



# Ingalls Engineering Stiffy™ Engine Torque Damper (ETD)

## Adjusting Procedure

1. Install the mounting brackets following the Instructions enclosed with your kit for your specific vehicle.
2. Set the **Stiffy™** preload. The preload is measured from the top of the adjusting plunger to the top of the aluminum body. The factory setting on your ETD is at 14mm. This is on the soft side of the adjustment.
3. To adjust the preload loosen the Adjusting Plunger Jam Nut. For the softest setting, turn the plunger outward to the maximum of 15mm. Do not lengthen beyond 15mm or the damper will not work properly and possibly damage the ETD when used. To tighten the ETD, shorten the distance between the top of the plunger and the aluminum body. Do not tighten beyond 10mm. 10mm is the stiffest setting. Going beyond 10mm can damage or cause premature wear to the ETD.
4. When the preload is set, be sure to tighten the Locking Jam Nut to 35 ft. lobs. DO NOT exceed 35 ft. lbs. or the ETD may be damaged.
5. Measure the distance between the two mounting holds of the chassis and the engine mounting brackets. It should be very close to 7" center to center.
6. Measure the distance from center to center of the heim joints on the ETD.
7. Loosen the Heim Joint Locking Jam Nut. By turning the heim joint only inward or outward lengthen or shorten the overall length of the ETD so that it matches the distance of the mounting holes on the brackets. The ETD should mount to the brackets without any force applied to the unit.
8. Once the length is correct, tighten the Heim Joint Locking Jam Nut to 25-30 ft. lbs.
9. Mount the ETD to the brackets, following the installation instructions for your vehicle.

## Component Breakdown

### Chassis Mount/Length Adjusting Heim Joint

This end mounts to the chassis and/or chassis mounted bracket.

### Preload Adjusting Plunger

This nut is adjusted in or out to set the stiffness of the damper. The range of the adjustment is measured by the distance from the top of the Adjuster Plunger to the Aluminum Body. A maximum measurement of 15mm is for the softest setting. Any more will strip the threads or cause it to loosen, damaging the ETD.

### Chassis Mount Heim Joint

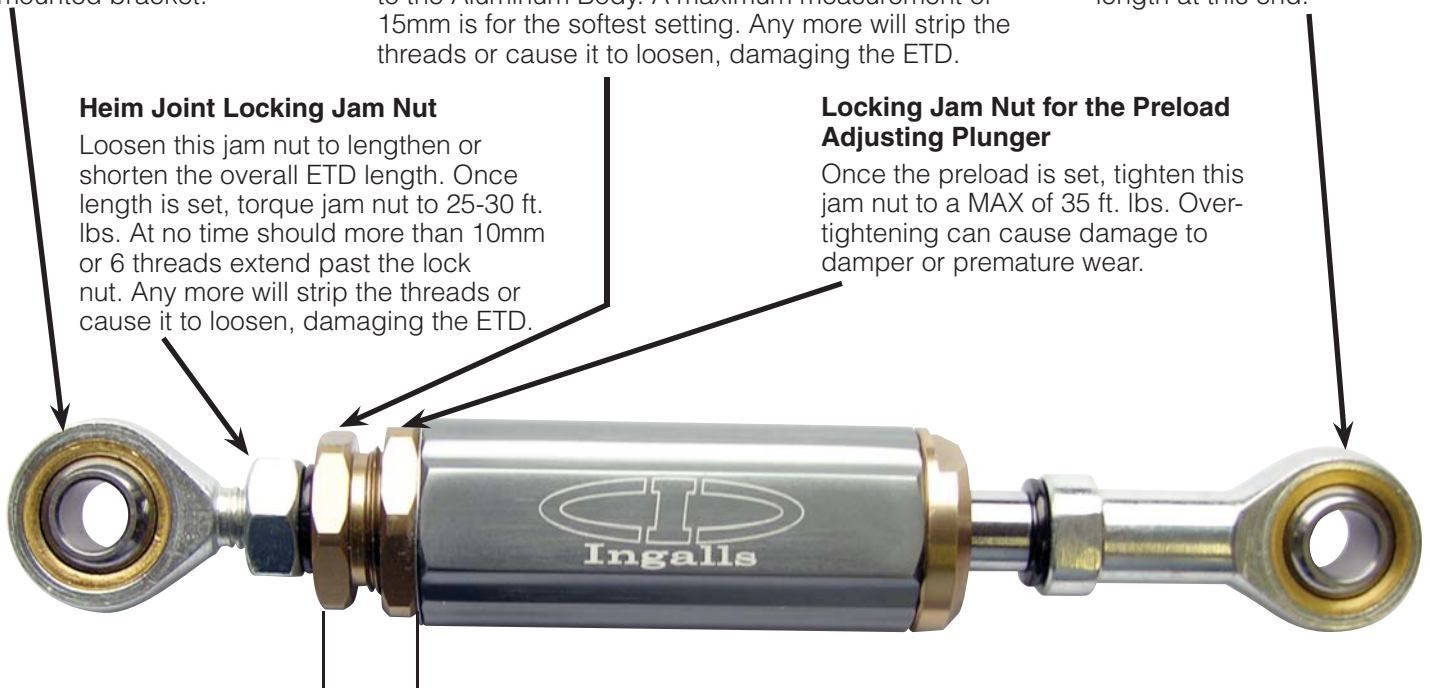
This end mounts to the engine mounting bracket. DO NOT adjust damper length at this end.

### Heim Joint Locking Jam Nut

Loosen this jam nut to lengthen or shorten the overall ETD length. Once length is set, torque jam nut to 25-30 ft. lbs. At no time should more than 10mm or 6 threads extend past the lock nut. Any more will strip the threads or cause it to loosen, damaging the ETD.

### Locking Jam Nut for the Preload Adjusting Plunger

Once the preload is set, tighten this jam nut to a MAX of 35 ft. lbs. Over-tightening can cause damage to damper or premature wear.



Measure between the top of the Adjusting Plunger and the top of the Main Body.

The preload is measured from the top of the Adjusting Plunger to the top of the Aluminum Body. The factory setting on your ETD is at 14mm. This is on the soft side of the adjustment. For softest setting, the maximum measurement is 15mm. For the stiffest setting, the minimum is 10mm.