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## Topic: Chassis Alignment

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It has come to our attention that there has been some confusion over both the proper means of aligning axles on a chassis and what the proper charge for performing an alignment is. It is the purpose of this document to clarify how to perform an alignment and what the proper charges should be for performing an alignment.

Once it is determined an alignment is necessary – i.e. visual inspection of the chassis to determine the front and rear axle on either side of the chassis do not align properly.

### Checking Alignment

1. Alignment should only be checked in areas with clean level surfaces. Shop facilities or work areas with concrete floors are preferred.
2. Move the trailer backwards and forwards several times with the last move forward to ensure that the axle and suspension are in its' normal running position
3. Uncouple the tractor from the chassis and raise or lower the landing gear as necessary to bring the chassis to the normal fifth wheel operating height – 47" - 48"
4. Inspect the area under the chassis to ensure that there is nothing that would interfere with measurements between the king pin and the front of the brake drum
5. Ensure that all tires are properly aired
6. Since worn, defective, loose, or damaged components can make aligning the axles impossible, all suspension components (i.e. U bolts, toque arms, radius rods, spring hangers, equalizers and bushings) should be carefully inspected for damage, wear, and proper torque prior to checking or performing an alignment
7. The use of a king pin extender or similar device to facilitate measuring should be installed
8. Measure front axle as described below – max allowable tolerance is **1/8<sup>th</sup> inch**
  - a. King pin to the front edge of the left brake drum (A)
  - b. King pin to the front edge of the right brake drum (B)
9. Measure front axle to rear axle as described below – max allowable tolerance is **1/16<sup>th</sup> inch**
  - a. Center of left front axle to center of left rear axle (C)
  - b. Center of right front axle to center of right rear axle (D)

**NOTE: Removal of the hub caps and use of axle pointers is no longer required for measuring axles.**

Please note also that the above change in the methodology for performing alignments is less labor intensive and will thereby result in a reduction in the amount of time that will be allowed to perform this operation. For this reason effective 1 August 2013 the time allowed to perform an alignment will be **.5 for each axle, 1.0mhr (both axles complete)**. The time allowed for checking the alignment will be reduced to **.25mhr**.

Please direct all questions regarding this matter to CCM Chassis Technical Services Manager.