



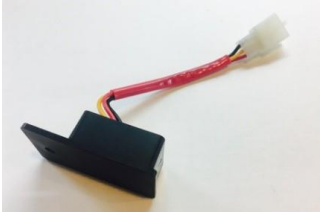

















Turn Signal/Horn Kit 4116

<p>Before you begin</p>	<p>STOP! THIS KIT IS DESIGNED SPECIFICALLY FOR</p> <ul style="list-style-type: none"> • KAWASAKI MULE PRO Series, all years, • KAWASAKI TERYX, 2016 and newer, • KAWASAKI TERYX4, 2016 and newer <p>IF YOUR VEHICLE IS NOT ONE OF THESE MODELS, DO NOT PROCEED. Contact Ryco Motorsports or your local dealer for the correct kit.</p>		
<p>Where do I start?</p>	<p>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 significant other to read them to you. I put a lot of effort into creating 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 photos for those of you who are visual and don't enjoy words.</p>		
<p>What tools do I need?</p>	<ul style="list-style-type: none"> • Pliers or flat blade screwdriver (to pull plastic push rivets) • 10 mm and 12 mm wrench Phillips screwdriver • 12 mm and 14 mm socket/nut driver • 3/4", and 9/32" diameter drills • center punch • drill motor <div style="display: flex; justify-content: space-around;">    </div>		
<p>What's in the box?</p>	<p>Let's become familiar with the items you will be installing on your vehicle, listed in order of use.</p>		
<p>TURN SIGNAL/HORN SWITCH</p>  <p>The connectors interface with the various kit components.</p>		<p>SELF-CANCELING FLASHER RELAY</p>  <p>- 3 pin connector - No marking tape</p>	
<p>BRAKE SWITCH INTERFACE</p>  <p>- 2 pin connector - No marking tape</p>		<p>CABLE TIE</p> 	
<p>PARALLEL TAP</p> 		<p>DASH MOUNTED INDICATOR HARNESS</p>  <p>- 3 pin connector - BLUE marking tape</p>	
<p>RYCO POWER, GROUND & HORN HARNESS</p>  <p>- 4 pin connector - GREEN marking tape</p>		<p>HORN</p> 	
<p>FRONT TURN SIGNAL HARNESS</p>  <p>- 4 pin connector - RED marking tape</p>			

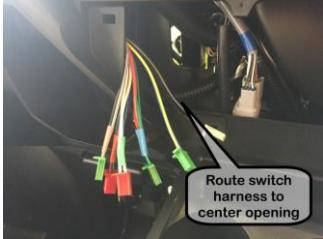
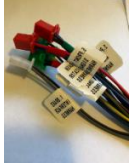





Turn Signal/Horn Kit 4116

	<p>REAR TURN SIGNAL HARNESS</p>  <ul style="list-style-type: none"> - 3 pin connector - RED marking tape 	<p>PLATE HOLDER</p> 	<p>LICENSE PLATE LIGHT and FLANGE NUT</p> 
	<p>TWO HOLE ADAPTER</p> 	<p>SINGLE HOLE CLAMP</p> 	
<p>Installation Steps</p>	<p>NOTE: Where possible run new cables alongside the existing wires, and use existing cable ties/anchors where practical.</p> <p>IMPORTANT: Ensure that the wiring and installed hardware do not contact moving components or hot surfaces.</p>		
<p>1.</p>	<ul style="list-style-type: none"> Depending on your vehicle, remove the front hood, center dash cover, seat, and access cover. 		 <p>Remove center dash cover on Teryx</p>
<p>2. Mount the TURN SIGNAL/HORN SWITCH</p>	<p>NOTE: The TURN SIGNAL/HORN SWITCH should NOT have any of the components installed on the harness until after the switch is installed, and the switch harness is routed behind the dash.</p> <ul style="list-style-type: none"> Remove the nuts on the existing tilt wheel mechanism. <p>NOTE: Do not remove the shoulder bolt.</p> <ul style="list-style-type: none"> Push the shoulder bolt so the threaded end is flush with the steering wheel column bracket. Slip the U-shaped switch bracket on the TURN SIGNAL/HORN SWITCH over the steering column. 		



Turn Signal/Horn Kit 4116

	<ul style="list-style-type: none"> • Reinstall the nuts on the factory shoulder bolt. • Torque the nut to 10 in-lb. • Route the wires below the steering column and above the tilt mechanism. • Insert the wire harness connectors through the opening one at a time, starting with the (2) 4 pin connectors, then the (3) 3 pin connectors, and then the 2 pin connector. • Route the wires towards the center of the vehicle. 	 <p>Route switch harness to center opening</p>
<p>3. Connect the TURN SIGNAL/HORN SWITCH to Harnesses</p>	<p>IMPORTANT: Match the colors of the <u>marking tape</u> on the wires when you install the components (e.g., RED to RED, GREEN to GREEN, BLUE to BLUE), rather than match the color of the connectors or the wires.</p> <p>Connect the following to the TURN SIGNAL/HORN SWITCH harness:</p> <ul style="list-style-type: none"> • SELF-CANCELING FLASHER RELAY (3 pin connector with NO marking tape), • RYCO POWER, GROUND & HORN HARNESS (4 pin GREEN marking), and • BRAKE SWITCH INTERFACE (2 pin NO marking). <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Self-Canceling Flasher Relay Feature: The SELF-CANCELING FLASHER RELAY has a timing circuit that will cancel the turn signals after three minutes and thirty three seconds. The timer is reset whenever the turn signal switch is returned to the center/off position.</p> </div> <p>NOTE: Do NOT connect the front or rear turn signal harness to the TURN SIGNAL/HORN SWITCH at this time.</p> <ul style="list-style-type: none"> • Secure the TURN SIGNAL/HORN SWITCH harness to a cross member using a CABLE TIE. <p>NOTE: The SELF-CANCELING FLASHER RELAY can be bundled and secured with a CABLE TIE to the TURN SIGNAL/HORN SWITCH harness.</p>	
<p>4. Install the HORN</p>	<p>IMPORTANT: Do not attempt to adjust the HORN or remove the center mounting nut that attaches the HORN to the horn mounting bracket.</p> <ul style="list-style-type: none"> • Remove the fastener securing the radiator overflow tank. • Install the HORN using the factory fastener. • Route the RYCO POWER, GROUND & HORN HARNESS to the HORN. • Install the two flat spade connectors to the HORN terminals. <p>NOTE: Either connector can be installed on either HORN terminal.</p>	
<p>5. Install the BRAKE SWITCH INTERFACE</p>	<ul style="list-style-type: none"> • Locate the vehicle brake switch at the brake pedal, and trace the wires up to the 2 pin connector as shown. 	  <p>Blue brake wire is hiding on driver side of dash opening</p>

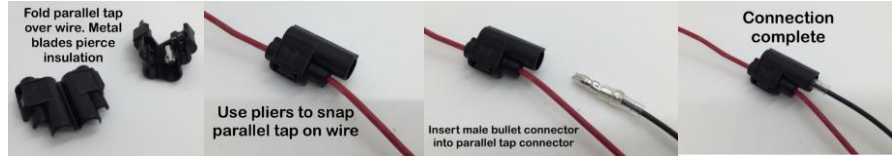


Turn Signal/Horn Kit 4116

- Install a **PARALLEL TAP** on the vehicle **BLUE** wire.

NOTE: Check the orientation of the PARALLEL TAP connectors to ensure access for the male connectors, prior to seating the terminal with pliers.

How to Install a PARALLEL TAP: The wire colors may not match your application but are for illustration.



- Route the **BRAKE SWITCH INTERFACE** wire from the **TURN SIGNAL/HORN SWITCH** harness.
- Connect the **BRAKE SWITCH INTERFACE** wire to the **PARALLEL TAP** installed on the hydraulic brake switch **BLUE** wire.

6. Install the DASH MOUNTED INDICATOR HARNESS

NOTE: Carefully insert the LEDs into the grommets to prevent damage to the wires and resistor.

HINT: A little warmth and moisture help when installing the grommets, and again when installing the LEDs into the grommets.

- Mark the desired locations in the dash for the two **DASH MOUNTED INDICATOR HARNESS** LED lights, where they are visible to the driver.
- Drill two 9/32" mounting holes in the dash for the indicator lights.
- Seat the rubber grommets into the drilled holes, and then carefully push the LEDs into the grommets from the rear, until the LED is flush or slightly protruding.
- Connect the **DASH MOUNTED INDICATOR HARNESS** 3 pin connector on the **TURN SIGNAL/HORN SWITCH** harness, matching the **BLUE** marking tape.

7. Install the FRONT TURN SIGNAL HARNESS

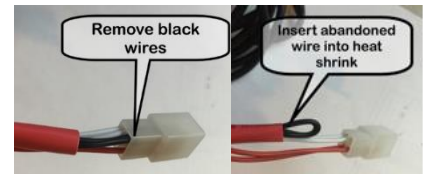
Front Running Lights Feature: The front turn signal LEDs are running lights, and illuminate at 60% intensity when the vehicle ignition is on, and then flash at full intensity when the turn signals are activated.

If you wish to disable the running light feature,

- On the **FRONT TURN SIGNAL HARNESS** remove the **BLACK** wire in the 4 position connector.

NOTE: Use a very fine flat blade screwdriver or similar tool to depress the metal tab on the pin joining the two black wires.

- Push the pin out of the 4 position connector, and tuck the pin into the red heat shrink or tape it out of the way.



- Determine the locations of the front LEDs as desired.

HINT: 1¼" - 1½" spacing between the LEDs works well.





Turn Signal/Horn Kit 4116

If installing on a...	Position the front LEDs on the...
Mule PRO	outboard side of the headlights.
Teryx	outboard side and above the headlights.
Teryx4	

NOTE: Loosen the deflector plate located under the headlight, and move the front edge while drilling the 3/4" diameter holes, to prevent damaging the deflector plate.

- Mark the locations using a center punch.

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

- Drill three 3/4" diameter holes for each set of front turn signal LEDs.
- Connect the **FRONT TURN SIGNAL HARNESS** to the 4 pin connector on the **TURN SIGNAL/HORN SWITCH** harness with the **RED** marking tape.

NOTE: The tags on the FRONT TURN SIGNAL HARNESS are marked "L" for the driver's side, and "R" for the passenger side.

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

- Route the **FRONT TURN SIGNAL HARNESS** triple LEDs to the front corners of the vehicle.
- Slide the rubber flange gaskets that are on the LEDs back onto the wires.
- Slip the LED through the 3/4" diameter hole, fold the flange gasket and push it through 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, to seat the LED into the gasket.
- Rotate the LEDs within the gasket as necessary to orient them in the same relative position.



8. Install the REAR TURN SIGNAL HARNESS

- From the front side of the firewall, route the **REAR TURN SIGNAL HARNESS** 3 pin connector through the grommet in the firewall.
- Connect the **REAR TURN SIGNAL HARNESS** to the 3 pin connector on the **TURN SIGNAL/HORN SWITCH** harness, matching the **RED** marking tape.

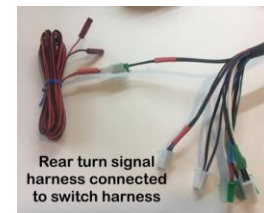
NOTE: Only the two outside pins of the REAR TURN SIGNAL HARNESS 3 pin connector is used. The rear turn signal circuit utilizes the existing vehicle ground.

- Route the **REAR TURN SIGNAL HARNESS** cable alongside the existing wires, where practical, to the rear of the vehicle.
- Secure with **CABLE TIES**.

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

- At the driver side taillight assembly, unplug the taillight connector.
- Expose the three wires for approximately 2 inches.
- Install a **PARALLEL TAP** on the **RED/BROWN** and **BLACK/YELLOW** wires.

EXPLANATION: These PARALLEL TAPS are used for the LICENSE PLATE LIGHT.





Turn Signal/Horn Kit 4116

NOTE: You MUST cut the vehicle **BLUE** wires, and connect to the **RED** and **BLACK** wires on the **REAR TURN SIGNAL HARNESS**. If you splice into the wires, rather than cut the wires, it will not function properly.

- At the driver side taillight assembly, cut the vehicle **BLUE** wire approximately 2 inches in front of the connector.
- Abandon the cut vehicle **BLUE** wire **coming from the front of the vehicle**, and tuck into the protective sleeve and/or wrap with electrical tape.
- At the passenger side taillight assembly, unplug the taillight connector.
- Expose only the **BLUE** wire for approximately 2 inches.
- Cut the vehicle **BLUE** wire approximately 2 inches in front of the connector.
- Abandon the cut vehicle **BLUE** wire **coming from the front of the vehicle**, and tuck into the protective sleeve and/or wrap with electrical tape.



How to Use the Solderless Connectors:

- Unscrew the solderless connector end piece, and slip it over the wire of the component to connect.
- Start to screw the end piece back in place, and push the wire of the component being connected, so it is seated in the solderless connector.
- Tighten the end pieces.



Connect the **REAR TURN SIGNAL HARNESS** and vehicle taillight wires, using the red solderless connectors:

- Attach the **REAR TURN SIGNAL HARNESS RED** wire to the driver side vehicle **BLUE** taillight wire, using the solderless connector.
- Attach the **REAR TURN SIGNAL HARNESS BLACK** wire to the passenger side vehicle **BLUE** taillight wire, using the solderless connector.

NOTE: If you connect the **REAR TURN SIGNAL HARNESS** wires to the **BLUE** wires coming from the front of the vehicle, the rear turn signals and brake lights will not function.

9. Install the PLATE HOLDER and LICENSE PLATE LIGHT

IMPORTANT: DO NOT overtighten the nut on the LICENSE PLATE LIGHT. The LICENSE PLATE LIGHT body is aluminum, and the threads can be stripped quite easily.

If installing on a...	Go to...
Mule PRO	Step 10.
Teryx	Step 11.
Teryx4	

10. Mule PRO

- Install the **PLATE HOLDER** utilizing the existing hole in the suspension brace, and drilling a second 1/4" diameter hole through the plate and suspension brace.
- Install the **LICENSE PLATE LIGHT** on the **TWO HOLE ADAPTER**, using the provided fasteners.
- Attach the **TWO HOLE ADAPTER** to the **PLATE HOLDER** using one of the **FLANGE BOLTS** and **LOCK NUTS**.
- **Go to Step 12.**





Turn Signal/Horn Kit 4116

11.
Teryx/Teryx4

EXPLANATION: 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. Use the FLANGE BOLT provided with the LICENSE PLATE LIGHT. DO NOT OVERTIGHTEN.

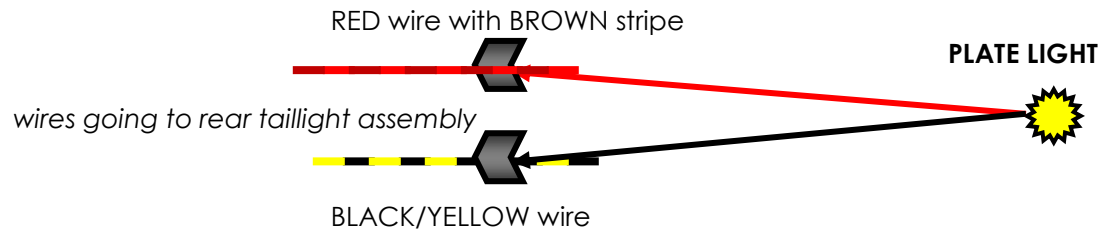
Install the **PLATE HOLDER** using the two **SINGLE HOLE CLAMPS**:

- Locate the horizontal bar just above the rear differential.
- Slip the two **SINGLE HOLE CLAMPS** over the bar.
- Secure the **PLATE HOLDER** using the provided fasteners.



12. **NOTE:** Check the orientation of the PARALLEL TAP connectors to ensure access for the male connectors, prior to seating the terminal with pliers.

- Route the **LICENSE PLATE LIGHT** wires to the **PARALLEL TAP** installed on the **RED/BROWN** wire and **BLACK/YELLOW** wires.
- Connect the **LICENSE PLATE LIGHT RED** wire connects to the **RED/BROWN** wire.
- Connect the **LICENSE PLATE LIGHT BLACK** wire connects to the **BLACK/YELLOW** wire.



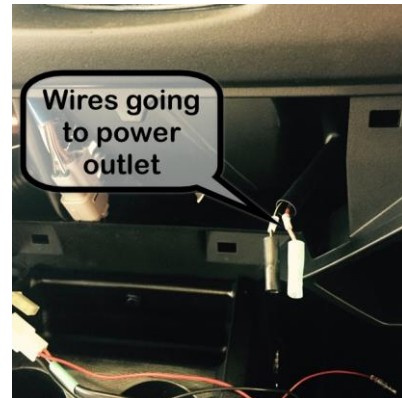
13.
Connect to the Main Power

- Ensure that the ignition key is in the "OFF" position.
- At the auxiliary power outlet that is mounted on the dash, locate the **RED/BROWN** and **BLACK/YELLOW** wires on the rear of the power outlet.

NOTE: Check the orientation of the PARALLEL TAP connectors to ensure 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.



MULE PRO



TERYX/TERYX4

- Install a **PARALLEL TAP** connector on the **RED/BROWN** and **BLACK/YELLOW** wires.



Turn Signal/Horn Kit 4116

	<p>IMPORTANT: The LEDs and SELF-CANCELING FLASHER RELAY are polarity sensitive. The RYCO POWER,GROUND & HORN HARNESS fused wire MUST be connected to the 12 volt DC (positive side), and the BLACK ground wire must be connected to the vehicle ground wire. If this is not done correctly, the horn will work, but the turn signals will not function.</p> <p>WARNING: Damage to the SELF-CANCELING FLASHER RELAY may occur if the wires are installed backwards.</p> <p>Connect the RYCO POWER,GROUND & HORN HARNESS to the PARALLEL TAP connectors on the auxiliary power outlet wires:</p> <ul style="list-style-type: none">• Connect the RYCO POWER, GROUND & HORN HARNESS RED wire to the vehicle RED/BROWN wire.• Connect the RYCO POWER, GROUND & HORN HARNESS BLACK wire to the vehicle BLACK/YELLOW wire.
14. Test	<ul style="list-style-type: none">• Double check all the connectors.• Turn the ignition key to the "ON" position.• Verify that the turn signals, four-way flasher, horn, brake, and license plate light work correctly.• Refer to the Troubleshooting Guide at the end of this document.
15. Done	<p>IMPORTANT: Ensure that the wiring and installed hardware do not contact moving components or hot surfaces.</p> <ul style="list-style-type: none">• Once all the cabling is in place and functionality is verified, double check the routing, and secure with CABLE TIES.• Bundle any extra cable length and secure with the CABLE TIES.• Reinstall covers and seats.



Turn Signal/Horn Kit 4116

Troubleshooting Guide							
Does It Work Correctly?	Front Turn Signals	Indicator Lights	Horn	Brake Lights	Rear Turn Signals	License Plate Light	Resolution
Scenario 1	✓	✓	✓	✓	✓	✓	Go riding!
Scenario 2	✓	✓	✓	No	No	✓	<ul style="list-style-type: none"> • BRAKE SWITCH INTERFACE not installed correctly. • Refer to Step 5.
							<ul style="list-style-type: none"> • The REAR TURN SIGNAL HARNESS RED and BLACK wires were connected to the wrong ends of the cut vehicle ORANGE wires. • Refer to Step 8.
Scenario 3	✓	✓	✓	✓	✓	No	<ul style="list-style-type: none"> • Ensure that the LICENSE PLATE LIGHT RED power and BLACK ground wires are connected correctly (i.e. cables are not reversed). • Refer to Step 9.
Scenario 4	No	No	✓	No	No	No	Ensure that the RYCO POWER, GROUND & HORN HARNESS RED main power and BLACK ground wires are connected correctly (i.e., the cables are not reversed).
Scenario 5	No	No	No	✓	✓	No	Ensure that the RYCO POWER, GROUND & HORN HARNESS BLACK ground wire is connected to a good ground.
Scenario 6	No	No	✓	✓	No	✓	Contact Ryco Motorsports by email or phone, provide your shipping address, and we will send you a replacement SELF-CANCELING FLASHER RELAY , at no charge, to correct the problem.
Scenario 7	No	No	✓	No	No	No	