAY ON!
- When the damper is fully seated, remove the installation tool and install a Grade 8 crankshaft bolt and washer. Tighten the bolt to the engine manufacturer's recommended torque specification:

Chevy Small Block - 70 ft. lbs., Chevy Big Block - 110 ft. lbs., Ford - 110 ft. lbs.



WARNING: FAILURE TO USE A PROPERLY TORQUED CRANK BOLT WILL VOID WARRANTY AND COULD RESULT IN DAMPER INNER BORE, KEY OR CRANK SNOUT DAMAGE.



Step 6 - Timing Check



- Check the ignition timing marks. Some engines have been equipped with different timing tabs over the years. The engine's tab may not be positioned the same as the one for which Streetdampr is designed.
- Use the positive stop method to locate true Top Dead Center (TDC). Remark or relocate the timing tab as required.
- Finding TDC- Top Dead Center may be found by installing a positive stop on top of the block (if the heads haven't been installed) or by threading a positive stop into the number one spark plug hole. Adjust the stop so that it contacts the piston at 15 to 30 degrees before TDC. Mount a degree wheel to the damper and install a pointer on the block. Carefully rotate the crankshaft by hand clockwise until the piston contacts the stop. Be careful as the position approaches TDC- what you want is positive stop, not a hole in the piston. Note the reading on the degree wheel. Then rotate the crankshaft counterclockwise until the piston once again contacts the stop and note the reading again. TDC is located exactly halfway between the two readings (within the area the engine did not rotate). Adjust the pointer as required. As an example, if the piston stops at 22 degrees before TDC when the crank is rotated one way, and 18 degrees after TDC when rotated in the opposite direction, the pointer is 2 degrees off. Move the pointer 2 degrees (so it indicates 20 degrees) and when you check it again, the piston should stop with the pointer indicating 20 degrees in both directions. Once this is accomplished, remove the piston stop and rotate the crankshaft until the pointer indicates TDC on the degree wheel. Check the timing tab and if it isn't pointing to "0" on the damper, adjust or remark the tab so that it is. If you don't have a degree wheel, mark the damper next to the timing pointer "0" mark at each positive stop. Then divide the distance in half. That is TDC.

Step 7 – Pulley Installation

- Accessory drive pulleys should be piloted on the damper or pulley mandrel. Otherwise, they will run out of round, causing side loads on the crankshaft.
- Re-install stock pulley bolts and torque to recommended stock specifications.
- Note- avoid cross threading pulley bolts during installation or removal. Streetdamprs are threaded for UNC fasteners with 16 t.p.i. (threads per inch) on Ford or 24 t.p.i. on Chevy. Some O.E. dampers use a coarse thread.

Step 8 - Damper Removal

· Whenever it's necessary to remove a vibration damper, only a proper puller tool should be used.

Warranty

LIMITED WARRANTY: All Fluidampr's are warranted to be free from defects in workmanship and materials for a period of one (1) year from the DATE OF PURCHASE. We recommend that you keep a copy of your sales invoice or receipt showing DATE OF PURCHASE during this warranty period. In the unlikely event you need to make a claim, for warranty consideration, you must contact Horschel Motorsports for a returned goods authorization number. During the warranty period, Horschel Motorsports will repair or replace, at our discretion, any part or parts that are determined by Horschel Motorsports to be defective due to workmanship or materials. Transportation charges for return of defective parts must be PREPAID by the purchaser. THIS WARRANTY DOES NOT INCLUDE AND IS NOT LIMITED TO THE FOLLOWING: • Failure due to improper installation or maintenance. • Loss or injury incurred from use or operation of Horschel Motorsports products. • Misuse, abuse, or unauthorized repairs. •Removal or replacement cost. • Cost incurred due to downtime of vehicle. • Damage to other engine or vehicle components. • Normal wear and tear.

Horschel Motorsports® • 180 Zoar Valley Rd • Springville, NY 14141 • 716-592-1000 • FAX 716-592-1001 • Website: www.fluidampr.com • E-mail: support@vibratechtvd.com