



INSTRUCTION BULLETIN

No. 9013038
Machine: T17
Published: 03-2017
Rev. 01

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.

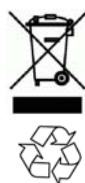
Installation instructions for **kit number 9013037**

SYNOPSIS:

This kit contains the parts needed to install the power steering kit on T17 scrubbers
(**serial numbers 000000-010999 - only**).
Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 4 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. 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, and remove key.

2. Disconnect the battery cable from the machine.

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

INSTALLATION:

1. Remove the access panel from the machine. Set the access panel and hardware aside. (Fig. 1)

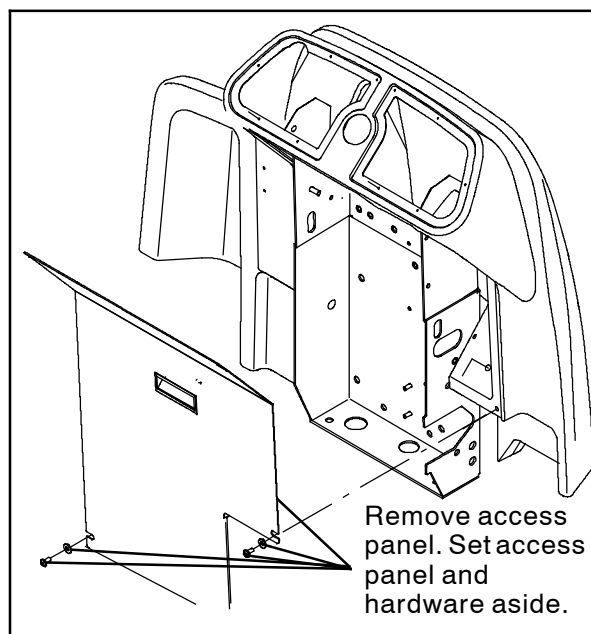


FIG. 1

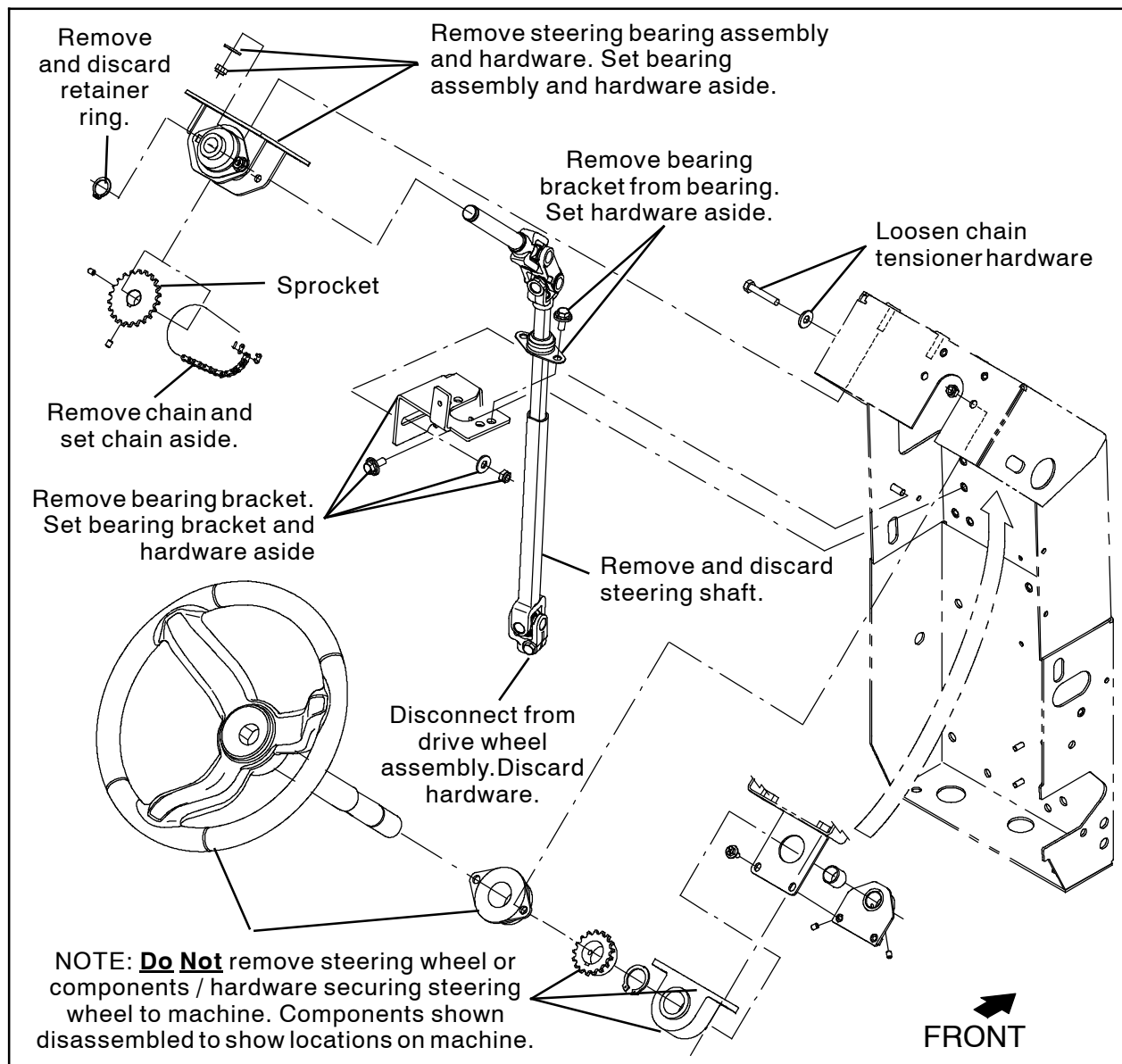


FIG. 2

2. Remove the chain from both steering sprockets. Set the chain aside. (Fig. 2)
3. Remove the hardware securing the steering bearing assembly to the machine. Set the hardware aside. (Fig. 2)
4. Remove the hardware securing the bearing bracket to the machine. Set the hardware aside. (Fig. 2)
5. Disconnect the steering shaft from the drive wheel assembly. Discard the hardware. (Fig. 2)
6. Remove the steering shaft / items attached to the steering shaft from the machine. (Fig. 2)
7. Remove the retainer ring securing the steering bearing assembly to the steering shaft and remove the steering assembly from the steering shaft. Set the steering bearing assembly aside. Discard the retainer ring. (Fig. 2)
8. Remove the hardware securing the bearing to the bearing bracket. Set the hardware aside. (Fig. 2)
9. Separate the two sections of the steering shaft and remove the bearing from the steering shaft. Set the bearing aside. Discard the steering shaft. (Fig. 2)

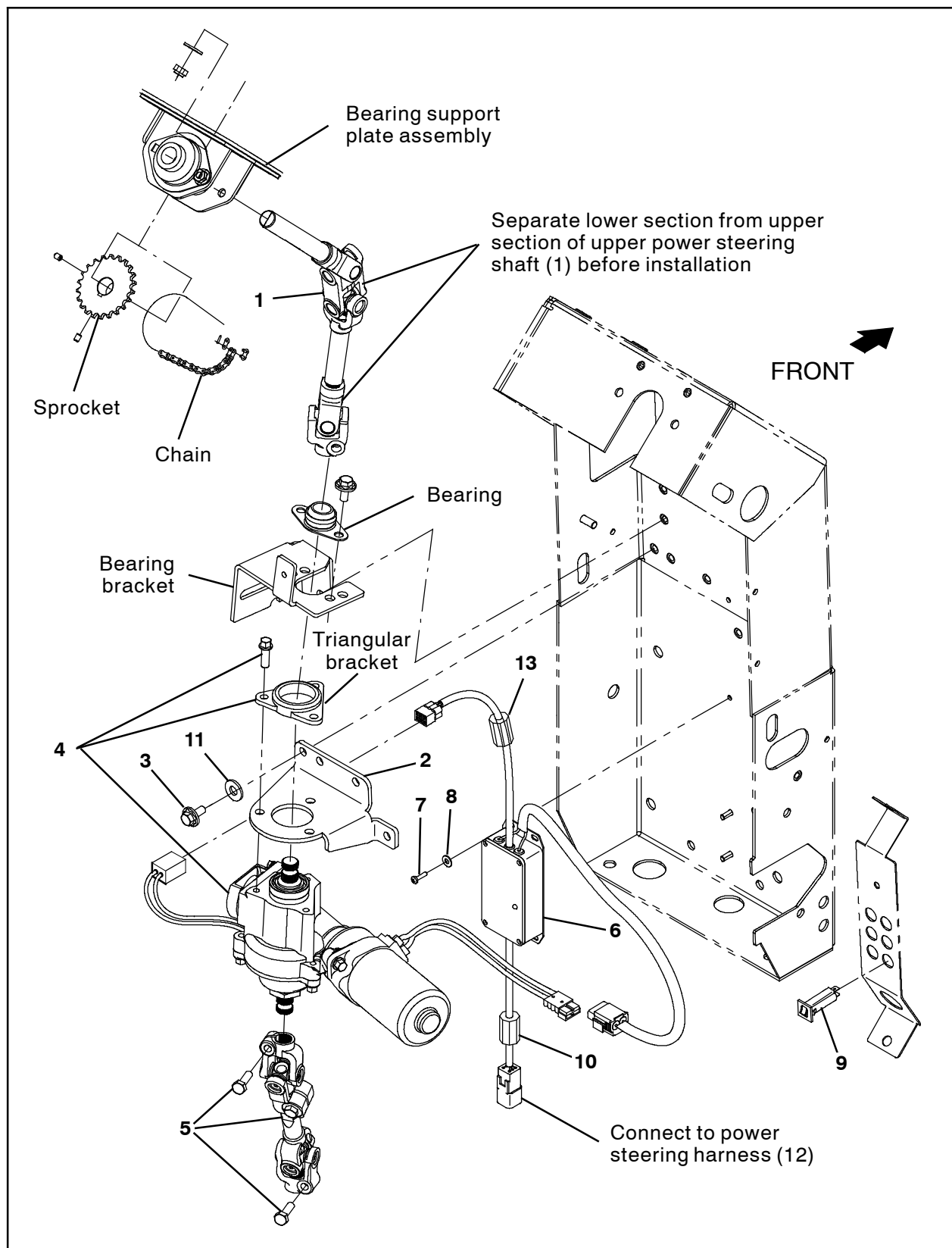


FIG. 3

10. Loosen the hardware securing the bearings to the bearing support plate assembly. (Fig. 3)

11. Slide the upper power steering shaft (1) through the bearing located at the bottom of the bearing support plate assembly, slide the sprocket onto the upper power steering shaft, and slide the upper power steering shaft through the bearing located at the top of the bearing support plate assembly. (Fig. 3)
12. Reinstall the bearing onto the bearing bracket. Note location of bearing on the bearing bracket. The bearing must be installed where shown for the power steering to function properly. (Fig. 3 / Fig. 4)

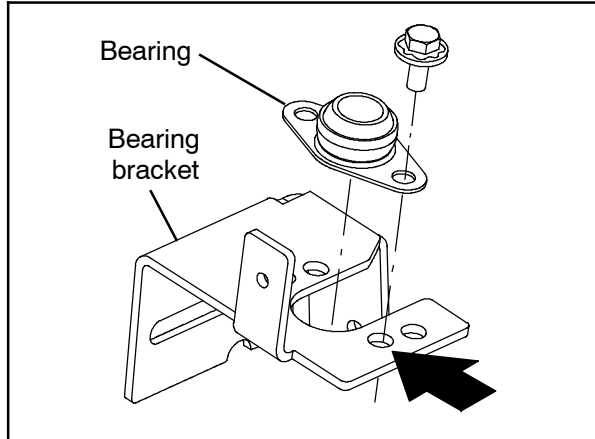


FIG. 4

13. Separate the upper power steering shaft (1), slide the shaft into the bearing in the bearing bracket, and reassemble the upper power steering shaft. (Fig. 3)
14. Install the upper power steering shaft (1) / bearing support plate assembly / bearing bracket into the steering channel. Tighten hardware just enough to hold the components into place in the steering channel. Do not completely tighten the hardware. Hardware is tightened during adjustment. (Fig. 3)
15. Align the sprocket in the bearing support plate assembly with the sprocket on the steering wheel shaft. (Fig. 3)
16. Reinstall the chain onto the steering sprockets. (Fig. 3)
17. Tighten the hardware to fully secure the bearing support plate assembly to the steering channel. (Fig. 3)
18. Remove the triangular bracket from the power steering motor (4). (Fig. 3)
19. Use the hardware and triangular bracket included with the power steering motor (4) to install the steering bracket (2) onto the power steering motor. (Fig. 3)
20. Use four M8 hex screws (3) and four flat washers (11) to install the power steering motor assembly into the steering channel. Do not completely tighten the hardware. Hardware is tightened during adjustment. (Fig. 3)
21. Install the upper power steering shaft (1) onto the power steering motor (4). (Fig. 3)
22. Loosen the hardware included with the lower power steering shaft (5). (Fig. 3)
23. Install the lower power steering shaft (5) onto the drive wheel assembly and the power steering motor (4). (Fig. 3)
24. Tighten the four M8 hex screws (3) to fully secure the power steering motor assembly into the steering channel. (Fig. 3)
25. Tighten the hardware included with the lower power steering shaft (5) to the drive wheel assembly and the power steering motor (4). (Fig. 3)
26. Reinstall the bearing bracket onto the steering channel. (Fig. 3)
27. Carefully pull circuit breaker bracket out far enough to access the main wire harness connectors located behind the bracket. **Do Not** break any wire connections. (Fig. 5)

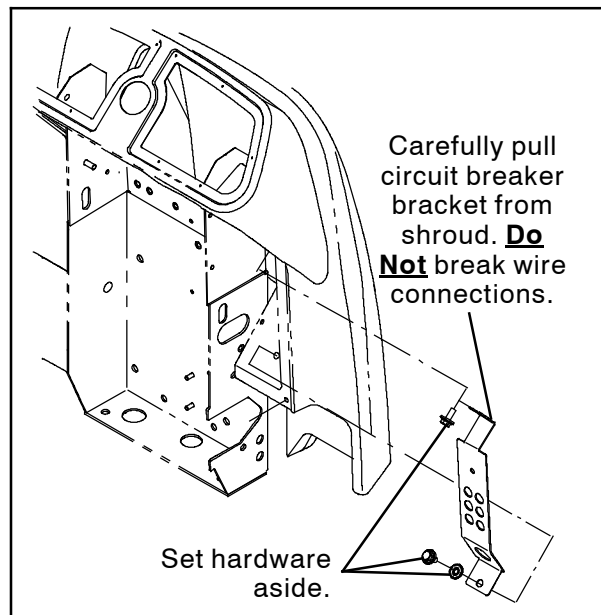


FIG. 5

28. Connect the main wire harness to the 15- Amp circuit breaker (9). (Fig. 3 / Fig. 8 / Fig. 9)
29. Insert the 15- Amp circuit breaker (9) into circuit breaker location 15 in the circuit breaker bracket. (Fig. 3)
30. Install the 12.7Mmid inductor (10) onto the power steering controller (6). (Fig. 3 / Fig. 8 / Fig. 9)
31. Use three M4 pan screws (7) and three flat washers (8) to install the power steering controller (6) into the steering channel. (Fig. 3 / Fig. 8 / Fig. 9)
32. Connect the power steering controller (6) to the power steering motor (4). (Fig. 3 / Fig. 8 / Fig. 9)
33. Install the 36.2Mml inductor (13) onto the power steering harness (12). (Fig. 3 / Fig. 7 / Fig. 9)
34. Connect the power steering harness (12) to the power steering controller (6). (Fig. 3 / Fig. 7 / Fig. 9)
35. Connect the power steering harness (12) to the 15- Amp circuit breaker (9) in circuit breaker location 15 in the circuit breaker bracket. (Fig. 3 / Fig. 7 / Fig. 9)
36. Reinstall the circuit breaker bracket onto the machine. (Fig. 5)

37. Connect the power steering harness (12) to the controller B- terminal. (Fig. 6 / Fig. 8 / Fig. 9)

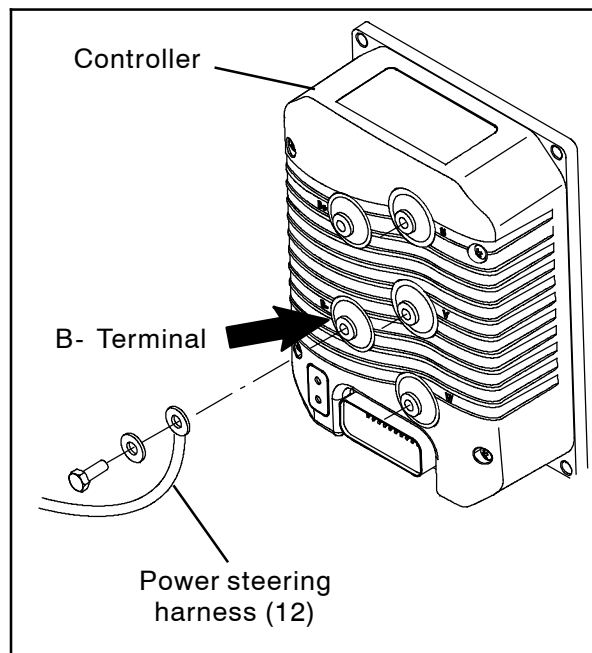


FIG. 6

38. Tighten chain tensioner hardware as necessary. (Fig. 2)
39. Reconnect the battery cable to the battery.
40. Start and test the machine. Turn the steering wheel in both directions. Observe the power steering components. All parts should move freely and not bind when the steering wheel is turned. Steering components should not rub or touch other components.
41. Reinstall the access panel onto the machine.

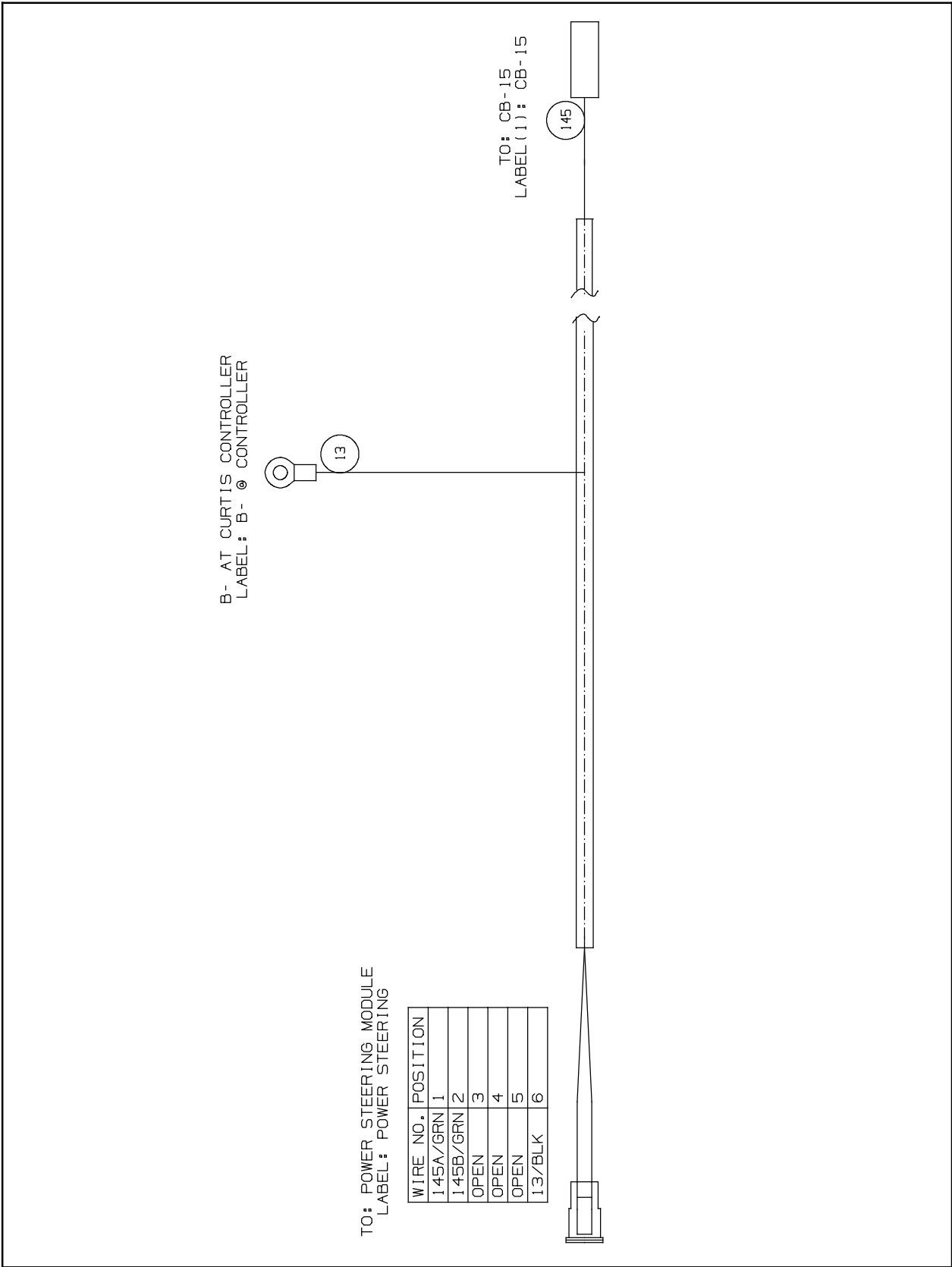


FIG. 7



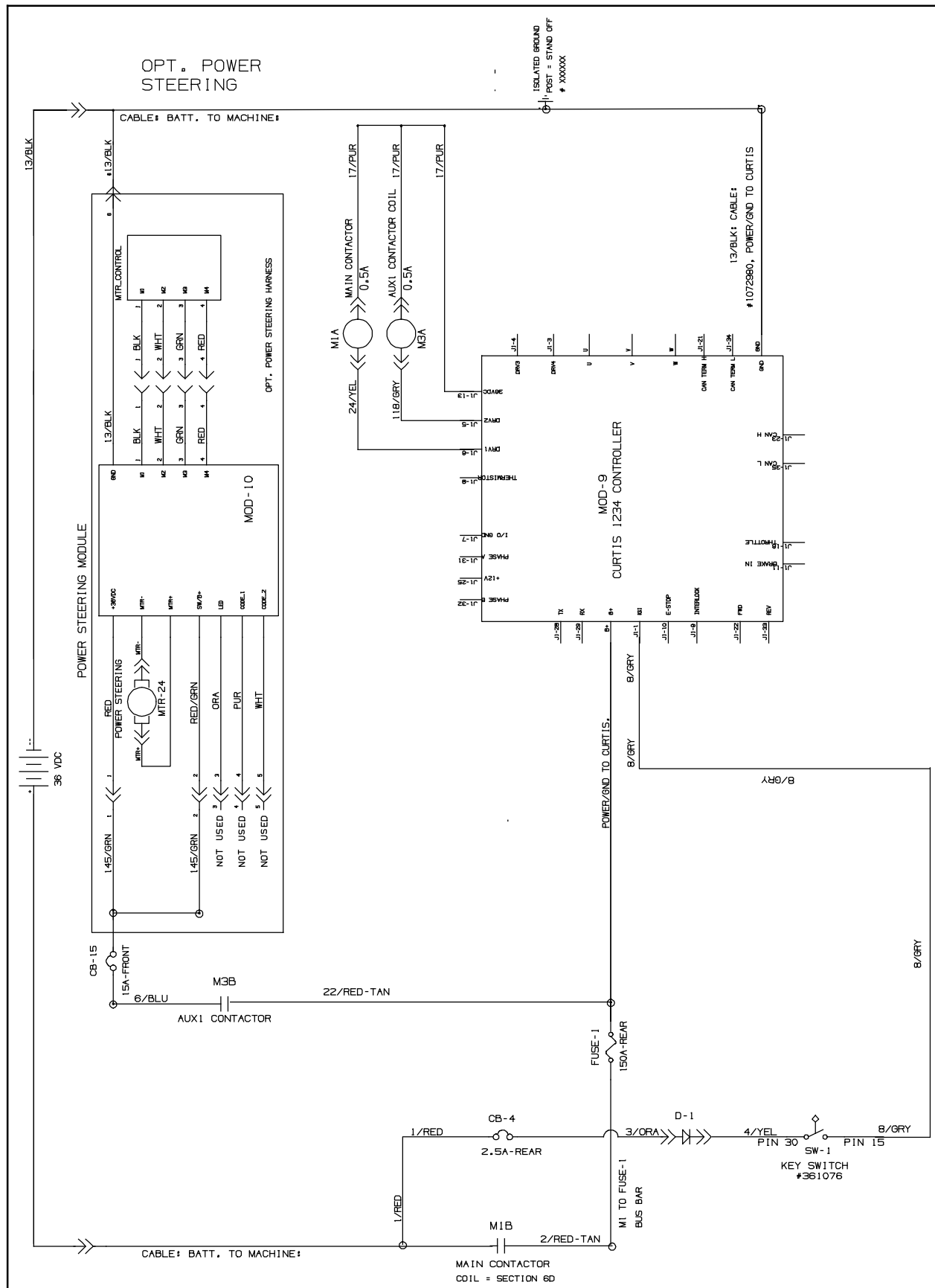


FIG. 9

Bill Of Materials For Steering Kit, Power, DI [T17] - 9013037

Ref.	Part No.	Description	Qty.
1	1208122	Shaft, Steering, Power, Upper	1
2	1205262	Bracket, Mtg, Steering	1
3	1020341	Screw, Hex, M8 X 1.25 X 20, NL, SS,	4
4	1204306	Motor Assy, Steering, Power, 12v	1
5	1209652	Shaft, Steering, Power, Lower	1
6	1208907	Controller, Steering, 36v	1
7	24265	Screw, Pan, Phl, M4 X 0.70 X 16, SS	3
8	01683	Washer, Flat, 10, SS	3
9	1064188	Circuit Breaker, 15.0a, Resettable	1
10	1052126	Inductor, 12.7Mmid [156 Imp At 25Mhz]	1
11	32491	Washer, Flat, 0.31, Std	4
12	1073062	Harness, Ele [Power Steering, T17]	1
13	1052126	Inductor, 36.2Mml, Rnd [Ferrite 1- 300Hz]	1

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