






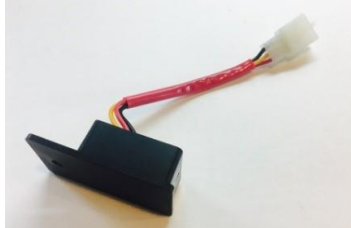









# Turn Signal/Horn Kit 9102

<p><b>Before you begin</b></p>	<p><b>STOP! THIS KIT IS DESIGNED SPECIFICALLY FOR</b></p> <ul style="list-style-type: none"> <li><b>• TEXTRON OFF ROAD WILDCAT XX</b></li> </ul> <p><b>IF YOUR VEHICLE IS NOT THIS MODEL, DO NOT PROCEED.</b>          Contact Ryco Motorsports or your local dealer for the correct kit.</p>		
<p><b>Where do I start?</b></p>	<p><b>Please read and follow the instructions.</b>          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><b>What tools do I need?</b></p>	<ul style="list-style-type: none"> <li>• 10 mm or 5/16" socket/nut driver or flat blade screwdriver</li> <li>• Torx driver bits T25 &amp; T27</li> <li>• 5/16" diameter drill bit</li> <li>• 3/4" stepped drill bit</li> <li>• 10 mm wrench</li> <li>• center punch</li> <li>• drill motor</li> </ul> <div style="display: flex; justify-content: space-around;">    </div>		
<p><b>What's in the box?</b></p>	<p>Let's become familiar with the items you will be installing on your vehicle, listed in order of use.</p>		
<p><b>TURN SIGNAL/HORN SWITCH</b></p>  <p>- The TURN SIGNAL/HORN SWITCH harness connectors interface with the various components.</p>	<p><b>SCREW CLAMP</b></p> 	<p><b>SCREW CLAMP COVER</b></p> 	
<p><b>CABLE TIE</b></p> 	<p><b>SELF-CANCELING FLASHER RELAY</b></p>  <p>- 3 pin connector - No marking tape</p>	<p><b>RYCO POWER, GROUND &amp; HORN HARNESS</b></p>  <p>- 4 pin connector - GREEN marking tape</p>	
<p><b>BRAKE STROBE INTERFACE</b></p>  <p>- 2 pin connector - No marking tape</p>	<p><b>HORN</b></p> 	<p><b>PLASTIC SPACER</b></p> 	



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	<p><b>PARALLEL TAP</b></p> 	<p><b>DASH MOUNTED INDICATOR HARNESS</b></p>  <p>- 3 pin connector - BLUE marking tape</p>	<p><b>FRONT TURN SIGNAL HARNESS</b></p>  <p>- 4 pin connector - RED marking tape</p>
	<p><b>REAR TURN SIGNAL HARNESS</b></p>  <p>- 3 pin connector - RED marking tape</p>	<p><b>SAE ADAPTER</b></p> 	<p><b>LICENSE PLATE LIGHT</b></p> 
	<p><b>PLATE HOLDER</b></p> 	<p><b>FLANGE BOLT and LOCK NUT</b></p> 	
<p><b>Installation Steps</b></p>	<p><b>NOTE:</b> Where possible run new cables alongside the existing wires, and use existing cable ties/anchors where practical.</p> <p><b>IMPORTANT:</b> Ensure that the wiring and installed hardware do not contact moving components or hot surfaces.</p>		
<p><b>1. Mount the TURN SIGNAL/HORN SWITCH</b></p>	<p><b>NOTE:</b> The TURN SIGNAL/HORN 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.</p> <ul style="list-style-type: none"> <li>Install the <b>SCREW CLAMP</b> and decorative <b>SCREW CLAMP COVER</b> on the <b>TURN SIGNAL/HORN SWITCH</b> as shown, with the screw mechanism on the bottom facing out.</li> </ul>		



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- Secure the **TURN SIGNAL/HORN SWITCH** to the vehicle steering column as shown.

**NOTE:** These top two photos are on a different vehicle, for illustration.



TURN SIGNAL/HORN SWITCH in the right turn position



- Move the **TURN SIGNAL/HORN SWITCH** lever up to the right turn position.
- Adjust the **TURN SIGNAL/HORN SWITCH** mounting so the **TURN SIGNAL/HORN SWITCH** lever will not make contact with the vehicle instrument cluster.
- Route the **TURN SIGNAL/HORN SWITCH** wires to left side of the steering column, up under the dash.
- Remove the 4 screws that hold the instrument cluster in place.
- Disconnect the multi-pin connector on the back of the instrument cluster.
- Remove the instrument cluster.
- Secure the **TURN SIGNAL/HORN SWITCH** harness to a cross member on the left side using a **CABLE TIE**.

**NOTE:** Ensure there is adequate slack in the TURN SIGNAL/HORN SWITCH harness; actuate the tilt mechanism to ensure it does not strain the cable.

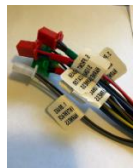
- Route the **TURN SIGNAL/HORN SWITCH** harness to the center of the machine.

## 2. Connect the TURN SIGNAL/HORN SWITCH to Harnesses

**IMPORTANT:** Match the colors of the marking tape on the wires (e.g., **RED** to **RED**, **GREEN** to **GREEN**, **BLUE** to **BLUE**) when you install the components, rather than match the color of the connectors or the wires, unless otherwise directed.

Connect the following to the **TURN SIGNAL/HORN SWITCH** harness:

- **SELF-CANCELING FLASHER RELAY** (3 pin connector with NO marking tape),
- **RYCO POWER, GROUND & HORN HARNESS** (4 pin **GREEN** marking), and
- **BRAKE STROBE INTERFACE** (2 pin NO marking).



**NOTE:** Do NOT connect the front or rear turn signal harness to the TURN SIGNAL/HORN SWITCH at this time.

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.

**NOTE:** The SELF-CANCELING FLASHER RELAY can be bundled and secured with a CABLE TIE to the TURN SIGNAL/HORN SWITCH harness or a cross member.



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### 3. Install the HORN

**IMPORTANT:** Do not attempt to adjust the HORN or remove the center mounting nut that attaches the HORN to the horn mounting bracket.

- Route the **RYCO POWER, GROUND & HORN HARNESS** from the **TURN SIGNAL/HORN SWITCH** assembly, adjacent to the existing vehicle wires in the opening above the radiator in the center of the vehicle, to the **HORN**.
- Install the two flat spade connectors to the **HORN** terminals.

**NOTE:** Either connector can be installed on either HORN terminal.

- Remove the radiator center support screw.
- Using the **PLASTIC SPACER** mount the **HORN** on the support frame behind the radiator using the radiator screw.

**NOTE:** The main power and ground will be addressed in a later step.

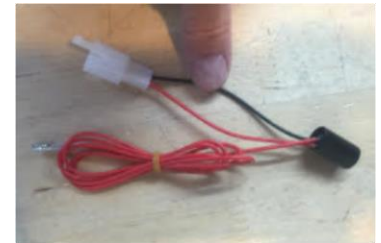


### 4. Install the BRAKE STROBE INTERFACE

**Brake Strobe Feature:** Whenever the service brake is applied, the brake lights strobe six times in the first second, and then remain on at full intensity until the brake pedal is released.

If you wish to disable the strobe feature:

- On the BRAKE STROBE INTERFACE cut the BLACK ground wire, or remove the BLACK ground wire from the 2 pin connector.
- Cut the two RED wires going into the BLACK cylindrical component.
- Splice the two RED wires together.



- Locate the vehicle master brake cylinder and hydraulic brake switch.

**EXPLANATION:** There are two hydraulic brake switches on the master brake cylinder. Use only the switch closest to the front of the vehicle.

- Unplug the connector from the hydraulic brake switch.
- Expose the **RED** with **BLUE** stripe wire.

**NOTE:** It may be easier to access the hydraulic brake switch **RED/BLUE** wire if you remove the vehicle wire harness from both hydraulic brake switches. This can be accessed through the instrument cluster opening.



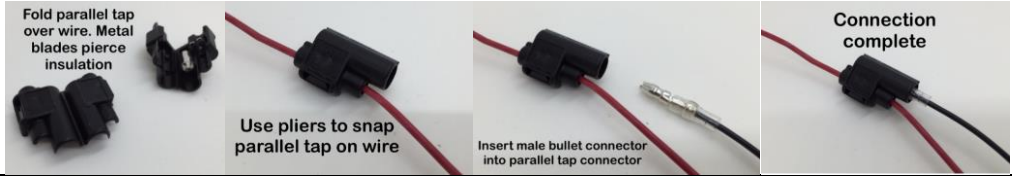
- Install a **PARALLEL TAP** on the hydraulic brake switch **RED/BLUE** wire.

**NOTE:** Check the orientation of the PARALLEL TAP connectors to ensure access for the male connector, prior to seating the PARALLEL TAP connector with pliers. You can unplug the connector to allow easier access.



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



- Connect the **BRAKE STROBE INTERFACE** to the **PARALLEL TAP** installed on the hydraulic brake switch **RED/BLUE** wire.
- Reinstall the connector(s) on the hydraulic brake switch.

**IMPORTANT:** Ensure the **PARALLEL TAP** and **BRAKE STROBE INTERFACE** are connected to the hydraulic brake switch closest to the front of the vehicle.

## 5. Install the DASH MOUNTED INDICATOR HARNESS

- Mark the desired locations in the dash for the two **DASH MOUNTED INDICATOR HARNESS** LED lights, where they are visible to the driver, taking into account the instrument cluster cover.
- Drill two 5/16" mounting holes in the dash for the indicator lights.
- Unplug the bullet connectors on the **DASH MOUNTED INDICATOR HARNESS**.
- Remove the nut from the **DASH MOUNTED INDICATOR HARNESS**.
- From the front of the dash insert the LED wires of the **DASH MOUNTED INDICATOR HARNESS** through the hole, and through the nut.
- Tighten the nut.
- Reconnect the **DASH MOUNTED INDICATOR HARNESS** bullet connectors. Connect the **DASH MOUNTED INDICATOR HARNESS** to the 3 pin connector on the **TURN SIGNAL/HORN SWITCH** harness, matching the **BLUE** marking tape.



## 6. Install the FRONT TURN SIGNAL HARNESS

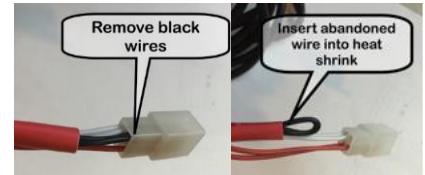
**Front Running Lights Feature:** The front turn signal LEDs are running lights, and illuminate at 60% intensity when the vehicle ignition is on, and then flash at full intensity when the turn signals are activated.

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.



**NOTE:** These two photos are on a different vehicle, for illustration.



- Determine the locations of the front LEDs as desired.
- HINT:** 1 ¼"-1 ½" spacing between the LEDs works well.
- Mark the locations using a center punch.

**NOTE:** Use of a step drill is recommended.





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- Drill six 3/4" diameter holes, as shown.
- Connect the **FRONT TURN SIGNAL HARNESS** 4 pin connector to the 4 pin connector on the **TURN SIGNAL/HORN SWITCH** harness, matching the **RED** marking tape.

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

- Route the **FRONT TURN SIGNAL HARNESS** triple LEDs to the front corners of the vehicle adjacent to the existing headlight wire harness.
- 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.

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

- Rotate the LEDs within the gasket as necessary to orient them in the same relative position, parallel to the existing white running light.

**NOTE:** This photo is on a different vehicle, for illustration.



## 7. Install the REAR TURN SIGNAL HARNESS

- Remove the seats.
- Remove the screws securing the center tunnel and the passenger side handle.



**NOTE:** You don't need to remove the center tunnel, but simply lift it enough to route the rear cable from the front to the rear of the vehicle.

- Connect the **REAR TURN SIGNAL HARNESS** 3 pin connector to the **TURN SIGNAL/HORN SWITCH** harness, matching the **RED** marking tape.

**NOTE:** Only two 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.



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- Locate the vehicle wires where they enter the rear taillight connector.
- Expose the vehicle taillight **RED/BLUE** wires, and cut at approximately 3" in front of the connector.
- Strip approximately 1/8" - 3/16" of the insulation on the wire **GOING TO THE TAILLIGHT ASSEMBLIES**.

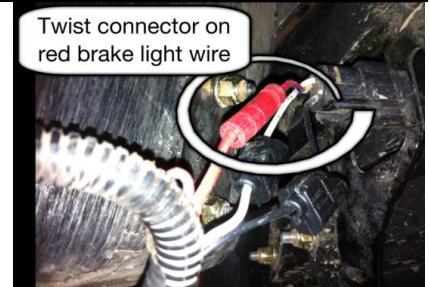
### How to Use the Solderless Connectors:

- 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:

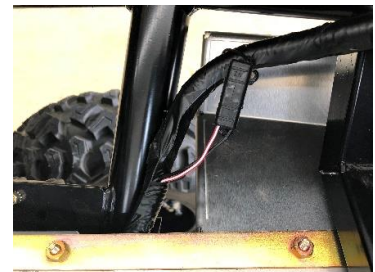
- Attach the **REAR TURN SIGNAL HARNESS** **BLACK** wire to the passenger side taillight assembly **RED/BLUE** wire, using the solderless connector.
- Attach the **REAR TURN SIGNAL HARNESS** **RED** wire to the driver side taillight assembly **RED/BLUE** wire, using the solderless connector.
- Abandon the cut vehicle **RED/BLUE** wires **COMING FROM THE FRONT OF THE VEHICLE**, and tuck into the protective sleeve and/or wrap with electrical tape.



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

## 8. Install the LICENSE PLATE LIGHT and PLATE HOLDER

- Install an **SAE ADAPTER** into the vehicle SAE plug on the passenger side of the vehicle.



- Position the **LICENSE PLATE LIGHT** as shown, above the exhaust heat shields.
- Drill a 5/16" diameter hole for the **LICENSE PLATE LIGHT** above the **PLATE HOLDER**.


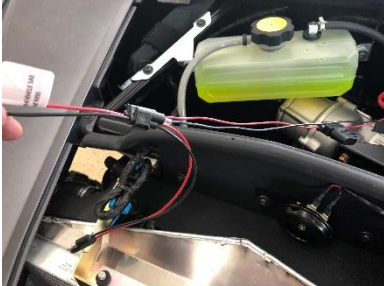
**IMPORTANT:** DO NOT overtighten the nut on the **LICENSE PLATE LIGHT**. The **LICENSE PLATE LIGHT** body is aluminum, and the threads can be stripped quite easily.



- Install the **LICENSE PLATE LIGHT** so that it will shine directly down.
- Secure the **LICENSE PLATE LIGHT** with the provided **FLANGE NUT**.
- Route the **LICENSE PLATE LIGHT** wires to the passenger side of the vehicle.
- Connect the **LICENSE PLATE LIGHT** **BLACK** wire to the vehicle **BLACK** wire.
- Connect the **LICENSE PLATE LIGHT** **RED** wire to the **SAE ADAPTER** **RED** or **WHITE** wire.
- Position the **PLATE HOLDER** in the desired location.
- Mark the location of the four mounting holes.
- Drill four 5/16" diameter holes in the vehicle's body plastic.



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	<ul style="list-style-type: none"><li>Secure the license plate to the <b>PLATE HOLDER</b> using the four <b>FLANGE BOLTS</b> and <b>LOCK NUTS</b>.</li></ul>
<b>9. Connect to the Main Power</b>	<p><b>IMPORTANT:</b> The LEDs and SELF-CANCELING FLASHER RELAY are polarity sensitive. The RYCO POWER, GROUND &amp; HORN HARNESS <b>RED</b> fused wire <b>MUST</b> be connected to the 12 volt DC (positive side), and the <b>BLACK</b> 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><b>WARNING:</b> Damage to the SELF-CANCELING FLASHER RELAY may occur if the wires are installed backwards.</p> <div style="display: flex; justify-content: space-around;"></div> <ul style="list-style-type: none"><li>Connect the <b>RYCO POWER, GROUND &amp; HORN HARNESS</b> to the <b>SAE ADAPTER</b>.</li><li>Locate the vehicle's 6 pin SAE plug marked 'ACC-"A"' in the center of the front access.</li><li>Route the <b>RYCO POWER, GROUND &amp; HORN HARNESS</b> to the 6 pin SAE ACC-A plug.</li><li>Connect the <b>SAE ADAPTER</b> to one of the three positions on the ACC-A SAE plug.</li></ul>
<b>10. Test</b>	<ul style="list-style-type: none"><li>Double check all the connectors.</li><li>Turn the ignition key to the "ON" position.</li><li>Verify that the turn signals, four-way flasher, horn, brake, and license plate light work correctly.</li><li><b>Refer to the Troubleshooting Guide</b> at the end of this document.</li></ul>
<b>11. Done</b>	<p><b>IMPORTANT:</b> Ensure that the wiring and installed hardware do not contact moving components or hot surfaces.</p> <ul style="list-style-type: none"><li>Once all the cabling is in place and functionality is verified, double check the routing, and secure with <b>CABLE TIES</b>.</li><li>Bundle any extra cable length and secure with the <b>CABLE TIES</b>.</li><li>Reinstall the dash, front access cover, center tunnel and seats.</li></ul>





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