

Vehicle Practice

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BOOM SIDE PLAY INSPECTION AND REPAIR CRITERIA FOR DIGGER AND DERRICK VEHICLES WITH ADJUSTABLE AND NON- ADJUSTABLE GEAR BOXES

Practice:

The following is the method to use when checking for side play in for the indicated makes and models where manufacturers' instructions do not exist.

- 1.0 **Lower outriggers** - rotate boom to the curb side and fully extend all booms (including fibreglass extension). See Figure 1.
- 2.0 Lower extended boom from horizontal position to about four feet from ground. Remove bucket if equipped for testing.
- 3.0 Taking hold of boom (Fig. 1) move boom to its furthest right point taking up all slack and mark using a stake or post, then move boom fully to the left (opposite position) and measure free movement.
- 4(a) Straight derrick vehicles and diggers that are used for production digging and pole setting only, are not to exceed measurements in the following table. If they go beyond measurements it will be necessary to make adjustments or repairs as required.

| <u>Make</u> | <u>Model</u> | <u>Maximum Free Play (side to side)</u> |
|-------------|------------------------|---|
| King | KSMD | 18" non-adjustable |
| King | TKII | 18" non-adjustable |
| King | SM500, CM500 (XL H.D.) | 23" non-adjustable |
| King | TKIV | 23" non-adjustable |
| King | TKII | 18" non-adjustable |
| King | K10 | 16" adjustable eccentric ring |
| King | K14 | 16" adjustable eccentric ring |
| King | K16 | 16" adjustable eccentric ring |
| Pitman | PC655 | 10" adjustable gear box |
| Pitman | PC750 | 10" adjustable gear box |
| Pitman | 1500 | 10" adjustable gear box |
| Pitman | P50 | 10" adjustable gear box |
| Pitman | P45MH | 10" adjustable gear box |
| Pitman | M45 | 10" adjustable gear box |

Revised by: W.D. Fraser

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Fleet Services



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4(b) If the digger / derrick is equipped and used primarily as a bucket truck, the following chart is to be used to measure side play and if it should exceed the measurements it will be necessary to make adjustments or repairs as required.

| <u>Make</u> | <u>Model</u> | <u>Maximum Free Play (side to side)</u> |
|-------------|------------------------|---|
| King | KSMD | 10" non-adjustable |
| King | TKII | 10" non-adjustable |
| King | SM500, CM500 (XL H.D.) | 10" non-adjustable |
| King | TKIV | 10" non-adjustable |
| King | TKII | 10" non-adjustable |
| King | K10 | 10" adjustable eccentric ring |
| King | K14 | 10" adjustable eccentric ring |
| King | K16 | 10" adjustable eccentric ring |
| Pitman | PC655 | 10" adjustable gear box |
| Pitman | P750 | 10" adjustable gear box |
| Pitman | 1500 | 10" adjustable gear box |
| Pitman | P45MH | 10" adjustable gear box |
| Pitman | M45 | 10" adjustable gear box |

5.0 There are two oversize pinion gears available from King Equipment that will fit all Tulsa rotation gear boxes and Braden 30 or 40 gear boxes (King Part #8885911 for 0.060" oversize and #404413 for 0.040" oversize). This will reduce side play by approximately 5".

