





#### Yamaha Wolverine X2/X4 Integrated Street Legal Kit with 3x2 LEDs

Parts Contents		
Long cable with Set of 3 Wires	Main Control Module with  Power wire	Snail Horn and Harness with Switch
Zip Ties for cable management and	Column-Mounted Turn Signal Switch	6-LEDs Harness
Hardware kit		
Dash Indicator Harness with Blue	License Plate Kit and wiring Harness	In-Line adapter plugs for Rear Taillights
LEDS		





### 1. Prep the front of the Machine

Remove the Hood by lifting and turning the 2 locks on top of the hood highlighted by yellow circles below. Next Remove the firewall access panel by removing the 9 fasteners highlighted by the red circles (5 along top of dash and 4 under the hood). Once all fasteners have been removed. Carefully Lift the cover toward the front of the machine. Remove the hoses from the cover and unplug the connector for the speed management system key by depressing the lock on the connector (yellow arrow below). Now the panel can be fully removed.







### 2. Attach the column-mounted turn signal lever

Attach the "L" shaped bracket as shown right to the turn signal switch using the pre-installed bolts on the switch. Hold the switch bracket in the desired position on the flat panel below the steering wheel and mark the mounting holes using a marker, be sure that the bracket is straight. Drill each hole with a 3/8-inch bit. Slide the included well nuts in the holes, and then align the holes on the



bracket and tighten the bracket down until tight using the fasteners included with the well nuts. The well nuts will expand on the back side of the hole and hold the bracket in place. Feed the wiring for the turn signal switch through the gap in between the steering column and dashboard. You may need to tilt the wheel to get it to fit through this gap.









## 3. Mount the Main Control Module

Position the Main Control Module under the dash. There is a bolt on the right-side fender that you will use to mount the control module (shown below). Remove this bolt and insert it into the top right bolt of the control module when facing the WD logo with the plugs facing down. Reinsert the bolt into the hole and tighten it back down. If this location is not suitable due to other accessories. Use another bolt under the hood or the included zip ties to mount the control module. We recommend positioning the control module but waiting to finalize mounting until all other wires have been run. Connect the column switch connector you just ran under the dash to the mating connector coming off the control module.











### 4. Install the Horn and switch

There is a bolt on the left-side fender that you will use to mount the snail horn (shown below). Remove the bolt and install it through the mounting bracket on the Horn. Clock the horn with the opening facing the front of the machine and tighten it down. If you have other accessories that don't allow room here, find another suitable bolt under the hood to mount the horn. Choose an open switch blank or cut one out and install the WD Horn switch into the blank, then reconnect the socket to the back of the switch. Locate the 2-pin connector behind the dash, route it to the main control module and connect it to the mating 2-pin connector. Lastly, route the black and red spade connectors to the horn and connect them either way. They are reversable.







# 5. Installing the Front Turn Signals (6 Amber LEDs)

For the six amber LED turn signal, mark three ¾ inch holes in your desired location. Our recommended position is shown (Drivers side shown below). Once you have finalized the positioning, drill out all six holes (3 on each side). Connect the Harness to the far-left connector on the main control module. Route one side of the harness to each side of the machine making sure to route the side that is labeled "driver's side" to the driver's side fender. Now, remove the 2 highlighted bolts, one on each fender (highlighted by XXX below). Lift each fender and feed one side of the harness (3 LEDs) under each fender. Slip the grommet down off each light. Next, feed each LED through the holes you drilled from the back side and then slip the rubber grommets through the back of the holes. Install the grommet in the front of each hole, and then press the LED into each grommet. Secure all wires under the fender away from any hot or moving parts using the included zip ties. Secure the portion of the harness under the hood along factory wiring back to the control module using the included zip ties. Re-install the 2 bolts you removed, one in each fender.

















6. Run the long cable to the rear of the machine.

Before running this cable, remove the center console/engine cover from the middle of the machine. This is easiest if you remove the seats first. There are five fastener clips on the bottom edge of the drivers' side, and four fastener clips on the bottom edge of the passengers' side of the center cover that need to be removed, as well as a single bolt on top of the center cover, behind the storage compartment. You will also need to remove the side access panel inside of the driver's side door opening shown (right). Run the large black cable (with 3 inner wires) from the main control module under the hood through the firewall access panel, and down the center of the machine



behind the switch blanks and instrument cluster. Keep feeding the wire down the center tunnel near the shifter, following your vehicles main wiring as much as possible and securing loosely with zip ties along the way until it is fully run (can be accessed from the top, and through the side cover). Once the cable is out through the rear firewall, follow the factory harness on the driver's side up to the driver's side taillight. Secure any extra cable in the side access panel to the frame with the included zip-ties.









## 7. Attach the rear taillight harnesses

Remove the bedside plastics from both sides of the machine. Each side is held in with five bolts along the top side (red circle below) and with 2 silver bolts on the bottom side of each plastic (yellow circles below). Remove these covers by gently pulling them towards the rear of the machine. Starting on the drivers' side unplug the 3-pin factory taillight connection by depressing the locking tab. Do the same on the passenger's side. Install the WD taillight adapters in line with the factory taillight harness on each side. Make sure to install the adapter with the extra black 2-pin connector on the driver's side taillight, and the adapter with the long white wire on the passenger's side taillight. Run the long white wire under the tilt bed following along the factory wiring to the driver's side taillight cavity securing it with zip-ties away from any hot or moving components.



Drivers Side: Passengers Side:





Connect the large black cable (with the 3 wires inside) you ran from the front of the machine, and both rear in-line taillight plugs together. See image to the right on how to correctly connect the 3 bullet connectors to the correct locations from the wiring harness you ran in step 8.

Black to Drivers side, White to Passengers side, and Red to the other driver's side bullet connector.

(If when testing at the end of your installation, the rear turn signals are blinking on the wrong sides, simply swap the 2 male bullet connectors on the black and white wires coming from the front of the machine.)



### 8. Install Dash Indicator Harness

Locate the Dash indicator harness with the 2 blue LEDs. Mark your desired location for the indicators. You may mount these anywhere on the dash, but make sure that the harness reaches from the control box to the location you choose before drilling any holes. Ensure there is open air behind each hole location, so that you don't damage any factory components.



Once you have confirmed your desired location. Drill a hole for each indicator LED. First install the rubber O-ring on each indicator, then install an LED in each hole and install the locking washer and nut from the back side. Route one side of the dash indicator harness to each LED you just installed. The two wires on the right side of the 4-pin connector, that matches up with an orange and a grey wire on the control box, powers the left (drivers) indicator, and the wire on the left side of the 4-pin connector that matches up with a blue and a grey wire on the control box powers the right (passengers) indicator. Attach the red and black spade connectors to each LED once the LEDs are installed.

If your indicators are flashing opposite of your other turn signals, swap the connectors on the back of each indicator light to reverse them





### 9. Attaching License Plate Frame

Mount the License Plate bracket to the center of the rear frame using the included self-tapping screw in the center hole on the bracket. Install your license plate with a cutout for the pigtail on the lighted frame. Next, mount the lighted license plate frame to the bracket using the included nuts and bolts. Connect the 2-pin plug on the license plate extension wire to the driver's side taillight adapter (see below) and run the other end of the wire to the license plate frame you just mounted. Connect the bullet connectors on the extension wire to the mating bullet connectors on the license plate frame making sure that the insulation is installed correctly. Once connected, make sure so secure all wires away from any hot or moving parts and secure any excess wire in the driver's side taillight cavity.

If the License Plate frame does not light up after you have power turned on, simply swap the red and black bullet connectors that are 6" inches from the plate frame.







Driver's Side Taillight Plug:



#### 10. Connect to Power Source

Now, you will attach the power cable included in the kit to the accessory plug under the dash. This is accessed behind the firewall panel we removed in the first step. There should be five or six, 2-pin accessory connectors behind that panel on the drivers side of the machine near the speed management key. They come from the factory with "dummy plugs" or caps on them that will need to be removed. First, attach the power cable to the right side of the Main Control Module with the bullet connectors. Then, pick an open connector, remove the cap by depressing the locking clip, and connect the 2-pin connector on the power extension wire to the machine.









### 11. Attaching License Plate

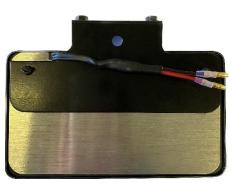
Installing the plate functions best if you use a pair of regular scissors and cut a small  $\frac{1}{2}$ " tab out the top of the license plate as shown in the pictures to the right. Leave enough space for the wires to come through. Bend the tab over so it lays flat (or file it off).



Use a 3/8" drill bit to install the mounting bracket to your bumper, or use the well nuts included in the licence plate kit to install the licence plate on the slots in the rear bumper.







#### 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 6 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 coming out of the long black cable that connects to the taillight adapters. This will reverse the left and right turn signals.
- **4.** If the front Blinkers blink on the wrong sides, swap the wires leading up to them.
- 5. If nothing is turning on, check your ACC and headlight fuses.

For additional support email support@wdelectronics.com

