SUPER DAMPER

DAMPER PART NUMBERS
PART #24502534 - DAMPER ASSEMBLY, 1.245" I.D.
PART #24502535 - DAMPER ASSEMBLY, 1.600" I.D.
PART #24502536 - HUB ONLY, 1.245" I.D.
PART #24502537 - HUB ONLY, 1.600" I.D.

The 6 Flat Head Screws and 3 Ferry Cap Screws MUST be retorqued after 5 and 10 runs.
Allen Head: 16 Ft. Lbs.
Cap Screws: 30 Ft. Lbs.

The 3 ferry cap screws can be used for pulley or trigger mounting but MUST BE INSTALLED and torqued if no pulleys are used.

CAUTION ! BALANCE:
Zero balance units have **each part** individually balanced to two-tenths of a gram. These units should not be drilled and SHOULD NOT be on the crankshaft for balancing. Install the damper at engine assembly. Since the inertia weight in the Super Damper is not bonded, it may not be on center until the engine is started. The damper may show out of balance until the engine reaches 2000 RPM the first time and the inertia weight centers itself.

INSTALLATION INSTRUCTIONS:

1. Inspect your crankshaft for burrs, nicks, etc. and file to clean up. Inspect your key and replace as necessary.

2. It is highly recommended that you use anti-seize lubricant on the crankshaft before hub installation.

3. Press fit of the hub to the crankshaft is vital to transfer harmonics from the crankshaft to the damper assembly. Recommended press is as follows:

   1.000 - 1.250 ----------.0009 to .0012
   1.250 - 1.375 ----------.0008 to .0011
   1.375 - 1.600 ----------.0007 to .0009

   The crank **must** be checked with micrometers and the hub with a dial bore gauge to verify fit. Most OEM cranks ----------are held to +/- .0002 while most aftermarket cranks are held to +/- .0005.

4. The hub may be installed onto the crankshaft first, then the damper may be bolted to the hub.

5. The damper assembly is indexed to the crank hub. The indent mark on the hub and damper must be aligned together for proper assembly.

DAMPER INSTALLATION INSTRUCTIONS (Continued)

6. The hub to damper fit is held to extremely close tolerance. Install the damper to the hub in the following manner:
   a.) Align the indent holes.
   b.) Start three (3) ferry cap bolts in front of the damper in the three holes that are not countersunk. **DO NOT PULL THE DAMPER DOWN TIGHT ON THE HUB!**
   c.) Start the six (6) countersunk flathead screws in the remaining six holes. Use Loctite® 242 on these six screws. Draw the damper assembly onto the hub evenly. Torque the six flathead screws to 16 ft./lbs. **NOTE: LOCTITE® MUST BE USED. USE ONLY LOCTITE 242**
   d.) Torque the ferry cap screws to 30 ft./lbs.
7. The use of a pulley installer is highly recommended.
8. The zero timing mark is keyed exactly as the OEM part.

TO TELL WHEN YOUR DAMPER NEEDS NEW RUBBER:
Drag Race Engines subject the damper to low total cycles at intermittent intervals. Elastomer in all units inspected will easily meet the ten year requirement.

Circle Track Engines subject the damper to greatly increased cycle times for an extended period of time and the damper requires more attention.

Nextel Cup - Most teams are inspecting rubber after each race or every 2 races (1.2 to 2.5 million cycles). Engines running shorter races can easily go 2.5 million cycles since the damper is not subjected to lengthy, continuous cycles under the extremely hot, tight environment of Nextel Cup.

RECOMMENDED MAINTENANCE SCHEDULES:

- Street/800 HP Max Drag Use: 10 years
- Circle Track / Endurance: Each engine rebuild
- Pro/Fuel Drag Use VARIES: Annual
- 5.5" Dampers depends on HP/usage:
  - ~ 400 HP - 5 years
  - ~ 400-600 HP - 2 to 3 years
  - ~ 600+ HP - yearly

Order replacement elastomer kits from **ATI Performance Products, Inc. (800) 284-3433).**