

# **INSTRUCTION BULLETIN**

No. 9045142 Machine: S16 Published: 08-2021 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 9045141

Kit installation must be performed by Tennant*True<sup>®</sup>* service or an authorized service provider.

#### SYNOPSIS:

This kit contains the parts needed to install a front skirt linkage kit on S16 sweepers. Please follow step-by-step instructions.

#### SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 1.5 - 2.0 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.

#### **INSTALLATION:**

1. Release the main sweeping brush compartment access door and open the access door. (Fig. 1)



FIG. 1

2. Remove the knobs securing the idler arm assembly to the main sweep assembly. Set both knobs aside. (Fig. 2)

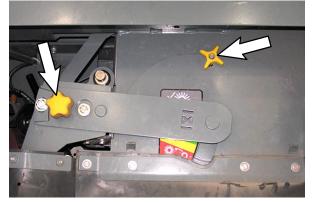


FIG. 2

3. Remove the idler arm assembly from the main brush assembly and remove the main sweep brush from the sweep compartment. Set removed components aside. (Fig. 3)



FIG. 3

- 4. Remove the left shroud from the machine. Set the left shroud aside aside.
- 5. Machines with optional left sweep brush only: Remove the left sweep brush from the machine. Set the brush and installation hardware aside.

NOTE: Although not necessary (parts can be accessed without jacking up the front end of the machine) jacking up the machine does make accessing/removing/installing parts easier. See MACHINE JACKING in MAINTENANCE section of Operator Manual for instructions how to safely jack up the front end of the machine.

 Remove the spring from the link plate and left pivot mounting bracket. Discard the spring. (Fig. 4)

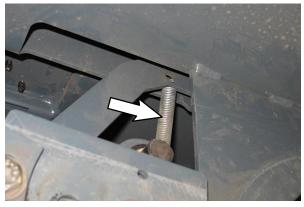
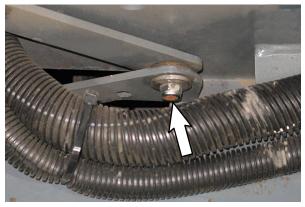


FIG. 4

7. Remove the hardware securing the link plate to the skirt pedal weldment. (Fig. 5)





8. Remove the skirt pedal from the machine. Set the skirt pedal aside. Discard all skirt pedal mounting hardware. (Fig. 6)



FIG. 6

9. Remove the M8 hex nut securing the lift sweep arm to the left pivot mounting bracket. Set all hardware aside. (Fig. 7)



FIG. 7

10. Disconnect the spring from the lift sweep arm. Leave the other spring connected to the machine. (Fig. 8)

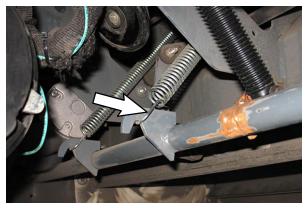


FIG. 8

11. Remove the hardware securing the plate link to the bearing mounting bracket and crank shaft. Discard the removed hardware and plate link. (Fig. 9)

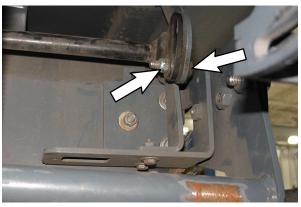


FIG. 9

12. Remove the bearing mounting bracket from the left pivot mounting bracket. Set the bearing mounting bracket and hardware aside. (Fig. 10)

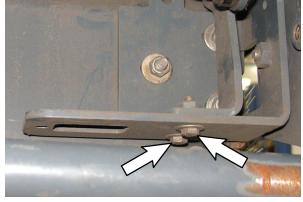


FIG. 10

13. Remove the left pivot mounting bracket from the frame of the machine. Discard the removed hardware and the left pivot mounting bracket. (Fig. 11)

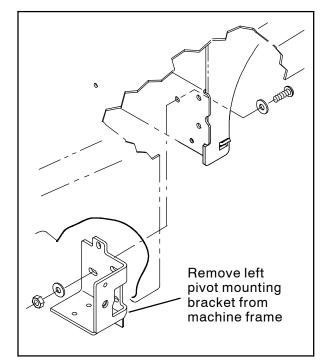


FIG. 11

14. Remove the hardware securing the arm bracket to the plate link. Discard the hardware. (Fig. 12)

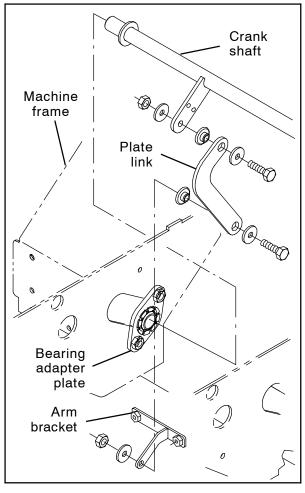


FIG. 12

- 15. Remove the plate link from the crank shaft. Discard the plate link and all hardware used to the plate link to the crank shaft. (Fig. 12)
- 16. Pull the crank shaft out from the machine. Discard the crank shaft assembly and all parts remaining installed on the crank shaft. (Fig. 12)

- 17. Slide the crank shaft (2) into the bearing adapter plate installed on the frame of the machine. (Fig. 13)
- 18.Use an M8 hex screw (9), two flat washers (7), a bronze bushing (6), and an M8 hex nut to install the plate link (3) onto the crank shaft (2). Torque hardware to between 7.6-9.9 Nm (5.6-7.3 ft lb). (Fig. 13)
- 19. Use one M8 hex screw (9), two flat washers (7), one bronze bushing (6), and one M8 hex nut (10) to install the arm bracket onto the plate link (3). Torque hardware to between 7.6-9.9 Nm (5.6-7.3 ft lb). (Fig. 13)
- 20. Use three M8 button screws (11), six flat washers (7), and three M8 hex nuts (12) to install the left pivot mounting bracket (4) onto the frame of the machine. (Fig. 14)
- 21.Slide the crank shaft (2) into the bearing bracket and install the bearing bracket onto the left pivot mounting bracket (4). (Fig. 13)
- 22.Reconnect the spring to the lift sweep arm. (Fig. 8/Fig. 14)
- 23. Use one M8 hex screw (9), two flat washers (7), one bronze bushing (6), and one M8 hex nut (10) to install the plate link (1) onto the crank shaft (2). Torque hardware to between 7.6-9.9 Nm (5.6-7.3 ft. lbs.). (Fig. 13)
- 24. Use one M8 hex screw (9), two flat washers (7), one bronze bushing (6), and one M8 hex nut (10) to install the skirt pedal onto the machine. Torque hardware to between 7.6-9.9 Nm (5.6-7.3 ft. lbs.). (Fig. 13)
- 25. Use one one M8 hex nut (10), two flat washers (7), and one bronze bushing (6) to install the plate link (1) onto the skirt pedal. Torque hardware to between 7.6-9.9 Nm (5.6-7.3 ft. lbs.). (Fig. 13)
- 26.Connect the spring (5) to the plate link (1) and the left pivot mounting bracket (4). (Fig. 13)
- 27.Install the lift sweep arm onto the left pivot mounting bracket (4). (Fig. 14)

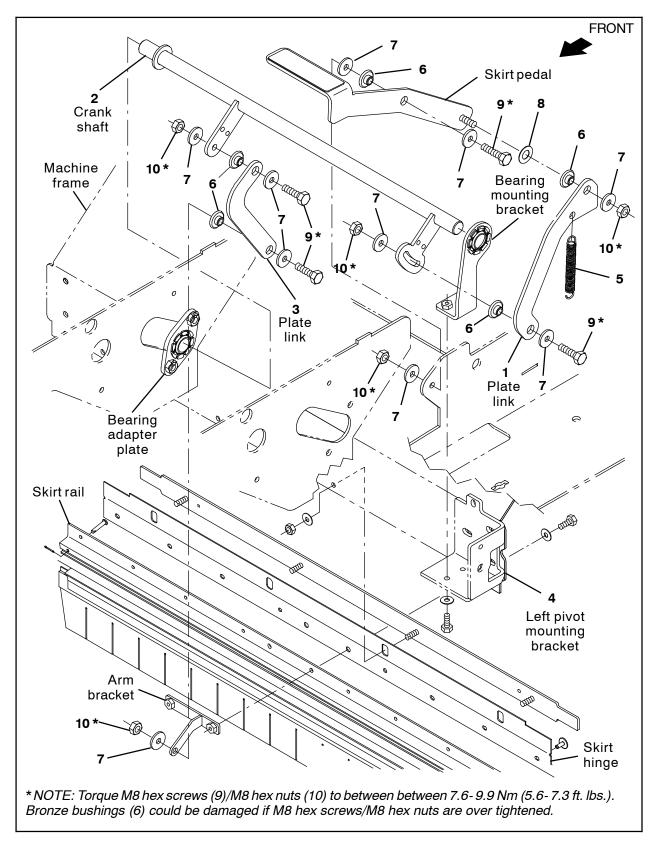


FIG. 13

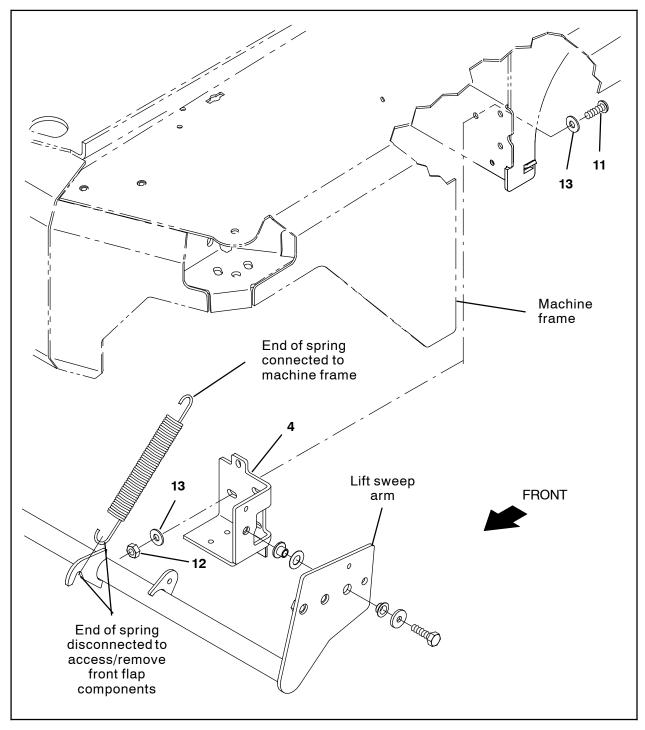


FIG. 14

28. Press the skirt pedal and observe the front flap. The front flap should easily raise when the skirt pedal is push and easily lower when the skirt pedal is released. The hinge skirt should also be vertical when the pedal is released. Loosen the M8 hex nut and M8 hex screw and adjust the plate link (1) as necessary in the arc slot in the crank shaft (2) to adjust this angle. Make adjustments as necessary if front flap is not moving freely/easily. (Fig. 15)

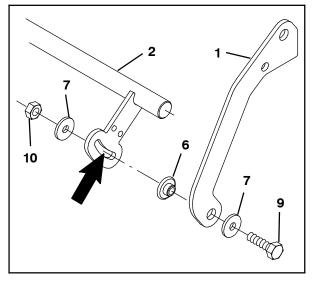


FIG. 15

- 29. Reinstall the main sweep brush into the sweep compartment.
- 30. Reinstall the idler arm onto the machine.
- 31.Close the main sweep brush compartment access door.
- 32. Reinstall the left shroud onto the machine.
- 33. Machines with optional left sweep brush only: Reinstall the left sweep brush onto the machine.
- 34. Check the main sweep brush taper/pattern. Adjust main sweep brush taper/pattern as necessary. Refer to CHECKING THE MAIN SWEEP BRUSH PATTERN and ADJUSTING THE MAIN SWEEP BRUSH PATTERN in the MAINTENANCE section of the Operator Manual for instructions and additional information.
- 35. Operate and test the machine. Operate the machine over typical customer sweeping routes. Observe for excessive dusting and poor sweeping performance. Make necessary adjustments.

### Bill Of Materials For Parts Kit, Front Skirt, Linkage - 9045141

	Tennant		
Ref.	Part No.	Description	Qty.
1	1255725	Plate, Link	1
2	1256190	Shaft, Crank Wldt	1
3	1256189	Plate, Link	1
4	1255839	Bracket Wldt, Mtg, Pivot, LH	1
5	1256660	Spring, Extn, 1.13OD 0.11Wir 04.0L	1
6	80950	Bushing, FIng, 0.32B 0.50D 0.24L, Bnz	5
7	1017218	Washer, Flat, 0.32B 1.00D .12, SS	9
8	89710	Washer, Flat, 0.51B 1.00D .03, Nyl	1
9	09023	Screw, Hex, M8 X 1.25 X 35, FI, SS	4
10	08713	Nut, Hex, Lock, M8 X 1.25, NL, SS	5
11	223470	Screw, Btn, M8 X 1.25 X 25, SS	3
12	08709	Nut, Hex, Lock, M8 X 1.25, NL	3
13	01685	Washer, Flat, 0.38B 0.88D .08, SS	6

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