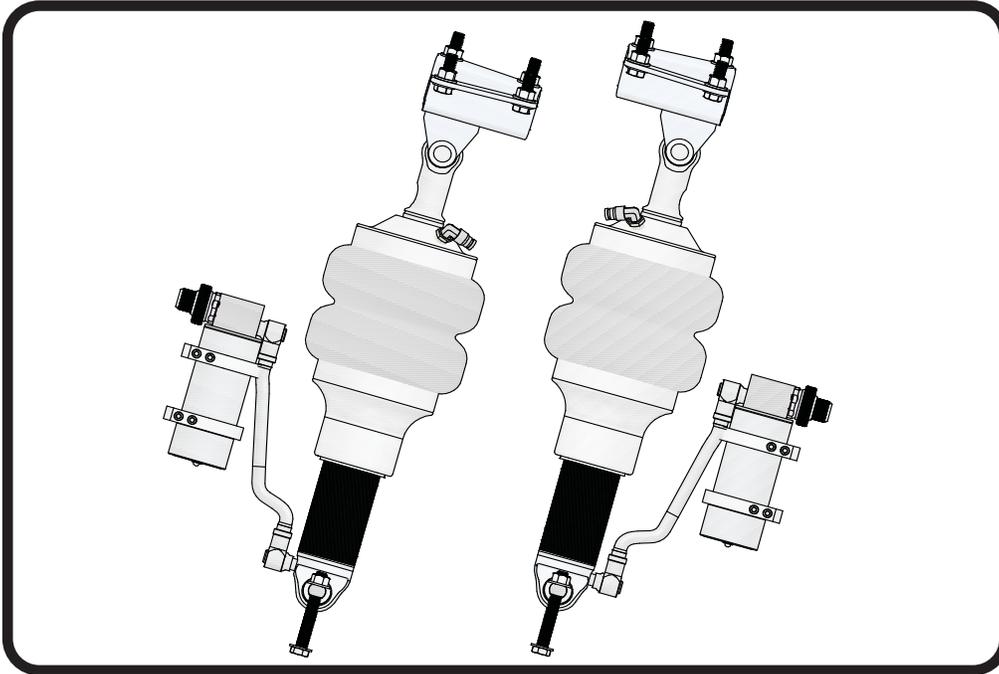




**Part # 11212411 - 1993-2002 F Body TQ Front ShockWaves**

Recommended Tools



## 1993-2002 GM F Body TQ Series Front ShockWaves Installation Instructions

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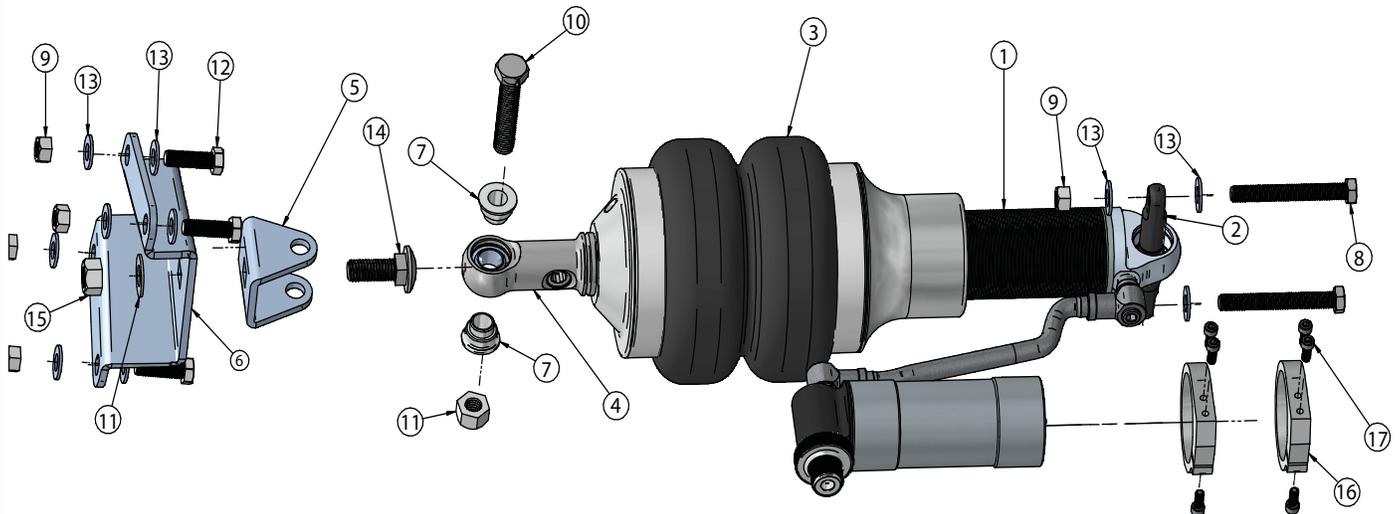
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### Major Components .....In the box

Item #	Part #	Description	QTY
1	982-10-806	6.3" Stroke HQ Series Shock	2
2	90001692	F Body Trunnion (Installed in Shock)	2
3	24190198	1000 Series 6.5" Diameter Bellow	2
4	90002025	Upper Shock Eyelet	2
5	90009982	Upper Shock Mount	2
6	90002305	Upper Shock Mounting Bracket DRIVERS	1
6	90002306	Upper Shock Mounting Bracket (PASSENGER)	1
7	90002043	Upper Eyelet Bearing Spacers	4
16	026-05-000	Reservoir Mounting Bracket	4
	90001994	5/8" ID Bearing (installed in shock eyelet)	2
	90001995	Bearing Snap Ring (installed in shock eyelet)	4
	234-00-153	Air Spring Locking Ring (Installed on ShockWave)	2
	90001980	Trunnion Snap Ring (Installed on Trunnion)	2
	90001083	Medium Bumpstop (Not Shown)	2





### Hardware List ....In the box

QTY	Part Number	Description	
4	99371033	3/8" -16 x 3" Hex Bolt	Lower Trunnion to Control Arm(8)
12	99372002	3/8" -16 Nylok Nut	Upper Shock Mount to Car and Bumpstop (9)
2	99501003	1/2" -13 x 2 1/2" Hex Bolt	Upper Shock To Mount (10)
4	99502001	1/2" -13 Nylok Nut	Upper Shock Mounting (11)
8	99371004	3/8" -16 x 1 1/4" Bolt	Upper Shock Mount to Car(12)
24	99373003	3/8" Flatwasher	Upper Mount to Car, Bumpstop, Lower Mount(13)
2	99501018	1/2" Carriage Bolt	Upper Shock Mount to Bracket (14)
2	99503001	1/2" SAE Flatwasher	Upper Shock Mount to Bracket (15)
12	99050000	5mm SHCS	Reservoir Mounting

### Getting Started.....

Congratulations on your purchase of the Ridetech F Body ShockWave System. This system has been designed to give your F Body excellent ride and handling along with a lifetime of enjoyment. The ShockWave System provides flexibility that can not be achieved with Conventional CoilSpring. The ShockWave System will give you the flexibility of adjusting your ride height along with the ability to dial in your ride quality to your personal preference.

1. The front OEM Shocks and Springs will need to be removed from the front of the car.
2. Raise the vehicle and support it by the frame or rear crossmember allowing the suspension to hang freely.
3. Support The lower Control Arm with a Jack or Jack Stand. The upper shock mount is also used to attach the upper control arm. When you remove the upper shock mount the spindle will want to swing out. Don not allow it to swing out or it can damage your brake lines.
4. Unbolt the lower shock mount from OEM Control Arm.
5. Unbolt the upper Shock mount and remove the OEM Shock and Spring setup from the car.
6. With the Shocks and CoilSprings removed you are ready to start assembling the CoilOvers and install them in your Camaro.

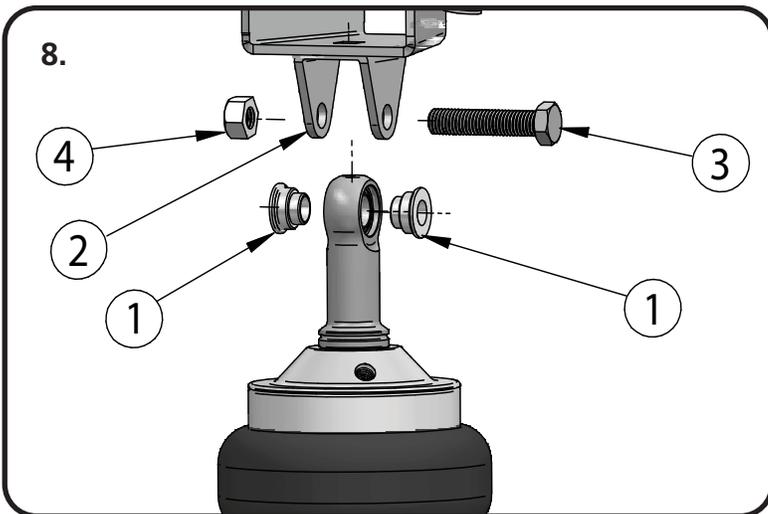


### CoilOver Installation



7.

7. Using the 1/2" Carriage Bolt, 1/2" Flatwasher, and 1/2" Nylok, bolt the Upper Shock Mount to the upper bracket. The squares in the brackets should be aligned with the square shank on the carriage bolt. With the squares aligned tighten the mount. With the 2 pieces bolted together, bolt them into the car using (4) 3/8"-16 x 1 1/4", (8) 3/8" Flatwashers, and (4) 3/8" Nylok nuts. There is Driver and Passenger Bracket and this have a "D" and "P" stamped in them. Tighten all hardware.



8.

8. Thread the fitting into the ShockWave using Teflon tape on the threads. Assemble the spacers(1) into the bearing in the upper eyelet. With the spacers installed insert the ShockWave assembly into the upper shock mount(2). Align the holes in the bracket with the hole in the Shock spacers and insert the 1/2" Bolt(3) and secure with the 1/2" Nylok Nut(4).



9.

9. Attach the lower ShockWave mount to the OEM Lower Control Arm using (2) 3/8"-16 x 3" Bolts, (4) 3/8" Flatwashers, and (2) 3/8"-16 Nylok Nuts. Tighten Hardware. It may be necessary to raise the lower control arm up to align the ShockWave Trunnion with the OEM Mount.



### Upper Mount Assembly and Installation



**10.** A bump stop will be installed between the inner fender and upper control arm to ensure that the tire does not hit the inner fender when fully compressed. There is a small hole on the inner fender that must be drilled out to 3/8". Fasten the bump stop to the inner fender using a 3/8" Nylok nut and flat washer.



**11.** Route the Air line to the Valves. Be sure to stay away from heat sources and sharp edges.



### Notes and Care of your Shockwaves

#### NOTES:

You can clock the airfitting location on the ShockWave by turning the AirSpring assembly of the shock.

The threads on the fittings need to have thread sealant applied to seal properly.

When cutting the airline, use a razor blade. The cut needs to be a clean cut and square for the airline to seal properly.

**The Locking ring on the shock is NOT adjustable. These rings are set at the factory to optimize the AirSpring stroke with the shock stroke.**

### The care and feeding of your new ShockWaves

1. Although the ShockWave has an internal bumpstop, **DO NOT DRIVE THE VEHICLE DEFLATED RESTING ON THIS BUMPSTOP. DAMAGE WILL RESULT.** The internal bumpstop will be damaged, the shock bushings will be damaged, and the vehicle shock mounting points may be damaged to the point of failure. This is a non warrantable situation.
2. Do not drive the vehicle overinflated or “topped out”. Over a period of time the shock valving will be damaged, possibly to the point of failure. This is a non warrantable situation! If you need to raise your vehicle higher that the ShockWave allows, you will need a longer unit.
3. The ShockWave is designed to give a great ride quality and to raise and lower the vehicle. **IT IS NOT MADE TO HOP OR JUMP!** If you want to hop or jump, hydraulics are a better choice. This abuse will result in bent piston rods, broken shock mounts, and destroyed bushings. This is a non warrantable situation.
4. Do not let the ShockWave bellows rub on anything. Failure will result. This is a non warrantable situation.
5. The ShockWave product has been field tested on numerous vehicles as well as subjected to many different stress tests to ensure that there are no leakage or durability problems. Failures have been nearly nonexistent unless abused as described above. If the Shockwave units are installed properly and are not abused, they will last many, many years. ShockWave units that are returned with broken mounts, bent piston rods, destroyed bumpstops or bushings, or abrasions on the bellows will not be warrantied.



### Shock Adjustment

#### Shock Adjustment 101- Single Adjustable

##### Rebound Adjustment:

How to adjust your new shocks.

The rebound adjustment knob is located on the top of the shock absorber protruding from the eyelet.

You must first begin at the ZERO setting, then set the shock to a soft setting of 20.



-Begin with the shocks adjusted to the ZERO rebound position (full stiff). Do this by rotating the rebound adjuster knob clockwise until it stops.



-Now turn the rebound adjuster knob counter clock wise 20 clicks. This sets the shock at 20. (settings 21-24 are typically too soft for street use).

##### Take the vehicle for a test drive.



-if you are satisfied with the ride quality, do not do anything, you are set!



-if the ride quality is too soft increase the damping effect by rotating the rebound knob clock wise 3 clicks.

##### Take the vehicle for another test drive.



-if the vehicle is too soft increase the damping effect by rotating the rebound knob clock wise 3 additional clicks.



-If the vehicle is too stiff rotate the rebound adjustment knob counter clock wise 2 clicks and you are set!

Take the vehicle for another test drive and repeat the above steps until the ride quality is satisfactory.

##### Note:

**One end of the vehicle will likely reach the desired setting before the other end. If this happens stop adjusting the satisfied end and keep adjusting the unsatisfied end until the overall ride quality is satisfactory.**



## Shock Adjustment

### Shock Adjustment 101-Triple Adjustable

#### Triple Adjustable:

#### Step One: High Speed Compression



- High speed compression adjustments are used in both street driving and track tuning.
- Begin with the shocks adjusted to the ZERO high speed compression position (full stiff). Do this by rotating the high speed compression adjuster (large knob) clockwise until it stops.
- Now turn the high speed compression adjuster knob counter clock wise 20 clicks. This sets the shock at 20. (settings 21-24 are typically too soft for street use. For typical street driving the high speed compression adjuster will remain at setting 20.

#### Step Two: Low Speed Compression

Low speed compression adjustment is what is typically felt during street driving.



- Begin with the shocks adjusted to the ZERO low speed compression position (full stiff). Do this by rotating the low speed compression adjuster (small knob) clockwise until it stops.
- Now turn the low speed compression adjuster knob counter clock wise 20 clicks. This sets the shock at 20. (settings 21-24 are typically too soft for street use). Take the vehicle for a test drive.
- if you are satisfied with the ride quality, do not do anything, you are set!
- if the ride quality is too soft increase the damping effect by rotating the low speed compression knob clock wise 3 clicks.

#### Take the vehicle for another test drive.



- if the vehicle is too soft increase the damping effect by rotating the low speed compression knob clock wise 3 additional clicks.
- If the vehicle is too stiff rotate the low speed compression adjustment knob counter clock wise 2 clicks and you are set!

Take the vehicle for another test drive and repeat the above steps until the ride quality is satisfactory.

#### Step 3:

Adjust rebound according to Single Adjustable instructions.

#### **Note:**

**One end of the vehicle will likely reach the desired setting before the other end. If this happens stop adjusting the satisfied end and keep adjusting the unsatisfied end until the overall ride quality is satisfactory.**