Instruction Manuals

UTOW Assembly
POSITIONING THE BRACKETS

1. The air spring must be installed between 5" and 8" from both the upper bracket to the lower bracket. It is best to position the upper bracket as high as possible.

Failure to mount the air spring at the recommended height can result in the air spring bottoming out.

The top rear mounting hole may be above the frame rail. If this condition exists, use the two lower mounting holes to mount the bracket.

2. Set the air spring assembly on the leaf spring over the axle

3. Position the upper bracket so that at least four bolt holes (two on each side) will be on the flat section of the frame rail. Keep the edge of drilled holes no closer than \( \frac{3}{4}'' \) from the top or bottom radius of the frame rail.

4. In some cases, it may be necessary to use the optional spacers to achieve the 5"- 8" space. For example, if only the top two holes contact above the lower radius edge of the frame rail, it may be necessary to move up the spacers under the lower bracket to achieve mounting height.

ATTACHING THE LOWER BRACKET

1. If the spacer is not used, attach the lower bracket securely using the provided U-bolts, flat washers, and lock nuts. Torque nuts to 16 ft/lbs.

2. If the spacer is used, place the spacers legs down on the leaf spring and attach the lower bracket securely using the provided U-bolts, flat washers, and lock nuts. Torque nuts to 16 ft/lbs.

If you find that the lower bracket needs to set flat onto the leaf spring in order to achieve the correct height and the stock u-bolts are too high to allow this, it will be necessary to trim the stock u-bolts.

when truck is equipped with overload springs hook square bolt on overload spring only
ATTACHING THE UPPER BRACKET

BEFORE DRILLING, CHECK THE BACK-SIDE OF THE FRAME FOR CLEARANCE ISSUES WITH THE BRAKE LINES, GAS LINES, AND ELECTRICAL LINES. ANY OBSTACLES WILL NEED TO BE TEMPORARILY RELOCATED TO CLEAR THE AREA.

1. Position the upper bracket so that it is parallel with the lower bracket and align the assembly vertically and horizontally.

2. Using the upper bracket as a template, center punch and drill one 3/8" locator hole through the frame at one of the top bolt holes. 

   *After achieving the proper alignment, repeat for the opposite side of the bracket.*

3. Except for Dodge vehicles, loosely install a washer head frame bolt, oversized flat washer), and lock nut

   **For Dodge trucks only:** The top two, or the bottom two, holes (depending on the model of the truck) will fall into a horizontal indentation. Spacers are provided to compensate for the indentation. Loosely install a washer head frame bolt, two upper bracket spacers, an oversized flat washer, and a lock nut for such instances

4. Install a washer head frame bolt, oversized flat washer, and lock nut.

   **For Dodge trucks only:** It may be necessary to add two of the provided spacers

5. Remove the clamps and drill the remaining two holes. Install the appropriate hardware and torque the nuts to 44 ft/lbs.

6. Align the air spring uniformly between the upper and lower brackets and check the air spring alignment.

   *Move the air spring in the slots of the upper and lower brackets to align. Make sure there is at least a thumbs width of clearance between the uninflated bag and the frame.*
SECURING THE AIR SPRING TO THE BRACKETS

1. Secure the air spring to the upper and lower brackets using an open ended 9/16” wrench by tightening the two bolts on the top and the two bolts on the bottom of the spring assembly.

DUE TO THE THICKNESS OF THE LEAF SPRING STACK, TRIM ALL FOUR U-BOLTS ON EACH SIDE OF THE VEHICLE TO PREVENT BOTTOMING OUT ON THE UPPER BRACKET

2. Check bolts and connectors to ensure that all hardware is secure and repeat the process for the other side of the vehicle.

INSTALLING THE AIR LINES

WHEN INSTALLING THE AIR LINES, THERE MUST BE AT LEAST SIX INCHES OF CLEARANCE BETWEEN THE AIR LINES AND ANY HEAT SOURCES.

1. Choose a convenient location for mounting the inflation valves. Popular locations for the inflation valves are: The wheel well flanges; The license plate recess in bumper; Under the gas cap access door; or through the license plate

2. Secure air lines with provided tie straps. 

Whatever the chosen location for the line is, make sure there is enough clearance around the inflation valves for an air chuck.

Be sure to use semi permanent liquid loctite on all npt threaded connections, the use of teflon tape is not recommended.

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**Material List**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2500 AirMaxx Air Spring (BAG)</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>Upper Bolt in Frame Bracket</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>Lower Leaf Spring Bracket</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>1/2” NPT x 1/4” Tube Elbow Fittings</td>
<td>2</td>
</tr>
<tr>
<td>F</td>
<td>U-Bolt</td>
<td>4</td>
</tr>
<tr>
<td>H</td>
<td>3/8 Nyloc Nut</td>
<td>16</td>
</tr>
<tr>
<td>I</td>
<td>3/8” Flat Washer</td>
<td>16</td>
</tr>
<tr>
<td>J</td>
<td>3/8” Lock Washer</td>
<td>8</td>
</tr>
<tr>
<td>K</td>
<td>3/8” Flat Washer 3/16 Thick</td>
<td>8</td>
</tr>
<tr>
<td>L</td>
<td>3/8” Large Flat Washer</td>
<td>8</td>
</tr>
<tr>
<td>M</td>
<td>3/8 x 1.5” Washer Head Frame Bolt</td>
<td>8</td>
</tr>
<tr>
<td>N</td>
<td>3/8” x 7/8 Hex Head Cap Screw</td>
<td>6</td>
</tr>
<tr>
<td>O</td>
<td>Spacer</td>
<td>4</td>
</tr>
</tbody>
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Normal Air Pressure 60-80psi 
Max Pressure: 150psi (under full load) 
Burst Pressure: 550psi