

## Aluminum-Parallel Motion Assembly Installation 24" stroke

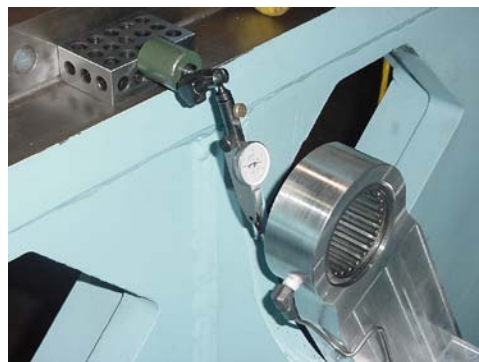
Frame modifications are required, see attached prints.

Modifications to redraw idlers may be required, see attached prints.

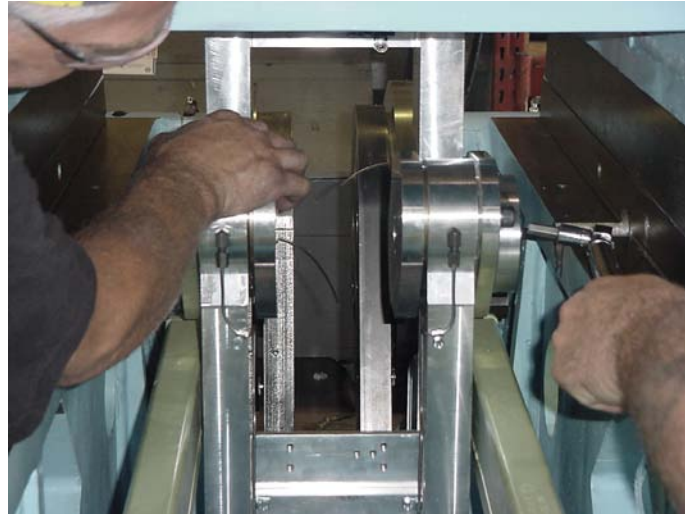
1. Drill 2" diameter hole in side of frame (see drawing )
  - a. Select location for the hole 2.0" below seam between "A" frame and Main Frame.
  - b. Bolt perishable-block into position, this allows the 2.0" diameter hole to be drilled half into the frame and half into the block.
  - c. Using a magnetic drill, center-drill at location.
  - d. Drill ½"-1.0"-1.5"-1.75"-2.0"x 3.0" deep.
  - e. Drill ½"-1.0"-1.5"-1.75-2.0 through.



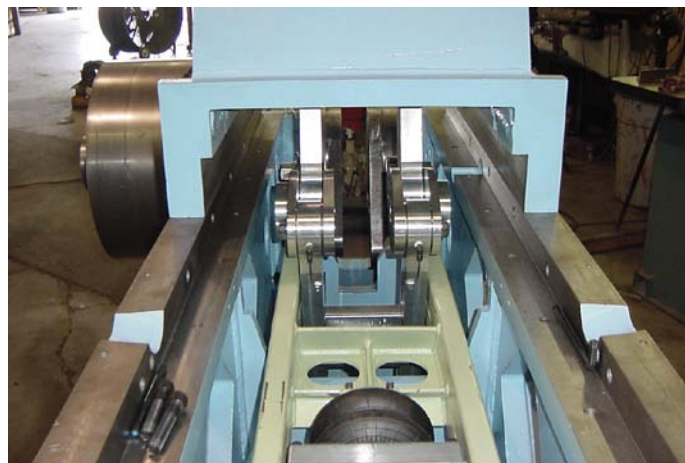
2. Install Aluminum Idlers (2) places - Item # 3 (p/n OK-I0210).  
Both idlers must be centered independently.



3. Install Journal (Inside) (2) places – Item #31 (p/n OK-I6310).
  - a. Install the PMA spacer onto each of the Inner Bearing Race (4) places.
  - b. Position the Journal (Inside) into both the Upper and Lower bores at the same time (2) places.

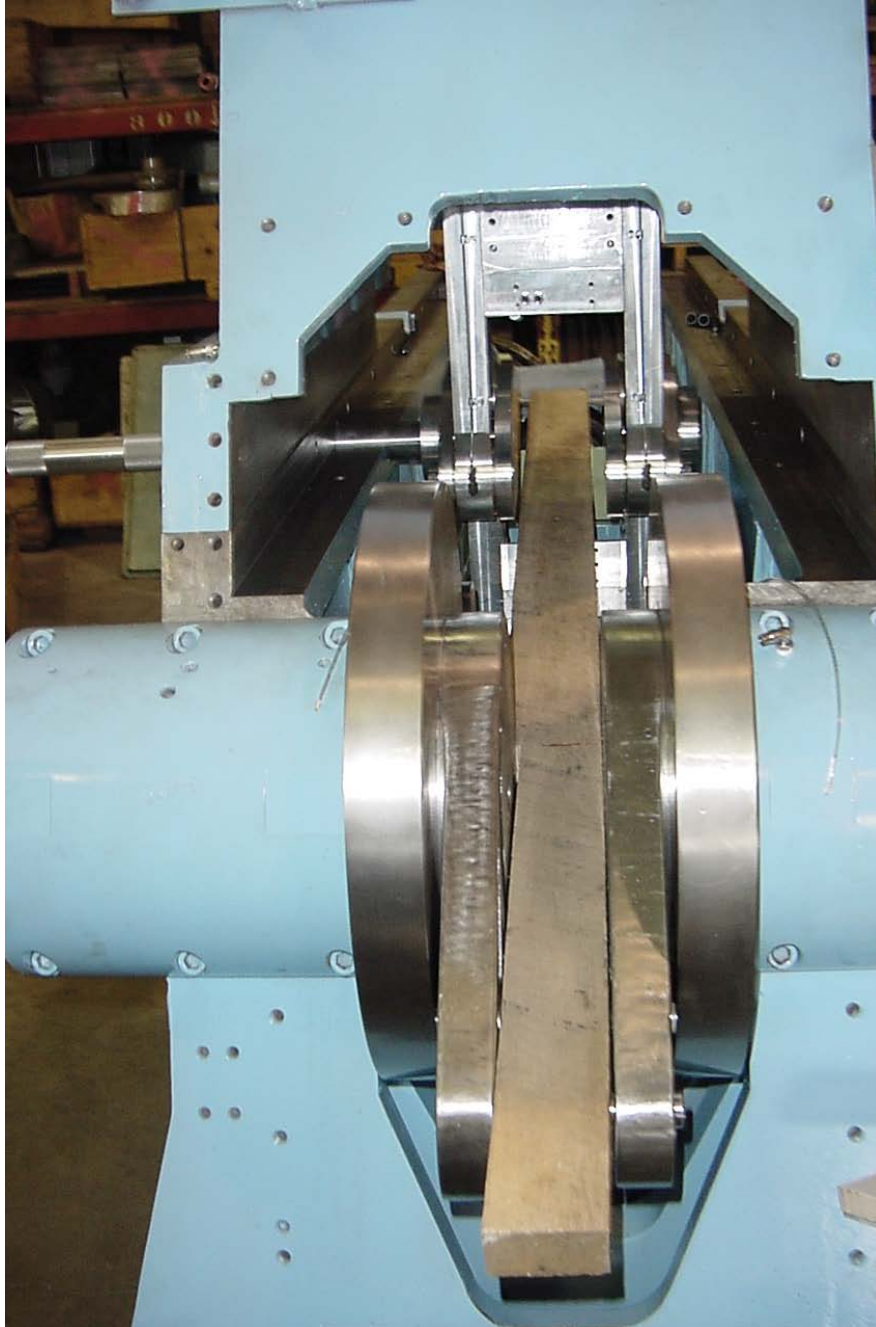


4. Install Journals (outside) (2) places – Item #32 (p/n OK-I6320).
  - a. Boss should fit snug into Inner Race – Item #33 (p/n OK-I6330)
  - b. Install the ½-13 screw (4) places into the Journal assembly.

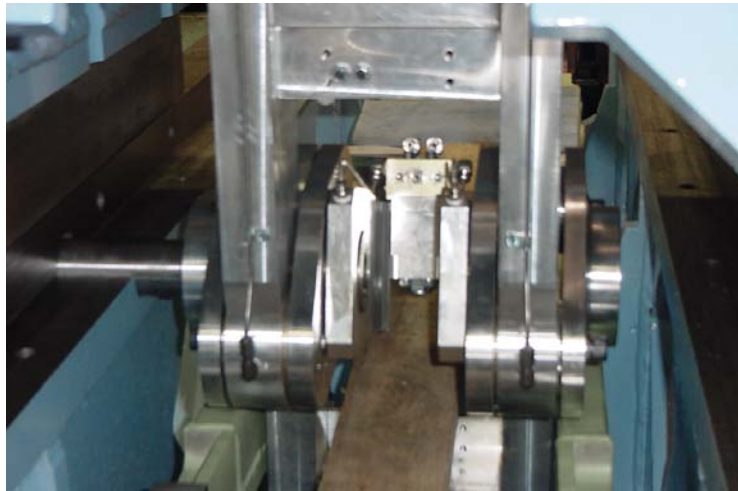


- c. Install the Shaft – Item # 20 (p/n OK-I6200) through the 2.0” hole drilled through the side of the frame. The installation kit includes an aluminum handle and a slide hammer.
  - d. Working side to side, tighten the ½-13 screw (4) places and torque to 60-75 ft-lb.

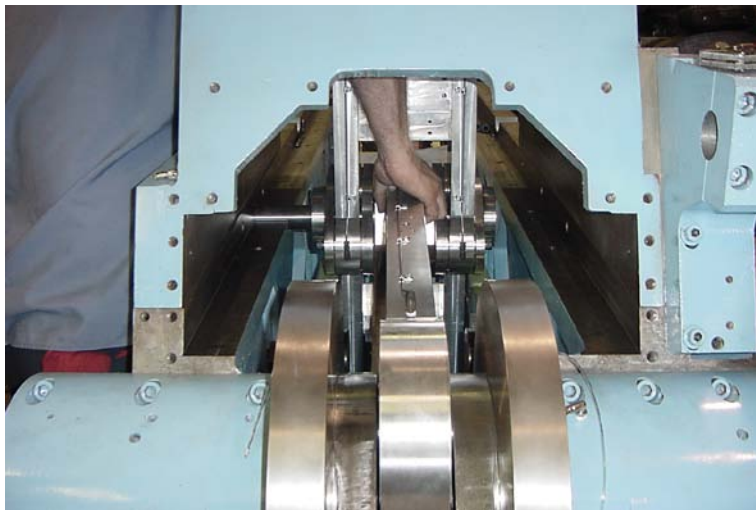
5. Using the aluminum handle withdraw the shaft until the end of the Shaft is flush with the Journal (inner) operator side.
6. Install the crank pin into the teardrops and place a 2x4 between them so that it rests on the crank pin and the support on the lower arm.



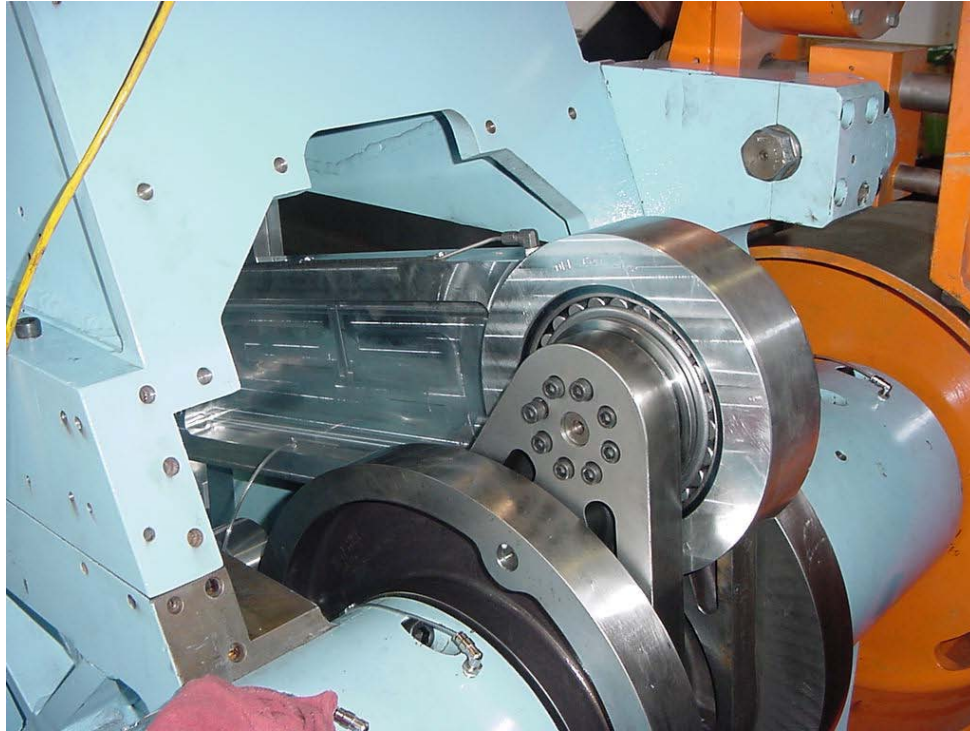
7. Position the Connecting Link Item #11 (p/n OK-I6110) between the Journals (inner).
8. Install the Shaft into the Connecting Link; make flush with the inner most edge of the bearing (operator side).



9. Position the Connecting Rod Item #1 (p/n OK-I6010) between the sides of the Connecting Link. While holding the rod in position, work the Shaft through.



10. Install the Ringfeder Item #21(drive side) and tighten in a cross pattern until the shaft will hold so that the aluminum handle can be removed.
11. Install the Ringfeder Item #21 (operator side).
12. Torque the Ringfeder in a cross pattern (2) places to 25-35 ft-lbs.
13. Attach the Connecting Rod to the Crankshaft using the same procedure used for a Steel-Knuckle Assembly.
14. Attach the Connecting Link to the Ram using the same procedure used for a Steel-Knuckle Assembly.



## Follow Up and Removal Tips:

After 1-2 Hours run time (when the Ram alignment is being rechecked) the Ringfeders should be checked to ensure the torque has not diminished (due to the aluminum parts reaching operating temperature).

When the Knuckle assembly needs to be removed, reverse the assembly procedure. To separate the Journals (inside-outside), remove the 1/2-13 SHCS and install 1/2-13 set screws into the holes (this will protect the threads). Next use 5/8-11 screws into the Journal (outside) to jack the Journals apart. To replace the Inner race – Item #6 (p/n OK-6060) use (4) pin punches and a press.