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## INSTRUCTION SHEET BEARING PAD REPLACEMENT IN-FLOOR/STRAIGHT OUT – INTERNALLY MOUNTED CYLINDER

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**This instruction sheet is for bearing pad kit RAP93213. The kit has the parts required to replace every bearing pad, including shims, for a single mechanism.**

The two side pads at the front of the mechanism can be replaced without removing the inner tube. The upper and lower pads at the rear of the mechanism can most likely be replaced without removing the inner tube. The lower pads at the front of the mechanism and the side pads at the rear of the mechanism can only be replaced by removing the inner tube from the mechanism.

It is easiest to replace most of the pads with the inner tube disconnected from the room. Extend the room fully. Block and support the room so it cannot drop or move with the operating mechanisms disconnected. Disconnect the mechanism from the room. For rooms with multiple mechanisms, disconnect all mechanisms. Disconnect the rod from the inner tube being worked on and fully retract the rod. Now the inner tube can move freely to make the repair easier.

**IMPORTANT: Always note the number of shims under each pad before removing pads.**

**Replacing the upper and lower bearing pads at the rear of the mechanism.** Push the inner tube into the mechanism. Unbolt the “Z” brackets from the inner tube. The inner tube should drop enough to remove/replace the two pads on the top of the inner tube. Re-install pads with shims as necessary then bolt the “Z” brackets back in place with new pads and shims as necessary.

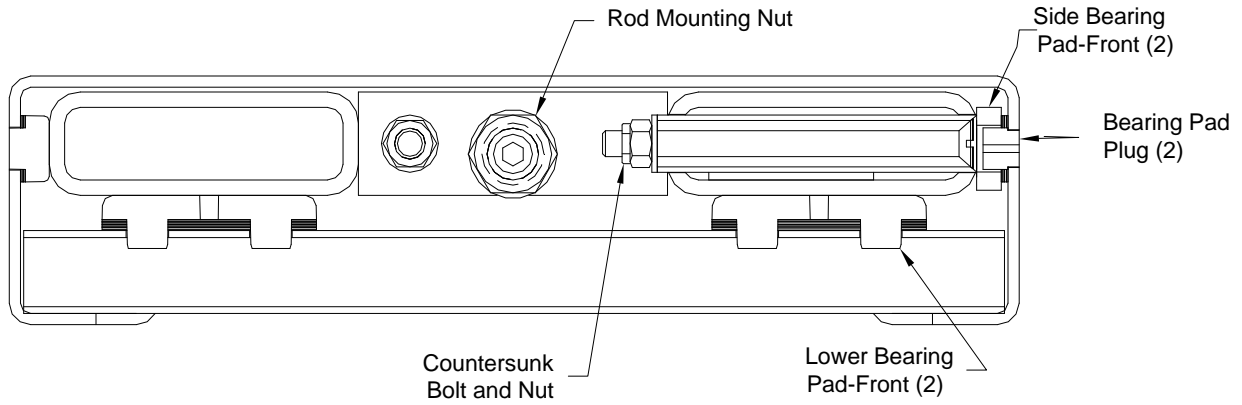
**Replacing the side bearing pads at the front of the mechanism.** There is a counter-sunk bolt and nut on one side of the inner tube approximately 4 inches back from the front of the inner tube. The pad on that side has two plugs holding the bearing pad in place. Use a small saw to cut those plugs so that pad can be removed. If necessary, chisel that pad out. Any method to remove that pad that will not damage the inner or outer tube can be used. With that pad out, force the inner tube against that side of the outer tube. Now the pad on the other side can be removed. Pull the inner tube out far enough to remove the bolt and nut. This needs to be done to install the new plugs. Replace the pad with the proper amount of shims on the side away from the bolt first. Line up the bolt hole for the inner tube with the plug holes in the outer tube. Slide the other side pad and shims into place. A little silicone can be use to glue the shims to the pad. Install the pad retaining plugs through the bolt hole. **Make sure the small diameter of the plug goes in first.** Install the front plug first and the rear plug will be easier to install. With both plugs installed, pull the inner tube out far enough to install the bolt and nut.

**Replacing the rear side pads and/or the front lower pads.** To replace either of these, the inner tube will need to be removed. First, remove the upper and lower bearing pads at the rear of the mechanism and the side bearing pads at the front of the mechanism according to the above directions. You must also remove the inner tube spacer bracket at the rear of the inner tube. Now the inner tube can be removed. Install the new front, lower bearing pads with necessary shims. Install the new side bearing pads with shims on the rear of the inner tube and slide the inner tube back into the outer tube. Install the rear upper and lower bearing pads then the front side bearing pads as discussed in the above instructions. Bolt the inner tube spacer bracket back on.

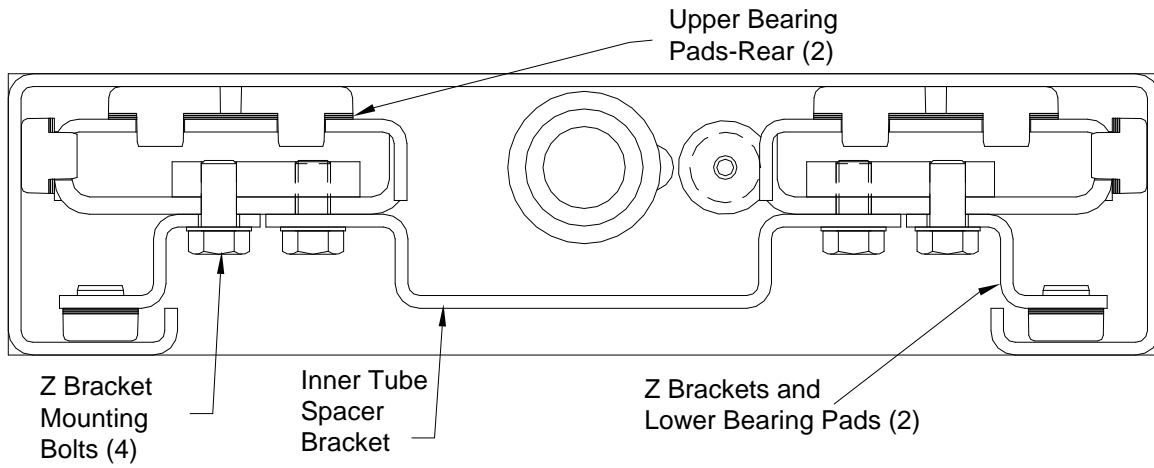
**Refer to diagrams on the other side for information concerning the different bearing pad, bracket, nut and bolt locations.**

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**FRONT VIEW OF MECHANISM**  
**(FRONT MOUNTING PLATE OMITTED FOR CLARITY)**



**REAR VIEW OF MECHANISM**  
**(REAR MOUNTING PLATE OMITTED FOR CLARITY)**



**TOP VIEW OF MECHANISM**  
**(SHORTENED FOR CLARITY)**

