

## **DEFENDER TURN SIGNAL SYSTEM**

Thank you for purchasing XTC Power Products Turn Signal System. Our new Easy Install Turn System is unique from the other kits on the market. This kit is completely plug and play, no wires to cut, no crimping with only power, ground and plug it into the OEM harness. Like many cars on the road today, our kit uses the factory brake lights as turn indicators.

## For more details on installation go to www.xtcinstall.com

Please read the instructions fully and familiarize yourself with the components before starting the install. These instructions are a guide line, the system can be installed in many locations depending on other installed options.

1. **Remove** the passenger side floor and center kick panel.





2. **Mount Control Unit** - Mount the control box under the glove box, there are two posts that are 4.75" apart, using the silver #8 x ½" screws and a P2 Philips screw driver mount the unit on two of these posts. If you want the turn switch mounted on the drivers left side of the steering wheel or if unable because of factory installed options, choose another suitable place to mount the control box under the dash using the optional screws provided.



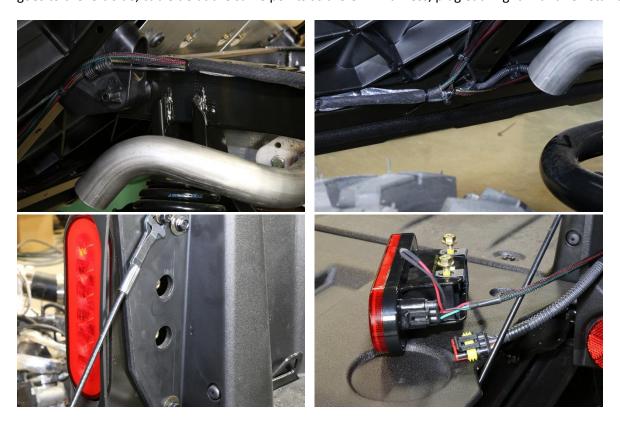


3. Run the Rear Extension Harness – Under the dump bed on the passenger side there is a thin wire coming from the rear of the dump bed up to a 3-pin connector, unplug the harness and plug our long Extension Harness with the 3-pin connector into the car side of the connector. Making sure to keep the harness away from any HOT or moving parts, run

the other side with the 4-pin connector down through the opening that leads into the center tunnel, unlatch the cars cable harness's and insert our harness up to the control box. Secure using the supplied cable ties at each end



4. Install Rear Light Harness – Remove both rear tail lights by removing two bolts from the side of each one using a #10 Socket. Starting at the new harness installed in the previous step plug the 4-pin connector into the new rear harness. Run the rear harness along the OEM harness, slide the heat tubing to the same spots as the factory reflective heat shield and cable tie in place. Continue attaching to the OEM cable, the green wire goes to the right-side light and the yellow wire goes to the left-side, cable tie at the same points as the OEM harness, plug each light in and reinstall tail lights.



## WARNING! Verify that there is clearance before drilling holes for the LED's or switches.

5. **Install Front LED Turn Lights** - Mark and drill 5/8" holes or if using the rubber grommet ¾" holes in the front corners of the fenders, remove the rubber grommet from the LED and insert into hole with the Top marking up. If using the grommet push the grommet into the ¾" hole and then insert the LED through grommet with the word TOP at the top.





6. Install Front Harness – There is a rubber seal that runs across the frame sealing the cab. Remove the winch control outlet to gain access, run the front harness up behind the plastic mount, lift the rubber seal and push the four pin connector through and plug into the control box.





- 7. Attach Front Harness to lights The Green and white wire go to the right/passenger side LED, attach the Green to the Black and the White to the White, the Yellow and white wire go to the Left/Driver side LED, attach the yellow to the Black and the white to the White. NOTE: Black wire is positive and go to the Green and Yellow wire, they will not work if reversed. White is ground. Pull any excess wire back under the dash and secure the Harness using the provided cable ties.
- 8. Install the Turn and Horn/Hazard Switch's Using a new sharp razor, cut two of the rectangle openings in the dash to install the turn switch and the Horn/Hazard Switch. (Shown Below with Old Style Hazard Switch) Run our switch connector's through the opening's and attach to our turn switch and Horn Switch (see below about grease) and insert the switch into the opening







Dielectric Grease - LED flashers by design take very little current to activate. When water gets on the dash and lands on the top of the switch, it can trickle to the connector causing it to activate the flasher by using the switches LED indicator, the system will continue to operate and does not hurt the system, but will continue clicking until the switch terminals dry. Just like the OEM we recommend using Dielectric Grease on all switch terminals, this keeps the water out and will stop the clicking, it also reduces

corrosion and increases reliability! Open the grease and put on the switch terminals and the connector terminals, the more the better, also put some on the Hazard switch terminals. It should also be used on any extra switches that you may have installed

9. **Install Horn** - Install the horn bracket onto the horn with the provided hardware. Mount the horn on the A-Arm top cross bar in front of the radiator in the existing holes using the ¼" x ¾" screw and Lock Nut. Attach Violet and Black wire from front harness to horn terminal.





- **10. Run power wire** The power wire needs to be run in the dash over to the factory Busbar in the center dash pocket. Using a #10 deep socket remove the nut at the far end. The Red wire goes to the post with the red wire with black stripe on the rear Busbar Post. Re-install nut. Remove the front Busbar nut and install the ground wire.
- 11. Verify operation of all lights. Cable tie any extra harness under dash. Reinstall center tunnel.

**Optional** - The Tan wire next to the Turn Switch is for an optional Dash Indicator. When the TSS is activated it will flash 12 VDC that can be attached to an Optional Dash Mounted LED Light. More Information can be found at www.xtcinstall.com

For more details on installation go to www.xtcinstall.com. We can also be reached by email at

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<sup>\*</sup>Disclaimer: This kit is intended for off road use only and XTC Motorsports claims no responsibility for it use. It is up to the purchaser to make sure it complies with all Federal, State and Local laws. R2