

All years Yamaha Wolverine

STOP - THIS KIT IS DESIGNED SPECIFICALLY FOR ALL YEAR AND MODELS YAMAHA WOLVERINE. IF YOUR MACHINE IS NOT ONE OF THESE MODELS 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?



"RYCOMOTO" Wolverine Turn Signal / Horn Kit
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What tools do I need?

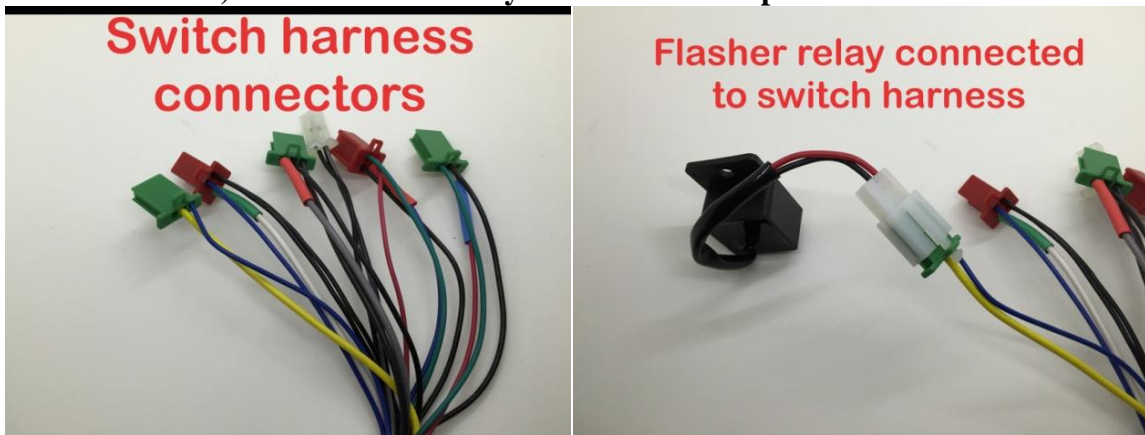
Tools needed: 10 mm or 5/16" socket/nut driver or flat blade screwdriver, Phillips screwdriver, 10 mm wrench, center punch, drill motor, 9/32", 1/2", 3/4" and 7/8" diameter drills (stepped bit works well) and pliers (or flat blade screwdriver) to pull plastic push rivets. Scissor to cut grommet.



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.



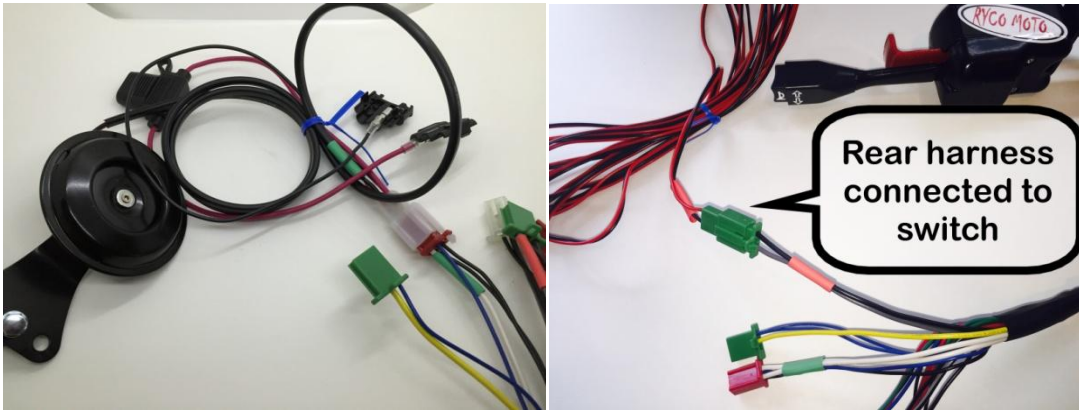
The flasher relay interface is the only 3 pin connector with no color coding.

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The horn, power (fuse holder) and ground wires interface is a 4 pin connector with **green** color coding. **DO NOT CONFUSE THIS 4 PIN CONNECTION WITH FRONT HARNESS WHICH HAS RED COLOR CODING.**



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 along side 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 cables or components installed on the harness until after switch is installed and switch harness is routed behind the dash.

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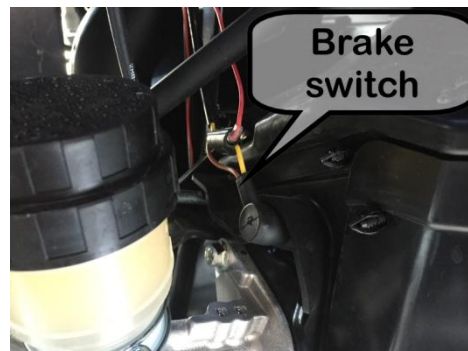
1. Insure the ignition key is in the off position and the key removed.
2. Remove the push pins and fasteners to allow the front cover to be opened.



3. 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.
4. Drill two 1/2" diameter holes and install the two expandable nuts in the holes.
5. Temporarily mount the turn signal switch and mark the required location for the access hole for the switch harness.
6. Remove the switch and drill a 7/8" diameter hole in the plastic on the side of the housing where the cabling will enter the housing.
7. Reinstall the turn signal switch and mounting bracket on the steering wheel housing.
8. Insert the wire harness connectors through the hole one at a time starting with the two 4 pin connectors, then the three 3 pin connectors and finally the 2 pin connector.
9. Using a pair of scissors cut the grommet and place it over the switch harness and install the grommet into the cable access hole.
10. Route the wires towards the center of the vehicle.
11. Install 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 nor the color of the wires).

12. 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.



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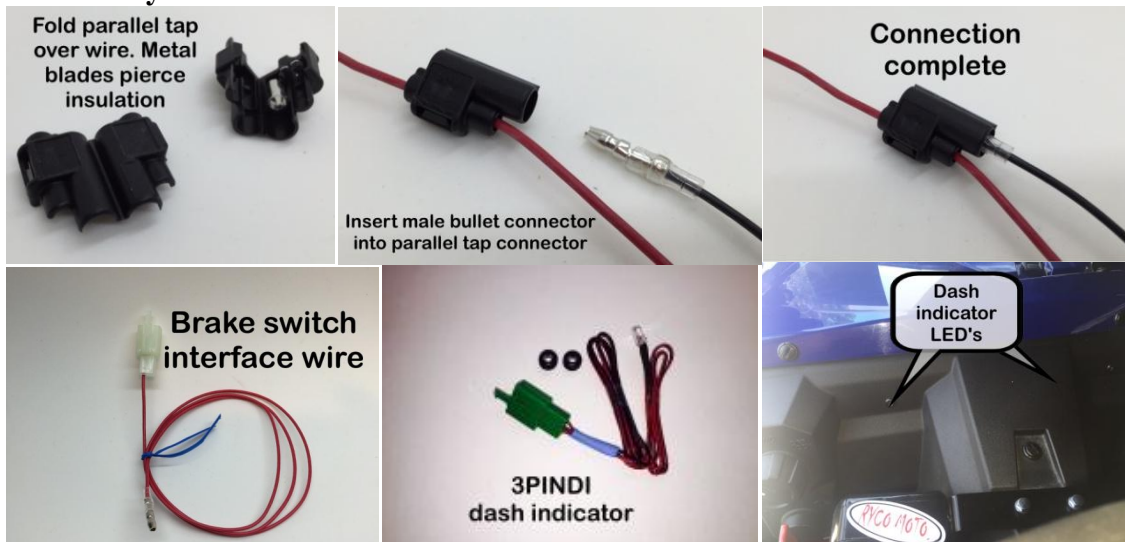
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13. Locate the wires leading to the vehicle brake switch. Trace the wires from the brake switch to the two pin connector.

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

14. Install a parallel tap on the vehicle yellow wire coming from the brake switch.

15. Plug the brake switch interface wire to the parallel tap connector on the yellow wire.

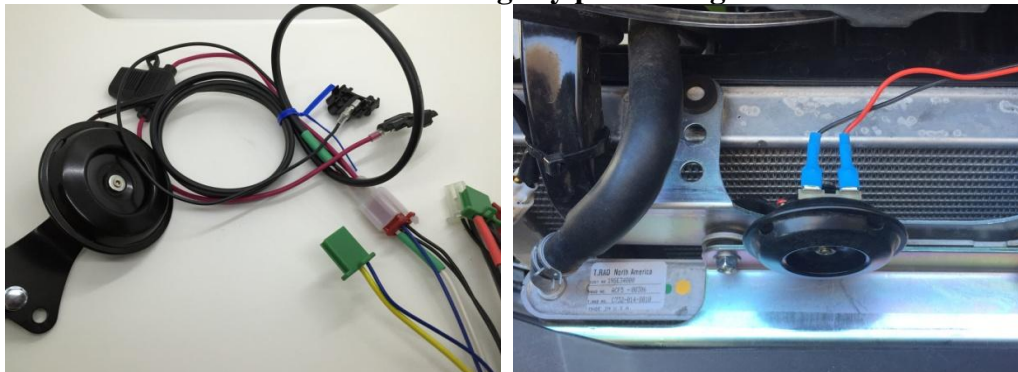


16. Mark the desired locations for the two LED dash mounted indicator lights where they are visible to the driver, taking into account the length of the LED wires.

17. 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.

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



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22. Install the two flat spade connectors onto the horn (either wire works just as well).
23. Mark the desired location of the six front LED's.

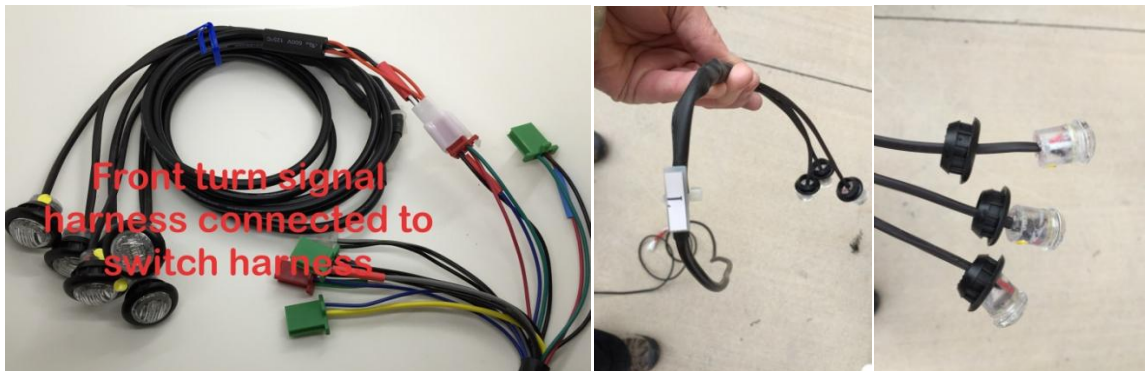


NOTE: A stepped drill works best to drill the holes in the plastic body work.

24. Drill six $\frac{3}{4}$ " diameter holes for the front turn signal LEDs.
25. 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 drivers side and "R" is the passenger side.

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



27. Slide the rubber flange gaskets that are on the LED's back onto the wires.
28. Slip the LED's thru the $\frac{3}{4}$ " 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.

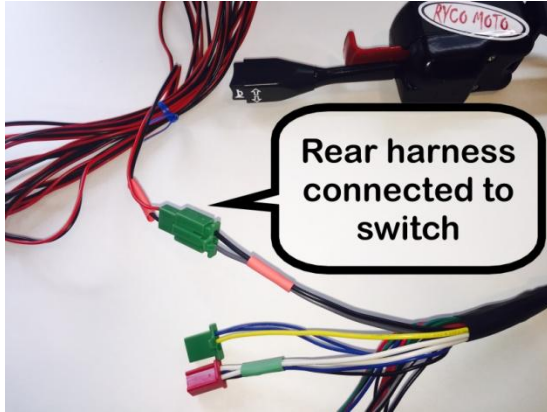
NOTE: A little warmth and moisture helps to slip everything together.

29. Rotate the LED's within the gasket as necessary to orient them in the same relative position.
30. Connect the rear turn signal harness to the 3 pin connector on the switch harness with the RED sleeve match marking.
31. 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.

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32. Unplug the yellow wires that lead to the two taillight assemblies. Plug the right side yellow wire into the factory yellow wires going to the taillight assembly. The factory yellow wire coming from the front of the vehicle are abandoned. Use the provided zip ties to secure them to the existing cables.

33. Connect NEW taillight harness red wire to the driver side yellow wire and the taillight harness black wire into the passenger side yellow wire.

NOTE: The rear turn signal circuit utilizes the existing vehicle ground.

34. The 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.

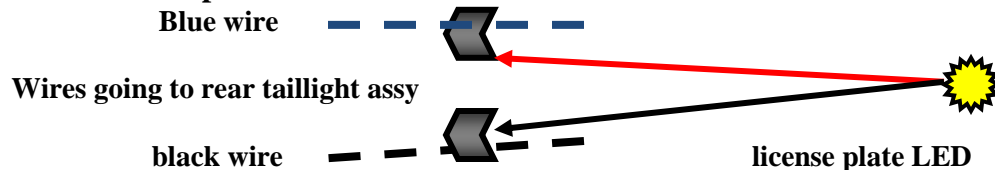


NOTE: Check orientation of parallel tap connectors to insure access for the male connectors prior to seating the terminal with pliers.

35. Locate the black (ground) and blue (12 volt DC) wires leading to the rear taillight assembly and install a parallel tap connector on each wire.

36. Plug the red license plate wire into the parallel tap on the blue wire and black license plate wire into the parallel tap on the vehicle black wire.

37. Install license plate holder as shown.



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NOTE: The LED's are polarity sensitive. The fused wire **MUST** be connected to 12 volt DC (positive side) and black ground wire must be connected to ground wire. If this is not done correctly the horn will work, but 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.



38. Locate the wires leading to the auxiliary power outlet and install a parallel tap on both the white/black power wire and the green ground wires going to the aux power outlet.
 39. Plug fuse wire (red) into parallel tap connector on the white/black wire and the black ground wire into the parallel tap on the green ground wire.
 40. Turn ON the ignition and verify the horn and turn signals function as well as brake light as well as 4 way emergency flasher.
 41. Turn ON the headlight switch and the verify plate light is illuminated.
- NOTE:** Front turn signal lights are also running lights and illuminate at approximately 60% intensity whenever the ignition key is in the on position. The LED's flash at full intensity when the turn signal is activated.
42. Secure all wires with provided wire ties.
 43. Reinstall the front cover. Ride and enjoy!

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