

# **INSTRUCTION BULLETIN**

No. 9020903 Machine: M17

Published: 05-2020

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 9020747

Kit installation must be performed by Tennant $True^{\mathscr{B}}$  service or an authorized service provider.

#### SYNOPSIS:

This kit contains the parts needed to change/replace the drive wheel oil in M17 Sweeper-Scrubbers. Please follow step-by-step instructions.

#### SPECIAL TOOLS / CONSIDERATIONS: NONE

(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:

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

- 1. Place a chock behind both rear tires.
- Loosen the socket screws (Qty. 4) on the drive wheel. (Fig. 1)

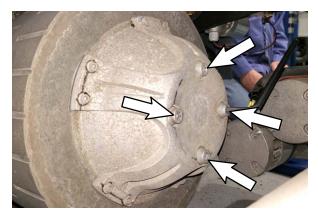


FIG. 1

3. Jack up the front end of the machine enough to access the drive wheel assembly. Place jack stands under the machine and lower the machine onto the jack stands. See MACHINE JACKING in the MAINTENANCE section of the OPERATOR MANUAL. (Fig. 2)

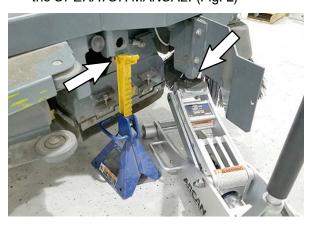


FIG. 2

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.

- 4. Remove the main scrub brush and side scrub brush from the machine.
- 5. Turn the steering wheel as far to the right (clockwise) as possible to allow easier access to the other side of the drive wheel assembly.
- Use the two extractor hex screws (3) to press the wheel from the drive wheel assembly. Tighten the screws evenly until the wheel comes freely from the drive wheel assembly. (Fig. 3/Fig. 4)

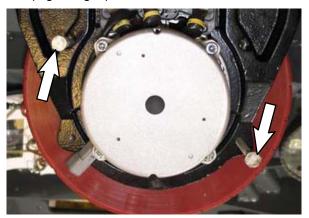


FIG. 3



FIG. 4

## **INSTALLATION:**

- Turn the steering wheel as far to the left as possible until the drive wheel hub is oriented to the front of the machine to allow easier access to the oil drain and fill plugs.
- 2. Position a drain pan underneath the drive wheel assembly drain plug.
- 3. Remove the fill plug from the drive wheel assembly to allow the oil to drain easier. (Fig. 5)



FIG. 5

4. Remove the drain plug from the drive wheel assembly and allow the oil to drain into the drain pan. (Fig. 6)



FIG. 6

- 5. Clean the drive wheel assembly drain plug.
- 6. Tighten the drain plug into the drive wheel assembly. Torque the drain plug to 16-18 Nm (11.8-13.3 ft. lbs.).
- 7. Use the yellow marker (4) to mark the drain plug and gearbox housing to show the drain plug is correctly torqued.

- 8. Insert the plastic straight fitting (6) into the oil pump (2) hose.
- 9. Use the hose clamp (7) to secure the plastic straight fitting (6) in the oil pump (2) hose.
- 10. Use the oil pump (2) to fill the drive wheel assembly with fresh oil (1).
- 11. Tighten the fill plug into the drive wheel assembly. Torque the fill plug to 16-18 Nm (11.8-13.3 ft. lbs.).
- 12. Use the yellow marker (4) to mark the fill plug and gearbox housing to show the fill plug is correctly torqued.
- 13. Place the wheel onto the drive wheel assembly and use two dowels to align the holes in the wheel with the holes in the drive wheel assembly. (Fig. 7/Fig. 8)

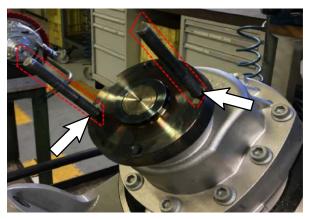


FIG. 7



FIG. 8

14.Apply red thread sealant onto the threads of two of the replacement kit (5) hex screws needed to secure the wheel onto the drive wheel assembly.

- 15. Loosely hand tighten the two replacement kit (5) hex screws from the previous step into the wheel and the drive wheel assembly until the wheel is loosely secured into place.
- 16. Remove the alignment dowels from the drive wheel assembly.
- 17. Apply red thread sealant onto the threads of the two remaining replacement kit (5) hex screws needed to secure the wheel onto the drive wheel assembly.
- 18. Loosely hand tighten the two replacement kit(5) hex screws from the previous step into the wheel and the drive wheel assembly.
- 19. Tighten the previously installed replacement kit (5) hex screws (Qty. 4) to 75 Nm (55.3 ft. lbs.). Use a star pattern to evenly tighten the hex screws.

NOTE: It maybe not be possible to achieve final torque with machine jacked up from the floor. It may be necessary to lower machine to the floor to tighten the hex screws to correct torque.

- 20. Jack the machine up off the jack stands, remove the jack stands from under the machine, and lower the machine to the floor.
- 21.If necessary, tighten the replacement kit (5) hex screws (Qty. 4) to the correct torque.
- 22. Use the yellow marker (4) to mark the replacement kit (5) hex screws (Qty. 4) and gearbox housing to show the hex screws are correctly torqued..
- 23. Jack the machine up off the jack stands, remove the jack stands from under the machine, and lower the machine to the floor.
- 24. Test the machine. Turn the machine on and operate it in both the forward and reverse directions. Listen for noise in the drive wheel assembly. Observe underneath the drive wheel assembly for leaks.

# Bill Of Materials For Oil Kit, Drive, Afmkt [M17] - 9020747

	Tennant		
Ref.	Part No.	Description	Qty.
1	1247952	Oil, Gear	1
2	1250968	Pump, Hand	1
3	1248639	Maint Kit [Extractor] [Amer]	1
4	1248640	Marker, Pnt, Yel	1
5	1248641	Screw, Replmt [Amer]	1
6	630164	Fitting, Plstc, Str, BM04/BM08	1
7	54333	Clamp, Hose, Wormdrive, 0.31-0.88, .31W	1

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