

# Tailpost Service and Inspection

## General

Following are recommended inspection, installation and removal procedures for the Tailpost Housing, Tailpost, Tiller Arm, and Steering Cylinders on the Wagner Logstacker.

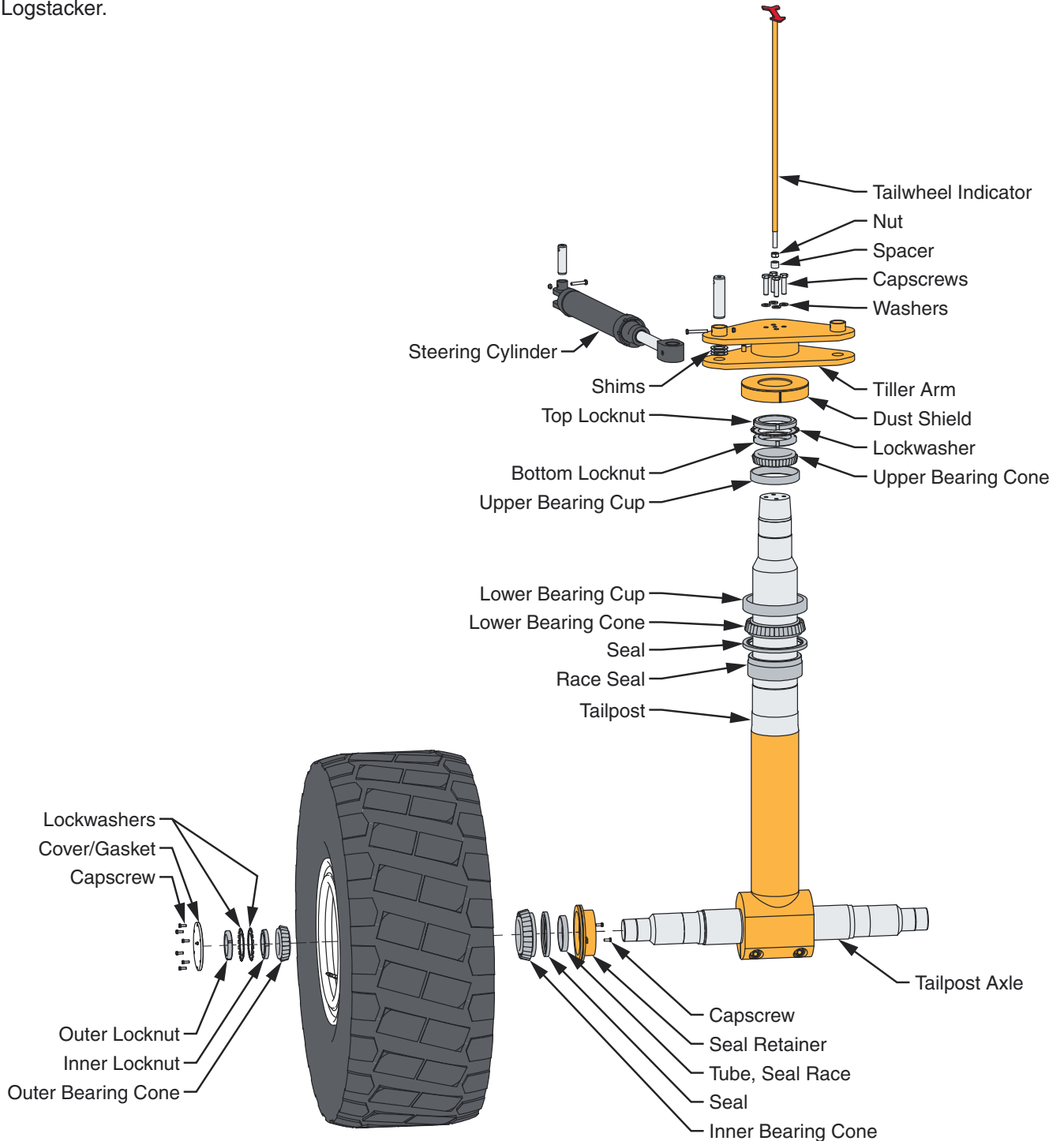


Figure 1 Tailpost Assembly

## Tiller Arm Removal

1. Raise and support rear of the main chassis ahead of the tail section to 40" (1 m) above the ground or shop floor with appropriate blocks or stands.
2. Remove wheels and tires.

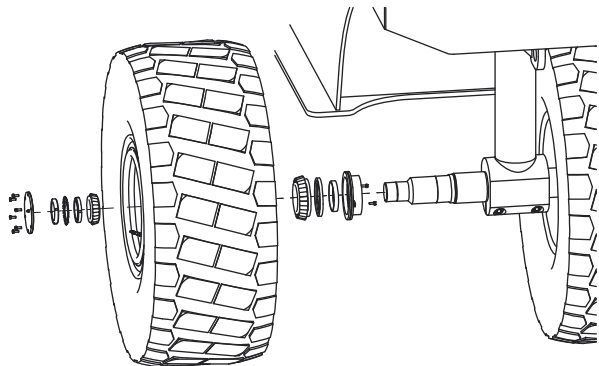


Figure 2 Remove Wheels and Tires

3. Remove the tailwheel indicator, nut, and spacer. Loosen the capscrews securing the tiller arm to the tailpost. Do not remove capscrews at this time.

### **WARNING**

Do not remove tiller arm capscrews. Only loosen them enough to allow the tiller arm to be forced from the tapered section of the tailpost (approximately 2-3 turns). Personal injury can result if the tiller arm is not restrained by the capscrews and suddenly breaks loose from the tailpost.

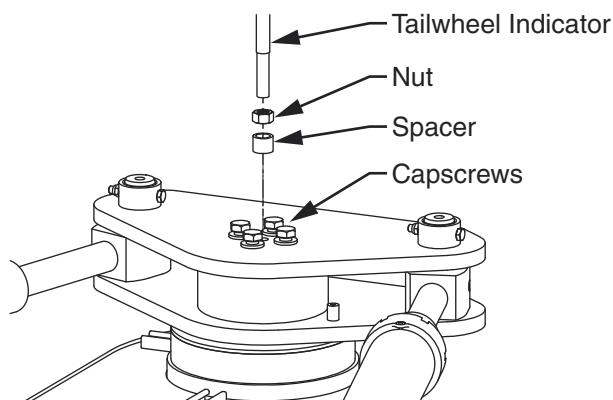


Figure 3 Loosen Capscrews (Do Not Remove)

4. Remove the steering cylinders. Note and retain the shims for reinstallation.

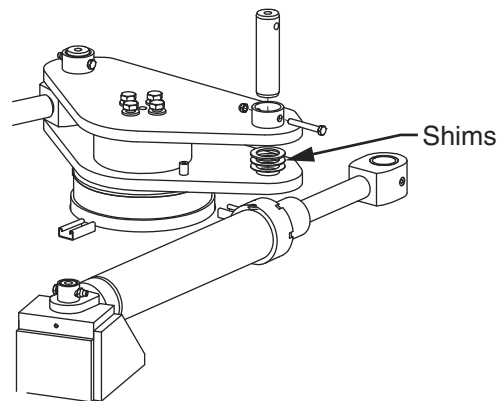


Figure 4 Remove Steering Cylinders

5. Make four heavy steel wedges that can be driven between the tiller arm and the chassis deck. Fabricate wedges so that front and rear blocks overlap each other to contact the tiller arm with maximum surface area.
6. Place two wedges on the forward (cab) side of the tiller and two wedges on the rear side of the tiller arm.
7. Alternately drive the wedges under the tiller arm with a sledge hammer until the arm comes loose from the post or the wedges are forced tightly between the tiller and deck. Heat may be required around the inner diameter of the tiller arm to allow removal. Localize the heat to the inner diameter of the tiller without applying excessive heat to the tailpost.
8. Remove tiller arm from the tailpost, and set aside.
9. Remove dust shield, and set aside.

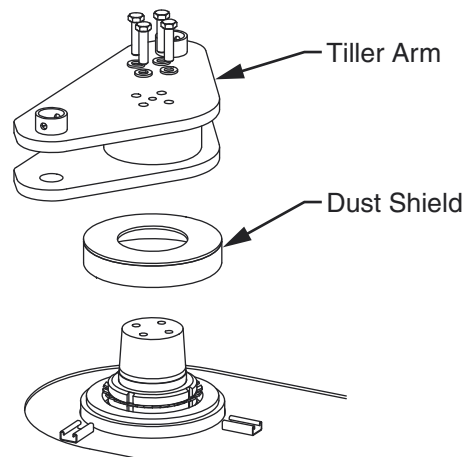


Figure 5 Remove Tiller Arm

10. Bend tabs on lockwasher, which secures the locknuts, and remove the top locknut and the lockwasher.

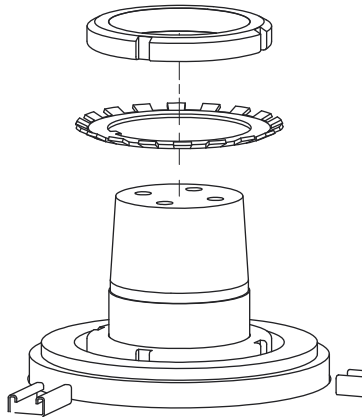


Figure 6 Remove Top Locknut and Lockwasher

11. Support tailpost with appropriate fork lift (3,000 pound [1360 kg] minimum capacity), with tines positioned outboard of the axle mounting plates as close to the post as possible. The forklift should face the same direction as the machine. Secure the post by a chain or choker around the tine frame of the forklift.
12. Loosen the bottom locknut and unscrew until approximately 1 1/2" (38 mm) of thread is still engaged.
13. Slowly lower the post assembly with the forklift to

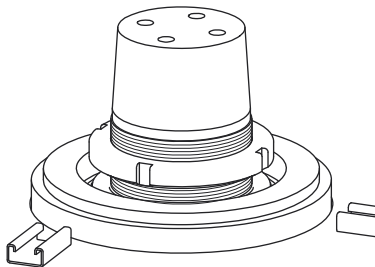


Figure 7 Loosen Bottom Locknut (Do Not Remove)

break it free from the bearing cones. Do not exert pressure on the remaining locknut.

14. While still supporting the tailpost with a forklift, install a heavy lifting eye (M20 X 2.50 ) in one of the threaded holes at the top of the tailpost. Attach a lifting sling or chain (3,000 pounds [1360 kg] minimum capacity) to the post. Hook the sling to an overhead crane or chain hoist with enough length to reach the ground.

15. Remove the remaining locknut. Protect the threaded area of the tailpost to prevent damage.
16. Slowly coordinate lowering the post to the ground with the forklift and overhead crane. The post will come out at an angle to the rear of the unit. The forklift should back up as the tailpost lowers so no components are damaged.

**Note: Be sure there is enough clear area around the machine while lowering the tailpost.**

**Note: The tailpost housing is packed with grease. Before installation of a new assembly be sure that the housing is cleaned out and the grease properly contained and disposed of per applicable laws and regulations.**

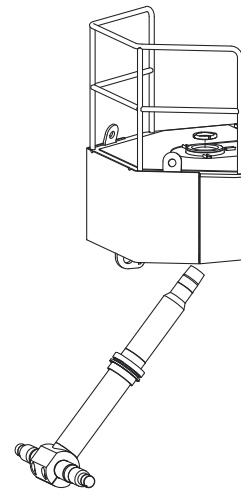


Figure 8 Remove Tailpost Assembly

17. Disassemble Tailpost Assembly. Clean all components.

**NOTE: The Race Seal is press fit, and does not need to be removed for inspection. If it is, apply heat (350° - 400° F) to the Race Seal to reinstall on Tailpost.**

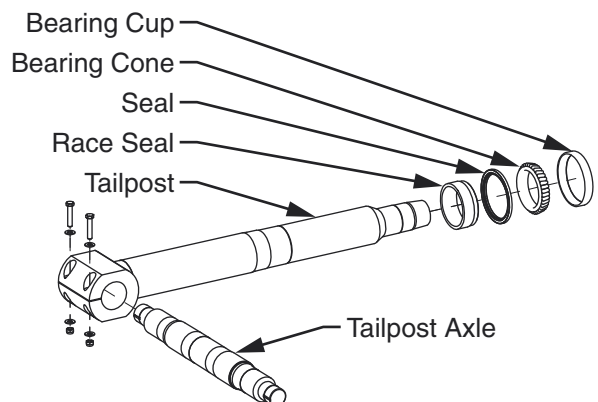


Figure 9 Disassemble Tailpost Assembly

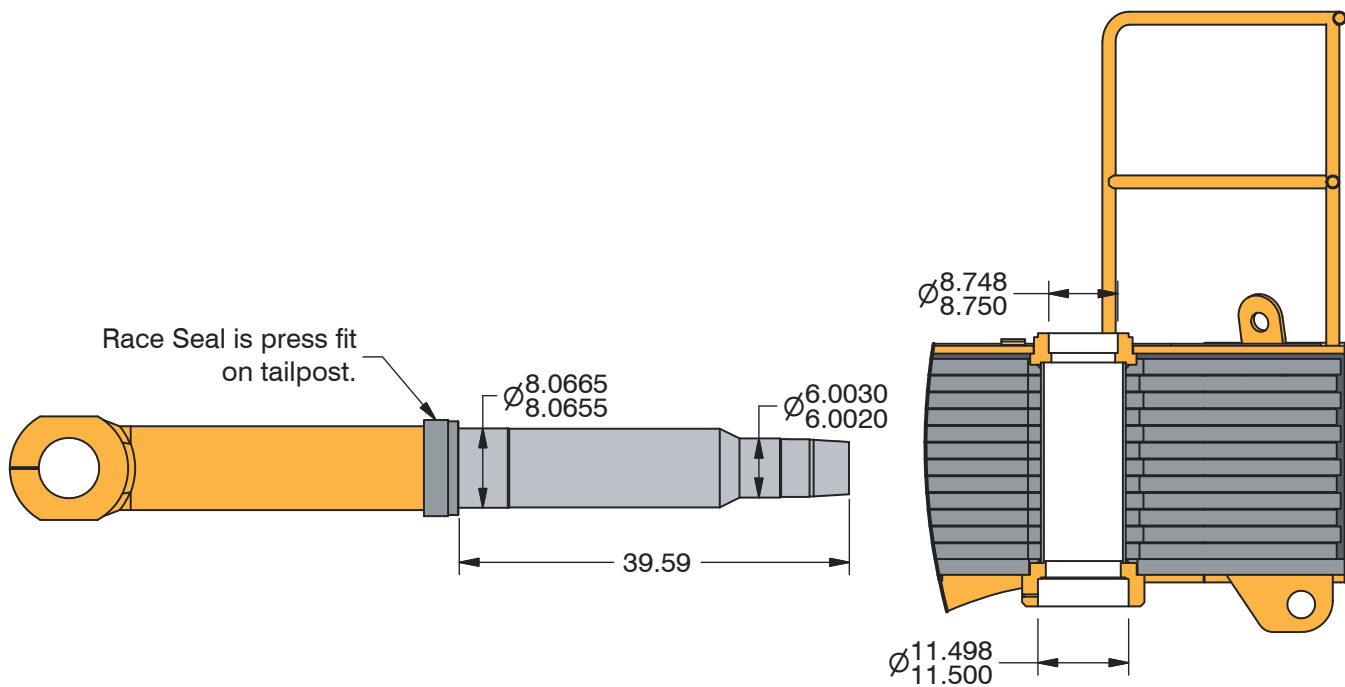


Figure 10 Dimension Checks

## Pre-Assembly Inspection

See Figure 10.

1. Check the tailpost bearing surface diameters for taper and concentricity.

The upper bearing seat diameter should be between 6.0020 and 6.0030 inches. The lower bearing seat diameter should be between 8.0655 and 8.0665 inches.

**Note: The race seal is press fit on the tailpost.**

2. Check the upper and lower bearing bore diameters in the tailpost bearing housing for proper taper and concentricity.

The upper bearing bore should measure between 8.748 and 8.750 inches and the lower bearing bore should be between 11.498 and 11.500 inches.

## Tailpost Assembly Procedure

1. Install the upper bearing cup and lower bearing cup into the tailpost bearing housing.

Check clearance with a feeler gauge to ensure that the cups are fully seated. There must be no gap between the cup and its seat for proper installation.

2. Pack the bearing cones with EP grease.
3. Place the seal over the tailpost with its lip facing up. Then install the lower bearing cone.

Check with a feeler gauge to ensure the cone is seated properly. There must be no gap between the cone and its seat.

4. Pack the lower cone with grease.
5. Protect the threads on the tailpost to prevent damage during installation.
6. Install the lifting eye and lift the tailpost into the tailpost housing. Place blocks under the tailpost and remove the lifting eye.

**IMPORTANT: The bottom seal should be recessed 1/8 inch (3 mm) past the bottom edge of the housing.**

7. Fill the housing cavity around the tailpost with EP grease.
8. Install the upper cone and the lower locknut. Torque the locknut to 2,400 lb-ft (3,250 N-m).  
**NOTE: The bevel side of the lock nut must face up.**
9. Install the lockwasher.
10. Install the upper locknut with the bevel side down, and torque it to 2,400 lb-ft (3,250 N-m). Bend the lockwasher tabs into the slots on both nuts.
11. Pack EP grease over the top bearing and nuts. Install dust cover.
12. Set the tiller arm down on the tailpost taper. There should be at least 1/4 inch gap between the top of the tailpost and the bottom of the top plate of the tiller arm. This will not be directly observable, so taking accurate measurements of the parts prior to and after dry-fitting is essential. If the gap is not at least 1/4 inch, contact Wagner Product Support.
13. Clean the taper surfaces of the tailpost and the tiller arm, and apply Loctite 635 (Order Allied PN 222691).
14. Install the tiller arm. Ensure the tiller arm is properly oriented (it should "point" to the front of the machine), and that the bolt holes align with the corresponding holes in the tailpost. See Figure 11.
15. Install the capscrews and washers finger tight, then strike the tiller arm with a sledgehammer. One strong blow is preferred, to assure that the tiller arm seats properly without binding.

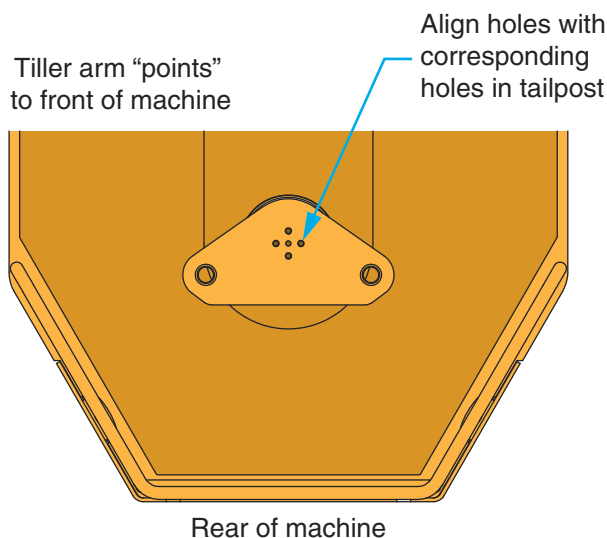


Figure 11 Tiller Arm Orientation

16. Tighten capscrews in a cross pattern, first to 200 ft-lbs (271 N-m), then to 405 ft-lbs (549 N-m).
17. After torquing the capscrews, strike the tiller arm with a sledgehammer and check the torque again. Repeat as needed until the capscrews do not advance when torque is applied.
18. Install the steering cylinders.
19. Grease all of the steering fittings with EP grease.

## TailPost Axle Assembly

1. Install axle in axle mount. Torque capscrews to 920-965 ft-lbs (1247-1308 N-m).
2. Slide the seal retainer onto the axle shaft.
3. Install seal race with the chamfer facing outward. Heat the race slightly so it can easily slide onto the shoulder of the axle shaft.
4. Install O-ring and seal onto the seal retainer assembly (seal lip on outside of hub). Ensure the assembly slides completely onto axle shaft.
5. Pack inner bearing with grease and install onto the shaft.
6. Cover axle shaft with grease and install the wheel assembly (not illustrated). Fill the hub with grease.
7. Pack outer bearing with grease and install in the hub.
8. Install the first locknut (bevel side away from tailpost). Tighten locknut to 35-45 ft-lbs (47-61 N-m) rolling torque (removing all bearing free play).
9. Install both lockwashers, then the second locknut (bevel side toward from tailpost). Torque outside lock nut to 1,500 - 1,800 ft-lbs (2,034-2,440 N-m). Bend lockwasher tabs to secure both locknuts.
10. Fill completely with grease. Install gasket and dust cap. Torque capscrews to 25 ft-lbs (34 N-m).
11. Install inner seal retainer assembly onto inner seal race and bolt to hub.



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