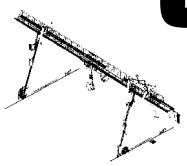
■ PORTAL CRANE SYSTEMS ■

UPDATE



Winter 1988

This inaugural issue of WOODYARD CRANE SYSTEMS UPDATE represents another step in Harnischfeger Corporation's commitment to serve our customers as effectively as possible.

In this and every issue of the UPDATE, you will find crane service techniques, maintenance procedures, technical tips, parts and crane modernization specials and other items of interest to woodyard crane users.

In addition, our newsletter will focus on how P&H services are being expanded and shaped to meet the needs of your company.

We are hopeful that the sharing of knowledge and experience helps you to manage your yard efficiently.

We welcome your comments and idea contributions. Please let us know about any topics you would like to have discussed. We are interested in learning service tips you may wish to share.

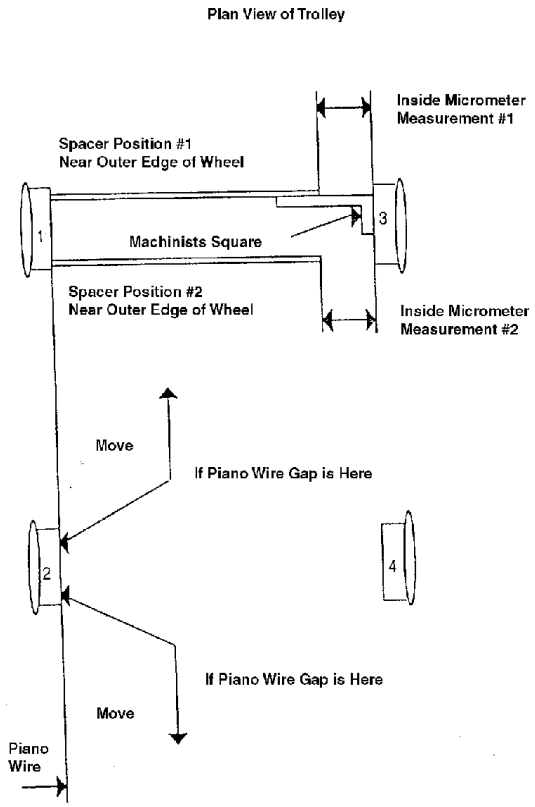
Portal Crane Trolley Wheel Alignment for Late Model Cranes ONLY

Equipment Required

1. Piano wire (approx. 18'-0" long)
2. Machinists square
3. Pipe or round bar spacer with ends cut square overall length equal to wheel face to face length minus 2 1/2". See sketch (if a pipe is used, provide a finished end cap).
4. 2" to 3" inside micrometer
5. Various wrenches for trolley wheel bolts

Procedure

1. Sketch the piano wire across the face of two wheels on one side of the trolley until it just touches each of the wheels at any point. (See sketch).
2. Examine the face of each wheel to determine if there are any gaps between the wire and the face of the wheel
3. If gaps are present, start with wheel #1 and loosen all hold down bolts.
4. Move the wheel in the direction shown on sketch by backing off the adjusting screw in the direction to be moved and "pushing" the bearing block with the other adjusting screws.
5. Repeat procedure at wheel #2 and again at #1 if necessary until wire touches across the entire face of both #1 and #2 wheels. Wheels #1 and #2 will now be parallel.
6. Snug the hold downbolts of both wheels.
7. Place the spacer in position #1 as shown on sketch using the machinists square to insure that the spacer is perpendicular in both the vertical and horizontal places
8. Read measurement #1 with the inside micrometer. Record this measurement.
9. Move the spacer to position #2 as shown on sketch. Square the spacer and read measurement #2. Record the measurement.
10. Compare measurement #1 and #2. If the measurements differ by more than .005", follow 2 & 3 to move the bearing back in the direction of the larger measurement
11. Repeat steps 5 thru 8 until the maximum difference in the measrement is .005" Wheels #1, #2 and #3 will now be parallel to each other.
12. Repeat steps 5 and 9 at wheel #4. Wheels #1,2,3 and 4 will now be parallel to each other. The face distance between wheels #1 and #3 and wheels #2 and #4 may not be equal: however, this is an acceptable condition.
13. With all wheel baring lock hold downbolts snug, run the trolley back and forth. If the trolley wheel flanges continue to scrub, run the trolley against the stops to center it. The trolley should now run true.
14. Retorque all hold down bolts per spec before returning the trolley to normal operation.



Crane Modernization Special

Reversing vacuum contactors are now being offered for use on the higher horsepower (over 75 HP) hoist motions of cranes.These new contactors reduce air contamination within NEMA 4 control cabinets, which are not force ventilated. Ozone is typically caused by the breaking of the arcs in standard contactors over 75 HP. In addition, contactor life is substantially extended over traditional contactors.

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