

**Turn signal / horn kit
BY RYCO MOTORSPORTS INC.**

2016 Can-Am Defender & Defender Max

STOP - THIS KIT IS DESIGNED SPECIFICALLY FOR 2016 CAN-AM DEFENDER AND DEFENDER MAX. IF YOUR MACHINE IS NOT THIS MODEL DO NOT PROCEED. Contact Ryco Motorsports or your local dealer.

Where do I start?

Step 1 – READ THE INSTRUCTIONS. If you are a guy and like most of us feel you can install this without taking the time to read the instructions then you should ask your wife or significant other to read them to you. I went to a lot of effort to create the instructions and I feel bad when no one reads them. Answers to all your questions should be covered in the installation instructions. We've included a lot of photo's for those of you who are visual and don't enjoy words.

Let's become familiar with the items you will be installing on your machine.

What's in the box?



**Turn signal / horn kit
BY RYCO MOTORSPORTS INC.**



What tools do I need?

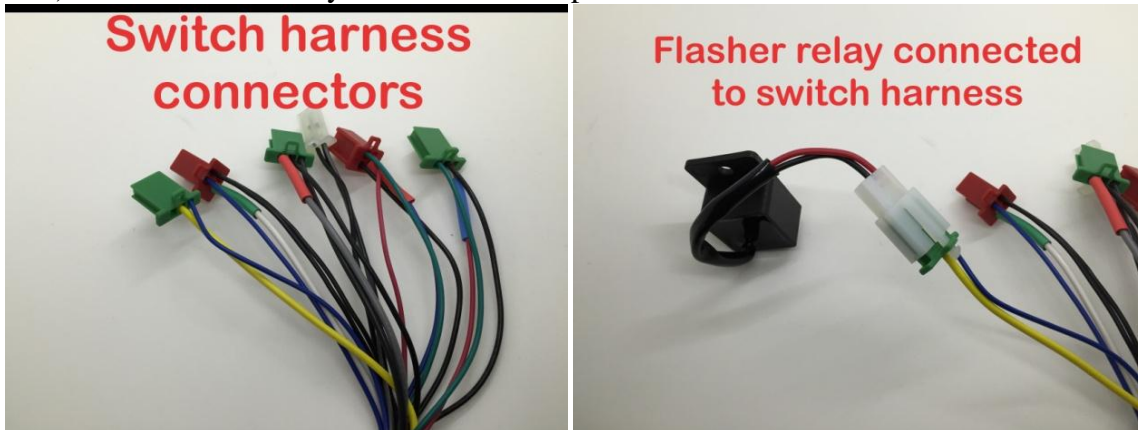
Tools needed: 10 mm or 5/16" socket/nut driver or flat blade screwdriver, Phillips screwdriver, 8mm, 10 mm and 12mm wrench, center punch, drill motor, 9/32", 1/2", 3/4" and 7/8" diameter drills (stepped bit works well) and Polaris pliers (or flat blade screwdriver) to pull plastic push rivets. Scissor to cut grommet.



Let's get started.

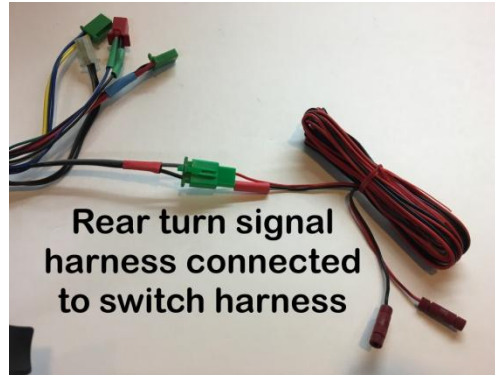
We'll show you how most of the items go together, then we'll show you where they go and how best to install the hardware.

Let's start at the switch. The switch harness connector interfaces with the various components. Notice the color coding on the most of the switch harness connector cables. Match the colors of the COLORED SLEEVES (red to red, green to green and blue to blue) on the cables when you install the components on the machine.



The flasher relay interface is the only 3 pin connector with no color coding. The horn, power (fuse holder) and ground wires interface is a 4 pin connector with green color coding. **DO NOT CONFUSE THIS 4 PIN CONNECTOR WITH THE FRONT HARNESS WHICH HAS A 4 PIN CONNECTOR WITH RED COLOR CODING.**

**Turn signal / horn kit
BY RYCO MOTORSPORTS INC.**



The rear turn signal harness interface is a 3 pin connector with **red** color coding.



The brake light module is the only 2 pin connector and has no color coding.

The front turn signal harness interface is a 4 pin connector with **red** color coding.



The dash mounted turn signal indicators interface is a 3 pin connector with **blue** color coding.

Installation

NOTE: Where possible run new cables alongside the existing wires and utilize existing cable tie / anchors where practical and ensure wires do not contact moving components or hot surfaces.

NOTE: The switch should NOT have any of the cables or components installed on the harness until after the switch is installed and the switch harness is routed behind the dash.

Turn signal / horn kit

BY RYCO MOTORSPORTS INC.

1. Position the turn signal switch and mounting bracket on the steering wheel housing and locate the bracket such that the holes are centered in the housing. Mark the location of the two mounting holes.
2. Drill two ½” diameter holes and install the two expandable nuts in the holes.



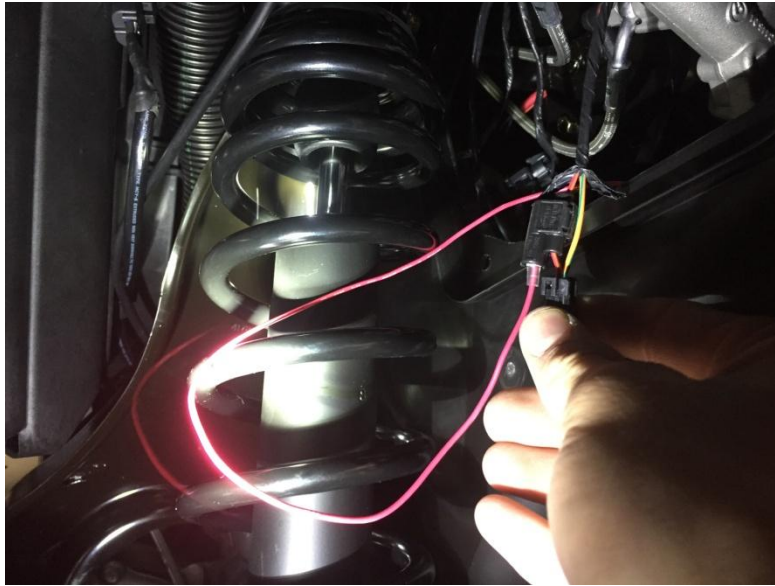
**Expandable nut,
washer and screw**

3. Route the wires under the steering column towards the center of the vehicle.
4. Install the flasher relay, horn and power (fuse) / ground harness, turn signal indicator harness and brake light module harness to the switch harness.

NOTE: Ensure the color coding is correct (Colored sleeve on the cables NOT the color of the connectors or the color of the wires).

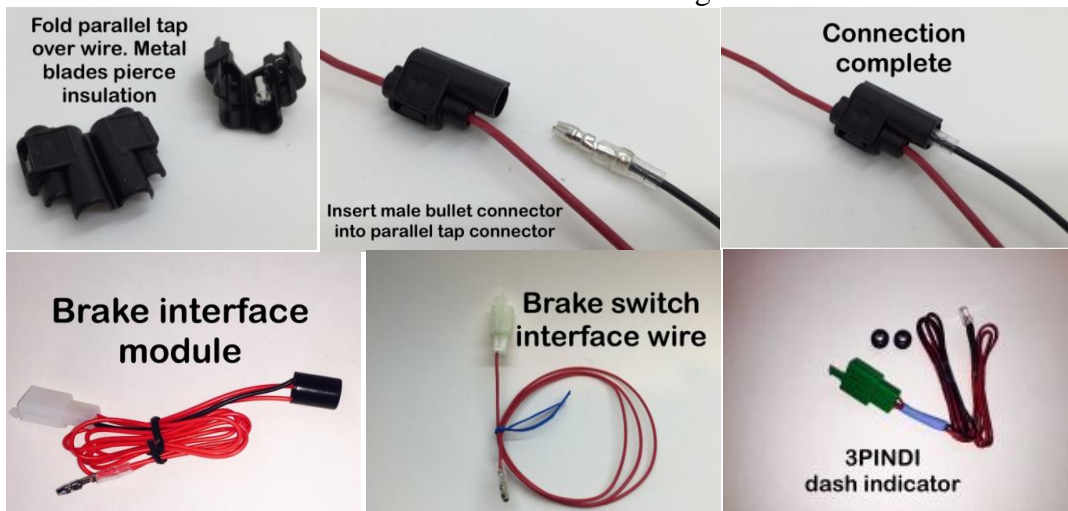
5. Secure the switch harness to a cross member using a cable tie. The flasher relay and can be bundled and secured with a cables tie to the switch harness.

**Turn signal / horn kit
BY RYCO MOTORSPORTS INC.**



NOTE: Check orientation of parallel tap to insure access for the male connector prior to seating the parallel tap connector with pliers. You can unplug the connector to allow easier access.

6. Locate the wires leading to the vehicle brake switch, remove some of the wire wrap to expose the wires and install a parallel tap on the vehicle brake switch orange/red wire.
7. Plug the red brake switch interface module harness to the parallel tap connector on the vehicle brake switch orange/red wire.



NEW NOTE: Whenever the service brake is applied the brake lights will flash 6 times in the first second and then remain on until the brake pedal is released.

**Turn signal / horn kit
BY RYCO MOTORSPORTS INC.**

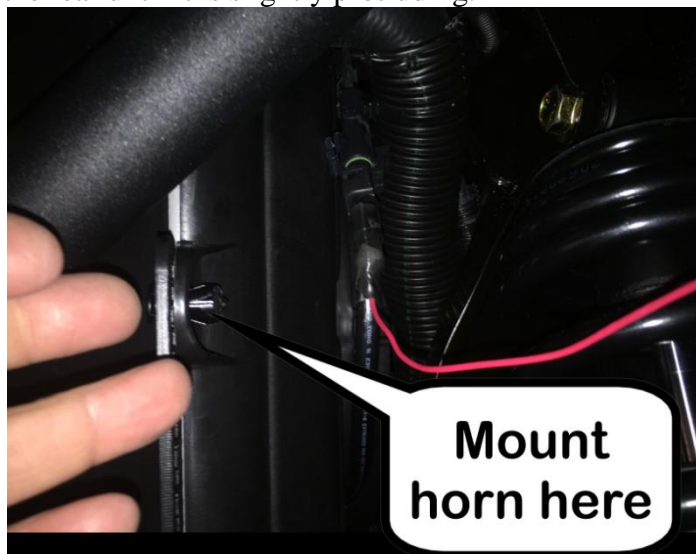


8. Remove the instrument cluster to provide easier access. Mark the desired locations for the two LED dash mounted indicator lights.

9. Drill two 9/32" mounting holes in the dash for the indicator LED's.

NOTE: Carefully insert the LEDs into the grommet to prevent damage to the wires and resistor. A little warmth and moisture can be helpful when installing the LED's/ grommets.

10. Seat the rubber grommet into the hole, then push the LED into the holder from the rear until it is slightly protruding.



Turn signal / horn kit

BY RYCO MOTORSPORTS INC.

11. Position the horn on the driver's side in the radiator mount as shown. Remove the existing factory plastic push rivet and install with provided 6mm fastener.
12. Route the horn cable from the switch assembly to the horn and install the two flat spade connectors onto the horn (either wire works just as well).
13. Mark the desired location of the three front LED's on the outboard side of the headlights. 1-1/2" spacing between LED's works well.

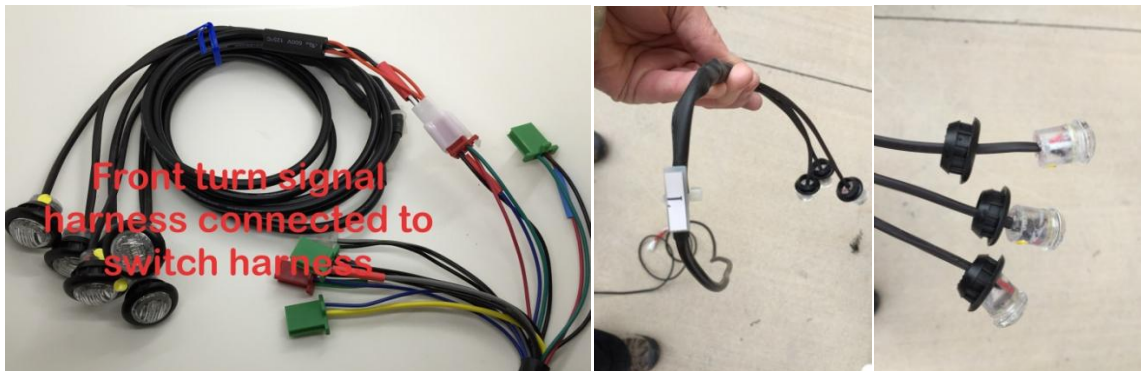
NOTE: A stepped drill works best to drill the holes in the plastic body work.



14. You can drill the holes in with the body work in place or you can remove or loosen the body work above the headlight assembly and drill three 3/4" diameter holes for the front turn signal LED's.
15. Connect the front turn signal harness to the 4 pin connector on the switch harness with the RED sleeve match marking.

NOTE: Tags on the front turn signal harness. "L" is the driver's side and "R" is the passenger side.

16. Route the front turn signal harness triple LED's to the front corners of the vehicle.



17. Slide the rubber flange gaskets that are on the LED's back onto the wires.
18. Slip the LED's thru the 3/4" diameter holes, fold the flange gasket and push it thru the hole. Install the flange gasket into the hole with the flange of the gasket towards the front of the vehicle. Insert the LED into the flange gasket with a gentle pulling and rocking motion, seat the LED into the gasket.

NOTE: A little warmth and moisture helps to slip everything together.

19. Rotate the LED's within the gasket as necessary to orient them in the same relative position.

NOTE: Front turn signal LED's are running lights and illuminate at approximately 60% intensity whenever the vehicle ignition is on and flash at full intensity when the turn signals are activated.

Turn signal / horn kit

BY RYCO MOTORSPORTS INC.

20. Connect the rear turn signal harness to the 3 pin connector on the switch harness with the RED sleeve match marking.
21. Remove the seats and the center tunnel cover. Route the rear wire harness from the front of the vehicle to the rear on the passenger side.

NOTE: Insure the wiring does not contact moving components or hot surfaces.



NOTE: The WHITE/ORANGE factory brake wire tee's from one wire coming from the front of the vehicle into two WHITE/ORANGE wires that go to the two rear taillight assemblies. This tee (splice) is under the foil wrapped cover on the factory harness. You MUST cut the wires on the taillight side of the splice and connect to the RED and BLACK wires on the Ryco harness.

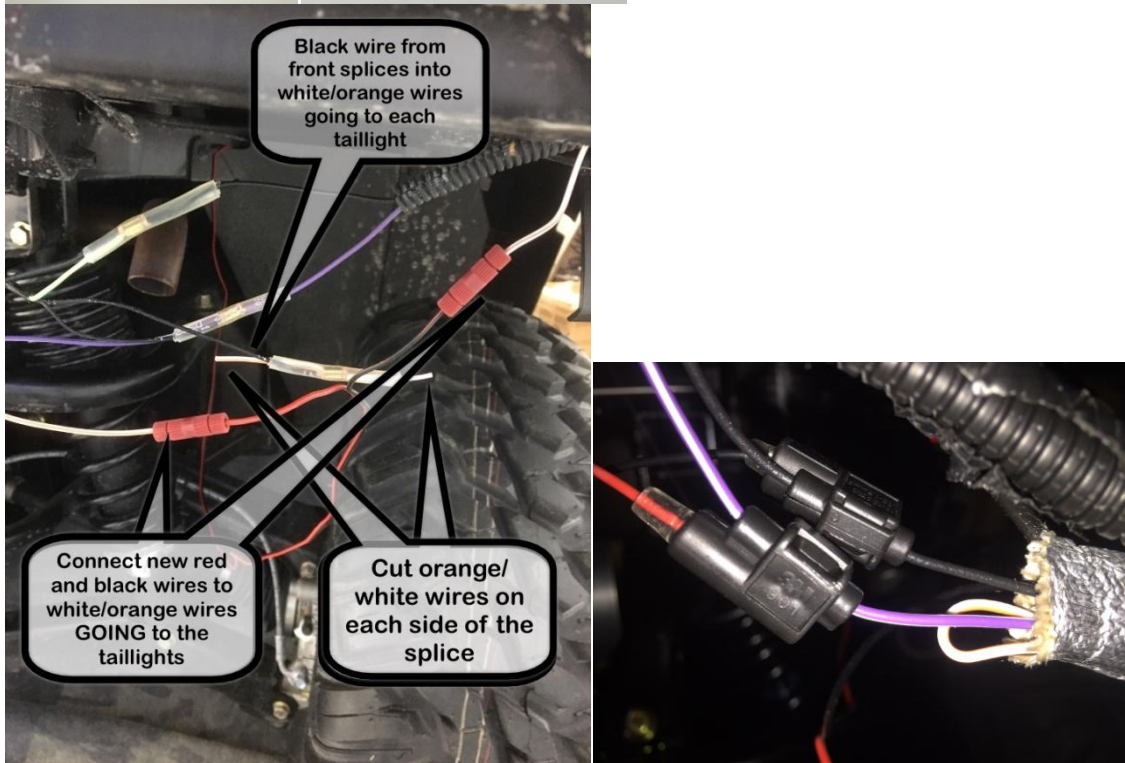
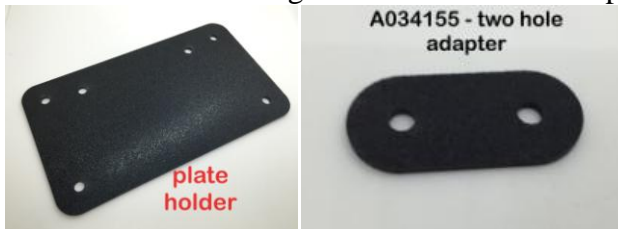
NOTE: If you connect the Ryco harness wires to the WHITE/ORANGE wires coming from the front of the vehicle the rear turn signals and brake lights will not function.

22. At the passenger side on the rear of the vehicle locate the factory wire harness leading to the rear taillight assemblies. Expose a couple of inches of wires. Locate the WHITE/ORANGE wires leading to each taillight assemblies and **CUT** the WHITE/ORANGE wires on the taillight side of the splice.

Turn signal / horn kit

BY RYCO MOTORSPORTS INC.

23. The cut ends of the WHITE/ORANGE wires COMING FROM THE FRONT OF THE VEHICLE are abandoned and should be tucked back into the factory wire harness sleeve and/or taped over with electrical tape.
24. Strip approximately 1/8"- 3/16" of insulation from each of the WHITE/ORANGE wires GOING TO THE TAILLIGHT ASSEMBLIES.
25. Remove the end cap from the red crimpless connector and install the WHITE /ORANGE wire going to the left taillight to the Ryco red wire and the WHITE/ORANGE wire going to the right taillight to the Ryco black wire.
26. Mount the license plate holder on the rear of the vehicle in the factory provided mounting holes using the provided 6mm fasteners.
27. The license plate light can be installed as one of the four license plate bolts or can be installed in the two hole adapter where the light will shine on the license plate. The plate light 2 hole adapter is secured to the license plate holder using one of the four license plate bolts.

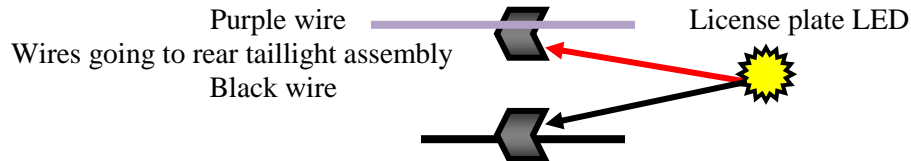


NOTE: Check orientation of parallel tap connectors to insure access for the male connectors prior to seating the terminal with pliers.

Turn signal / horn kit

BY RYCO MOTORSPORTS INC.

28. Locate the purple (12 V DC, taillight) and black (ground) wires leading to the rear taillight assembly and install a parallel tap connector on each wire and connect the red wire from the plate LED to the brown wire and LED black wire to the vehicle green wire.



NOW back to the front of the vehicle.

NOTE: The LED's are polarity sensitive. The fused wire MUST be connected to the 12 volt DC (positive side) and the black ground wire must be connected to the ground wire. If this is not done correctly the horn will work, but the turn signals will not function. (Damage to the flasher relay may occur if wires are installed backwards.)

NOTE: Check orientation of parallel tap connectors to insure access for the male connectors on the power and ground wires when the wires are reconnected to the auxiliary power outlet terminals prior to seating the terminal with pliers.

29. At the auxiliary power outlet that is mounted on the dash, trace the wires coming from the rear of the power outlet; remove the outer wrap enough to install a parallel tap connector on the two wires.
30. Connect the RYCO switch black ground wire to the parallel tap connector on the vehicle ground wire (outer wire on accessory plug), and the RYCO switch fused red wire to the parallel tap on the 12 volt DC wire. (Center most wire on accessory plug).
31. Turn the ignition key to the on position and verify the turn signals, horn and license plate lights work correctly.
32. Once all the cabling is in place and functionality verified, double check the routing and secure with wire ties. Bundle any extra wire and secure with the wire ties.
33. Reinstall the tunnel access cover, hood and seats.

NOTE: Front turn signal LED's are running lights and illuminate at approximately 60% intensity whenever the vehicle ignition is on and flash at full intensity when the turn signals are activated.

NOTE: Whenever the service brake is applied the brake lights will flash 6 times in the first second and then remain on until the brake pedal is released.

RYCO MOTORSPORTS INC.

rycomoto@gmail.com

801-643-3440