INSTRUCTION BULLETIN

No. 9020400
Machine: T17 / M17
Published: 07-2016
Rev. 02

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

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

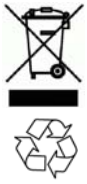
Installation instructions for **kit number 9013267 (T17 machines NA serial numbers 000000-010999 / EU serial numbers 0000-0330) / 9014997 (T17 machines NA serial numbers 011000- / EU serial numbers 0400-) (M17 All machines)**

SYNOPSIS:

This kit contains the parts needed to replace the steering transmission on T17 scrubbers / M17 sweeper-scrubbers.
Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: 10mm ball & hex drive

(Estimated time to complete: 2 hours)



PROTECT THE ENVIRONMENT

Please dispose of packaging materials, used machine components such as batteries and fluids in an environmentally safe way according to local waste disposal regulations.

Always remember to recycle.

PREPARATION:

1. Empty the recovery tank and the solution tank before jacking up the machine.

2. Park the machine on a clean level surface, turn off the machine, set the parking brake, and remove the key.

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

3. Disconnect the battery cable from the machine.

WARNING: Always disconnect battery cables from machine before working on electrical components.

4. Chock both rear tires.

5. Jack up the front end of the machine high enough to access the steering components and remove the steering components from under the machine. Place jack stands under the machine frame and lower the machine onto the jack stands. (Fig. 1)

FIG. 1

FOR SAFETY: When servicing machine, block machine tires before jacking machine up. Use a hoist or jack that will support the weight of the machine. Jack machine up at designated locations only. Support machine with jack stands.

INSTALLATION:

NOTE: *Use care when removing the drive wheel and steering transmission from the machine. The drive wheel weighs approximately 140 lbs (64 kg) and the steering transmission weighs approximately 90 lbs (41 kg). If necessary, seek help to remove these items from the machine.*

1. Remove the electric access panel from the steering channel. Set the electric access panel and all mounting hardware aside. (Fig. 2)

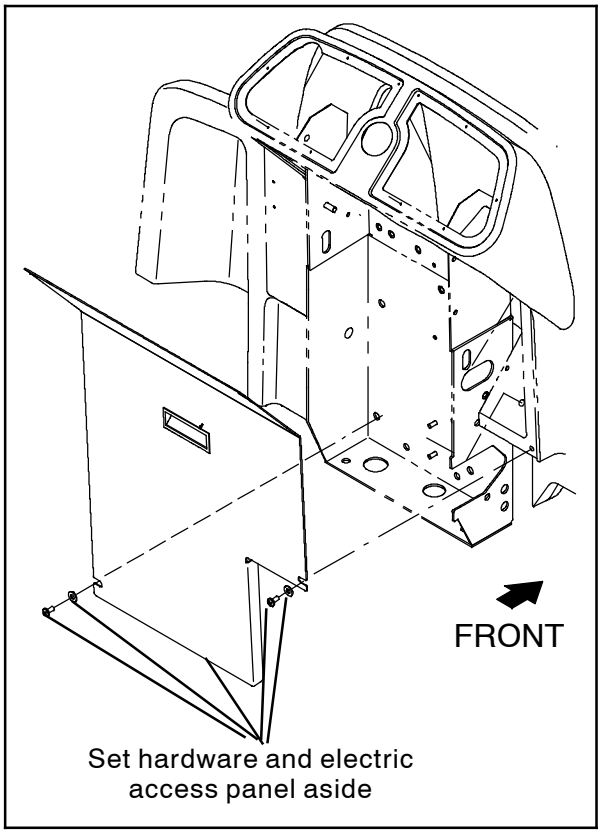


FIG. 2

2. **Machines with Standard Steering:** Disconnect the steering shaft from the input shaft. Set all hardware aside. (Fig. 3)

FIG. 3

3. **Machines with Optional Power Steering:** Loosen hardware and disconnect the steering shaft from the input shaft. (Fig. 4)

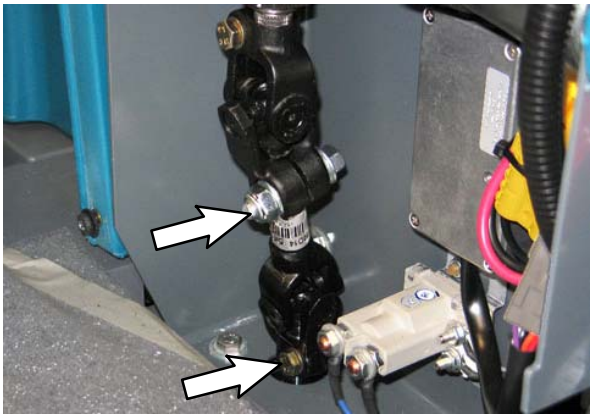


FIG. 4

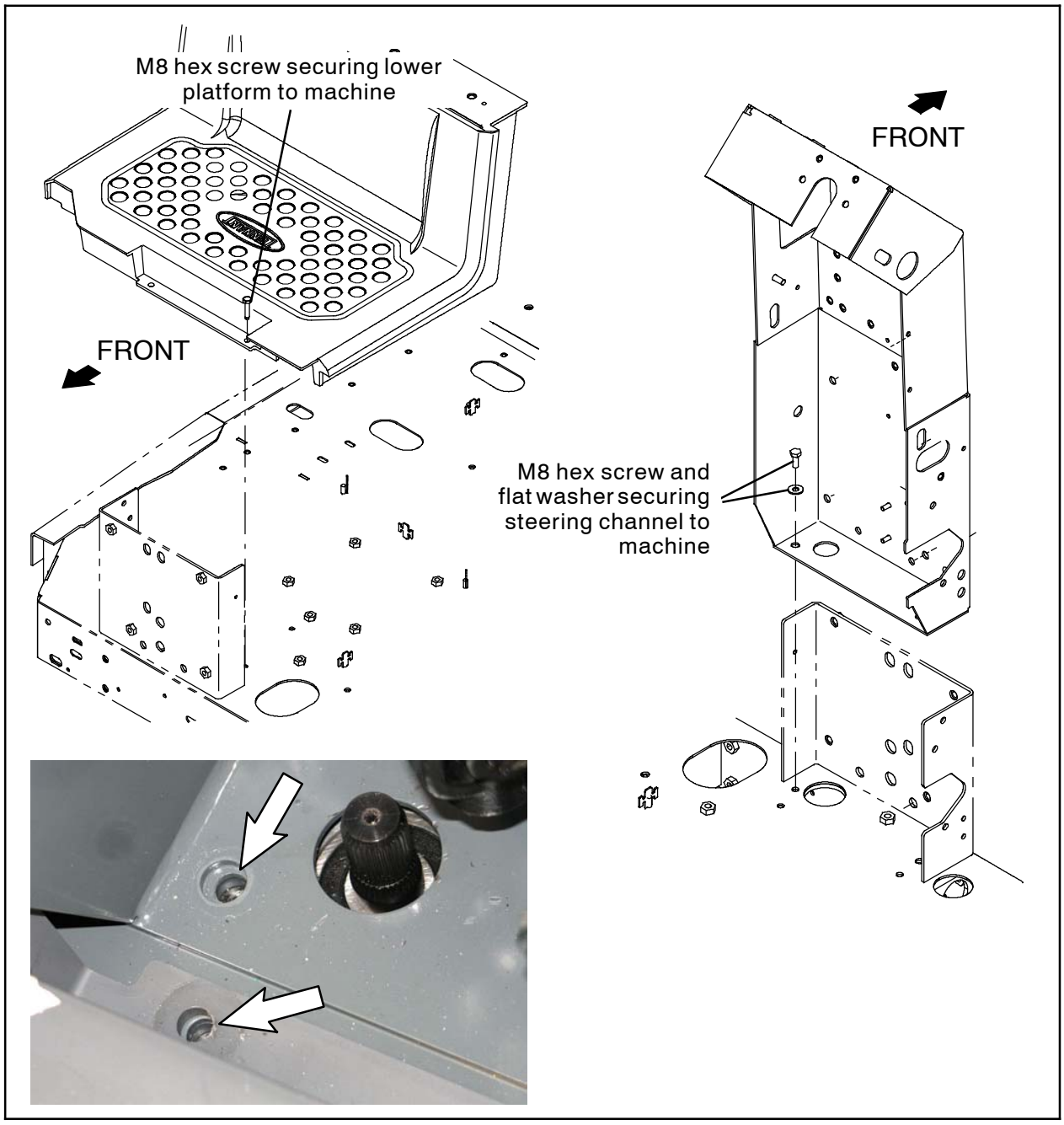


FIG. 5

4. Remove the M8 hex screw securing the steering channel to the machine and and the M8 hex screw securing the lower operator platform to the machine. (Fig. 5)

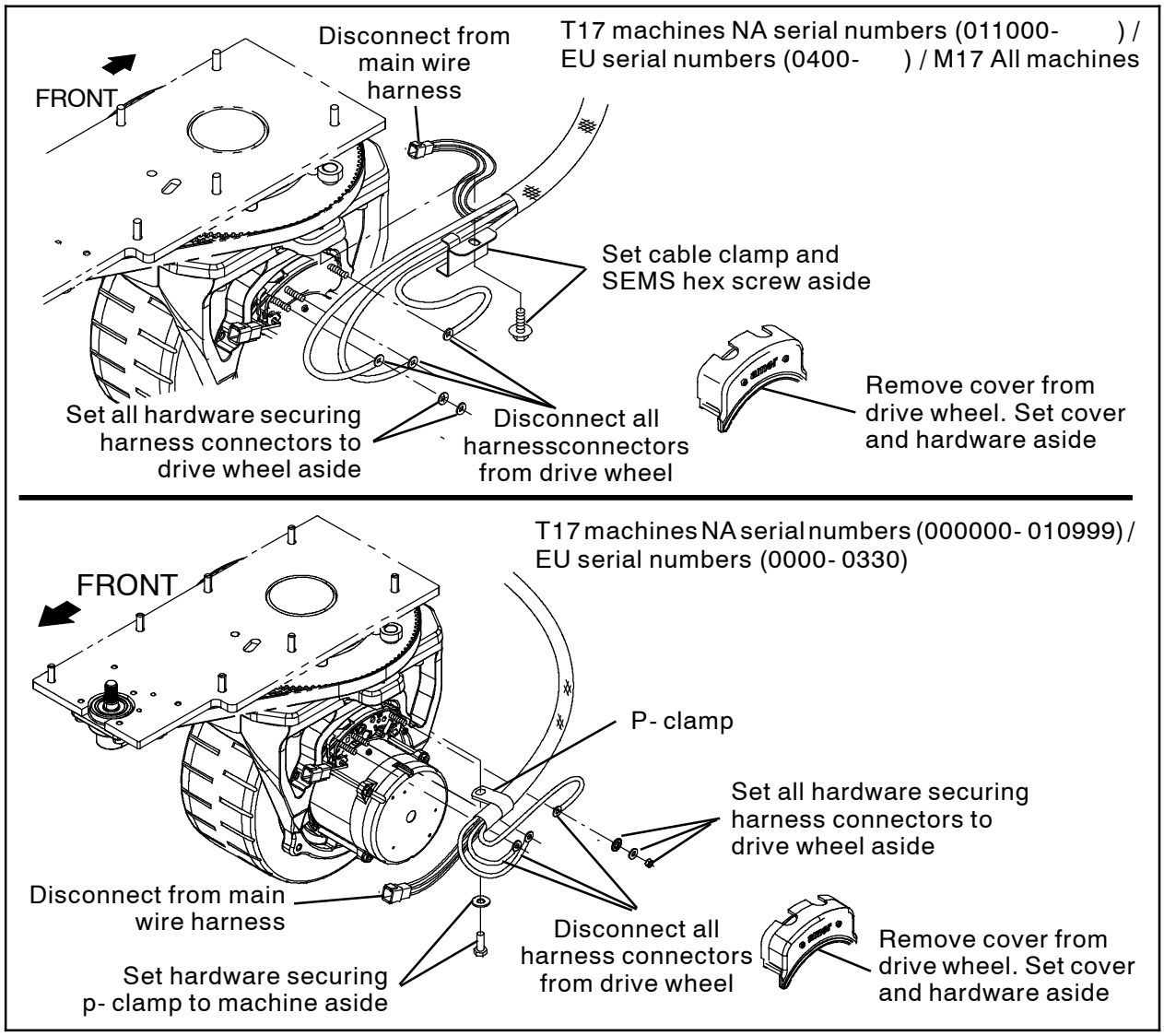


FIG. 6

5. Remove the cover from the drive wheel. Set the cover and mounting hardware aside. (Fig. 6)

6. If the machine is equipped with cable clamp securing the main harness to the drive wheel, remove the cable clamp from the machine. Set the cable clamp and SEMS hex screw. (Fig. 6)

   If the machine is equipped with p- clamp securing the main harness to the drive wheel, remove the p- clamp from the machine. Set the p- clamp and hardware aside. (Fig. 6 / Fig. 7)

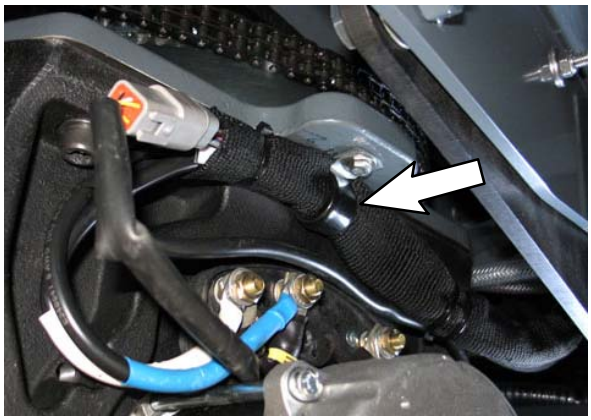


FIG. 7

7. Disconnect all harness connections from the drive wheel. (Fig. 6 / Fig. 7)

8. Loosen the four M12 socket screws securing the drive wheel to the steering transmission. Do not remove the four socket screws. (Fig. 8)

9. Jack the machine up off the jack stands, remove the jack stands from under the machine, and lower the machine to the floor.

10. Raise the jack until it is touching the frame, but not enough to raise the machine from the floor.

11. Remove the four previously loosened M12 socket screws. Set the M12 socket screws and flat washers aside. (Fig. 8)

12. Jack the machine back up off the floor, position the jack stands under the machine and lower the machine onto the jack stands.

NOTE: *Use caution when removing the drive wheel as the brake is not engaged during the removal process. Carefully set the drive wheel on the ground when removed.*

13. Remove the front drive wheel from under the machine. (Fig. 8)

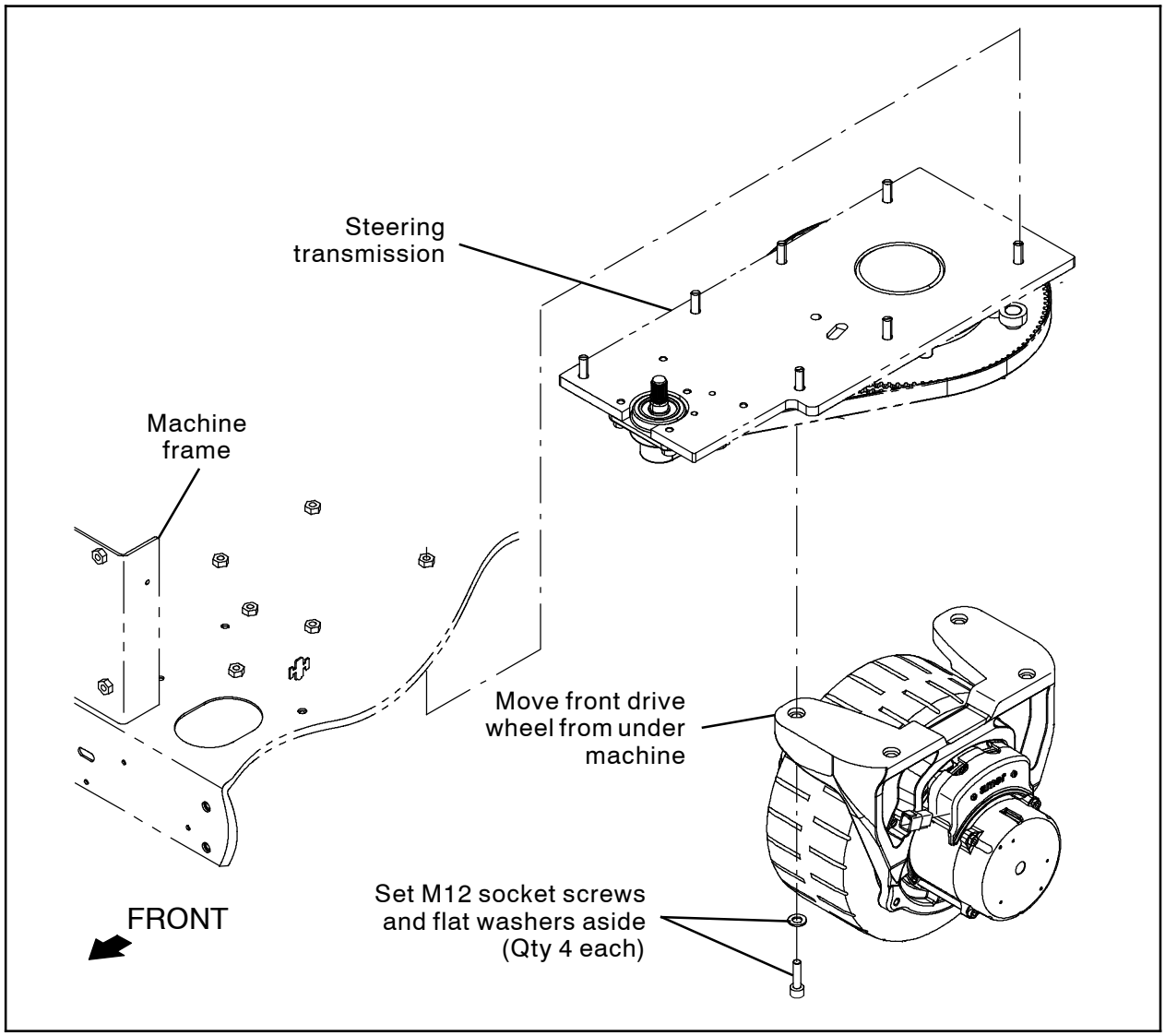


FIG. 8

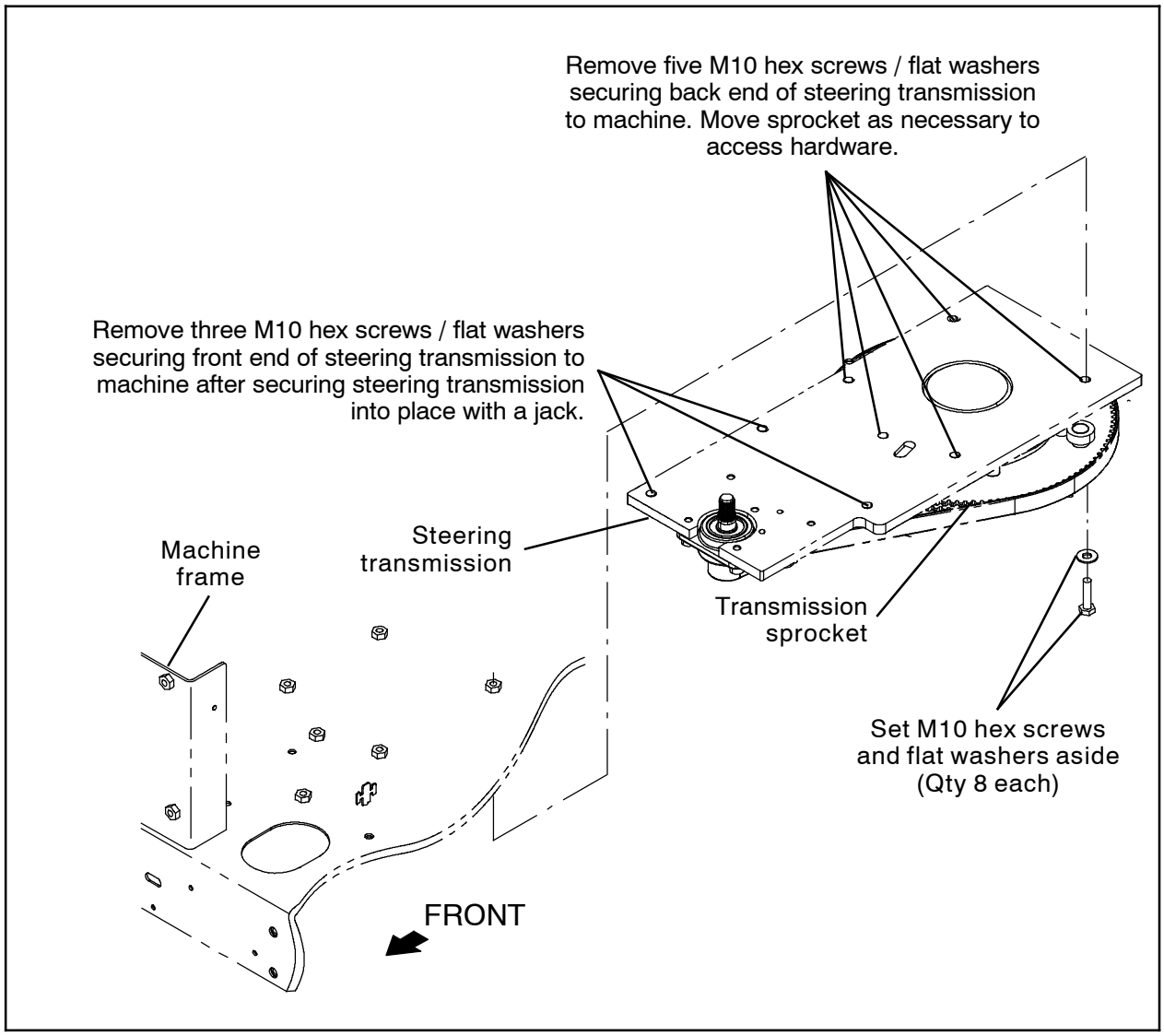


FIG. 9

14. Remove the five M10 hex screws and five flat washers securing the back end of the steering transmission to the machine. Move the transmission sprocket as necessary to access the M10 hex screws. Set the M10 hex screws and flat washers aside. (Fig. 9)

15. Place a jack under the steering transmission and raise the jack enough to hold the steering transmission into place on the machine. (Fig. 9)

16. Remove the remaining three M10 hex screws and three washers securing the steering transmission to the machine. Set the M10 hex screws and flat washers aside. (Fig. 9)

17. Remove the steering transmission from under the machine. (Fig. 9 / Fig. 10)

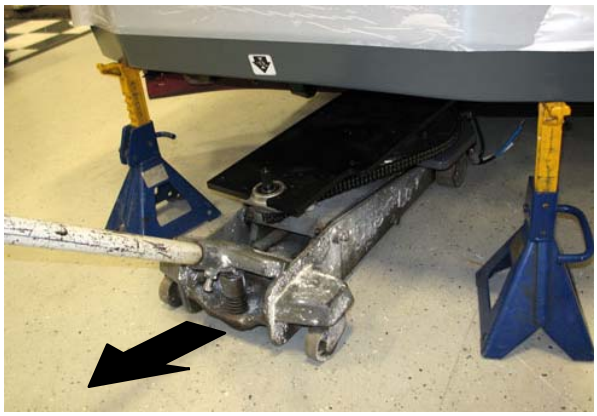


FIG. 10

18. Place the new steering transmission onto the jack, position the jack under the machine and raise the steering transmission up to the frame of the machine. Be sure no wires / cables get caught between the steering transmission and frame of the machine when raising the steering transmission.

19. Position the steering transmission so the holes in the steering transmission are aligned with the corresponding holes in the frame of the machine. (Fig. 11)

20. Use the three M10 hex screws / flat washers to secure the front end of steering transmission to the frame of the machine. Tighten the M10 hex screws enough to hold the steering transmission onto the frame of the machine. Do not completely tighten the M10 hex screws. (Fig. 11)

21. Remove the jack from underneath the machine.

22. Use the five M10 hex screws / flat washers to secure the back end of the steering transmission to the frame of the machine. Move the sprocket as necessary to reinstall the hardware. (Fig. 11)

23. Completely tighten all eight M10 hex screws securing the steering transmission to the frame of the machine. Tighten the M10 hex screws to 37- 48 Nm / 27.3- 35.4 ft lbs. (Fig. 11)

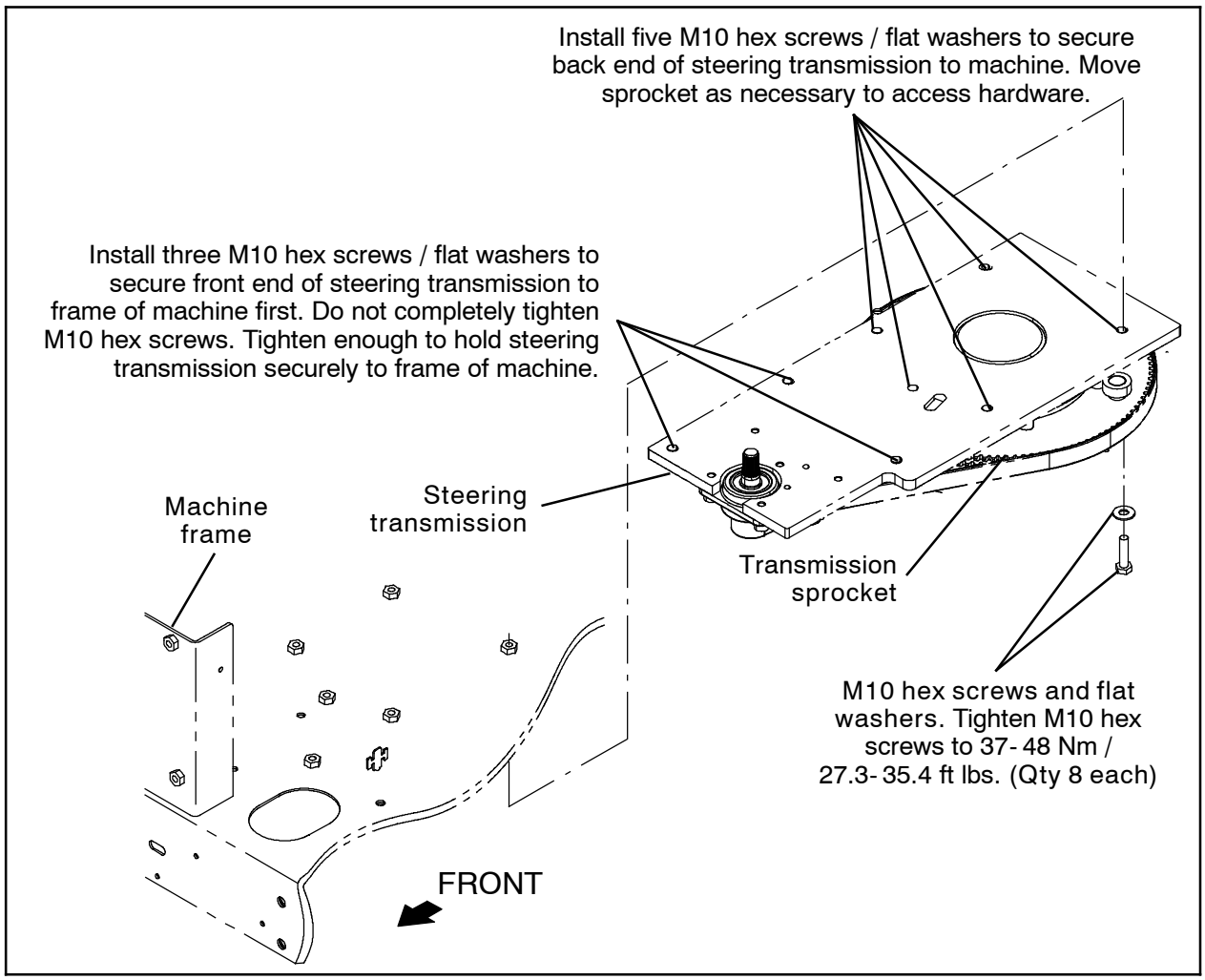


FIG. 11

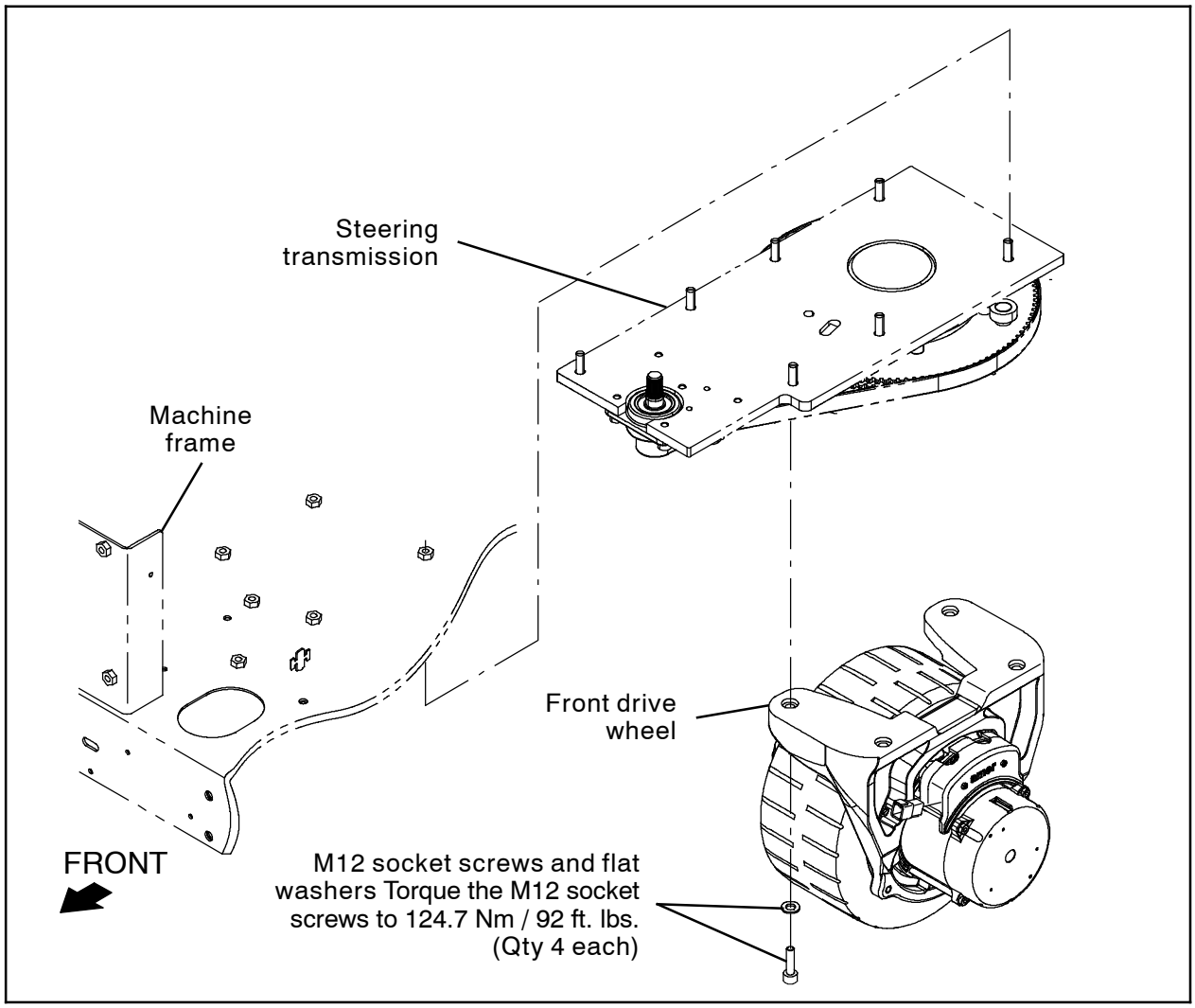


FIG. 12

24. Place the drive wheel onto the jack, slide the jack underneath the machine, and raise the drive wheel up to the steering transmission.

25. Use the four M12 socket screws to safely secure the drive wheel to the steering transmission. (Fig. 12)

26. Remove the jack from under the machine.

27. Position the drive wheel completely against the steering stop. (Fig. 13)

FIG. 13

28. Tighten the four M12 socket screws to Torque the M12 socket screws to124.7 Nm / 92 ft. lbs. (Fig. 11)

29. Connect all wire harness connectors to the drive wheel. Arrange wire harness as shown. (Fig. 14 / Fig. 15)

FIG. 14

FIG. 15

30. If the machine is equipped with cable clamp to secure the main harness to the drive wheel, reinstall the cable clamp to secure the wire harness to the drive motor. (Fig. 6)

    If the machine is equipped with p- clamp to secure the main harness to the drive wheel, reinstall the p- clamp to secure the wire harness to the drive motor. (Fig. 6 / Fig. 14 / Fig. 15)

31. Reinstall the drive wheel cover onto the drive wheel. (Fig. 6)

32. Straighten the drive wheel.

33. Slightly raise machine from jack stands, remove the jack stands from under the machine, and lower the machine to the floor.

34. Straighten the steering wheel. (Fig. 16)

FIG. 16

35. Reinstall the M8 hex screw to secure the steering channel to the machine and and the M8 hex screw to secure the lower operator platform to the machine. (Fig. 5)

36. Reconnect steering shaft. Tighten the hardware to 13.5- 24 Nm / 10- 17.7 ft lbs. (Fig. 17 / Fig. 18)

FIG. 17

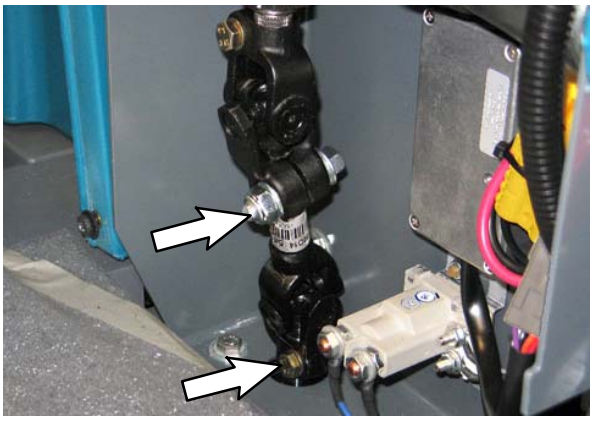


FIG. 18

37. Reconnect battery cable to the machine.

38. Reinstall the electric access panel.

39. Start and test machine to ensure steering is straight. Make necessary adjustments.

Bill Of Materials

Ref.	Tennant Part No.	Description	Qty.
	9013267	Transmission Assy, Str, Afmkt [T17]	1

Ref.	Tennant Part No.	Description	Qty.
	9014997	Transmission Assy, Str, Afmkt [T17 / M17]	1

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