

INSTALLATION INSTRUCTIONS

6305 Air Spring Kit 2005+ Toyota Tacoma 4WD 2005+ Toyota Tacoma Pre-runner 2WD

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.



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 HARNESSES.

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.



 Park vehicle securely—set parking brake and chock wheels. Prepare vehicle for mounting air springs by removing bump stop from spring assembly as shown. <u>On-</u> ly install an air spring on one side of the vehicle at a time to prevent axle from shifting when u-bolts are loose.





2. Assemble frame brackets to air spring as shown. 3/8" x 3/4" flat head bolt will attach to the center of the air spring on the end without an air fitting port. Install $3/8 \times 1-1/2$ bolts into threaded holes in end of bracket. These bolts will be tightened later so only thread them in 2-3 turns.



3. Attach axle brackets to air spring as shown using 3/8 x 1" bolts and washers. Torque to 20 ft-lb. Note orientation of frame bracket relative to axle bracket. There are driver and passenger axle brackets— the driver side assembly is shown. The brackets can be identified by the removed corner on the axle brack-et that is oriented to the rear of the vehicle when installed. Attach air fitting and torque fitting torque to 20 ft –lb. Align frame bracket to axle bracket and torque flat head bolt to 20 ft-lb.





4. Count the number of main leaves in the leaf spring. Do not count the thick base leaf. The number of leaves will determine if you use a spacer tab and where to locate it on the axle bracket.



5. If equipped with two main leaves do not install spacer tab. If equipped with 3 main leaves install spacer tab on upper holes. If equipped with 4 main leaves install spacer tab on lower holes. Tighten bolts to 25 ft-lb.





6. Place air spring assembly between frame and axle as shown in photo. Exposed hole in axle bracket will be installed over the center bolt of the spring. Attach frame bracket so that tab with bolts wraps over the bump stop bracket on frame as shown. Reinstall u-bolts over axle bracket and torque U-bolts to 75-85 ft-lb. Make sure u-bolts are centered properly on axle before tightening nuts. Do not tighten bolts on frame bracket at this time.



7. Attach frame support to frame bracket as shown using 3/8" x 1-1/4" bolts washers and locknuts. Do not tighten at this time. Make sure that the threads of the bolts are pointing up as shown in photo.

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8. Insert 3/4" bolt and washer into large hole in frame and hole in frame support. Attach with nut, washer and lockwasher. Tighten to 120 ft-lb. Tighten $3/8 \times 1$ -1/2" bolts on frame bracket until they contact the pocket of bump stop. Continue to tighten until tab flexes slightly. Tighten bolts holding frame support to frame bracket to 25 ft-lb.



9. Complete installation of driver and passenger side air spring assemblies. Orient fittings on air spring so that they point forward for air line routing.



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 LEAK-AGE 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.



12. Check your installation to ensure that all fasteners are tight and that the assembly and all fasteners clear brake and fuel lines, emergency brake cables, fuel tanks, wiring harnesses, etc.

- 13.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.
- 14.Inflate air springs to 40 psi and check for leaks. A soapy water solution can be used to find slow leaks.
- 15. 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.
- 16.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.

MAINTENANCE AND INSPECTION:

YOUR HELLWIG SUSPENSION PRODUCT IS BUILT TO LAST. HOWEVER, AS WITH ALL VEHICLE SYSTEMS, IT REQUIRES ROUTINE INSPECTION. INSPECT YOUR HELLWIG INSTALLATION LOOKING FOR SECURE HARDWARE AND TIGHT FITTING BRACKETS AND BUSHINGS. IF YOU DO NOT PERFORM THIS INSPECTION, HAVE YOUR PROFESSIONAL MECHANIC INSPECT AS DESCRIBED.

ATTENTION INSTALLER: BE SURE THAT THE CUSTOMER RECEIVES THIS INSTRUCTION SHEET, ALL IMORTANT NOTE CARDS AND THE WAR-RANTY FORM.

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