

## Road Package Installation

### AT-9077

| Document Number | Kit Number / Part Number | Model       | Serial Number Range |
|-----------------|--------------------------|-------------|---------------------|
| 12-70030        | AT-9077                  | 520M / 520Y | All Units           |

### ⚠ WARNING

Before making repairs or adjustments set the parking brake, turn off the engine, and remove the ignition key.

Always disconnect the negative battery cable from the battery when working with electrical components. Always work in a manner that does not put safety at risk!

### ⚠ WARNING

Safety glasses must be worn during installation. Ear (hearing) protection must be worn when using air or power tools.

**Installation Notes:** Right and left hand orientation referred to in these instructions is determined as if facing forward from the operator station.

**Installation Time (estimated)** 2 hours

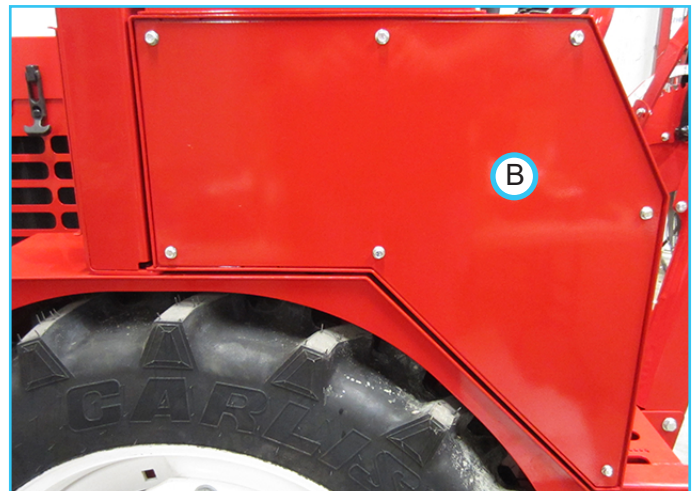
**Tools Required:** 3/8" wrench, 3/8" socket, 7/16" wrench, 7/16" socket, Ratchet, Torque Wrench

| Kit Contents |                                  |      |
|--------------|----------------------------------|------|
| Part #       | Description                      | Qty. |
| 05-0186      | Grommet 6" Oval                  | 6    |
| 30-0333      | Fuse, 10 Amp Mini Red            | 3    |
| 30-0370      | Fuse, 60A Maxi Blue              | 1    |
| 31-0053      | Switch, Rocker On/Off            | 2    |
| 31-0055      | Switch, Rocker On/Off/On         | 1    |
| 31-0057      | Switch, Horn                     | 1    |
| 32-0210      | Harness, Wire 7 Pin Trailer Plug | 1    |
| 32-0213      | Harness, Adapter Light           | 6    |
| 33-0017      | Light, LED Wide Flood            | 2    |
| 33-0081      | Horn, Low Tone                   | 1    |
| 33-0083      | Light, LED Turn - Amber          | 4    |
| 33-0084      | Light, LED Stop/Tail/Turn - Red  | 2    |
| 35-0117      | Relay, 12V 35/20 Amp 280 Micro   | 3    |
| 35-0153      | Module, Directional              | 1    |
| 90-0406      | Bolt, 1/4-20 USS                 | 2    |
| 95-04        | Washer, Flat 1/4 SAE             | 2    |
| 99-SF04      | Nut, SRF 1/4-20 USS              | 7    |
| 99-SF0406    | Bolt, SRF 1/4-20 x 3/4           | 5    |

1. Install the front wiring harness in accordance with the Front Chassis Wiring Harness Installation instructions (Document # 12.70033) as required.
2. Disconnect the electrical power to the tractor by pushing the circuit breaker button (A).

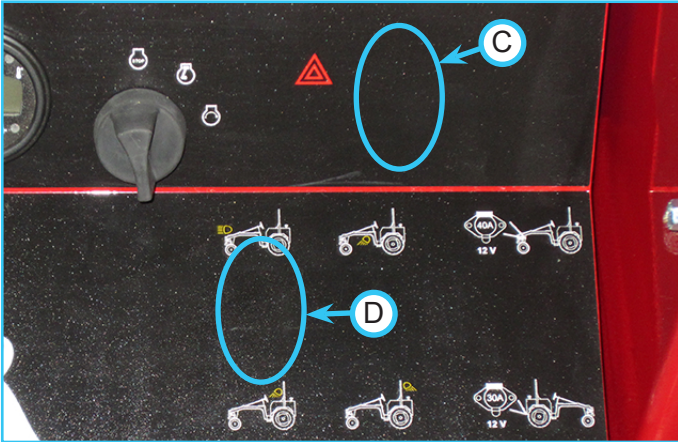


3. Remove the console cover (B) by removing the seven 1/4" bolts located around the perimeter of the cover.





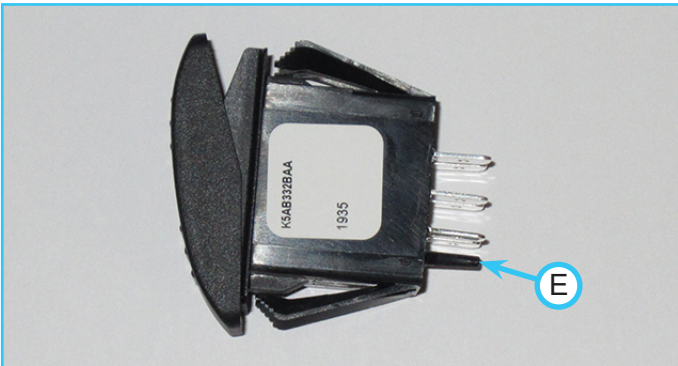
4. Locate the location of the hazard light switch (C) and the front headlight switch (D).



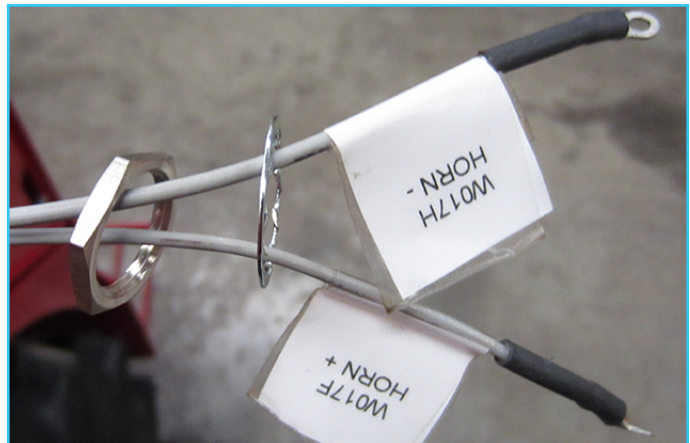
9. Locate the horn positive and negative wiring harness wires inside the operators console.



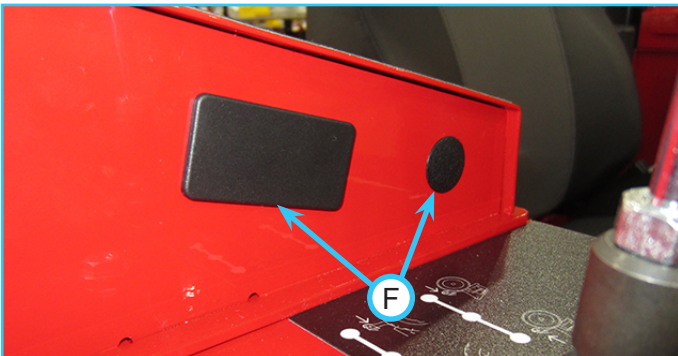
5. Using a utility knife cut out a square opening in the decal for the rocker switch.
6. Install the rocker switches into the operators console with the locating pin (E) toward the bottom of the console.



10. Install the nut and lock washer on to the wires as shown below.



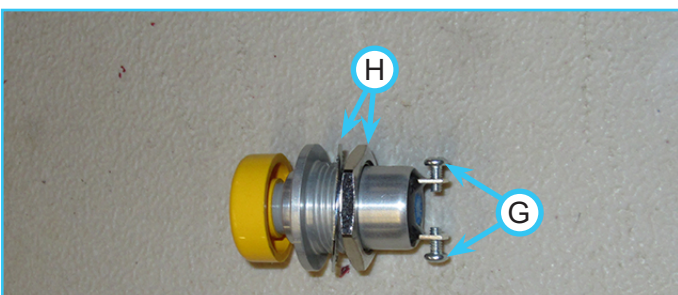
7. On the front of the operators console remove the directional signal and horn opening covers (F).



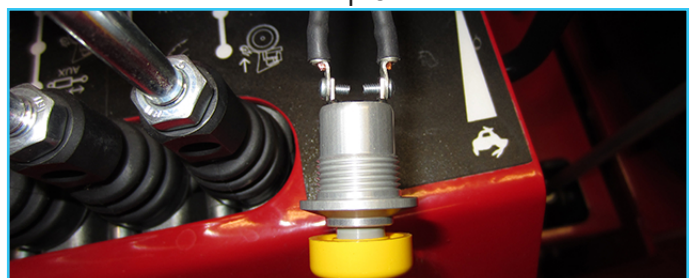
11. Route the horn wires over the hydraulic valve and through the horn switch mounting hole.



8. Remove the two terminal screws (G) the lock washer and nut (H) from the horn switch.

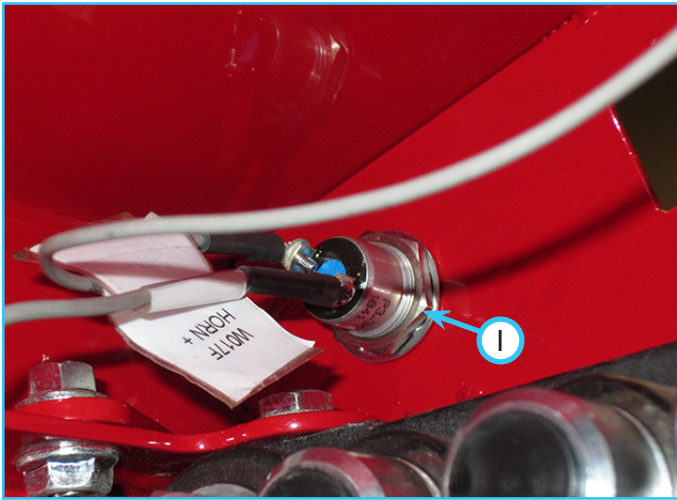


12. Connect the positive and negative wires to the horn switch securing them with the terminal screws removed in step 8.

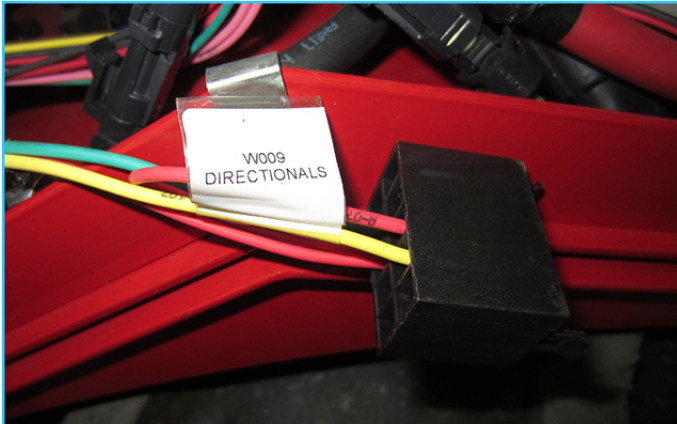




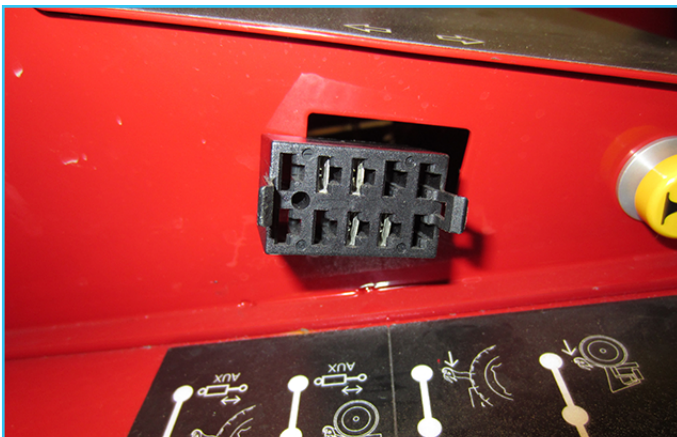
13. Position the horn switch in the mounting hole.
14. Secure the switch in place with the lock washer and nut (I) placed over the horn wiring harness in step 10.



15. Locate the wiring harness in the operators console labeled Directionals.



16. Route the directional wiring harness over the hydraulic valves and through the directional switch mounting hole.

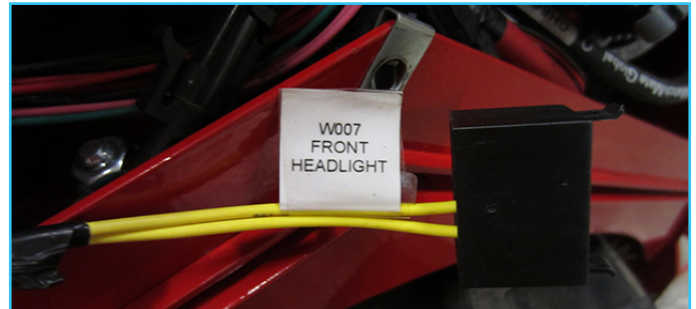


17. Connect the three position switch to the harness.

18. Install the switch into the mounting hole.



19. Locate the wiring harness in the operators console labeled Front Headlight.

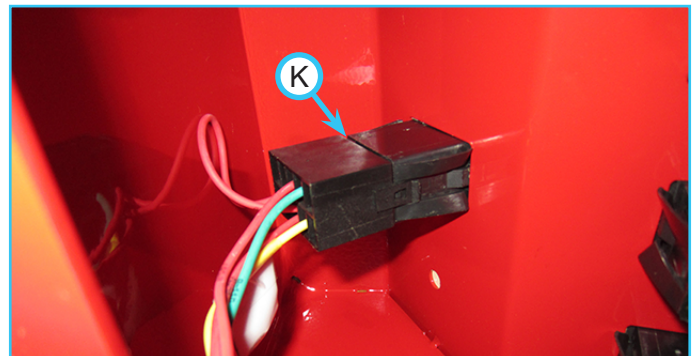


20. Connect the front headlight harness to the front headlight switch (J).



21. Locate the wiring harness in the operators console labeled Hazard Switch.

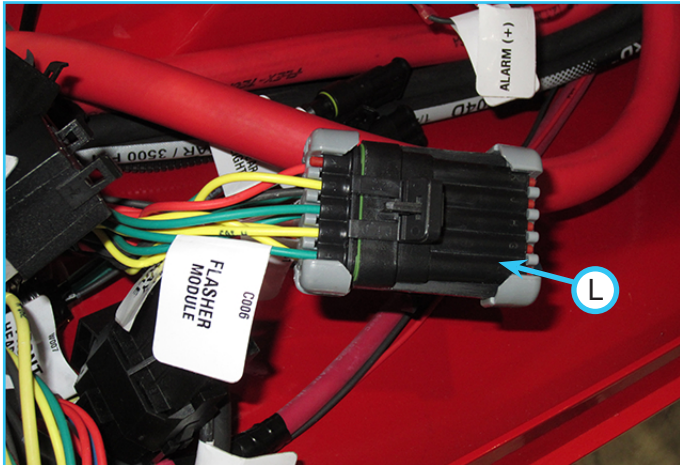
22. Connect the hazard wiring harness to the hazard light switch (K).





23. Locate the wiring harness in the operators console labeled Flasher Module.

24. Remove the cover (L) from the harness.



25. Connect the directional module (M) to the flasher module harness.

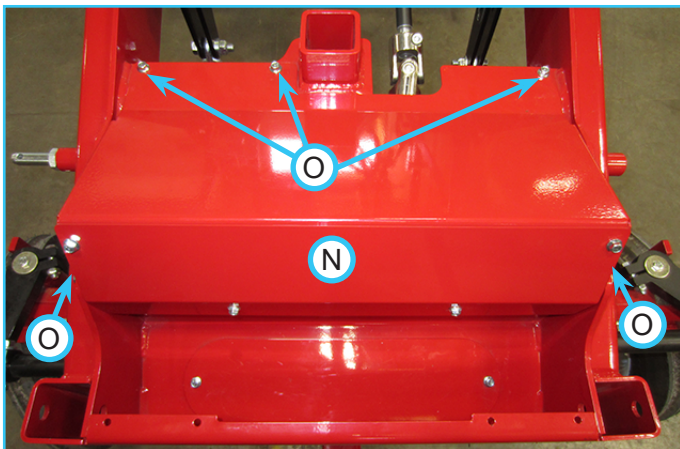


26. Install the console cover.

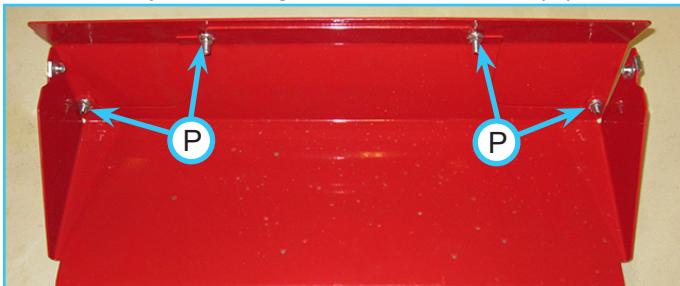
27. Secure the console cover in place using the seven 1/4" bolts removed in step 3.

28. Torque the 1/4" bolts to 100 in-lbs (11 Nm).

29. Remove the front headlight cover (N) by removing the five 1/4" bolts (O).

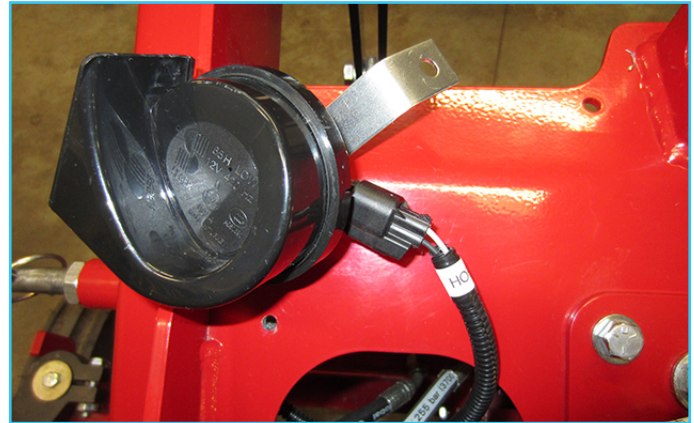


30. Remove the front cover from the front headlight cover by removing the four 1/4" bolts (P).

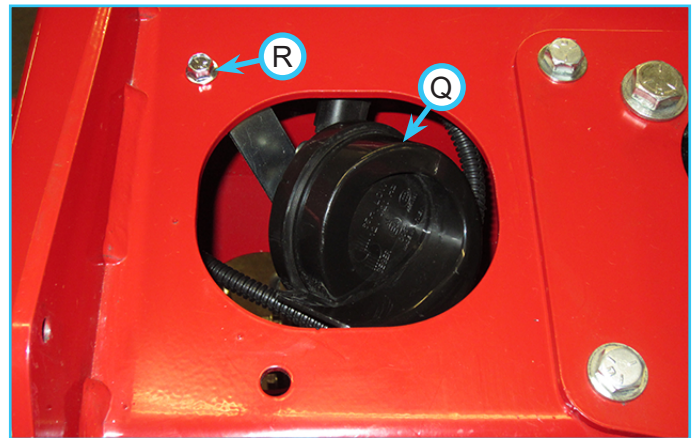


31. Locate the front horn harness in the front frame.

32. Connect the horn assembly to the front horn harness.



33. Position the horn assembly (Q) in the front frame aligning the mounting holes.



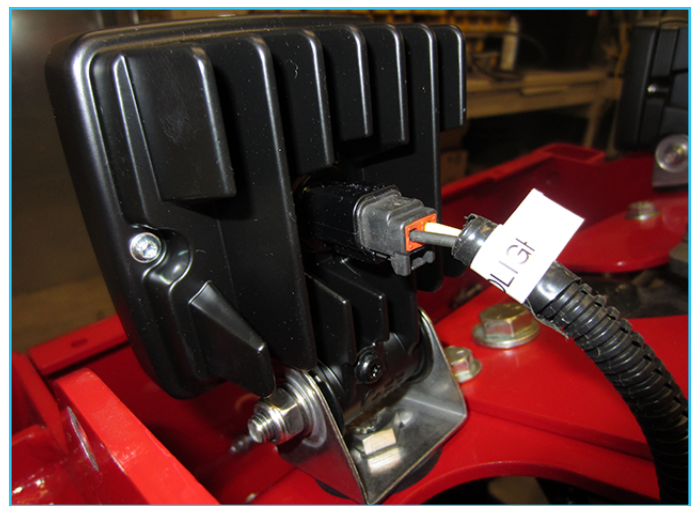
34. Secure the horn in place using a 1/4" bolt (R).

35. Torque the 1/4" bolt to 100 in-lbs (11 Nm).

36. Install the front head lights, position the 8mm mounting bolt through the rubber washer, and then through the mounting hole.

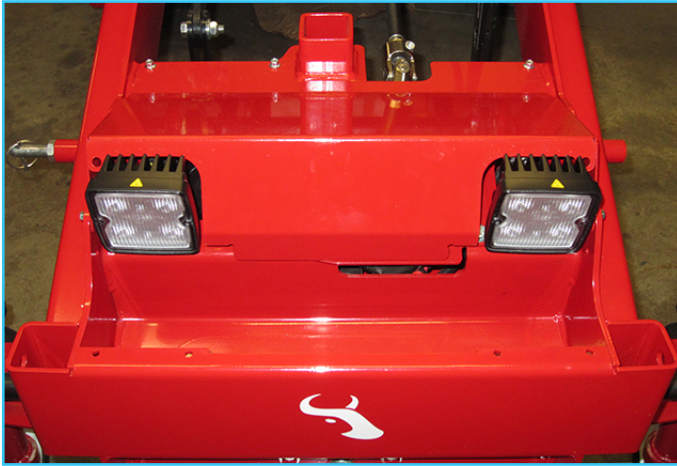
37. Secure the lights in place with a 8mm washer and 8mm lock nut.

38. Connect the wiring harness labeled head lights to the lights as shown below.





39. Position the headlight cover on the frame aligning the mounting holes.



40. Secure the headlight cover in place using the five 1/4" bolts removed in step 29.  
41. Torque the 1/4" bolts to 100 in-lbs (11 NM).  
42. Remove the left and right forward marker light covers by removing the two 1/4" bolts from each cover.



43. Remove the left and right rear marker light covers by removing the four 1/4" bolts from each cover.



44. Install a light grommet into each light opening as shown below. NOTE: Insure that the grommet is fully seated in the opening.



45. Install the six light adapter harnesses onto the six lights. Ensure that the harness connections are fully seated on the lights.



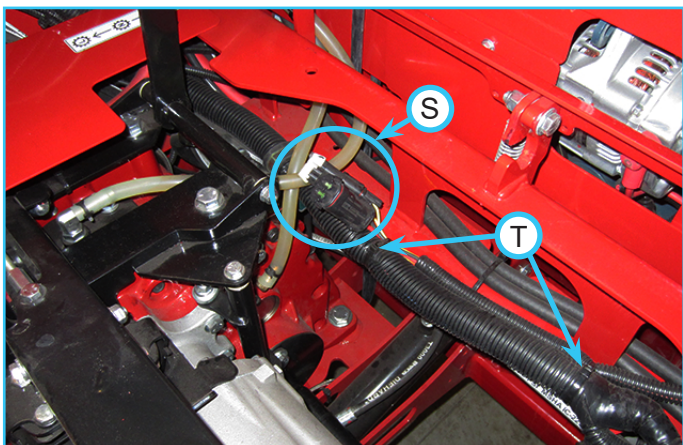
46. Install the forward facing left and right amber marker lights into the grommet. Firm pressure is required to fully seat the light in the grommet.



47. Locate the wiring harness labeled front amber and connect the harness to the light adapter harness.  
48. Repeat the above process for the rear amber and red lights.



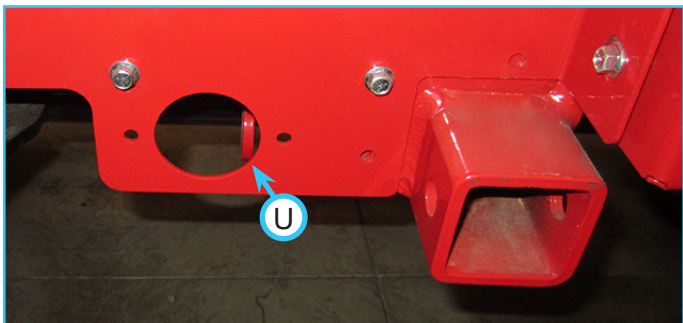
49. Locate the 7 pin plug harness (S) behind the operators seat.



50. Remove the two cable ties (T) securing it to the main harness.

51. Route the harness between the engine cover and rear frame. Ensure that the harness will not interfere with the operation of the seat latch.

52. Install the 7 pin plug through the mounting location (U).

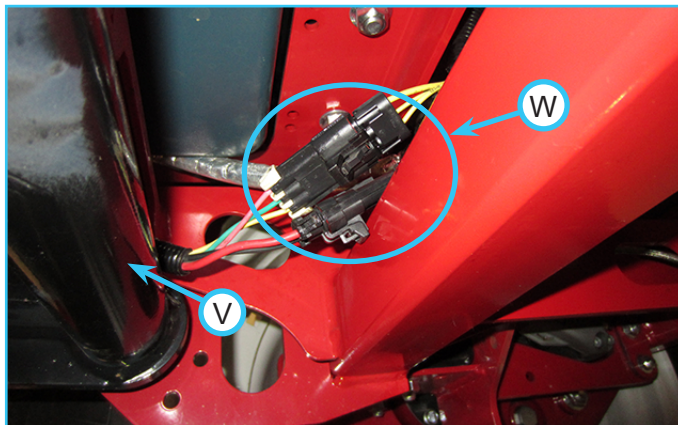


53. Secure the plug in place using two 1/4" bolts, washers and locknuts as shown below.

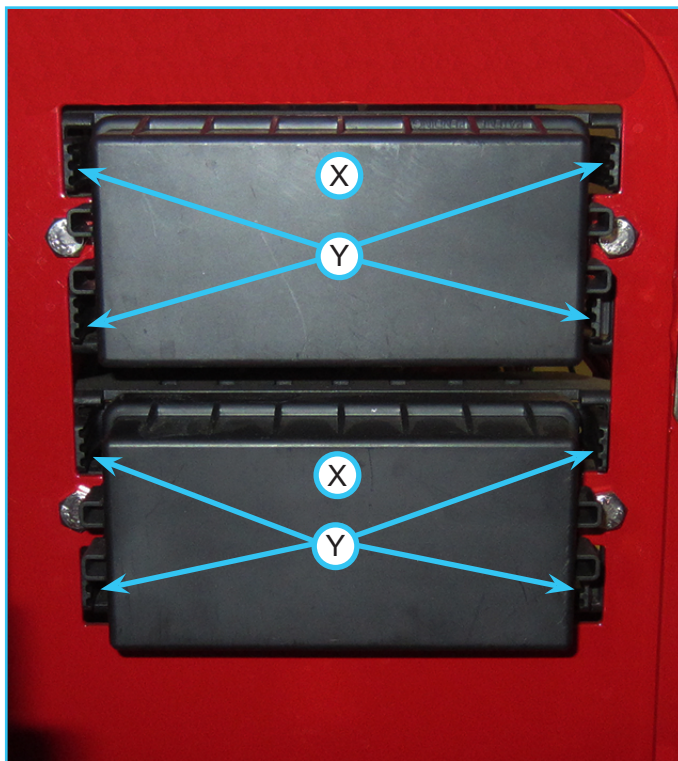


54. Torque the 1/4" bolts to 100 in-lbs (11 Nm).

55. Route the plug harness over the hitch frame (V). Connect the main harness connectors to the 7 pin plug connectors (W).

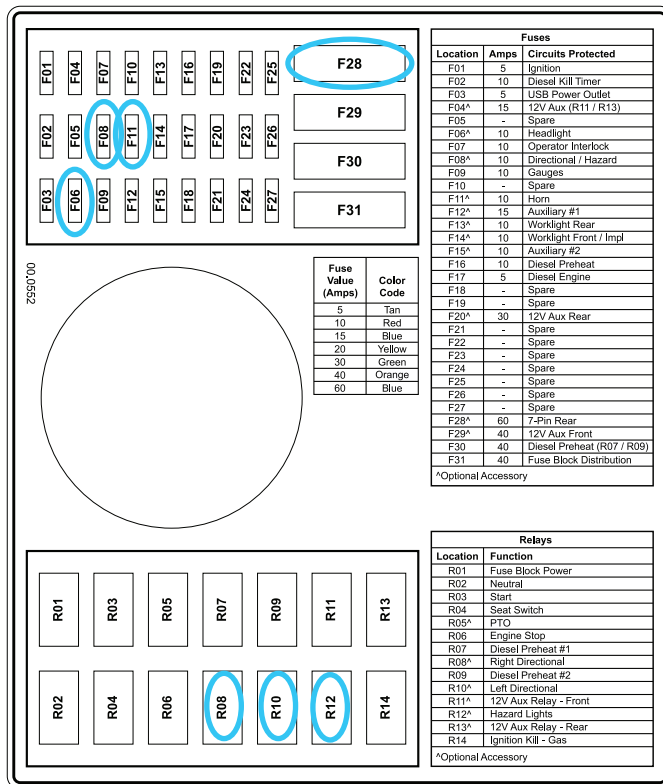


56. Remove the upper and lower fuse block covers (X) by squeezing the four black plastic tabs (Y) toward the cover, and pulling the cover off.

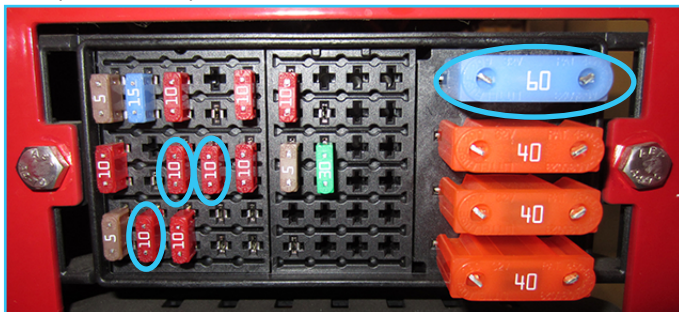




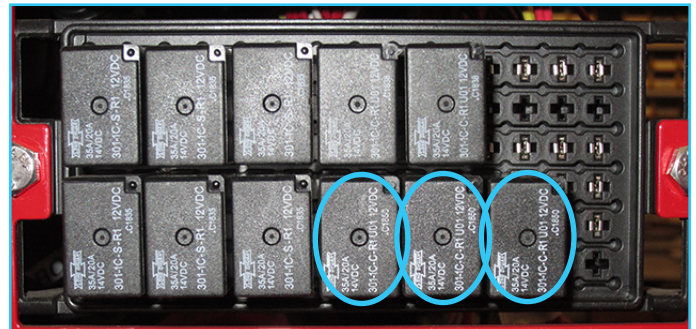
57. Reference the fuse block diagram, located on the inside of the fuse panel access door for the installation location of the three 10 amp mini fuse, 60 amp maxi motor, and three relays.



58. Install a 10 amp mini fuse into terminal F06 (Headlight).
59. Install a 10 amp mini fuse into terminal F08 (Directional / Hazard).
60. Install a 10 amp mini fuse into terminal F11 (Horn).
61. Install a 60 amp maxi fuse into terminal F28 (7-pin rear).



62. Install a 12 volt relay into terminal R08 (Right Directional)
63. Install a 12 volt relay into terminal R10 (Left Directional).
64. Install a 12 volt relay into terminal R12 (Hazard Lights).

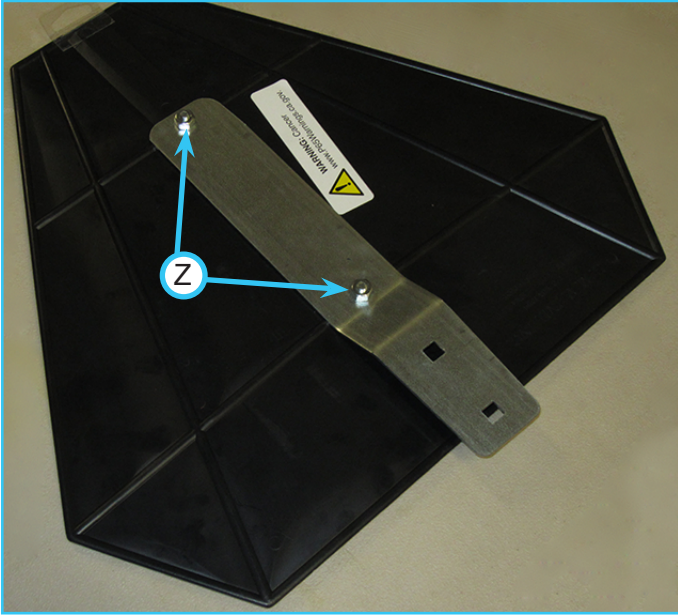


65. Install the upper and lower fuse block covers.
66. Close and secure the fuse panel access door.
67. Install the two Phillips head screws through the slow moving vehicle sign as shown below.





68. Secure the mount in place using two phillips head screws in place with two 1/4" nuts (Z).

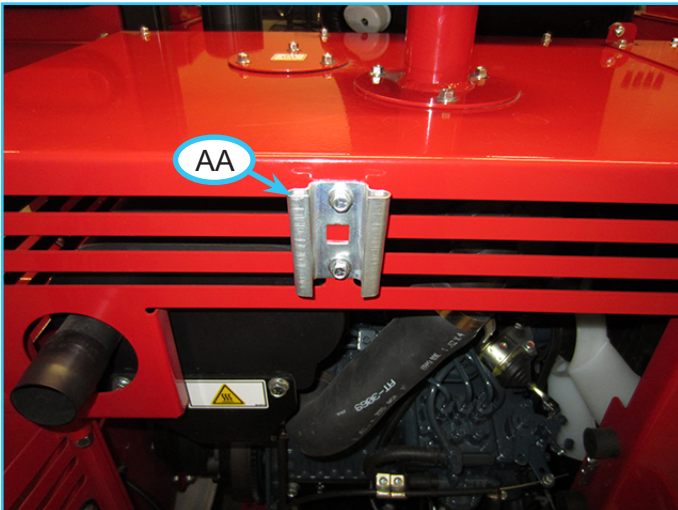


72. Install the slow moving vehicle sign into the mounting bracket.



69. Open the engine access door.

70. Install the slow moving vehicle sign mounting bracket (AA) onto the engine cover above the access door.



71. Secure the bracket in place using two 1/4" flange bolts and two 1/4" flange nuts.