



350 S. St. Charles St. Jasper, In. 47546
Ph. 812.482.2932 Fax 812.634.6632

www.ridetech.com

Part # 13082401
09-12 Dodge 1/2 Ton Front Single Adjustable Shockwaves

Shockwave Assembly:

2	24090297	2000 Series 224c air spring bellow assembly (8" diameter)
2	982-10-802	2.9" stroke single adjustable threaded shock
2	90001994	.625" Shock Bearing
4	90001995	Bearing snap ring
2	90002060	Extended width T-bar
4	90001980	T-Bar snap ring
2	70008651	3.75" threaded stud top
2	234-00-153	AirSpring locking ring

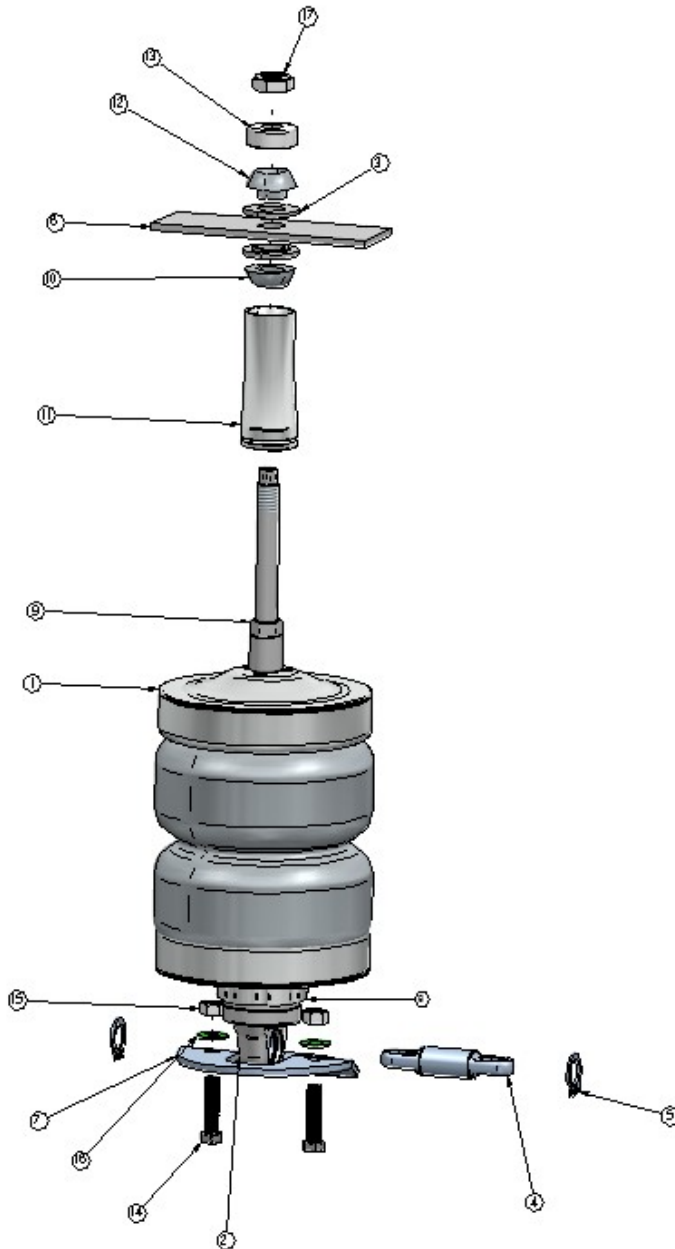
Components:

2	90002311	3.75" threaded stud top base
2	90001902	Delrin ball cap
2	90001903	Delrin ball top half
2	90001904	Delrin ball bottom half
4	90000134	.750" I.D. stepped washer
2	90000135	Sway bar frame mount spacer
2	90002300	Lower reinforcement plate
2	31954201	1/4" npt x 1/4" tube elbow fitting
2	31957004	1/4" NPT Plug

Hardware:

2	99562003	9/16" SAE Nylok Jam nut	Stud top to frame
4	99311003	5/16" x 1 1/2" USS bolt	T-bar to lower arm
4	99312003	5/16" USS Nylok nut	T-bar to lower arm
8	99313002	5/16" SAE flat washer	T-bar to lower arm
4	99111005	10mm x 1.5 x 40mm bolts	Sway bar spacer
4	99373003	3/8" SAE flat washer	Sway bar spacer

SHOCKwave®



BILL OF MATERIALS				
Item Number	PART NO.	DESCRIPTION	MATERIAL	QTY
1	24090299	8.0" DOUBLE CONVULUTED FOX ASSY 2.9, 3.5, 4.1		1
2	24129999	FOX 2.9 SINGLE ADJUST SHOCK		1
3	7000 0728	SKV WASHER 750 DV	1018 Steel	2
4	7000B 227 -A	SKV UNIVERSAL TRUMBON	Steel	1
5	7200 0036	EXTERNAL SNAP RING	Steel	2
6	7000B12 4	FRAME	Aluminum	1
7	7000B 222	09-UP DODGE LWR SHOCK BRACKET	1018 HSLA	1
8	7000B 913	FOX LOCKING RING W/ WRENCH PATTERN	Aluminum, 6061-T6	1
9	7000B 978	FOX STUD NON ADJUSTER 3.75 STUD	A311 STRESSPROOF STEEL	1
10	7000 0184	SKV UPPER DELRIN BALL	DELRIN PTFE	1
11	7000B 939	COIL OVER STUD TOP SPACER 3.75	Aluminum, 6061-T6	1
12	7000 0185	SKV LWR DELRIN BALL	DELRIN PTFE	1
13	7000 0186	AFCOFK BALL AND SOCKET BASE	Aluminum, 6061-T6	1
14	7200 0043	3/8" x 1 1/2" -18 BOLT	Zinc	2
15	7200 0027	3/8" USS NYLOC MUT	Steel	2
16	7200 0033	3/8" FLAT WASHER	Zinc	2
17	7200 0022	5/16"-18 NYLOC JWR MUT	Steel	1

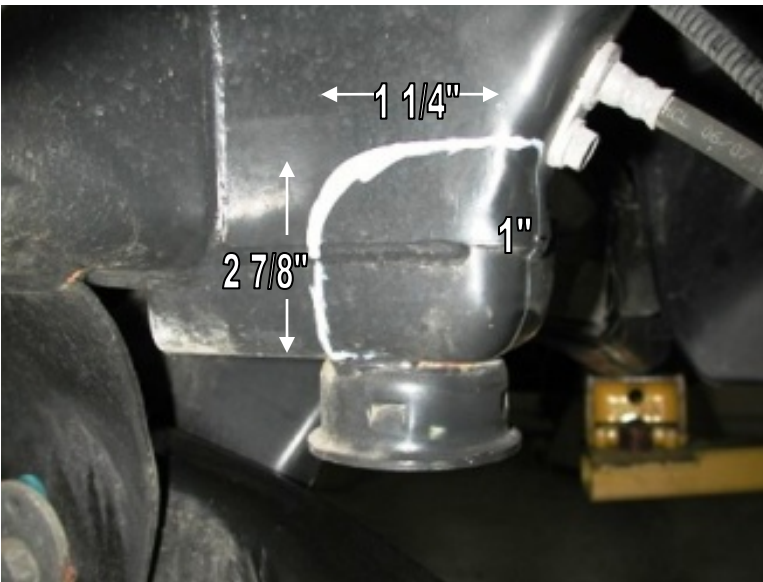
SHOCKwave®

13082401 Installation Instructions

1. Raise and support the vehicle by the frame, to the safe and comfortable working height.
2. Remove the coil spring and shock absorber. Refer to the factory service manual for proper disassembly procedures.



3. Remove the factory bump stop from the frame. The bump stop housing does not need to be removed.



4. Trim this portion of the frame to allow for air spring clearance. Approximately 2 7/8" tall x 1 1/4" wide x 1" deep.



5. Grind all edges smooth and touch up bare metal with black paint.



6. The factory shock was held in place with these nuts on the lower control arm. They must be removed before installing the Shockwaves. A hammer and chisel will do the job.



7. Apply thread sealant to an elbow air fitting and screw it into the top of the Shockwave.

8. Slide the Aluminum base over the stud top. Place the lower Delrin ball half (with step) over the base. Place a step washer over the Delrin ball half. Insert the stud through the upper mount. Place top step washer, Delrin ball half, and then aluminum cap over the stud. Secure the assembly with two 9/16" jam nuts.

Note: The airline must be routed at this time.



9. The bottom of the Shockwave has a T-bar installed through it. It will bolt to the **top** of the lower control arm and is secured with two 3/8" x 1 1/4" bolts, two Nylok nuts and four flat washers. The reinforcement plate is to be installed between the T-Bar and the lower arm.

Note: The air fitting location can be clocked by rotating the bellow on the shock absorber.



10. To create adequate sway bar to Shockwave clearance a 3/8" spacer is supplied and must be installed between the sway bar mount and the frame. Longer 10mm x 40mm bolts & 3/8" washers are supplied.



10. Double check Shockwave to frame clearance. **Allowing the Shockwave to rub will cause failure and is not a warrantable situation.**

11. Ride height should be approximately 85 psi., but may vary to driver preference and vehicle weight.

12. The truck must be realigned before driving.

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.

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.**
3. Do not let the ShockWave bellows rub on anything. Failure will result. **This is a non warrantable situation.**
4. 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.**