



Thanks for purchasing the best performing, most durable and safest adjustable air suspension for your Harley Davidson

- I. **A.** Prepare for install make sure contents are correct have correct tools and secure bike in safe working position. Inspect contents for 2000 and up, for rocker, and 99 and down and custom.
- B.** Remove original shocks, battery and splash guard. To remove shocks on 2000 and up secure with 11/4 open end wrench and unscrew with 11/16 box end ratchet.
Remove rear shoulder bolts with 3.4 box end ratchet.
Lock tite is strong on shoulder bolts so it may be necessary to use heat.
(99 and down will have four shoulder bolts.)
- C.** If shocks don't clear frame remove front bushing and steel sleeve on 2000 and up.
- D.** Placing an adjustable jack under rear wheel will allow for smother install.

- II. **A. Install compressor for 2000 and up Harley Davidson softail**
Using a size J drill bit in 2 holes in bottom rear of trans housing, tap holes to 7/16 14 thread.



- B.** Install compressor in same direction as it is mounted on bracket, compressor head will face forward on right side of bike, except on rocker compressor will face rearward on left side of bike.

- C.** Install the 2 7/14 14 socket screws, best to use red lock tite on threads and tighten securely.
- D.** Button head screw is not tight allowing for compressor head to be clocked in correct position in order to clear the shock body, once compressor head is in correct position tighten the button head screw securely.
- F.** California softails from 2000-2007 will require different hardware, so when ordering for this application be sure to let us know.

- III. **A. For 99 and down compressor and custom bikes using 99** and down style frame, a figure 8 bracket is provided to secure compressor to swing arm axel and after compressor head is clocked tighten button head screw.
- B.** Custom frames will require some consultation with the factory to determine the correct bracket.

- IV. **A.** Install wiring harness by routing positive and negative eyelets along top of starter and up through battery box, the other end of the harness will plug into the shock body and the compressor.
- B.** As you now plug connector to compressor have the dual wall to heat shrink over the connection so it can be heated for a permanent seal .install battery and connect hot and ground.
- C.** Now install switch harness by bolting bracket to horn and on rockers to the ignition switch. **D.** Route switch toward rear of bike as it will plug into relay harness in battery area.
- V. **A.** Install shock body on 2000 and up hd softails with flat side of body facing down and air inlet toward rear of bike. Using stock shoulder bolts, insure that bolts fit smoothly into shock body eyelets. Apply red lock tite to threads and antiseize to shoulder of bolts. Position swing arm so that shock boss is as far to front as allowed. With shock body in a vertical position you can start threading the two shock bolts into the swing arm, no need for final torque now.
- B.** Air line from compressor can now be cut to length and be plugged into shock body. Try to make cut as square as possible and clean any burrs off.

- C.** Wiring harness plug can now be plugged into the shock body and dual wall heat shrink heated to insure weather proof seal.

- D.** Make sure rubber shock dampeners are positioned on front frame mounts. Raise swing arm so that shock body will clear frame as you raise shock body into horizontal position. Now lower swing arm allowing shock body to rest slightly on dampeners. The two supplied 12 millimeter bolts can now be inserted along with the flat and lock washer. Do not lock tite threads. Now torque all 4 fasteners using a 3/4 box end.

- VI. Installing shock body on 99 and down and custom frames, as you hold shock up toward frame plug in airline and wiring harness using heat to make bond on connection with supplied dual wall shrink tubing. Shock will mount with flat side down and air inlet toward rear, direct rear heims through gusset of frame and start 2 stock shoulder bolts, with red lock tite on threads and antiseize on shoulder, into shock boss of swing arm. Now insert 2 stock shoulder bolts into front shock boss of frame. Torque shoulder bolts to factory specs.

- VII. **A.** Test system ,with bike still on jack and rear wheel suspended, by putting both switches in the momentary position the wheel will suck into fender as far as it will go. Turn the wheel, listening for any interference or rubbing of the rubber on any inside the fender. This step is critical as some after market electronics may hang low inside the fender and be contacted by the tire in its lowest position.
- B.** On 2000 and up inspect clearance of shock and compressor as suspension is moved up and down by placing both switches one way and then the opposite way.
- C.** On 99 and down and on rocker make sure compressor clears swingarm.
- D.** Also on 99 and down check clearance of bottom of rear eyelet and frame gusset.

VIII. Switch operation

Switches have three positions

- Middle is off
- Up should be stationary, stays in place until manually moved
- Down should be momentary, moves back to neutral when not held

Put both switches up, they should stay up in the stationary position. This will raise the suspension as fast as possible since the compressor will fill the air cavity to raise the bike and the other switch will open the cavity that pushes the bike down. Allow the bike to rise to full height and then after ten seconds put switches in neutral position.

Now that the bike is all the way up, it is in the position to adjust for both height and firmness. To lower the bike you will move the switch that turns the compressor on when the switch is in the down, momentary position. If the switches were mounted in the dash, this switch will be toward the front of the bike.

After you set the bike in any position you prefer to ride in at this time, you can check for firmness by vigorously pushing down on the rear fender. If you want to firm up the suspension this can be done without changing the ride height. To achieve a firmer ride move the switch up into the stationary position, the switch that turns on the compressor. If the switches are on the dash, the one for firming will be toward the rear of the bike.