



INSTRUCTION BULLETIN

No. 340419
Machine: 530
Published: 06-2006
Rev. 02

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 382975

SYNOPSIS:

This kit contains the parts needed to replace the controller on the 530 sweeper/scrubber.
Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 2 hours)

PREPARATION: (Refer to FIG. 1 through 11)

1. Park the machine on a clean level surface, turn off the machine, remove the key, and set the parking brake.

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

2. Disconnect the negative terminal from the battery and then remove the positive terminal from the battery.



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

POWERPAK PANEL INSTALLATION: (Refer to Fig. 1)

1. Remove and set aside all of the cables and wires connected to the direction contactors. Remove and discard the direction contactors. Refer to Fig. 1.
2. Tie back ORANGE wires #33 and #33A ORANGE wires #31A and #32A. These wires are no longer used. Refer to Fig. 1 and Fig. 10.
3. Remove all cables and connector on the MC250 panel. Remove the complete MC250 panel. Refer to Fig. 1.

4. Cut GREEN wire #29 coming out of the accelerator box attached to the directional pedal and splice it into YELLOW wire #25C without cutting all the way through wire #25C. Tape off the battery side of GREEN wire #29 so it does not short to ground. Refer to Fig. 10.
5. Coat the bottom of Powerpak base plate panel with a heat transfer compound and install it where the MC250 was previously located.

NOTE: Due to the slightly thicker base plate, longer mounting bolts (3/8" longer) are required to install the Powerpak panel.

WIRING POWERPAK PANEL: (Refer to Fig. 2)

1. Connect the motor cables A1, A2, S1 and S2 as shown in Fig. 2.
2. Replace the positive battery cable from the drive motor fuse with cable part number 190/12055. Connect the cable as shown in Fig. 2.
3. Connect the negative battery cable and all negative cables to the "B-" stud on the Powerpak, as shown in Fig. 2.

NOTE: After machine is wired, check machine for proper operation. Swap wires A1 and A2 to change direction if machine is wired incorrectly.

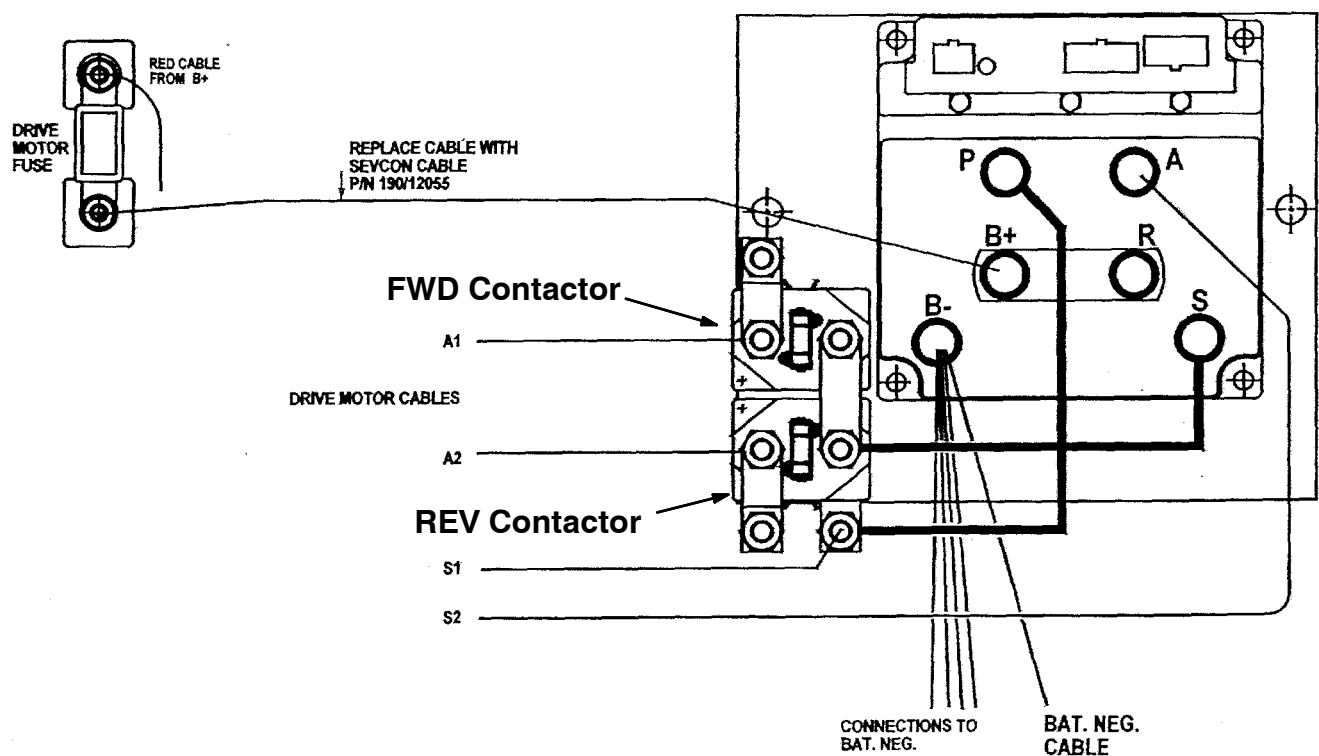


FIG. 2 - CONTROL BOX GROUP

WIRING POWERPAK PANEL: (Refer to Fig. 3)

1. Connector "A" is the connection for the display or the calibrator. Refer to Fig. 3.
2. Connector "B" is the control wiring input plug. (This input plug reads signals from the accelerator pedal and directional switches). Plug the interface wiring harness into connector "B" and the black wire coming out of the harness to the "B-" stud. Refer to Fig. 3.
3. Plug the vehicle wiring harness into the interface wiring harness connector. Refer to Fig. 3.
4. Connector "C" is the control wiring to the direction contactor coils. This harness is wired up at the factory. Refer to Fig. 3.

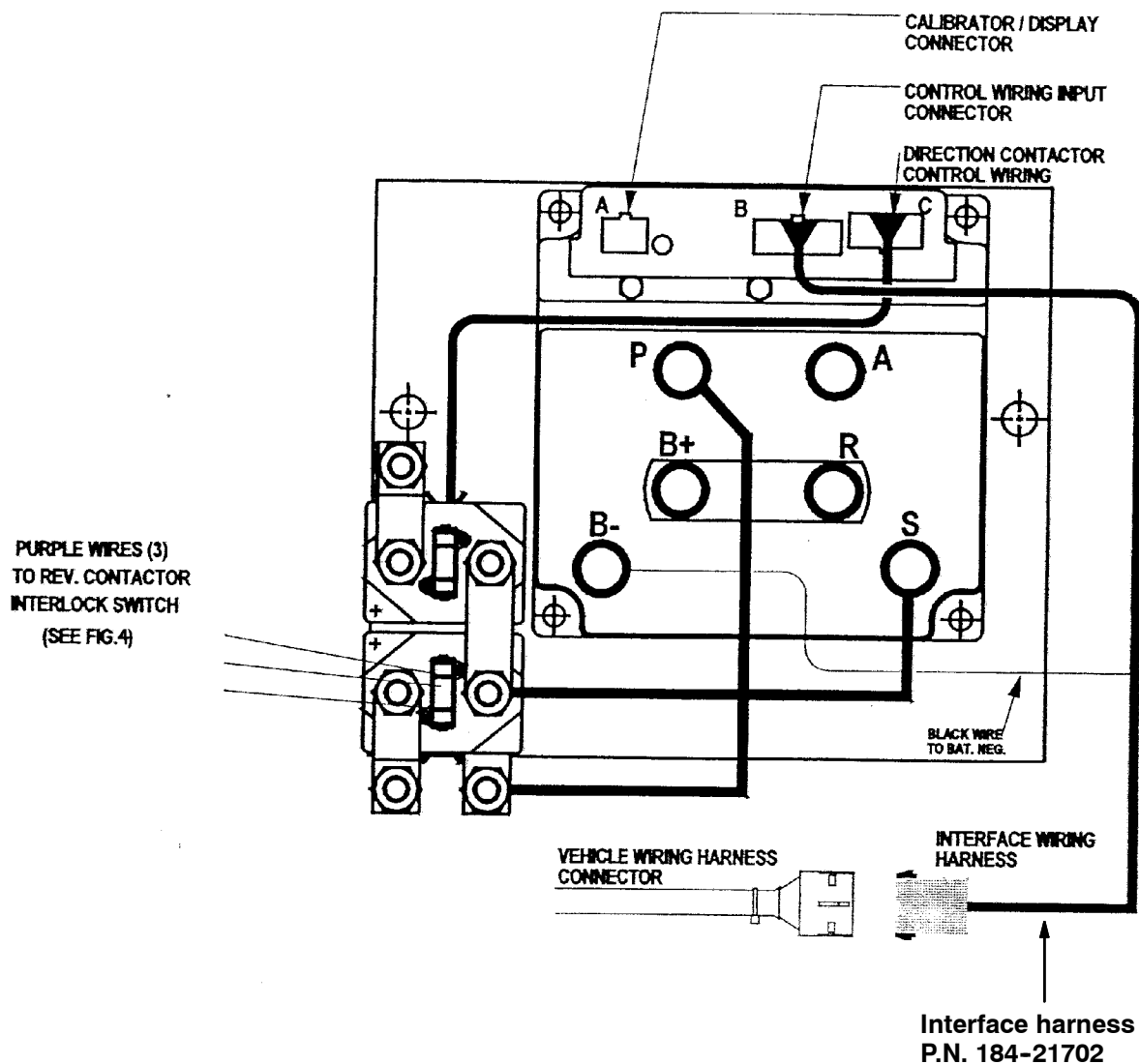


FIG. 3 - CONTROL WIRE CONNECTIONS

**WIRING TO INTERLOCK SWITCH ON REVERSE
DIRECTION CONTACTOR: (Refer to Fig. 4)**

1. Cut the existing terminal lugs off the three purple wires labeled "36B", "35C" and "42A". Refer to Fig. 4.
2. Crimp the female terminal lugs (Sevcon part #963/35012 or equivalent) on wires "42A", "35C" and connect as shown in Fig. 4.
3. Crimp the female terminal lug (963/80044 or equivalent) on to wire "36B". Splice a second wire into this crimp and crimp the same type of lug onto the second wire. Connect the 2 terminals as shown in Fig. 4.

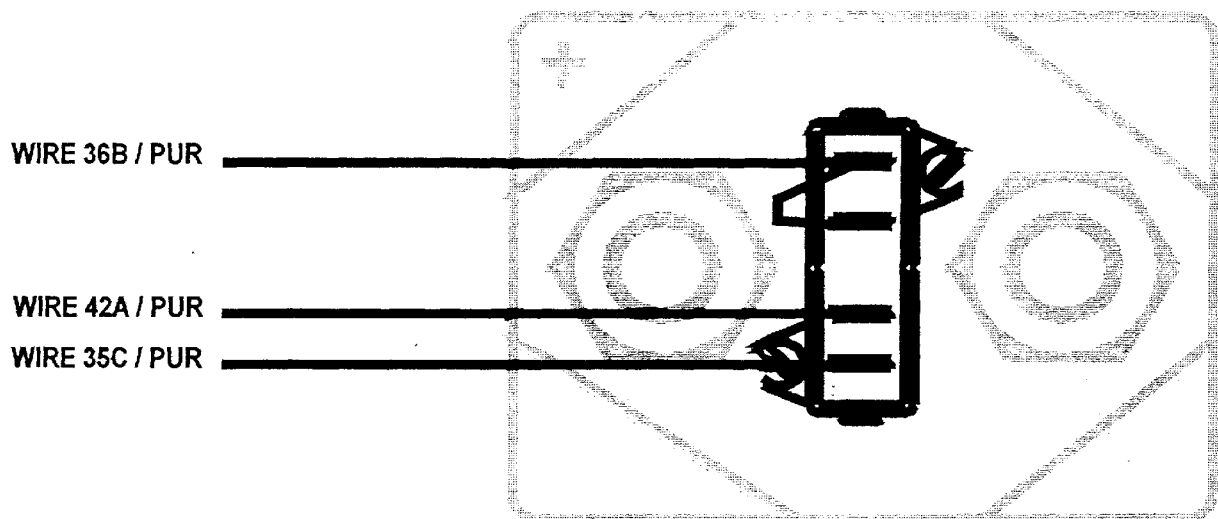


FIG. 4 - WIRING TO INTERLOCK SWITCH ON REVERSE DIRECTION CONTACTOR

BILL OF MATERIALS FOR CONTROLLER KIT-382975

| Ref. | TENNANT Part No. | Description | Qty. |
|------|---------------------|----------------------------------|------|
| 1 | 382977 | Controller assy, repair kit, 530 | 1 |

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

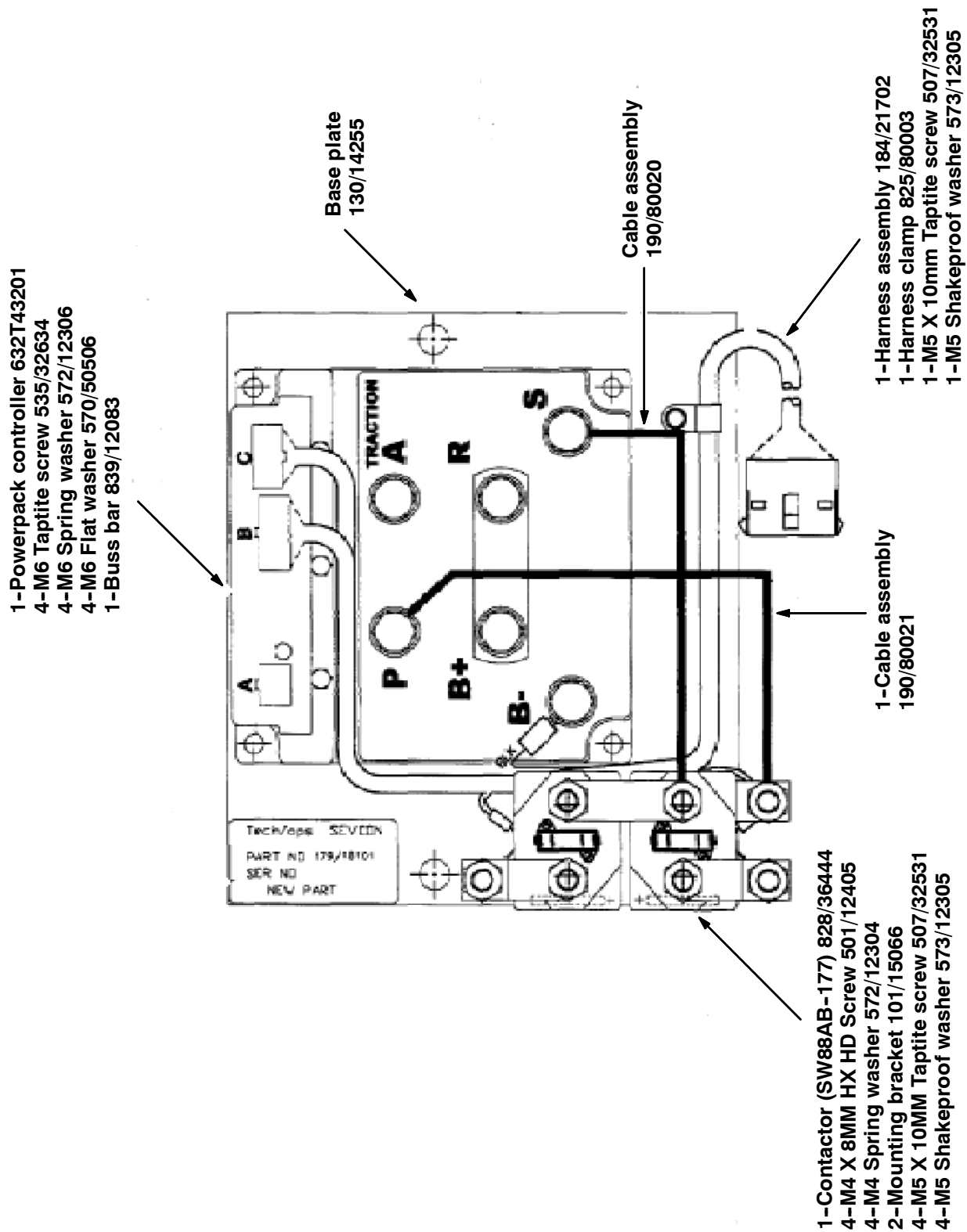


FIG. 5 - CONTROLLER ASSEMBLY

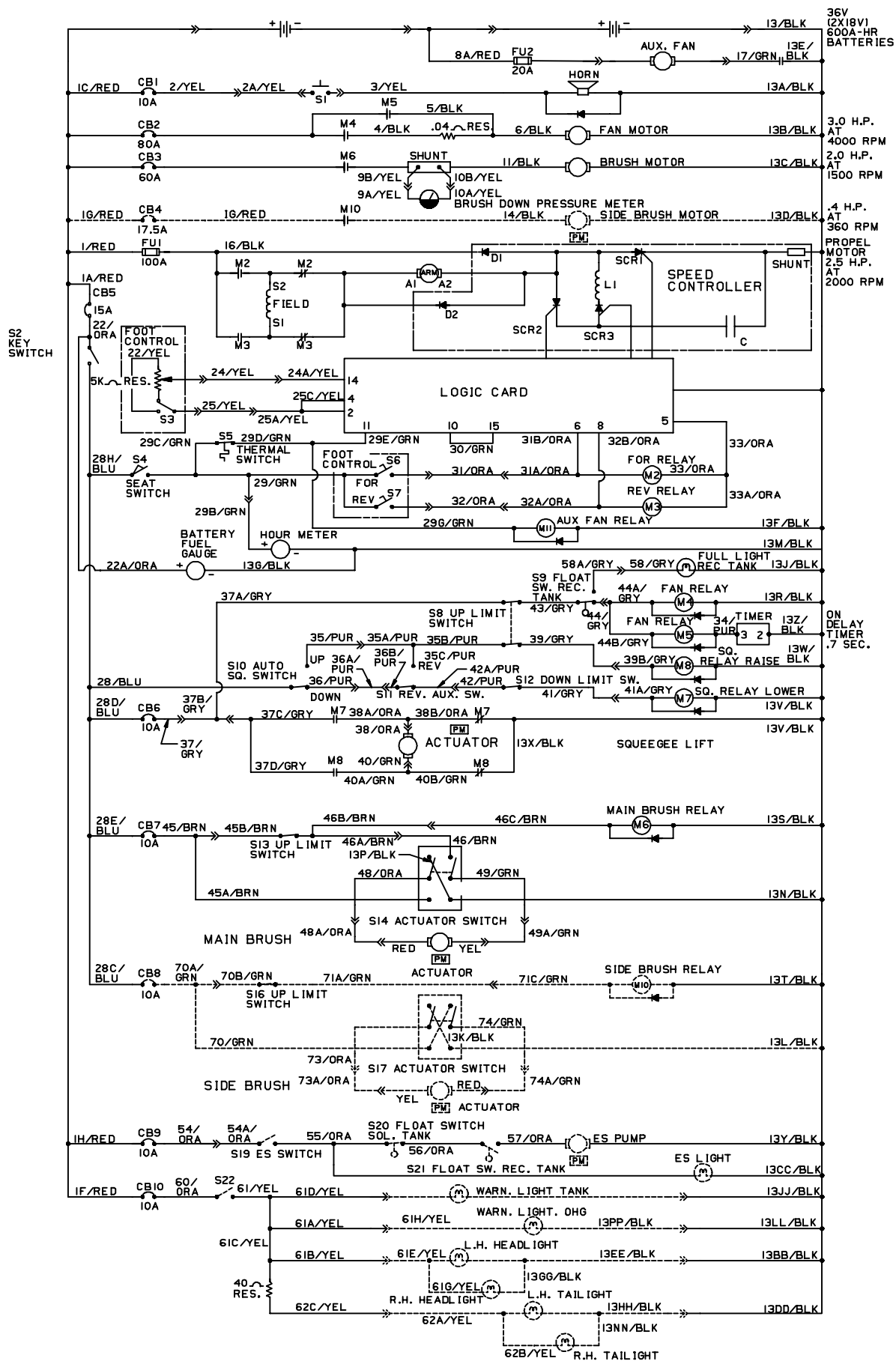


FIG. 6 - ELEC. SCHEM. (For machines below S.N. 007500) W/OLD ASSEMBLY

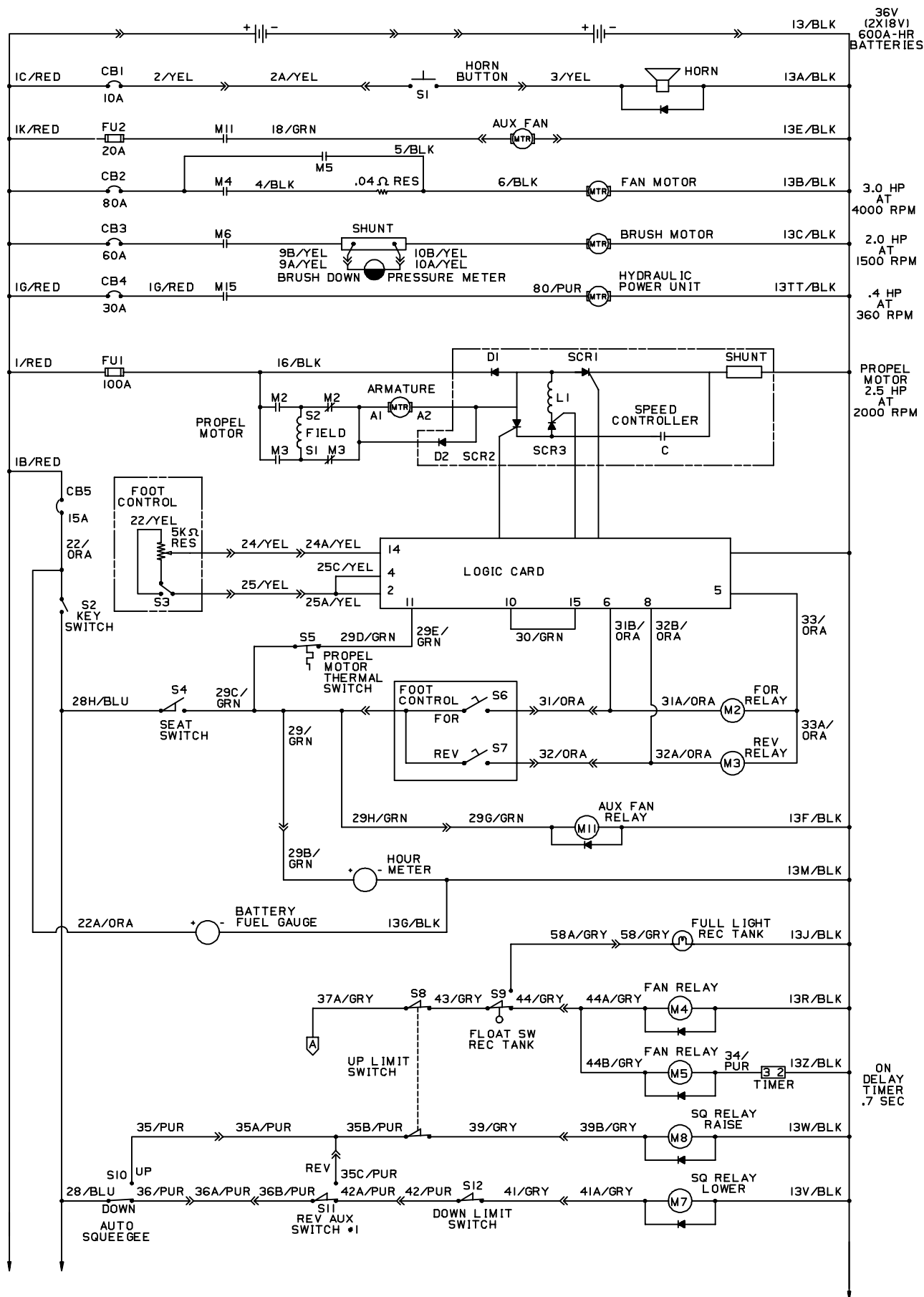


FIG. 7 - ELECT. SCHEM. (For machines S.N. 007500 to 007892) W/ OLD ASSEMBLY

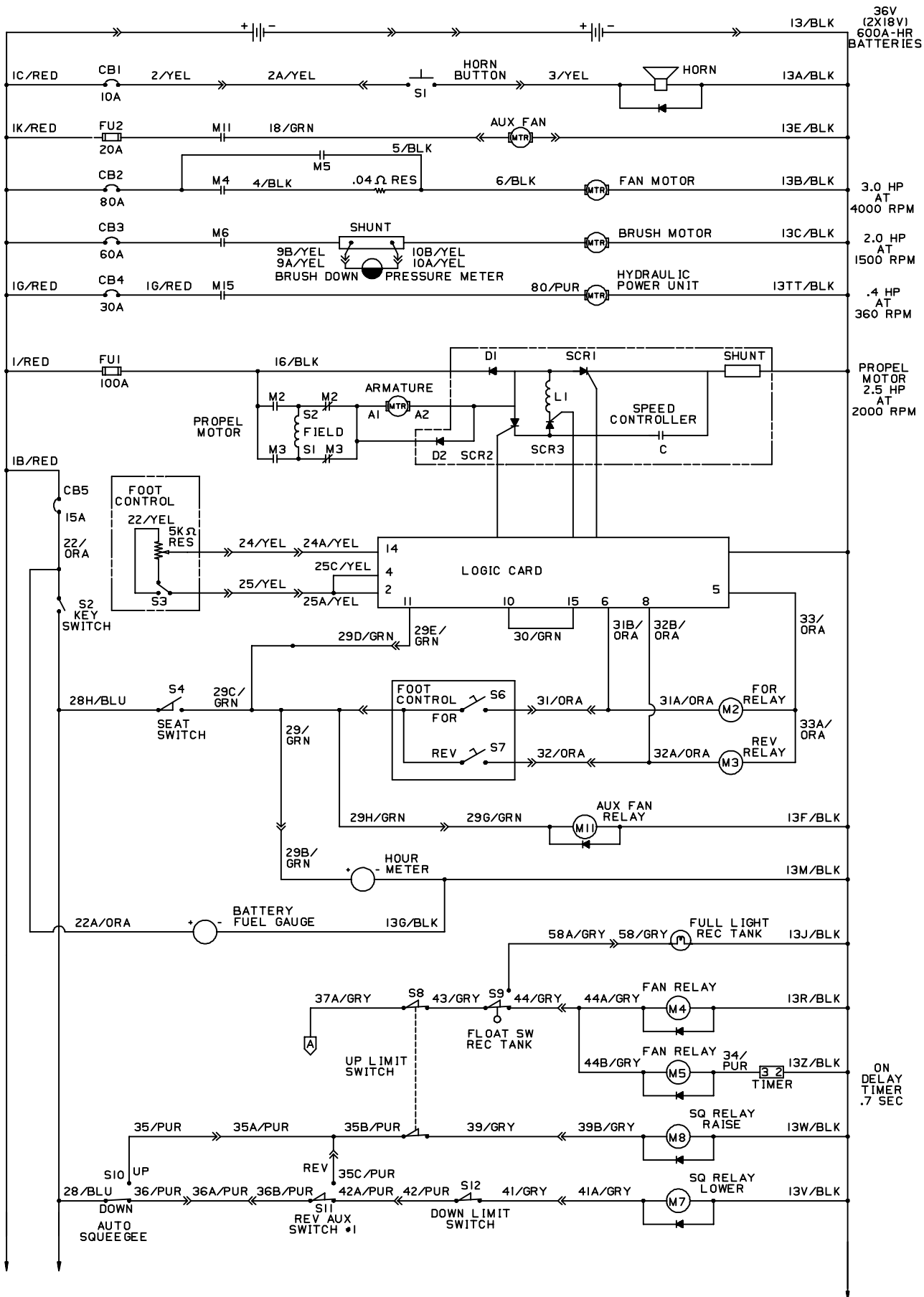
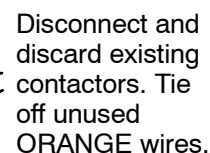


FIG. 8 - ELECT. SCHEM. (For machines S.N. 007500 to 007892) W/ OLD ASSEMBLY



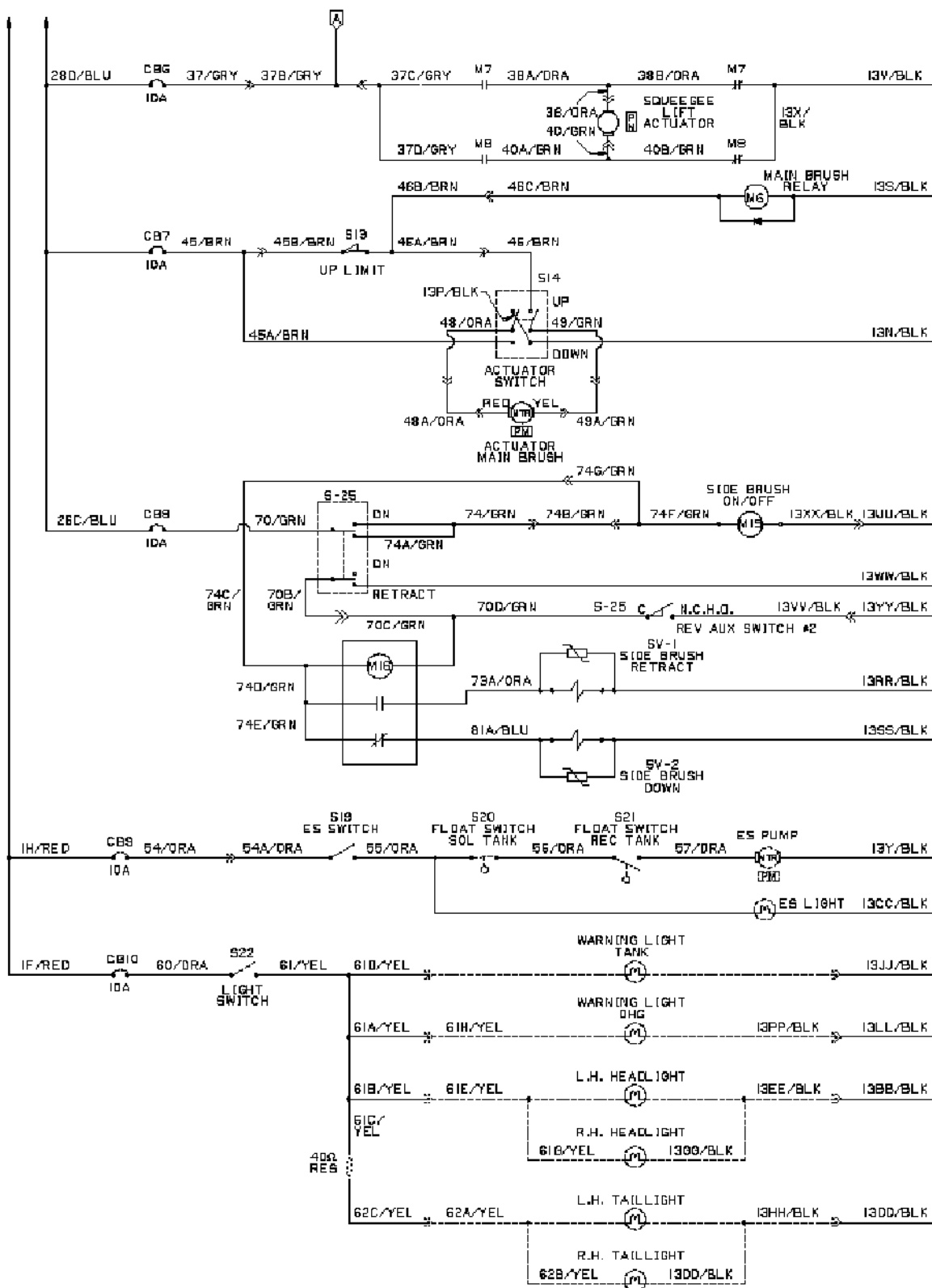


FIG. 11 - SCHEMATIC W/ SIDE BRUSH RETRACT CIRCUIT