



INSTRUCTION BULLETIN

No. 3237
Machine: 510E, 515,
8010
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Rev. 06

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 16966**

SYNOPSIS:

This kit contains the parts needed to install two 1.5 HP electric motors on 510E, 515, and 8010 machines.

Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 1.5 hours)

PREPARATION:

1. Park the machine on a clean level surface, engage the parking brake, shut off the machine, 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 cables from the batteries.



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

3. Remove the seat support, batteries, and battery tray to access the existing motors. Set all items removed in this step aside.
4. Disconnect and remove the existing motors from the gearboxes. Discard the motors.

INSTALLATION:

1. Apply EMB grease (3) onto the shaft of each motor. Refer to Fig. 1.
2. Apply adhesive (2) onto the internal threads of each motor. Refer to Fig. 1.

3. Use existing hardware to install the new motors (1) onto the existing gear boxes. Refer to Fig. 1.
4. Mount each motor/gearbox and existing gearbox spacers on scrubber head frame with existing hardware. Refer to Fig. 1.
5. Connect wires previously attached to the old motors to the new motors (1). Refer to Fig. 2 for 515 machines serial numbers 0000-4286 and 510E machines. Refer to Fig. 3 for the 8010 machines. Refer to Fig. 4 for the 515 serial numbers 4287 and higher.
6. Reinstall the battery tray and batteries onto the machine and reattach the battery cables to the batteries. Do not connect the battery cables to the machine.
7. Remove existing 40-Amp circuit breakers from the side of the machine. Discard both circuit breakers and hardware. Refer to Fig. 1.
8. Use a pan screw (5) and hex nut (6) to install each 50-Amp circuit breaker where the 40-Amp circuit breakers were previously located. Refer to Fig. 1.

9. **515 (serial numbers 4286 and below) and 510E machines only:** If necessary, adjust the existing shunt to obtain the correct down pressure. Center the adjustment screw in the center of the adjustment slot for an initial setting. Adjust the shunt as necessary for the appropriate brush pressure. Refer to the Shunt Adjustment Detail in Fig. 1 for the combined draw between both brush motors.

10. **515 (serial numbers 4287 and above) and 8010 machines only:** Remove the existing shunt. Set the mounting hardware aside and discard the removed shunt. Use saved hardware to install the new shunt (7) onto the machine.

11. Connect the battery cables to the machine.

12. Start and test machine to ensure the brushes operate correctly.

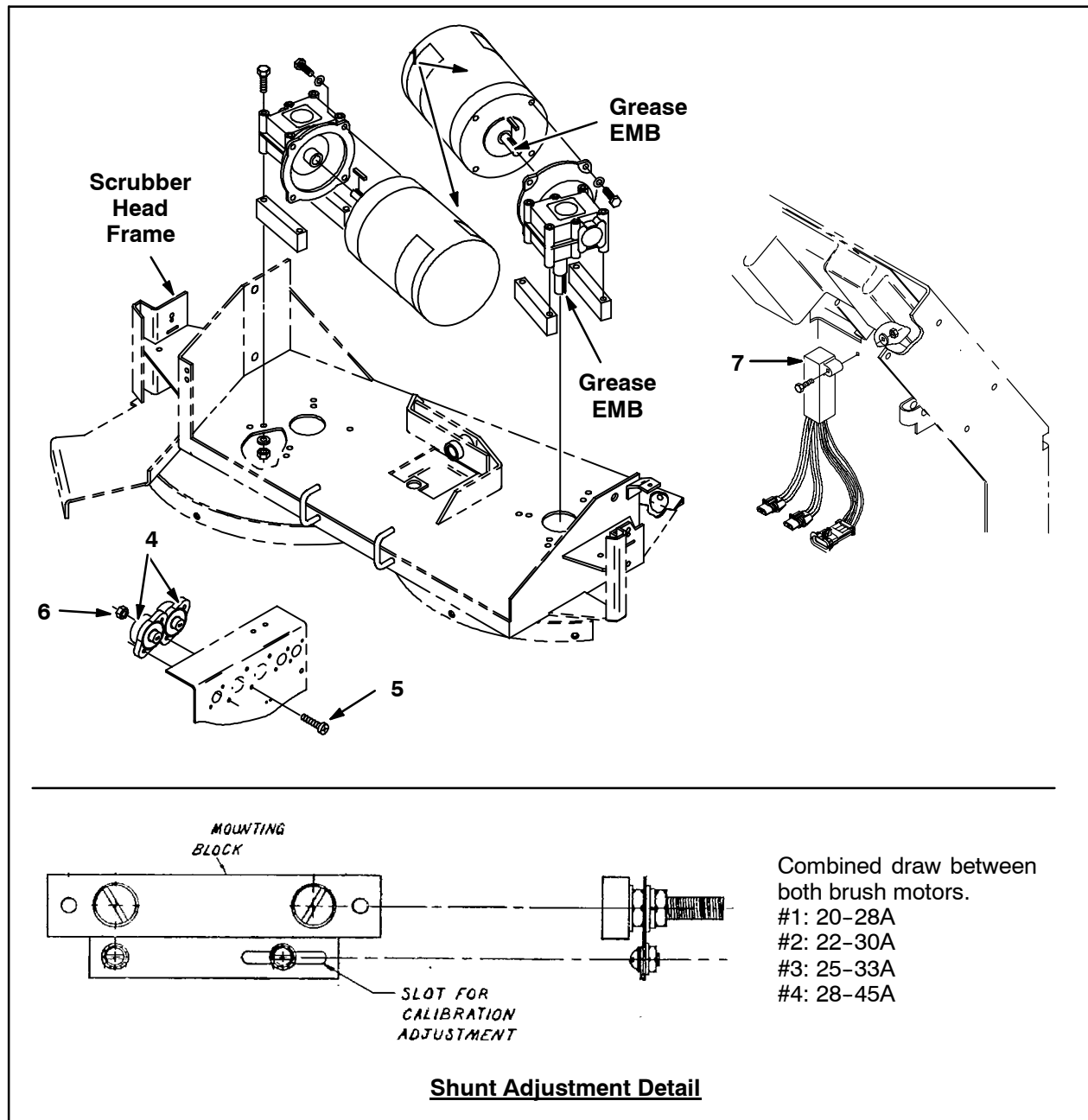


FIG. 1

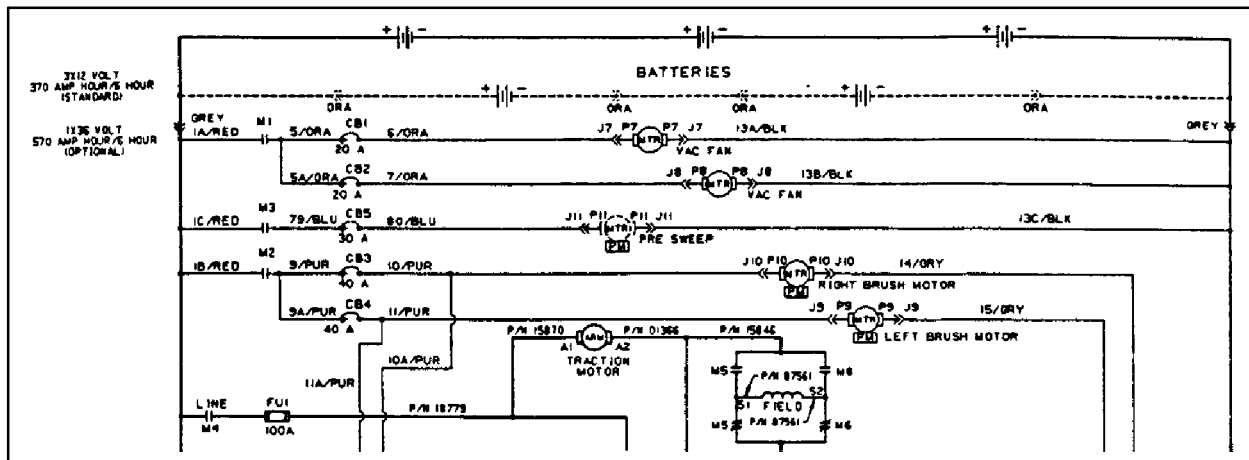


FIG. 2-Wire Diagram for 510E

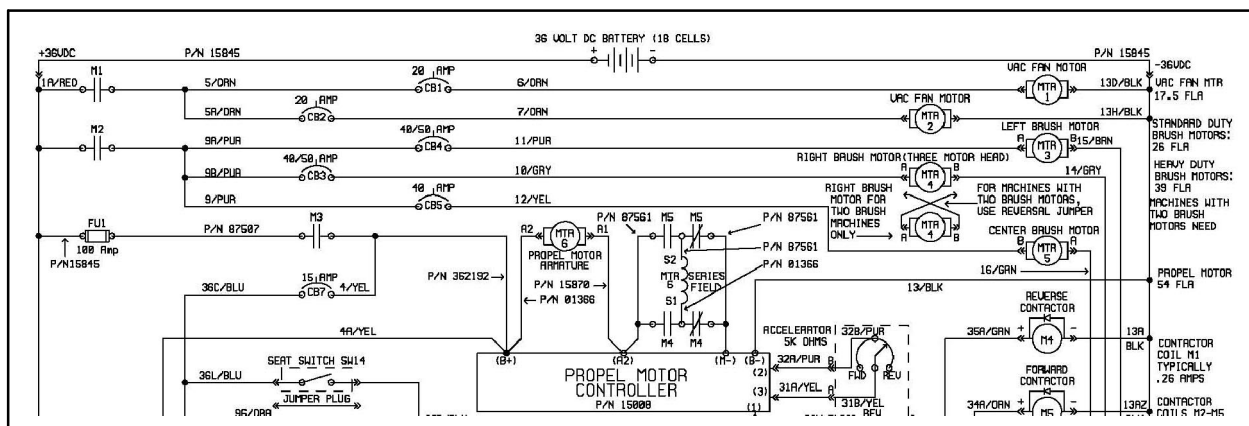


FIG. 3-Wire Diagram for 8010

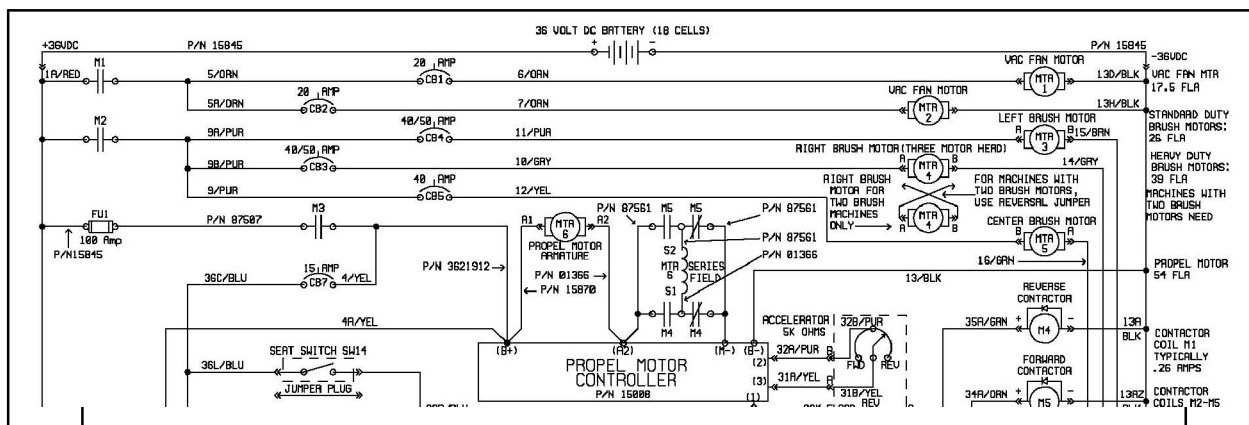


FIG. 4-Wire Diagram for 515

Bill of Material for Motor Kit, HD-16966

	Ref.	Tennant Part No.	Description	Qty.
▽		16966	Motor Kit, HD	1
▲	1	16225	Electric Motor, 1.5 HP, 36 VDC, 2200 RPM	2
▲	2	32675	Adhesive, Thread, 10.0ML [242BLU]	1
▲	3	01433-1	Grease, 14.5OZ [Lubriplate EMD]	1
▲	4	375119	Circuitbreaker, 50.0A [Resetable]	2
▲	5	06935	Screw, Pan, M5 X 0.80 X 25, 4.8	4
▲	6	06549	Nut, Hex, Lock, M5 X 0.80, NL	4
▲	7	363237	Shunt, 2 HD Motor, Red [SCB 515]-Install onto 515 and 8010 only	1

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