



# POLARIS™

*Thank you for purchasing the Polaris Ford Ranger FR-1516 in-dash unit. Before removal and installation, be sure to thoroughly read these instructions. Keep these instructions with your vehicle for future reference*

## FORD RANGER

### FR-1516 INSTALLATION INSTRUCTIONS

If you have any questions concerning the installation, warranty or operation of the unit, please contact **POLARIS** on

**1300 555 514**

This installation guide is for reference only. Polaris takes no responsibility for any damage caused to any vehicle through incorrect installation, unsafe practices or poor workmanship.

Warranty for this product is 3 years from the date of purchase, however warranty will be void if:

- The unit is tampered with, damaged or modified in any way
- Reverse camera cable is cut or modified in any way
- Reverse camera is subjected to over voltage
- The navigation SD card is damaged or tampered with in any way (this includes installing foreign mapping or software)

#### Warranty Terms

The Ford Ranger FR-1516 is covered for 3 years and includes:

- Defective Equipment
- Defective cables

Not covered under warranty:

- Abuse
- Improper installation
- Alteration to cables (this includes cutting of any cables)
- Accidents

*Prior to installing the unit, please make sure that you have all the parts from the box and the necessary tools to complete the installation.*

### Parts Packing List



1. FR-1516 Head Unit
2. Wiring Harness
3. GPS Antenna
4. Rear Vision Camera with 7m cable
5. Forward Vision Camera with 7m cable
6. User Manual

### Tools required

1. Trim tools
2. Cable ties
3. Soldering Iron & Solder
4. Electrical Tape
5. Heat shrink
6. Burner for Heat shrink
7. Step through drill
8. 7mm socket
9. Multi tip set
10. Side cutters
11. Drill/Philips head screwdriver
12. Split conduit
13. Yellow Tongue (long strike, approx. 3-4 metres)
14. Short strike (approx. 1 metre)
15. Power cable
16. 10mm spanner

## SECTION 1-UNIT PREP



First, remove glove box for easy access, by opening and squeezing in the two edges. There will be two white plastic pins near the hinge that need to be removed so the glove box can be pulled out and set aside. **(NOTE WHICH WAY PINS GO IN FOR REASSEMBLY)**



Now using your fingers or a trim tool, remove the top dash tray, after doing so you will need to use step through drill piece, and drill a hole big enough for the wiring loom to fit through.(Ensure that the hole lines up with the plug on the head unit)



Grab the wiring loom and pass the plug end up behind glove box until you see it peeping through the left side of the dash tray, and feed it under the plastic skin to the hole and then pull through hole.

## SECTION 2-REVERSE CAMERA INSTALLATION



Run a long strike through the chassis rail from front to rear



With the end of the strike hanging out, tape the camera cable (large 4 pin), illumination wire and reverse power wire onto it. Pulling carefully, pull the strike through from the front of the vehicle, making sure that you leave enough cable and wires at the rear to plug in rear camera and wire up the two wires.



Attach the number plate camera provided as shown in the picture.



Mount the number plate back onto the vehicle



Now under the vehicle and behind the rear bumper, connect the number plate camera plug to the extension cable. Apply heat shrink over the connection to avoid the plug coming loose.

## **SECTION 2 CONTINUED....**



Open the back tail gate to get access to the two screws that need to be undone in order to remove the passenger side tail light.

## **SECTION 3-REVERSE CAMERA WIRING**



Now tap into the reverse positive wire, red with yellow stripe (Attach reverse power wire), and tap into tail light wire, red and grey (Attach illumination wire). After everything is soldered and taped, reinstall tail light.

## SECTION 3 CONTINUED...



Remove scuff plate and kick panel on the passenger side of the vehicle, then lift up the carpet to locate the grommet. Remove grommet and feed cable up into the cab.



Using cutters, make an incision in the grommet so that the cables can be fed through it. Once the cables have been fed through the grommet making sure there is enough cable to reach behind the glove box, restore it to its original position.



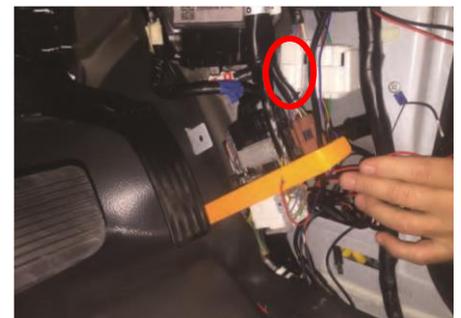
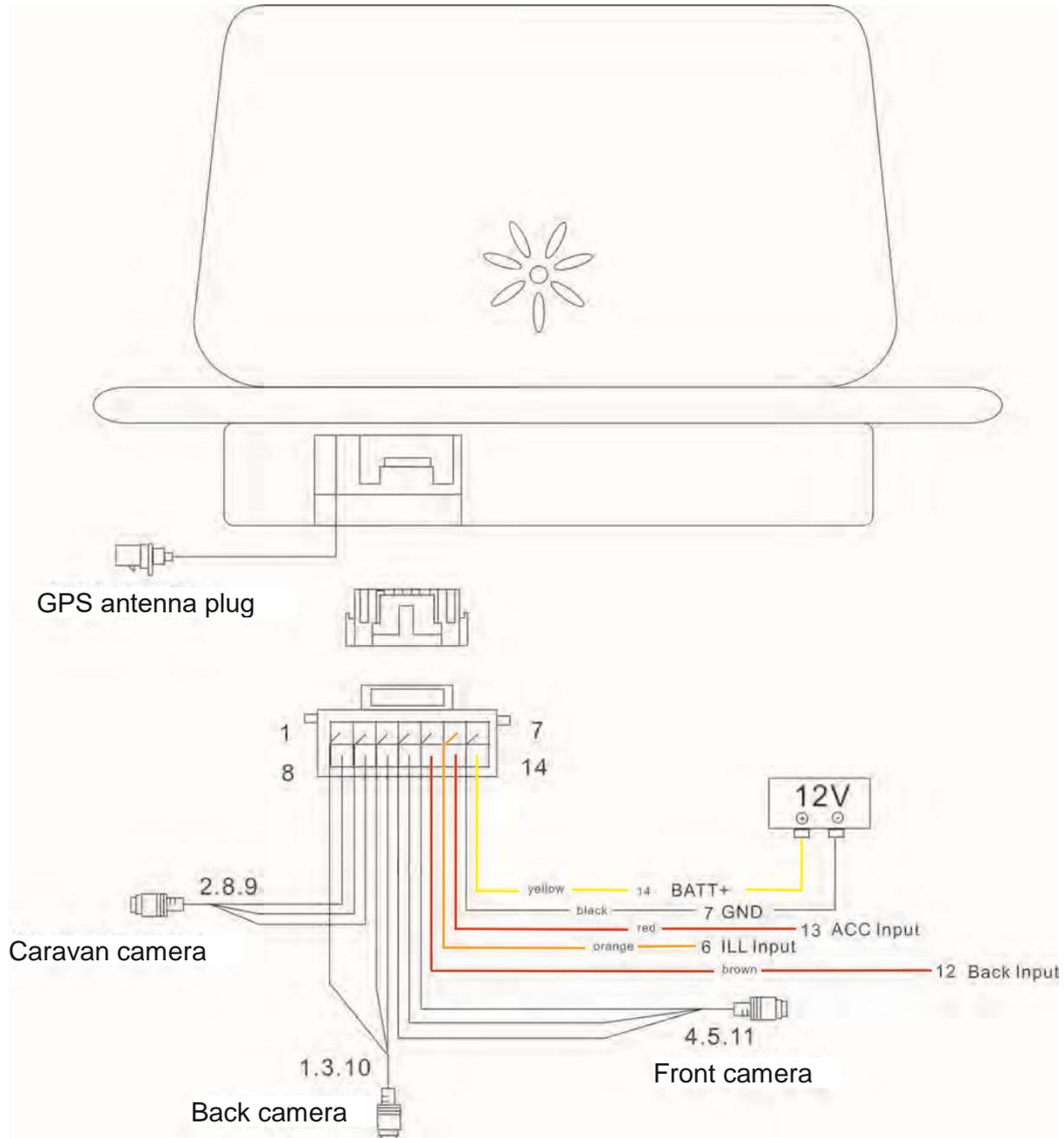
From underneath the vehicle, pull any excess cable through and apply conduit to all exposed cable/wires, then push back into chassis rail and zip tie conduit to chassis rail to ensure it doesn't pull back out. \*

\*when finished with the grommet and you have made sure you have enough cable, silicon it up for waterproofing.



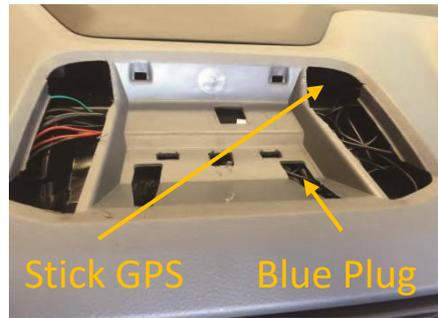
Run the reverse camera cable and wires to glove box area reaching the end of the wiring loom. Plug rear camera into BACK CAM Plug on loom. Connect reverse power wire to brown BACK wire in loom and also connect illumination wire to orange ILL wire on loom, making sure to solder the two wires and tape all wires including camera plug so it doesn't come loose.

## SECTION 4-WIRING DIAGRAM



To find BATT+ and ACC, remove scuff plate and kick panel of driver's side. Using a test lamp, find constant power for BATT+ and accessory power for ACC. **(The plug circled has a grey with blue stripe wire and this wire is generally ACC power, although not guaranteed with different year models).** Once all is soldered and taped run the wires from here under carpet and up through to behind the glove box, connecting onto the loom. Put driver side trim back together.

## **SECTION 5-MOUNTING HEADUNIT & GPS**



Before connecting up the head unit, you need to secure the GPS antenna under the top of the dash using a square of double sided tape, and making sure that it's not in the way of the head unit clipping in. Run the blue plug up the right side of rectangular hole. Any extra GPS cable can be bundled and shoved in under dash. Grab the FR-1516 in-dash and plug in the main harness, then plug in the blue GPS plug. It's advised that you test all the features before putting everything back together. Once satisfied that everything is in working order. Push down firmly on the unit until it clips in. (It should fit nicely, if it is having trouble clipping in, there is wiring in the way and needs to be moved)

## **SECTION 6-REINSTALLING AND FINISHING**



Reinstall kick panel and scuff plate, making sure all is clipped in, make sure all loose or hanging wires/cables are zip tied and neat. Reinstall your glove box by doing the reverse of removal ensuring the white pins go back in the correct way. Now you have your finished product.