

20-600200T 93-02 GM F-body Front and Rear Coil-over Kit

Checked	Part Number	Description
	(2x) S6875T	Front Shock #100232
	(2x) S6855	Rear Shock #100230
	(2x) 12B0600	Front Spring (600 lbs/in)
	(2x) 10B0200	Rear Spring (200 lbs/in)
	(2x) 7917-101	Thrust Bearings and Washers
	2045	Rear Coil-Over Conversion Kit
	2048	Front Coil-Over Conversion Kit
	2057	Spanner Wrench
	(2x) 2058	Pack of (8) 1/8" Shock Centering Spacers



The rear brackets of this kit will only work with a lower control arm that has a tubular diameter of 1.5" or less.

This system is designed to operate on the bump stops during race applications and while daily driving. Do not be alarmed if the vehicle is on bump stops at ride height.

After this kit is installed onto the vehicle several precautions must be taken. These precautions ensure no damage is inflicted to you or your vehicle.

- No larger than 1.5" lower rear arms
- Shock center-to-center ride height should be no less than: 17.5" Front // 15.5" Rear
- UMI Performance does not recommend exceeding the suggested ride height range and is not responsible for any damage because of it.
- UMI Performance recommends running your vehicles suspension through its travel and inspecting it for any unwanted contact.
 - Front upper control arms contacting inner fender
 - Wheels contacting fenders
 - Axle brackets contacting exhaust
 - etc

Important Notes about UMI Shocks

- Included Schrader Valve is preset at the factory and is not intended to be adjusted.
- Because these shocks are gas charged mono-tubes, the shaft will self-extend if left uncompressed.
 - Shaft extension speed on the bench is irrelevant. Extension differences are expected.
 - Shocks can NOT be evaluated while moving by hand.
- Gas charge volume inside the shock is physically small. Consequently, no amount of the gas charge should be released.

93-02 GM F-body Front Coilover Kit Item # 2053-600 Part 1 of Item # 20-600200T



IMPORTANT NOTES

UMI is not responsible for failure due to misuse, mis-installation, shock bottoming, etc.

UMI is not responsible for fitment issues when using other companies' components such as sway bars, A-Arms, etc. This kit fits UMI 35mm and factory sway bar as well as A-arms with the factory shock bolt location

Please follow all applicable safety practices when working on a raised vehicle such as proper use of jack stands and safety glasses, and care when lifting heavy objects.

Installation Instructions:

- 1. Begin by removing front shocks and springs. Be sure to support vehicle in a safe manner.
- 2. Remove spindle front upper ball joint.
- 3. Remove bolts from the top of the strut mount from the engine bay. Driver's side will require loosening and moving the brake booster to access some bolt heads.
- 4. Once all (4) bolts/nuts are removed from the strut mount, remove the bolts holding the lower shock mount.
- 5. Remove shock and upper control arm mount/strut mount.
- 6. Remove the shock from the upper strut mount. Use of cutting wheel or penetrating oil likely required.
- 7. Locate UMI upper mount, and orient as shown in Figure 1. Mount with tabs on bottom, ¹/₄ inch washer in the hole of the upper control arm mount, and 1/8" washer on top to sandwich upper control arm mount.
 - a. NOTE: If the upper control arm mount is corroded, and the lip is deteriorated, the ¹/₄" plate will prove to be too thick. Use a grinding disc and vise, or another method of

surface grinding, until the $\frac{1}{4}$ " washer is the correct thickness. The idea is to clamp onto the upper control arm mount, and the $\frac{1}{4}$ " washer takes up the space to allow this clamping force.

- 8. Tighten this system to approximately 55 ft/lbs maintaining the desired tab orientation. If the clamp spins after tightening at this torque, refer to grinding note above.
- 9. Align upper control arm in the wheel well and use the supplied M10x35mm bolts and nuts to install. Once fully installed torque all (4) M10 bolts to approximately 55ft/lbs.
- 10. The upper mount is now installed.
- 11. Lubricate threads on shock body with anti-seize. <u>WARNING</u>: DO NOT MOVE HEIGHT ADJUSTMENT NUT UNDER WEIGHT OF CAR WITHOUT ANTI-SEIZE.
- 12. Install shock spring perch, washer, bearing and washer onto shock as shown in Figure 2 (optional).
- 13. Slide spring down onto shock and install coilover hat.
- 14. Install T-bar in lower shock rod end if T-bar mounting on lower A-arm is necessary.
- 15. Align coilover shock with the new UMI upper mount. Use 1/8" spacers on both sides of shock rod end (see Figure 4). Slide ¹/₂" bolt through with (2) washers per bolt.
- 16. Tighten upper shock bolt and locking nut to 60 ft-lb.
- 17. Complete the installation by installing the lower bolts through the shock T-bar on lower Aarm. Tighten to 37 ft-lbs.
- 18. Repeat steps 1-18 for opposite side. Adjust spring perch nut for desired ride height. Align vehicle upon completed installation for optimal handling and steering.





Fig 2 – Assembly order (optional bearing and washer)

Figure 1 – Washer orientation



Figure 3 – Upper Assembly



Figure 4 – All shock mounting locations without a T-bar use 1/8" centering spacers



Figure 5 – Start rebound adjustment on 20 clicks (from full stiff). UMI suggests making adjustments 2 clicks at a time.



Figure 6 – Complete Front kit

Continue reading for rear coil-over installation instructions...

Thanks for choosing UMI Performance, Inc.

93-02 GM F-body Rear Coilover brackets Item # 2054-200 Part 2 of Item # 20-600200T



IMPORTANT NOTES

UMI is not responsible for failure due to misuse, mis-installation, shock bottoming, etc. The rear bump stops should be utilized to prevent shock bottoming and subsequent bracket damage.

UMI is not responsible for fitment issues when using other companies' components such as sway bars, relocation brackets, etc. This kit fits UMI 22mm and drag anti-roll bar and tubular 1-1/2" diameter arms.

Please follow all applicable safety practices when working on a raised vehicle such as proper use of jack stands and safety glasses, and care when lifting heavy object such as the rear axle.

Installation Instructions:

- 1. Remove existing rear springs and shocks. Be sure to support axle in a safe manner.
- 2. Removing the lower shock bolt will allow the rear to droop enough to remove the springs.
- 3. The top shock nuts are removed from inside the passenger cabin, under the carpet and under a silicone mold. See Figure 1.
- 4. Install the lower bracket using ¹/₂-13 bolt, nut and washer. Tighten gently to locate lower bracket. See Figure 2.
- 5. The bracket kit comes with two small, round 3/16" spacers. These will be utilized if using relocation brackets or may be left out if not using relocation brackets.
- 6. Drill 3/8" clearance hole through axle housing flange as shown in Figure 3.
- 7. Install 3/8-16 bolt, lock washer and nut. Final torque to 35 ft-lb. Use spacer if attaching over relocation bracket.
- 8. Additional spacing may be needed on aftermarket housings. You may use hardware store 3/8" washers.
- 9. Final torque ¹/₂-13 lower bolt to 60 ft-lb.
- 10. The lower mount is now installed.

- 11. Lubricate threads on shock body with anti-seize. <u>WARNING</u>: DO NOT MOVE HEIGHT ADJUSTMENT NUT UNDER WEIGHT OF CAR WITHOUT ANTI-SEIZE.
- 12. Install shock spring perch, washers, and bearing onto shock as shown in Figure 4 (optional).
- 13. Slide spring down onto shock and install coilover hat.
- 14. Prepare UMI upper mount and coilover by attaching coilover to upper mount. The bolt is in a tight location up top and is easier to assemble on the bench. Be sure to use an 1/8" spacer on both sides of the shock rod (see Figure 5).
- 15. Tighten upper shock bolt to 60 ft-lb.
- 16. Guide the shock and bracket assembly up into the existing shock hole. Inside the car, install a flat washer and ½-13 locking nut. Tighten to 60 ft-lb. The shock should now be hanging down from the upper mount (see Figure 7).
- 17. Complete the installation by installing the lower bolt through the shock and bracket. Clearance is best when bolt is installed from inside to outside. You may need to remove trailing arm to gain access. Be sure to use an 1/8" spacer on both sides of the shock rode end (see Figure 5). Tighten to 60 ft-lb.





Figure 1 – Upper Shock bolt Location

Figure 2 – Lower Bracket Location



Figure 3 – Drilling for 3/8" Reinforcement



Figure 4 – Assembling Thrust Bearings on Shock

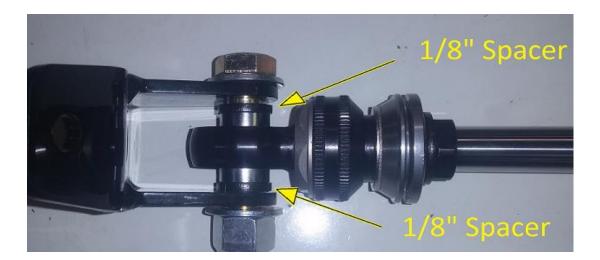


Figure 5 – All shock mounting locations without a T-bar use 1/8" spacers



Figure 6 – Start rebound adjustment on 20 clicks (from full stiff). UMI suggests making adjustments 2 clicks at a time.



Figure 7 – Upper Bracket Installed <u>Note</u>: Shock may be installed spring up <u>or</u> spring down however UMI recommends rod and adjuster down for easy adjustment.



Figure 8 – Complete