



## INSTRUCTION BULLETIN

No. 340305  
Machine: ATLV 4300  
Published: 9-99/01  
System: CHASSIS

**NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you the cost of ordering an entire kit.**

*NOTE: Numbers in parenthesis ( ) are reference numbers for parts listed in Bill of Materials.*

Installation instructions for kit number 368359

### **SYNOPSIS / PROBLEM:**

This kit contains the parts needed to replace the rod ends on the model ATLV 4300.  
Please follow step-by-step instructions.

### **SPECIAL TOOLS / CONSIDERATIONS: NONE**

(Estimated time to complete: 2 hours)

### **PREPARATION:**

(Refer to FIG. 1, 2 and 3)

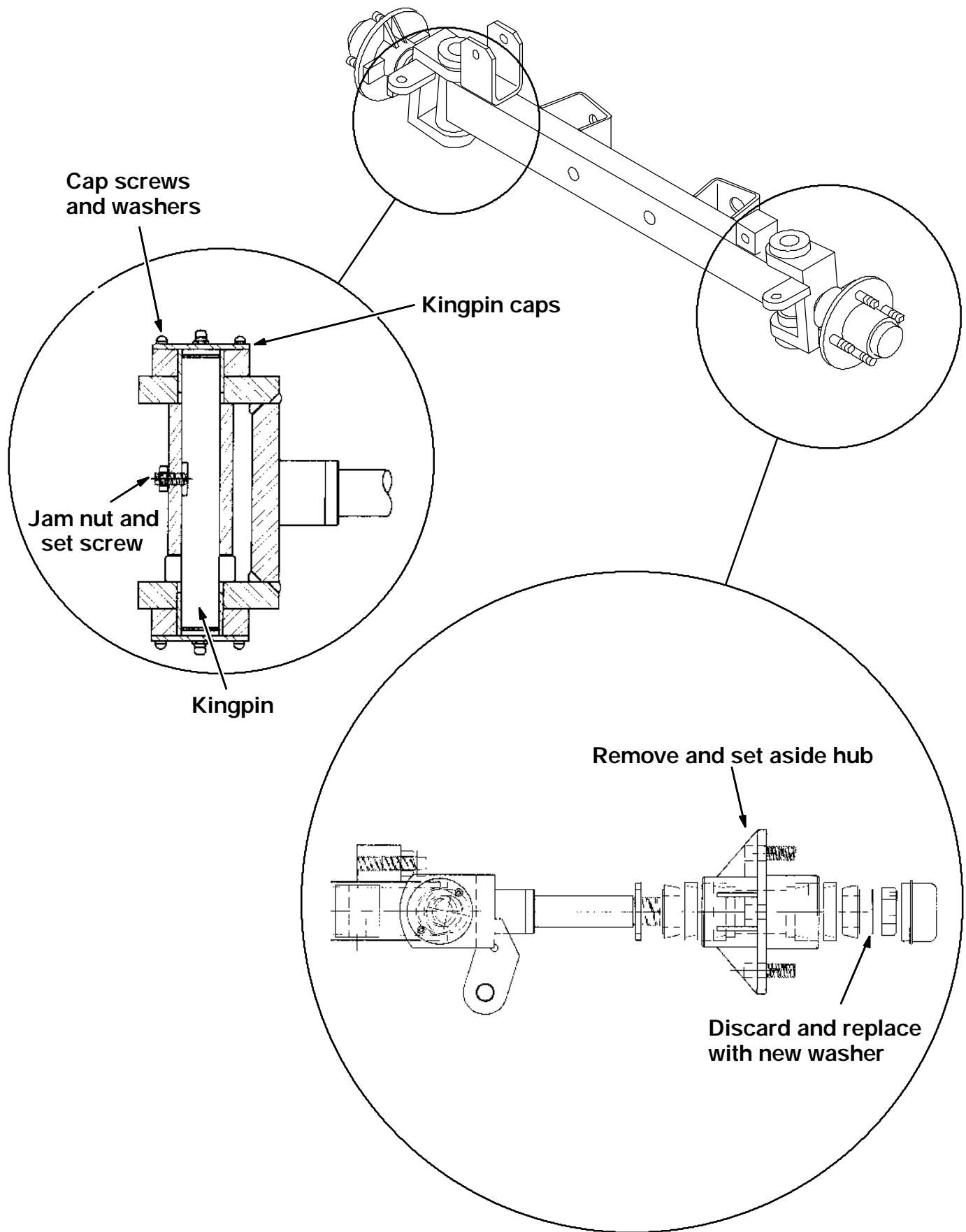
**FOR SAFETY: Before leaving or servicing machine, stop on level surface and set parking brake. Then turn off machine and remove key.**

### **INSTALLATION:**

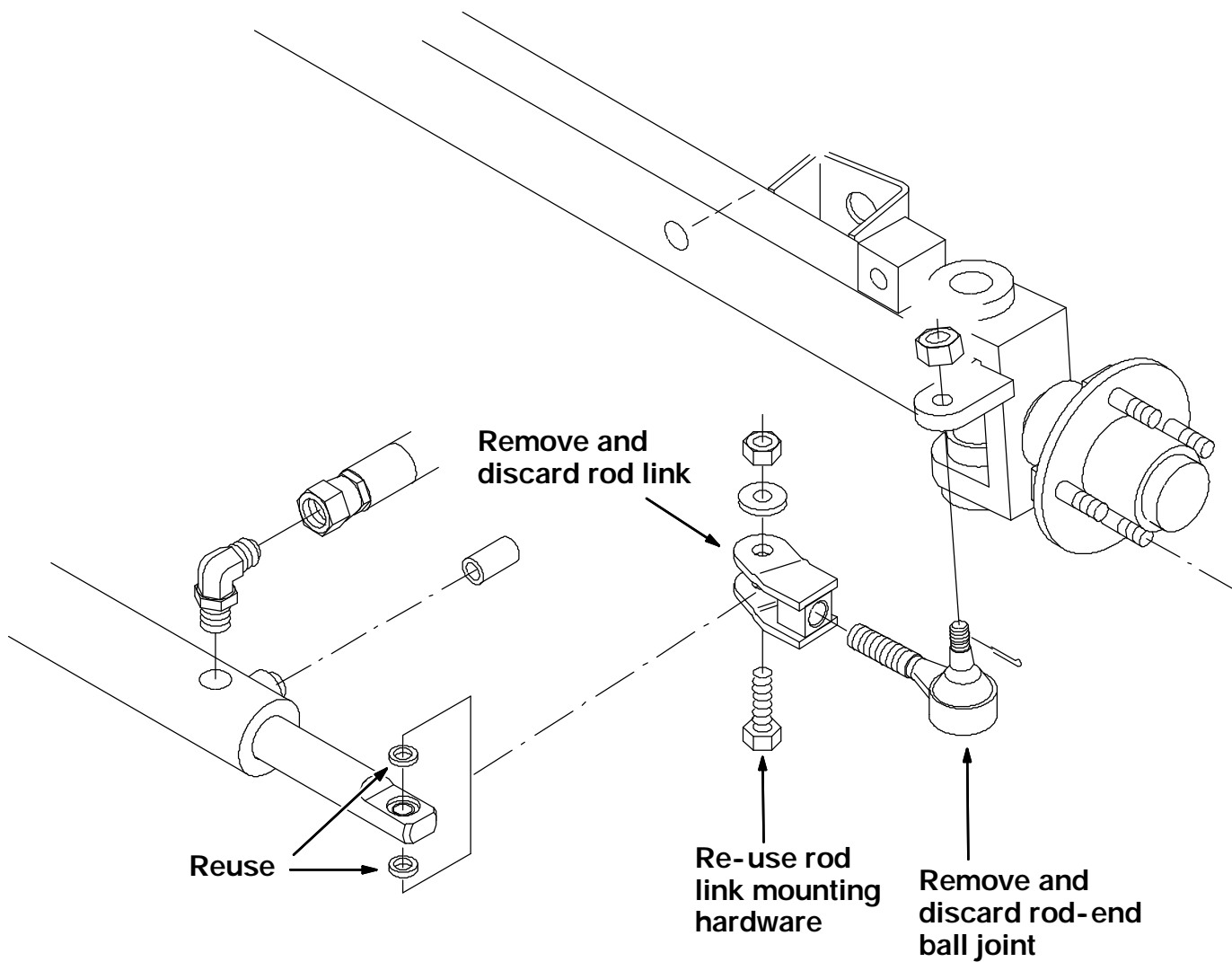
(Refer to FIG. 1, 2 and 3)

1. Loosen the eight wheel nuts on the front tires before lifting the front end of the machine.  
**Do not remove** the wheel nuts at this time.
2. Jack up the front of the machine at the indicated jack points. Install jack stands under the machine frame.
3. Finish removing and set aside the eight wheel nuts. Remove and set aside the tires and wheel assemblies from the machine.
4. Remove and set aside the left side slot nut, cotter pin, bearings and hub from the yoke.  
Remove and discard the washer. (Refer to FIG. 1)
5. Disconnect and discard the rod link and ball joint assembly from the machine. Set the mounting hardware aside. (Refer to FIG. 2)
6. Remove and set aside the kingpin cap screws and washers from the top and bottom of the yoke. (Refer to FIG. 1)
7. Remove and set aside the kingpin caps from the top and the bottom of the yoke.  
(Refer to FIG. 1)
8. Remove and set aside the jam nut and set screw, then remove and set aside the kingpin from the yoke. Remove the yoke from the axle assembly. (Refer to FIG. 1)

9. Install the new left hand yoke with the set aside kingpin. Set the kingpin in position with the jam nut and set screw on the side of the new yoke (1).
10. Reinstall the kingpin caps on the new yoke (1) with set aside hardware.
11. Reinstall the hub on the new left hand yoke (1) with bearings, new washer, slot nut and cotter pin.
12. Assemble the new rod-end/ball joint (7) and connecting link (9) with jam nut (8). Thread the rod-end/ball joint (7) through the link until the mounting hole center points of the new assembly are the same distance apart as the old assembly (The threads of the ball joint end should remain flush, or extend out of the link as far as 1/8"). Discard the old assembly. Set the new ball joint with the jam nut. (Refer to FIG. 4 and 5)
13. Mount the new connecting link (9) to the hydraulic cylinder with set aside hardware. (Refer to FIG. 4, 5 and 6)
14. Mount the rod-end/ball joint (7) to the new yoke(1) with hex screw (3), sleeve (4), flat washer (5) and lock nut (6). Torque to 215 - 280 ft. lb (300 - 390 Nm). (Refer to FIG. 4)
15. Install the new right hand yoke with same instructions as the left hand side installation. Figure illustrations will be mirror image of left hand side illustrations.
16. Use tape measure to check alignment of tires. Rear of tires should be 1/16" to 1/2" farther apart than the front of the tires. Tires should "toe in".  
To adjust: Remove the rod end mounting hardware, disconnecting the rod end from the yoke. Three full turns equals 1/4" of travel. Adjustment must be made equally to each side. Example - If 1/4" of adj. needed then turn each side 1.5 turns to keep piston travel centered on axle. (Refer to FIG. 5 and 6)
17. Start the machine and check for proper steering operation.



**FIG. 1 - OLD STEERING YOKE REMOVAL**



**FIG. 2 - ROD END AND LINK REMOVAL**

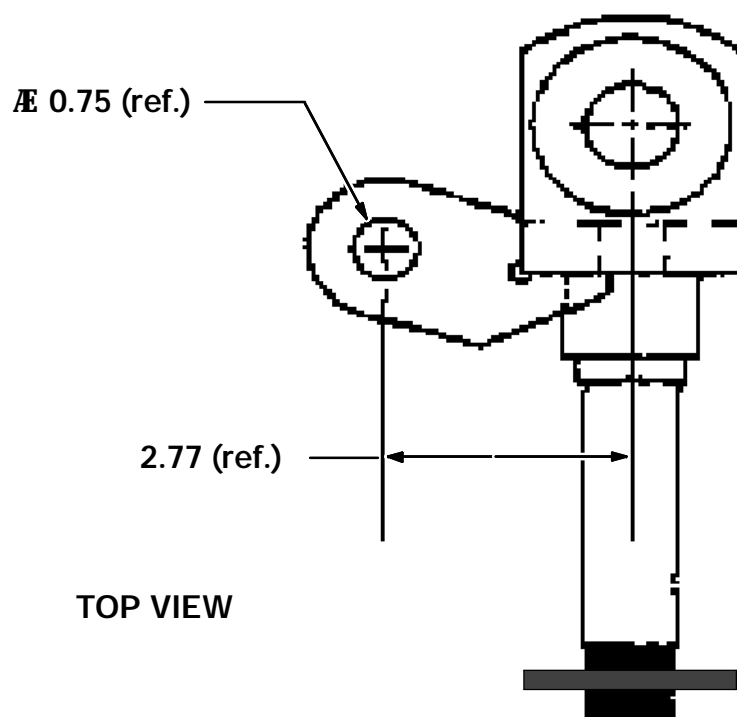
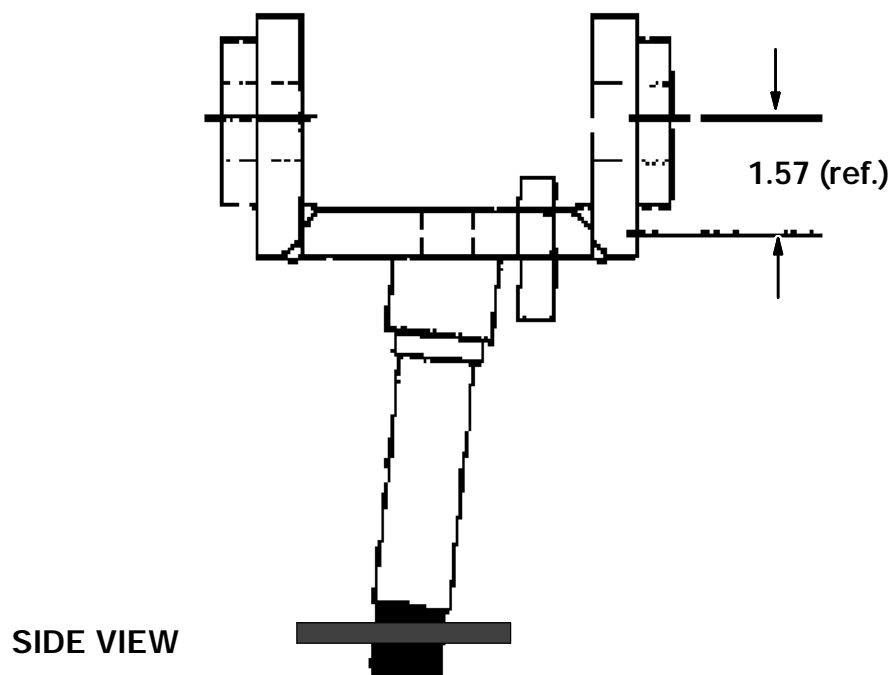
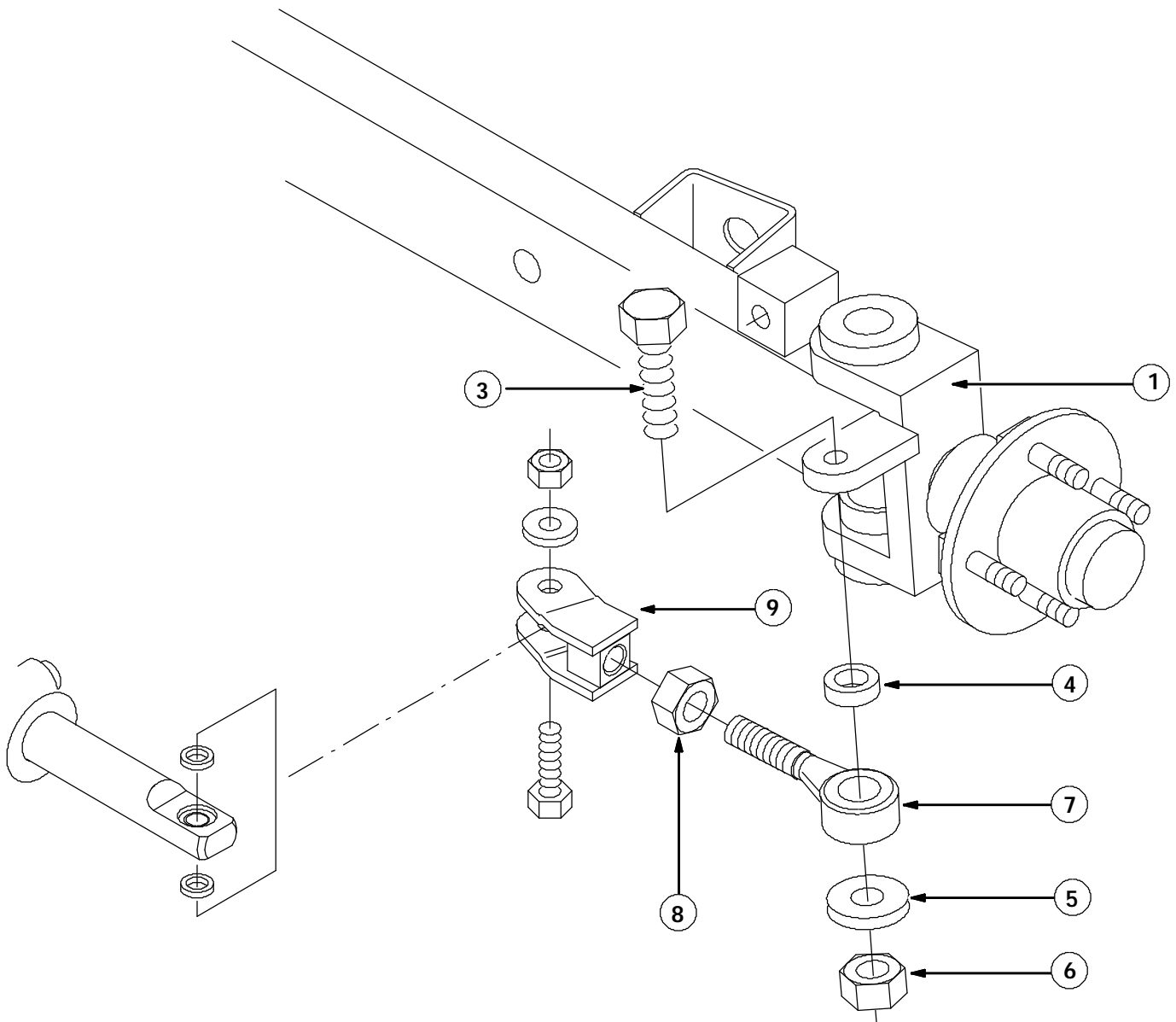


FIG. 3 - NEW STEERING YOLK

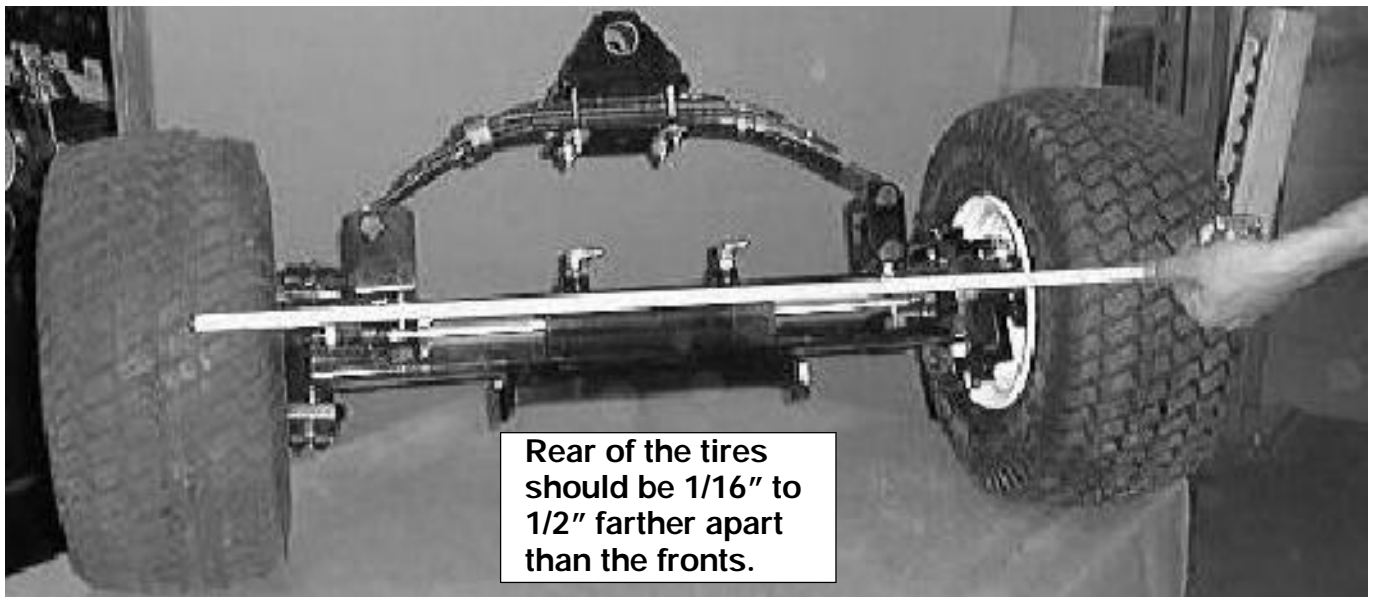


**FIG. 4 - NEW ROD END REPLACEMENT KIT INSTALLATION**



The threads of the ball joint may extend as far as 1/8" out of the clevis

FIG. 5 BALL JOINT ADJUSTMENT



Rear of the tires should be 1/16" to 1/2" farther apart than the fronts.

FIG. 6 CHECK TIRE ALIGNMENT

**BILL OF MATERIALS FOR ROD END REPLACEMENT KIT 368359**

<b>Ref.</b>	<b>TENNANT Part No.</b>	<b>Description</b>	<b>Qty.</b>
1	368357	Yoke, left hand	1
2	368358	Yoke, right hand	1
3	58056	Screw, hex .75-10 X 3.0 G5	2
4	368332	Sleeve	2
5	39350	Washer, flat .75 SAE	2
6	32987	Nut, hex, lock .75-10, NL	2
7	368336	Ball joint, rod-end	2
8	35886	Nut, hex, jam .75-16	2
9	368327	Link, connecting	2

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