

Service Call:

Rotation Bearing Deflection Test

Tools Required:

- Dial Indicator with Magnetic Base
- Maintenance Manual for the Unit Being Tested

Model(s):

Over-Center Units:

HR37-55, HRX, XML, OM, OMD, SC, SCM, XM, XT and XT PRO

Tech Tip Safety Rules



Danger

Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury. Many of the hazards identified in the operator's manual are also safety hazards when maintenance and repair procedures are performed.

Do Not Perform Maintenance Unless:

- You are trained and qualified to perform maintenance on this machine.
- You read, understand and obey:
 - manufacturer's instructions and safety rules
 - employer's safety rules and worksite regulations
 - applicable governmental regulations
- You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this tech tip is a supplement to the service manual. Consult the appropriate service manual of your machine for safety rules and hazards.

Step 1

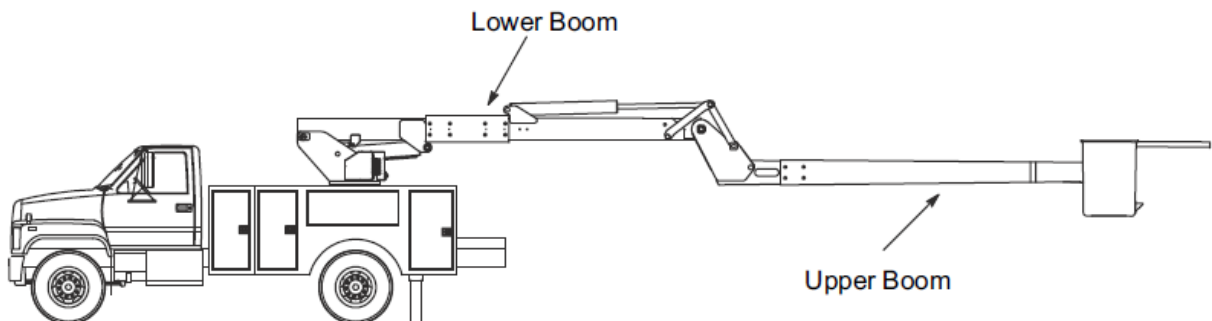
Read this entire procedure and the section in the maintenance manual that applies to this procedure before starting the work.

Step 2

Position the truck in a suitable location. Check for overhead obstructions. Set the outriggers. There can be no additional tools or materials in the platform with the exception of a platform liner.

Step 3

Check for obstructions before rotating boom. Rotate boom 180 degrees off the rear of the vehicle. Place lower boom at 0 degrees and unfold the upper boom to 180 degrees. See image below.



ENSURE THE OUTRIGGERS ARE PROPERLY EXTENDED

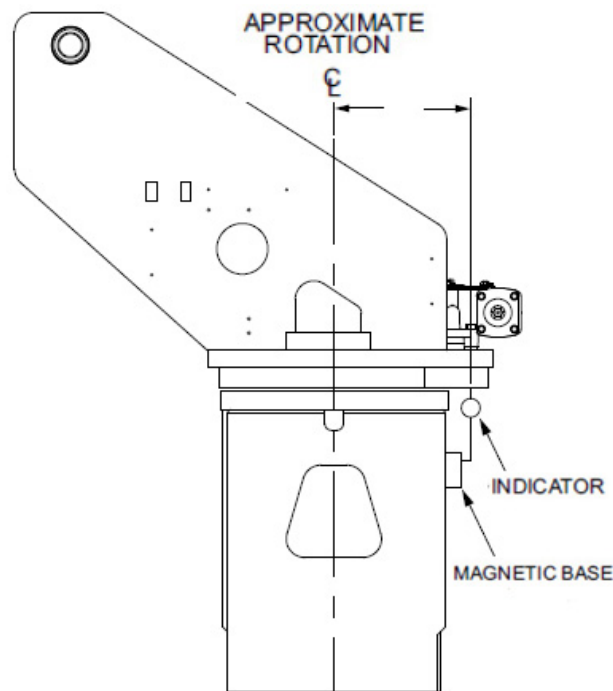
Step 4

Attach the dial indicator base to the pedestal, positioning the tip perpendicular to the edge of the turntable bottom plate at the specified indicator radius.

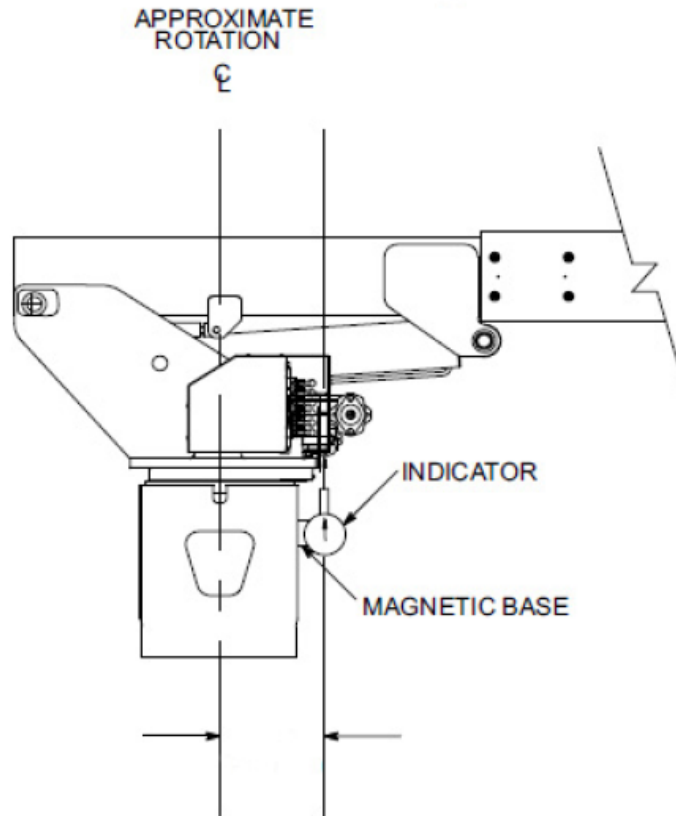
Note: Consult the table at the end of this document for the dial indicator radius for your specific unit.

Note: Make sure you know which way the dial indicator rotates when it moves for the correct reading.

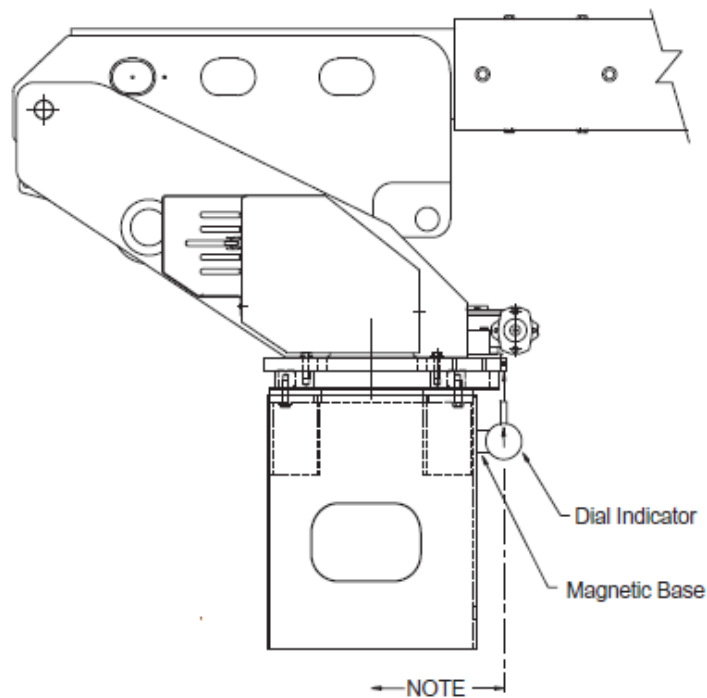
OM/OMD/XM Series:



HR/HRX/XML/XT/XT Pro Series:



SC and SCM Series:

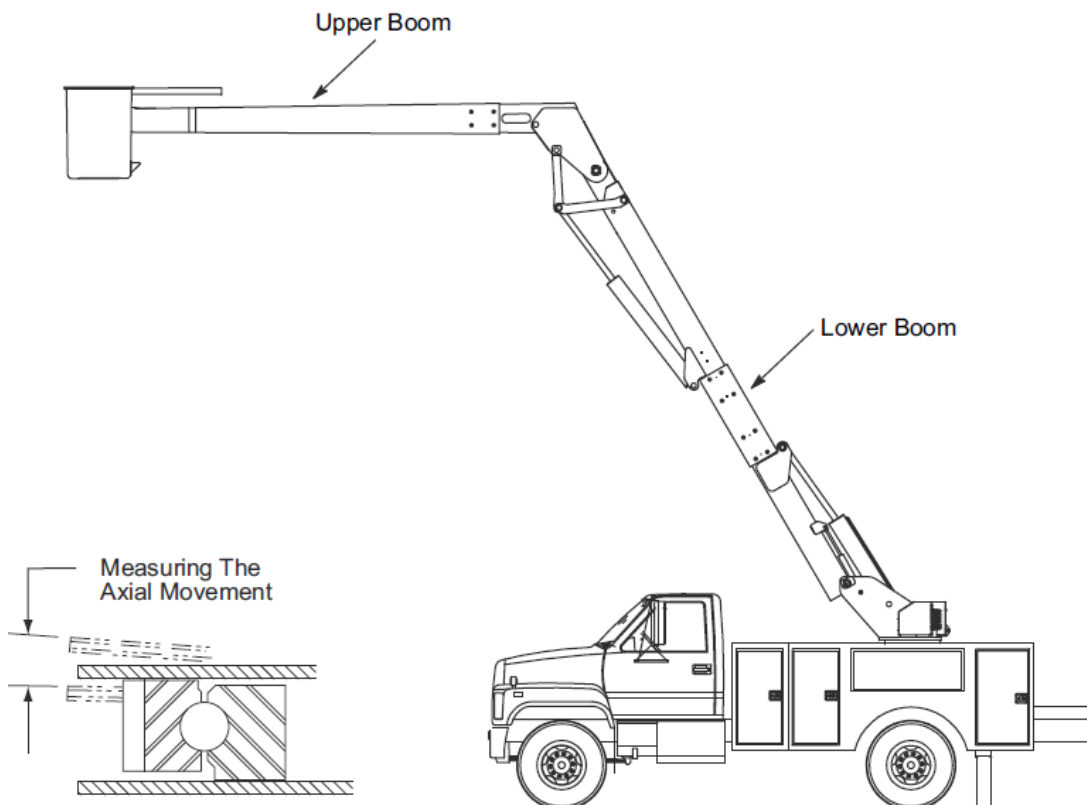


Step 5

Zero out the dial indicator. Verify that you have at least .25 inches of movement on the dial indicator in both directions when zeroing.

Step 6

Position the lower boom as indicated in the illustration below. Lower boom fully articulated and upper boom horizontal.



Step 7

Read the number on the dial indicator. This is your rotation bearing deflection. Record the reading and check this reading against the “Maximum Allowable Bearing Deflection” in the following table.

Note: Measure the deflection at the same boom location and dial indicator radius every time this test is performed to provide consistent measurements that can be compared over the life of the machine.

Unit Model	Maintenance Manual	Indicator Radius (inch)	Max Deflection (inch)
HR37-40	463199	11.50	0.177
HR40 thru HR46	463199	14.00	0.175
HR50 thru HR55	463199	14.00	0.160
HRX-XML	477640	14.00	0.160
OM	463203	14.00	0.160
OMD	463535	15.00	0.156
SC	463535	14.00	0.175
SCM	602253	14.00	0.160
XM	469572	15.00	0.156
XT55	463107	14.00	0.175
XT60	463107	14.00	0.160
XT Pro	611447	14.00	0.160

Unit Specific Maximum Allowable Bearing Deflection