



# Service Kit 759-04220

Date: April 06, 2009

Subject: 683-04282A Replacement Kit

Models: i1046 (17AF9BKH010).  
Affected: i1050 (17AF9BKP010).

17AF9BKH709, 17AF9BKH710, 17AF9BKH056,  
17AF9BKH756, 17RF9BKH756. 17AF9BKP709,  
17AF9BKP710, 17AF9BKP756, 17RF9BKP756,  
17AF9BKP056, 17AF9BKP009.

**PURPOSE:** The 683-04282A Right Hand Steering Arm Assembly will no longer be available. when replacing a 683-04282A RH Steering Arm Assembly, order a **759-04220** Service Replacement Kit.

**NOTE:** These materials are prepared for use by trained technicians who are experienced in the service and repair of equipment of the kind described in this publication, and are not intended for use by untrained or inexperienced individuals. Such individuals should seek the assistance of an authorized service technician or dealer.

**NOTE:** Save this Instruction Sheet. Refer to it when ordering replacement parts.

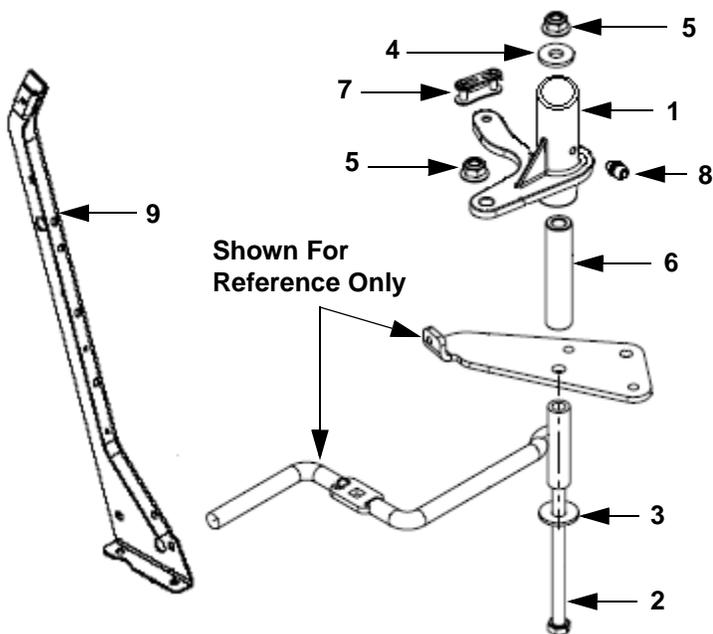
## Service Kit Contents

ITEM NO.	PART NUMBER	QTY	DESCRIPTION
1	719-04288	1	RH Steering Arm
2	710-04692	1	Bolt 3/8-16 x 7.25
3	736-0452	1	Bell Washer
4	736-3052	1	Flat washer
5	712-04065	2	Flange Lock Nut 3/8-16
6	750-04855	1	Spacer .385 x .750 x 3.47
7	713-04037	1	Chain Link-Connect
8	737-3000	1	Grease Fitting
9	783-04285F	1	RH Dash Support
N/S	726-0317	1	Cable Tie: 8.5"

Instruction sheet included with kit.

## REMOVAL INSTRUCTIONS:

1. Park unit on a flat level surface.
2. Set the parking brake.
3. Disconnect the negative battery cable from the negative battery terminal. Disconnect the positive battery cable from the positive battery terminal.
4. Remove the nylon nut that secures the battery strap. Swing the battery strap to the right away from the battery, and remove the battery from the unit.
5. Remove the deck from under the tractor. Refer to the Operators Manual for deck removal instructions.
6. Open the hood and locate the right hand side steering arm assembly. See Figure 2.



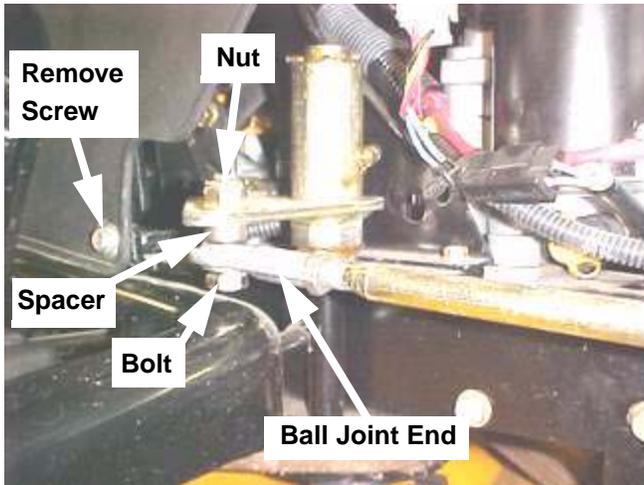
**FIGURE 1**



**FIGURE 2**

7. Remove the screw securing the dash panel to the RH steering support bracket to allow easier access. See Figure 3.

8. Remove the nut from the bolt securing the ball joint end to the right hand steering arm. See Figure 3.  
**NOTE:** The bolt, spacer and the ball joint end will rest on the right hand foot rest. See Figure 4.

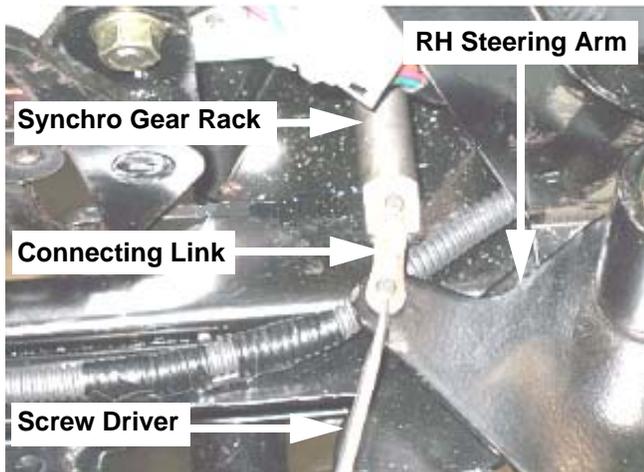


**FIGURE 3**



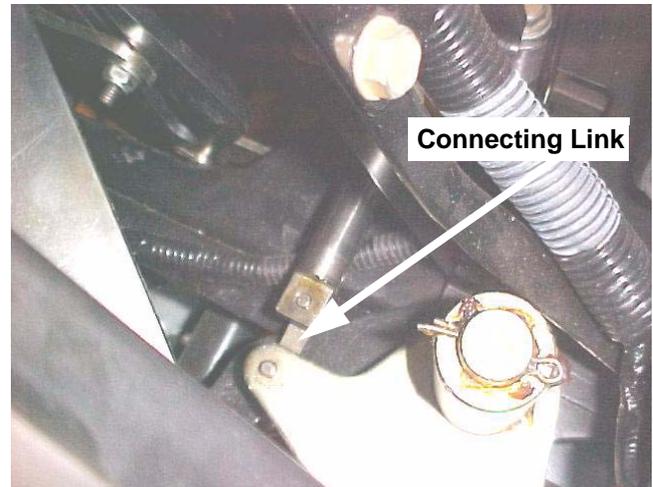
**FIGURE 4**

9. Turn the steering wheel to the right to gain access to the connecting link. Use a flat bladed screwdriver to remove the connecting link from the RH steering arm and synchro gear rack. See Figure 5



**FIGURE 5**

10. Remove bottom half of the connecting link from the steering arm and synchro gear rack. See Figure 6.



**FIGURE 6**

11. Remove the bolt that secures the steering pivot gear shaft to the RH steering support bracket. See figure 7.



**FIGURE 7**

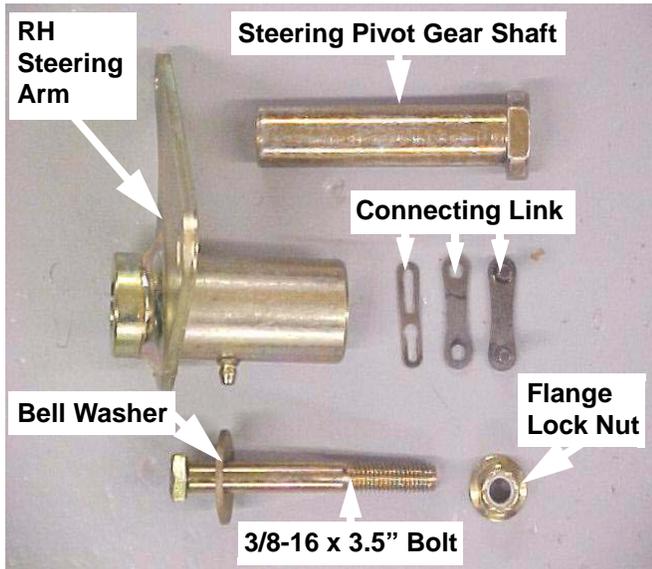
12. Remove the RH steering arm and steering pivot shaft up and off of the connecting link and bolt in the tie rod end. See Figure 8.



**FIGURE 8**

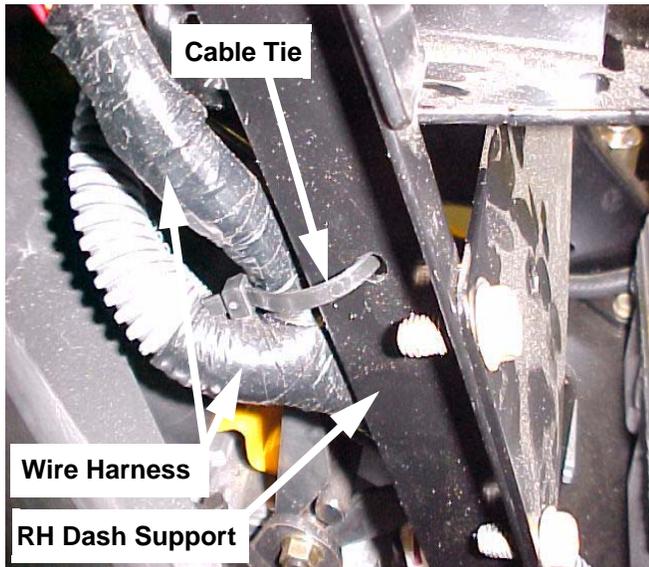
13. Discard the RH steering arm, steering pivot gear shaft, 3/8-16 x 3.5" bolt, 3/8-16 nylon lock flange nut, connecting link, cotter pin, and bell washer. See Figure 9. **NOTE:** Cotter pin not shown.

**DISCARD ALL ITEMS SHOWN IN FIGURE 9**



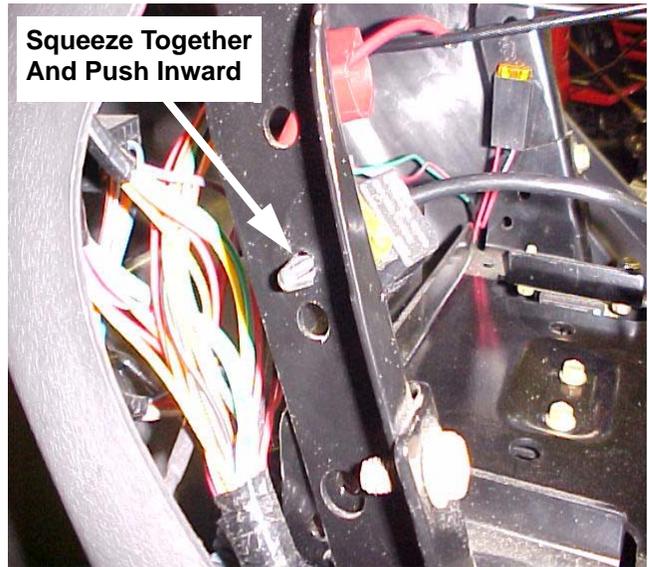
**FIGURE 9**

14. Cut the cable tie securing the wire harness to the RH dash support. See Figure 10.



**FIGURE 10**

15. Using a pair of pliers, remove the fuse and relay assembly from the RH dash support. See Figure 11.



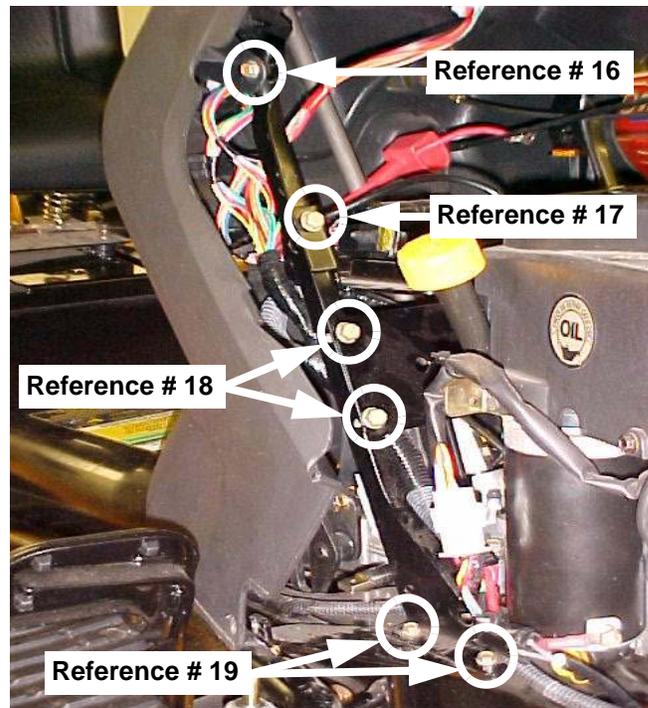
**FIGURE 11**

16. Remove the screw securing the dash to the upper portion of the RH dash support. See Figure 12.

17. Remove the bolt securing the battery support bracket to the RH dash support. See Figure 12.

18. Remove the two (2) bolts that secure the dash support plate to the RH dash support. See Figure 12.

19. Remove the two (2) screws that secure the RH dash support to the RH steering support bracket and frame. See Figure 12.



**FIGURE 12**

20. Remove the RH dash support and discard.

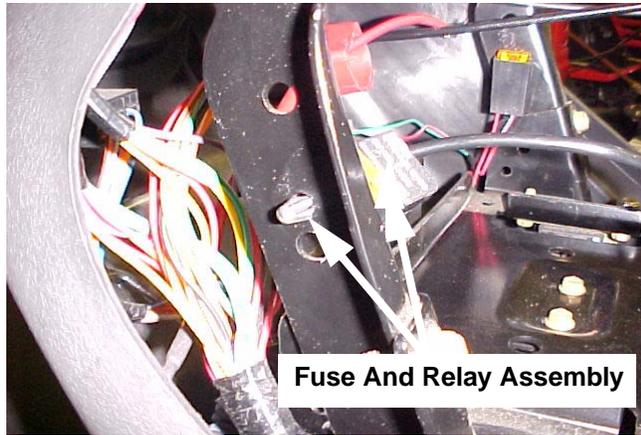
**INSTALLATION INSTRUCTIONS:**

21. Install the RH dash support provided in the service kit using the hardware removed in steps 16 through 19.

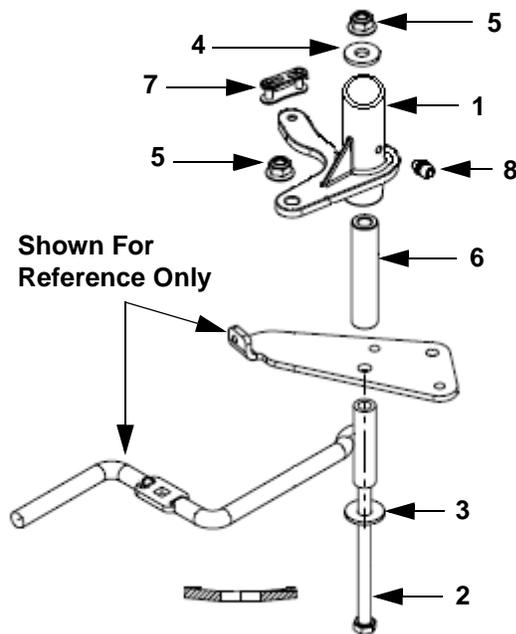
22. Install bolts and screws but do not tighten. **NOTE:** Torque the two (2) screws from Step 19, to 240 -264 in. lbs. (20 -22 ft. lbs). Then tighten all other bolts and screw.

23. Secure the wire harness to the newly installed RH dash support using the 8.5" cable tie provided in the Service Kit. Cut off the excess cable tie.

24. Install the fuse and relay assembly into the hole of the RH dash support as shown in Figure 13.



**FIGURE 13**



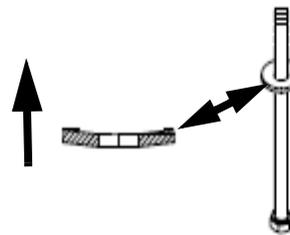
**FIGURE 14**

25. Install the grease fitting, (Ref.#8 Figure 14) into the RH steering arm, (Ref.#1 Figure 14) as shown in Figure 15. **NOTE:** Use a 9/32 socket to drive in the grease fitting. Do Not press or push on the head surface of the grease fitting as damage will occur.

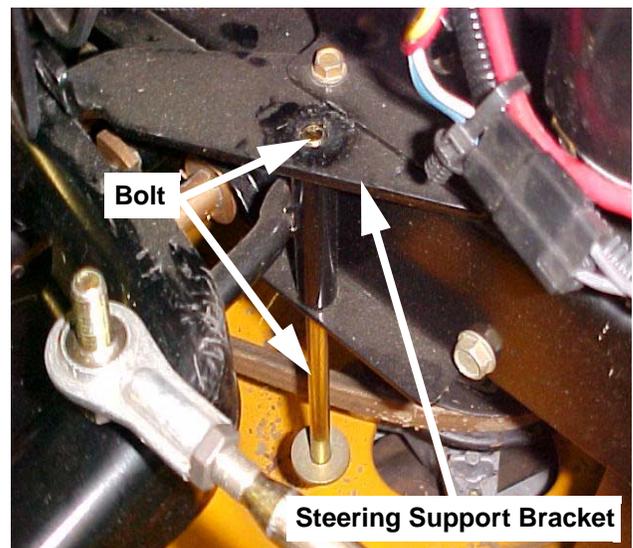


**FIGURE 15**

26. Install the bell washer, (Ref.#3 Figure 14) onto the 3/8-16 x 7.25" bolt, (Ref.#2 Figure 14) with the cupped side away from the head of the bolt

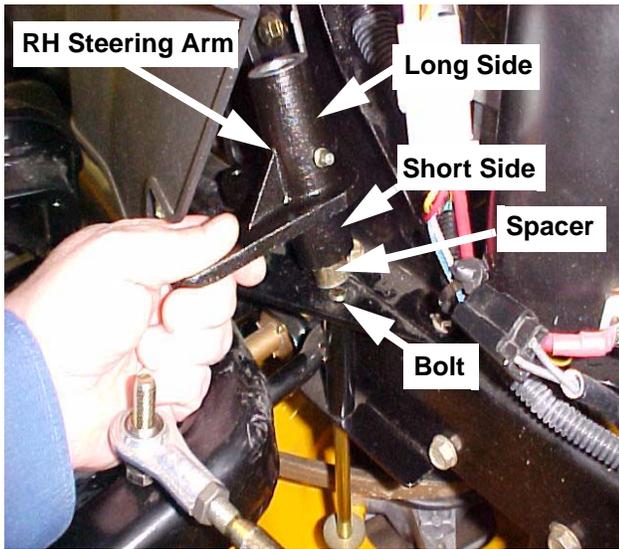


27. Install the 3/8-16 x 7.25" bolt, (Ref.#2 Figure 14) with bell washer, (Ref.#3 Figure 14) up through the fender support rod and RH steering support bracket. **NOTE:** Install the bolt until the threads are flush with the top of the RH steering support bracket. See Figure 16.



**FIGURE 16**

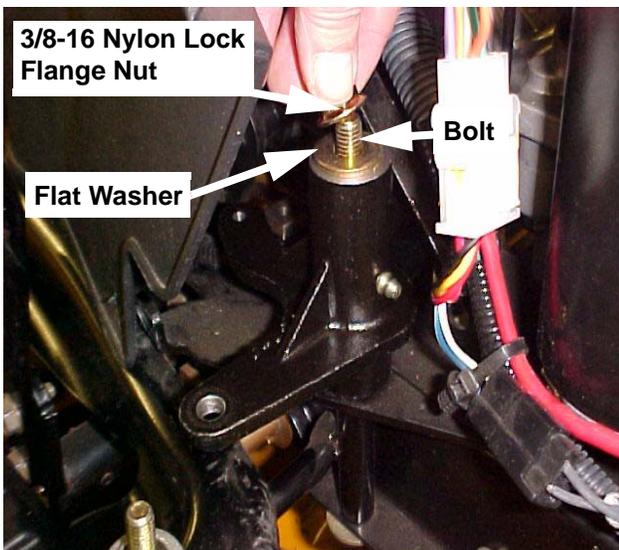
28. Install the spacer, (Ref.#6 Figure 14) inside the RH steering arm and place the assembled parts over the top of the 3/8-16 x 7.25" bolt. **NOTE:** The RH steering arm is installed with the grease fitting facing the front of the tractor and the short side down, long side up. See Figure 17.



**FIGURE 17**

29. Push the 3/8-16 x 7.25" bolt up through the spacer while holding the spacer in the steering arm.

30. Install the flat washer (Ref.# 4 Figure 14) over the bolt then one of the 3/8-16 nylon lock flange nuts (Ref.# 5 Figure 14). See Figure 18.

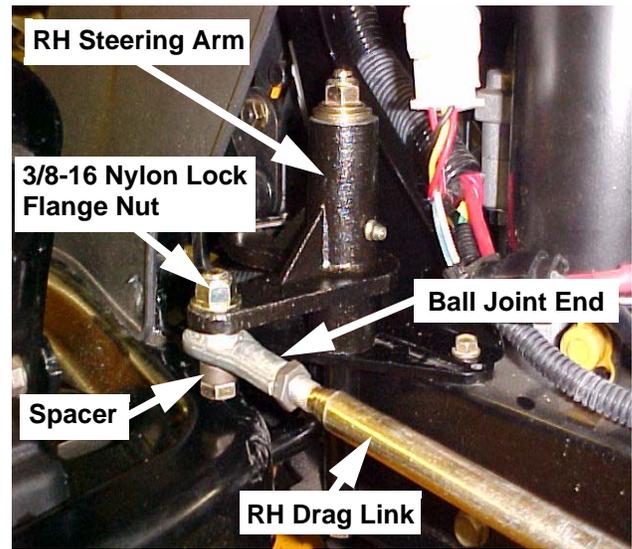


**FIGURE 18**

31. Torque the 3/8-16 x 7.25" bolt (Ref.# 2 Figure 14) and 3/8-16 nylon lock flange nut (Ref.#5 Figure 14) to 380 - 450 in.lbs. (31.6 - 37.5 ft. lbs.).

32. Attach the chain link connect (Ref.#7 Figure 14) to the arm with the smaller hole on the RH steering arm and the synchro gear rack.

33. Connect the ball joint end of the RH drag link to the 3/8" hole in the RH steering arm. Use the remaining 3/8-16 nylon lock flange nut (Ref.# 5 Figure 14) and tighten securely. **NOTE:** The spacer is positioned between the ball joint and RH steering arm. See Figure 19.

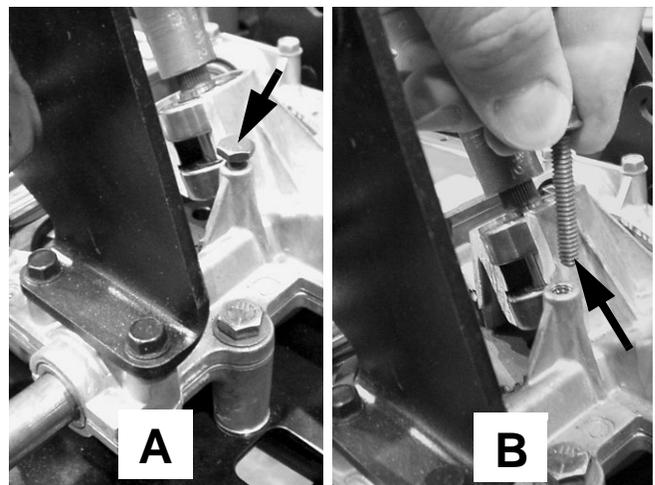


**FIGURE 19**

**ADJUSTING WHEEL ALIGNMENT:**

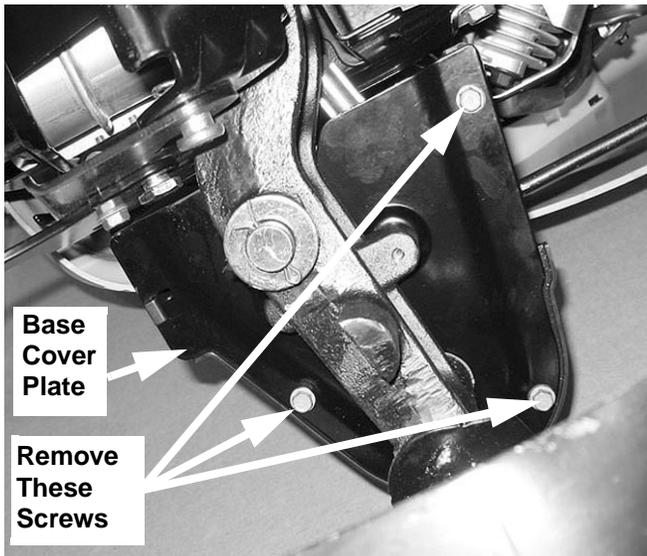
34. Remove the 1/4"-20 plug screw from the steering gear box centering port as shown in Figure 20A.

35. Refer to Figure 20B. Using a 1/4"-20 bolt having a minimum of 1.5" of threaded length, thread the bolt into the steering box centering port until you feel it touch the steering rack. While trying to gently thread the bolt further, slowly rotate the steering shaft back and forth until the bolt sets into the detent in the steering rack, then finger tighten to set the screw fully into the detent. The steering gear box is now centered.



**FIGURE 20**

36. Remove the three (3) screws securing each front wheel steering gear plastic cover to the base cover plate. Remove the plastic covers. See Figure 21.



**FIGURE 21**

37. Check the timing marks on the axle's spur gear and the steering spur gear on the both the left and right wheels. See Figure 22.



**FIGURE 22**

38. Both left and right wheel spur gear sets must have their timing marks aligned at this point. If both sets of timing marks are aligned, attempt to insert a 5/16" diameter bolt/pin into the axle alignment holes in the axle's spur gear and through the hole in the base cover plate at both wheels. See Figure 23.

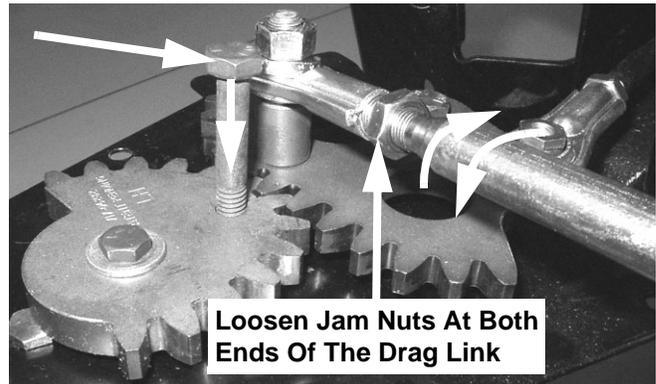


**FIGURE 23**

39. If both 5/16" bolts/pins go into their respective holes in the base cover plates, as shown in Figure 23, with

the timing marks aligned, the front wheel alignment is good. Proceed to Step 42.

If either of the 5/16" diameter bolt/pins do not go into it's base cover plate hole the drag link must be adjusted. See Figure 24. Proceed to Step 40.



**FIGURE 24**

40. At the wheel where the axle's spur gear hole does not line up with the base cover plate, loosen the drag link jam nuts at both ends.

41. Rotate drag link clockwise or counterclockwise until the 5/16" bolt/pin drops into the base cover plate and spur gear timing marks are aligned. Tighten both jam nuts.

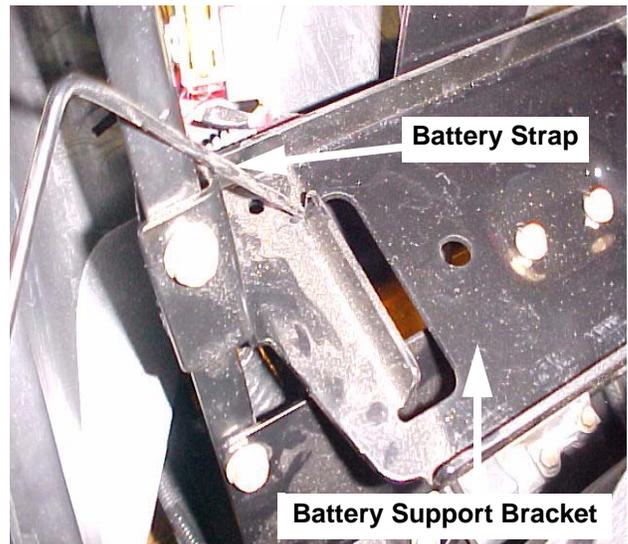
42. Remove the 5/16" bolt/pin from the axle's spur gear.

43. Reinstall the front steering gear plastic covers and secure with the hardware removed in step 36.

44. Remove the 1/4-20 bolt from the steering box centering port. Install the plug screw removed in step 34.

45. Install the mower deck. Refer to the Operators manual for mower deck installation instructions.

46. Install the battery strap in the slot of the battery support bracket. See Figure 25.



**FIGURE 25**

47. Install the battery.

48. Connect the positive battery cable to the positive battery terminal. Connect the negative battery cable to the negative battery terminal.

49. Swing the battery strap to the left over the front of the battery and secure with the nylon lock nut removed in step 4. to the anchor bolt.

50. Install the screw removed in step 7 to secure the dash panel to the RH steering support bracket.

51. Grease the newly installed RH steering arm with 737-3034 (251 EP Chassis Lubricant). Grease the LH steering arm if needed.

52. Start the tractor and check that all safety devices are functioning properly.

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