



# INSTRUCTION BULLETIN

No. 340160  
Machine: 6100E 6100G/LP  
Published: 12-02  
Rev. 01

**NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you 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 83223(12V), 83229(36)

## **SYNOPSIS / PROBLEM:**

This kit contains the parts needed to install a left hand side brush kit on the model 6100E and 6100G/LP sweeper.

Please follow step-by-step instructions.

## **SPECIAL TOOLS / CONSIDERATIONS:** None

(Estimated time to complete: 2 hours)

## **PREPARATION:**

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

1. Disconnect battery cables from machine.



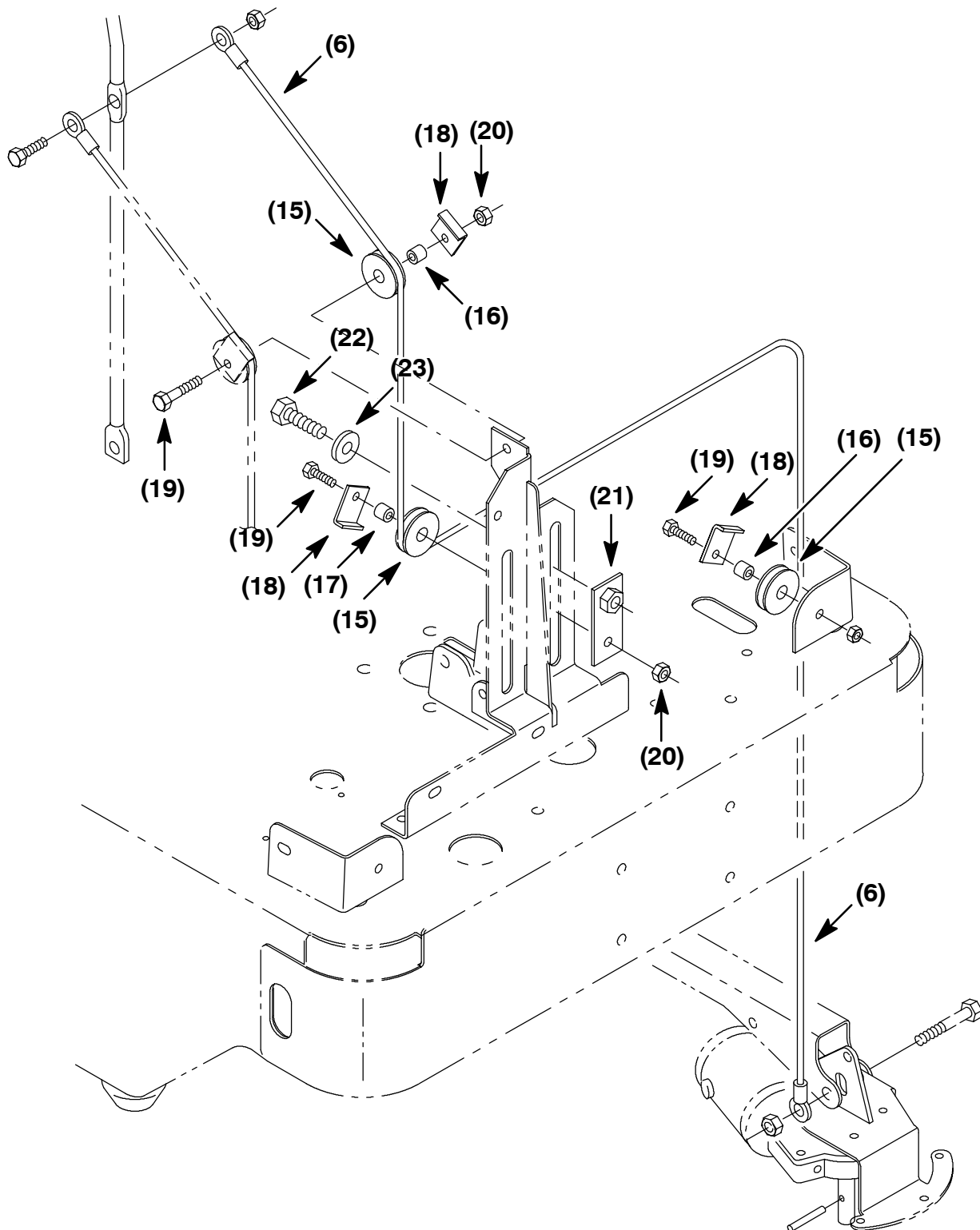
**WARNING: Always disconnect battery cables from machine before working on electrical components.**

## **INSTALLATION:**

(Refer to FIG. 1 and 2)

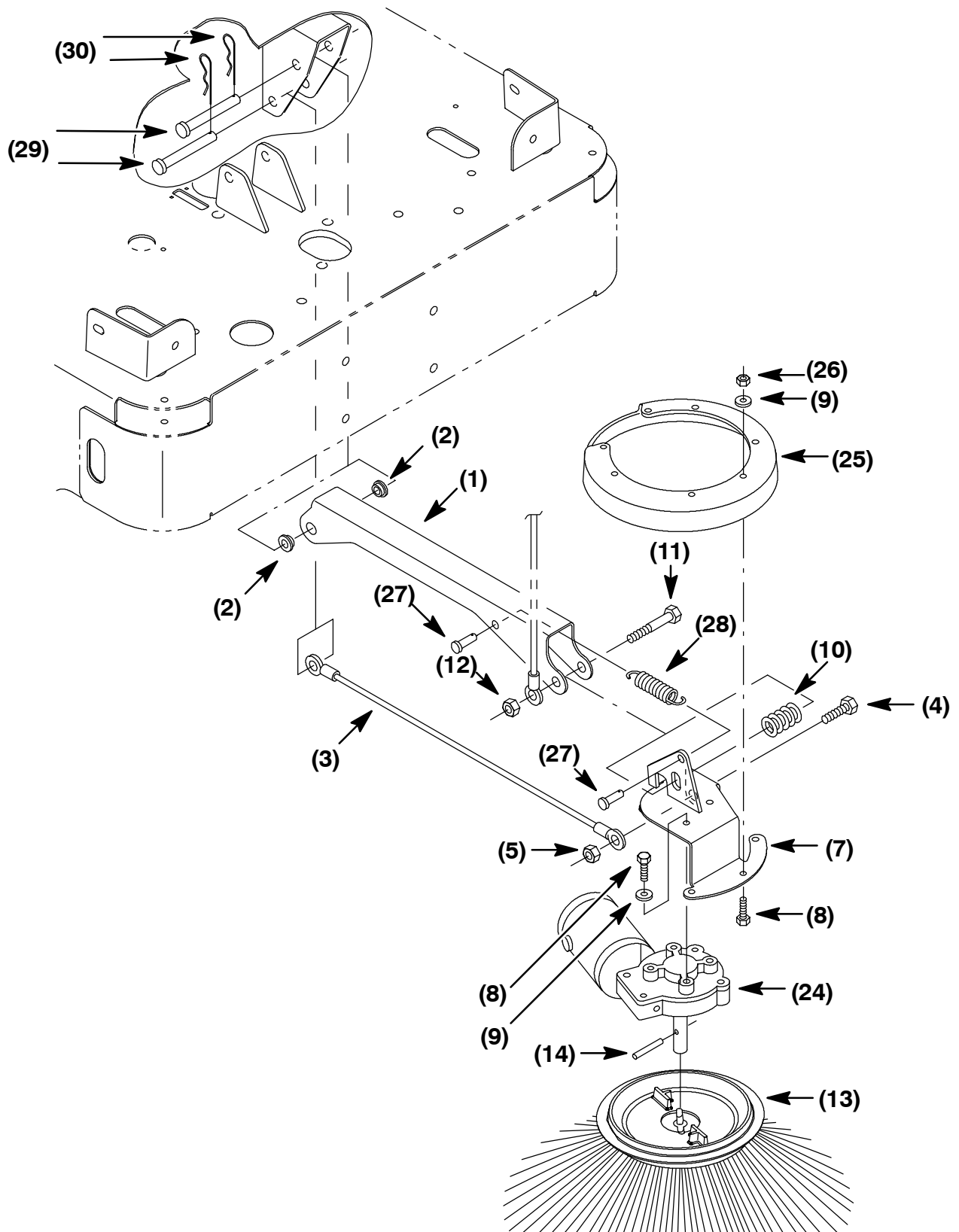
1. Position the LH side brush lift cable (6) into the machine in the operators compartment. (Refer to FIG. 1)
2. Remove the hex nut holding the RH side brush cable to the lift handle. Install the LH cable (6) onto the hex screw. Reinstall the hex nut. (Refer to FIG. 1)
3. Route the LH lift cable (6) down, through the hole in the frame in the left, front corner of the machine. (Refer to FIG. 1)
4. Install the three pulleys (15), steel sleeves (16 & 17), cable keepers (18), hex screws (19), and hex nuts (20). Leave the hardware loose for now. (Refer to FIG. 1)
5. Install the middle pulley (15) onto the side brush lift plate (21). (Refer to FIG. 1)
6. Install the side brush lift plate (21) onto the machine frame using the hex screw (22) and washer (23). Leave loose for now. (Refer to FIG. 1)
7. Install the LH lift cable (6) under the cable keepers (18). Hand tighten the three hex screws (19) and nuts (20). (Refer to FIG. 1)

8. Install the side brush motor assembly (24) onto the mount bracket (7) using four hex screws (8) and washers (9). Tighten the hardware. (Refer to FIG. 2)
9. Install the side brush guard (25) onto the mount bracket (7) using five hex screws (8), washers (9), and nuts (26). Tighten the hardware. (Refer to FIG. 2)



**FIG. 1 - Side Brush Lift Group**

10. Install the two flange bushings (2) into the holes in the end of the side brush mount channel (1). (Refer to FIG. 2)



**FIG. 2 - Side Brush Motor Group**

11. Install the side brush motor (24), mount bracket (7), and brush guard (25) onto the side brush mount channel (1). Install the hex screw (11) and compression spring (10). Install the open end of the side brush lift cable (6) over the end of the screw. Install the nut (12) and hand tighten. (Refer to FIG. 2)

12. Install one end of the side brush cable (3) onto the side brush bracket (7) using the hex screw (4) and nut (5). Hand tighten. (Refer to FIG. 2)
13. Install the tension spring (28) using the two clevis pins (27) onto the mount bracket (7) and mount channel (1). (Refer to FIG. 2)
14. Install the whole side brush assembly into the machine using the two clevis pins (29) and hair pin cotter pins (30). Make sure the open end of the side brush cable (3) is installed under the lower hole in the machine frame. (Refer to FIG. 2)
15. Install the roll pin (14) into the hole in the side brush motor (24) shaft. (Refer to FIG. 2)
16. Install the side brush assembly (13) onto the motor (24). (Refer to FIG. 2)
17. **6100E:** Locate the wire connector (11A/BRN and 13B/BLK) in the main machine harness (in the area of the front left corner) that is used to power the LH side brush.
18. Connect the main wire harness to the side brush motor.
19. Operate the machine and check the LH side brush for proper operation.
20. Loosen hex bolt (22) and move plate (21) down to adjust side brush height off the floor. Retighten hex bolt.

**BILL OF MATERIALS FOR LEFT HAND SIDE BRUSH KIT 83223 (12V)**

<b>Ref.</b>	<b>TENNANT Part No.</b>	<b>Description</b>	<b>Qty.</b>
1	81783	Side brush mount channel	1
2	15648	Flange bushing	2
3	81784	Side brush cable	1
4	41345	M12 hex screw, 25mm	1
5	08711	M12 hex nut	1
6	81785	LH side brush lift cable	1
7	81750	Side brush bracket	1
8	15678	M6 hex screw, 16mm	9
9	01684	Flat washer, .25 in.	9
10	87242	Compression spring	1
11	06972	M12 hex screw, 60mm	1
12	08711	M12 hex nut	1
13	80042	Side brush	1
14	11516	Roll pin	1
15	369781	Cable pulley	3
16	222460	Tube, .50 in.	2
17	80395	Tube, .70 in.	1
18	54400	Cable angle keeper	3
19	76570	M8 hex screw, 30mm	3
20	08709	M8 hex nut	3
21	81955	Side brush lift plate	1
22	06967	M12 hexm screw, 20mm	1
23	32493	Flat washer, .50 in.	1
24	379212	Electric motor, 12V	1
25	81822	Side brush guard	1
26	08712	M6 hex nut	5
27	39019	Clevis pin	2
28	15047	Tension spring	1
29	06279	Clevis pin	2
30	44906	Hairpin cotter pin	2

**BILL OF MATERIALS FOR LEFT HAND SIDE BRUSH KIT 83229 (36V)**

<b>Ref.</b>	<b>TENNANT Part No.</b>	<b>Description</b>	<b>Qty.</b>
1	81783	Side brush mount channel	1
2	15648	Flange bushing	2
3	81784	Side brush cable	1
4	41345	M12 hex screw, 25mm	1
5	08711	M12 hex nut	1
6	81785	LH side brush lift cable	1
7	81750	Side brush bracket	1
8	15678	M6 hex screw, 16mm	9
9	01684	Flat washer, .25 in.	9
10	87242	Compression spring	1
11	06972	M12 hex screw, 60mm	1
12	08711	M12 hex nut	1
13	80042	Side brush	1
14	11516	Roll pin	1
15	74391	Cable pulley	3
16	222460	Steel sleeve, .50 in.	2
17	80395	Steel sleeve, .70 in.	1
18	54400	Cable angle keeper	3
19	76570	M8 hex screw, 30mm	3
20	08709	M8 hex nut	3
21	81955	Side brush lift plate	1
22	06967	M12 hexm screw, 20mm	1
23	32493	Flat washer, .50 in.	1
24	81767	Electric motor, 36V	1
25	81822	Side brush guard	1
26	08712	M6 hex nut	5
27	39019	Clevis pin	2
28	15047	Tension spring	1
29	06279	Clevis pin	2
30	44906	Hairpin cotter pin	2
31	57164	Circuit breaker, 10amp	2

TENNANT COMPANY  
P. O. Box 1452  
Minneapolis, MN 55440-1452