



559-734-7451 800-367-5480 FAX 559-734-7460

INSTALLATION INSTRUCTIONS

6154 Air Spring Kit 2004+ Ford F-150 4WD

Thank you for purchasing a quality Hellwig Product.

**PLEASE READ THIS INSTRUCTION SHEET COMPLETELY BEFORE STARTING
YOUR INSTALLATION**

IMPORTANT NOTES

***DO NOT* INFLATE AIR SPRING ASSEMBLY UNLESS IT HAS BEEN
PROPERLY INSTALLED ON VEHICLE.**

***DO NOT* INFLATE AIR SPRINGS OVER 100 PSI**

**A MINIMUM OF 5-10 PSI MUST BE MAINTAINED IN AIR SPRINGS
AFTER INSTALLATION FOR WARRANTY TO BE VALID. FAILURE TO
KEEP MINIMUM PRESSURE IN AIR SPRINGS WILL VOID WARRANTY.**

**THIS UNIT IS DESIGNED TO INCREASE THE LEVEL LOAD CARRYING
CAPACITY OF YOUR VEHICLE. NEVER LOAD THE VEHICLE THIS
UNIT IS INSTALLED ON BEYOND THE MANUFACTURER'S MAXIMUM
GROSS VEHICLE WEIGHT RATING.**

**OVERINFLATION AND IMPROPER USE MAY RESULT IN PERSONAL
INJURY AND/OR DAMAGE TO YOUR VEHICLE AND PROPERTY.**



559-734-7451 800-367-5480 FAX 559-734-7460

BEFORE STARTING YOUR PROJECT

WHEN LIFTING A VEHICLE WITH A JACK, BE SURE TO SET THE PARKING BRAKE AND USE SAFETY STANDS.

ENSURE THAT THE INSTALLATION OF COMPONENTS WILL NOT CRUSH OR DAMAGE FUEL AND BRAKE LINES OR ELECTRICAL HARNESSSES.

BEFORE DRILLING ANY HOLES, ENSURE THAT ALL ELECTRICAL WIRES, FUEL LINES, BRAKE LINES, BRAKE HOSES AND ANY OTHER COMPONENTS ARE MOVED OR PROTECTED TO AVOID DAMAGE FROM DRILLING ANY HOLES .

DO NOT ATTEMPT ANY MODIFICATIONS TO THE VEHICLE OTHER THAN THOSE OUTLINED IN THIS INSTRUCTION SHEET. IF ANY INTERFERENCE WITH THE GAS TANK, FUEL LINES, BRAKE LINES, EXHAUST PIPE, ETC. EXISTS, STOP YOUR INSTALLATION AND CALL HELLWIG PRODUCTS FOR TECHNICAL HELP.

IF WHEELS ARE REMOVED FOR INSTALLATION OF KIT, CHECK MANUFACTURERS SPECIFICATIONS FOR PROPER LUG NUT TORQUE BEFORE REINSTALLING WHEELS.

WHEN CUTTING AIR BRAKE TUBING A SQUARE CUT IS REQUIRED OR LEAKAGE MAY RESULT.



1. Park vehicle securely and set parking brake and chock wheels. Remove factory bump stops from vehicle using a 13mm socket.

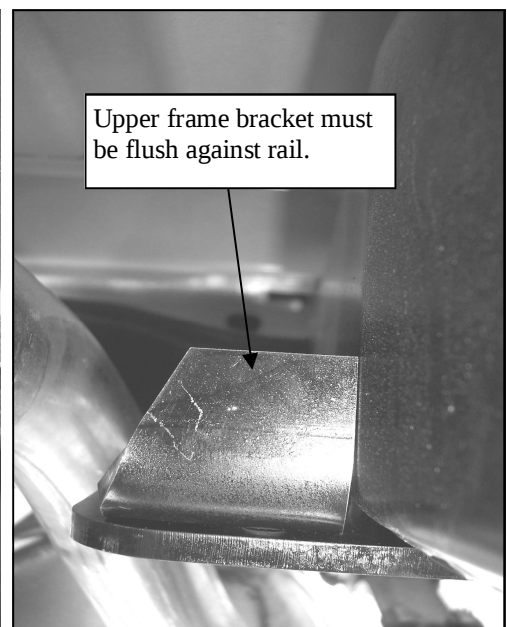
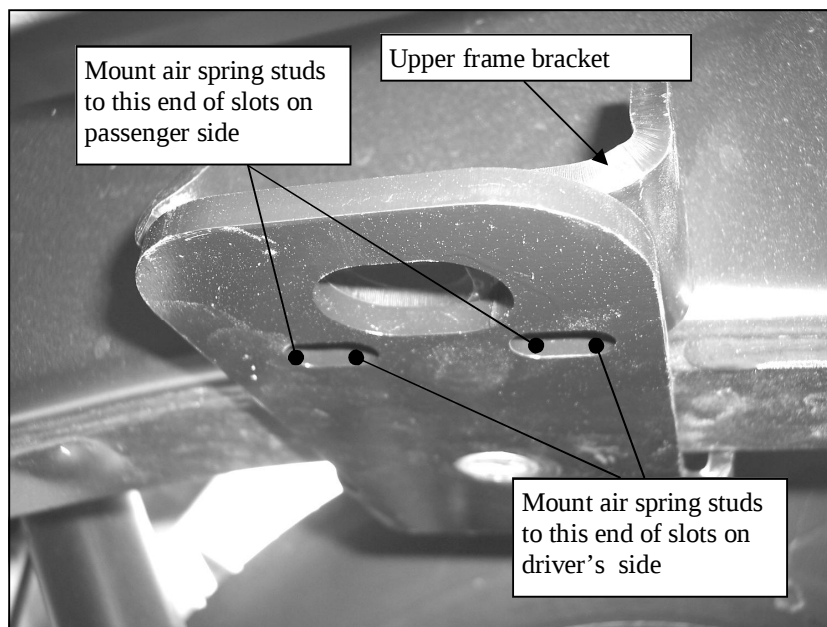
2. Install fitting in port of air spring. Torque fitting to approximately 20 ft-lb.



559-734-7451 800-367-5480 FAX 559-734-7460



3. Install lower frame bracket using flat head bolt and 6mm hex key. Tighten bolt to 25 ft-lb.



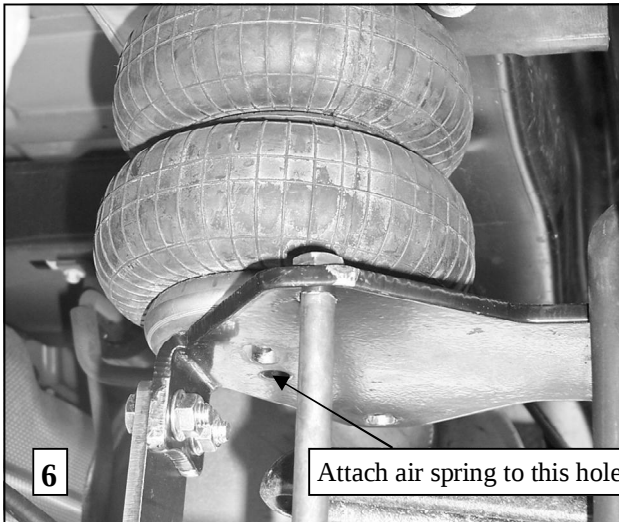
4. Align upper frame bracket on lower frame bracket as shown in photos. The bracket must be aligned so that it is flush against the frame rail and that it locates the air spring studs in the proper location. The studs for the air spring must be located against the forward end of the slotted holes in lower frame bracket as installed on vehicle.



559-734-7451 800-367-5480 FAX 559-734-7460

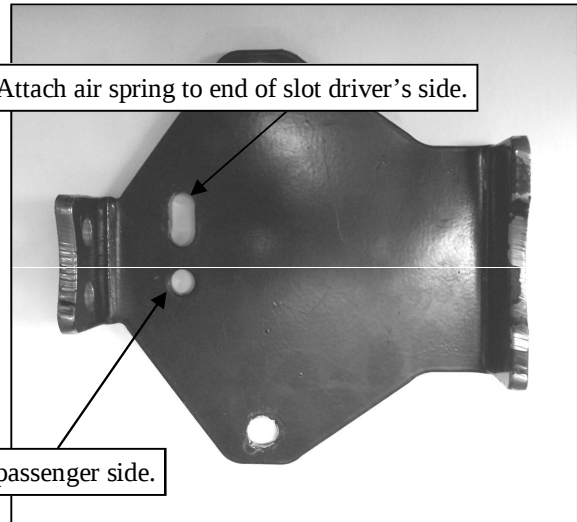


5. Place heat shield on top of passenger side air spring and insert air spring through holes in both frame brackets. Driver's side air spring does not require heat shield. Attach air spring using 3/8" flanged nuts. Take care to align air spring studs as described in step 4. Make sure upper frame bracket is flush against frame rail and tighten nuts to 20 ft-lb.



6

Attach air spring to this hole passenger side.

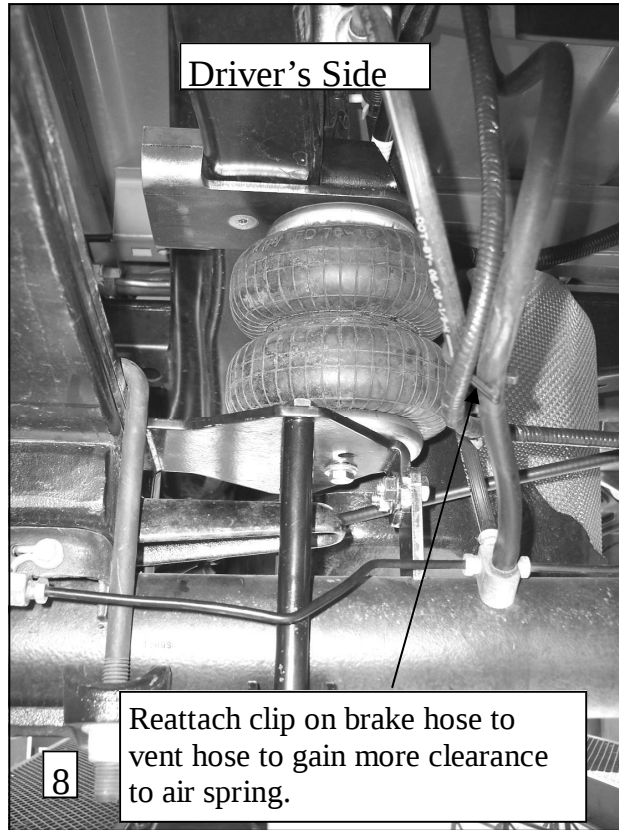


Attach air spring to end of slot driver's side.

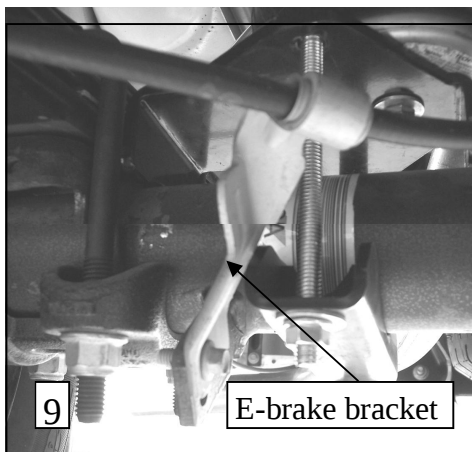
6. Attach spacer tab to axle bracket using 3/8-16 X 1" bolts and flanged nuts as shown in photos. Insert axle bracket between air spring and axle with outboard tab resting on bump stop casting. Use 3/8-16 x 1" bolt and washer to attach air spring to bracket as shown in photos. Tighten bolt to 20 ft-lb.



559-734-7451 800-367-5480 FAX 559-734-7460



8. Install bolts in axle bracket and install spacer tube over rear bolt only. Attach saddle bracket to bolts using thick washers and flange nuts. It may be necessary to shorten spacer 1/8" to 3/16" for best fit. Tighten rear bolt (with spacer) first to 20-25 ft-lb and then tighten forward bolt to 20-25 ft-lb. Ensure that brake hose will not rub on air spring during use.



9. It may be necessary to adjust emergency brake bracket on passenger side to allow saddle bracket to mount properly.



559-734-7451 800-367-5480 FAX 559-734-7460

9. Complete passenger and driver's side installation of air spring assembly.
10. Select a location for the air inflation valves. The location can be on the bumper or body of the vehicle where an air chuck can be used to inflate the air springs. Select a location where the valve will not be damaged or interfere with the operation of other components.
11. Cut air brake lines to length and connect air lines to fittings by pushing the air line into the air fittings as far as possible. **WHEN CUTTING AIR BRAKE TUBING, A SQUARE CUT IS REQUIRED AND THE HOSE END MUST NOT BE DEFORMED OR LEAKAGE MAY RESULT. IF DEFORMATION OF THE HOSE END OCCURS, THE HOSE END MUST BE REWORKED SO THAT IT IS ROUND.** Engagement of the sealing O-ring will be felt when the air line has been inserted properly into the fitting. Fittings may be disconnected if required by pushing down on the outer ring while pulling firmly on the air line. Route air lines away from exhaust pipes or any other sources of heat and ensure that the air lines are protected from sharp edges. A length of heat shielding is provided to protect the air line as it exits the passenger side air spring.
12. Inflate air springs to 40 psi and check for leaks. A soapy water solution can be used to find slow leaks.
13. When satisfied with integrity of the system, adjust air pressure to desired level. The air springs can be inflated to any level between 10 and 100 psi. **DO NOT** run the air springs empty or warranty will be void. **MINIMUM** air spring pressure is 5 psi. Failure to keep air in the air springs will void the warranty. For best **RIDE** use only enough air pressure as required to level the vehicle. If a firmer ride is desired, more pressure can be used.
14. Check air pressure in the system regularly to ensure system performance and maintenance of warranty. Just like tires, the air pressure in the system will vary due to temperature changes. For your air spring system to function properly it must be checked on a regular basis.

ATTENTION INSTALLER: BE SURE THAT THE CUSTOMER RECEIVES THIS INSTRUCTION SHEET, ALL IMPORTANT NOTE CARDS AND THE WARRANTY FORM.