

Before you	STOP! THIS KIT IS DESIGNED SPEC										
begin	HONDA Talon 1000R and 1000X, all years,										
	IF YOUR VEHICLE IS NOT ONE OF THESE MODELS, DO NOT PROCEED.										
	Contact Ryco Motorsports or your local dealer for the correct kit.										
Where do I	Please read and follow the instructions.										
start?	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.										
What tools do	10 mm or 5/16" socket/nut driver or flat blade screwdriver										
I need?	9/32" and 5/16" diameter drill bit										
	Phillips screwdriver										
	• 10 mm wrench										
	• 3/4" step drill bit										
	Center punch										
	Wire stripper										
	Wire cutter										
	Drill motor										
What's in the		items you will be installing on yo									
Box?	TURN SIGNAL/HORN SWITCH	ALUMINUM SPACER	5MM FLANGE SCREW, 5MM								
			FLAT WASHER, 5MM FLANGE								
			NUT								
			A								
	The connectors interface with										
	the various kit components										
	SELF-CANCELING	RYCO POWER, GROUND &	DASH MOUNTED								
	FLASHER RELAY	HORN HARNESS	INDICATOR HARNESS								
	TENOTIEN NEED VI	TIORIT III MATERIA									
		6									
			* A								
			* (1) in p								
	- 3 pin connector	- 4 pin connector	- 3 pin connector								
	- No marking tape	- GREEN marking tape	- BLUE marking tape								
	BRAKE STROBE INTERFACE	CABLE TIE	POSI-TAP								
		III.									
		•									
	- 2 pin connector										
	- No marking tape										



HORN FRONT TURN SIGNAL HARNESS **REAR TURN SIGNAL HARNESS** - 4 pin connector - 3 pin connector - RED marking tape - RED marking tape **PLATE HOLDER LICENSE PLATE LIGHT** and **FLANGE BOLT and LOCK NUT FLANGE NUT** (RYCO-C) **PLUG & PLAY ADAPTER PARALLEL TAP** Installation **NOTE**: Where possible run new cables alongside the existing wires, and use existing cable ties/anchors where practical. Steps **IMPORTANT**: Ensure that the wiring and installed hardware do not contact moving components or hot surfaces. 1. Remove the front hood / access cover. Remove the plastic push pins holding the top of the rubber shield. Remove the screws and plastic push pins securing the dash cover. Remove the dash cover to provide better access to the back side of the dash.



2. Mount the TURN SIGNAL/ HORN SWITCH

NOTE: The TURN SIGNAL/HORN SWITCH should NOT have any components installed on the harness until after the SWITCH is installed, and the SWITCH harness is routed behind the dash.

- Using the tilt feature, tilt the steering wheel to the upper most position.
- Remove the nut and shoulder bolt on the existing tilt wheel mechanism.
- Discard the existing shoulder bolt and nut.





NOTE: You may need to put some pressure on the SWITCH BRACKET to force it over the tilt mechanism bracket, and again to align the hole with the provided SPACER and fastener. You may also need to squeeze the bracket once it is place to get the nut started.

- Slip the U-shaped switch bracket on the TURN SIGNAL/HORN SWITCH around the back of the tilt mechanism bracket.
- Align the holes of the switch bracket, tilt mechanism and the steering column bracket.
- Install the ALUMINUM SPACER and 5mm FLANGE SCREW, 5mm FLAT WASHER and 5mm FLANGE NUT.
- Torque the nut to 10 in-lb.
- Route the TURN SIGNAL/HORN SWITCH harness below the steering column and up under the dash towards the left side of the vehicle.

3. Connect the Components to the TURN SIGNAL/HORN SWITCH Harness

IMPORTANT: Match the colors of the <u>marking tape</u> on the wires when you install the components (e.g., <u>RED</u> to <u>RED</u>, <u>GREEN</u> to <u>GREEN</u>, <u>BLUE</u> to <u>BLUE</u>), rather than match the color of the connectors or the wires.

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),
- DASH MOUNTED INDICATOR HARNESS (3 pin BLUE marking), and
- BRAKE STROBE INTERFACE (2 pin with NO marking).

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

Secure the TURN SIGNAL/HORN SWITCH harness to a cross member using a CABLETIE.

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

Self-Canceling Flasher Relay Feature: The SELF-CANCELING FLASHER RELAY has a timing circuit that will cancel the turn signals after a few minutes. The timer is reset whenever the turn signal switch is returned to the center/off position.



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.
- o Splice the two RED wires together.
- Locate the vehicle brake switch.
- Push the cover back on the cable assembly on the vehicle side of the two pin brake switch connector to expose the YELLOW/GREEN wire.



How to Use the POSI-TAP Connector:

- o Unscrew the GRAY end piece, and slip the GRAY cap over the wire.
- o Screw the main body of the **POSI-TAP** and the GRAY cap together.
- o Unscrew the other end piece from the main body.
- o Start to screw the end piece back in place, and push the wire of the component being connected, so it is seated in the main body piece.
- Tighten the end piece.



- Route the BRAKE STROBE INTERFACE from the TURN SIGNAL/HORN SWITCH harness.
- Determine the length of **BRAKE STROBE INTERFACE** RED wire needed to connect it to the **POSI-TAP** installed on the hydraulic brake switch YELLOW/GREEN wire.
- Cut the **BRAKE STROBE INTERFACE** RED wire to the proper length.
- Strip approximately 1/8" of insulation from the BRAKE STROBE INTERFACE RED wire.
- Insert the BRAKE STROBE INTERFACE RED wire end into the POSI-TAP and tighten the end piece.
- Secure wire with a CABLE TIE.

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.
- Drill two 9/32" mounting holes in the dash for the indicator lights.

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

NOTE: Carefully insert the DASH MOUNTED INDICATOR HARNESS LEDs into the grommets to prevent damage to the wires and resistor.



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

• 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.





Remove black

wires

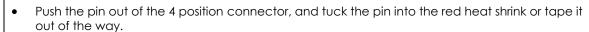
6. Install the **FRONT TURN** SIGNAL **HARNESS**

Front Running Light 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.

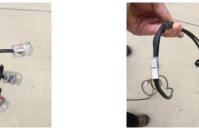


IMPORTANT: The locations of the six front LEDs are critical. There is a support point for the headlight that is near the center of the area where the LEDs are installed. Use of the TEMPLATE is recommended and extreme care when drilling the holes is required.

- Using the provided **TEMPLATE**, mark the location of the three front LEDs on each side of the vehicle.
- Mark the locations using a center punch.

NOTE: Use of a 5/16" pilot drill and step drill is <u>HIGHLY</u> recommended.

- Drill a 5/16" diameter pilot hole in the center hole only through the outer plastic.
- Drill 5/16" diameter pilot holes in the two outside holes through the outer plastic and the headlight support plastic.
- Using the step drill bit, drill the three 3/4" diameter holes through the front plastic.
- Using the pilot holes on the two outside holes as a guide, drill two 3/4" diameter holes from the back side in the headlight cover.
- Remove the screw from the headlight support where it connects to the outer plastic, to allow the routing of the center LED cable.



SWITCH harness, matching 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 on the LEDs back onto the wires.



sert abandoned

wire into heat







- Slip each LED through the applicable ¾" diameter hole, with the two outside LEDs routed through the headlight cover and the front facia. The center position only through the front facia.
- 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.
- Reinstall the screw in the headlight support brace.
- Connect the REAR TURN SIGNAL HARNESS 3 pin connector to 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 are used. The rear turn signal circuit utilizes the existing vehicle ground.





- Remove the seat bottoms.
- Push the center of the plastic pins to release the plastic rivets, and then remove the plastic rivet entirely.
- Remove the center tunnel cover.
- Route the REAR TURN SIGNAL HARNESS from the front of the vehicle to the rear of the vehicle on the passenger side.
- Secure with CABLE TIES.

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





IMPORTANT: You MUST cut the vehicle YELLOW/GREEN 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 rear access opening on the driver side locate the vehicle taillight harness 6 pin connector.
- Remove the connector from the vehicle attach point to provide better access to modify the wires.
- Unplug the connector on the rear taillight harness side of the 6 pin connector.
- Push the outer wrap back on the wires to expose the YELLOW/RED wires leading to the taillight assemblies.
- On the rear harness side of the connector cut the YELLOW/RED wires approximately 1"-2" from the connector.
- Strip approximately 1/8" of the wire insulation from each of the YELLOW/RED wires going to the taillight.

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.
- o Tighten the end pieces.



Connect the **REAR TURN SIGNAL HARNESS** to the vehicle taillight <u>YELLOW/RED</u> wires using the solderless connectors:

- Attach the REAR TURN SIGNAL HARNESS BLACK wire to the RIGHT taillight vehicle YELLOW/RED wire coming from connector position 5 (i.e., the furtherest away from the mounting feature).
- Attach the REAR TURN SIGNAL HARNESS RED wire to the LEFT taillight vehicle YELLOW/RED wire coming from position 2 (i.e., the closest to the mounting feature).
- Abandon the cut vehicle YELLOW/RED wires COMING FROM THE FRONT OF THE VEHICLE, and wrap each wire end individually with electrical tape.

NOTE: If you connect the REAR TURN SIGNAL HARNESS wires to the <u>YELLOW/RED</u> 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

- Using the **PLATE HOLDER** as a guide, mark the location of the four mounting holes.
- Drill four 5/16" diameter holes in the exhaust cover body plastic.
- Install the LICENSE PLATE LIGHT in one of the top holes.

NOTE: Use the flange nut provided with the LICENSE PLATE LIGHT. DO NOT OVERTIGHTEN. The LICENSE PLATE LIGHT body is aluminum, and the threads can be stripped quite easily.

• Using three of the provided **FLANGE BOLTS** and **LOCK NUTS (RYCO-C)**, secure the **PLATE HOLDER** and license plate to the vehicle's body.

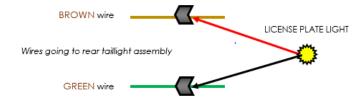


NOTE: Check the orientation of the PARALLEL TAP connectors to ensure access for the male connectors, prior to seating the terminal with pliers.

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



- Remove the left taillight assembly.
- Unplug the taillight wire harness from the taillight assembly.
- Trim approximately 1½" of the outer cover from the wire harness where it plugs into the taillight assembly.
- Install a **PARALLEL TAP** connector on the **BROWN** wire and GREEN wires.
- Route the LICENSE PLATE LIGHT wires to the PARALLEL TAPs installed on the BROWN wire and GREEN wires.
- Connect the LICENSE PLATE LIGHT RED wire to the BROWN wire.
- Connect the LICENSE PLATE LIGHT BLACK wire to the GREEN wire.



9. Connect to the Main Power

IMPORTANT: The LEDs and FLASHER RELAY are polarity sensitive. The RYCO POWER, GROUND & HORN HARNESS RED 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.

WARNING: Damage to the FLASHER RELAY may occur if the wires are installed backwards.







- Ensure the ignition key is in the "OFF" position.
- Locate the auxiliary power outlet that is mounted under the top access cover on the drivers side.
- Remove the vehicle 2 pin connector and install the PLUG & PLAY ADAPTER.
- Connect the RYCO POWER, GROUND & HORN HARNESS to the PLUG & PLAY ADAPTER.
- Connect the RYCO POWER, GROUND & HORN HARNESS RED wire to the PLUG & PLAY
 ADAPTER RED wire and the BLACK wire to the BLACK wire.

10. Test

 Temporarily connect the HORN to test the kit functionality: Install the two flat spade connectors of the RYCO POWER, GROUND & HORN HARNESS from the TURN SIGNAL/HORN SWITCH harness to the HORN to the HORN terminals.

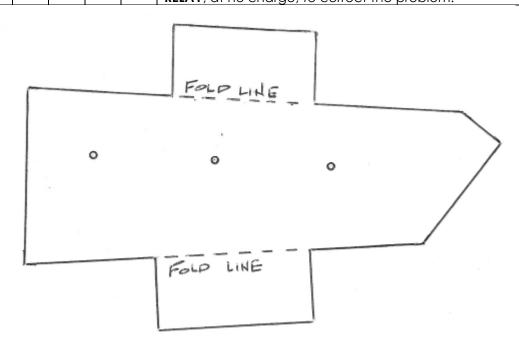
NOTE: Either connector can be installed on either HORN terminal.



11.	 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 as applicable. IMPORTANT: Ensure that the wiring and installed hardware do not contact moving components or hot surfaces. 					
12.	 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. EXPLANATION: The HORN is installed using the existing fastener for the front hood. Install the 					
Install the HORN	horn while replacing the front hood / access cover. IMPORTANT: Do not attempt to adjust the HORN or remove the center mounting nut that attaches the HORN to the horn mounting bracket.					
	 Position the HORN as shown. Secure with the existing fastener for the front hood. Route the RYCO POWER, GROUND & HORN HARNESS from the TURN SIGNAL/HORN SWITCH harness to the HORN. Install the two flat spade connectors to the HORN terminals. NOTE: Either connector can be installed on either HORN 					
13. Done	 terminal. Reinstall the covers front hood / access cover and seats. 					



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	√	BRAKE STROBE INTERFACE not installed correctly. Refer to Step 4. The REAR TURN SIGNAL HARNESS RED and BLACK wires were connected to the wrong ends of the cut vehicle ORANGE wires. Refer to Step 7.			
Scenario 3	√	✓	✓	✓	✓	No	Ensure that the LICENSE PLATE LIGHT RED power and BLACK ground wires are connected correctly (i.e. cables are not reversed). Refer to Step 8.			
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).	Refer to		
Scenario 5	No	No	No	√	√	No	Ensure that the RYCO POWER, GROUND & HORN HARNESS BLACK ground wire is connected to a good ground.	Step 9.		
Scenario 6	No	No	√	√	No	✓	If the turn signal lights illuminate but do not flash, then the FLASHER RELAY is damaged or defective. Contact Ryco Motorsports by email or phone, provide your shipping address, and we will send you a replacement FLASHER RELAY , at no charge, to correct the problem.			



TEMPLATE