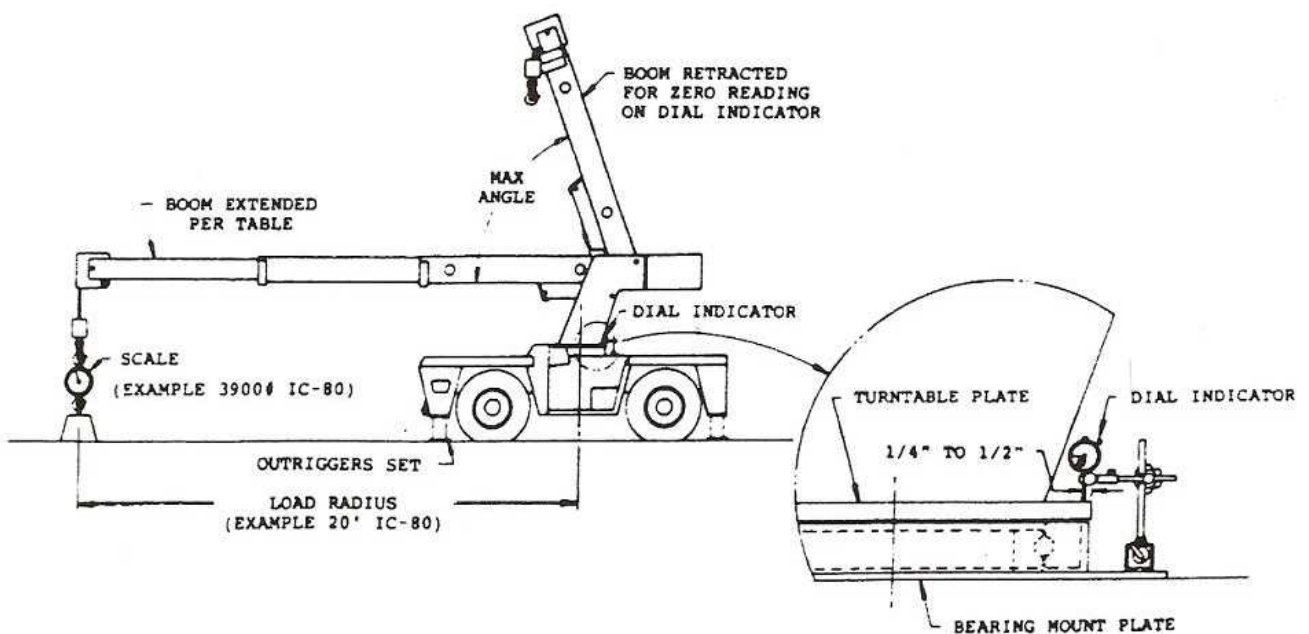




SWING BEARING DEFLECTION TEST

The purpose of this test is to determine whether the boom swing bearing of a Broderson crane has excessive deflection.

1. Locate a load that is heavier than the load listed in the test table on the next page. Position it in an open area where there is overhead clearance to raise the retracted boom to its maximum angle.
2. With the boom lowered over the front of the crane, extend the boom so that the hook is at the load radius shown on the test table. A boom extension may be stowed on the main boom for this test. A boom extension may not be deployed for this test.
3. Position the crane so that the hook is directly over the attachment point of the load, keeping the boom over the front of the crane. Do not attach the hook to the load yet.
4. Set the outriggers.
5. Retract and raise the boom to its maximum angle.
6. Position a dial indicator over the turntable plate with its tip $\frac{1}{4}$ " to $\frac{1}{2}$ " from the rear edge of the plate. Anchor the base of the indicator to the bearing mount plate of the frame. See figure below. Do not swing the boom while the indicator is in place.



7. Set the indicator dial to zero.
8. Lower the boom and extend it to the test load.
9. Hang a hook scale on the crane hook and attach it to the test load. Pull the load line taut with the hoist. Use the "Boom Raise" control to load the scale to the test load indicated on the table. You must deduct the weight of the scale and the sheave block (if one is used) from the load on the table.
10. Record the reading on the dial indicator. This is the deflection.
11. Unhook the load, retract the boom, raise it to its maximum angle again, and check the dial indicator. If it is not within .002" of zero, repeat the test.
12. Remove the dial indicator.
13. Swing the boom 90° to the LH side of the crane.
14. Repeat steps 2-12, except with the boom over the side.
15. Repeat at any swing position that is suspected of having more deflection.
16. The bearing should be replaced if the deflection exceeds the maximum value shown on the test table below.

SWING BEARING DEFLECTION TEST				
CRANE MODEL	BEARING PART NO.	TEST LOAD	LOAD RADIUS	MAXIMUM DEFLECTION
IC-20-1	716-00015	2500	8	0.045
IC-35-2	716-00019	3400	10	0.06
IC-40-2	716-00019	3400	10	0.06
IC-80-1, 2	716-00012	6900	12	0.10
IC-80-3	716-00012	3500	20	0.10
IC-100-3	716-00012	3500	20	0.10
IC-200-1,2, 3	716-00014	8300	22	0.16
IC-250-3	716-00020	8800	25	0.15
IC-400-3	716-00028	5500	28	0.14
RT-80-1,2	716-00009	4400	20	0.10
RT-80-3	716-00009	4100	20	0.10
RT-200-1,2	716-00009	7500	24	0.13
RT-200-3	716-00013	8000	22	0.13
RT-300-2	716-00018	9400	30	0.11