FORM 1602

REMOTE SETWORKS TO ACCUSET 2 RETROFIT INSTRUCTIONS

Part No. 053382

The enclosed parts can be retrofitted to 1997+ remote sawmills equipped with Setworks. The new Accuset 2 system will provide improved reliability and functionality.

Installation of this kit requires a Transducer Sensor kit sold separately (Part No. 006013).

Installation Instructions

1. Use the sawmill controls to move the saw carriage so the hydraulic power strip (if applicable) is not engaged and the saw head is positioned so the blade height scale indicates 12".

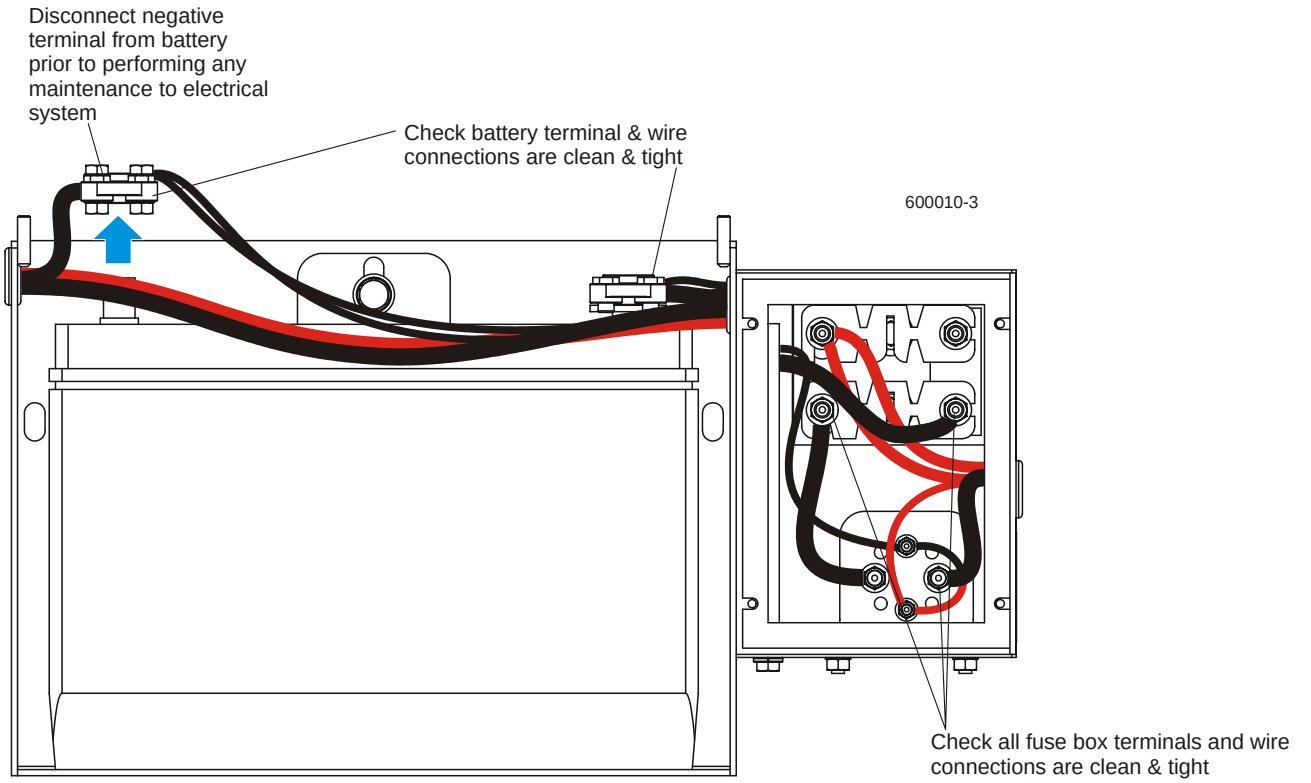
2. Turn the key switch to the OFF (#0) position and remove the key.

3. Remove the battery box cover and disconnect the negative battery terminal.

WARNING! Disconnect the negative battery terminal cable before performing any service to the 12-volt electrical system. Failure to do so may cause injury or electrical system damage.

CAUTION! Loose battery and/or fuse terminal connections may cause damage to Accuset 2 electrical components. Prior to installation, check all connections are clean and tight.

See Figure 1. Before removing any panel from the control box, disconnect the cable from the negative battery terminal.



BATTERY & FUSE BOX
(APPEARANCE WILL VARY DEPENDING ON MODEL)

FIGURE 1

4. Remove the fuse box cover. Inspect all connections inside the battery and fuse boxes. Be sure all surfaces are clean and connections are tight.

NOTE: Any loose fuse connections may cause the mounting hardware to burnish (discolor). If this condition exists, an adequate electrical connection will be difficult to achieve and the fuse block assembly should be replaced.

5. Replace the fuse box cover.

See Figure 2.

6. At the operator control box, use a Phillips screw driver to remove the rear control box panel.

7. Use a 5/16" socket wrench to loosen the four Setworks control box hold-down bar bolts. Use a Phillips screwdriver to remove the four screws at the front of the Setworks control box.

8. Lift the Setworks control box from the sawmill control and unplug the two harnesses (#40 & 41) from the Setworks control panel.

9. Locate the four cable #39 wires connected to the Setworks control panel. Cut the red and black wires back to the cable jacket. Disconnect the white and green cable #39 wires and the red and black Up/Down wires from the Setworks control panel. Remove the Setworks control box from the sawmill control.

10. Cut the terminals from the wires and strip 1/4" of insulation from the ends of each wire. Use the two provided junction connectors to connect red Up/Down wire to white cable #39 wire. Insert the ends of each wire into a junction connector and push the connector levers closed to secure the wires. Repeat to connect black Up/Down wire to green cable #39 wire. Push all wires/cables down into the sawmill control box.

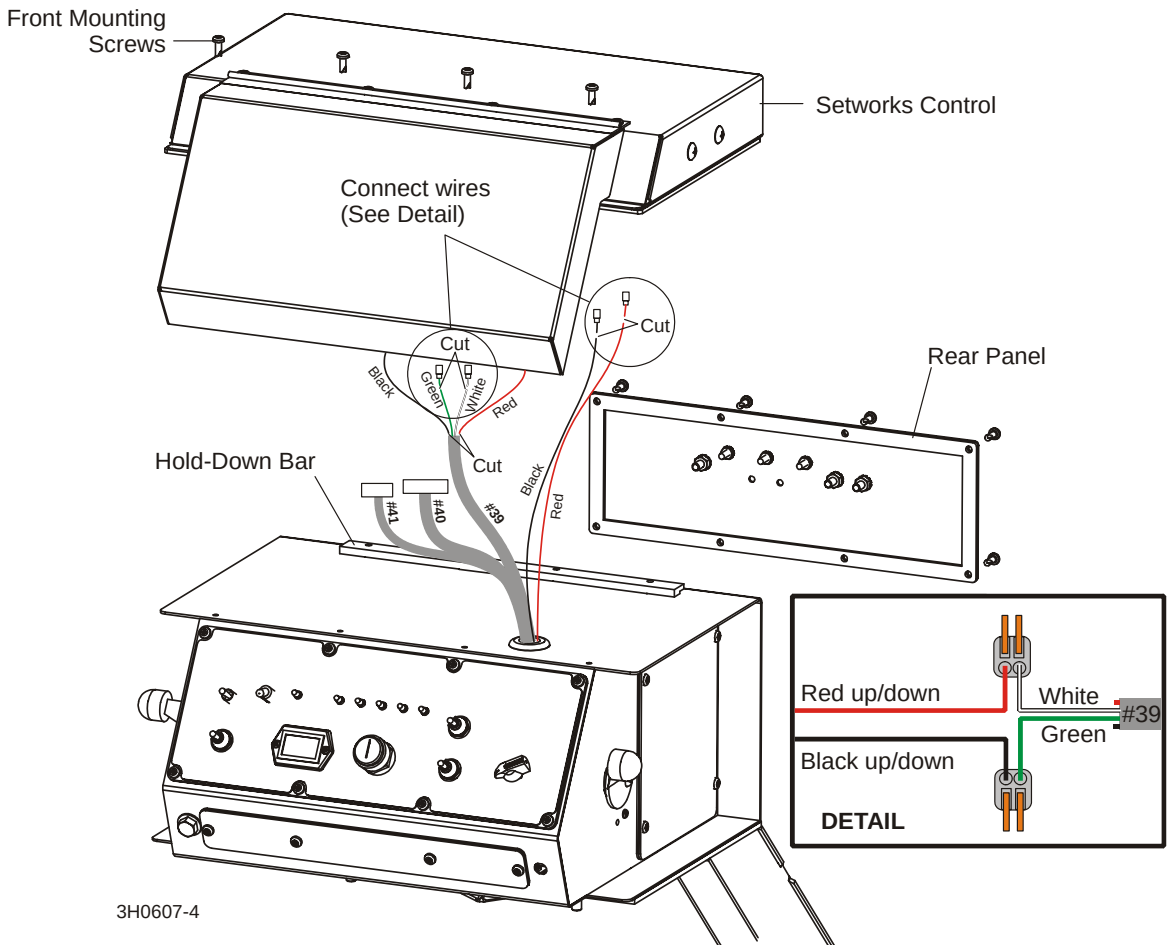


FIGURE 2

See Figure 3.

11. Position the Accuset 2 control box on top of the sawmill control and route the black, red, blue and yellow Accuset harness wires through the conduit into the sawmill control box (the gray wires will remain unconnected, lying in the Accuset 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.

12. Remove the sawmill control front panel. Connect the red Accuset harness wire to the front terminal of the Blade Guide circuit breaker (CB5). DO NOT OVERTIGHTEN.

13. Connect the black Accuset harness wire to the ground stud at the rear of the control box and secure with the 1/4-20 self-locking hex nut supplied.

14. Remove the up/down drum switch handle and remove the drum switch mounting bolts. Connect the yellow Accuset harness wire to terminal #4 of the drum switch (leave any existing wires connected). Connect the blue Accuset harness wire to terminal #1 (leave any existing wires connected).

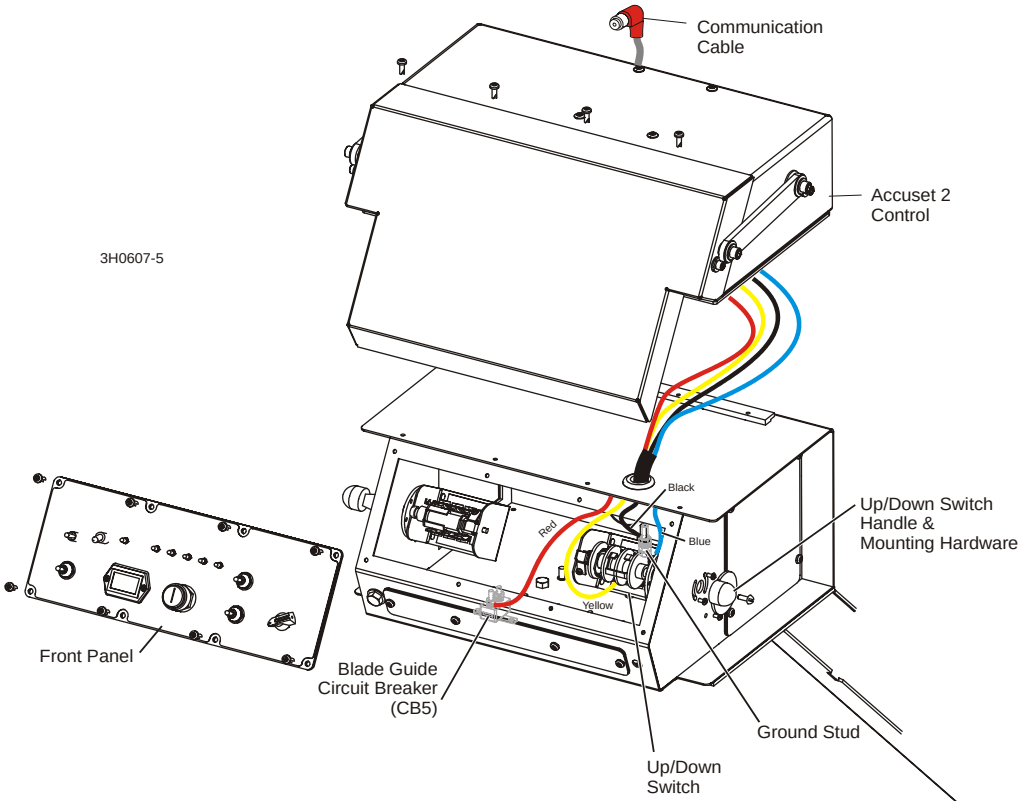


FIGURE 3

15. Use two of the supplied wire ties to secure the conduit around all wires.

16. 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.

17. 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.

18. Connect the supplied communication cable to the connector on the back of the Accuset 2 control.

19. Route the communication cable to the cable carrier.

See Figure 4.

20. Route the new communication cable down the control pedestal into the cable carrier wireway Remove the cable carrier box plate and continue routing the cable through the box into the cable carrier. The 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 control pedestal and 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.

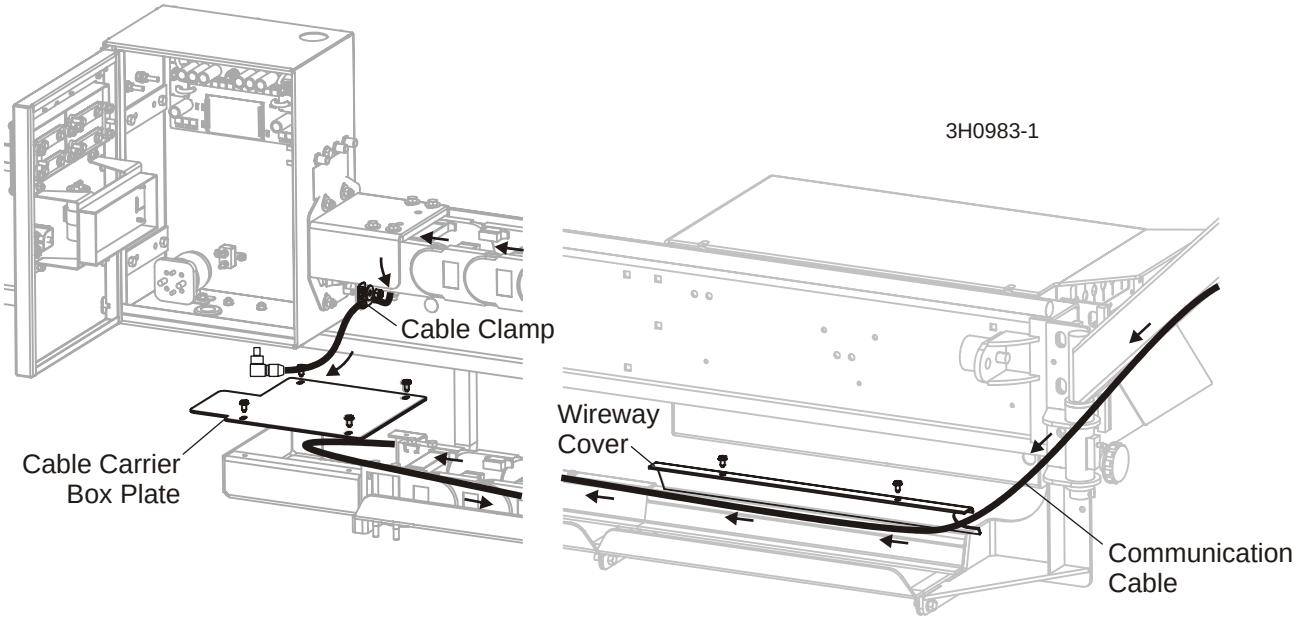


FIGURE 4

21. Open the remote power box door and disconnect the four power and four cable #39 from the Setworks circuit board panel mounted on the remote box door.

Remote model before 6/99 only: Remove the unused up/down solenoids from the back of the remote power box. Remove the three nuts and disconnect the black ground wire from the ground stud and the red wire from the up/down circuit breaker.

See Figure 5.

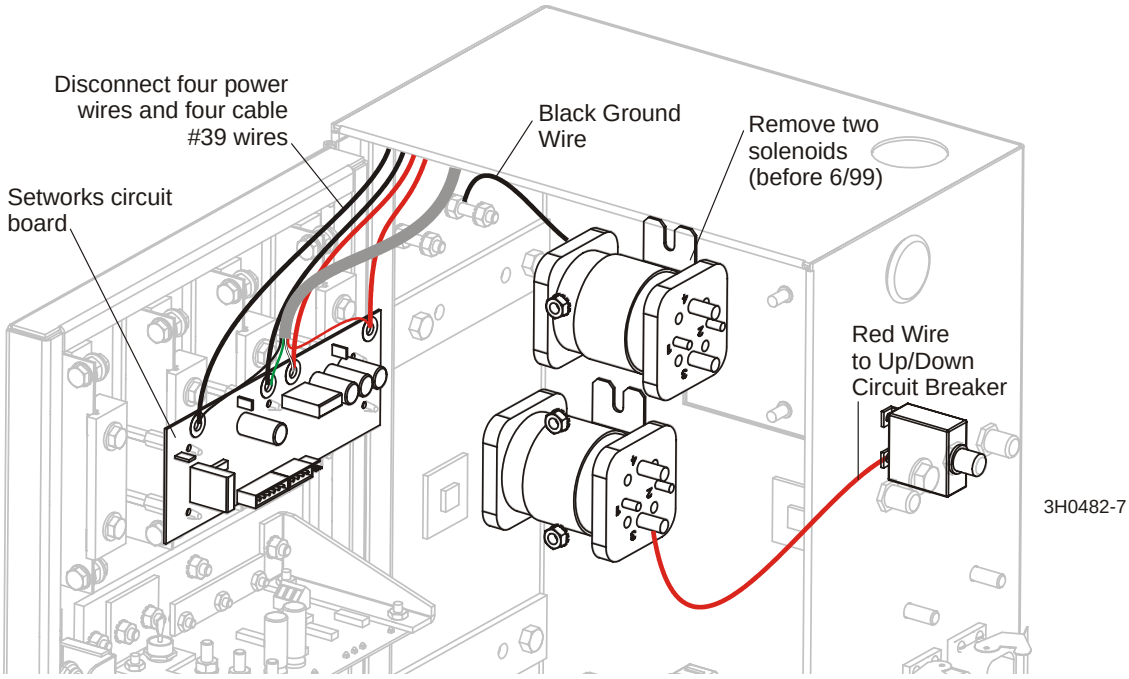


FIGURE 5

22. 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 are 2 3/4" from the right side of the box, 5 3/8" from the rear of the box and 1 1/8" apart.

23. Install the new Accuset 2 module to the remote power box.

See Figure 6. Remote sawmills before 6/99 with solenoid panel in back of box: Drill four 5/16" diameter holes in the back of the box at the locations shown. Thread a hex standoff supplied to each of the four module mounting bolts. Orient the module vertically, with the connector ports at the top. Secure the module to the box with the supplied 1/4" button head screws and star lock washers.

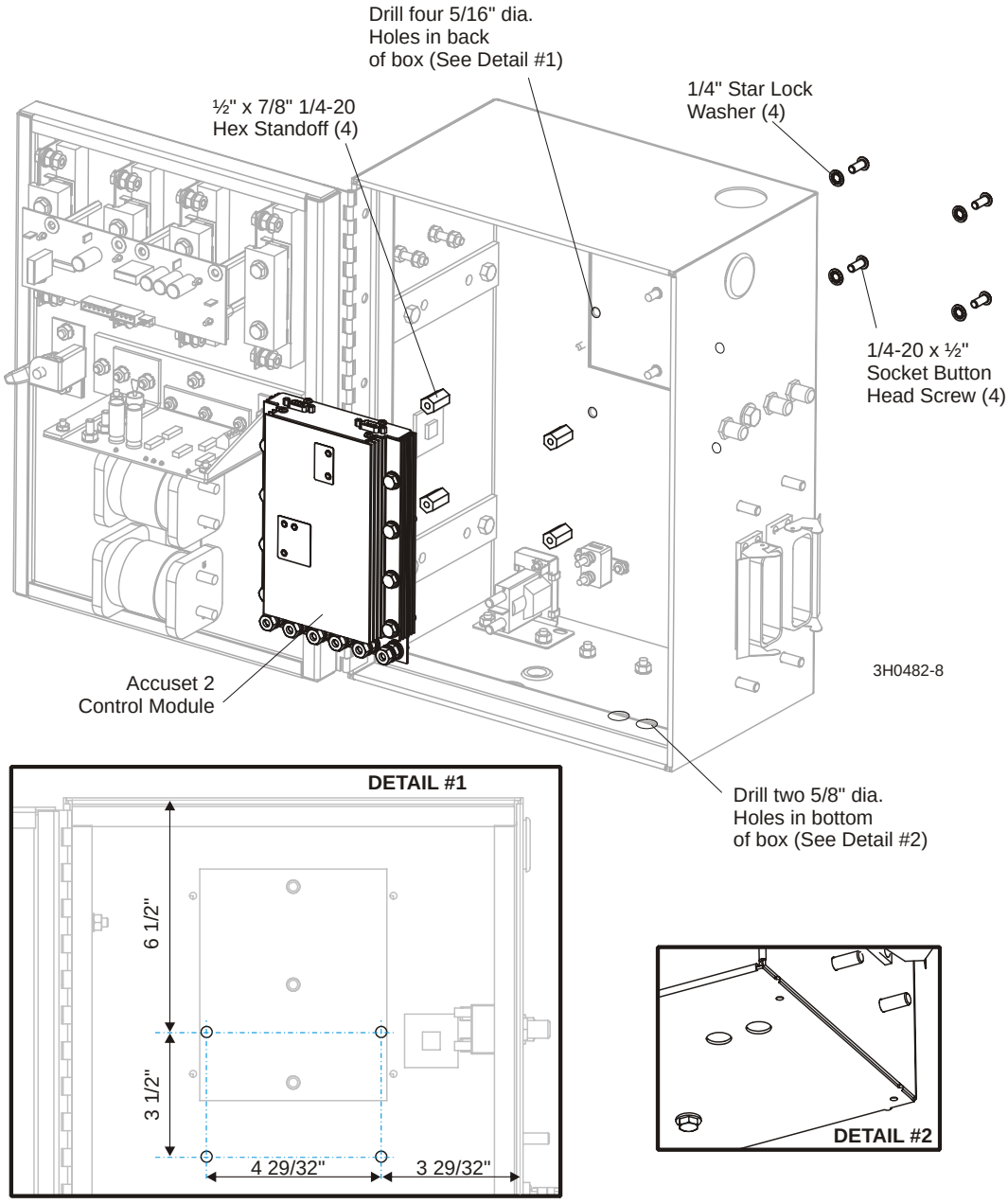


FIGURE 6

See Figure 7. Remote sawmills after 6/99 without solenoid panel in back of box: Drill four 5/16" diameter holes in the back of the box at the locations described above. Orient the module vertically, with the connector ports at the top. Secure the module to the box with the supplied 1/4" star lock washers and heavy-duty jam nuts.

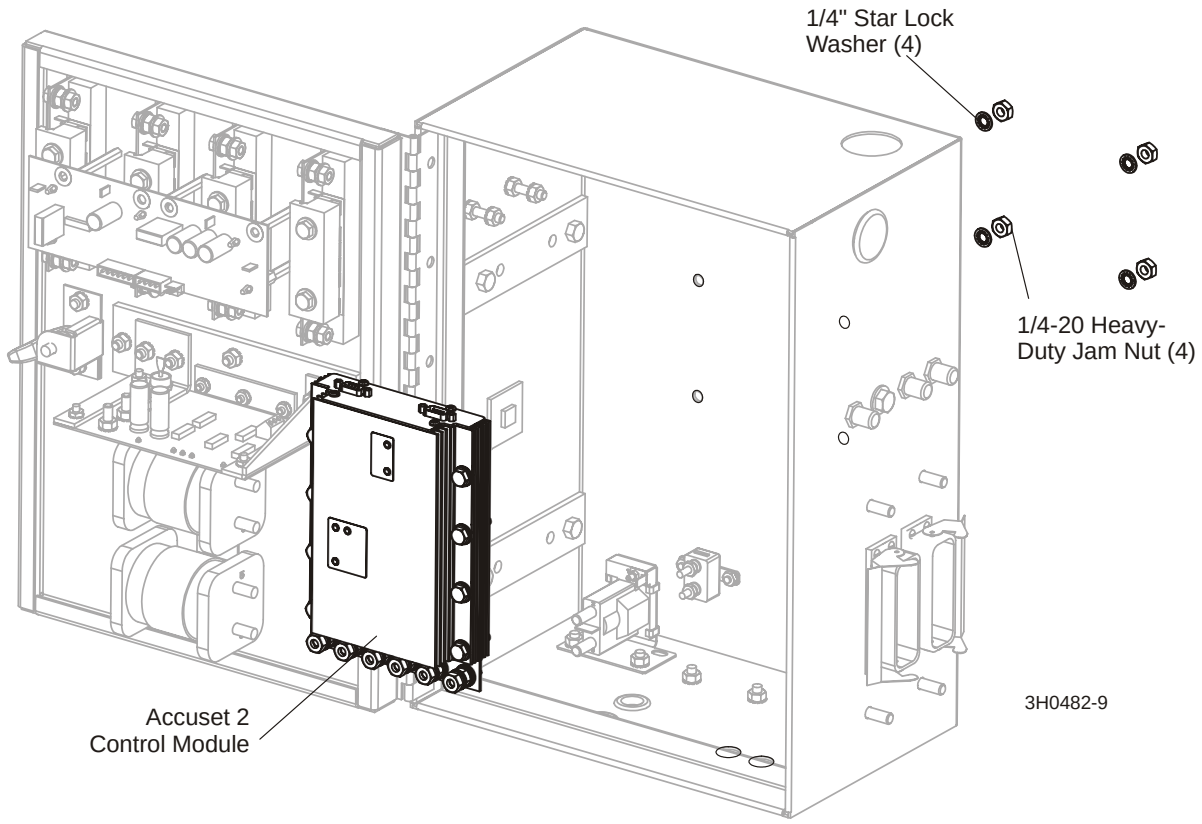


FIGURE 7

24. Locate the four cable #39 wires removed from the Setworks control panel. Cut the red and black wires back to the cable jacket. Cut the terminals from the green and white wires and strip 1/4" of insulation from the ends of each wire. Insert the ends of each wire into the adaptor cable connectors. Connect the green cable #39 wire to the yellow adaptor wire. Insert the end of the wire into the junction connector and push the connector lever closed to secure the wire. Repeat to connect the white cable #39 wire to the blue adaptor wire.

25. Connect the bridge comm harness to the top left port of the drive control. 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.

26. Connect the power wires removed from the Setworks panel to the terminals at the bottom of the drive control.

27. Connect the previously installed communication cable to the 5-pin connector in the bottom of the box. Connect the supplied transducer cable to the 8-pin connector and route to the transducer sensor.

See Figure 8.

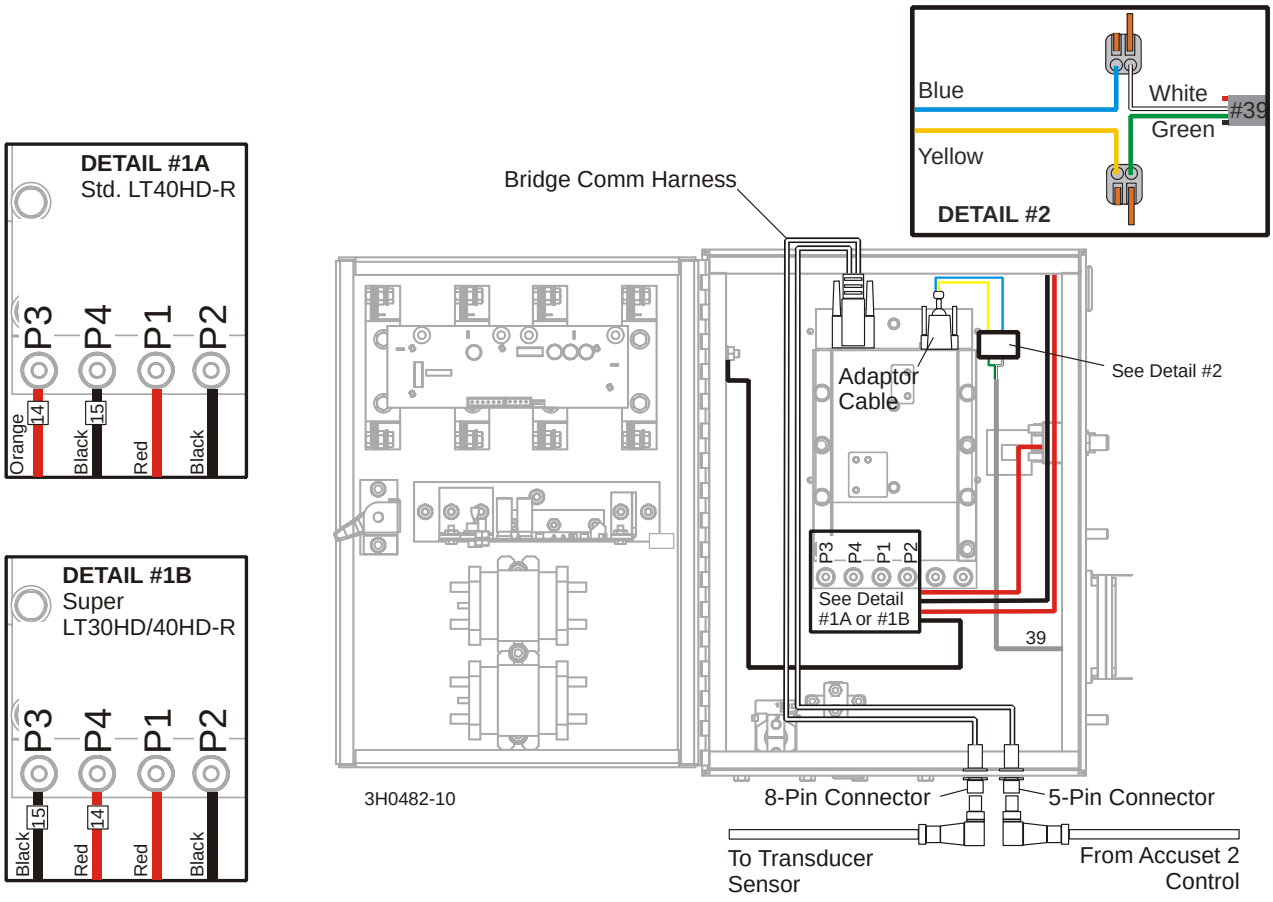


FIGURE 8

28. Secure cables & wires inside the power box with wire ties as necessary to limit movement and interference.

29. Recheck that all connections are tight & secure.

30. Remove the drive pulley/belt cover from the sawmill.

31. Disconnect the encoder cable from the remote control power box and remove the encoder and mounting bracket from the sawmill.

32. Note the blade height indicator position on the inch scale and remove the scale pointer assembly from the mill. Set the mounting hardware aside.

Remove the existing blade height scale assembly from the mill. Remove the scales from the scale mounting bracket, then set the scales and mounting hardware aside.

> **NOTE:** Sawmills manufactured after 11/00 have four threaded holes in the mast. If your sawmill has the threaded holes, skip to Sensor Installation (*See Section 1.2*). If your sawmill does not have the threaded holes, continue with this procedure.

33. Position the supplied template on the sawmill vertical mast tube 4 5/16” from the top of the tube.

See Figure 9.

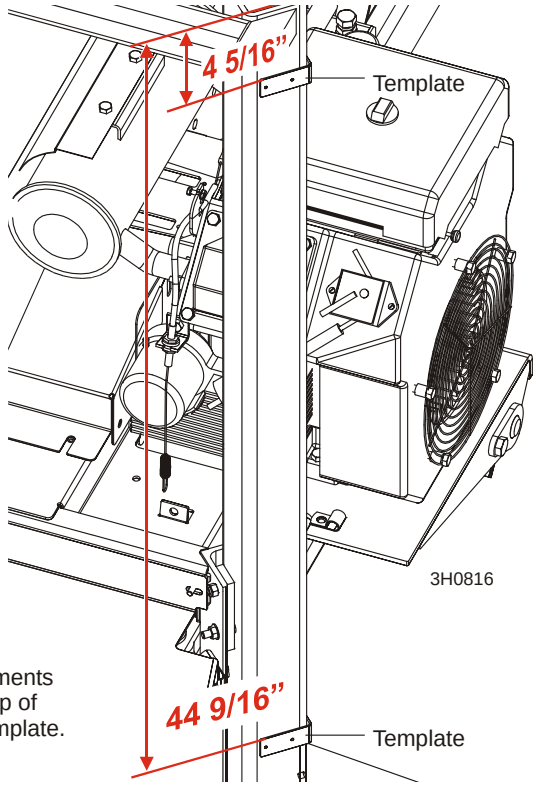


FIGURE 9

34. Mark the locations indicated by the holes in the template on the mast tube.

> **NOTE:** Accurate location is necessary for proper mechanical and sensor operation.

35. Relocate the template 44 9/16” from the top of the mast tube and mark the two hole locations.

36. Use the #3 (7/32”) drill bit provided to drill holes through one wall of the mast tube at all four locations.

37. Thread all four holes with the 1/4-20 tap provided.

38. Install the magnet to the bracket with the provided #8-32 x 7/8” hex head bolts, flat washers and nylon lock nuts. Slide the magnet assembly onto the sensor (the assembly will be secured later).

See Figure 10.

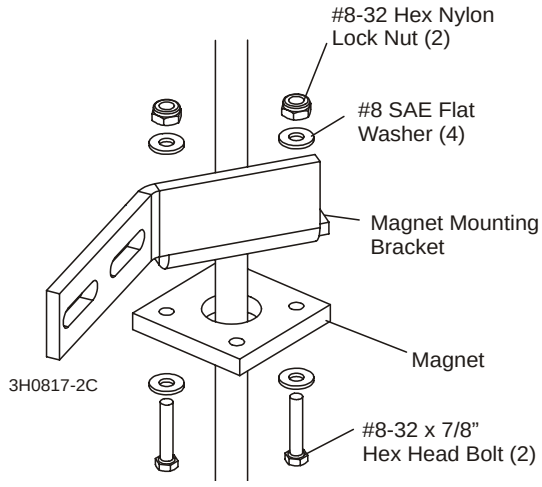


FIGURE 10

39. Install the 3/8” ID grommet to the upper mount bracket and install to the top of the sensor.

See Figure 11.

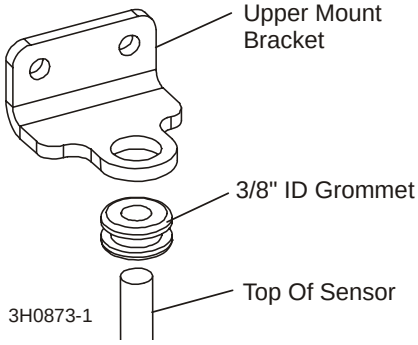


FIGURE 11

40. Install two of the provided 1/4” lock washers and 1/4-20 x 5/8” hex head bolts to the bottom set of threaded holes in the mast. Thread the bolts about halfway into the holes. Slide the slotted lower mounting bracket of the sensor assembly around the two bolts, behind the lock washers. Slide the upper mounting bracket up or down as necessary so the bracket holes align with the holes in the mast. Secure with the remaining two lock washers and hex head bolts. Tighten all four mounting bolts. Use large channel lock pliers on the transducer nut to turn the asssembly so the label is viewable.

See Figure 12.

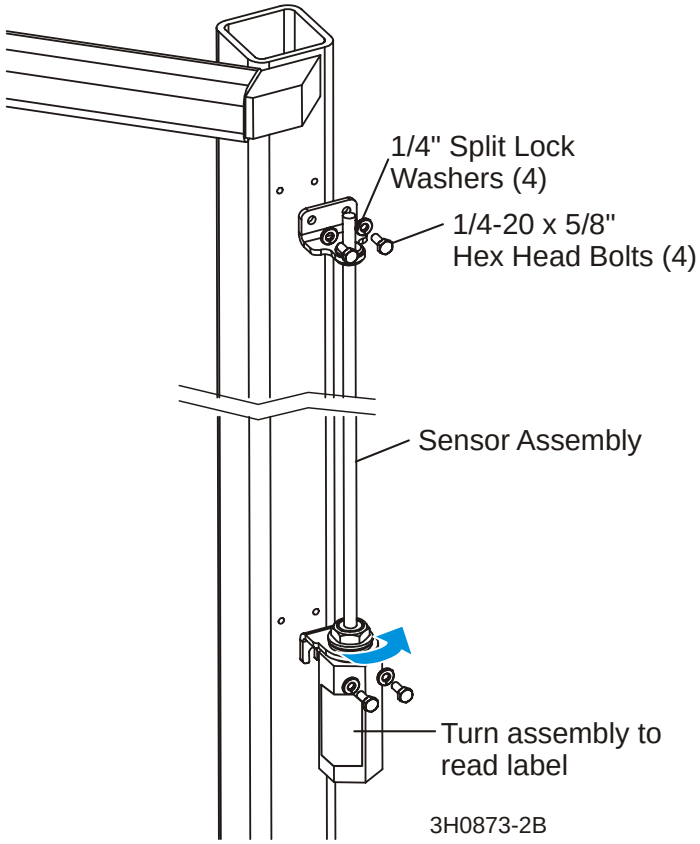


FIGURE 12

41. Remove the blade height and quarter scales from the removed scale mount bracket. Use the existing hardware to secure the scales to the provided scale mount bracket.

See Figure 13.

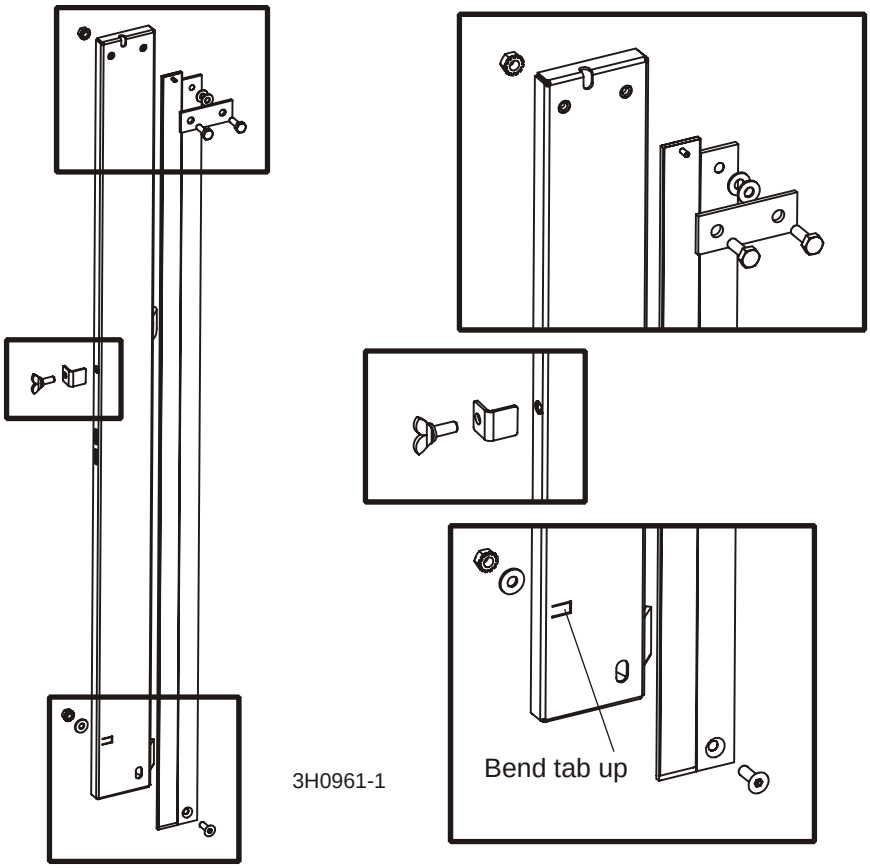


FIGURE 13

Assemble the new scale mount bracket to the sawmill mast and secure the at the top with the existing hardware. Leave the bottom loose until after the magnet assembly is installed.

42. Install the sensor magnet mount block to the scale mount bracket using the four provided #10-24 x 1/2" hex head bolts and flat washers. Check the area between the bracket and block. If there is a gap, use the provided extra #10 washers as necessary to fill the gap. This will prevent bending of the scale bracket when the mounting bolts are tightened.

43. Position the magnet assembly so the holes in the magnet mounting bracket align with the holes in the magnet mount block.

44. Secure the magnet assembly to the mount block with the provided 1/4-20 x 3/4” hex head bolts and flat washers. Adjust the assembly in the slotted holes so the magnet is centered around the sensor rod.

See Figure 14.

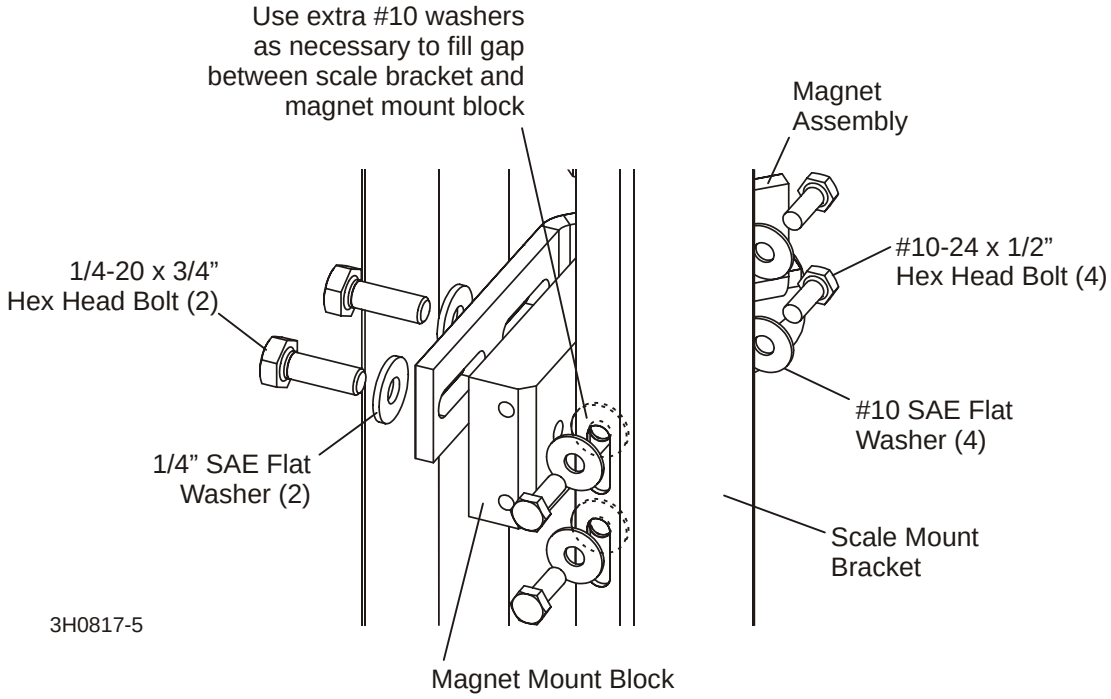


FIGURE 14

45. Use the two provided #10-24 x 3/8" pan head screws and self-locking hex nuts to secure the provided scale pointer to the new pointer mount plate. Then, use existing hardware to secure the pointer mount plate to the sawmill.

See Figure 15.

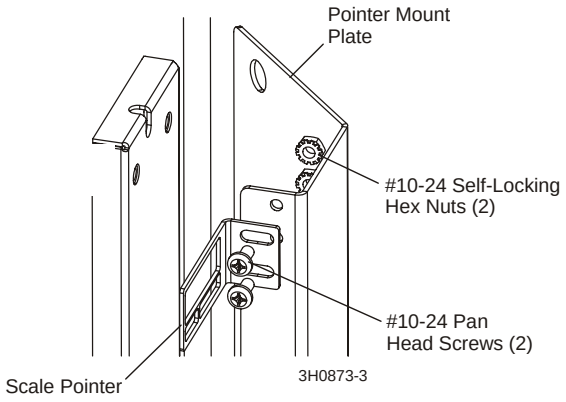


FIGURE 15

Secure the bottom of the blade height scale assembly with the existing hardware. Leave the nuts loose enough you can still move the scale assembly up or down. Adjust the assembly until the blade height indicator shows the measurement noted before the old scale assembly was removed. Tighten the mounting nuts.

Apply the appropriate decals supplied to the pointer mount plate.

46. Connect the transducer cable to the sensor and secure to the power box mounting stud with the provided cable clamp as shown.

See Figure 16.

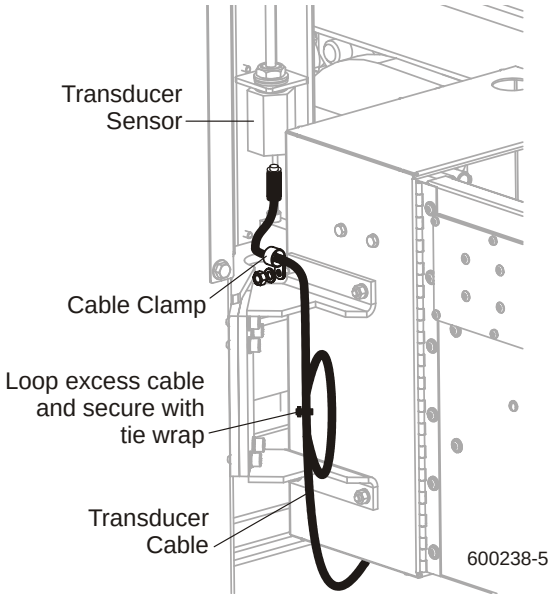


FIGURE 16

47. Install the lower sensor guard.

See Figure 17. Place the cover in position behind the holes and secure with two bolts, lock washers and flat washers provided.

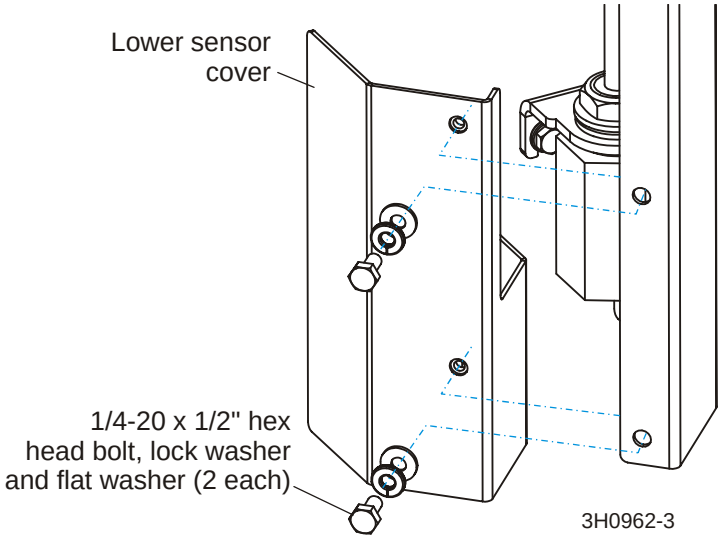


FIGURE 17

48. 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.

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

See Figure 18.

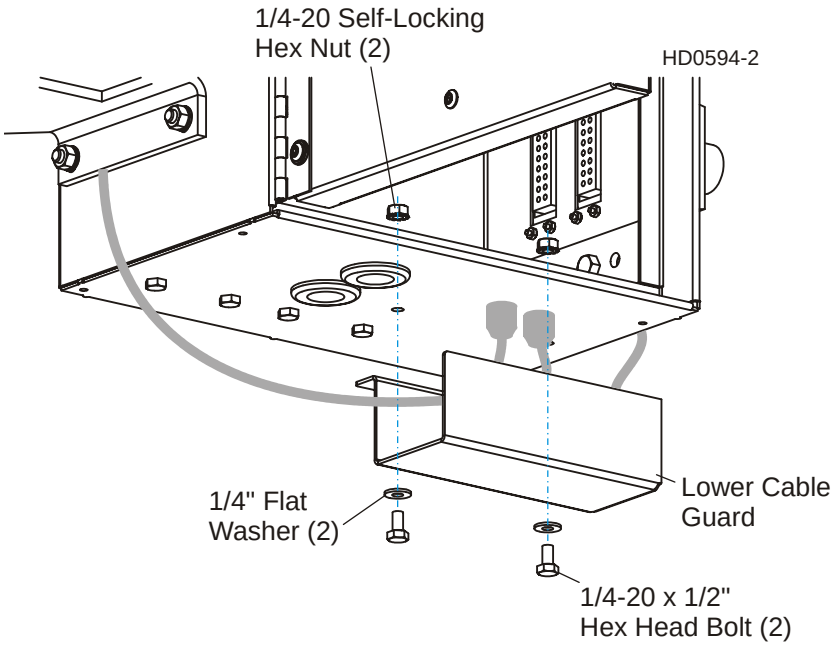


FIGURE 18

50. Reconnect the negative battery terminal cable and replace the battery box lid.

51. See the Setup section of the provided manual to calibrate your new Accuset 2 control.