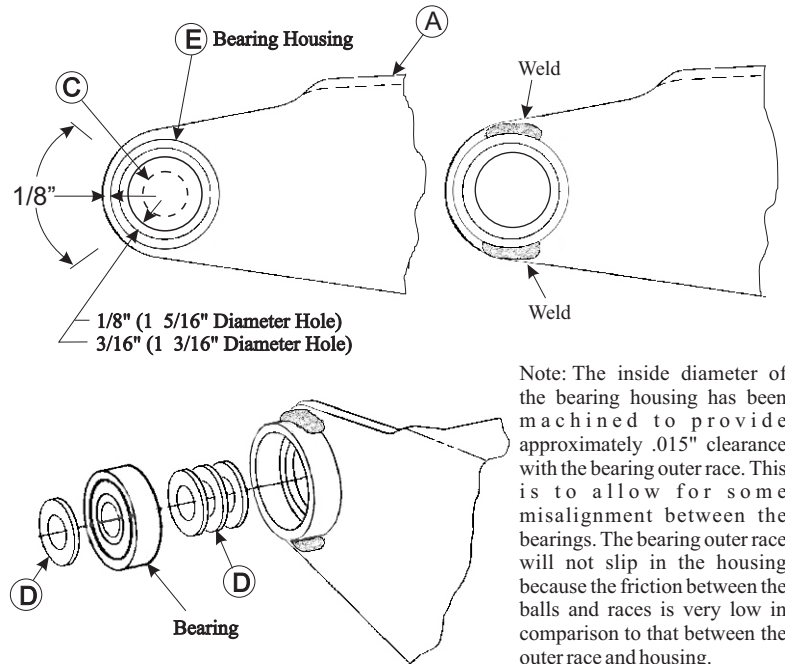


## INSTRUCTIONS FOR INSTALLING BALL BEARING STYLE CLOSING WHEEL FRAME PIVOT KITS ON JD 7000/7100, KINZE AND SIMILAR PLANTERS

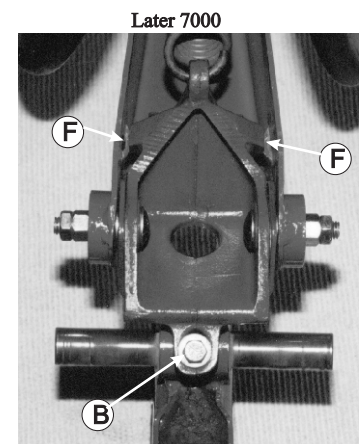
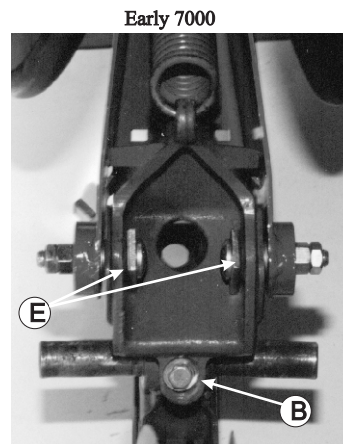
**When working on your planter in the raised position be certain that service locks are installed or parking stands are down and properly secured. Wear proper protective clothing and eye protection. Review the safety section in your operators manual.**

Note: No cam adjustment is provided with this kit. If your planter does not have adjusting slots in the support casting (early 7000 and later Kinze) see step 13.

1. Remove frame (A) from planter. Removing gauge wheel arms or locking them up may make reinstallation easier. Loosening or removing bolt (B) at the front of the support casting may also help.
2. Worn sheet metal holes (C) should be increased in size to approximately 1 1/8" diameter (minimum) to provide clearance for flat washers (D).
3. If you are going to enlarge the holes with a torch, reamer or grinder do the following: Locate the bearing housing (E) approximately 1/8" from the curved edge at the front of the frame and center it at the top and bottom. The actual location of the bearing housings is not as important as having them located the same on both sides. Scribe the I.D. of the bearing housing onto the frame.
4. Remove material to within approximately 1/8" to 3/16" of the scribed circle. This will produce a hole diameter of approximately 1 5/16" to 1 3/16". Proceed to step 6.
5. If you are going to enlarge the holes by drilling (1 1/8" minimum) do the following: Run the drill through the sheet metal. Be aware that because of uneven wear on the original holes the new holes may not be located exactly the same on both sides.
6. Make sure that areas where pivot washers will be located are clean and smooth. Remove paint from areas to be welded. Inside surfaces of the frame must also be smooth.
7. If you enlarged the holes as in step 3 locate the bearing housings the same way as before. If you drilled as in step 5 locate the bearing housings by approximately centering them on the drilled holes. Be certain both bearing housings are located the same on both sides relative to the curved edge at the front of the frame.
8. Clamp the bearing housings to the frame. Weld the bearing housings with an approximately 3/4"-1" weld at the top and bottom.
9. Check the clearance between flat washers (D) and the sheet metal holes.
10. Paint the bearing housings, welds and frame to protect from corrosion.
11. Reassemble frame on to planter. If the support casting has holes, a pair of flat clips (E) are provided. Insert the bolts through the clips. With the longest clip dimension up, insert the bolts through the holes in the casting from the inside to the outside. If the support casting has slots, no clips are required. If planter is equipped with insecticide placement brackets it will be necessary to change the round attaching hole to a square hole by use of a square file. Flat clip (F) will not be required on that bolt.
12. Assemble the bearings with three washers (D) inside and one outside as shown. If the support casting has slots, apply adequate spring pressure to assure that the bolts are pushed to the front of the slots. Tighten nut to 85 ft-lb torque. Install the jam nut and lock it against the first nut.
13. Slots are provided in the support casting of later 7000 and early Kinze planters to allow centering of the closing wheels on the



Note: The inside diameter of the bearing housing has been machined to provide approximately .015" clearance with the bearing outer race. This is to allow for some misalignment between the bearings. The bearing outer race will not slip in the housing because the friction between the balls and races is very low in comparison to that between the outer race and housing.



furrow if necessary. Note that it may be necessary to grind some material off of the support lugs (F) to utilize this adjustment. It may also be necessary to grind two corners off the carriage bolt neck to allow full adjustment.

For planters that have no adjusting slots but have bolt-on closing wheels it will be necessary to shim the wheels as required. Wheels with water pump type bearings can be adjusted in or out if R K P Bearing Support Collars have been installed.

For other planters it may be necessary to relocate a bearing housing to get the correct alignment. To do this, grind the bearing housing welds on the side you want to move the wheels to. With the bearing in the housing, use a large flat washer to loosely clamp the housing to the frame. Move the frame to center the wheels. Clamp the bearing housing tight to the frame. Scribe the outside diameter of the bearing housing onto the frame. Remove the frame and reweld the bearing housing. Reinstall the frame.