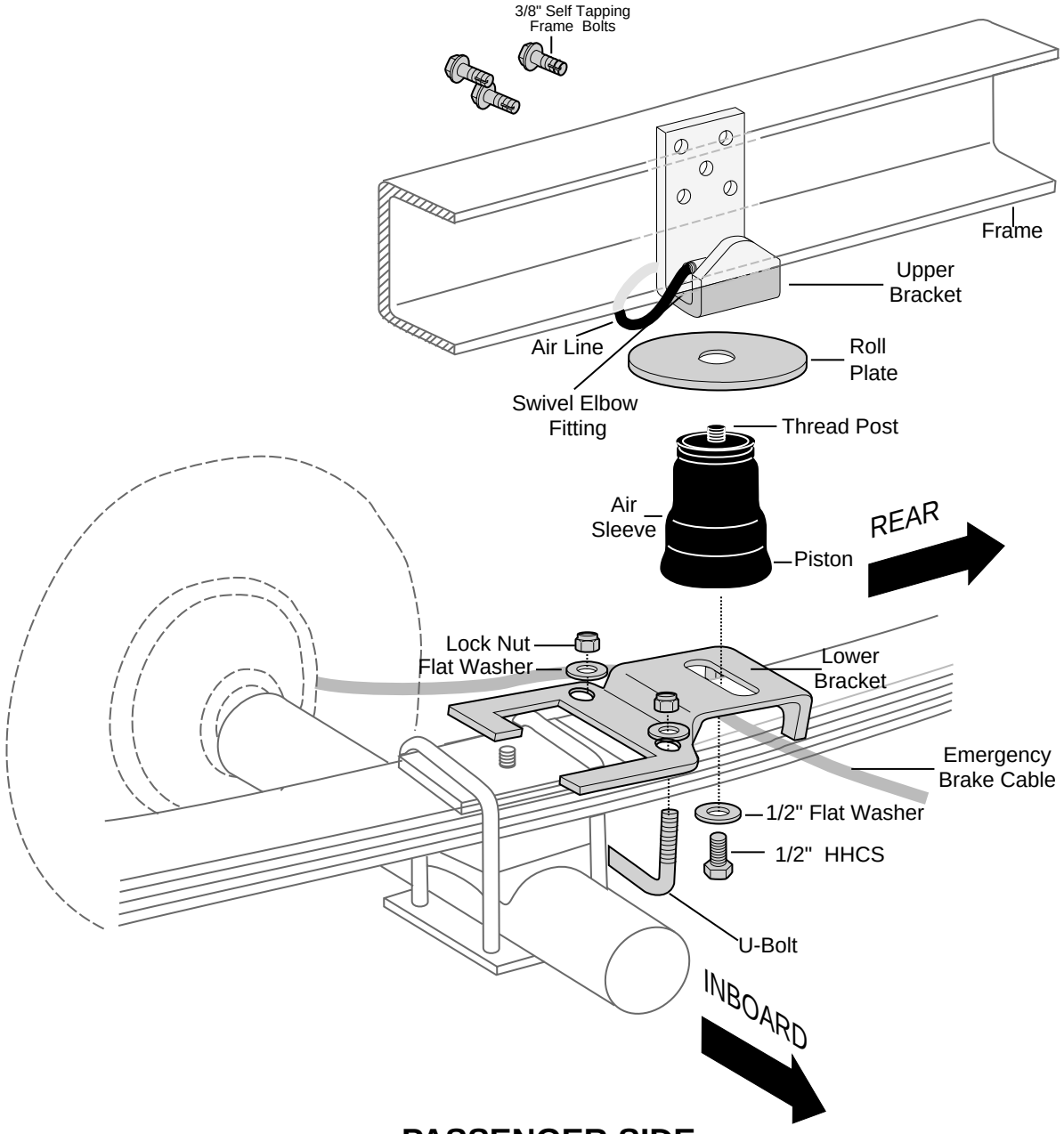
MN-289
(06801)
ECN2396

RIDE CONTROL
ADJUSTABLE AIR SPRING SUSPENSION

P/N 59517

Figure 1 represents a TYPICAL installation. For a 4WD Extended Cab Mini-Pickup (see page 2 for Tacoma instructions). Your vehicle may look slightly different due to model or year.



PASSENGER SIDE
Figure 1

WARNING: DO NOT INFLATE ASSEMBLY WHEN IT IS UNRESTRICTED. ASSEMBLY MUST BE RESTRICTED BY SUSPENSION OR OTHER ADEQUATE STRUCTURE. DO NOT INFLATE BEYOND 100 P.S.I. IMPROPER USE OR OVER INFLATION MAY CAUSE ASSEMBLY TO BURST CAUSING PROPERTY DAMAGE OR SEVERE PERSONAL INJURY.

FAILURE TO MAINTAIN CORRECT MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO THE LOAD), BOTTOMING OUT, OVER-EXTENSION, OR RUBBING AGAINST ANOTHER COMPONENT WILL VOID THE WARRANTY. NORMAL RIDE HEIGHT, REGARDLESS OF LOAD MUST ALWAYS BE MAINTAINED.

NORMAL RIDE HEIGHT: Normal ride height is defined as the measured distance from the bottom edge of the fenderwell to the center point of the wheel with the vehicle in the "as delivered condition" (without camper, tool boxes, unusual load, etc.). **This measurement should be recorded for later reference. All AIR LIFT kits are designed to be installed and operated at Normal Ride Height.**

IMPORTANT: Your vehicle may be equipped with a rear brake proportioning valve. ANY type of load assist product could affect brake performance. If equipped with a brake proportioning valve, we recommend that you check with your dealer before installing this type of product. If your vehicle DOES NOT have a rear brake proportioning valve or is equipped with an anti-lock type brake system, installation of a load assist product will have NO EFFECT ON BRAKE SYSTEM PERFORMANCE.

TACOMA 4WD - Air Springs will mount FORWARD of the axle.

4WD EXTEND CAB MINI TRUCK and 4-RUNNER -Air Springs will mount BEHIND the axle.

1. Jack up rear of vehicle or raise on hoist and remove rear wheels. Assemble the kit. Install the air fitting finger tight plus two turns (Figure 1).**Use a 7/16" open end wrench being careful to tighten on the metal hex nut only. DO NOT OVER TIGHTEN.** Place the roll plate over the thread post of the air spring.

2. Thread the upper bracket onto the air spring. The bracket must be tight and flat to the roll plate on both sides. Hand tight is sufficient (Figure 2). Be sure the air fitting faces the front of the vehicle for proper air line routing.

3. LOOSELY attach the lower bracket to the bottom of the sleeve using 1/2" HHCS bolt and 1/2" flatwasher (Figure 1). Set the assembly on the leaf spring.

   NOTE: The lower bracket will set **OVER** the U-bolts. Secure to the leaf springs using the provided u-bolts, flat washers and nylon lock nuts (Figure 1). Tighten to 20 ft. lbs.

4. To install the upper bracket: lower axle or raise frame until the upper bracket is in line with the lower and at the same angle as the leaf spring. The bottom of the upper bracket must fit tight to the bottom of the frame rail (Figure 3). The upper bracket must be parallel and perpendicular to the lower bracket. The upper bracket is designed so that it can be "tilted" for the proper angle (Figure 4).

5. It is necessary to use at least three of the five pre-drilled mounting holes on the upper bracket. Any combination of three is permissible. **NOTE:** There is a shock bracket on the inside frame rail, passenger side of the **TACOMA**. Take this into consideration when choosing mounting holes for the upper bracket. Using the bracket as a template, center punch and drill three 5/16" holes. **The holes must be no larger than 5/16".** Attach the upper bracket using the Self-Tapping Frame Bolts and tighten to 15 ft-lbs (Figure 1). **DO NOT OVER-TIGHTEN.**

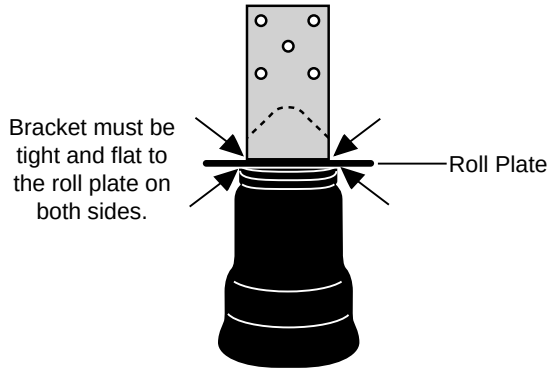
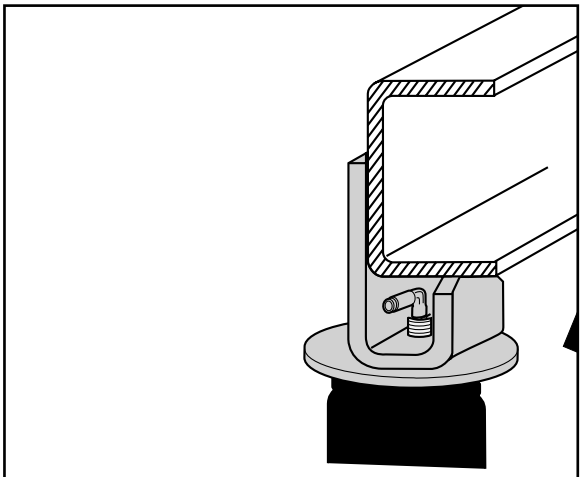


Figure 2



Fit the bottom of the upper b
tight to the frame rail.

Figure 3

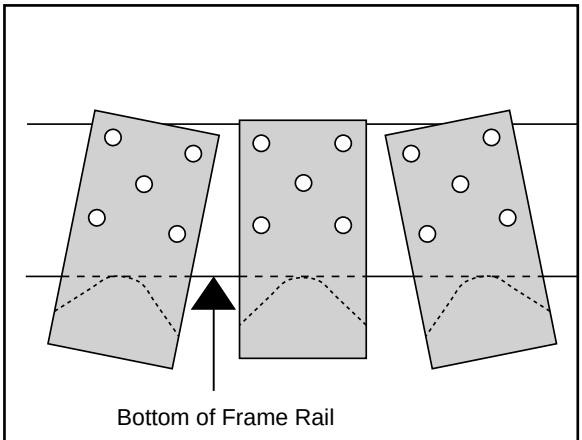


Figure 4

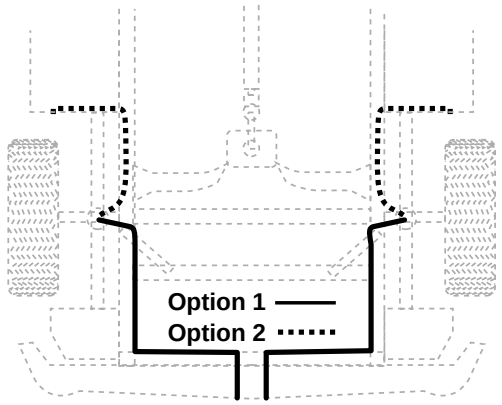


Figure 5

CAUTION: DO NOT DRILL HOLES INTO FRAME UNTIL ANY AND ALL HYDRAULIC, FUEL, OR ELECTRICAL LINES HAVE BEEN MOVED OR SHIELDED.

Your air springs will live much longer if they are not the suspension limiter in either compression or extension. Regardless of load, the air pressure should always be adjusted so that the Normal Ride Height is maintained at all times. The shock absorber is usually the limiter on extension. If this is not the case, you should consider the use of limiting straps; **especially if the vehicle is used off-road.** The maximum inflated diameter of your air spring is 4.6". You must check to see that nothing is rubbing against the air spring within this diameter.

6. Select a location for the inflation valves in the rear bumper area or rocker panel flange insuring that each valve will be protected and accessible with an air hose (Figure 5).

7. Drill 5/16” hole for inflation valve and mount as illustrated. Rubber washer on outside is for weather seal (Figure 6).

TO PREVENT AIR LINE FROM MELTING, KEEP IT AT LEAST TWELVE INCHES FROM EXHAUST SYSTEM.

8. Route air line along frame from inflation valve location to the air fitting (Figure 5). Attach air line to chassis with the provided plastic straps.

NOTE: Route the air line through the upper bracket from the front. Loop the air line in to the upper bracket as shown in Figure 1. This will prevent the air line from being pinched between the bracket and the frame.

9. Use a standard tube cutter, a razor blade, or very sharp knife to cut the air line. A clean square cut will ensure against leaks. Cut off excess air line squarely and install the air line into the fitting. This is a push-to-connect fitting. Push and slightly turn the cut end of the air line into the fitting as far as it will go, (9/16”). You will hear/feel a definite “click” when the air line is seated. The air line is now installed.

10. Repeat process for right side.

11. **VERY IMPORTANT** - With the bottom of the air spring still loose, inflate the sleeve to approximately 10 p.s.i. By using the slot for adjustment, center the sleeve so that it is in line with the upper and lower bracket and that there is a symmetrical cushion of air around the lower base of the sleeve to prevent side load wear (Figure 7). This can be accomplished by pressing all around the air spring and tapping it inboard or outboard for proper alignment. **Sleeve diameter grows to 4.6” at maximum inflation,** check to be sure there is clearance all around the sleeve when fully inflated. Tighten the lower sleeve mounting bolt to 10 ft-lbs. **DO NOT OVERTIGHTEN .**

12. Inflate to 30 p.s.i. Check all fittings and valve core with a soapy water solution for leaks. Recheck air pressure after 24 hours. A 2-4 p.s.i. loss after initial installation is normal. If pressure has dropped more than 5 lbs. re-test for leaks with soapy/water solution. Please read and follow the Maintenance and Operating Tips.

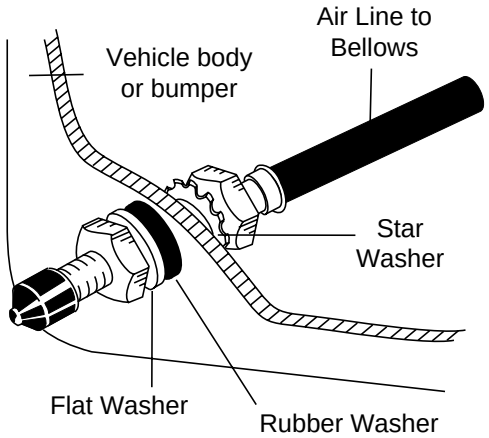
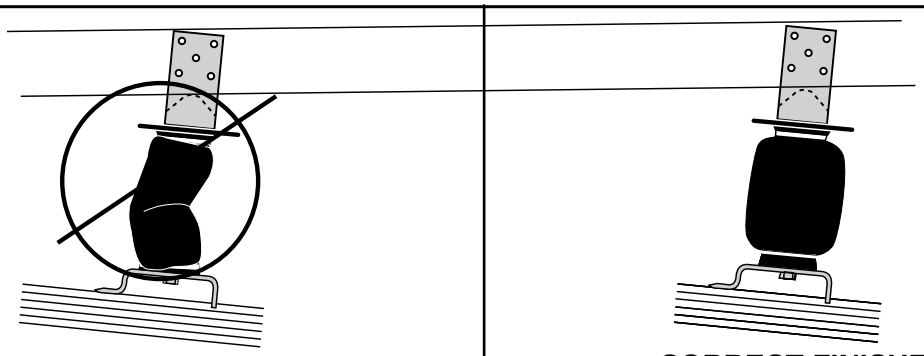


Figure 6

FINISHED INSTALLATION



NOT CORRECT
MISALIGNED OR UNDER INFLATED
(ok during assembly)

CORRECT FINISHED
INSTALLATION
(inflated)

FIGURE 7

FAILURE TO MAINTAIN CORRECT MINIMUM PRESSURE (OR PRESSURE PROPORTIONAL TO THE LOAD), BOTTOMING OUT, OVER-EXTENSION, OR

MAINTENANCE/OPERATION

MINIMUM AIR PRESSURE	MAXIMUM AIR PRESSURE
10 P.S.I.	100 P.S.I.

MAINTENANCE

1. Check pressure weekly.
2. Always maintain at least 10 p.s.i. air pressure.
3. If you develop an air leak in the system, use a soapy/water solution to check all air line connections and the inflation valve core before removing sleeve.

OPERATING TIPS

1. Inflate your air springs to 60 p.s.i. before adding the payload. After vehicle is loaded, adjust your air pressure to level the vehicle.

NOTE

1. **IMPORTANT:** For your safety and to prevent possible damage to your vehicle, do not exceed maximum load recommended by the vehicle manufacturer. Although your air springs are rated at maximum inflation pressure of 100 p.s.i., this pressure may represent too great of load on some vehicles. Check your vehicle owner's manual and do not exceed maximum loads listed for your vehicle.

   When inflating your Air Lift sleeves, add pressure in small quantities, checking pressure frequently during inflation. The sleeves require much less air volume than a tire and therefore inflate much faster.

2. **Should it become necessary to raise the vehicle by the frame, make sure the system is at minimum pressure (10psi) to reduce the tension on suspension/brake components. Check to see that the air spring rolls back down over the bottom piston after the vehicle is lowered (Figure 7). If sleeve fails to roll back down over the piston, add air pressure until sleeve "pops" back over piston (do not exceed 100 p.s.i.).**

Thank you for purchasing Air Lift Products

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FOR TECHNICAL ASSISTANCE CALL 1-800-248-0892

Caution: DO NOT EXCEED THE VEHICLE MANUFACTURERS MAXIMUM GROSS VEHICLE WEIGHT RATING.

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