

RYCOMOTO 2016 HONDA 1000 Pioneer PN 3102

Turn signal / horn kit rev nc
BY RYCO MOTORSPORTS INC.

2016 Honda 1000 Pioneer

STOP - THIS KIT IS DESIGNED SPECIFICALLY FOR 2016 HONDA 1000 PIONEER IF YOUR MACHINE IS NOT THIS MODEL DO NOT PROCEED. THIS KIT DOES NOT WORK ON THE PIONEER 500 nor 700'S. 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?



1/4" expandable nuts
and 10-32 expandable nuts

RYCOMOTO 2016 HONDA 1000 Pioneer PN 3102

Turn signal / horn kit rev nc BY RYCO MOTORSPORTS INC.



What tools do I need?

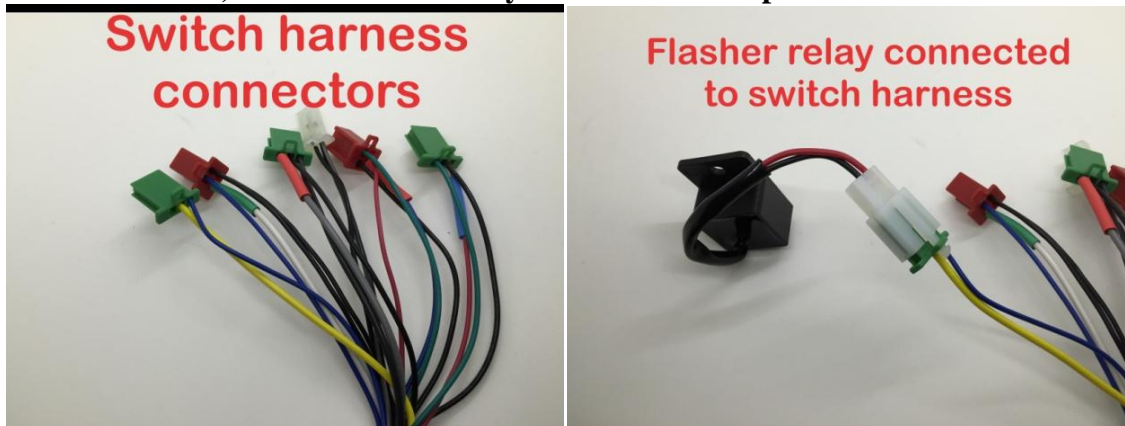
Tools needed: 10 mm or 5/16" socket/nut driver or flat blade screwdriver, Phillips screwdriver, 10 mm wrench, center punch, drill motor, 9/32", 1/2" and 3/4" diameter drills (stepped bit works well) flat blade screwdriver to remove plastic push rivets.



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 CONNECTION WITH FRONT HARNESS WHICH HAS RED COLOR CODING.

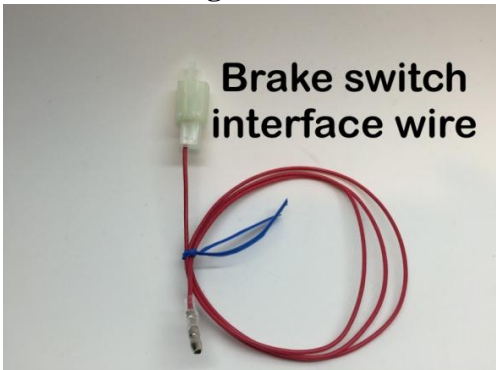
RYCOMOTO 2016 HONDA 1000 Pioneer PN 3102

Turn signal / horn kit rev nc
BY RYCO MOTORSPORTS INC.



Rear turn signal harness connected to switch harness

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



Brake switch interface wire



Front turn signal harness connected to switch harness

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.



3PINDI dash indicator

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 points 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.

RYCOMOTO 2016 HONDA 1000 Pioneer PN 3102

Turn signal / horn kit rev nc BY RYCO MOTORSPORTS INC.

1. Remove the vehicle front access cover.
2. Tilt the steering wheel to the upper most position, remove and discard the two plastic push rivets on the bottom of the paddle shifter housing.

NOTE: Plastic push rivet is a two piece assembly. Be sure to remove both piece

NOTE: Well nuts fit very tight during installation.

1. Install a well nut in each of the open push rivet holes.
2. Screw a fastener into the well nut to provide a push point, lubricate the well nut, push and rock the well nut into place. Remove the fasteners for use in the next step.
3. Install the turn signal switch and mounting bracket by securing the bracket to the underside of the steering column by screwing the provided fasteners into the two well nuts until the fasteners are quite solid.
4. Insert the wire harness cable/connectors through the steering column tilt slit below the steering column.
- 5.



6. Route the wires towards the center of the vehicle.
7. 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 nor the color of the wires).

RYCOMOTO 2016 HONDA 1000 Pioneer PN 3102

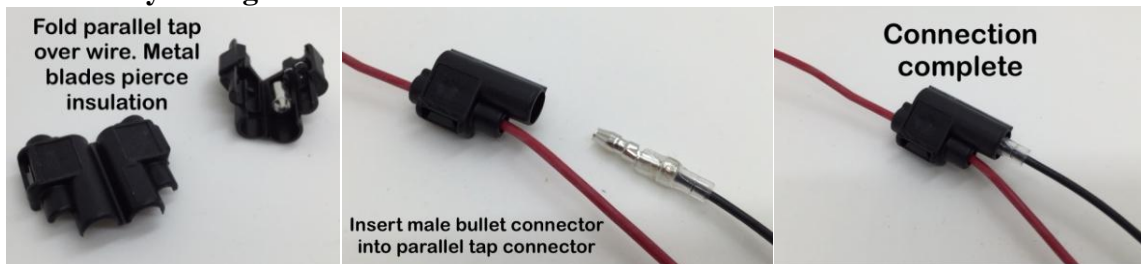
Turn signal / horn kit rev nc BY RYCO MOTORSPORTS INC.

- 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.
- Locate the wires coming from the vehicle brake switch.



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

- Install a parallel tap on the vehicle brake switch yellow/green wire.
- Plug the brake switch interface wire to the parallel tap connector on the yellow/green wire.



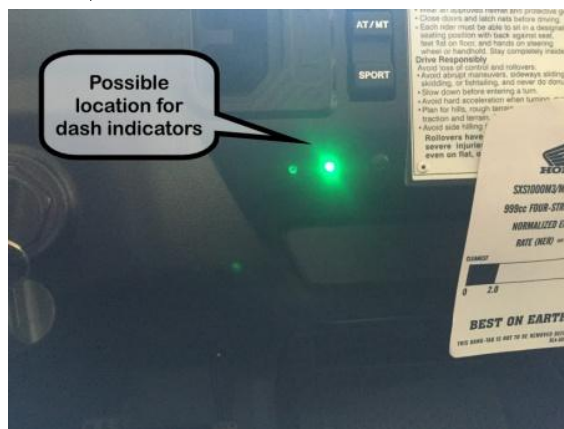
Photo's show how the parallel tap is installed. Wire colors may not match your application



- Position the horn in the desired location and drill a 6mm (1/4") diameter hole in the plastic under the hood. Utilizing the plastic spacer mount the horn using the provided fastener, flat washer and lock nut.
- Install the two flat spade connectors onto the horn (either wire works just as well).
- 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.

RYCOMOTO 2016 HONDA 1000 Pioneer PN 3102

Turn signal / horn kit rev nc BY RYCO MOTORSPORTS INC.



15. 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.

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

17. Mark the desired location of the three front LED's on the outboard side of the headlights.

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



18. Drill three 3/4" diameter holes for the front turn signal LEDs.

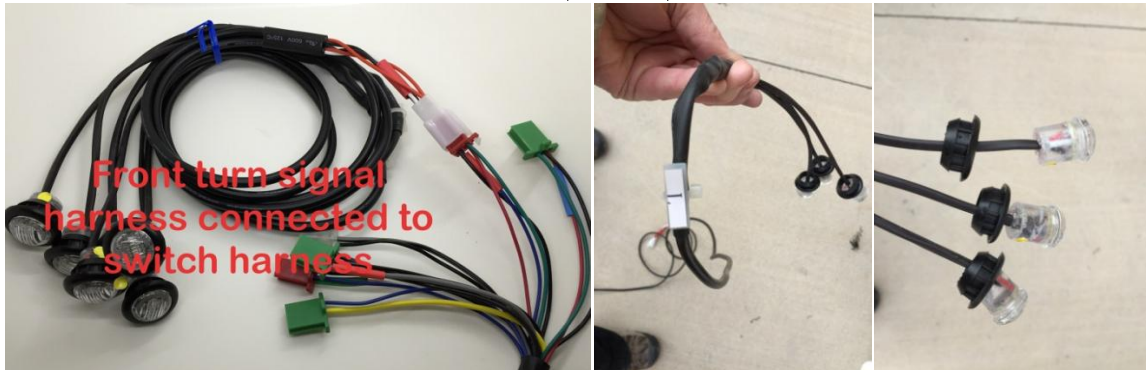
19. Connect the front turn signal harness to the 4 pin connector on the switch harness with the RED sleeve match marking.

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

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

RYCOMOTO 2016 HONDA 1000 Pioneer PN 3102

Turn signal / horn kit rev nc BY RYCO MOTORSPORTS INC.



21. Slide the rubber flange gaskets that are on the LED's back onto the wires.
22. 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.

23. Rotate the LED's within the gasket as necessary to orient them in the same relative position.
24. Connect the rear turn signal harness to the 3 pin connector on the switch harness with the RED sleeve match marking.
25. 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.



26. At the rear of the vehicle locate the factory wire harness leading to the rear taillight assemblies, Expose the yellow/green wires leading to the taillight assemblies and **CUT** the yellow/green wires
27. Tuck the abandoned yellow/green wire going to the front of the vehicle back into the wire loom cover and secure with tape or cable ties.
28. Strip approximately 1/8" - 3/16" of insulation from each of the yellow/green wires leading to the taillights.

RYCOMOTO 2016 HONDA 1000 Pioneer PN 3102

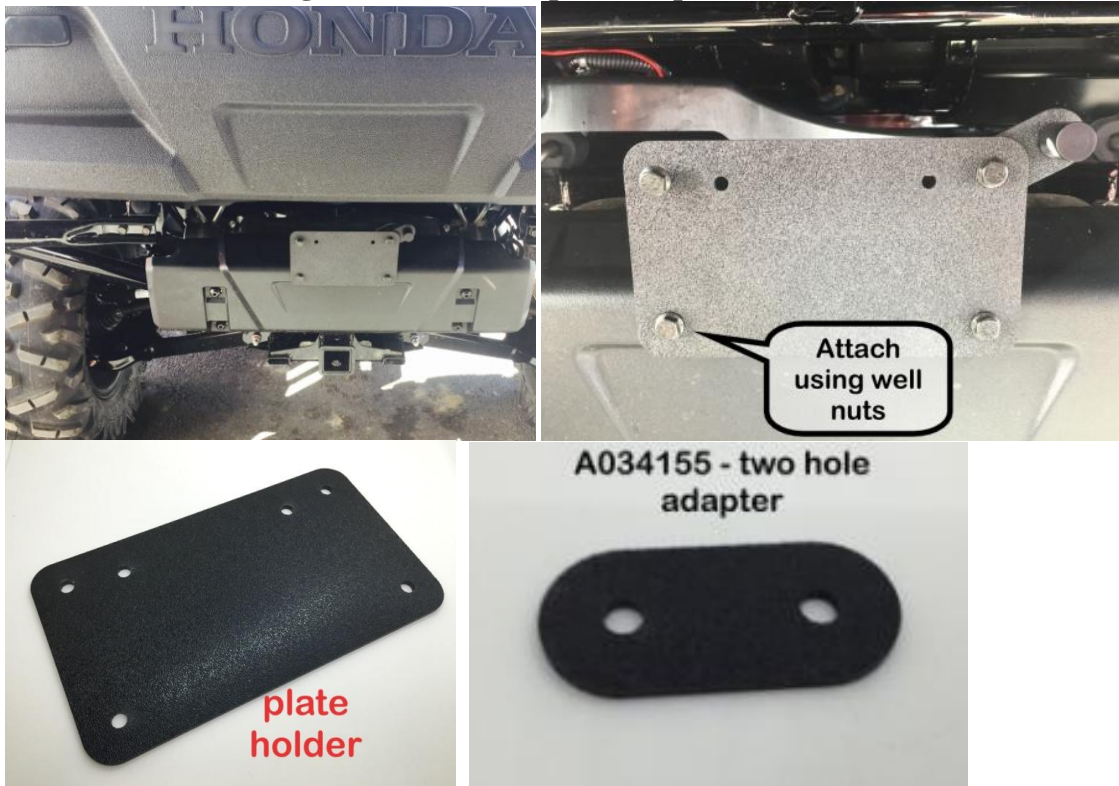
Turn signal / horn kit rev nc BY RYCO MOTORSPORTS INC.

29. Remove the end cap from the red crimpless connector and install the yellow/green wire from the left taillight to the red wire and the right taillight yellow/green wire to the black wire.

NOTE: IF YOU CONNECT THE RYCO PROVIDED RED AND BLACK WIRES TO THE WRONG ENDS OF THE CUT YELLOW/GREEN 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.

30. Position the license plate backing plate in the desired location and mark the location of the two bottom corner holes.
31. Drill two 1/2" diameter holes in the exhaust cover body plastic and install the two rubber expandable nuts with the flange portion outboard. Using the two provided fasteners secure the plate holder to the cover.
- NOTE: Two hole adapter must be positioned as shown in order to clear the cargo bed when it is in the dump position.**

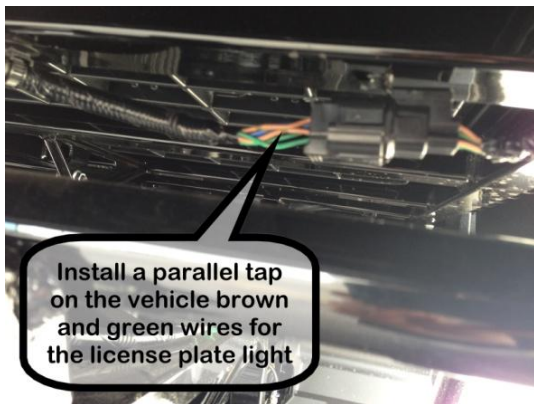
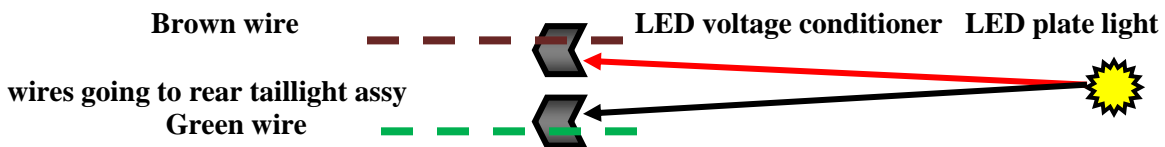
32. The plate light can be installed as one of the two top license plate bolts or can be installed in the two hole adapter where the light will shine on the license plate. The plate light/2 hole adapter is secured to the license plate holder using one of the two top license plate bolts.



RYCOMOTO 2016 HONDA 1000 Pioneer PN 3102

Turn signal / horn kit rev nc BY RYCO MOTORSPORTS INC.

33. Locate the brown (12 V DC, taillight) and green (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.



Similar photo

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.

34. At the auxiliary power outlet that is mounted on the dash, remove the two pin connector from the back of the outlet to facilitate the installation of the parallel taps.
35. Remove the outer wrap enough to install a parallel tap connector on the green and white/black wires as shown.
36. Connect the **RYCO** switch black ground wire to the parallel tap connector on the green wire (ground), and the **RYCO** switch fused wire to the parallel tap on the white/black wire (12 Volt DC).
37. Turn the ignition key to the on position and verify the turn signals, horn and license plate lights work correctly.

RYCOMOTO 2016 HONDA 1000 Pioneer PN 3102

Turn signal / horn kit rev nc

BY RYCO MOTORSPORTS INC.

- 38. 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 and 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. The front LED's flash at full intensity when the turn signals are activated.

RYCO MOTORSPORTS INC.

rycomoto@gmail.com

801-643-3440