

# **Fitting Instructions for EC Kits**

E-Z-GO Industrial 640 / Cushman	Stock Chaser	Kit 4139011
E-Z-GO Industrial 875 / Cushman	Titan	Kit 4139014
E-Z-GO Industrial 340 / Cushman	Tug	Kit 4140359

A Textron Company



WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.



# **FITTING GUIDE**

# **TITAN INDUSTRIAL 875**

# **BATTERY DISCONNECT SWITCH**

# **KIT PART NUMBER**

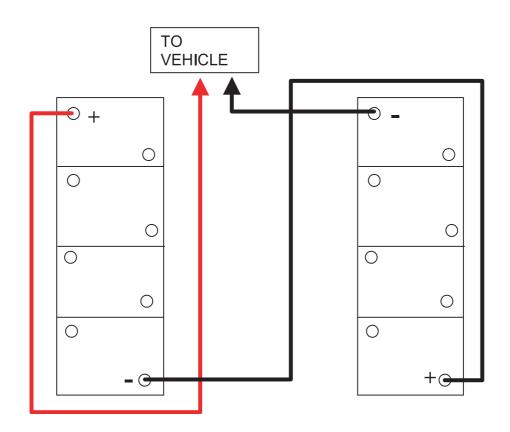
# 4139014

**Component Parts** 

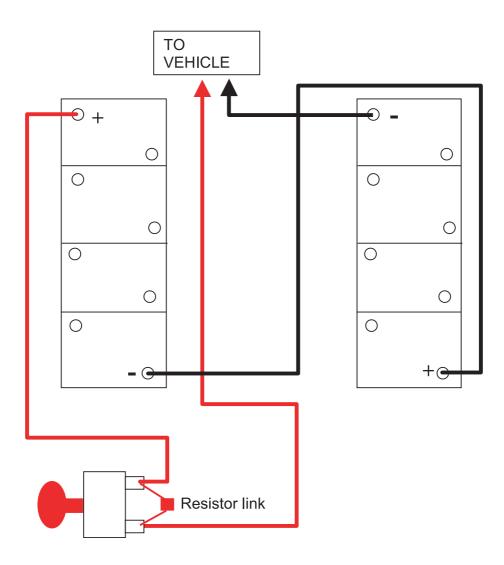
1 off Push / Pull Switch 4139009

1 off Positive battery Cable 4139015

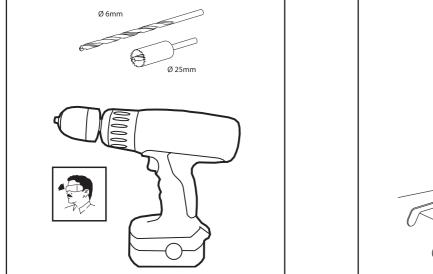
# **Existing Circuit**



# **New Circuit**



1. Disconnect batteries at both negative and positive terminals.



- 875
- 2. Drill suitable holes in Seat panel to mount new switch refer to switch fitting notes supplied with switch. The switch is finally fitted later.

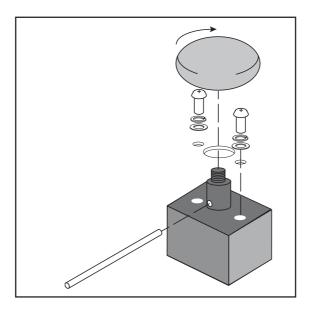


# FIT SWITCH HERE FACING UPWARDS

- 3. Reroute the cable that was fitted to the Positive battery cable to the new switch.
- 4. Fit new cable supplied with kit from new switch terminal to the battery Positive Terminal, ensuring that the fitted resistor is at the switch end. Ensure that the resistor is fitted to both terminals across the switch.
- 5. Route both the new switch cable through the existing cable clips fitted to the central spar of the machine.
- 6. Connect new cable and charger cable to positive battery terminal.



7. Ensure all screws are tight on the switch terminals.



- 8. Slide switch into position and feed up through previously drilled holes, Fit switch into position paying particular attention to the knob fitting instruction supplied. Ensure all screws are tight.
- 9. Push new switch in to ensure circuit is open.
- 10. Refit battery negative cable and charger cable to negative terminal of battery.
- 11. Pull new switch knob firmly out to connect circuit.
- 12. Test machine operation.

## TITAN / 875 SRO LOOM AND CONTROLLER

#### SUPPLIED AS KIT WITH ALL COMPONENTS

COMPONENT PARTS CONTROLLER UNIT 414020 LOOM 414020 LOGIC RELAY (TWL 1

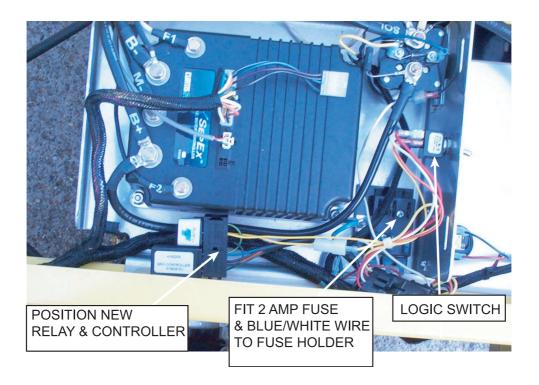
4140205 (TWL 010626-00) 4140206 (TWL 010627-01) (TWL 17-00732)

1. DISCONNECT BATTERY NEGATIVE TERMINAL FROM LEFT HAND REAR BATTERY.



- 2. Expose controller and wiring by lifting cover panel.
- 3. Route the new loom into machine following line of existing loom, starting from the controller and working forwards, to the steering column. Ensure loom cannot chafe on any sharp edges.
- 4. Route Black wire through side chassis rail to area of battery negative
- 5. Route seat switch wires over chassis side rail to underside of seat switch.
- 6. Disconnect existing blue wire and connect to new blue wire.
- 7. Connect new blue/orange wire to seat switch. You should now have old orange wire and new blue/orange wires connecte to the seat switch.
- 8. Disconnect the existing plastic connector to the throttle pedal from the existing loom.
- 9. Connect the new 4 way connector to bridge the original 4 way connectors.
- 10. Route the orange and green wires to the rear of the direction switch.
- 11. Remove the existing Orange wire from the direction switch, fit the new orange wire in it's place. Fit the original orange wire into the tail of the new connector.

- 12. Repeat 11. for the green wire.
- 13. Repeat 11. for the grey wire. The grey wire must be in the middle.
- 14. Remove the yellow wire from the rear of the logic switch and connect to the short yellow wire from the new Logic Relay.
- 15. Connect the Long yellow wire from the logic relay to the vacant position on the rear of the Logic switch.
- 16. Check the loom fits naturally and using tyraps hold to the original loom.

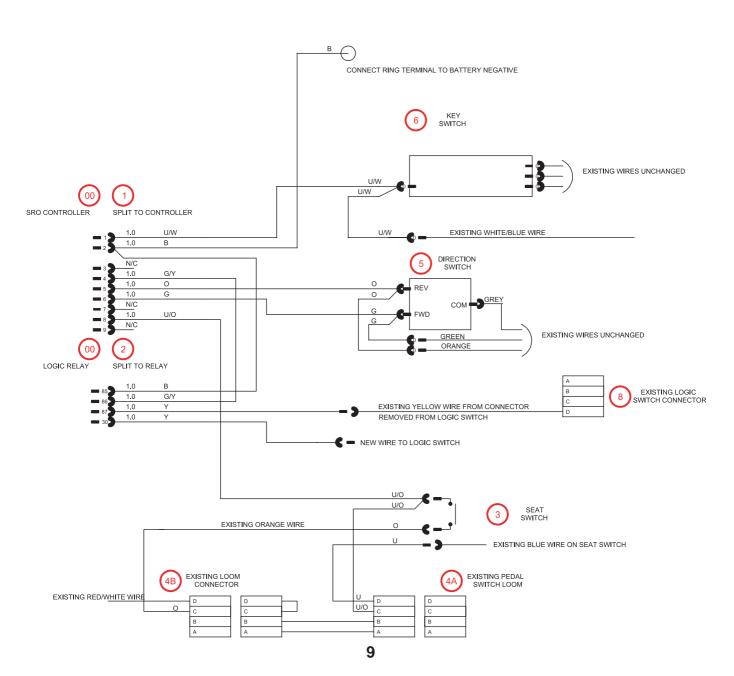


# POSITION NEW RELAY AND CONTROLLER HERE LOGIC SWITCH

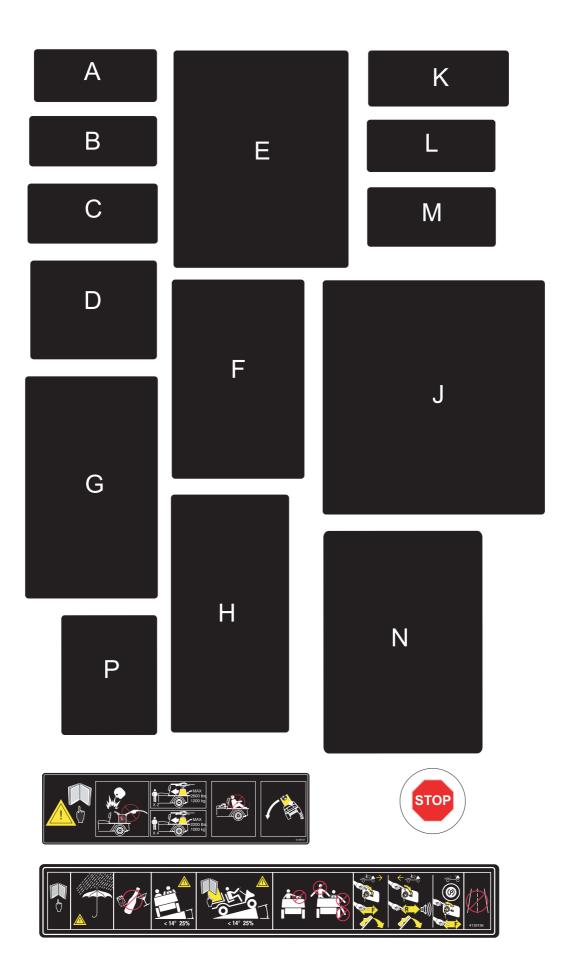
- 17. Fit the blue and white wire to the vacant position on the fuse box, located behind the controller, fit 2amp fuse to the same position. Ensure there is 12V at the wire connection. (Use a DVM for this)
- 17. Refit Controller cover.

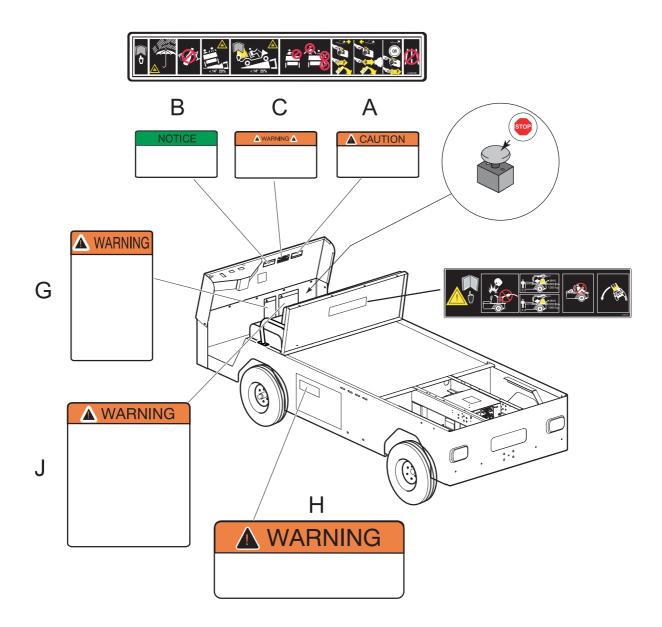
- 18. Connect new ground terminal and refit existing ground terminals to battery.
- 19. Testing the new SRO System
- a. Sit on seat, select FWD, press Throttle gently and whilst moving forward lift weght from the seat.
- i. The machine will STOP.
- ii. Resit on seat and attempt to drive forward, Nothing will happen.
- 1. Release Throttle pedal, select neutral with direction switch, wait 1 second, re-select forward, re-apply throttle the machine will move.
- b. The same rule applies in Reverse.

#### IT IS STRONGLY RECOMMENDED THAT IF THE MACHINE IS TO BE LEFT STORED FOR ANY LENGTH OF TIME THAT THE BATTERIES ARE DISCONNECTED AT BOTH POSITIVE AND NEGATIVE POSTS.



# **SRO Wiring Diagram**





All worded decals must be covered with the blanks provided

# FITTING GUIDE

#### 640

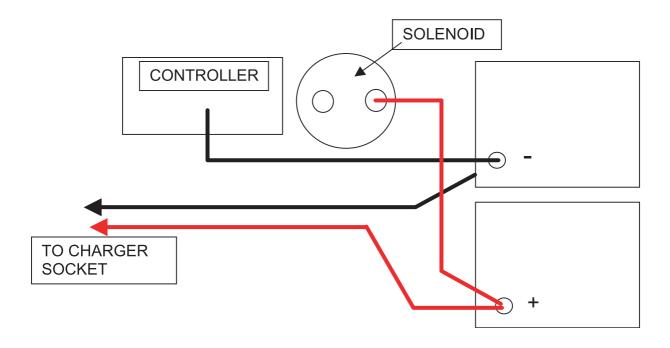
# **BATTERY DISCONNECT SWITCH**

# KIT PART NUMBER

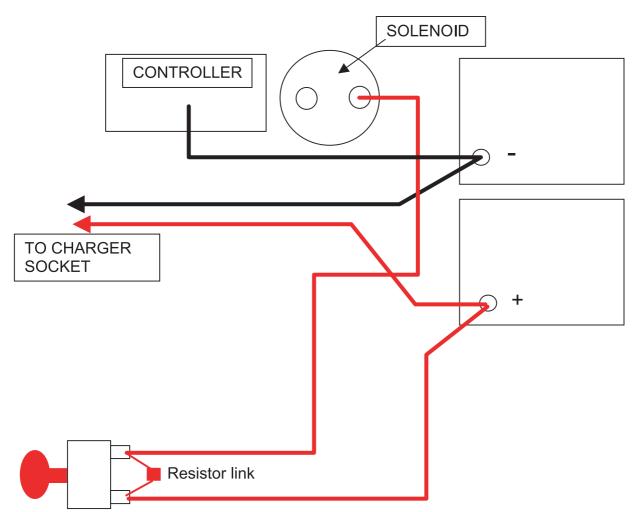
# 4139011

## **Component Parts**

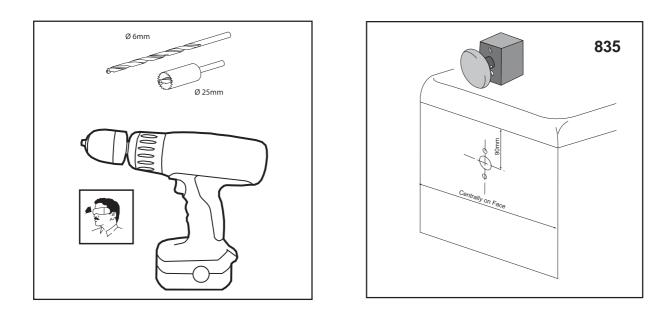
- 1 off Push / Pull Switch 4139009
- 1 off Positive battery Cable 4139012
- 1 off Positive vehicle cable 4139013



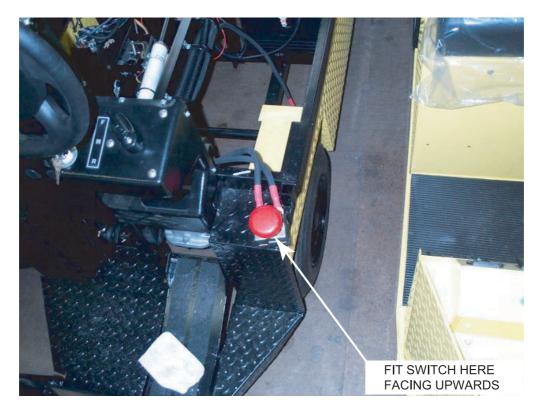
**New Circuit** 



1. Disconnect batteries at both negative and positive terminals.



2. Drill suitable holes in Left Hand panel to mount new switch refer to switch fitting notes supplied with switch. The switch is finally fitted later.



- 3. Remove the cover that is over the motor controller and solenoid.
- 4. Remove and discard old positive cable from battery to solenoid. This is no longer required



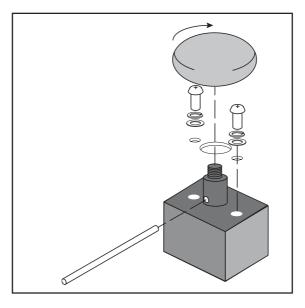
5. Fit new cable supplied with kit from a new switch terminal to the solenoid, ensuring that the fitted resistor is at the switch end from the solenoid. Make sure that all terminals are refitted to the solenoid.

- 6. Fit 2<sup>nd</sup> new cable from the switch to the positive battery terminal, ensure that the resistor is fitted to both terminals across the switch.
- 7. Route both the new switch cable through the existing cable clips fitted to the central spar of the machine.

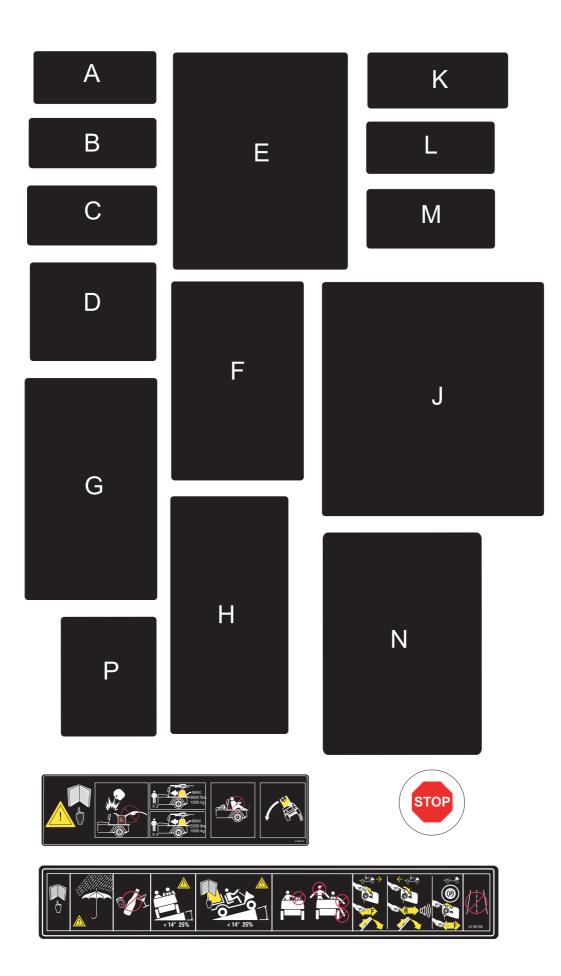


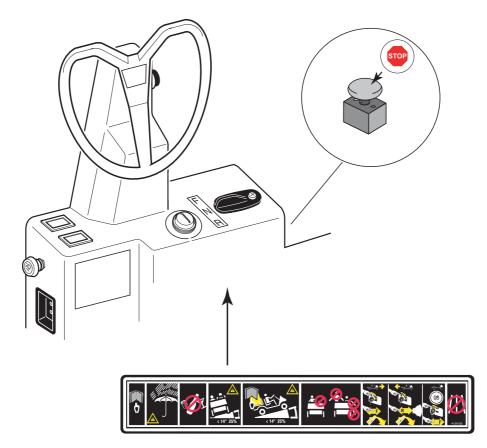
8. Connect new cable and charger cable to positive battery terminal.

9. Ensure all screws are tight on the switch terminals.



- 10. Slide switch into position and feed up through previously drilled holes, Fit switch into position paying particular attention to the knob fitting instruction supplied. Ensure all screws are tight.
- 11. Push new switch in to ensure circuit is open.
- 12. Refit battery negative cable and charger cable to negative terminal of battery.
- 13. Pull new switch knob firmly out to connect circuit.
- 14. Test machine operation.





All worded decals must be covered with the blanks provided

# FITTING GUIDE

# TUG

# **BATTERY DISCONNECT SWITCH**

# **KIT PART NUMBER**

**Component Parts** 

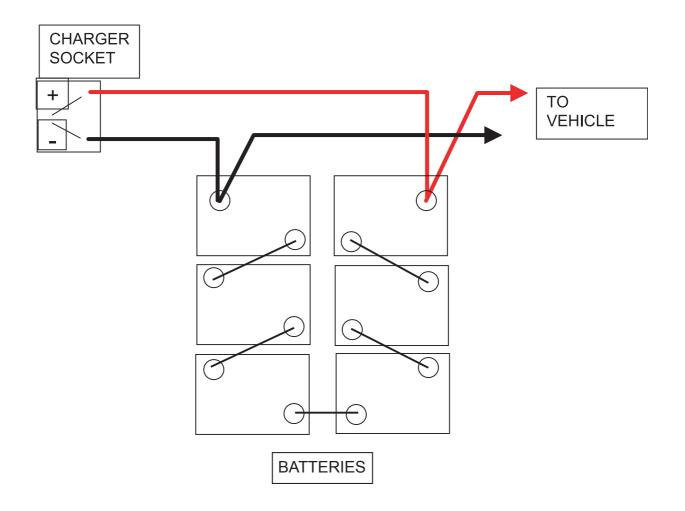
1 off Push / Pull Switch 4139009

1 off Positive battery Cable 010559-00

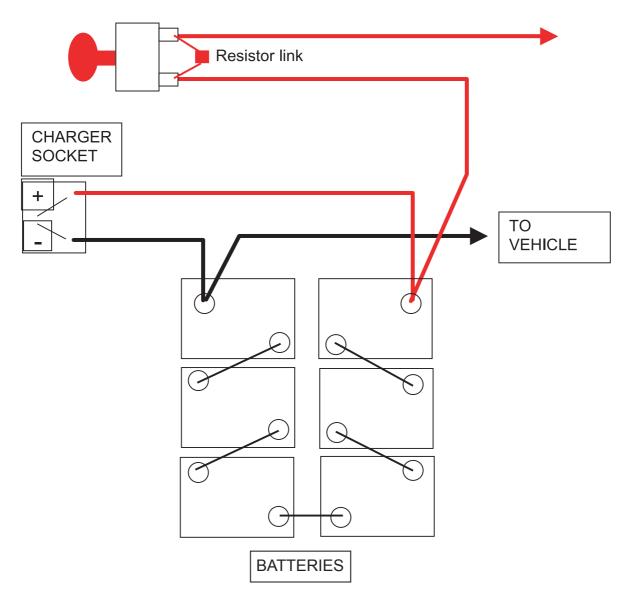
6 off Positive Terminal Covers 4139551

6 off Negative Terminal Covers 4139550

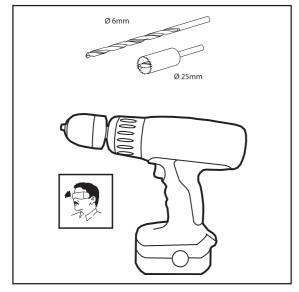
**Existing Circuit** 



# **New Circuit**



1. Disconnect batteries at both negative and positive terminals.

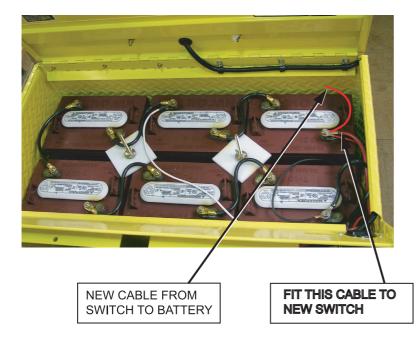


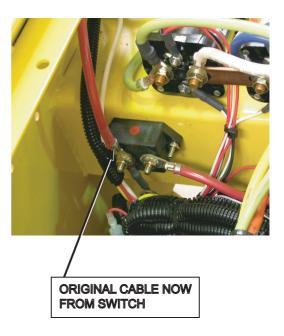
2. Drill suitable holes in panel below the seat panel to mount new switch refer to switch fitting notes supplied with switch. (see picture 1) Fit switch following instructions supplied, with particular attention to knob installation.

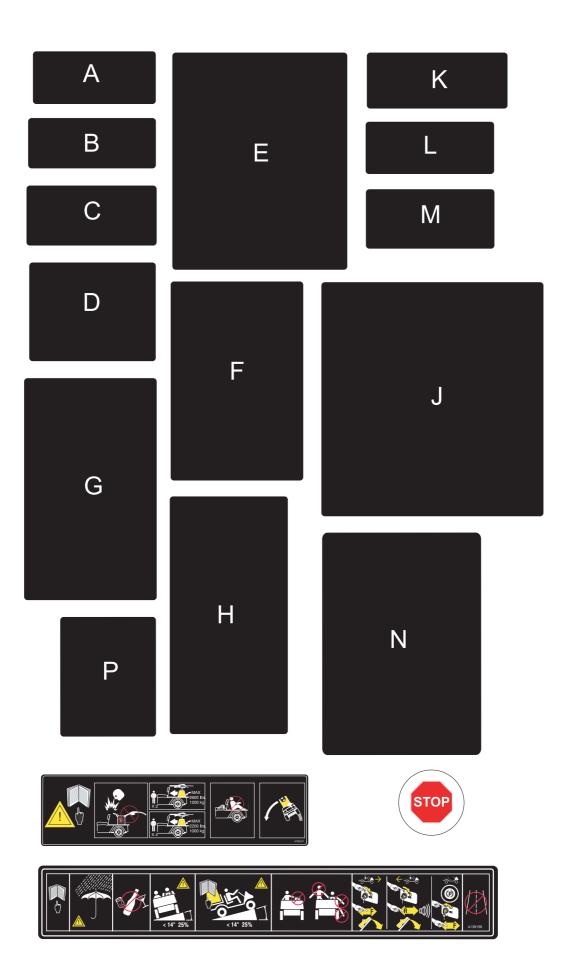


FIT SWITCH HERE FACING FORWARDS

- 3. Route positive (RED) cable that was on positive terminal to one side of new switch. Fit with supplied screw and washers. (See picture 2)
- 4. Fit new cable supplied with kit to 2<sup>nd</sup> switch terminal, with resistor ring terminal connected to terminal with vehicle cable.
- 5. Disconnect all battery terminals in order and fit supplied terminal covers to cables. Refit and tighten all terminals
- 6. Connect new cable and charger cable to positive battery terminal.
- 7. Ensure all screws are tight.
- 8. Push new switch in to ensure circuit is open.
- 9. Refit battery negative cable and charger cable to negative terminal of battery.
- 10. Pull new switch knob firmly out to connect circuit.
- 11. Test machine operation.



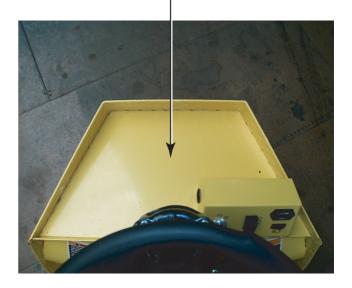


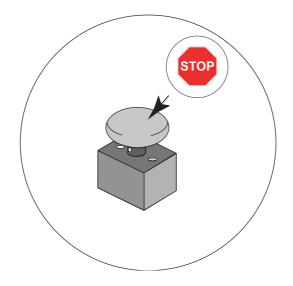
















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