

Before you begin Where do I start?	STOP! THIS KIT IS DESIGNED SPECIFICALLY FOR  ARCTIC CAT HDX / HDX CREW all years, ARCTIC CAT PROWLER all years (except Prowler 500, 2017 and newer), TEXTRON OFF ROAD HAVOC / HAVOC X all years, TEXTRON OFF ROAD STAMPEDE / STAMPEDE 4 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.  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.				
What tools do I need?					
box?	TURN SIGNAL/HORN SWITCH	EXPANDABLE NUT	INVERTED U-SHAPED BRACKET		
	- The connectors interface with the various kit components.				
	SCREW CLAMP SWITCH BRACKET	SCREW CLAMP	SCREW CLAMP COVER		
	SELF-CANCELING FLASHER RELAY	RYCO POWER, GROUND & FUSE HARNESS	DASH MOUNTED INDICATOR HARNESS		
	- 3 pin connector - No marking tape	- 4 pin connector - GREEN marking tape	- 3 pin connector - BLUE marking tape		



	CABLE TIES	HORN		PLASTIC SPACER		
		"Titre at " "Minimalized of the attention of the attentio		0		
	FRONT TURN SIGNAL HARNESS	REAR TURN SIGNAL HARNESS		PARALLEL TAP		
	- 4 pin connector - RED marking tape		8			
	PLATE HOLDER	- RED marking tape TWO HOLE AD	APTER	LICENSE PLATE LIGHT		
	FLANGE BOLTS	LICENSE PLA		SAE ADAPTER		
	and LOCK NUTS	LIGHT EXTENS		120		
Installation Steps	<b>NOTE</b> : Where possible run new ties/anchors where practical.	cables alongside th	e existing wire	es, and use existing cable		
1. Mount the TURN SIGNAL/ HORN SWITCH	IMPORTANT: Ensure that the wiring and installed hardware do not contact moving components or hot surfaces.  NOTE: The TURN SIGNAL/HORN SWITCH should NOT have any of the cables or compoinstalled on the harness until after the switch is installed, and the switch harness is rou behind the dash.					
	If you are installing on a(n)	Model year Go to				
	HAVOC STAMPEDE STAMPEDE 4	All,	Step 2.			
	HDX	2016 and newer, 2015 and older,	Step 3.			
	DDOWLED.	Step 4.				
	PROWLER	Step 3. Step 4.				
	L	2015 and older,	1 2126 7.			



Mount the TURN SIGNAL/HORN SWITCH on HAVOC, STAMPEDE or STAMPEDE 4

- Position the TURN SIGNAL/HORN SWITCH with the switch bracket on the bottom side of the steering column shaft cover.
- Position the switch bracket and mark the location for the two mounting holes.
- Drill two ½" diameter holes.
- Install the two EXPANDABLE NUTS in the holes.
- Reinstall the TURN SIGNAL/HORN SWITCH and switch bracket on the steering wheel housing.
- Go to Step 5.



3.
Mount the
TURN SIGNAL/
HORN SWITCH
on HDX or
PROWLER
2016 and
newer

- Remove the L-shaped bracket from the TURN SIGNAL/HORN SWITCH, and reserve the screws.
- Install the provided INVERTED U-SHAPED BRACKET onto the switch, using the screws removed from L-shaped bracket.
- Remove the nut on the tilt wheel mechanism.

**NOTE**: Do not remove the shoulder bolt.

- Push the shoulder bolt so the threaded end is flush with the steering wheel column bracket.
- Slip the INVERTED U-SHAPED BRACKET on the TURN SIGNAL/HORN SWITCH over the steering column.
- Reinstall the nut on the shoulder bolt.
- Torque the nut to 10 in-lb.

**NOTE**: You may need to put some pressure on the SWITCH BRACKET to force it over the steering column, and again to align the hole with the shoulder bolt.









- Remove the fasteners holding the dash in place.
- Pull the dash out to allow access to the back side of the auxiliary power plug and the TURN SIGNAL/HORN SWITCH connectors.
- Go to Step 5.



- Mount the
  TURN SIGNAL/
  HORN SWITCH
  on HDX or
  PROWLER
  2015 and
  older
- Remove the L-shaped bracket from the TURN SIGNAL/HORN SWITCH.
- Install the provided **SCREW CLAMP SWITCH BRACKET**.
- Install the SCREW CLAMP SWITCH BRACKET COVER.





 Install the TURN SIGNAL/HORN SWITCH on the steering column, using the applicable SCREW CLAMP:

If you are installing on a model	Use the	
with tilt steering,	large SCREW CLAMP.	
without tilt steering,	small SCREW CLAMP.	

NOTE: Do not overtighten the SCREW CLAMP.

- Remove the fasteners holding the dash in place.
- Pull the dash out to allow access to the back side of the auxiliary power plug and the TURN SIGNAL/HORN SWITCH connectors.





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

- Route the **TURN SIGNAL/HORN SWITCH** wires through the opening on the steering column.
- Route the wires below the steering column and towards the center of the vehicle.

**IMPORTANT**: <u>Match the colors of the marking tape</u> 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.

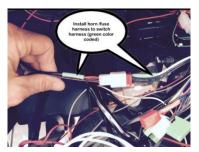
Connect the following to the TURN SIGNAL/HORN SWITCH harness:

- SELF-CANCELING FLASHER RELAY (3 pin connector with NO marking tape),
- RYCO POWER, GROUND & HORN HARNESS (4 pin GREEN marking), and
- DASH MOUNTED INDICATOR HARNESS (3 pin BLUE marking).

**NOTE**: The 2 pin connector with NO color marking labeled "BRAKE INTERFACE HARNESS" is NOT used.









**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.

**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 CABLE TIE.

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

#### 6. 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.

- Install the HORN in the existing hole on the driver side hood support bracket, using the provided fastener.
- Install the **PLASTIC SPACER** between the horn and the vehicle support bracket.
- Route the RYCO POWER, GROUND & HORN HARNESS to the HORN.
- Install the two flat spade connectors to the HORN terminals.

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



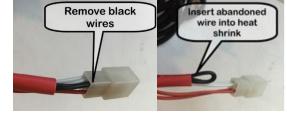
7. Install the FRONT TURN SIGNAL HARNESS

**Front Turn Signal 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**: 11/4" - 11/2" spacing between the LEDs works well.

 Mark the locations using a center punch, ensuring there is adequate room on the back side of the panel prior to drilling.

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

- Drill three ¾" diameter holes for each set of front turn signal LEDs.
- Connect the FRONT TURN SIGNAL HARNESS 4 pin connector to the TURN SIGNAL/HORN SWITCH harness, matching the RED marking tape.
- Route the FRONT TURN SIGNAL HARNESS triple LEDs to the front corners of the vehicle.

**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.

- 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.
- Connect the REAR TURN SIGNAL HARNESS 3 pin connector to the TURN SIGNAL/HORN
   SWITCH harness, matching the RED marking tape.
- Route the **REAR TURN SIGNAL HARNESS** from the front of the vehicle to the rear.

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

- To position the rear LEDs, remove the push pins and fasteners, and separate the bed from the exterior, to allow access inside the cavity.
- Drill a ¾" diameter hole in the rear of the outboard portion of the taillight bed.

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







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

- Slip the rubber gasket onto the REAR TURN SIGNAL HARNESS LED wires, with the flange toward the LED as shown.
- Slip the LED through the 3/4" diameter hole, fold the flange gasket and push it through the hole so the flange portion is inside the taillight housing.



- Gently pull the LED and seat it in the gasket.
- Rotate the LEDs within the gasket as necessary to orient them in the same relative position.

#### 9. 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.

- 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 to the TURN SIGNAL/HORN SWITCH harness, matching the BLUE marking tape.

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

Locate the 3 wires leading to the vehicle taillight/brake light assembly.

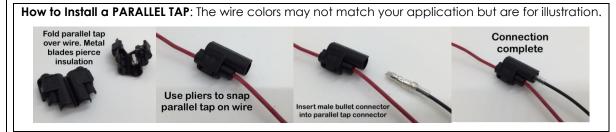
**NOTE**: On the PROWLER you will need to remove the access panel, and on the PROWLER HD model, remove the storage compartment just in front of the driver side rear wheel, and expose the three wires.





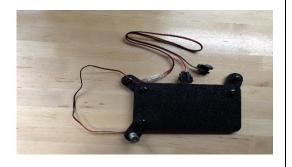
**NOTE**: Check the orientation of the PARALLEL TAP connectors, to ensure access for the male connectors prior to seating the terminal with pliers.

 Install a PARALLEL TAP connector on the vehicle taillight/brake light assembly BLACK and WHITE wires.





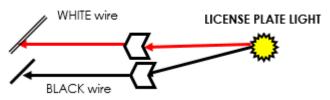
- Using the PLATE HOLDER, TWO HOLE ADAPTERS and LICENSE PLATE LIGHT, assemble as shown.
- On the plastic support rib on the lower left of the body, mark the location for the two PLATE HOLDER holes.
- Drill two ¼" diameter holes.
- Attach the TWO HOLE ADAPTERS to the vehicle, using the provided FLANGE BOLTS and LOCK NUTS.



- Route the LICENSE PLATE LIGHT EXTENSION to the area just in front of the driver side rear wheel.
- Connect the LICENSE PLATE LIGHT EXTENSION RED wire to the PARALLEL TAP on the vehicle taillight/brake light assembly WHITE wire.
- Connect the **LICENSE PLATE LIGHT EXTENSION** BLACK wire to the **PARALLEL TAP** on the vehicle taillight/brake light assembly BLACK wire.

**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.

- Before tightening, orient the LICENSE PLATE LIGHT so it shines on the PLATE HOLDER.
- Connect the LICENSE PLATE LIGHT EXTENSION RED wire into the LICENSE PLATE LIGHT RED
  wire.
- Connect the LICENSE PLATE LIGHT EXTENSION BLACK wire into the LICENSE PLATE LIGHT EXTENSION BLACK wire.
- Secure the wires with CABLE TIES.



#### 11. Connect to the Main Power

• Ensure the ignition key is in the "OFF" position, and the key is removed.

**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.

**WARNING:** Damage to the SELF-CANCELING FLASHER RELAY may occur if the wires are installed backwards.

- Install the SAE ADAPTER to the vehicle SAE plug located under the dash cover, matching the SAE ADAPTER RED male connector to the vehicle RED/ORANGE or WHITE wires, as applicable.
- Plug the SAE connector located in front of the firewall under the front hood, into the parallel taps on the SAE ADAPTER according to the tag on the SAE ADAPTER

**NOTE**: There are additional SAE connectors in the engine tunnel area and towards the rear of the vehicle, but you will use the SAE connector located under the front hood near the firewall.





	<ul> <li>Route the RYCO POWER, GROUND &amp; HORN HARNESS from the TURN SIGNAL/HORN SWITCH toward the center of the vehicle.</li> <li>Connect the RYCO POWER, GROUND &amp; HORN HARNESS RED fused wire to the PARALLEL TAP on the SAE ADAPTER RED wire.</li> <li>Connect the RYCO POWER, GROUND &amp; HORN HARNESS BLACK ground wire to the</li> </ul>
	PARALLEL TAP connector on the SAE ADAPTER BLACK wire.
12. Test	<ul> <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>Refer to the Troubleshooting Guide at the end of this document.</li> </ul>
13. Done	Once all the cabling is in place and functionality is verified, double check the routing, and secure with CABLE TIES.  IMPORTANT: Ensure that the wiring and installed hardware do not contact moving
	<ul> <li>components or hot surfaces.</li> <li>Bundle any extra cable length and secure with the CABLE TIES.</li> <li>Reinstall the dash, panels and covers.</li> </ul>

	Troubleshooting Guide						
Does It Work Correctly?	Front Turn Signals	Dash Indicators	Horn	Brake Lights	Rear Turn Signals	License Plate Light	Resolution
Scenario 1	✓	✓	<b>√</b>	✓	✓	✓	Go riding!
Scenario 2	No	No	<b>√</b>	No	No	No	<ul> <li>Ensure that the RYCO POWER, GROUND &amp; HORN HARNESS         RED main power and BLACK ground wires are connected         correctly (i.e., the cables are not reversed).</li> <li>Refer to Step 11.</li> </ul>
Scenario 3	<b>✓</b>	<b>✓</b>	✓	<b>√</b>	<b>√</b>	No	<ul> <li>Ensure that the LICENSE PLATE LIGHT RED power and BLACK ground wires are connected correctly (i.e. cables are not reversed).</li> <li>Refer to Step 10.</li> </ul>
Scenario 4	No	No	<b>√</b>	✓	No	✓	If the turn signal lights illuminate but do not flash, the SELF- CANCELING FLASHER RELAY is damaged or defective.  Contact Ryco Motorsports by email or phone, provide your shipping address, and we will send you a
Scenario 5	No	No	<b>√</b>	No	No	No	If the turn signal lights do not illuminate but the horn works, the SELF-CANCELING FLASHER RELAY is damaged or defective. replacement SELF-CANCELING FLASHER RELAY, at no charge, to correct the problem.
Scenario 6	No	No	No	<b>√</b>	✓	No	<ul> <li>Ensure that the RYCO POWER, GROUND &amp; HORN HARNESS         BLACK ground wire is connected to a good ground.</li> <li>Refer to Step 11.</li> </ul>