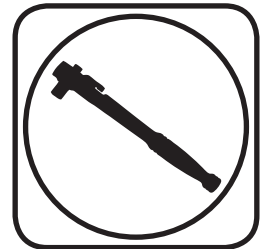
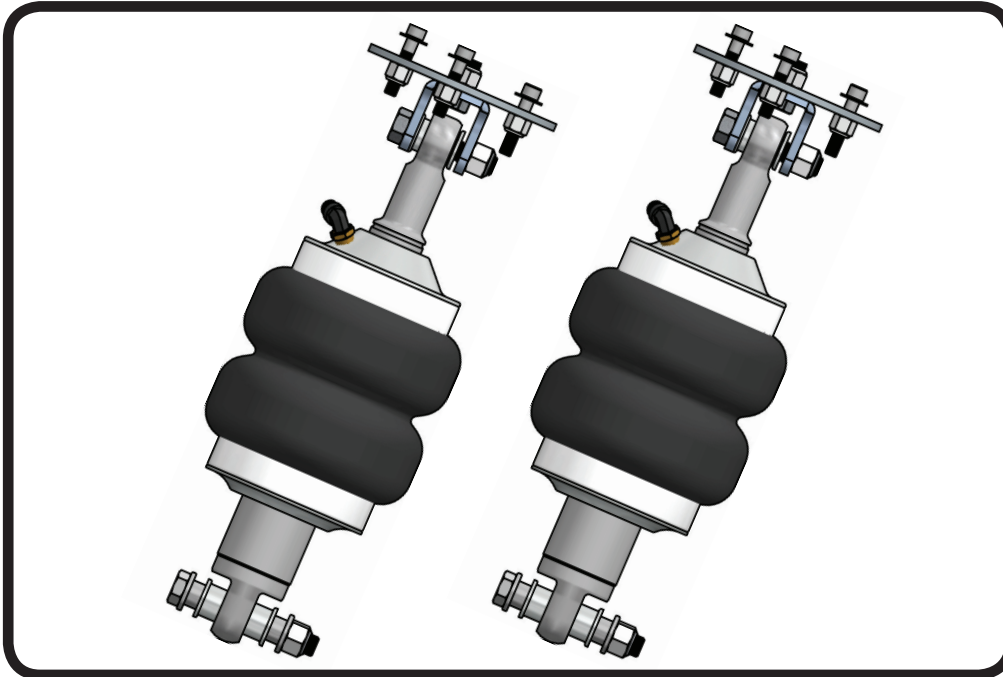




### Part # 12262401 - Crown Vic HQ Series Front ShockWaves

#### Recommended Tools



## Crown Vic HQ Series Front ShockWaves Installation Instructions

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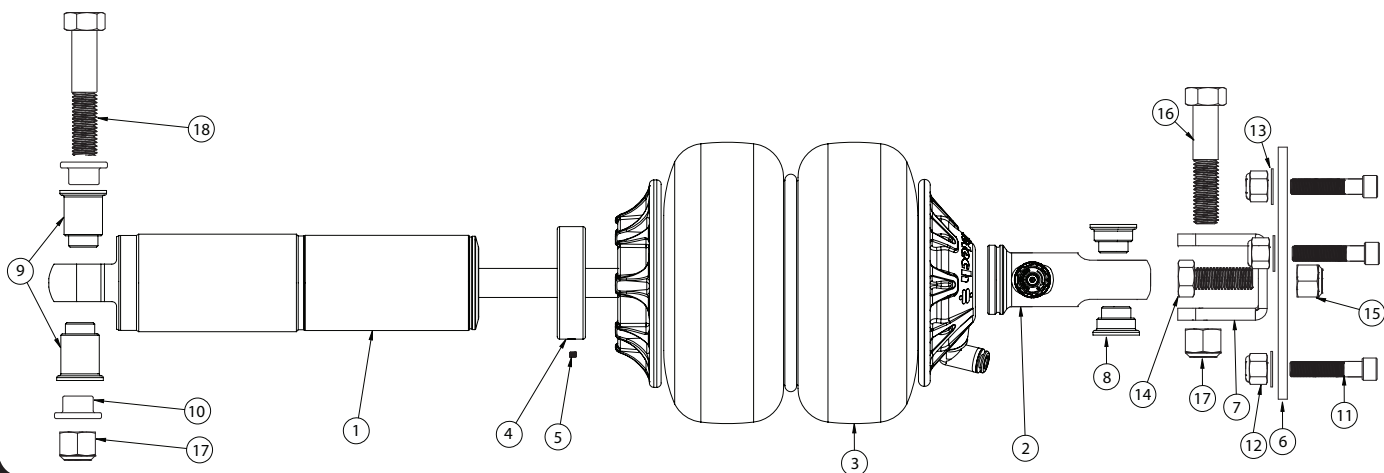
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### Major Components .....In the box

Item #	Part #	Description	QTY
1	24139999	3.6" Stroke HQ Series Shock	2
2	90002025	Upper Shock Eyelet	2
3	24090199	6.5" Diameter Air Spring 1000 Series	2
4	70010893	Air Spring Locking Ring	2
5	99055000	Locking Ring Set Screw	2
6	90002189	Upper Mounting Plate	2
7	70011719	Upper Shock Bracket (Bolts to 90002189)	2
8	90002043	Upper Shock Bearing Spacers	4
9	90002062	Lower Shock Bearing Spacers	4
10	90002188	Lower Control Arm T-Bushing	4
11	99311003	5/16"-18 x 1 1/2" Hex Bolt	6
12	99312003	5/16"-18 Nylok Nut	6
13	99313002	5/16" SAE Flat washer	6
14	99431001	7/16"-14 x 1" Hex Bolt	2
15	99432001	7/16"-14 Nylok Nut	2
16	99501011	1/2"-20 x 2 1/2" Hex Bolt	2
17	99502008	1/2"-20 Nylok Nut	4
18	99501015	1/2"-20 x 3 3/4" Hex Bolt	2



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



## Installation Instructions



### Getting Started.....

Congratulations on your purchase of the Ridetech Crown Vic Crossmember ShockWave System. This system has been designed to give your vehicle excellent handling along with a lifetime of enjoyment. The ShockWave System provides flexibility that can not be achieved with Traditional Coil Spring setups.

**This ShockWave System is Designed to replace the factory Shock and Coil Springs.**

1. The front OEM Shocks and CoilSpring Assembly will need to be removed from the crossmember. Refer to the factory Service Manual if you need assistance.

### Notes about your Shockwaves

#### NOTES:

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

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 Air-Spring stroke with the shock stroke.

#### ShockWave Dimensions:

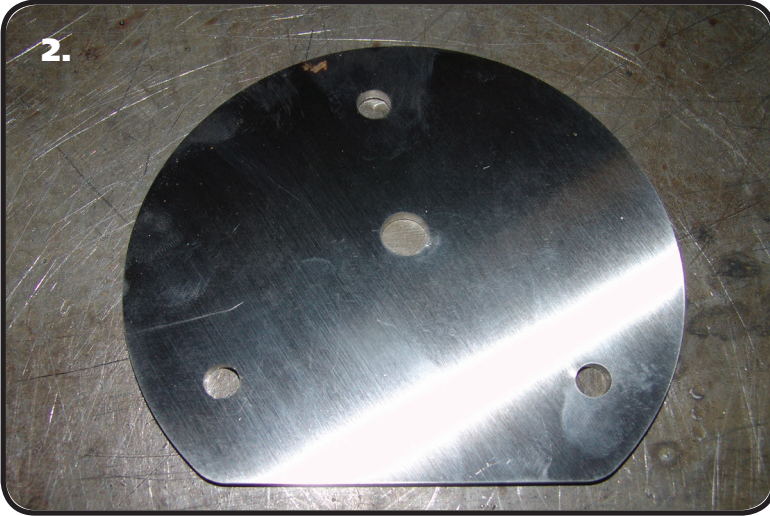
##### Center of bearing to Center of bearing:

Compressed:	11.05"
Ride Height:	12.50"
Extended:	14.30"



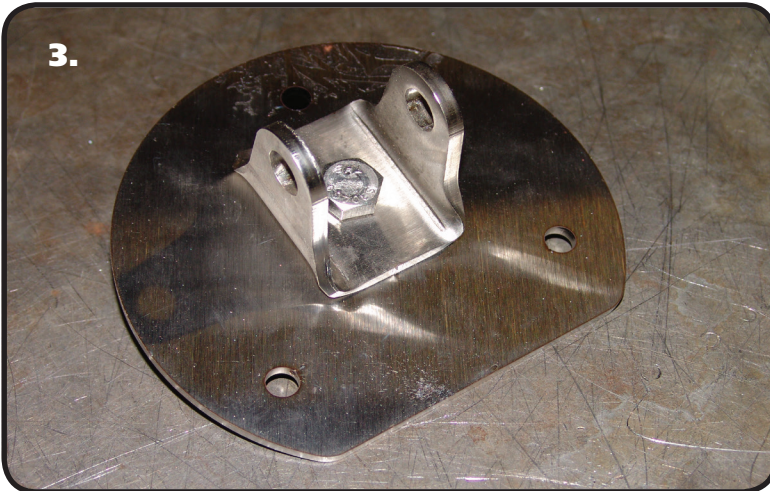
### Upper Mount Assembly and Installation

2.



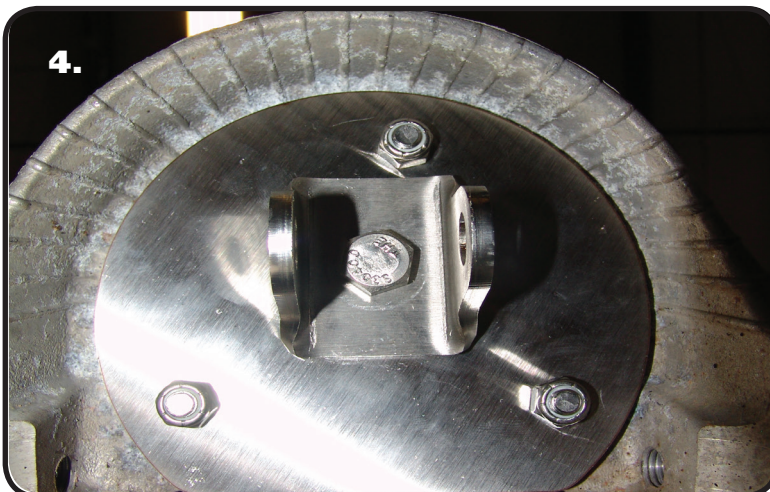
2. Both sides of the suspension use the same Upper Mounting Plate. Both Upper Mounting Plates and Shock Mounts are assembly identically to each other. Figure "2" shows the bottom side of the Mounting Plate.

3.



3. Using the 7/16-14" x 1" Hex Bolt and 7/16"-14 Nylok Nut bolt the Upper Shock Mount to the Upper Mounting Plate. The 7/16" Bolt needs to be installed with the Hex Head of the bolt in the Shock Mount. The shock mount needs to be clocked on the mounting plate. The edge of the Shock Mount needs to be positioned parallel with the edge of the Mounting Plate. Tighten the 7/16" Bolt and nut keeping the shock mount clocked correctly.

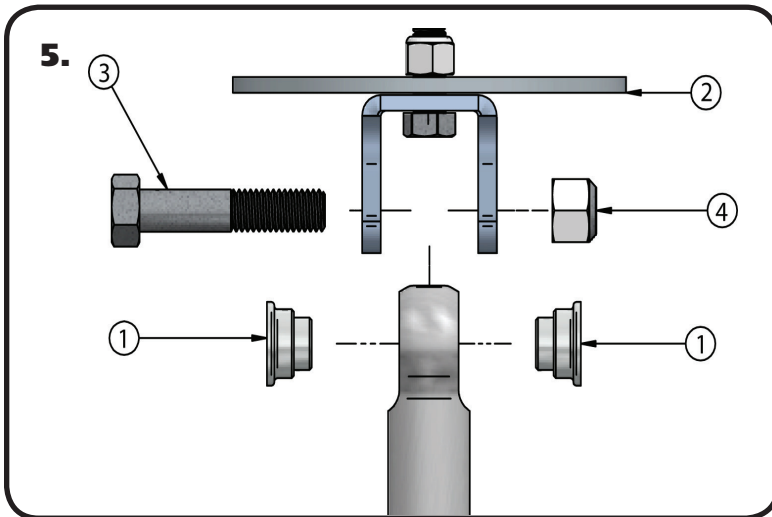
4.



4. Install the upper mount into the cross-member using (3) 5/16" x 1 1/2" Hex Bolts, (3) 5/16" SAE Flat washers, & (3) 5/16" Nylok Nuts. Position the Straight edge of the Mount facing the Engine Compartment. Tighten the mounting hardware.



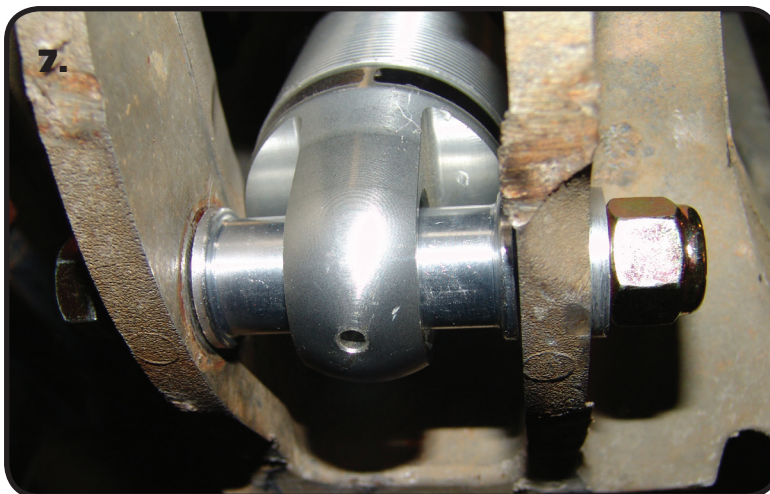
### ShockWave Installation



5. Install the Air Fitting into the ShockWave using a thread sealant on the fitting threads. Insert the **NARROW** upper spacers(1) into the upper shock bearings. Install the **WIDE** spacers into the Lower Shock Bearing. 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 x 2 1/2" Bolt(3) and secure with the 1/2" Nylok Nut(4).



6. Insert the supplied T-Bushings into the OEM Control Arm. The T-bushings are installed on the outside of the OEM Control Arm.



7. With the **WIDE** spacers installed in the lower ShockWave Bearing, insert the ShockWave into the Lower Control Arm. Align the hole in the ShockWave with the hole in the T-bushing. Insert the 1/2" x 3 3/4" Hex Bolt into the mounting hole in Lower Control Arm. Install a 1/2" Nylok Nut onto the Bolt and tighten.



### Notes and Care of your Shockwaves

#### NOTES:

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

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.

### 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 than 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. **CONTINUE ON NEXT PAGE.**

##### 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.

### STILL HAVE QUESTIONS?

#### Tech line hours

Monday - Friday

8AM - 6PM (EST) ..... 812-482-2932