PARt No. 25794

SPC PERFORMANCE®

Instruction Sheet

US Patent 7140601 B2

JounceShock™ System Rear

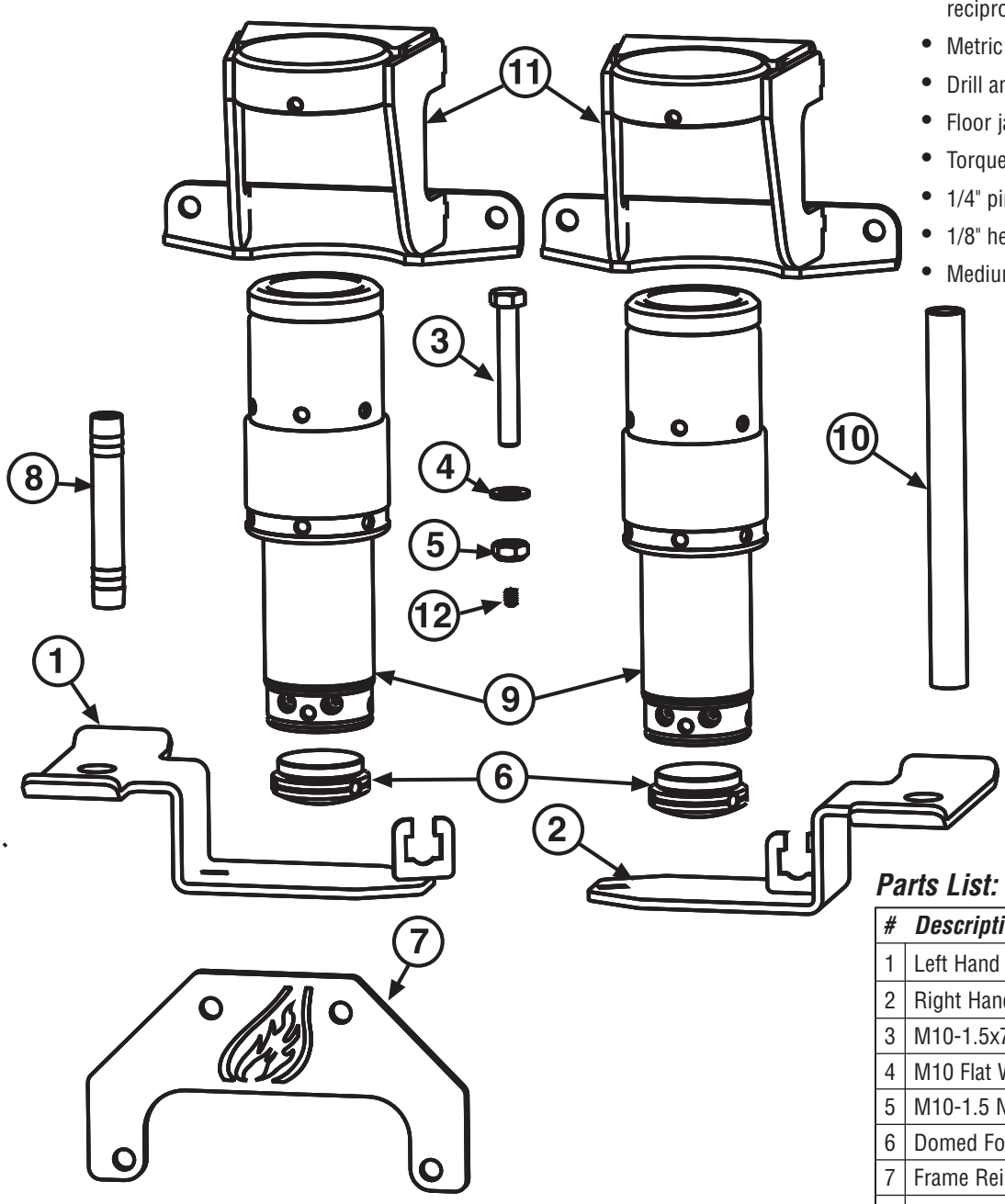
2005 -2015 Frontier, 2005 - 2015, Navara D40, 2005 - 2012 Pathfinder, 2005 - 2015 Xterra

This part should only be installed by personnel who have the necessary skill, training and tools to do the job correctly and safely. Incorrect installation can result in personal injury, vehicle damage and / or loss of vehicle control.

Read instructions completely before beginning installation.

Required Tools:

- Cutting tools (grinder with cut-off wheel, reciprocation saw, or hacksaw)
- Metric sockets and wrenches.
- Drill and Drill Index.
- Floor jack or lift w/ jack stands
- Torque wrench 100 ft/lbs
- 1/4" pin wrench
- 1/8" hex key
- Medium Hold Thread Locker



Parts List:

#	Description	Qty.
1	Left Hand JounceShock Target Plate	1
2	Right Hand JounceShock Target Plate	1
3	M10-1.5x75 Bolt	8
4	M10 Flat Washer	16
5	M10-1.5 Nut	8
6	Domed Foot	2
7	Frame Reinforcement Plate	2
8	Barbed Pipe Connector	1
9	JounceShock, 3.0" Travel	2
10	1/2" Fuel Hose	1
11	JounceShock Mount	2
12	Cup Point Set Screw	2

Part No. 25794 Instruction Sheet
Rear JounceShock System - 2005 & Up Frontier, 2005 & Up Xterra - Continued

Installation process:

1. Confirm that you have all parts and tools required to complete the job.
2. Safely raise vehicle per manufacturers specifications and remove both rear wheels.
3. Starting on the driver's side remove the large evaporative canister vent tube connected to the inside of the frame rail shown in ***FIGURE 1***. Remove plastic nipple hose and reinstall in frame rail hole approximately 6 inches rearward of original hole. Install one end of barbed connector into vent hose and install the supplied hose on the other end. Attach opposite end of that hose to the nipple in the frame.
4. Loosely thread JounceShock into the rear JounceShock mount.
5. Hold JounceShock mount against the inside of the frame rail. The top of the mount should be against the bottom of the bed cross tube. The JounceShock should be centered with the stock jounce bumper bracket that is welded to the frame rail. The end of the JounceShock should be in line with the center of the axle tube. (See ***FIGURE 2*** for correct position of JounceShock against frame rail.)
6. Align outer frame reinforcement plate with the JounceShock mount. The top of the reinforcement plate should be even with the top of the JounceShock mount. The reinforcement bracket should straddle the stock jounce bumper bracket welded to the frame.
7. Once the JounceShock mount and reinforcement plate are aligned properly, clamp them in place, mark, and drill 8 holes through the frame. (4 on each side of the frame rail.)
8. Bolt JounceShock bracket to the side of the frame rail as shown in ***FIGURE 2*** using 4 M10 X 75 bolts. Torque to 30 lb-ft.
9. Reinstall JounceShock unit into mount and tighten using pin wrench.
10. Apply a small dab of medium hold thread locker to the set screw. Install supplied set screw to lock JounceShock into position. (Follow all thread locker cure time instructions)
11. Repeat this process on the passenger's side except for the vent hose repositioning.
12. Support axle with jack stands.
13. Remove the two brake lines from the tabs welded to the top of the axle tube just inboard of the leaf spring. Using cutting tools cut these two tabs off of the axle tube and grind or file the axle tube smooth.
14. Loosen stock u-bolts and remove bump stop from under the u-bolts on top of the rear leaf spring.
15. Place new hit pad in place of stock bump stop as shown in ***FIGURE 3***. The hit pads are side specific for the brake line routing.
16. Tighten u-bolts to 100 lb-ft.
17. Re-install the brake lines into the tabs supplied on the Hit pads.
18. Replace Tires and tighten lug nuts to manufacturer's specifications.
19. Check all fasteners after 100 miles of driving.

For information on how to tune the JounceShocks, please refer to the instructions for the individual shocks: http://www.spcalignment.com/instructions/25710-INS_WEB.pdf

What to expect from your JounceShock system:

The JounceShock is the core of a secondary suspension system that dramatically increases the capacity of your vehicle's suspension. Most systems are designed such that the JounceShocks do not engage the suspension of your vehicle at ride height. Therefore, the system does not usually alter the ride height or on-road ride quality of your vehicle. When you have a heavy payload or take your vehicle off-road, your suspension will compress more and engage the JounceShocks. When the suspension engages the JounceShocks, you may hear the initial contact. This is normal and is an indication that the JounceShocks are being applied. When the vehicle is driven off-road you will notice a couple of performance gains. First, as you drive the vehicle over rough terrain it never feels as though the vehicle is bottoming. Also, you will realize that the vehicle moves up and down less, this is known as "Gross Vehicle Motion Control". These are changes caused by the characteristic exponential air spring curve and the critical damping of the JounceShock units. These changes significantly enhance the ability and durability of the vehicle, as well as the comfort level of the occupants. This added capacity can be misleading and care should be taken to learn the new limits of your vehicle without damage to the vehicle itself. For more discussion on JounceShock function and performance gains please visit our website at ***www.specprod.com***

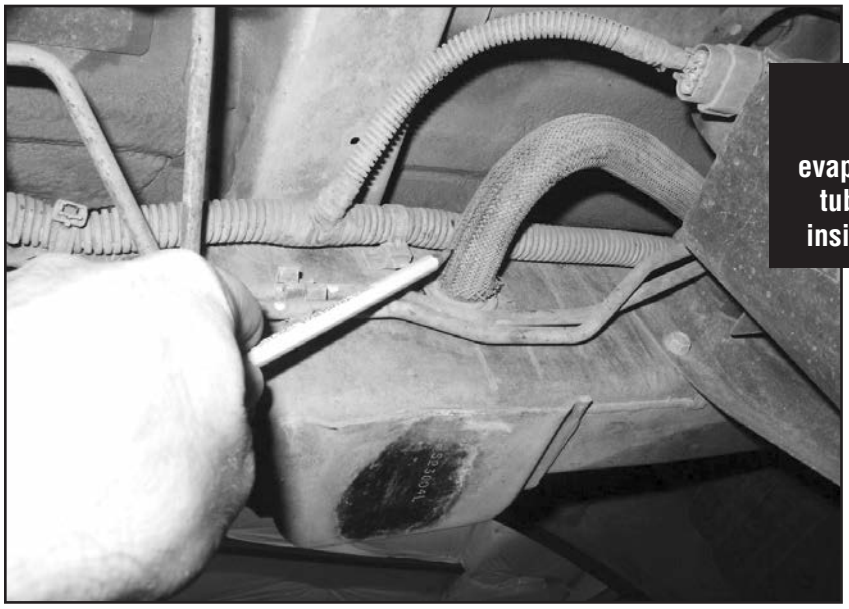


Figure 1
Remove large evaporative canister vent tube connected to the inside of the frame rail.

Figure 2
Bolt JounceShock bracket to the side of the frame rail.

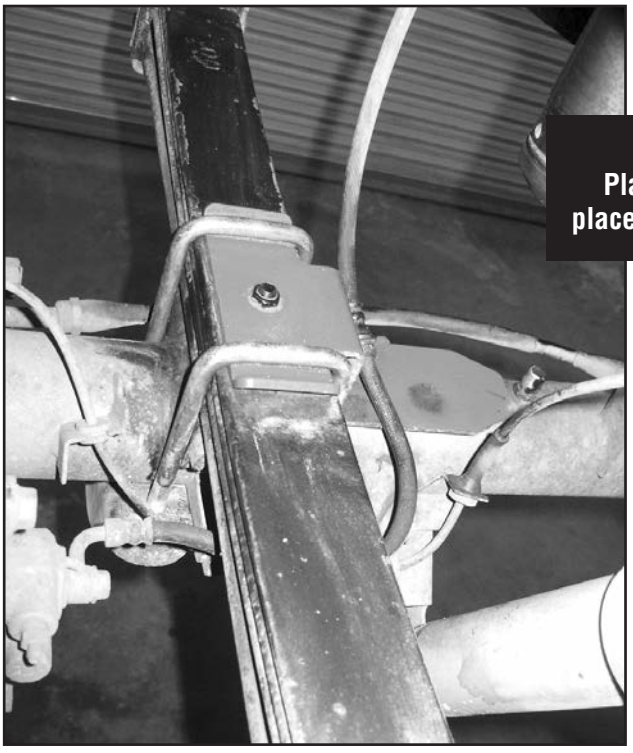


Figure 3
Place new hit pad in place of stock bump stop.

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