Installation Overview

Required Parts

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4003011</td>
<td>1</td>
<td>HYDRAULIC ACTUATOR ASSY. (INCLUDES MOUNTING HARDWARE)</td>
</tr>
<tr>
<td>4004747</td>
<td>1</td>
<td>UPPER ACTUATOR BRACKET</td>
</tr>
<tr>
<td>4004786</td>
<td>1</td>
<td>ANTI-ROTATION BRACKET (FOR ACTUATOR)</td>
</tr>
<tr>
<td>2002001-25075</td>
<td>2</td>
<td>HEX HEAD BOLT – 1/4 X 3/4 IN.</td>
</tr>
<tr>
<td>2002061-25</td>
<td>2</td>
<td>SPLIT LOCK WASHER – 1/4 IN.</td>
</tr>
<tr>
<td>2002487-21062</td>
<td>1</td>
<td>FLAT WASHER – 1.062 IN. ID X 2 IN. OD</td>
</tr>
</tbody>
</table>

* Quantities listed are per row unit

Installation Procedure

1. Raise planter enough that row units are resting on lower stops.

2. Remove existing down force springs/air bags and upper bracket.
   - Upper bracket hardware, lower bracket and lower bracket rotation linkage will be re-used.
3. Install provided upper actuator bracket.

4. Install anti-rotation bracket on actuator using 1/4 x 3/4 in. bolts with lock washers.
5. Remove caps from hydraulic fittings on actuator.

6. Install plastic bushing on top end of actuator.

7. Install socket base over top of plastic bushing.

8. Position stud on top of actuator into upper bracket. Socket base should be on bottom side of bracket with rubber washer, steel washer and castle nut on top side.

9. Hold actuator tight up against bottom side of upper bracket and tightening castle nut.
   - Castle nut is properly tightened when rubber washer is just slightly compressed.

10. Install cotter pin on castle nut.
11. Extend hydraulic ram of actuator down until it is resting in socket base on top side of lower bracket. Install the flat washer between socket base of actuator and lower bracket. Make sure that plastic bushing is installed between ram and base. Hydraulic ram may not extend easily by hand. If not, gently apply downward force on top side of ram base using a pry bar.

12. Install shoulder bolt with 1/4 in. spacer, 3 flat washers and rubber washer into ram. Use longer shoulder bolt when spacer(s) are required. Torque shoulder bolt to 25 ft-lbs.

13. To reinstall the lower rotation linkage the bolts must be flipped around so in can be installed on the opposite side.
14. When installing the rotation linkage back on the row unit insert the bolts threw the left side of the brackets with the notch overtop of the hex shaft. Secure the bracket with the nuts removed when taking the linkage apart.