

# **INSTRUCTION BULLETIN**

No. 9015639

Machine: M20 / T20 /

M30

Published: 02-2017

Rev. 00

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 9015636

### SYNOPSIS:

This kit contains the parts needed to replace the steering gear box on M20 / T20 / M30 machines equipped with the pod panels.

Please follow step-by-step instructions.

# **SPECIAL TOOLS / CONSIDERATIONS: NONE**

(Estimated time to complete: 45 minutes)





# 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 so the steering wheel is positioned correctly and the front wheel is pointed out straight from the front of the machine.

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

2. Disconnect the battery cables from the battery.



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

### INSTALLATION:

- 1. Disconnect the main wire harness from the control pod.
- 2. Loosen the socket screws in the steering tilt bracket securing the control pod into the collar. (Fig. 1)
- 3. Pull the control pod from the steering assembly. Set the control pod aside. (Fig. 1).
- 4. Remove the steering wheel from the steering gear box shaft. Set the steering wheel, jam hex nut, and both thrust washers aside. (Fig. 1)
- 5. Remove the M8 pan screws securing the right steering tilt bracket to the frame of the machine. Set the M8 pan screws and flat washers aside. (Fig. 1)

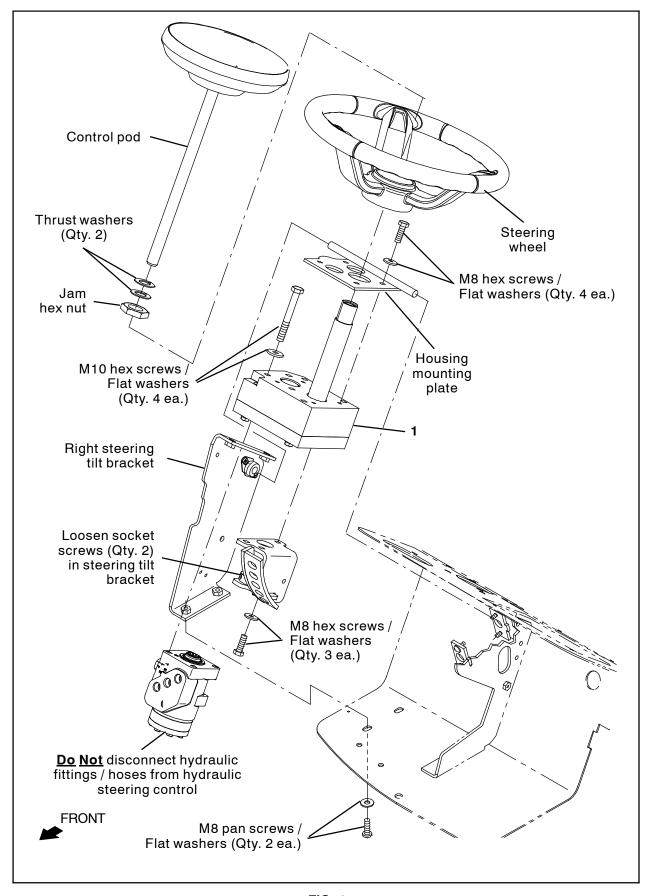


FIG. 1

 Remove both M8 pan screws securing the right steering tilt bracket to the frame of the machine. Set the M8 pan screws and flat washers aside. (Fig. 1 / Fig. 2)

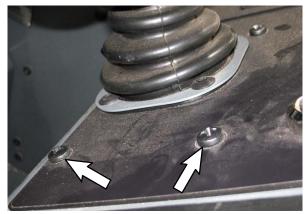


FIG. 2

- 7. Remove the right steering tilt bracket from the frame of the machine. Set the right steering tilt bracket aside. (Fig. 1)
- Remove the four M10 hex screws securing the hydraulic steering control to the steering gear box. (Fig. 1)

NOTE: <u>Do Not</u> disconnect any hydraulic hoses / connections from the hydraulic steering control when removing it from the steering gear box.

- Remove the steering gear box from the machine. (Fig. 1)
- 10. Remove the steering tilt bracket from the steering gear box. Set the steering tilt bracket, the three M8 hex screws, and the three flat washers aside. (Fig. 1)
- 11. Remove the housing mounting plate from the steering gear box. Set the housing mounting plate, the four M8 hex screws, and the four flat washers aside. Discard the removed steering gear box. (Fig. 1)
- 12. Install the housing mounting plate onto the new steering gear box (1). (Fig. 1)
- Install the steering tilt bracket onto the steering gear box (1). Do not completely tighten the three M8 hex screws. These items are tightened during later adjustment. (Fig. 1)

- Insert the steering gear box (1) / housing mounting plate / steering tilt bracket into place in the machine and install the hydraulic steering control onto the steering gear box. (Fig. 1)
- 15. Reinstall the right steering tilt bracket onto the machine. (Fig. 1 / Fig. 2)
- 16. Confirm the front wheel is pointed out straight from the front of the machine. (Fig. 3)

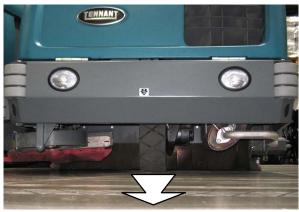


FIG. 3

17. Place the steering wheel onto the steering gear box shaft. Correctly orient the steering wheel (Fig. 4)



FIG. 4

- 18. Insert the control pod into the steering wheel / gear box shaft / steering tilt bracket. (Fig. 1)
- Reconnect the main wire harness to the control pod

- 20. Tighten the socket screws in the steering tilt bracket to secure the control pod in the steering tilt bracket. (Fig. 1)
- 21. Tighten the three M8 hex screws to fully secure the steering tilt bracket to the steering gear box (1). (Fig. 1)
- 22. Reconnect the battery cables to the batteries.
- 23. Start and test the machine. Turn the steering wheel in the full range of motion in both directions. If there is any binding or steering is difficult, loosen the three M8 hex screws securing the steering tilt bracket to the steering gear box (1). Retighten the three M8 hex screws. Recheck steering.

# Bill Of Materials For Gearbox Kit, Steering, Afmkt [M20 / 30 / T20] - 9015636

	Tennant		
Ref.	Part No.	Description	Qty.
1	1224095	Gearbox, Steering	1

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