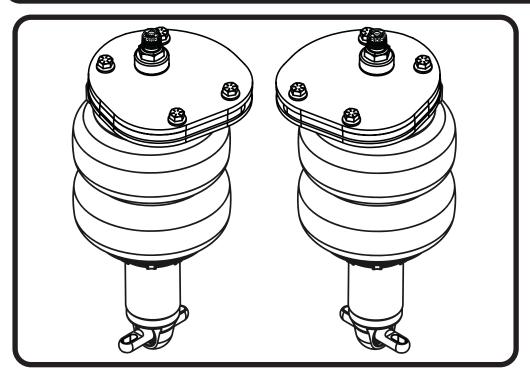




## Part # 11253011 - 1962-1967 Chevy II Front TQ ShockWaves for StrongArms



#### **Recommended Tools**





## 1962-1967 Chevy II TQ Series Front ShockWaves

# **Installation Instructions**

THESE SHOCKWAVES ARE DESIGNED TO BE USED WITH RIDETECH STRONGARMS

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#### **ShockWave Dimensions:**

Center of bearing to Center of bearing:

Compressed: 11.00" Ride Height: 13.10" Extended: 14.50"





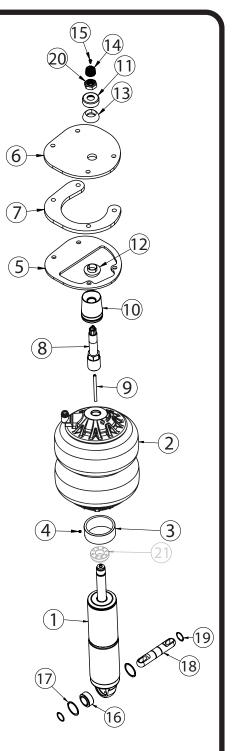


## **Major Components** .....In the box

		I	
Item #	Part #	Description	QTY
1	982-10-071	4.1" Stroke TQ Series Shock	2
2	24090199	1000 Series ShockWave Bellow	2
3	234-00-153	Bellow Locking Ring (Installed on shock)	2
4	99055000	Locking Ring Set Screw (Installed on shock)	2
5	90001637	Lower Shock Tower Mounting Plate	2
6	90001638	Upper Shock Tower Mounting Plate	2
7	90003320	Shock Tower Spacer	2
8	90009988(kit)	2.00" Stud Adjuster Assembly	2
9	70012160	2.00" Metering Rod	2
10	90002312	2.00" Stud Top Base	2
11	90001902	Delrin Ball Upper Cap	2
12	90001903	Delrin Ball Lower Half	2
13	90001904	Delrin Ball Top Half	2
14	90009969	Adjuster Knob Retaining Screw	2
15	210-35-120-0	Shock Adjuster Knob	2
16	90001994	5/8" ID Bearing	2
17	90001995	Bearing Snap Ring	4
18	90002060	Universal Trunnion	2
19	90001980	Trunnion Snap Ring	4
20	99562003	9/16"-18 Nylok Jam Nut	2
	026-05-000	Reservoir Mounting Clamps	4
	99050000	Reservoir Mounting Screw	12
	85000003	Allen Wrench for Reservoir Screws	1

#### **Hardware Kit# 99010189**

Part #	Description	QTY
99311022	5/16"-18 x 1 3/4" Hex Bolt	8
99312002	5/16"-18 Nylok Nut	8
99313001	5/16" SAE Flat Washer	16







## Getting Started.....

#### THESE SHOCKWAVES ARE DESIGNED TO BE USED WITH RIDETECH STRONGARMS!

The front OEM Shock and Spring assemblies will need to be removed from the front of the car.

- **1.** Raise the vehicle and support it by the frame, allowing the suspension to hang freely. Remove the wheels.
- **2.** If you haven't installed the front StrongArms, do so before installing the CoilOvers. Refer to the StrongArms instructions.

### **Disassembly**



**3.** The OEM upper shock mount will need to be removed from the car. Remove the upper shock nut and unbolt the mount.



**4.** If you haven't done so already, remove the shock spring assembly out of the car.





## **ShockWave Installation**



**5.** The lower plate will fit the contours of the OEM shock tower opening.



**6.** The kit includes an upper spacer due to different metal thicknesses at the upper shock mounting area. Place the upper spacer on top of the shock tower with the opening to the FRONT of the car and the curves side toward the engine. The mounting holes will align with the outer slots of the upper shock mount.



**7.** The upper mounting plate sits on top of the spacer. The mounting holes will align with the holes in the spacer plate.





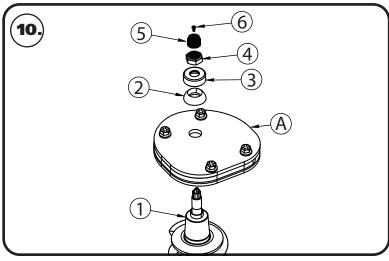
### **ShockWave Installation**



**8.** The outer (2) holes of the upper mount will align with the OEM slots. The inner (2) holes will need to be drilled. The easiest way to do this is to bolt the upper mounting plates together in the car. Install a 5/16" SAE flat washer on each of (2) 5/16"-18 x 1 3/4" hex bolt. Insert the bolt/washers through the (2) outer mounting holes. Install the lower plate from the bottom side, making sure the contour fits the shock tower. Install a 5/16" flat washer and 5/16"-18 nylok nut on each of the bolts. Snug the hardware down.



**9.** Drill the inner (2) holes using a 5/16" drill bit. Install a 5/16" on each of (2) 5/16"-18 x 1 3/4" hex bolts. Insert the bolts/ washer through the inner 2 holes. Install a 5/16" flat washer & 5/16"-18 nylok nut on each bolt. Torque the hardware to 25 ft-lbs.



- **10.** Place the ShockWave into the coil spring pocket with the stud sticking through the upper mount (A). See assembly **Diagram 10**.
- **1.** ShockWave Assembly
- A. Upper Shock Mount
- 2. Delrin ball upper half
- **3.** Aluminum cap
- 4. 9/16" SAE Nylok jam nut
- 5. Rebound adjusting knob
- 6. Screw

TIGHTENING THE TOP 9/16"-18 NUT: SNUG THE NUT DOWN AGAINST THE TOP CAP. YOU NEED TO BE ABLE TO ARTICULATE THE SHOCK BY HAND. WE TORQUE THE NUT TO 80 IN-LBS USING A 7/8" CROWS FOOT WRENCH ON A TORQUE WRENCH.





### CoilOver Installation



**11.** Raise the upper arm up to the ShockWave. Line up the shock mounting holes with the through hole of trunnion Install a 5/16" flat washer on each of (2) 5/16"-18 x 1 1/4" hex bolts. Insert the bolt/washers in the aligned holes. Install a 5/16" flat washer and 5/16"-18 nylok nut on the threads of each bolt. Torque to 25 ft-lbs.

### **Notes and Care of your Shockwaves**

#### **NOTES:**

WARNING: ATTEMPTING TO REMOVE THE AIR FITTING WILL DAMAGE IT AND VOID THE WARRANTY.

**TIGHTENING THE TOP 9/16"-18 NUT:** SNUG THE NUT DOWN AGAINST THE TOP CAP. YOU NEED TO BE ABLE TO ARTICULATE THE SHOCK BY HAND. WE TORQUE THE NUT TO 80 INLBS USING A 7/8" CROWS FOOT WRENCH ON A TORQUE WRENCH.

You can clock the airfitting location on the ShockWave by turning the AirSpring assembly of the shock. Make sure the fitting doesn't contact the frame.

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.





## **Care of your Shockwaves**

## 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**

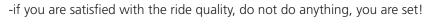
Low speed compression adjustment is what is typically felt during street driving.





-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 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.