Installation and Disassembly Instructions for the Optional Expander Pivot Pin System

**Important**

Do not install your Expander System until you have read and understood the information contained in these instructions. For questions, call Allied Systems at (503)625-2560.

*Below are instructions for installation and maintenance of your Expander Pivot Pin System. Following the procedures detailed herein will ensure that the System is installed correctly. It will also ensure that the assembly will be removable for access to the bushing or when other service is required.*

**Installation**

1. Lubricate the pin and the expansion sleeves with bearing grease for easy insertion. First, insert only the expander pin into the bore, then install the sleeves, tension washers, and fastening elements. Be sure not to damage the thread or the tapered ends of the expander pin.

2. Hand tighten the assembly centered in its final position in the pivot.

3. **Torque the fastening elements** in order to maintain an equal clearance between the tension washers and the mounting lug of the Expander Pivot Pin System. Torque the fastening element to 175 lb ft. Tighten until the torque wrench "clicks out" on setting. **Important:** The tension washer located between the fastening element and the end of the expander pin should never come in contact with the pivot lug. If this occurs on only one side of the pin, go back to Step 2 of this section.

4. Lubricate the pivot according to the operator's manual specification before operating the machine. Proper lubrication maintenance will greatly extend the life of the Expander Pivot Pin System.

5. Once the initial torque regiment and pivot lubrication have been completed, start the machine and move the unit back and forth. Tighten again until torque wrench "clicks out" on settings. This procedure ensures that the expansion sleeves have properly seated.

6. **Important:** Initial torque and re-torque is an intricate part of the installation and crucial to the
success of the pin system. Make sure to follow the torque schedule in Table 1 below.

*Note: The machine must be extended to its full height in order to torque the bottom element on the hinge bars

### Table 1

<table>
<thead>
<tr>
<th>Torque Schedule</th>
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<tbody>
<tr>
<td>After 1 hour</td>
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<tr>
<td>* When you re-torque and the wrench “clicks out” on setting without additional torque, you have successfully “seated” the expansion sleeves and the installation process is complete.</td>
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<tr>
<td>After 3 hours</td>
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<tr>
<td>After 10 hours or 1 day *</td>
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<td>After 40 hours or 4 days*</td>
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If expansion sleeves have not “seated” within one week of operation, call Allied Systems at (503) 625-2560 for instructions.

Reachable from outer edges of the deck. The top fastening element on the upper hinge bar has to be reached by removing the center grate on the top of the machine’s deck to reach the top of the Idler hinge. Tools: A 15/16 inch socket with appropriate extension and torque wrench.

### Maintenance Intervals

1. Important: After initial torque is achieved, check the torque at 250 hour service intervals. Apply appropriate torque (see page 1, step 3). Tighten until the torque wrench “clicks out” on setting.

### Disassembly Instructions

1. Unscrew the fastening elements on both sides of the assembly and remove the washers.
2. Reinstall only fastening elements. Thread the stud all the way down until it contacts the pin axle body before tapping it.
3. Tap the fastening elements alternately on both sides until the expansion sleeves come loose. Use only soft mallets/hammers for tapping.
4. Remove the expansion sleeves with channel lock pliers or a similar tool.
5. Remove the Expander pin.

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Figure 2 - Locations of Typical Expander Pin System (At the each end of Steering Cylinders.)