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STOP! THIS KIT IS DESIGNED SPECIFICALLY FOR

- Polaris Ranger (2015 and newer, all models)
- Polaris General (all years/models)
- Polaris Ranger 900 (all years/models)

IF YOUR MACHINE IS NOT ONE OF THESE MODELS, DO NOT PROCEED.

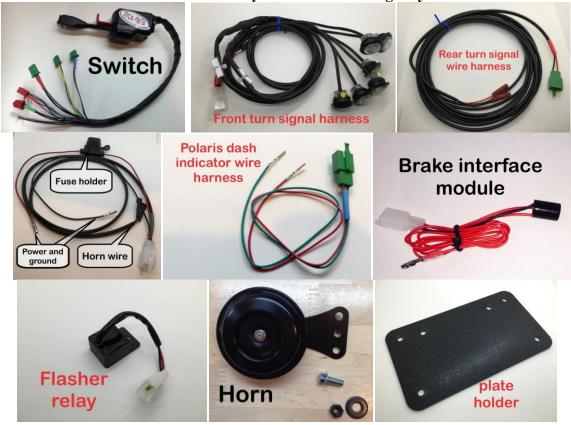
Contact Ryco Motorsports or your local dealer for the correct kit. Where do I start?

Step 1 – Please Read and Follow 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

What's in the box?

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

a lot of photo's for those of you who are visual and don't enjoy words.



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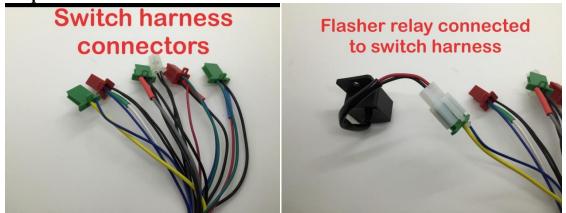


What tools do I need? Tools needed: 10 mm or 5/16" socket/nut driver or flat blade screwdriver, Phillips screwdriver, 10 mm wrench, center punch, drill motor, 3/4" diameter drill (stepped bit works well). and pliers.



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 heat shrink 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. Only 2 of the 3 positions are used.

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The horn/power (fuse holder) and ground wires interface is a 4 pin connector with green color coding.

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





The brake interface 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 Polaris instrument cluster turn signal indicator wire harness interface is a 3 pin connector with blue color coding.

NOTE: Where possible run new cables alongside the existing wires and use existing cable tie / anchors where practical. Ensure the wiring and installed hardware does 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.

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- 1. Using the Polaris pliers that come with the machine, remove the push pins that hold the dash top cover in place and remove the cover to provide access.
- 2. Using the tilt feature lower the steering wheel to the lower most position and remove the nut on the existing tilt wheel mechanism. Don't remove the shoulder bolt. Push the shoulder bolt so the threaded end is flush with the steering wheel column bracket.
- 3. Slip the turn signal / horn switch "U" shaped bracket over the steering column and reinstall the nut on the factory shoulder bolt.
- 4. Torque the nut to 10 in-lb. (You may need to put some pressure on the bracket to force it over the steering column and again to align the hole with the shoulder bolt).



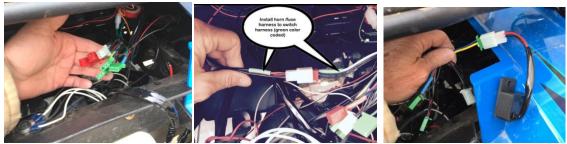
- 5. Route the cable between the steering column and the tilt mechanism then up under the dash towards the center of the vehicle.
- 6. Install the flasher relay, horn and power (fuse) / ground harness, turn signal indicator harness and brake light module harness to the switch harness.

NOTE: Ensure the color coding is correct. (Colored heat shrink on the cables NOT the color of the connectors nor the color of the wires).

NOTE: Do not connect the front and rear turn signal harnesses to the switch harness at this time.

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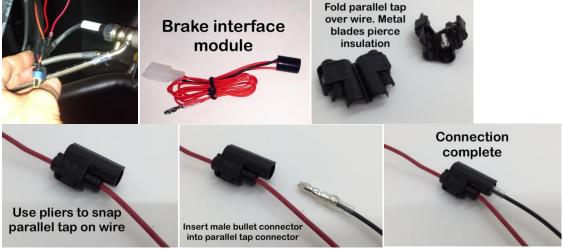


- 7. Secure the switch harness to a cross member using a cable tie. The flasher relay and can be bundled and secured with a cables tie to the switch harness.
- 8. Install the screw into the center position on the horn bracket and then install plastic spacer on the screw. Insert the screw through the existing hole on the structural cross member under the hood located on the driver's side as shown. Secure using the provided fastener and lock nut.



9. Route the horn cable from the switch harness to the horn through the firewall and install the two flat spade connectors to the horn terminals. Either connector can be installed on either horn terminal.

NOTE: Use a 10mm wrench and 10mm socket to secure the horn. DO NOT ATTEMPT TO ADJUST THE HORN OR REMOVE THE CENTER MOUNTING BOLT THAT ATTACHES THE HORN TO THE HORN MOUNTING BRACKET.



Photo's show how the parallel tap is installed. Wire colors may not match your application. 10. Locate the hydraulic brake switch on the front drivers side.

11. Note the ORANGE wire coming from the brake switch connector as shown.

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- 12. Disconnect the 2 pin connector on the factory brake switch wire harness. This will allow easier access to install the parallel tap connector on the orange wire.
- 13. Install the parallel tap connecter. Reconnect the 2 pin connector.
- 14. Route the brake interface module wire from the switch harness and plug the single red wire into the parallel tap connector on the orange wire.

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.

15. Disconnect the multi-pin connector from the back of the speedometer assembly OR INTERACTIVE DISPLAY by depressing the single locking tap on the connector and pull the connector away from the mating part.

CAUTION: DO NOT USE A METAL OBJECT TO REMOVE THE TWO PLASTIC PLUGS COVERING POSITIONS 6 & 7

- 16. Open the connector cover, remove and discard the two plastic plugs in positions 6 & 7. Use your fingernail to easily remove the plastic plugs.
- 17. This is important! That's why it's underlined. Remove clear pin cover on front side of connector by depressing the tabs on the sides of the connector.
- 18. Install the red RYCO harness pin/wire in position 6 and the green harness pin/wire in position 7. (pins must be seated completely.
- 19. This is important! That's why it's underlined. <u>Verify the new pins match the installation depth of the existing pins</u>).
- 20. Reinstall the clear pin cover and route the two new wires adjacent to the existing wires and close the back cover.







21. Reinstall the clear pin cover and route the two new wires adjacent to the existing wires and close the back cover.



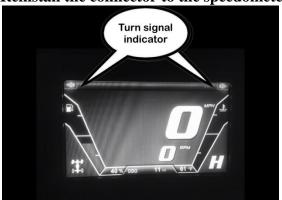




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22. Reinstall the connector to the speedometer OR interactive display.





23. The interactive display flashes left and right. The standard instrument cluster turn signal indicator double arrow flashes regardless of direction of the switch. NOTE: On machines the indicator does not flash. Please contact us and we will send you a diode module to correct the problem.



- 24. Locate the front LED's as desired. 1-1/2" spacing between holes works well.
- 25. Mark the locations using a center punch.
- 26. NOTE: Use of a step drill is recommended.
- 27. Drill six 3/4" diameter holes as shown.







28. From the front side of the firewall route the front turn signal harness 4 pin connector and cables through the grommet in the firewall and connect it to the 4 pin connector on the switch harness with the RED heat shrink match marking.

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Note: Tags on the front turn signal harness. "L" is the drivers side and "R" is the passenger side.

- 29. Route the front turn signal harness triple LED's to the front corners of the vehicle.
- 30. Slide the rubber flange gaskets that are on the LED's back onto the wires.
- 31. Slip the LED's thru the hole, 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.

- 32. Rotate the LED's within the gasket as necessary to orient them in the same relative position.
- 33. From the front side of the firewall route the rear turn signal harness 3 pin connector and cables through the grommet in the firewall and connect it to the 3 pin connector on the switch harness with the RED heat shrink match marking.

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.

34. Remove the floorboard access panel and seats and route the rear cable assembly to the rear of the vehicle along side the existing cabling.



- 35. Locate the rear taillight wire harness. At the point where the cable assembly splits in the two taillights expose the two orange wires.
- 36.CUT the two orange wires approximately 2-3 inches on each side of the tee. Strip approx. 1/8" of insulation from the orange wire going to the taillights.

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37. Remove the end cap from the red crimpless connector on the red and black wires and slip it over the prepared orange wire and screw the crimpless connector back together.

The red wire is attached to the left taillight orange wire going to the taillight and black wire is connected to the orange wire going to the right taillight. The ends of the orange wires coming **from the front of the vehicle** are abandoned and can be tucked back into the factory wire harness sleeve and/or

NOTE: IF YOU CONNECT THE RYCO PROVIDED RED AND BLACK WIRES TO THE WRONG ENDS OF THE CUT ORANGE WIRES (THOSE GOING TOWARDS THE FRONT OF THE VEHICLE), EVERYTHING BUT THE BRAKE AND REAR TURN SIGNALS WILL WORK WHEN YOU TEST THE KIT INSTALLATION.

38. Drill a couple of holes in the bed stiffeners and install the license plate holder on the rear of the vehicle.

NOTE: Removing the tailgate allows easy access to the license plate mounting holes.



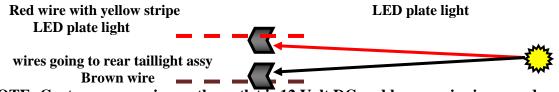
Options for mounting plate light

39. The plate light may be installed and used as one of the 4 plate holder fasteners or mounted separately utilizing one of the provided 2 hole tabs. Use the bright flange nut provided with the license plate light

DO NOT over tighten the nut.

taped over with electrical tape.

40. Locate the brown (ground) and red/white (12 volt DC) 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 red/white wire and <u>black</u> to brown.



NOTE: Center orange wire on the outlet is 12 Volt DC and brown wire is ground. The auxiliary power outlet is active when the ignition key is in the "ON" position.

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41. Locate the orange and brown wires leading to the back side of the auxiliary power outlet and unplug them from the auxiliary power plug. Either top or bottom auxiliary power plug works equally well.



NOTE: Prior to seating with pliers, verify orientation of the parallel tap connectors to insure access for the male connectors on the fused power and ground wires.

- 42. Install a parallel tap connector on the brown wire and one on the orange wire as shown.
- 43. Connect the new power and ground wires to the parallel tap connectors on the auxiliary power outlet wires. Red <u>Fused</u> wire to the orange wire. (12VDC). Black ground wire harness wire to the brown wire. (Ground)
- 44. Reconnect the orange and brown wires to the auxiliary power outlet terminals.
- 45. NOTE: The LED's and flasher relay 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 power and ground wires are installed backwards.)
- 46. Once the cabling is in place, double check the routing and secure with wire ties. Bundle any extra wire and secure with the wire ties.
- 47. NOTE: Double check all connectors prior to turning ON the ignition
- 48. Turn ON the ignition and verify the horn, turn signals and rear license plate light functions, pull the hazard switch and verify that feature functions correctly.
- 49. Reinstall the dash cover and front access panel.

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.

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