



Dodge Off Road, LLC

Specializing in Dodge Ram Solid-Axle 4x4
Suspension and Steering for Off Road Applications
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DODGE OFF ROAD 2nd GEN AIR BAG SYSTEM INSTRUCTIONS

For all 1994-2002 Ram 2500 and 3500 4x4 Trucks with the DOR Shackle Flip

Thank you for your purchase of our air bag kit! Please read over the instructions carefully before beginning your installation. Installation should be performed by a qualified mechanic. This is not a difficult install, however it does require average mechanical ability and an understanding of suspension systems.

Installation takes approximately 2 hours.

Your air bag system includes two frame brackets, two air bags with Schrader air valves, a pair of U bolt plate brackets, and a pair of Daystar cradles. We also include the mounting hardware for the cradle (mounts to the U bolt plate bracket) and the frame brackets, which use ½" Grade 8 hardware. If you are missing any of this hardware, please let us know prior to installing the steering.

You will need to use this with our U bolt flip kit, which is sold separately, or as an option on our shackle flip setup, traction bar setup, and air bag setup. If you do not have our U bolt flip, you will not be able to install the air bag cradle.

Tools Needed

Assorted sockets and wrenches, and a drill with a ½" drill bit. The 1/2" hardware we provide takes a 3/4" socket or wrench; the 5/8" U bolt nuts take a 15/16" socket or wrench. The ¾" nut on the air bag takes a 1-1/16" socket or wrench.



Air Bag Cradle Installation Procedure

Park the truck on a flat, level surface. Ensure the truck will not roll away while you are working under it.
Wheel chocks are recommended.

Remove your inner fender liner. These are normally held in place by a few plastic push pins. Pull the center of the pin out and the entire piece should be able to be removed. Once all of the push pins are removed, the fender liner can be removed from the rear fender. Do this on both sides of the truck.

With the weight of the truck on the axle, you will mount the cradle brackets on top of the DOR U bolt plate. To do this, you will need to remove the factory U bolts and bracket. If you already have the DOR U bolt flip, just remove the 5/8" nuts and washers from the U bolts. The new cradle bracket sits right on top of the DOR U bolt plate, and your U bolts will pass through the U bolt plate as well as the cradle mount. Make sure that the air bag mount is oriented correctly so that all bolt holes line up.

You will need to make sure that the U bolts do not stick up past the bottom of the cradle. If they do, you will need to cut the excess thread off before you can mount the cradle to the U bolt bracket.

Once the U bolt washers and nuts are installed, torque them to 180 ft.lbs in a cross-pattern in equal amounts so as not to pull one side of the U bolt up more than the other side.

Now you can mount the cradle to the U bolt bracket using the provided hardware. Torque the bolt to 30 ft.lbs.

The lower half of the setup is now complete.

Air Bag Frame Bracket Installation Procedure

The frame brackets can be mounted on either side (driver or passenger) of the truck. With the cradle in place and the truck at ride height, you need to attach the air bag to the frame brackets and line the air bags up so that they will drop into the cradles when the suspension compresses. However, the air bags should not be touching the cradles at ride height – they should have at least a 2" gap between the bottom of the air bag and the top of the cradle. This can be adjusted as needed, and as you add air pressure to the bags, they will become slightly longer.

Once you have the air bags lined up horizontally with the cradles, you can place the frame bracket on the frame and mark the holes to be drilled. The frame bracket will sit so that the top of the air bag is the same height as the bottom of the frame. Mark the holes and drill them out with a 1/2" drill bit or hole saw.

With the holes drilled, you can mount the frame bracket to the frame using the supplied 1/2" Grade 8 hardware. Torque these bolts to 60 ft.lbs.

You can now tighten the air bag mounting bolts. The 3/4" nut will be torqued to 65 ft.lbs, the smaller 1/2" nut will be torqued to 35 ft.lbs.

Tighten the Schrader valve so that air does not leak out. Fill the bag with 40 psi and check for leaks by spraying a soap and water mixture around the valve.

The Firestone airbags are very high quality and will handle up to 100 psi, however most customers will run them at 5 psi when unloaded and 35-45 psi when loaded. The pressure can vary based on your load, and

you may find that you want to install an air line kit to make filling the bags easier. The threaded section that the Schrader valve goes into is 1/4" NPT threads. There are many air line and gauge kits on the market that will work with these air bags.

When unloaded, do not let all of the air out – keep at least 5 psi in the bags so that they do not completely collapse if your suspension bottoms out while driving.



Final Notes

Please recheck all hardware after 100 miles, as the bolts can stretch – especially U bolts. Recheck as needed afterwards. Trucks used in harsh conditions such as gravel roads, poorly maintained roads, or in off road environments, should recheck hardware more frequently. It is up to the owner of the truck to ensure all hardware is securely tightened and remains tight as part of your truck maintenance.

If you have any questions, please do not hesitate to email us! We can troubleshoot your install quickly if you provide a couple of pictures of the issue you are having. Thanks again for your purchase. Check out our other products for more Dodge Ram upgrades: store.dodgeoffroad.com



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