PROGRESSIVE suspension

Installation Instructions

30-5300 Compressor Kit for use with 716 Air Dragger™ Rear Shocks For Harley Davidson FLH/FLT Models '97-'09.

ATTENTION

Statements in these instructions that are preceded by the following words are of special significance:

Warning

This means there is the possibility of injury to yourself or others.

Caution

This means there is the possibility of damage to the motorcycle.

Note

Information of particular importance has been placed in italics.

Warranty

Progressive Suspension Inc. warrants to the original purchaser this Part to be free of manufacturing defects in materials and workmanship for a period of one (1) year from the date of purchase. In the event warranty service is required, you must call Progressive Suspension immediately with a description of the problem.

If it is deemed necessary for Progressive Suspension to make an evaluation to determine whether the part is defective, a return authorization number will be given by Progressive Suspension. The parts must be packaged properly so as to not cause further damage and returned prepaid to Progressive Suspension with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem. If after the evaluation by Progressive Suspension the part was found to be defective it will be repaired or replaced at no cost to you. If we replace it, we may replace it with a reconditioned one of the same design.

Progressive Suspension shall not be held liable for any consequential or incidental damages resulting from the failure of a Progressive Suspension part. Progressive Suspension shall have no obligation if a part becomes defective as a result of improper installation or abuse.

Warning

Lowering your motorcycle will decrease initial ground clearance. The motorcycle will be lower to the ground and care should be taken to avoid bottoming, especially over bumps or in turns. Lowering a motorcycle can change the handling characteristics. Always use extreme caution when riding after a change is made and take time to get accustomed to any handling change.

IMPORTANT NOTICE

Note: Please read the following instructions completely before starting installation!

Follow instructions in an authorized shop manual or take the motorcycle to a competent dealer.

Progressive Suspension 30-5300 compressor kit is designed to work with Progressive Suspension's 716 Series "Air Dragger" shock on an OEM (Original Equipment) frame and swingarm. Use of this product with any other shocks – or on a frame or swingarm other than OEM – may produce unsatisfactory results and void the warranty.

Tire to fender clearance may be affected when tires other than original equipment are installed. If the tire diameter and / or width is larger then stock, the tire may touch the underside of the fender resulting in unexpected braking which could lead to an accident and or injury.

Installation

- The 30-5300 Compressor kit is designed to work with Progressive Suspension 716 Series Air Dragger shocks. If you have not done so already, install the Progressive 716 Series Air Dragger shocks on your bike per the instructions supplied with those shocks.
- The compressor will be mounted in the left hand side saddlebag. This saddle bag will first need to be emptied and both saddlebags removed for installation. Also remove the seat. If any other accessories on your bike prevent access to the shocks, remove such accessories per their mounting instructions.
- If the 716 shocks are currently pressurized, release all pressure before proceeding. Disconnect all current airlines.

Note

All the air fittings in this kit are high pressure quick connect fittings. To connect the airlines, simply press them into the fitting until they bottom out. They bottom out about 3/ 16" past the first resistance you feel. If you need to trim the airline, it is vital that you make a square cut with a sharp razor blade (do not use "dikes" or wire cutters) as failure to do so could result in a leak. If you need to disconnect a line for any reason, you simply push in the outer collar on the fitting and pull the airline out. Also, if you disconnect an airline it's a good idea to trim a small amount (approximately 1/ 8") off the end you pulled out—as a freshly cut and installed line is less likely to leak.

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- NOTE: for assistance with the following steps, refer to diagram on page four.
- Cut sufficient lengths of the supplied 5/32" tubing to go from each shock to one of the supplied "T" fittings - with the "T" fitting being located under the seat. Plug sections of tubing into each shock, then into a "T" fitting.
- Cut another section of tubing to run from the currently installed "T" fitting to yet another "T" fitting – recommended placement of this second "T" fitting is near the left side under the seat. Plug the tubing into each "T" fitting.
- Cut and route a piece of tubing from the second "T" fitting forward toward the battery and out of the frame under where the tank and seat come together (see photo 1). Plug tubing into second "T" fitting.
- Plug one end of the remaining tubing into the second "T" fitting and safely route the tubing towards the left side saddlebag area – and ultimately to the area the pump will be located, the left rear. Do not trim tubing to length, or tie it down yet.
- You will need to drill a 5/8" hole in the inside wall of the left saddlebag to run the two lead wires and one air tube through. It is recommended that you choose a location that is high up to reduce the possibility of water entering the saddlebag. Also take into consideration routing the airline and wires so as they are not in harms way, have something to tie them off to, and are as obscure as possible. See photo 2 for reference.
- Install supplied rubber grommet into the hole drilled in the saddlebag.
- Cut a section of tubing (off the loose end) approximately 10-12" inches in length, and install one end into the compressor outlet. Install the other end of the tubing into the small or white end of the check-valve assembly.
- Stick the hook portions of the supplied hook-n-loop material onto the compressor case as shown (see photo 3). Then align and attach the loop portions, and peel the backing off of them.
- After being sure the area in saddlebag is clear, and the surface the loop sections are going to adhere to are clean and ready, carefully place the pump assembly in the bottom rear of the saddlebag, pressing down on the supplied block of foam slightly before sticking it to the rear of the saddlebag. Be sure to place pump assembly toward the outside of the saddlebag to allow room for the airline and wiring to exit the pump area (see photo 4). Press firmly into place.

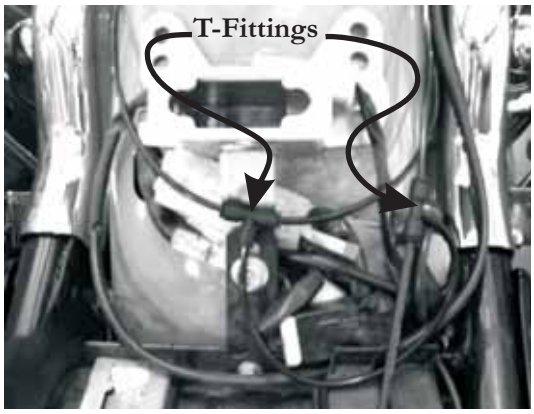


Photo 1

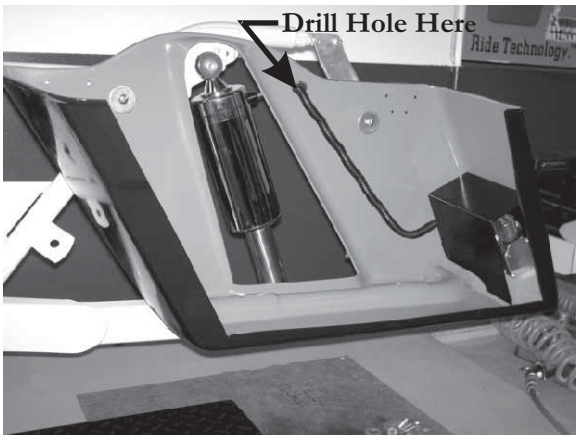


Photo 2

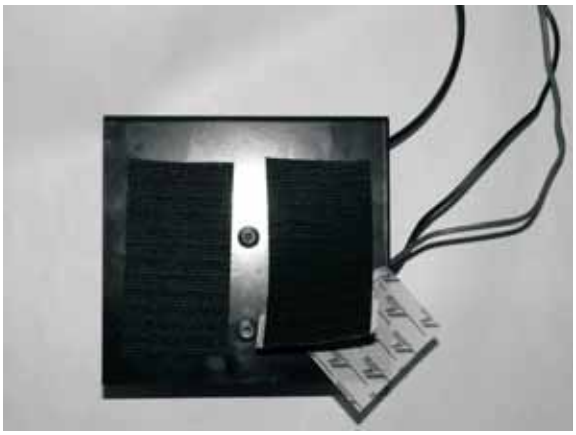


Photo 3

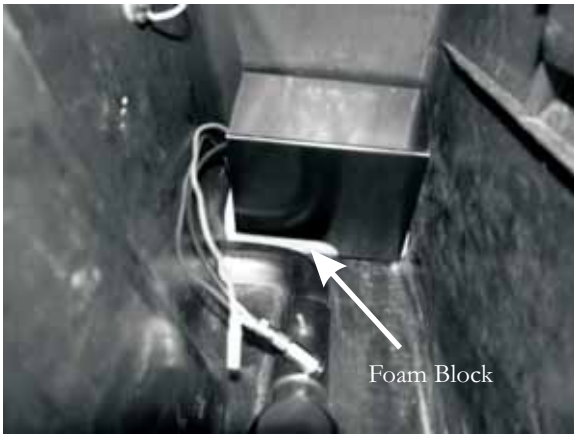


Photo 4

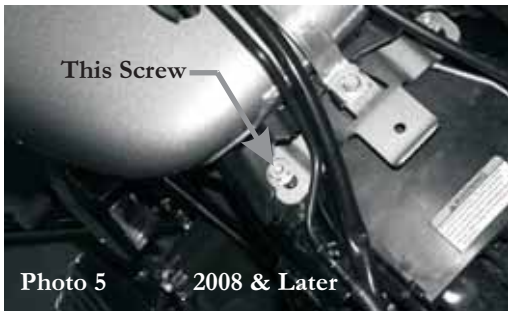


Photo 5 2008 & Later


Photo 6 2008 & Later

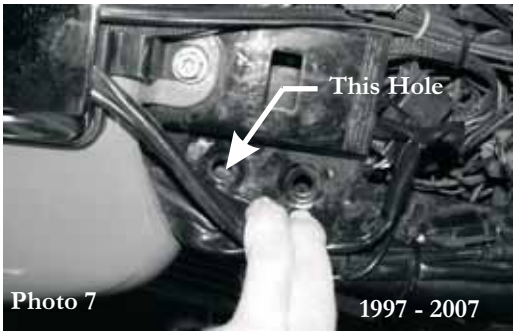


Photo 7 1997 - 2007


Photo 8 1997 - 2007

- On 2008 and later models, the left rear fuel tank mounting screw will be used to mount the control switch bracket to the bike (see photo 5). To do this, simply remove the screw, slide the control switch bracket under the rear left fuel tank mounting tab, align the holes and re-install the stock mounting screw (see photo 6).

- On 2007 and earlier models, locate the two holes on top of the frame and to the left at the base of fuel tank, the furthest forward one will be used to mount the control switch (see photo 7). To do this, insert the supplied expanding rubber well-nut into the proper hole, followed by the control switch mounting bracket, then the supplied #10 flat washer and finally the supplied screw. Tighten the screw until bracket is snug and secure – do not over tighten (see photo 8).

- If you have to displace any stock wires or lines, make sure they not exposed to any excessive heat or damage in their new location.

- Route the two wires from the switch through the larger hole in the center of the frame. Then route the airline from the second "T" fitting out through the same hole and to back of the manifold. Trim the airline to the proper length and plug it into the fitting coming out of the back of the manifold.

- Connect the orange wire coming from the switch to the fuse holder (also an orange wire) and route it toward the positive terminal on the battery. Take the long red wire coming from the switch and route it toward the left saddlebag, specifically to where the hole for the wires and tubing was drilled in the saddlebag (when it's reinstalled).

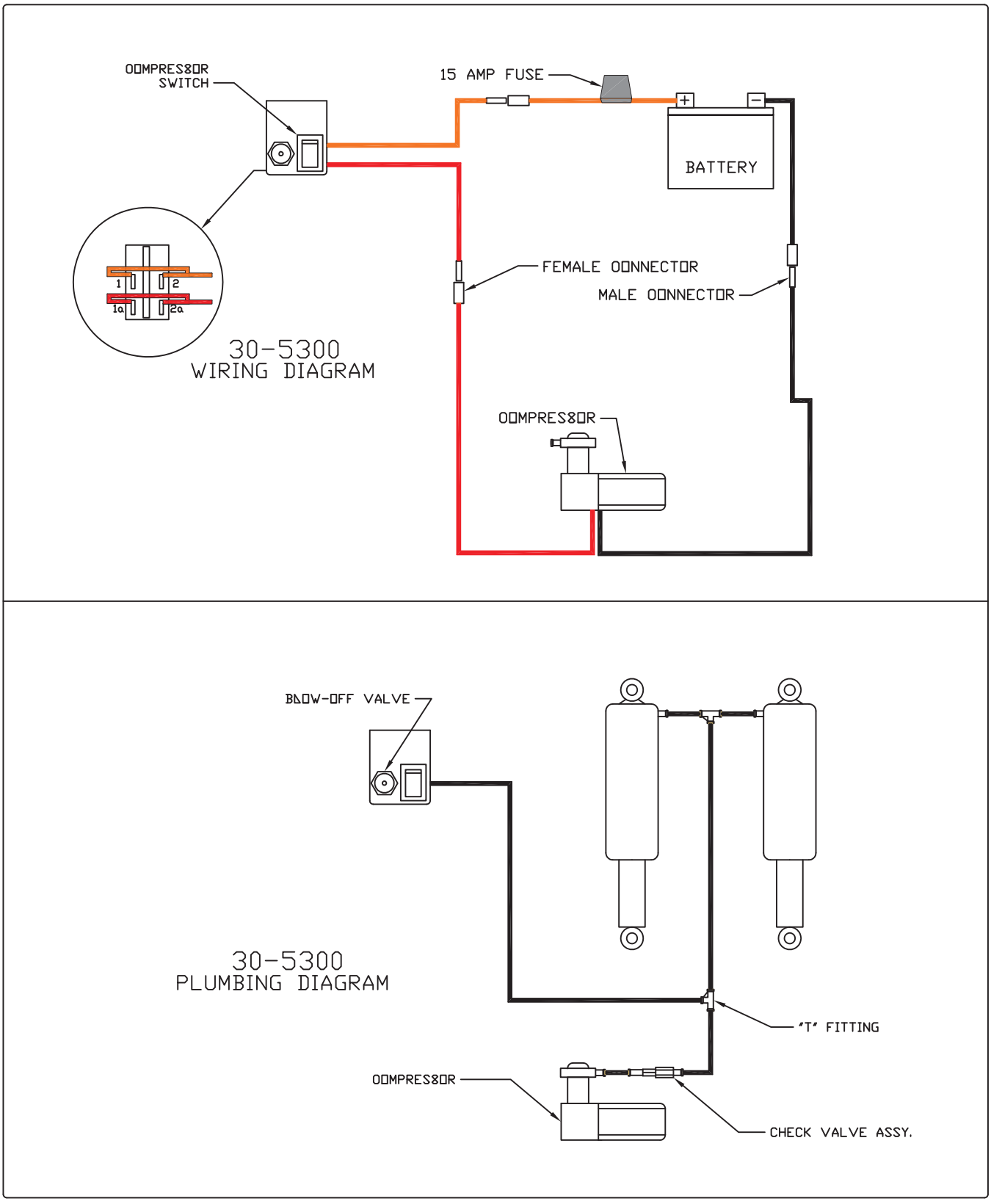
- Making sure the 15amp fuse is NOT currently installed, attach the orange wired fuse holder to the positive terminal on the battery. Now attach the long black wire to the negative terminal of the battery, and route that wire toward the same location as the previously described red wire.

- Now, as you reinstall the left saddlebag onto the bike, push the red & black wires along with the remaining tubing (attached to the second "T" fitting) through the rubber grommet and into the saddlebag. Pull enough of the wires into the saddlebag to facilitate connecting the two wires – red to red and black to black – onto the compressor, and do so. Pull all the tubing into the saddlebag and trim to a length proper to plug into the larger or black side of the check-valve assembly, allowing a little bit of slack to work with (and in case a new cut needs to be made to get a good seal). Plug airline into the check-valve assembly.

- At this point, before zip-tying any lines off or reinstalling the seat, it's time to check the system for leaks. To do this, install the supplied 15amp fuse in the fuse holder and push the switch on the control manifold. The pump should energize and the shocks should pressurize. After building a significant pressure, release the switch and check for leaks. The best way to do this the put a small amount of soap and water solution on and around each airline connection point and look for bubbles to form. If a leak is found, disconnect the tubing and put a new square cut on it – cutting off about 1/8" of an inch should do it – then plug it back into the fitting making sure it bottoms out. Recheck for leaks.

- Once it is confirmed there are no leaks, route and tie-off all wires and tubing so as they will not be pinched, kinked, melted, or damaged in any way. Any excess wire or tubing can be looped and secured under the seat. Cut the proper length of the supplied flexible conduit to cover the wires and tubing inside the saddlebag, and installed it over them. The conduit will cover the two wire connections and the check-valve assembly – these connections are what you would likely disconnect should you have to remove the entire saddlebag again for any reason.

- Reinstall any other accessories removed during the installation per their installation instructions. You are now ready to adjust your 716 Series "Air Dragger" shocks per the original setup instructions supplied with those shocks – only now you have an on-board compressor to increase the pressure and you only need press the blow-off valve next to the switch to release pressure.


COMPRESSOR SWITCH
15 AMP FUSE
BATTERY
1
2
1a
2a
FEMALE CONNECTOR
MALE CONNECTOR
COMPRESSOR
30-5300
WIRING DIAGRAM
BLOW-OFF VALVE
"T" FITTING
COMPRESSOR
CHECK VALVE ASSY.
30-5300
PLUMBING DIAGRAM