FORM 1503

REMOTE ACCUSET 2 RETROFIT INSTRUCTIONS

Part No. 069659 (LT70HD-R AC)

The enclosed parts can be retrofitted to AC LT70HD remote sawmills equipped with Accuset. The new Accuset 2 system will provide improved reliability and functionality.

IMPORTANT! The Accuset 2 is programmed for operation with DC sawmills by default. To reconfigure the control for use with AC sawmills, be sure to follow the instructions in the Control Setup section of the provided Accuset 2 operator's manual.

Installation Instructions

☐ **1.** Use the sawmill controls raise the saw head so the blade height scale indicates 12".

☐ **2.** Turn the key switch to the OFF (#0) position and remove the key.

DANGER! Make sure all electrical installation, service and/or maintenance work is performed by a qualified electrician and is in accordance with applicable electrical codes.

DANGER! Hazardous voltage enters machine at two locations. Power enters machine at motor starter box and hydraulic control box. Disconnect and lock out both power supplies before servicing! Failure to do so will result in shock, burns or death.

☐ **3.** Disconnect and lock out power to the sawmill and wait a few minutes to allow stored electrical power to dissipate (see Operator's manual for detailed procedure).

See Figure 1.

- [ ] **4.** At the operator control box, use a Phillips screw driver to remove the rear control box panel.

- [ ] **5.** Disconnect the transducer cable from the back of the Accuset control box.

- [ ] **6.** Use a 5/16" socket wrench to loosen the four Accuset control box hold-down bar bolts. Use a Phillips screwdriver to remove the four screws at the front of the Accuset control box.

- [ ] **7.** Lift the Accuset control box from the sawmill control and disconnect the harness plugs from the Accuset control panel and remove the Accuset control from the sawmill control.

- [ ] **8.** Use a 5/32" hex wrench to loosen the two screws securing the cover to the Accuset control box. Use a 3/16" hex wrench to loosen the two cover stop screws. Remove all cover and stop screw hardware and install to the new Accuset 2 control box.

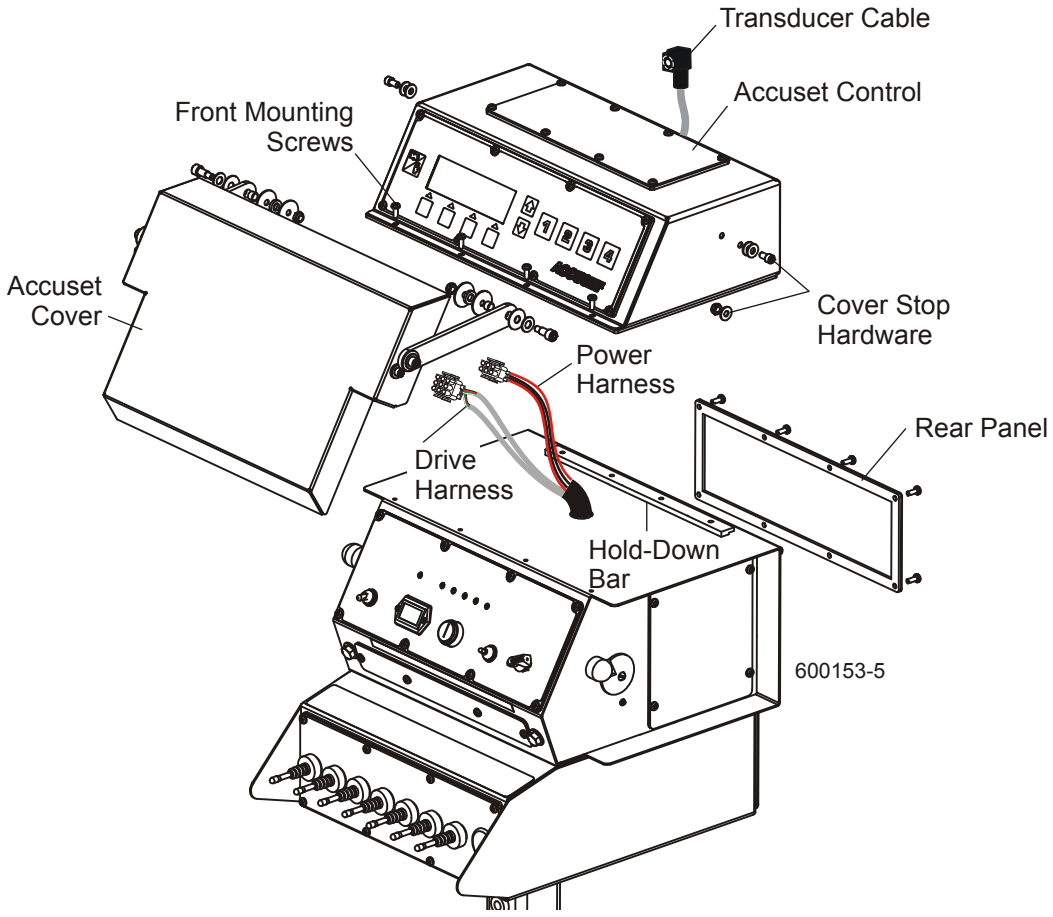

FIGURE 1

- [ ] **9.** The Accuset power and drive harnesses will no longer be used. Remove the sawmill control front panel and trace the red and black wires of the power harness into the sawmill control and disconnect. Disconnect the black wires from the ground stud. Remove the up/down drum switch handle and remove the drum switch mounting bolts. Disconnect the black wire and two red wires from the up/down switch and remove the power harness from the control.

Cut the connector plug from the drive harness and pull the gray cables down through the sawmill control box and into the hydraulic control box. If desired, you may remove the cable wires from the connector J2 in the back of the hydraulic control box and completely remove the cables. Otherwise, leave the gray cables unconnected in the hydraulic control box.

See Figure 2.

☐ **10.** Position the Accuset 2 control box on top of the sawmill control and route the gray #1 & #4, black, red, blue and yellow Accuset harness wires through the conduit into the sawmill control box. Be sure all wires are contained inside the conduit. If the existing conduit is too small, replace it with the supplied 6" piece of conduit. Gray #5 wire is not used and should be stored in the Accuset 2 control box.

☐ **11.** Connect the red Accuset harness wire and gray wire #1 to the front terminal of the ignition circuit breaker CB2.

☐ **12.** Connect the black wire and gray wire #4 to the ground stud at the bottom of the control box and reinstall the nut.

☐ **13.** Connect the yellow wire to terminal #4 of the drum switch (leave any existing wires connected). Connect the blue wire to terminal #1 (leave any existing wires connected).

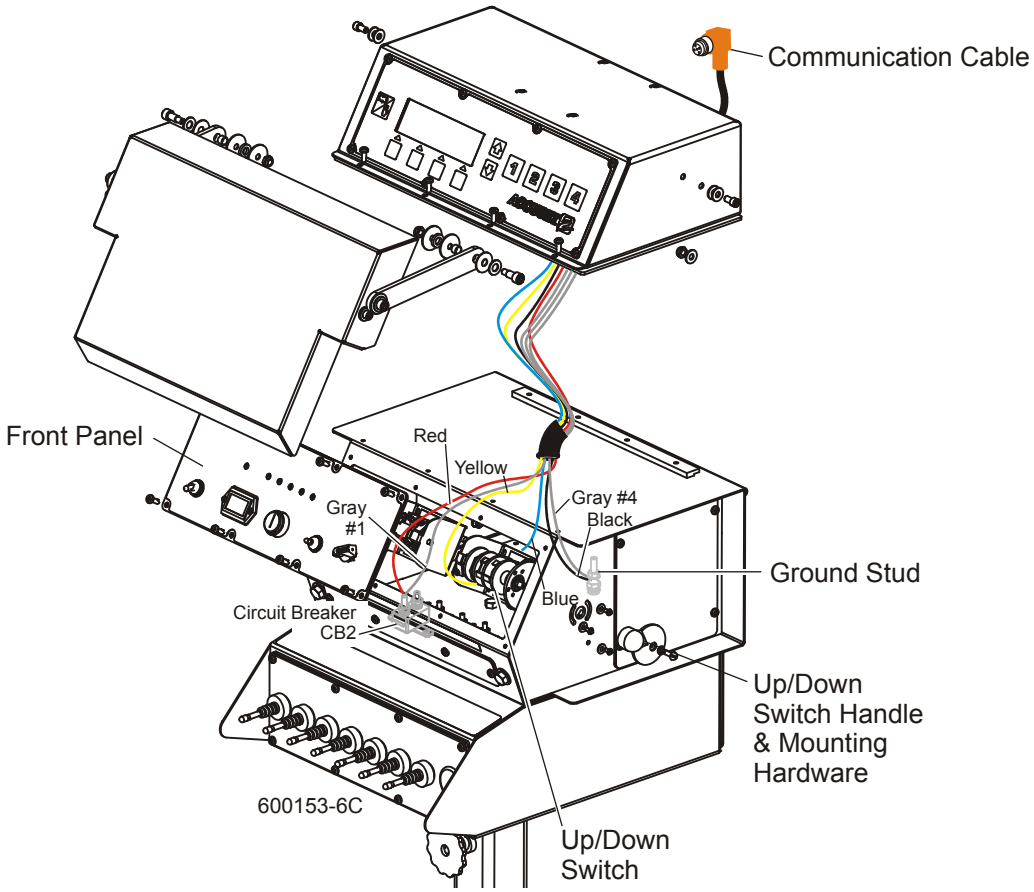

FIGURE 2

☐ **14.** Use two of the supplied wire ties to secure the conduit around all wires.

☐ **15.** Secure the Accuset 2 control box to the top of the sawmill control, positioning the rear lip under the hold-down bar. Tighten the four hold-down bolts and secure the front of the control box with the four screws previously removed.

☐ **16.** Reinstall the up/down drum switch to the side of the control box and reinstall the handle. Replace the front and rear control box panels.

☐ **17.** Connect the supplied communication cable (052921) to the connector on the back of the Accuset 2 control.

☐ **18.** Route the communication cable to the cable carrier.

See Figure 3.

Follow the path of the existing transducer cable to route the new communication cable through the cable sleeve and into the cable storage box, removing the old cable as you go. Remove the cable carrier box plate and continue routing the cable through the box into the cable carrier. Remove wire ties securing the old cable. The new cable will connect at the bottom of the remote power box. Store any excess cable in the cable carrier box and replace the lid. Secure the communication cable to the other cables in the cable carrier with the provided wire ties. Use the provided cable clamp to secure the cable to the cable carrier mounting stud as shown.

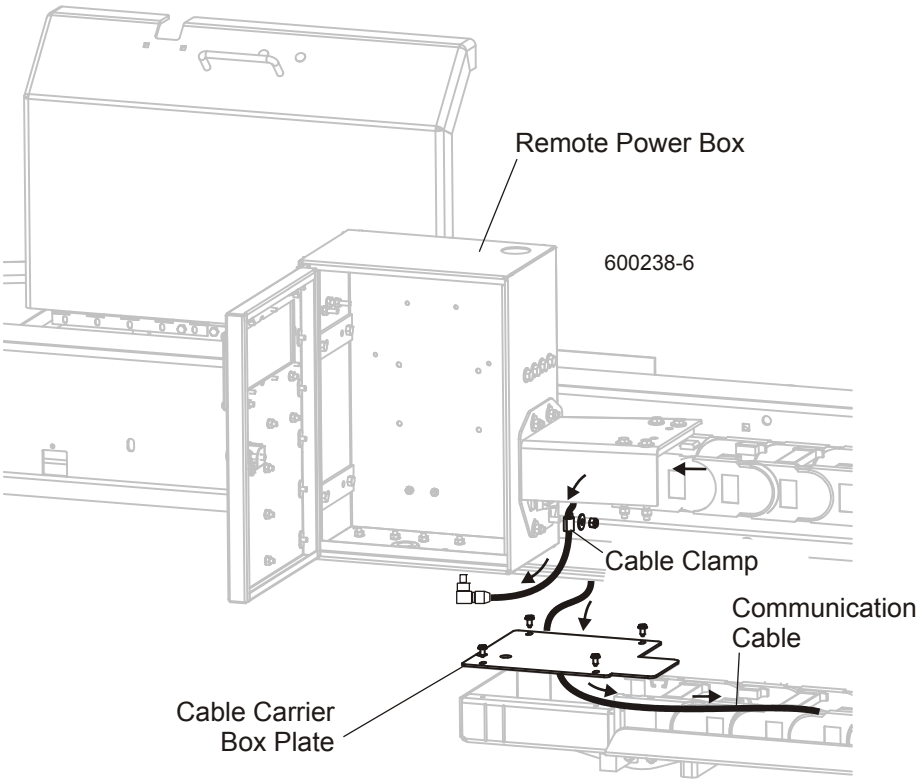

FIGURE 3

See Figure 4.

☐ **19.** Use the supplied 1/4" pilot drill bit and hole saw to drill two 5/8" holes in the bottom of the power box. The exact location of the holes is not critical. Suggested dimensions for the holes are 3" from the right side of the box, 5" from the rear of the box and 2" apart.

☐ **20.** Use the supplied 13/32" drill bit to drill a pilot hole in the top of the box. Suggested dimensions for the top hole are 1 3/4" from the back of the box and 2 1/2" from the existing harness hole. Assemble the provided knockout to the pilot hole. Use a 1" wrench to tighten the knockout until it punches through the box top.

☐ **21.** Install the AC drive interface panel assembly to the remote power box door.

Remove the existing screws and nuts in the door. Position the module assembly with the connectors pointing down against the door and replace the bolts and nuts.

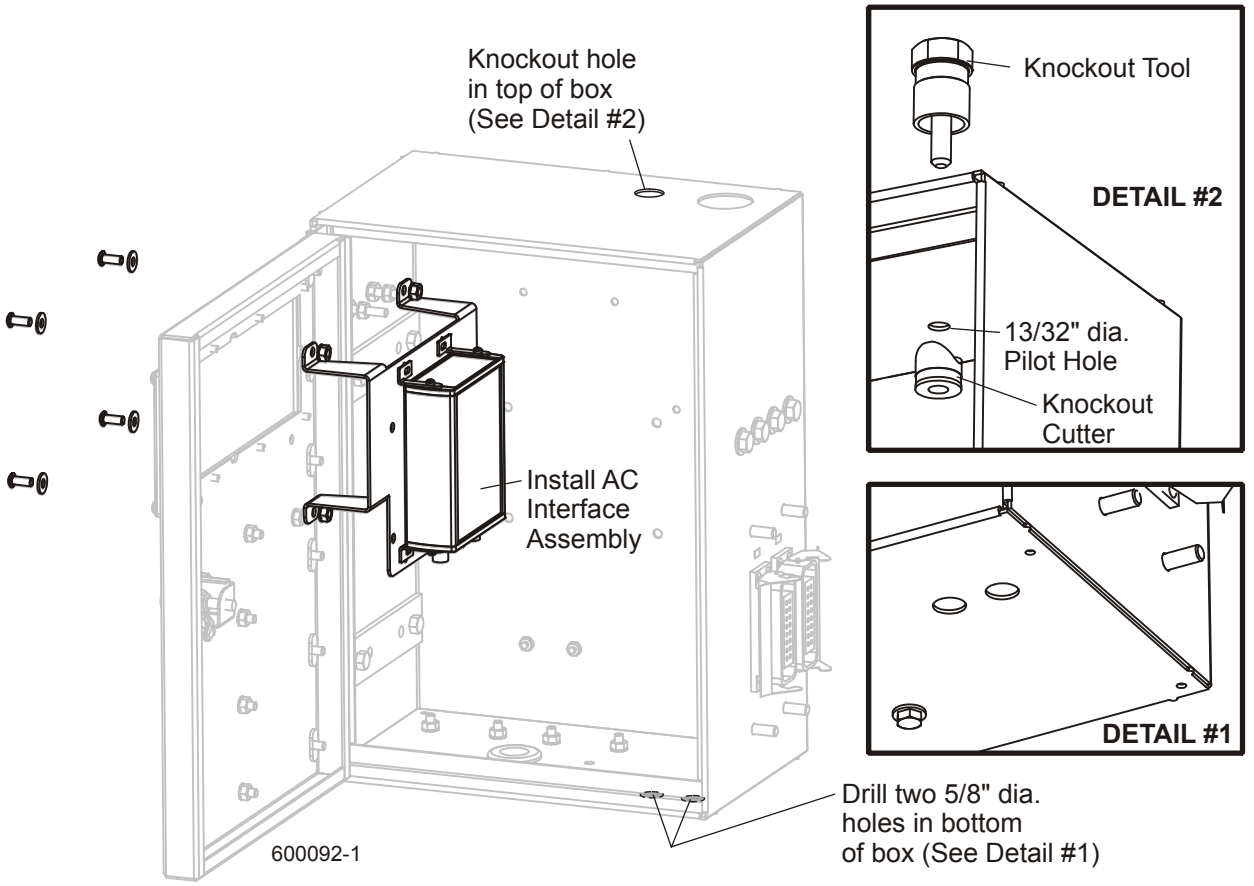

FIGURE 4

See Figure 5.

☐ **22.** Locate the two short interface cables provided. Connect the 8-Pin cable (053085) to the TRANSDUCER port on the AC interface module. Connect the 5-Pin cable (053086) to the CAN/PWR port on the module. Route the two cables to the new holes in the bottom of the power box. Remove the hex retaining rings from the cable connectors. Mount the 8-pin connector to the left hole and the 5-pin connector to the right hole. Secure the connectors to the box with the hex retaining rings.

☐ **23.** Locate the strain relief assembly on the long AC Drive cable (053195) nearest the 8-Pin connector. Remove the lock nut from the strain relief and feed the connector end of the cable down through the new hole in the top of the box. Slide the lock nut over the end of the cable and connect the cable to the AC DRIVE port on the module. Insert the strain relief into the hole and secure with the lock nut.

☐ **24.** Secure cables inside the power box with wire ties as necessary to limit movement and interference.

☐ **25.** Connect the communication cable from the Accuset 2 control to the 5-Pin connector in the bottom of the box. Connect the supplied transducer cable (052920) to the 8-Pin connector and route to the transducer sensor.

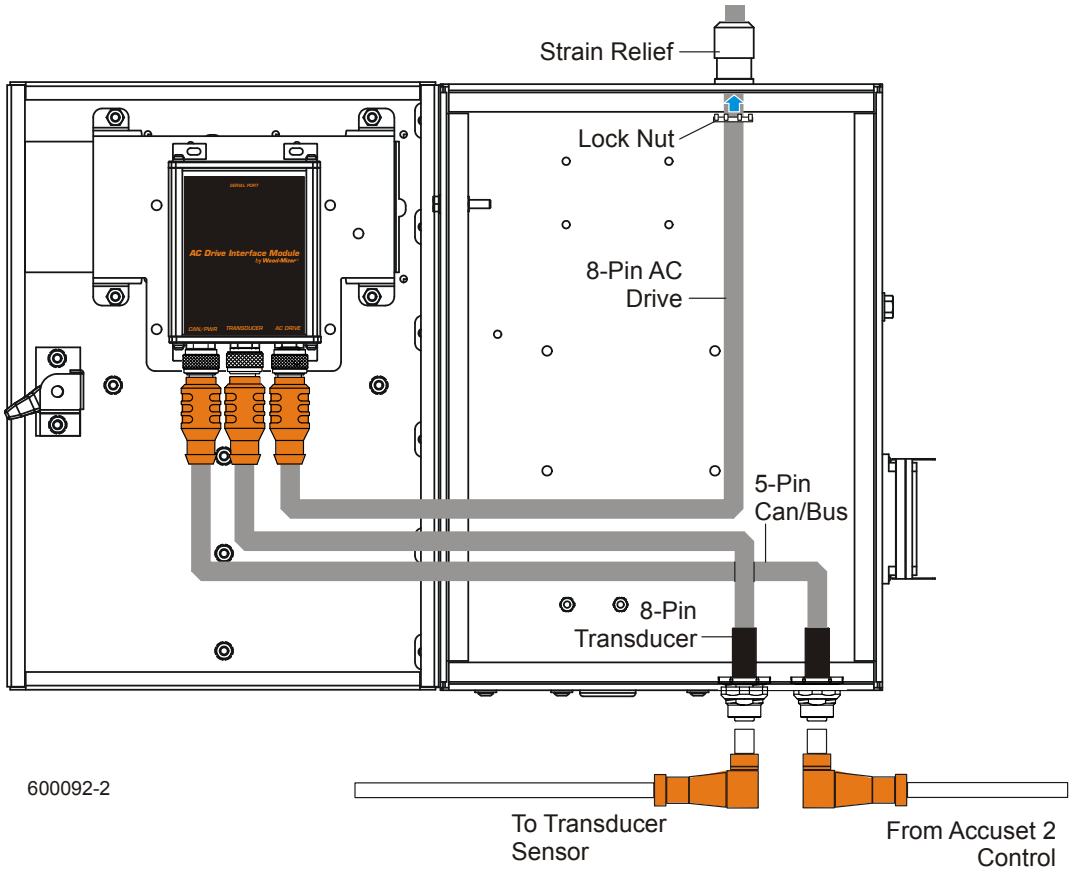

FIGURE 5

☐ **26.** Remove the lower transducer sensor guard, disconnect the old transducer cable from the transducer sensor and remove the cable from the sawmill. Connect the new transducer cable to the sensor and secure to the power box mounting stud with the provided cable clamp as shown. Bundle the excess cable into a loop and secure with a tie wrap. Replace the lower sensor guard.

See Figure 6.

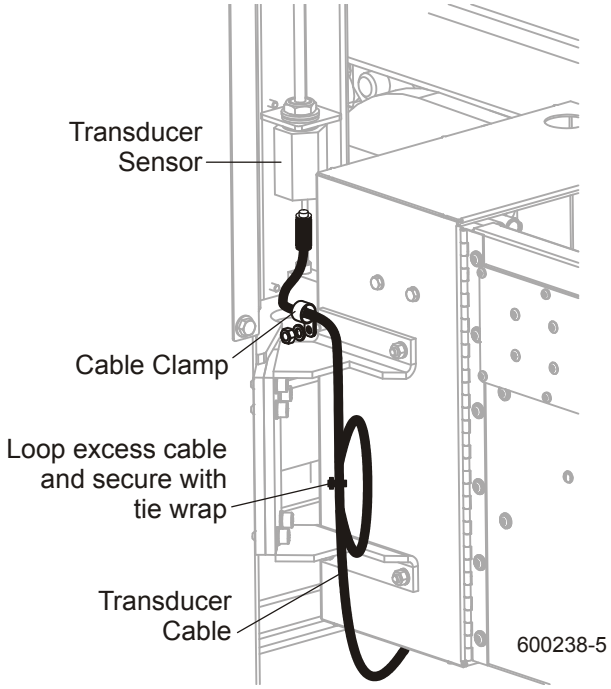

FIGURE 6

☐ **27.** Place the supplied lower cable guard in position on the bottom of the remote power box with the mounting flange toward the back of the power box. Mark the two mounting hole locations on the power box and drill two 5/16" holes in the bottom of the box.

☐ **28.** Use the supplied 1/4" hex head bolts, flat washers and self-locking nuts to secure the guard to the power box.

See Figure 7.

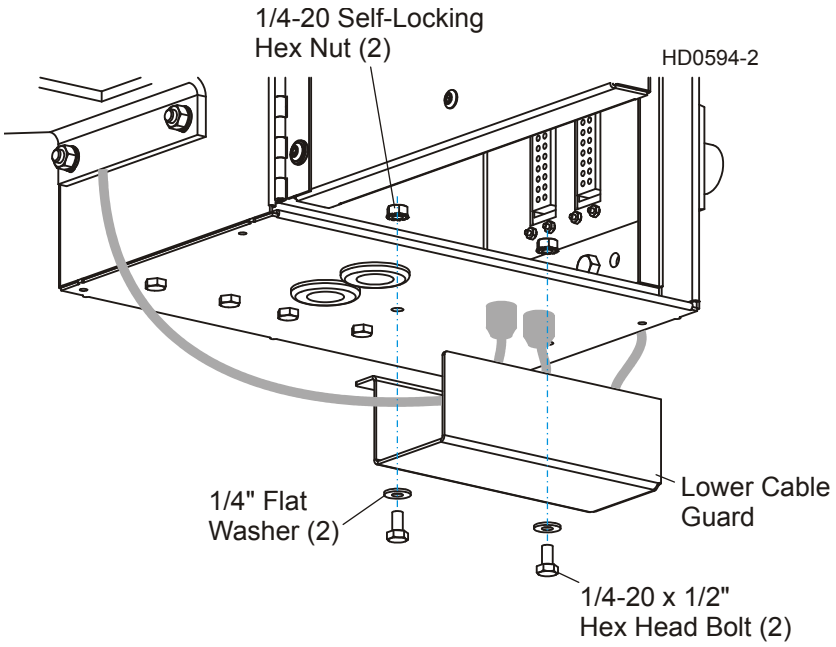

FIGURE 7

☐ **29.** In the electrical cabinet, locate cables #39 & #40 connected to the AC Up/Down Drive (U1). Loosen the wire terminal screws and disconnect cable #39 & #40 cable wires from the drive. Tuck the cables out of the way or remove completely from the upper harness if desired.

☐ **30.** If an empty port is available in the bottom of the cabinet, remove the hole plug. If no empty port is available, use the provided pilot drill bit and knockout to create a new hole in the bottom of the box. Locate the hole in line with the existing holes, about 1 1/2" from the forward most hole. Be careful not to place the hole too close to the front lip to avoid interference with the cabinet door. Be sure to remove any rough edges from the hole.

See Figure 8.

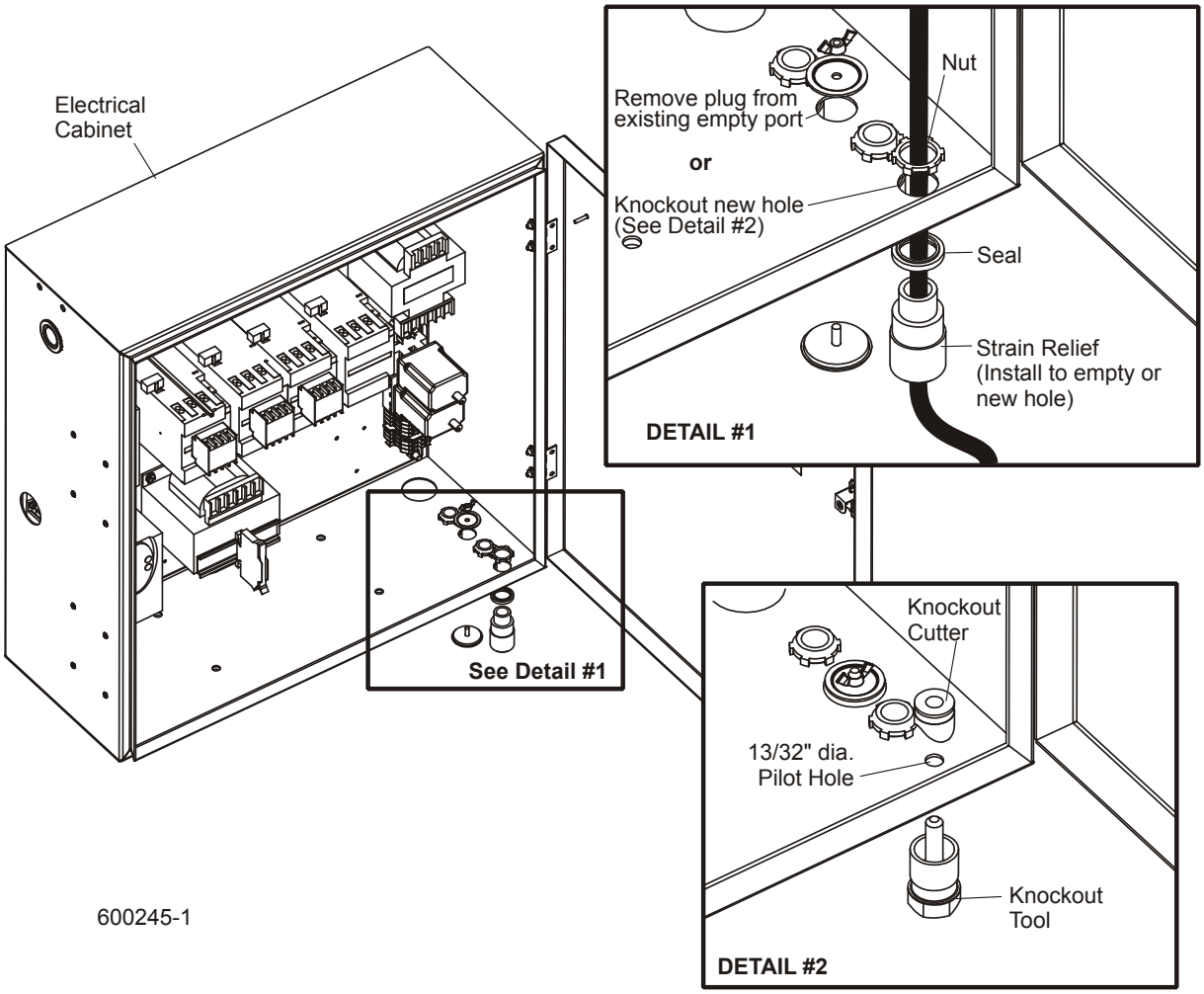

FIGURE 8

31. Remove the lock nut from the second strain relief on the AC drive cable. Feed the cable up through the hole in the bottom of the electrical cabinet and route to the AC Up/Down Drive (U1). Slide the lock nut over the end of the cable.

See Figure 9. Open the AC drive (U1) cover and connect the cable wires to the drive as shown. Note the alternate wiring instructions for LT70 Revs. prior to A5.01 with the original ATV28 AC drive. Be sure to leave all existing jumper wires connected.

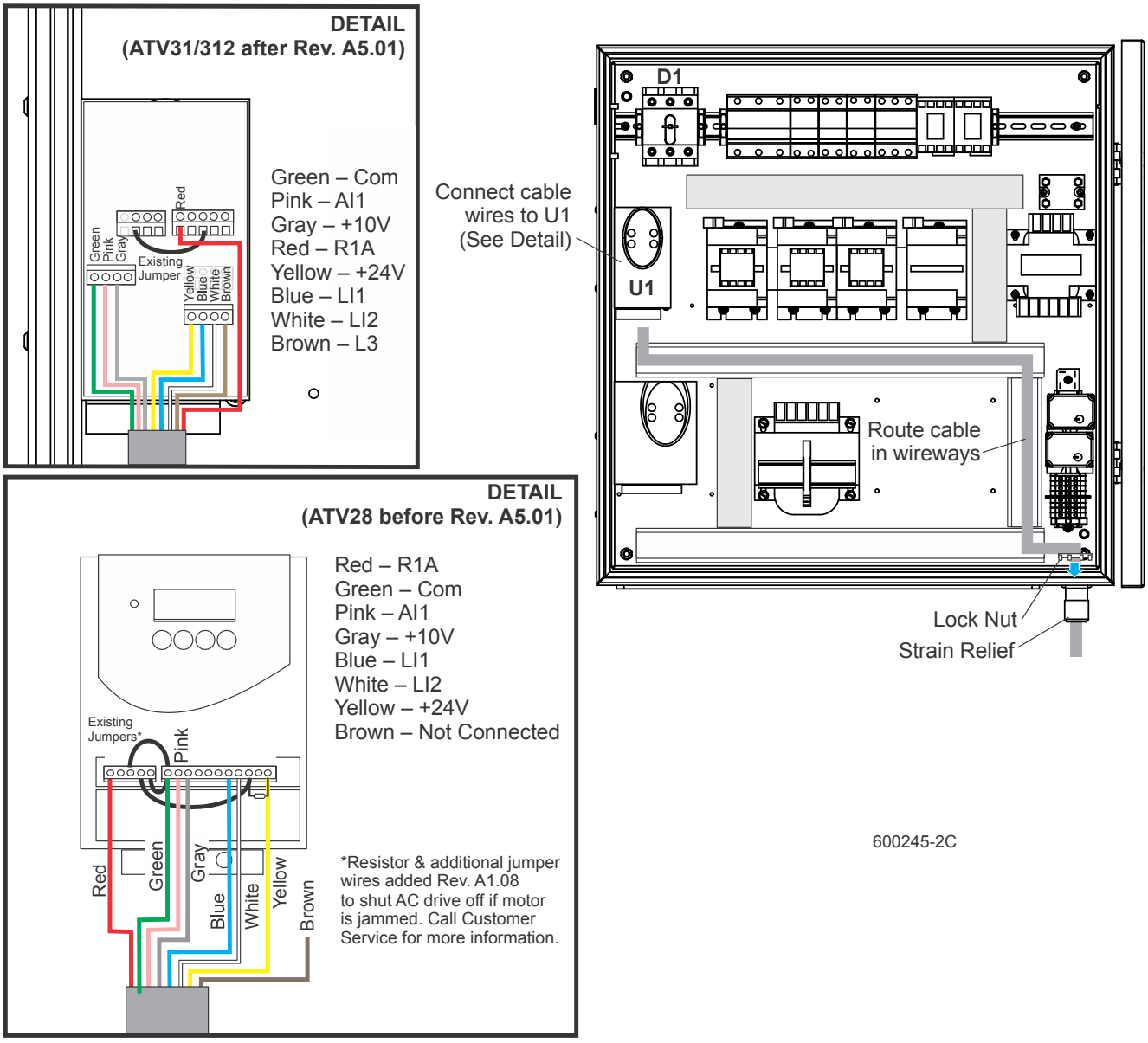

FIGURE 9

☐ **32.** Close the drive cover. Remove wireway covers and place the drive interface cable in the wireways. Replace the wireway covers.

☐ **33.** Secure the AC drive cable to the upper harness using the supplied wire ties. Push excess cable up into the electrical cabinet as required. Be sure to secure the cable to the harness as high as possible to allow for up/down movement of the saw head. Install the strain relief to the hole in the electrical cabinet and secure with the lock nut.

LT70 AFTER Rev. A5.01 or retrofitted with ATV31/312 AC Drive Only:

☐ **34.** The Up/Down AC drive will need to be reprogrammed for optimum performance with Accuset 2. Restore power to the sawmill by first turning the disconnect (D1) clockwise to the ON position, then turn on the main electrical supply.

BE CAREFUL not to touch anything except the drive control buttons as voltage is now present in the electrical cabinet.

☐ **35.** Push the enter (ENT) button on the drive control panel to display the SEt menu. Push the down arrow button four times to scroll the menu until FUn is displayed.

NOTE: A graphical version of the following instructions is provided *Figure 11 on page 13*.

See Figure 10.

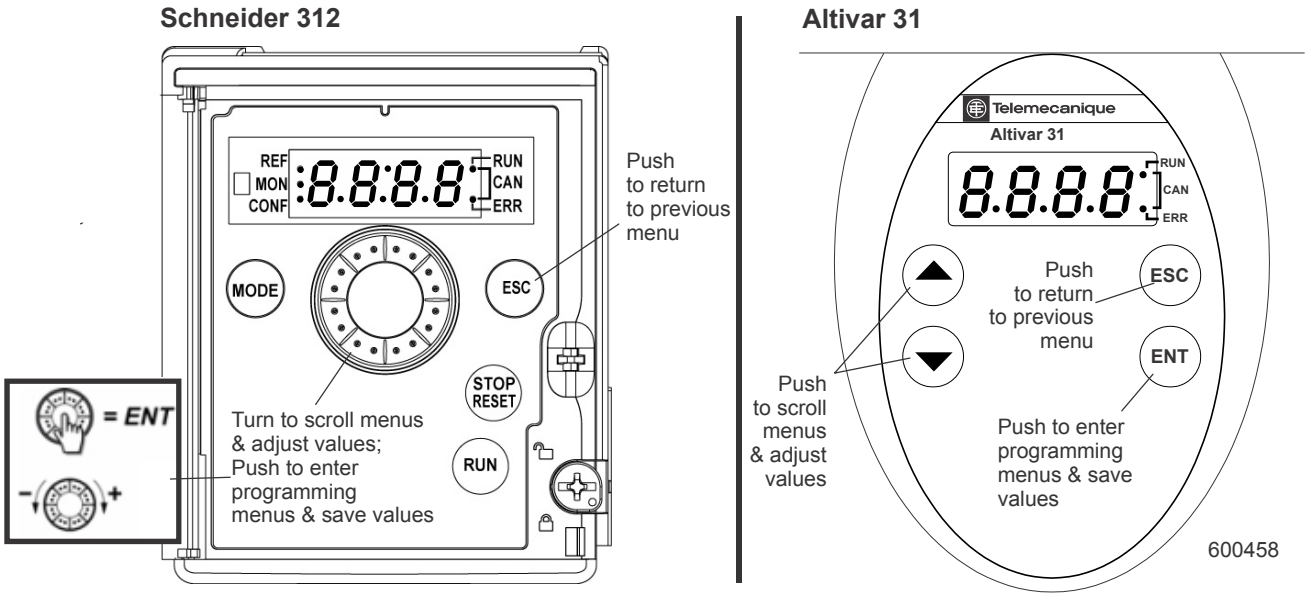

FIGURE 10

☐ **36.** Push ENT to display the rPC submenu. Push the down arrow twice to display the AdC submenu. Press ENT twice to display the current value. Use the up or down arrows to adjust the value to "Ct". Push ENT to save the new value. Push ESC four times to exit the programming menus (display should now read "dCb").

☐ **37.** Push ENT twice to display the ACC menu. Push the down arrow four times to scroll to the ItH menu.

☐ **38.** Push ENT to display the current value. Use the up or down arrows to adjust the value to "5.7". Push ENT to save the new value. Push ESC to return to the ItH menu.

- [ ] **39.** Push the down arrow to display the UFr menu. Push ENT to display the current value. Use the up or down arrows to adjust the value to "15". Push ENT to save the new value. Push ESC to return to the UFr menu.

- [ ] **40.** Push the down arrow to display the FLG menu. Push ENT to display the current value. Use the up or down arrows to adjust the value to "25". Push ENT to save the new value. Push ESC to return to the FLG menu.

- [ ] **41.** Push the down arrow to display the StA menu. Push ENT to display the current value. Use the up or down arrows to adjust the value to "10". Push ENT to save the new value. Push ESC to return to the StA menu.

- [ ] **42.** Push the down arrow twice to display the tdC1 menu. Push ENT to display the current value. Use the up or down arrows to adjust the value to "0.3". Push ENT to save the new value. Push ESC to return to the tdC1 menu.

- [ ] **43.** Push the down arrow to display the SdC1 menu. Push ENT to display the current value. Use the up or down arrows to adjust the value to "4.8". Push ENT to save the new value. Push ESC to return to the SdC1 menu.

- [ ] **44.** Push the down arrow to display the SdC2 menu. Push ENT to display the current value. Use the up or down arrows to adjust the value to "1.0". Push ENT to save the new value. Push ESC to return to the SdC2 menu.

- [ ] **45.** Push the down arrow three times to display the CL1 menu. Push ENT to display the current value. Use the up or down arrows to adjust the value to "5.5". Push ENT to save the new value. Push ESC to return to the CL1 menu.

- [ ] **46.** Push ESC twice more to exit the programming menus (display should read "dCb").

- [ ] **47.** Manually turn the disconnect (D1) counterclockwise to the OFF position and close the electrical cabinet door.

- [ ] **48.** See the Setup section of the provided manual to calibrate your new Accuset 2 control.

See Figure 11. A graphical version of the above instructions is provided on the following pages.

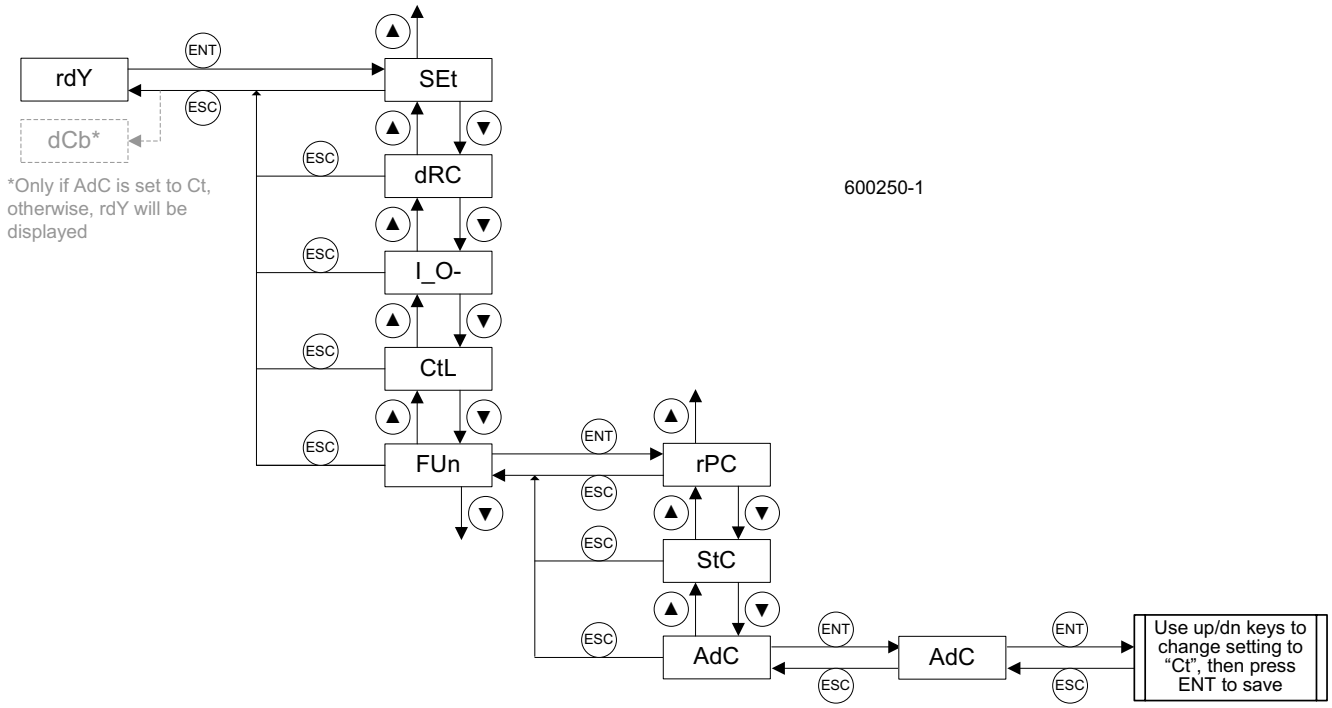

FIGURE 11 (PAGE 1 OF 2)

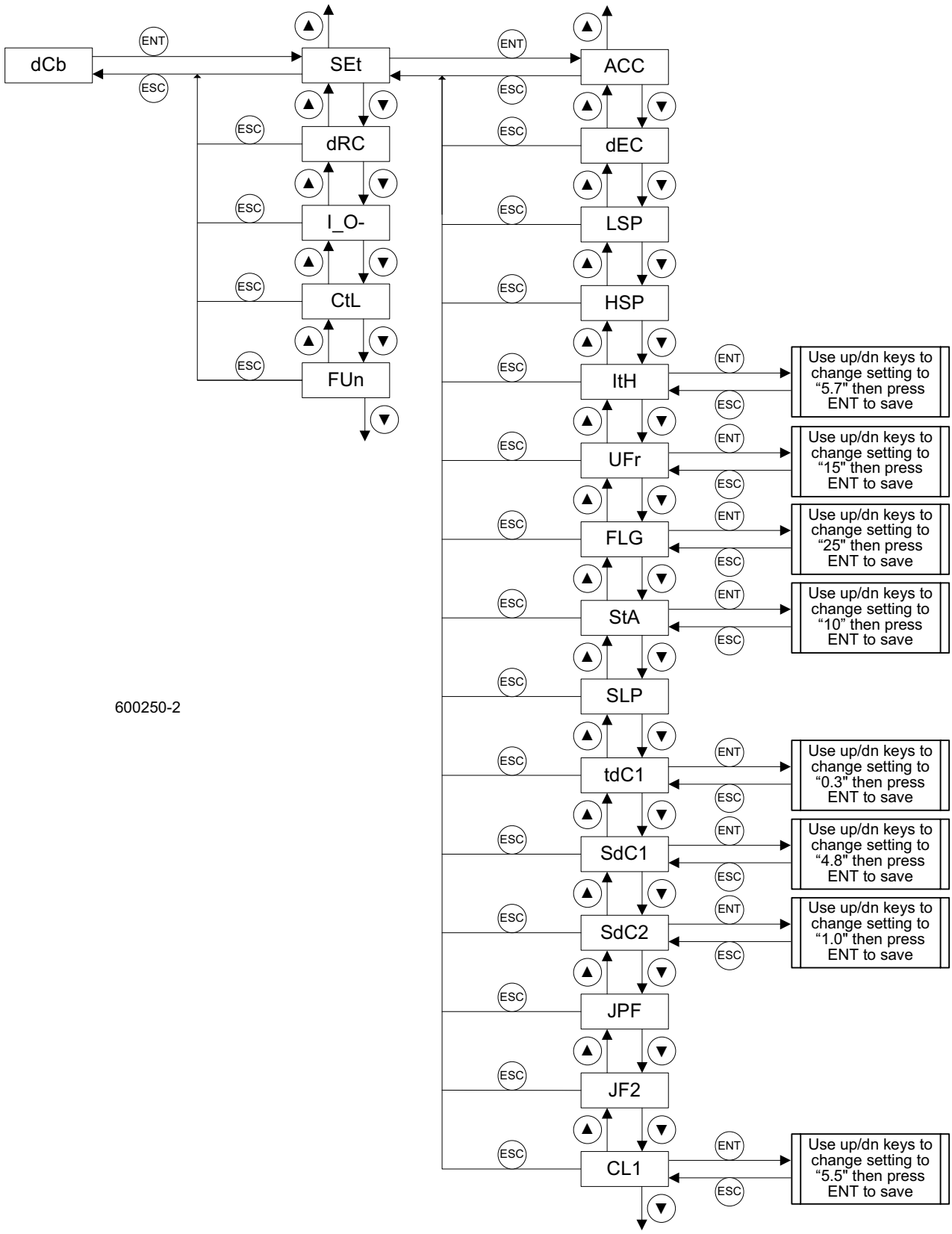

FIGURE 11 (PAGE 2 OF 2)