

AUTO Electronics

THE MAGAZINE FOR MOBILE ELECTRONICS PROFESSIONALS

Look Out!

A Rostra Rear Sensor Install



Surviving the Big Box

How two Northern Vermont 12-volt specialists survived...and thrived.

**Rostra Precision
Controls, Inc.**

800-782-3379
info@rostra.com.



NOPI Nationals • See it at SEMA • Midbass Matters

*Rostra back up sensing system solves a problem for a plumbing contractor
...and makes for an easy install*

Safe Backing

Rostra Precision Controls offers the Rear Obstacle Sensing System (ROSS) back up system, which proved to be a quick and easy install that solved the problem of a blocked rear window for one of my contractor customers. Included in the ROSS system are two sensors, the main control module, installation

kit and wiring harnesses with the audio/visual driver notification strip. Detailed instructions are included for most applications in the manual. This system was VERY easy to install and did not require any special tools to install in my customer's 1996 Dodge Ram Pickup. Marco Plumbing & Heating's work truck had a cap that the owner stored all his work tools and equipment in for air conditioning and plumbing. This was a perfect add-on to his truck as he could not see anything through the back window.



To begin the installation we followed the instructions that came with the system for this truck. The manual instructed us to remove two screws from the under side of the bumper as this is where the two sensors were going to be mounted. We had a small problem with the driver side of this vehicle because of the towing plug. Not a problem...we took out the trusty air cutoff wheel and took care of this. We remounted the plug at the end of the installation.



Next, we needed to cut the bolts supplied to length so they could fit properly under the bumper to hold the sensors in place. The bolt, washer, lock washer and bracket are supplied, but require cutting for a perfect fit. Once you have the bolt cut you need to place all the hardware in the proper order before you can mount the sensor into position.



Once the two sensors have been mounted and the wiring harness run, you can mount the main control module. We mounted the control unit to the bumper screw with one of the supplied brackets. We then removed the screw on the truck's bumper and attached the bracket that was included in the package to this screw, and cut it short to fit.



With the main control module properly mounted, and the wiring harness connected to the two sensors via the supplied waterproof Molex plugs, we are ready to hook up the main power and ground connections. This step really surprised me when I looked at the system. I was wondering where all the wires were supposed to install into, and to my surprise, I only needed to hook up two wires for this system to function. The two wires were described and the color codes were accurate in the instructions as well.



To continue with the wiring, we had to remove two screws from the inside of the truck's tailgate to remove the driver side tail light assembly.

Final Step: The Test



We hooked up the ground wire to the BLACK wire to the BLACK wire on the reverse light harness. The GREEN/BLACK wire was the activation wire for the system. When this wire gets 12 volts, it engages the system and the system is in ready mode. After the wires were soldered and taped, we began to run the control wire to the front of the truck with the wires supplied. It had a heat shrink tube attached to it so that it made the connection to the control lights a sealed connection.



We drilled a small hole large enough to slip the plug through on the driver's side of the truck and ran the wire through, under the carpet, and up to the vent in the dash. We later filled the hole with silicone caulking to seal it and protect the wires from the hole's sharp edges. The customer wanted the visual tab mounted in the front of the dash. The speaker was mounted inside the vent for ease of hearing the beep when in reverse.



To get the dash the way the customer wanted it, we took apart the dash area and pulled it back and out of the way by removing the cup holder and ash tray/lighter assembly. The wires were all taped up and tucked away and we did a test run on the system to make sure the system was operational before we put everything back together.

We started the vehicle and put the system to the test. First we placed a large bin approximately six feet away from the truck and backed up without looking behind us. The ROSS detected the bin at six feet and the audio alarm sounded...no problem. We continued backing and the light system started to flicker and turn yellow to notify the driver that the object was now less than four feet away. We got to about two feet away and the light began flashing red, and at about one foot away it turned to solid RED. All the while the audio alarm sounded. In short, the system worked flawlessly. As a test we convinced a "friend" to get behind the truck on their hands and knees so the driver could not see him at all. The ROSS detected the person the same way it did the large bin.

In closing, the system we installed worked flawlessly and the installation difficulty was about a three out of 10. This is a system that we highly recommend for anyone that needs a back up system to see where they are backing up if their view is blocked or hidden.