# I.S. - KIT, BOOM MOWER PROXIMITY SENSOR (970313)

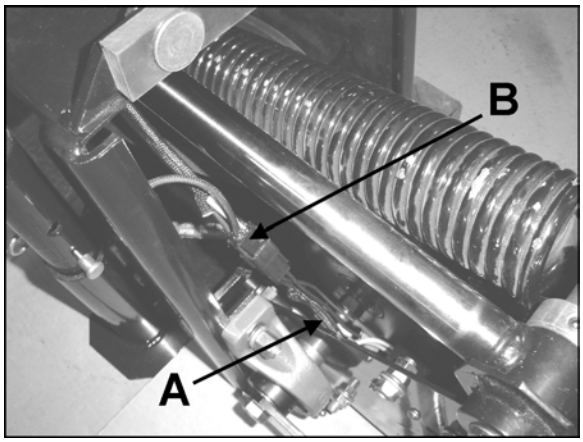
JACOBSEN
A Textron Company

**4134022 REVA**

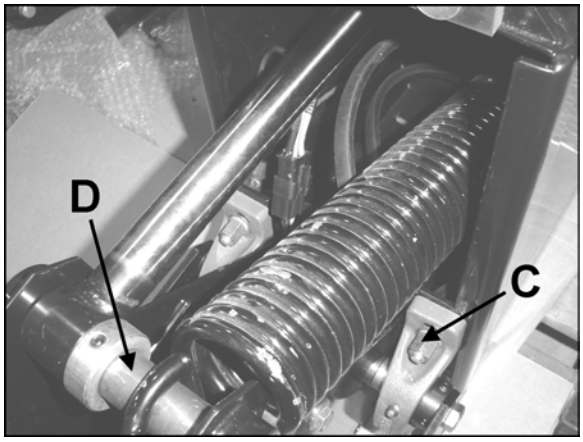
**INTRODUCTION:** This instruction sheet covers the replacement of the mercury switch with a proximity sensor for the Boom Mower attachment.

**NOTE:** Parts indicated with a letter are existing, parts supplied with kit are represented with the number corresponding to the parts list located on Page 5.

1. Lower the boom arm to the ground, set the parking brake and turn the key to the off position.
2. Disconnect the boom harness **A** from the main frame harness **B**.



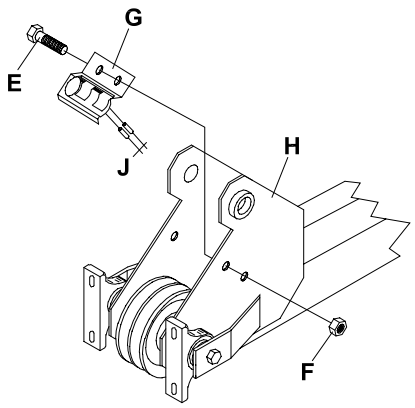

3. Remove (4) bolts **C**, pin **D** and the belt to remove the boom arm from the main frame.
4. Remove and discard (2) bolts **E**, (2) nuts **F** mercury switch with switch shield **G** from the boom arm **H**. Cut the wires attached to the mercury switch above the connectors at location **J**, and strip 3/8" from the ends.



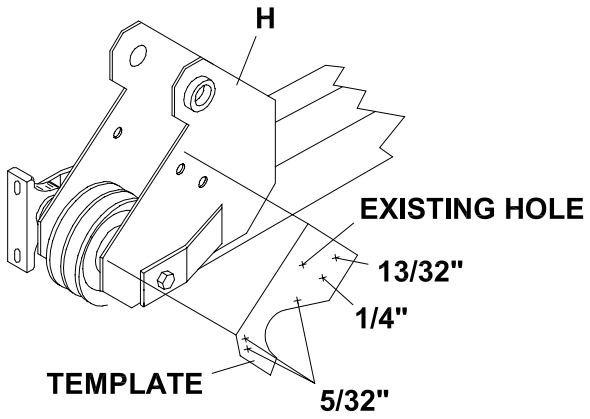

**⚠WARNING**

**Mercury is toxic and should not be thrown in the trash. Dispose of mercury in accordance with local requirements.**

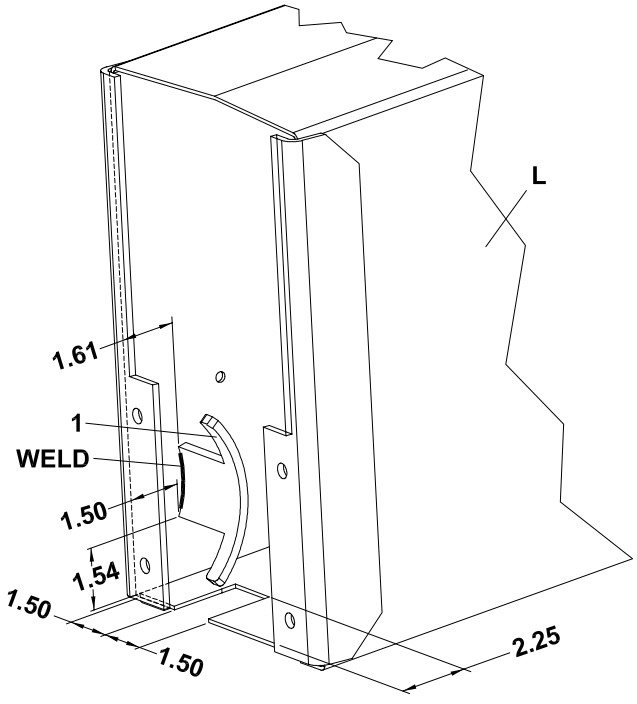
5. Remove and discard "P" clamp holding the boom harness, to the boom arm **H** and retain nut, lockwasher and bolt for later use.



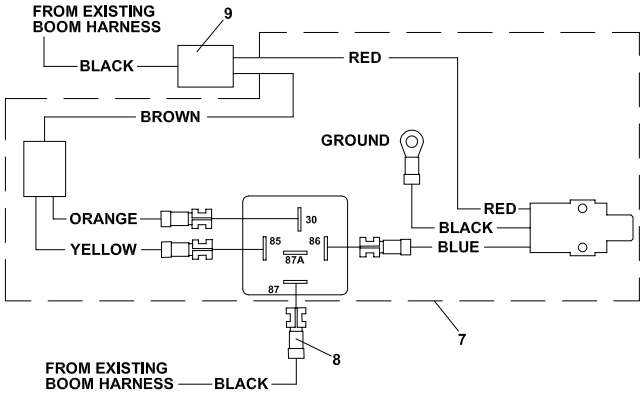
1. Cut out drill template located on Page 6.
2. Align edges of template with the edges of the boom arm **H**, as shown. Tape template to the boom arm.
3. Mark and drill (3) 5/32", (1) 13/32" and (1) 1/4" diameter hole on the boom arm, as shown on template.



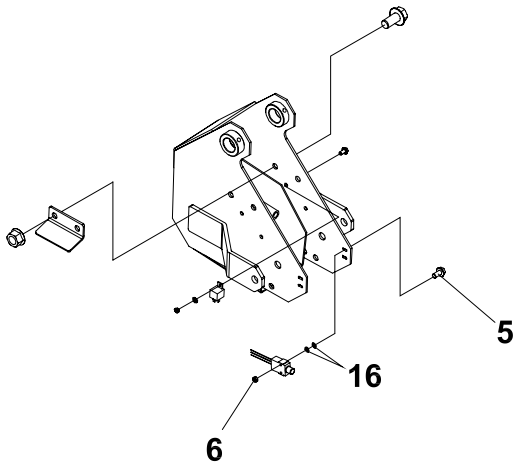

4. Cut a 1.50" X 2.25" notch in the bottom of the main boom frame **L**, as shown.
5. Locate the sensor shut-off bracket **1** on the main boom frame and weld, as shown.

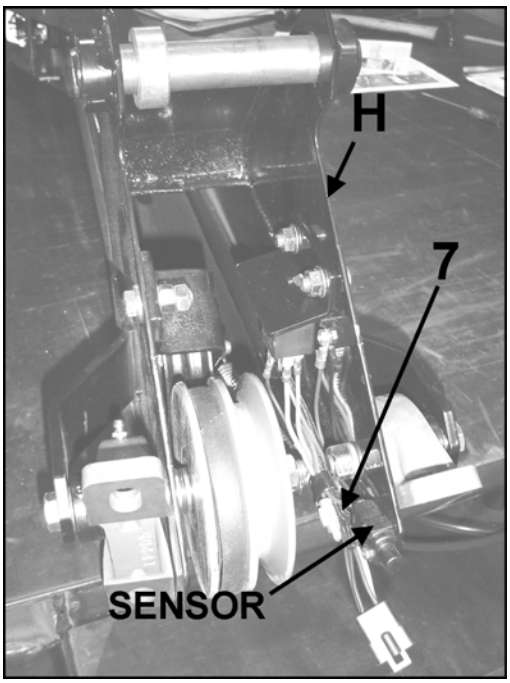


6. Connect the stripped ends of the BROWN wire and the RED wire of harness **7** to one of the black wires cut from the existing mercury switch, using quick splice connector **9**.
7. Crimp spade connector **8** onto the remaining black wire cut from the existing mercury switch. Connect wire to terminal 87 of the relay.

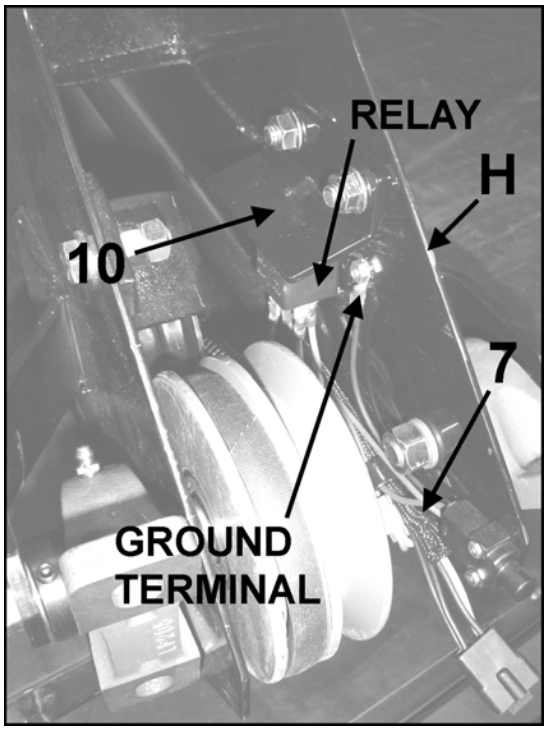



8. Install the proximity sensor from the harness **7** to the boom arm **H**, in the (2) 5/32" holes drilled in Step 3 Page 2, using (2) screws **5**, (4) washers **16** and (2) nuts **6**.

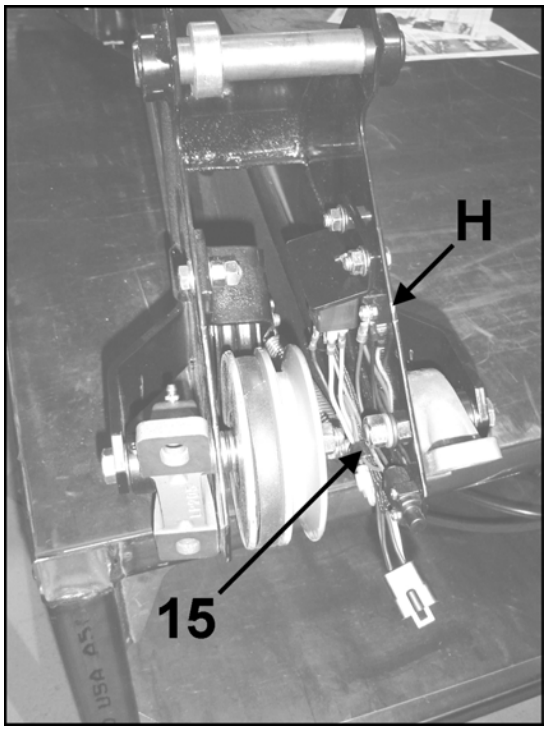


9. Install the relay from the harness **7** to the boom arm **H**, in the 1/4" hole drilled in Step 3 Page 2, using (1) machine screw **2**, (1) lockwasher **4**, and (1) nut **3**.
10. Install the ground terminal to the boom arm **H** in the 5/32" hole drilled in Step 3 Page 2, using (1) screw **11** and (1) nut **12**.
11. Install the relay cover bracket **10** in the 13/32" holes of the boom arm **H**, using (2) 3/8-16 X 3/4 bolts **13** and (2) 3/8-16 nuts **14**.



12. Route wires through clamp **15** and attach to boom arm **H**, using the bolt, lockwasher and nut removed in Step 5 Page 1. Make sure the wires are routed away from the pulley and spring.
13. Reinstall the boom arm to the main frame.
14. Reconnect the boom harness to the main frame harness.




**KIT PARTS LIST**

| ITM | PART NO. | DESCRIPTION | QTY |
|---|---|---|---|
| 1 | 4133946 | SENSOR SHUT OFF BRKT | 1 |
| 2 | 64152-05 | 10-32X1/2 MACH SCREW | 1 |
| 3 | 64025-14 | NUT-HEX #10-32 | 1 |
| 4 | 120052 | LOCKWASHER | 1 |
| 5 | 64152-31 | #6-32X1-1/8 RD HD SLOT | 2 |
| 6 | 64025-26 | NUT-HEX #6-32 KEPS | 2 |
| 7 | 4134021 | HARNESS, PROXIMITY SENSOR | 1 |
| 8 | 30-004B | TERMINAL, FEM SPADE (14-16GA) | 1 |
| 9 | 30-095 | CONNECTOR, QUICK SPLICE | 1 |
| 10 | 4134500 | COVER BRACKET | 1 |
| 11 | 64152-57 | SCREW-MACH #8-32X3/8 | 1 |
| 12 | 64025-29 | NUT-HEX #8-32 | 1 |
| 13 | 64139-21 | BLT-WLF 3/8-16X3/4 | 2 |
| 14 | 64141-4 | NUT-WLF 3/8-16 | 2 |
| 15 | 48228A | CABLE CLIP-INSULATED | 1 |
| 16 | 64163-86 | WASHER | 4 |