



Tusk ATV Enduro Lighting Kit Instructions

The Tusk Enduro Lighting Kit is designed to be a simple way to provide front and rear turn signals, tail/brake lights, horn, and rearview mirror for your machine. The components have universal applications and will work on almost any four-wheeler with minor modifications. Installation may vary with each machine.

- **Note** – *If this kit is being used to make an off-road ATV street legal, it is the user's responsibility to make sure the kit is compatible with local and State laws.*

Installation Instructions

1. **Wire Harness** - Remove the seat and side plastics from the machine. Layout the wiring harness along the frame so the rear connectors are positioned in front of the rear fender and the front connectors are positioned between the two front tires. It is best to route the wiring along with the existing wiring harness path. Make sure the wiring is safe from heat or anything that could rub or pinch it.



2. **License Plate Mount** - Depending on your machine and the kit purchased, you will either be installing a license plate mount with a tail/brake light or just a plate light. In either case, the plate mount can be mounted with the provided "P" clamps to the grab bar or rear rack or bolted to the machine with supplied hardware. For further instructions, refer to the instructions included in the Tusk Taillight/Brake Light or the Tusk License Plate Light. If you received the Taillight/Brake light please look at step 3 for how to install the brake switch, if you received the license plate light skip step 3 and move to step 4.



3. **Brake Switch** - Install brake switch by removing the stock banjo bolt from the rear master cylinder and replacing it with the hydraulic brake switch (some machines may not have room on the master cylinder for the brake switch. In this case it can be installed on the caliper or front brake – *see note at bottom of page*). It is best to pour brake fluid into the switch and banjo bolt hole before installing. This will eliminate as much air as possible. **After the switch is installed, the rear brake must be bled to remove any air that entered when the switch was installed.** Refer to your owner's manual for brake bleeding instructions as the process will vary. Plug the wires from the brake switch into the Pink wire leads from the harness.



4. **Rear Turn Signals** - Align flush mount turn signals in desired location. Drill holes for the turn signal wires. Make sure the desired turn signal location is clean by wiping the area with rubbing alcohol or contact cleaner. Apply the turn signal.



5. With the rear turn signals and tail/brake light in place, plug signals and tail/brake light into the wiring harness. (Both black wires from the signals connect to the two long black wires from harness. Yellow wires from signals connect to the orange (left) and blue (right) wires on the harness).



6. **Control Switch** - Install Compact control switch to the handlebars in a suitable location. Route the wires along the handlebar to the area between the front tires.



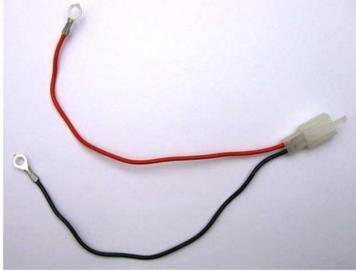
7. **Horn & Relay** - Install the horn and flasher relay. These can be installed in multiple locations on the front of the machine. Choose a location most suitable for your application. The mounting hole can be drilled larger if needed. Velcro with an adhesive back (not included) may be used on the flasher relay if desired.



8. **Front Turn Signals** - Install front turn signals just like you did in the rear. Remember to align it how you would like it to sit before you start drilling. Clean service with contact cleaner or rubbing alcohol and then peel of the paper and adhere the signal in the designated area.



9. Making sure the wire paths are clean and won't interfere with anything, go ahead and plug in horn, signals, relay, and compact control switch to the wiring harness. (refer to wiring diagram that came with the harness)
10. **Battery** - Connect the battery leads included with the wiring harness (red +, black -) to the battery part on the harness. (rear part of harness, red and yellow wires) If the battery leads don't reach your battery, there is a set of extra long battery leads included in the wire harness contents.



11. Double check the wiring by referring to harness wiring diagram. Plug the battery into the harness and test the kit. Turn the Compact control switch to the "On" position. The tail light should be on. Test the turn signals, horn, and brake to make sure everything is functioning. If there are problems, double check all wiring and 5 amp fuse.
12. **Secure Wires** - Using zip-ties, secure the wire harness and loose wires. Make certain the wiring will not interfere with steering or any other functions. Also make sure the wiring is protected from anything that could cause damage from heat, rubbing, or pinching.
13. **Mirror** - This can be installed upward or downwards depending on preference. In either position, the mirror can be folded inward when not in use.



14. Install the seat and side plastics. Again, double check the wiring to make sure there is no interference with steering or any other functions.

Additional options

- *There is a red and black pair of wires extending from the front of the harness. These are used to plug into the brake switch used on the front brake master cylinder if desired (optional – extra switch must be purchased separately).*
- *Harness includes a yellow and black wire lead. This will be used for the kit including the Tusk License Plate Light only. If your kit doesn't have the license plate light you will not need this yellow and black lead*