1250AJP Tower Boom Drift Test

Instructions

For Kit: none

WARNING: Never Diagnose a suspected tower boom lift cylinder drift by fully elevating the booms. Machine tip over could occur.

WARNING: Do not leave the machine unattended at any time during the test.

1. Place unit on a firm level surface with an empty platform, axles completely extended, tires to be oriented straight and both upper and tower booms retracted and in the transport position. The booms are to be parallel to the wheels. NOTE: Units hydraulic oil must be at ambient temperature prior to starting step 2.
2. Connect the hand held analyzer inside the ground box. Place the key switch to the ground position. Pull out the emergency stop switch and start the engine. Using the analyzer right arrow to *DIAGNOSTICS* and press enter. Press the right arrow to *BOOM SENSORS* and press enter. Press the right arrow until *TOWER CYLINDER ANGLE* is visible.
3. Using the control operations position the upper and jib booms at the maximum angle. The telescope cylinder must be completely retracted. (see Figure #1)
4. Using ground controls and analyzer display, position the tower lift cylinder to an angle position between 17.0° and 18.0°. Record tower lift cylinder angle as displayed on the analyzer.
5. While still in the *DIAGNOSTICS/BOOM SENSORS* menu using the left arrow record the displayed value of the *TOWER ANGLE 1* and *TOWER ANGLE 2.* Press the escape button one time, press the left arrow to *SYSTEM* and press enter. Record the *CHASSIS TILT* angle. NOTE: The displayed value for Tower Angle #1 and Tower Angle #2 should be between 10.0° and 12.5°. (see Figure #1)
6. Visually monitor the tower boom and analyzer display for drift.
   a. After residual boom movement has stopped and all angle readings listed above have been recorded, recheck each of the angles on the analyzer to ensure the values are not currently changing. If immediate tower boom drift is evident, return the upper boom to the transport position and then return the tower boom to the transport position. Discontinue use, tag the unit out of service and remove key. Contact JLG service or JLG service provider for diagnosis and repair information.
   b. If tower boom drift is not immediately evident, record the time at the start of test. Turn key switch to the off position and depress the emergency stop switch. Tag unit out of service and remove key.
7. After the unit has remained in this position for 60 minutes, pull out the emergency stop switch. Using the analyzer right arrow to *DIAGNOSTICS* and press enter. Press the right arrow to *BOOM SENSORS* and press enter. Record the *TOWER ANGLE1, TOWER ANGLE 2* and *TOWER CYLINDER ANGLE* readings.
8. If the angular drift of any of the recorded values exceeds 0.3°, discontinue use, tag the unit out of service and remove key. Contact JLG service for diagnosis and repair information. If the boom drift is less than 0.3°, the tower lift cylinder is fit for continued service.

A 02/01/2010
3128709
JLG

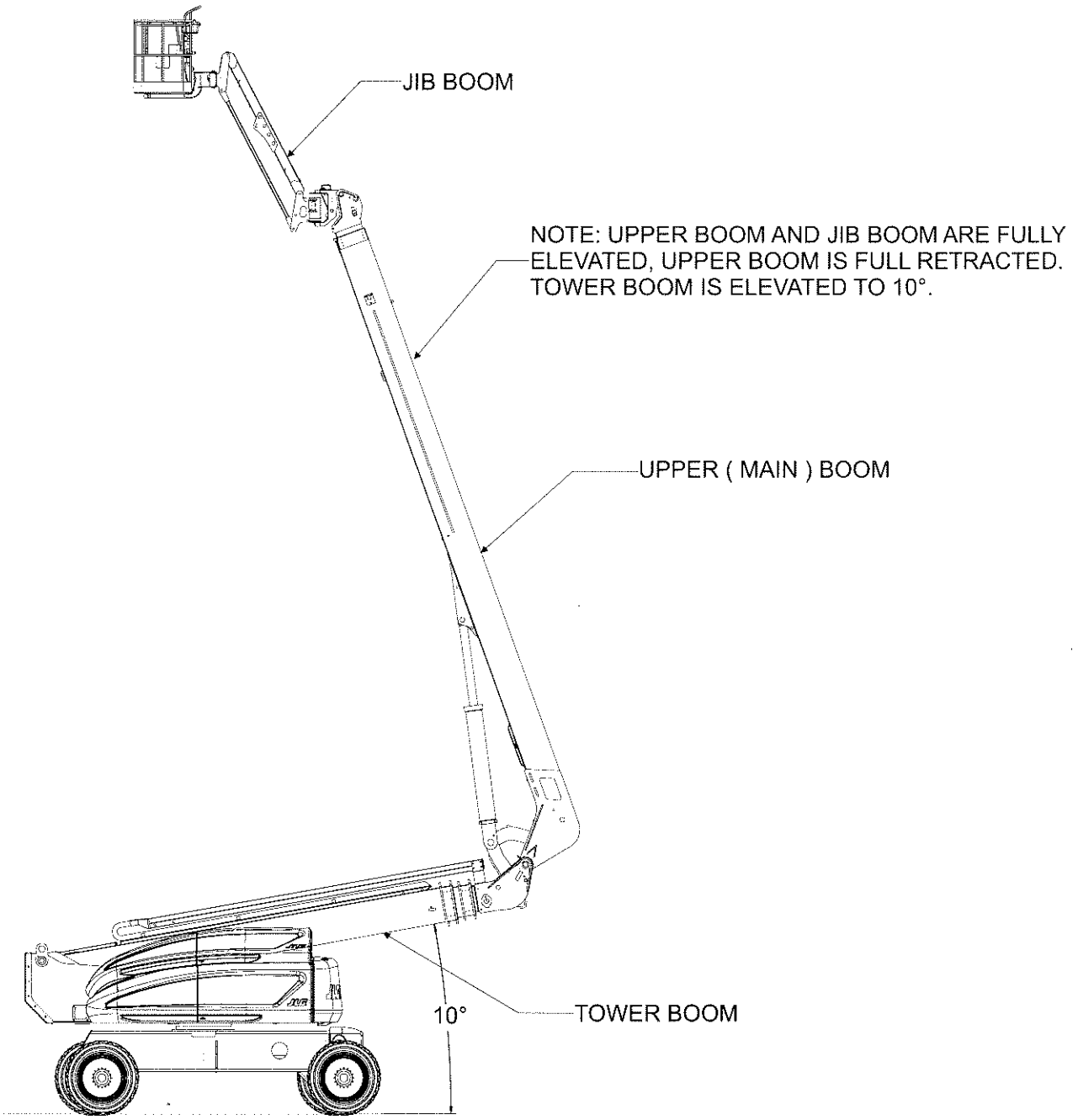
JIB BOOM
NOTE: UPPER BOOM AND JIB BOOM ARE FULLY ELEVATED, UPPER BOOM IS FULL RETRACTED. TOWER BOOM IS ELEVATED TO 10°.
UPPER (MAIN) BOOM
10°
TOWER BOOM

Figure 1