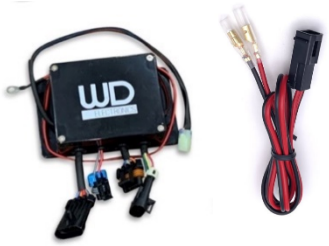
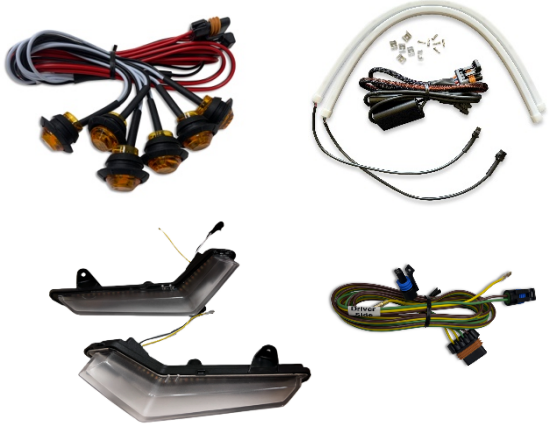
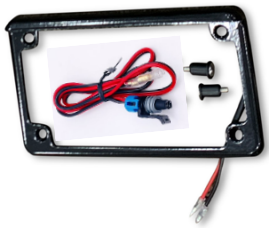
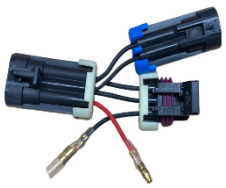
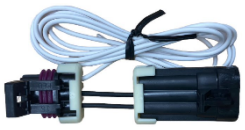
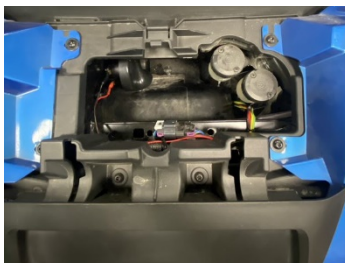
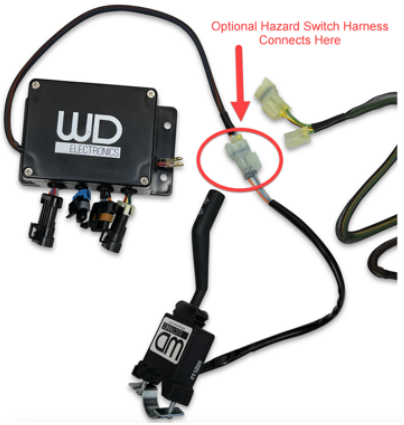
Integrated Street Legal Kit for Can Am Commander

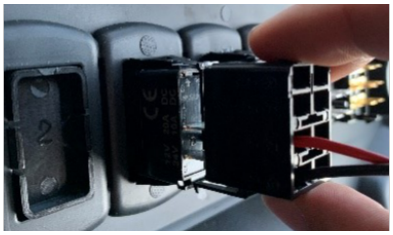
(Sequential LEDs, 3x2 LEDs, Replacement Signature Lights)

Parts Contents		
Long cable with Set of 3 Wires	Main Control Module with Power Plug 	Snail Horn and Harness with Switch
Zip Ties for cable management and Hardware kit	Column-Mounted Turn Signal Switch and bracket.	6-LEDs for front turn signals, sequential LEDs, or Signature Lights 
Wiring for instrument cluster integration	License Plate Kit and wiring Harness 	In-Line adapter plugs for Rear Taillights Drivers' side taillight Adapter  Passengers side Adapter 

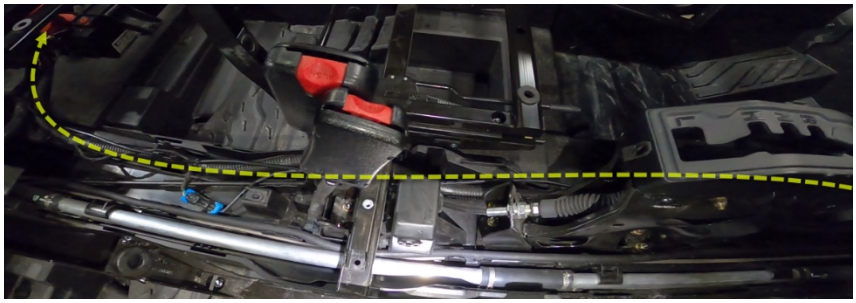
1. Prep the front of the Machine	Remove the Hood from your Can Am Commander by pressing the button on the hood and lifting. 
2. Mount the Main Control Module 	Position the Main Control box under the driver's side of the dashboard. Use the included self-tapping screws to affix it against the left side plastic wall with the plugs facing up. Make sure to leave enough room to plug in the harnesses at the top. If your machine has other accessories, wires, or components in this location, find a suitable location to mount the Main Control Module under the dash in the middle section so that all wire lengths reach.
3. Attach the column-mounted turn signal lever 	The Turn Signal Switch mounts to the steering column on the left side of the steering wheel. The silver bracket with the rubber sleeve goes around the steering column. Remove the two screws holding the silver bracket to the turn signal switch. Sandwich the steering column with the column switch and the silver bracket with the notched side (see photo) of the bracket facing up and loosely install the screws. Position the Column switch in final position and snug up the screws evenly to secure. Then route the wire from the column switch to the mating connector on the main control box, making sure to stay clear of moving parts and to give enough slack for the steering wheels tilt adjustment. 

<table>
<tr>
<td>4. Install the Horn and switch

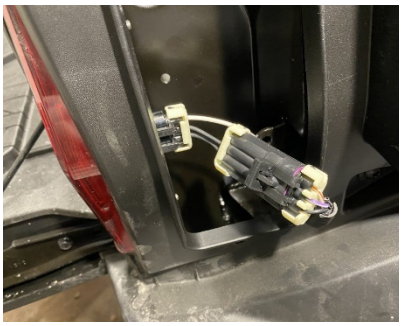
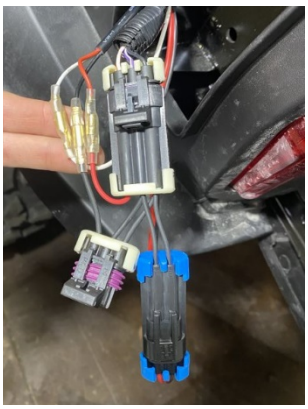
 </td>
<td>Mount the horn under the hood utilizing the gold threaded insert on the left side of the frame using the included Black Bolt. If this location is unsuitable due to other accessories, find a different Bolt under the hood to secure the horn in place. Pop out the switch blank and run the horn rocker switch to the switch blank on your dash. Run the two insulated Spade connectors through the rubber grommet on the firewall to the leads on the horn and connect them. Next, run the 2-pin plug from the horn harness to the main control module and connect to the mating plug.

  </td>
</tr>
<tr>
<td>5. Run the long set of wires to the rear of the machine

 </td>
<td>Remove the center plastic trim to expose center tunnel. It may be helpful to remove the seat bottoms and backs to provide easy access to the fasteners, they simply remove by pulling up on the seat. First remove the two rubber trim pieces that go around the seatbelt latches by removing the torx bolt securing them. There are then four more pieces that need to be removed: the trim piece around the shift lever, the two side plastics that are underneath the shift lever trim, and the rear cup holder piece. Starting at the main control module, connect the white 3-pin connector on the long black cable. Then, run the cable from the Main Control Module to the rear of the machine (the three separate bullet connectors) following the main factory wiring harness (covered in large plastic tubing). Run it all the way to the back past the battery and up under the rear rubber cover behind the driver rear seat back and through the rear firewall. Follow the factory harness on the frame back until you can feed this wire up under the tilt bed on the driver’s side where we will integrate into the taillight harness. Be careful to make sure you are keeping the cable away from the drive shaft or any other moving parts. If you follow and secure the wire to the factory harness all the way there, you will be safe.

 </td>
</tr>
</table>

6. Install the Taillight Adapters	Remove the two bed side plastics with the Can Am decals by removing the two locking screws on each side of the machine. They are located to the left and right of the tailgate on the inside of the tailgate opening. Then slide the plastic toward the rear to remove them and expose the taillight harnesses. At the driver side rear taillight is a 3-pin connector that we will insert our in-line adapter into. Simply unplug the factory connection from the taillight by lifting the locking tab and then insert our taillight adapter (the one with the blue 2-pin connector) in-line between the factory harness and the driver's side taillight. Run the 2nd in-line adapter with the long white wire from the passenger's side taillight following the factory wiring harness (covered in plastic tubing) under the tilt bed over to the driver's side harness. Run the long white wire back to the same spot you installed the first adapter following the factory harness and up into the driver's side taillight cavity.   The bullet connectors on BOTH taillight adapters will match up to the same colors that are on the long black cable you ran in step 5. Red to red, white to white, and black to black. There are only three total wires with bullet connectors between the two adapters. The Red and black wires are on the driver's side adapter (the one with the blue 2-pin connector) and the white wire is coming from the adapter you ran from the passenger's side taillight. The leftover blue 2-pin connector plug will provide power for your license plate frame.
Front Turn Signals	**Which Kit do you have??** For kits with six amber LEDs Proceed to **Step 7a.** For kits with Sequential LED Strips preceed to **Step 7b.** For kits with replacement Accent Lights Proceed to **Sep 7c.**

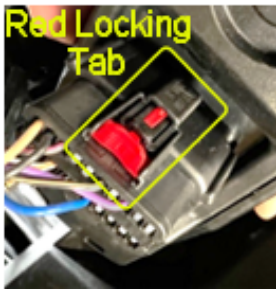
7a. Installing the Front Turn Signals (**6 Amber LEDs**) 	Drill ¾" holes for each of the 6 LEDs on the front corners of the machine wherever you like, three on each side. Make sure to route the side with the driver side label to the correct side of the machine. Remove the rubber grommet from the LEDs first and slide them further down the wires out of the way. Then slide each of the LEDs from the back though the holes you drilled, and then push each of the grommets out through the top and seat them in the hole. Tug gently on the wires from the back to slide the LEDs into place inside the grommet.
7b. Installing the Front Turn Signals (**Sequential LEDs**) 	Locate the Headlight adjustment screws on your Headlights. There is one upper and one lower. Back the headlight out so there is a large enough panel gap(about ¼ inch) between the headlight and the plastic panel. Insert the sequential strip with the connector facing the inside corner of the headlight. Route the strip so that the groove is pinched in between the headlight and the plastic hood following the profile of the headlight.Tuck any extra length into the plastic at the outside corner of the headlight and tighten the adjustment screws to secure the strip. **Do not over-tighten your headlights or you will run the risk of crushing the LEDs themselves.** **<u>As an alternate!</u>** You can use the included plastic brackets and mount your sequential strip any way you like. They will screw into any plastic surface and then you run the bottom of the strip into the brackets as shown below Feed the 4 pin plug on the wiring harness through the rubber grommet on the firewall and connect to the main control box. Run one ballast to each strip and plug them in. Test them to make sure that they are on the correct side, if not then swap the ballasts. Secure the ballasts to the frame or Factory harness.
7c. Installing the Front Turn Signals (**Signature Lights**) 	First, un-clip the factory harness from the signature lights. Then, remove the factory signature lights by removing the screw and using a small screwdriver or pick to release the two tabs from the lights. Next, run the light harness through the rubber grommet in the firewall and follow the factory Harness all the way to the lights on each side. Make sure to run the side with the driver's side label to the correct side. Insert the WD signature lights into the spaces and re-install the screw. Connect the bullet connector and 2-pin plug on each side. Secure the wires m making sure to avoid any moving parts.

8. Install the Dash Indicators

DISCONNECT THE POWER CABLE FROM THE BATTERY FIRST.

- Remove the 4 Torx screws on the front of the instrument cluster being careful to not scratch the screen.
- Next, carefully depress the three tabs on the top of the display downwards using picks or small screwdrivers until the screen assembly releases.

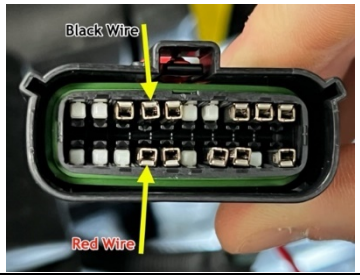
- To remove the Connector from the screen, you must pull the red locking tab back and depress the now exposed black lever and pull the connector free.



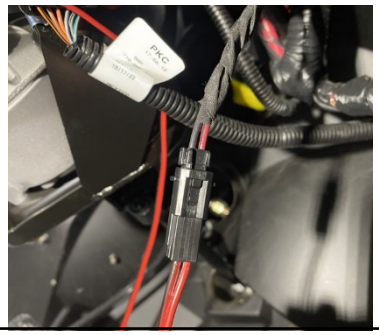
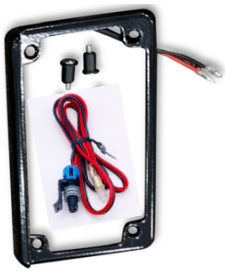
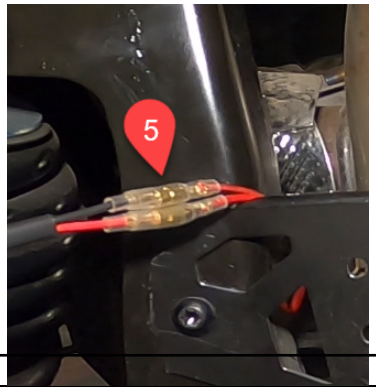
- Next, remove the white front cover by inserting a small flat blade or pick in the side openings and lightly pulling to free the cover from the housing.
- Remove and discard the plastic place holder plugs by pushing them out from the back of the plug using a small tool.
- The pin positions are not numbered. When holding the connector as pictured, with the RED lock tab up, both wires are the 4th pin from the left side on both rows.

- Route the included 4-pin wiring harness with the red and black wire) from the WD control box, through the back cover of the plug
- Install the Black wire in the top row 4th pin from the left and install the red wire in the bottom row 4th pin from the left
- Double check that all the pins are seated and evenly aligned before reinstalling the white front cover.

- Reinstall the front white retainer cover
- Reconnect the plug back into the digital display and push the red locking tab in.
- Connect the 4-pin instrument cluster wiring harness to the WD Main control box.



- Reinstall the screen and the plastic trim piece.

9. Connect to Power Source 	Under the dashboard slightly left of center there is a white 2-pin plug secured to the frame. The white dummy plug will have a 2-pin power connector plugged into it. Unplug the 2-pin connector from the white dummy plug by depressing the locking tab and pulling it out. Plug the included black 2-pin power wire into the mating plug that we just removed. Connect the two bullet connectors on the other side of the power wire to the corresponding bullet connectors on the WD main control box, red with red, black with black. <u>You should not connect this kit directly to battery power. If connected directly it will drain your battery.</u> 
10. Attaching License Plate Frame 	Attach the license plate frame to the rear frame of the machine. Using the two slots on the center rear frame of the machine and the two bottom holes of the license plate frame, insert the included bolts through both bottom holes and slots in the frame. Then use one of the included washers and nuts on each bolt behind the frame and tighten to secure. Run the blue two pin power wire following the pictures below, from the mating plug on the inline taillight adapter in the driver's side taillight cavity down through the holes in the driver's side frame (following the numbers on the photos) and connect it to the lead on the license plate frame (#5). Secure using zip ties so that the power wire can not touch any hot or moving parts. Well nuts have also been included if you would like to mount your license plate elseware. 

11. Attaching License Plate	Installing the plate functions best if you use a pair of regular scissors or snips to cut a small ¼" tab out the top of the license plate as shown in the pictures to the right. Leave enough space for the wires to come through. Bend the tab over so it lays flat (or file it off).
	Install complete!
Common Troubleshooting Tips.	**1.** There is ONLY one place that each wiring harness will connect to on the Main Control Box. Each wiring harness will end up at the control box, as none of them connect to each other. This is helpful if you are confused about which wiring harness to use. **2.** If your license plate does not light up, when the switch is turned on, swap the red and black wires that are six inches from the plate. Black on Red, and Red on Black. **3.** When you test the blinkers, if the rear taillight blinkers blink on the wrong sides, simply swap the black and white bullet connectors on the long black cable that connects to the inline taillight adapters. This will reverse the left and right turn signals. **4.** If the front Blinkers blink on the wrong side, swap the wires leading up to them. **5.** If nothing is turning on, check your fuses. **For additional support email support@wdelectronics.com**