



BULL DAWG SUV HARDTOPS

The Perfect Companion for your Sport SUV

Another quality company by McLaughlin Manufacturing.

4737 Adams Road

Chattanooga, TN 37411

www.bulldawgmfg.com

800-784-6478

1997 to 2006 TJ 1-PC JEEP HARDTOP DEFROST INSTRUCTIONS

(You can also view this installation sheet in color online at:
<http://www.bulldawgmfg.com/BullDawgmfginstall.pdf>)

Parts List and Hardware Identification

- Defrost 2 minute timer control box
- Wiring harness
- Relay (pre wired)
- Fuse block (pre wired)
- Indicator light
- Push button switch
- Fuse Tap
- Self tapping screws

- **See attached pictures on last page**

***** All underlined words in the instructions are wire locations on the Defrost Timer Control Box**

***** Do not insert any wires into their plastic harnesses until the wires have been run. You will not be able to remove them once they are inserted into the harness.**

***** Schematics are included for technical data only**

***** Please read and understand the directions before you begin the installation process.**

Defrost Installation Instructions

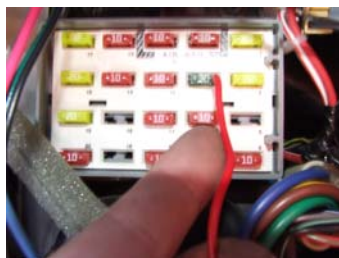
- Mount Defrost 2 minute timer control box using the double sticky tape provided behind the glove box. Make sure to check for clearances so that the glove box can close. (*Picture shown on finished installation. Do not install wires at this time.*) **(See picture below ↓)**



- Mount the relay (square box with wires) and the fuse block (2 red wires together) (using the self tapping screws provided) to the upper rear corner of the jeep tub under the carpet. (Drivers Side) As close to the rear window as possible. Run the other 2 red wires with the ring terminal and the plastic plug to the front of the jeep behind the carpet. **(See picture below ↓)**



- Connect the black ground wire (ring terminal end) (16 AWG) from the relay to the screw that mounts it to the tub of the jeep. *Please remove all paint from surface area where grounding.* **(See picture above ↑)**
- Take the pink wire (18 AWG) with plastic connector already installed and connect it to the timer box at the **+12V ACC**. Use the fuse jumper provided; insert it into the rear window wiper fuse slot. (this enables the box to work only with the ignition on) **(See picture below ↓)**



- Drill two holes (31/64 for the push button & 17/64 for the light) in the center console or desired location; for the red indicator light and the red push button on switch. (Make sure wire lengths are appropriate to reach the timer box.)
- Insert the indicator light (green wire is LIGHT + & black wire is LIGHT -) and the red push button switch wires (blue wire is SW IN & black wire is SW GND) *****If you disconnect the plastic harness from the timer box to install the wires, pay special attention to the direction that it snaps into the box so that when it is put back in; the wires are not backwards*** Warning: Do not put wires into plastic wiring harness until after it has gone through the drilled holes. You will not be able to remove the wire once it is inserted. (See picture below ↓)**



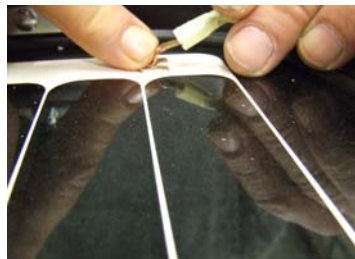
- Take the black GND wire (16 AWG) (ring terminal end) with plastic connector already installed and connect it to the timer box. Ground it to the passenger kick panel using the self tapping screw provided. *Please remove all paint from surface area where grounding.* (See picture below ↓)



- Take the red +12 V wire (ring terminal end) (16 AWG) already installed to the timer box with the black ground wire. Route it directly to the battery. (use the most direct path, under carpet, through the firewall. etc) **(See pictures below ↓)**
- Take the red wire (ring terminal end) (10 AWG) from the relay to the battery using the most direct path. (be sure to go under carpet for a clean installation) **(See pictures below ↓)**



- Take the red wire (16 AWG) with plastic connector already installed from the relay and connect it to the timer box in the DEF wire location. (use the most direct path, under carpet, through the firewall. etc)
- Connect the red wire (10 AWG) female spade end from the relay, to the terminal clip on the window. (Drivers side) **(Warning: Be sure to support the grid clips with your other finger to prevent breakage, they are fragile and can come off easily)**(See picture below ↓)



- Connect the black wire (10 AWG) female spade end to the terminal clip on the window. (Passenger side) **(Warning: Be sure to support the grid clips with your other finger to prevent breakage, they are fragile and can come off easily)** (See picture above ↑)

- Take the same black wire (ring terminal end) (10 AWG) with spade connector from defrost window and mount/ground to the upper rear corner of the jeep tub behind the carpet. *Please remove all paint from surface area where grounding.* **(See picture below ↓)**



- Finish putting carpet back in place and you are ready to enjoy your new BullDawg Defrost Window for many years to come!

Parts List and Hardware Identification



Defrost Timer Control Box



wiring harness



Relay



Fuse Block



**Indicator Light
Push Button Switch**



Fuse Tap



Self Tapping Screws