



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

INSTALLATION INSTRUCTIONS

6118 Air Spring Kit 2008 F-450 Dual Wheel 2WD/4WD Accommodates High clearance fifth wheel hitch

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 HARNESES.

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.

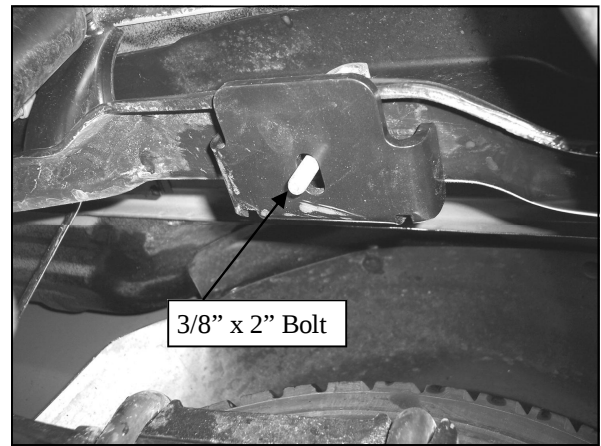
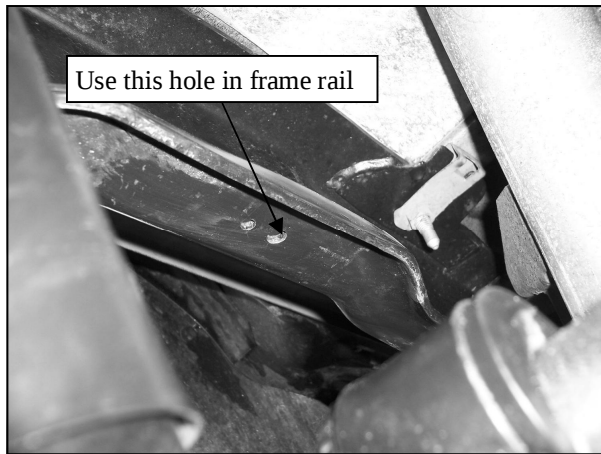


1. Park vehicle securely and set parking brake and chock wheels. Remove factory bump stops from vehicle by removing nuts from studs using a 15mm wrench or socket.

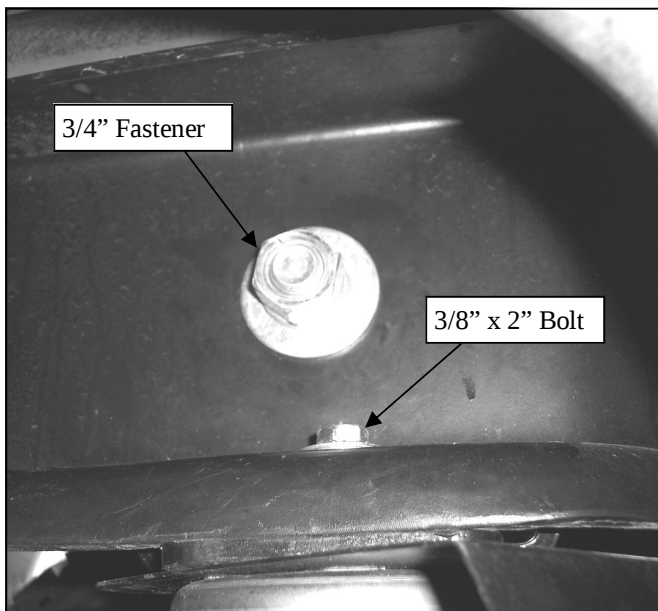
2. Install fitting in port of air spring. Torque fitting to approximately 20 ft-lb.



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



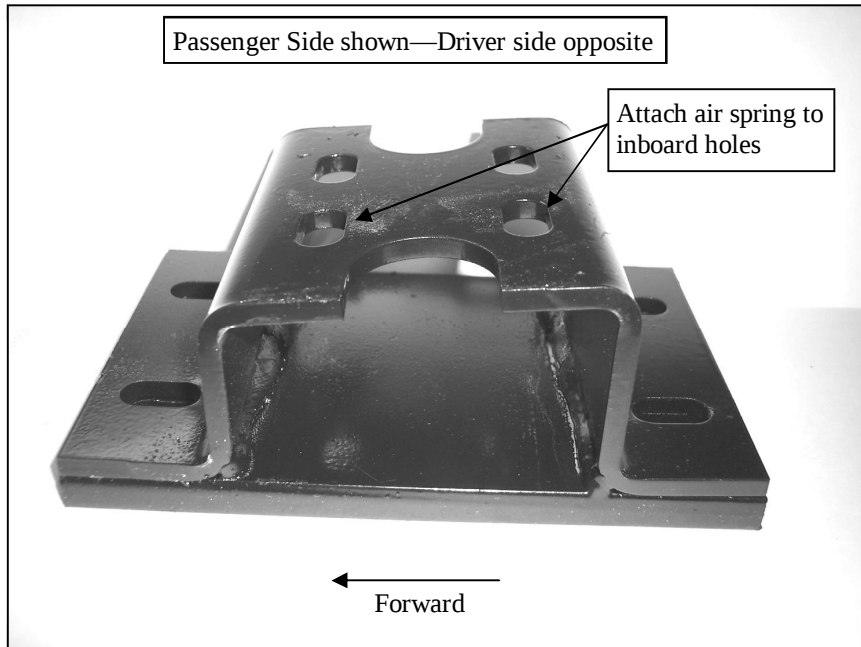
3. Install upper frame bracket and insert 3/8" X 2" bolt with washer, and lock washer through hole in frame as shown in photo. Align slotted hole in bracket with bolt and place bracket squarely against bottom of frame rail.



4. Locate Large hole in frame rail. Attach frame bracket using supplied 3/4" bolt, flat washers, lock washer, and nut with washers on both sides of rail and bolt head on outside of rail. Leave loose for adjustment later.



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



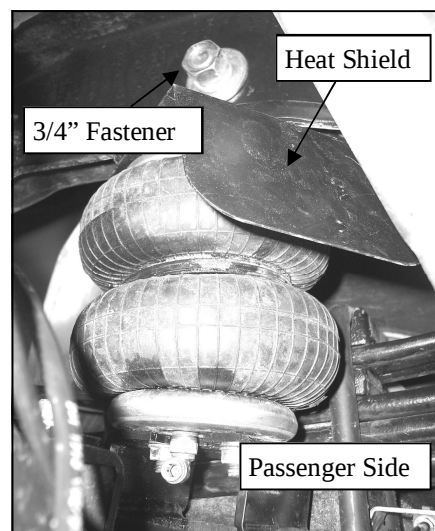
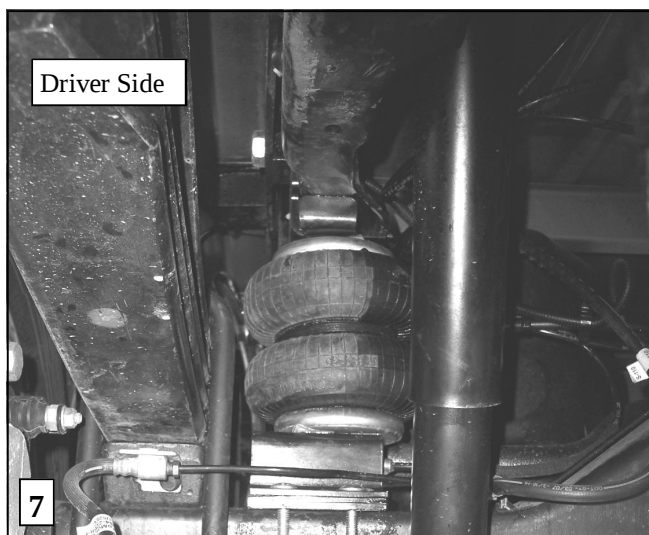
5. Orient axle bracket as shown in photo to prepare for attachment of air spring. When installed on vehicle, the air spring will attach to the inboard holes.



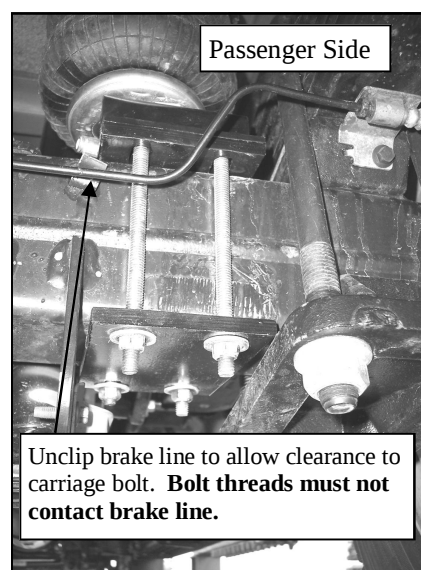
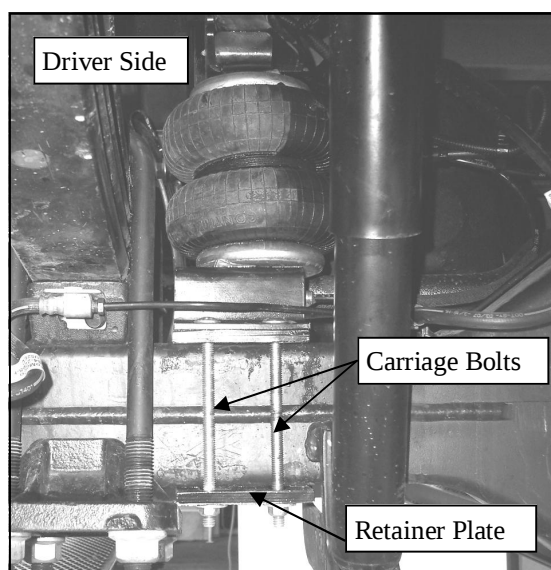
6. Attach air spring as shown in photo using flanged serrated locknuts. Torque to 25 ft-lb.



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



7. Insert air spring assembly between frame and axle as shown. Install heat shield on passenger side as shown in photo. Attach air spring to frame rail with 3/8" X 2" bolt inserted in step 3 and torque to 25 ft-lb. Torque 3/4" bolt to 100 ft-lb.



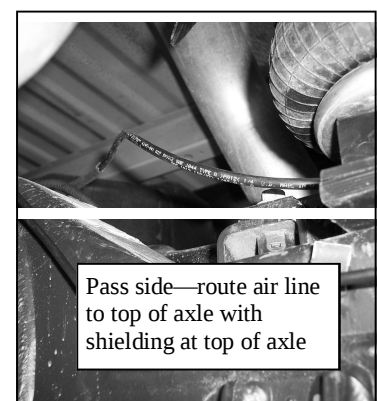
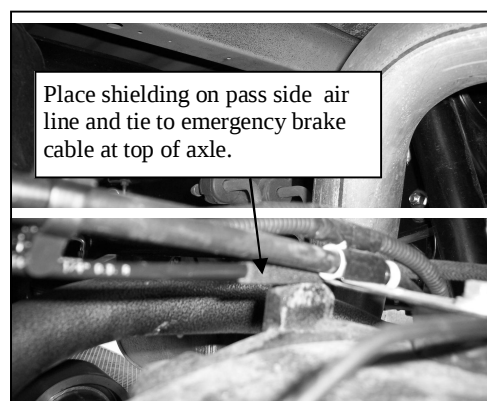
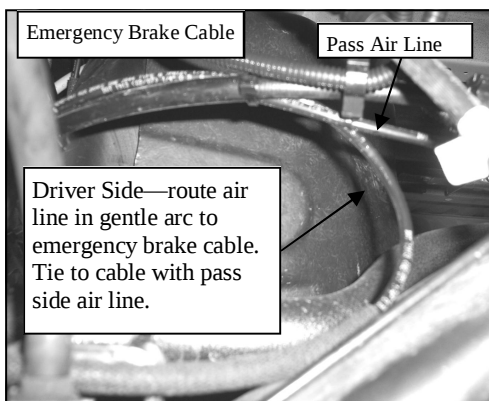
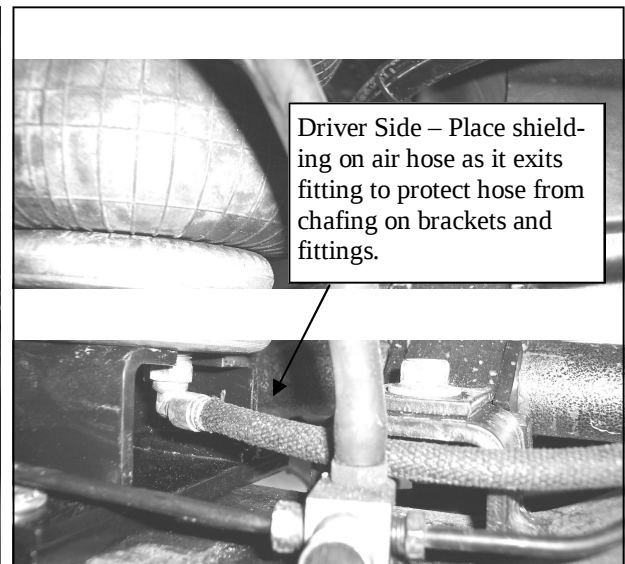
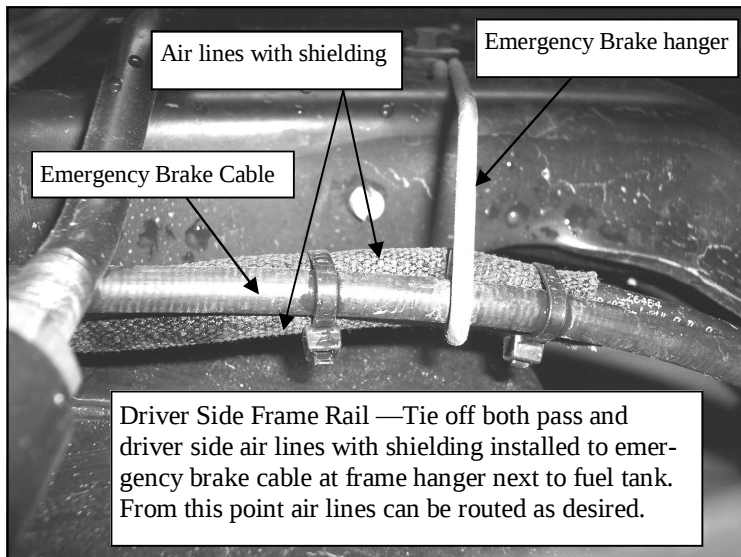
8. Insert carriage bolts into slots in axle bracket and attach plate to bottom of axle tube with locknuts and washers as shown in photo. It may be necessary to reposition brake lines slightly to allow clearance. The passenger side brake line may be un-clipped from the axle tube to provide additional clearance to carriage bolts. **Make sure that carriage bolts will not contact brake lines during operation of vehicle.** Align brackets and torque nuts to 20-25 ft-lb.



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

9. Complete passenger and driver's side installation of air spring assembly.

10. 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.



11. Route air lines as shown along the emergency brake cables. Lines **MUST** be routed as shown with shielding and tie straps installed on air lines as shown. Failure to install air lines as shown will result in excessive flexing of air lines and potential leaks. Air lines can be routed as required after being tie strapped to the emergency brake cable frame hanger on driver side frame rail near fuel tank.



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

12. 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.
13. Inflate air springs to 40 psi and check for leaks. A soapy water solution can be used to find slow leaks.
14. 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.
15. 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.