



Installation Instructions for 93038

Ingalls Engineering Stiffy™ Engine Torque Damper for 2006+ Civic Si

The **Stiffy™ Adjustable Engine Torque Damper** is engineered to reduce deflection under hard acceleration and cornering for improved performance and power to weight transfer. Deflection in the motor mounts, as with the chassis and suspension, is a formidable enemy in power and weight transfer, robbing valuable horsepower and control. The innovative, built-in damper eliminates the huge amounts of “torque shock” that result from wheel-hop and once installed; transfers more power to the road and improves acceleration, shifting, and overall control and balance. The adjustable feature allows the assembly to be tuned and pre-loaded for racing and street applications.

CAUTION: Observe proper safety and repair procedures for installation of all chassis parts. Some chassis parts require specialized tools and experience and therefore **MUST** be installed by a qualified technician; otherwise and unsafe vehicle and/or personal injury could result. Wear safety glasses and other protection.

WARNING: Before beginning, check for any damaged or loose suspension connections. Loose connections here indicate worn or broken parts which **MUST BE REPLACED**. Failure to replace a damaged or worn spindle and/or link may cause the wheel to separate from the vehicle, possibly resulting in serious personal injury. Installer **MUST** check for proper clearance. Modification(s) may be required. Please proceed **ONLY** if the vehicle owner is completely aware of these potential suspension modifications.

Estimated Installation Time: One Hour

Technical Rating: Easy

Included Parts List:

- 1 - Stiffy™ Engine Torque Damper
- 1 - Engine Bracket
- 1 - Chassis Bracket
- 1 - Cable Tie
- 1 - Hardware Kit

Required Tools for Installation:

- Metric Sockets
- Metric Box Wrenches
- Crescent Wrench (up to 27mm)
- 3/8" Torque Wrench
- 3/8" Socket Driver (Wrench)

Step 1: Remove all three factory bolts connecting factory passenger side dog-bone style engine mount using 17mm wrench. Slip out factory dog-bone engine mount and set aside for reinstallation. Remove stock engine mount bolt from passenger side engine mount; this nut is nearest to the pulley and intake manifold.

Step 2: Remove the 6mm bolt holding the air conditioning line bracket to the dog bone mount (Arrow A). Place one of the supplied spacers between the mount and the air conditioning line bracket then re-mount using the supplied 6mm bolt and washer.

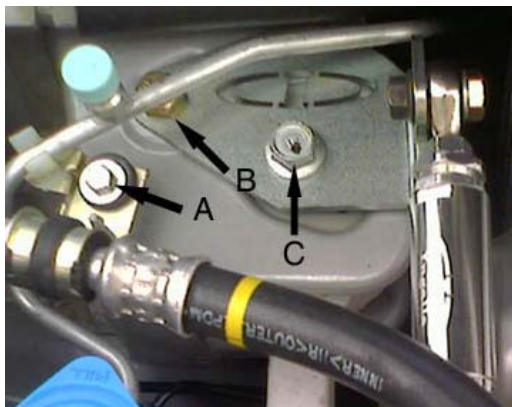


Figure 1



Figure 2

Step 3: Align supplied chassis bracket over the chassis side mount for the dog-bone (the chassis bracket has the Ingalls I logo) after you have placed another one of the supplied spacers over the hole where the factory hardware was installed for the dog-bone. Install supplied bolt and lock nut through the additional hole in the dog-bone mount and Ingalls Stiffy™ bracket (Arrow **B**) and align primary hole with the factory dog-bone bolt (Arrow **C**). Tighten hardware to no more the 15 ft-lbs.

Step 4: Place supplied spacer over the hole on the factory engine mount (same point that OE bolt was removed from Arrow **D**). Reinstall factory dog bone in stock mounts; do not reinstall OE hardware at this point. Place supplied Ingalls engine bracket over the spacer and stud and innermost bolt hole for the dog-bone. Using the supplied bolt and OE dog-bone bolt, align and then tighten engine-mounting bracket (Arrows **E**). Reinstall OE hardware on the chassis side of the dog-bone engine mount and the remaining bolt on the engine side of the dog-bone. Torque hardware to OE specifications (please consult Honda for these specifications as these figures can change periodically).

Step 5: Align Stiffy™ between the two installed brackets, adjust length by loosening the 17mm jam nut on the preload/length adjustment end of the Stiffy™. Once the heim joints line up with the holes (one on each bracket) use supplied hardware to install the Stiffy™ (see Arrows **F**). The hardware should be oriented as follows: bolt, washer, Stiffy™ heim joint, rubber o-ring, bracket, and nut. Torque bolts to no more than 35 ft-lbs. Do not tighten length adjusting jam nut to more than 35 ft-lbs.



This image shows how the Stiffy™ should look after installation. The brackets should be aligned so that the Stiffy™ is parallel to the valve cover. If need be, you can use spacers or washers to ensure that the Stiffy™ will be properly aligned. Make sure however that the rubber o-ring is against the heim joint for noise suppression.

Notes:

Proper use and fitment of the rubber O-ring helps dampen additional road noise or “feel” that can be transferred through the damper assembly. The O-ring should be used between the Stiffy™ heim joint and bracket for optimal noise suppression. Dynamat or other damping materials, as used in aftermarket audio and in-car electronics industries, can also be used to provide further noise and vibration damping when used between the brackets and the surface they mount on.

DO NOT attempt to adjust Stiffy™ from its pre-set stiffness without consulting the Ingalls website. Large open-end wrenches are required to adjust stiffness (27mm). Most standard and mechanics tool kits do not include these types of wrenches.

Limited Warranty

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