

## Swivel Box Joint Wear Check

### General

The movement between the chassis and the swivel box should be measured annually. Keeping a record of these values will help to determine when the joint has worn excessively. See the table on page 2.

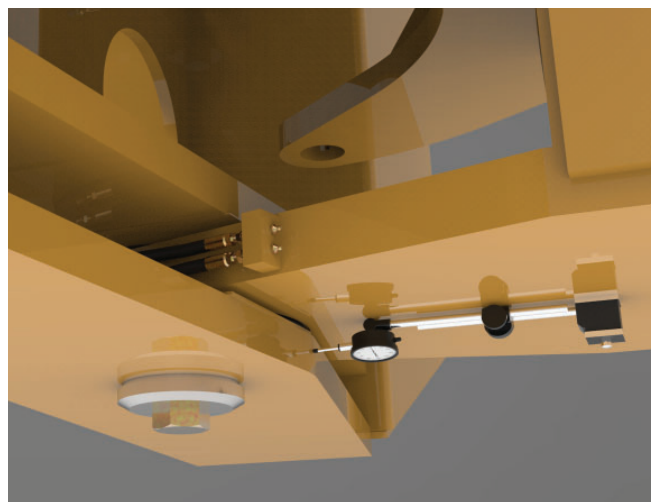
To perform this check, the areas to be measured should be steam cleaned, and the machine should be parked on level ground, with the carriage or bucket lowered. Employ lockout/tagout procedures.

### Procedure

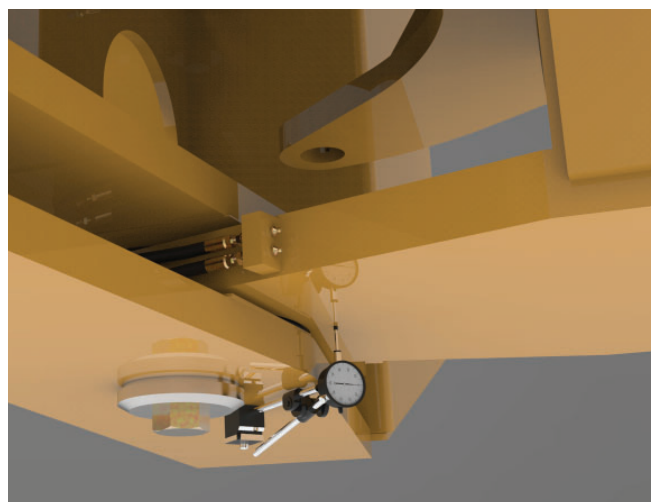
1. With the machine parked on level ground, the carriage/bucket lowered, the power turned off, and lockout/tagout procedures employed, set up a dial indicator with a magnetic base on the lower hinge bar, as shown in Figure 1. Zero the indicator in this position.
2. Refer to the jacking locations illustration in your operators manual (section 5), or your service manual (section 10) to determine safe locations to place jacks and jack stands.
3. Using jacks, raise the chassis at the hinge end (rear of chassis for logstackers, front of chassis for dozers) until one of the tires clears the ground. Place jack stands to maintain this chassis position.
4. Record the value of the dial indicator in the table on page 2. This value represents the horizontal movement of the lower hinge bar.
5. Remove the jack stands, and lower the machine.
6. Repeat steps 1-5 for the upper hinge bar.
7. Record the values for the vertical movement for both the upper and lower hinge bars in the same manner. See Figure 2. The dial indicator plunger should set as close to the joint as possible.

### Analysis

Review the values recorded in the table. When the movement becomes excessive, contact Allied Systems service department at 503.625.2560.



*Figure 1 Horizontal Wear Check*



*Figure 2 Vertical Wear Check*

|                     | Horizontal Movement |                 | Vertical Movement |                 |
|---------------------|---------------------|-----------------|-------------------|-----------------|
|                     | Lower Hinge Bar     | Upper Hinge Bar | Lower Hinge Bar   | Upper Hinge Bar |
| Factory Measurement | 0.020"              | 0.020"          | 0.035"            | 0.025"          |
| Year 1              |                     |                 |                   |                 |
| Year 2              |                     |                 |                   |                 |
| Year 3              |                     |                 |                   |                 |
| Year 4              |                     |                 |                   |                 |
| Year 5              |                     |                 |                   |                 |
| Year 6              |                     |                 |                   |                 |
| Year 7              |                     |                 |                   |                 |
| Year 8              |                     |                 |                   |                 |
| Year 9              |                     |                 |                   |                 |
| Year 10             |                     |                 |                   |                 |
| Year 11             |                     |                 |                   |                 |
| Year 12             |                     |                 |                   |                 |
| Year 13             |                     |                 |                   |                 |
| Year 14             |                     |                 |                   |                 |
| Year 15             |                     |                 |                   |                 |
| Year 16             |                     |                 |                   |                 |
| Year 17             |                     |                 |                   |                 |
| Year 18             |                     |                 |                   |                 |
| Year 19             |                     |                 |                   |                 |
| Year 20             |                     |                 |                   |                 |
| Year 21             |                     |                 |                   |                 |
| Year 22             |                     |                 |                   |                 |
| Year 23             |                     |                 |                   |                 |
| Year 24             |                     |                 |                   |                 |
| Year 25             |                     |                 |                   |                 |
| Year 26             |                     |                 |                   |                 |
| Year 27             |                     |                 |                   |                 |
| Year 28             |                     |                 |                   |                 |
| Year 29             |                     |                 |                   |                 |
| Year 30             |                     |                 |                   |                 |
| Year 31             |                     |                 |                   |                 |
| Year 32             |                     |                 |                   |                 |
| Year 33             |                     |                 |                   |                 |
| Year 34             |                     |                 |                   |                 |
| Year 35             |                     |                 |                   |                 |
| Year 36             |                     |                 |                   |                 |
| Year 37             |                     |                 |                   |                 |
| Year 38             |                     |                 |                   |                 |