



RustStop® RS-5 5-Step Installation Instructions

5 Simple Steps

Step 1. Mount the Command Module

Step 2. Mount the Rust Magnets™ (anodes)

Step 3. Run and Connect the Rust Magnet™ Wires

Step 4. Run and Connect the Power Wires

Step 5. Tests to Ensure Correct Installation

The simple detailed instructions are below. It's recommended that you read all the instructions before you begin, **especially #2. MOUNT THE RUST MAGNETS™.**

PARTS INCLUDED: (For the RustStop RS-5 12V system)

- 1 x RustStop® Command Module.
- 1 x Warranty and Maintenance Record Card.
- 1 x Rust Magnet™ Wire Loom with 8m and 4m black leads.
- 4 x Rust Magnets™ with special adhesive mounting strips.
- 4 x Rust Magnet™ Screws with Locking Washers.
- 4 x 3 mm ring terminal wire connectors (for the Rust Magnets™).
- 2 x 8 mm ring terminal wire connectors (for the battery).
- 1 x Set of plastic tie straps.

1. **MOUNT THE COMMAND MODULE:** Find a suitable flat surface inside engine compartment on the battery side of the vehicle (if possible) where it's easily visible (See Figure 1). Remove dirt, grease etc. with rubbing alcohol or a suitable safe non-oil-based cleaner and wipe dry. Remove the protective backing from the two adhesive strips and, carefully, mount the Command Module in place, pressing firmly to seat the adhesive. **DO NOT MAKE BATTERY CONNECTIONS AT THIS TIME.**

2. **MOUNT THE RUST MAGNETS™ (anodes):** Start by identifying Rust Magnet™ locations (do not fit yet) for all of the Rust Magnets™, making sure that you attempt to have one at each corner of the vehicle, i.e. two at the front and two at the rear.

IMPORTANT: Ideally, all Rust Magnets™ should be placed in areas of the vehicle where they will get wet anytime the vehicle gets wet. Try to choose locations where water collects or runs off. Suggested mounting locations for front Rust Magnets™ are the hood (bonnet) recess channels used for water run-off (See Figure 2). The rear Rust Magnets™ can similarly be mounted in the trunk (boot) recess channel (See Figure 3). For all Rust Magnets™ make sure that the Rust Magnet™ does not make contact with the hood (bonnet) or trunk (boot) when closed. See Figures 4, 5 and 6 for other rear locations. Choose Rust Magnet™ locations, which are convenient to run wires to. Make sure the surface is flat and the Rust Magnets™ do not obstruct any moving parts.

IMPORTANT: It is not recommended that you mount the Rust Magnets™ in areas where mud, snow, slush and etc. will accumulate on them; for example, not in the fender wells (wheel wells).

IMPORTANT: Before mounting each Rust Magnet™, make a scratch into the paint, exposing bare metal, that is about 80 mm long by 1.5 mm wide (3 inches long by 1/16 inch wide) using the thin edge of a screwdriver so that it will be centered beneath the Rust Magnet™. Wipe the area so as to remove any loose paint or metal.

Clean areas well with rubbing alcohol, or a suitable safe non-oil-based cleaner, ensuring all dirt, grease and grime are removed, and then dry thoroughly. Remove the protective backing from the adhesive strip and, carefully, place the Rust Magnet™ over the scratch pressing firmly and square to seat the adhesive. Only mount each Rust Magnet™ at this stage, do not wire them.

IMPORTANT: The specially designed adhesive tape must be kept dry for a minimum of 24 hours after placement, to allow a proper bond. It is also advisable, that once the installation is complete, to again press firmly on the Rust Magnets™ to ensure that they are securely adhered.

3. **RUN AND CONNECT THE RUST MAGNET™ WIRES:** The Command Module (module) has two Rust Magnet™ outputs connected to a loom-plug. Use the Rust Magnet™ wire-loom to wire the Rust Magnets™. The 4m lead is for the front Rust Magnets™ and the 8m lead is for the rear Rust Magnets™ (See Figure 7). Plug the loom-plug into the output plug from the module. Start by wiring the front Rust Magnet™ closest to the module. Thread the wire from the module through any convenient hole or crevice towards the closest front Rust Magnet™, securing occasionally to other wiring, fixtures, etc. with plastic tie straps or electrical tape, or under existing rubbers and covers.

IMPORTANT: Keep wire away from moving parts and hot or abrasive surfaces. At any point where wire goes through a hole, or over some sharp edge, protection is advisable. Electrical tape wrapped around wire, or a wire sleeve can be used to protect the wire in these areas.

Cut the wire, leaving ample length to make connection to the Rust Magnet™, strip the end exposing about 10mm (3/8 inch) of bare copper. Now strip one end of the remaining cut-off Rust Magnet™ wire in the same way and twist the two stripped ends together. Insert this into a small (3mm) ring terminal (See Figure 8). Using a crimping tool or pliers, crimp the wire in place and test by pulling firmly to ensure that it is securely crimped. Insert a screw and locking washer through the ring terminal and screw into Rust Magnet™ hole securely.

FIGURE 1 Suggested mounting locations for the Command Module. Firewall (A), Fender (B) or any surface (C), where it can be easily seen.

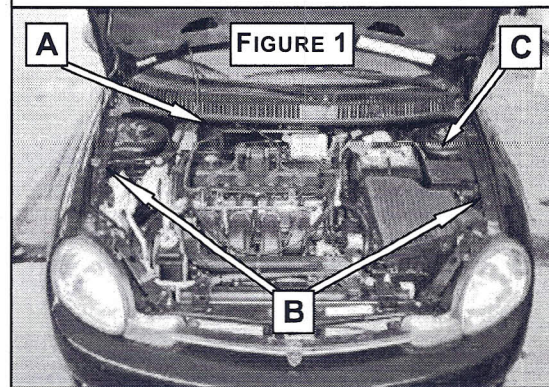


FIGURE 2 Suggested mounting location for the front Rust Magnets™.

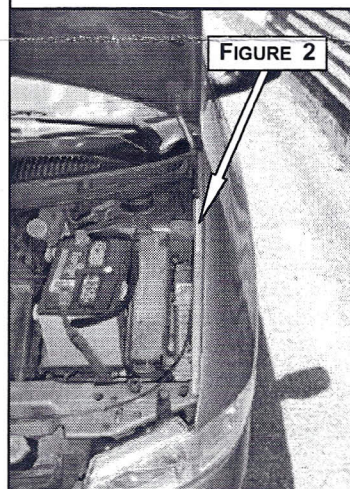


FIGURE 3 Suggested mounting location for the rear Rust Magnets™.

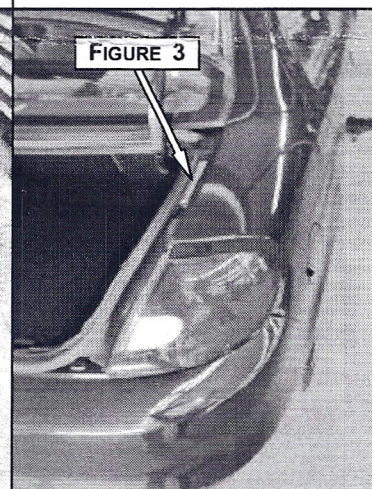


FIGURE 4 Suggested mounting location for pickup/utility vehicles.

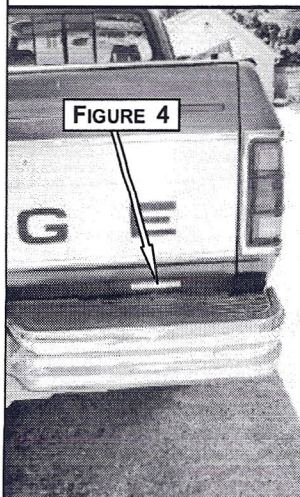


FIGURE 5 Suggested mounting location for pickup/utility vehicles.

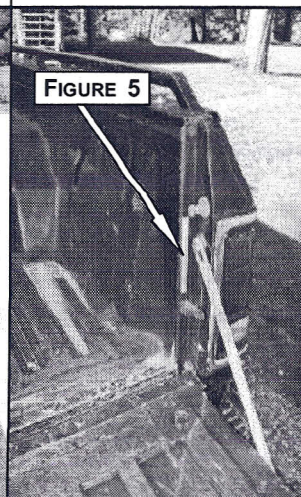
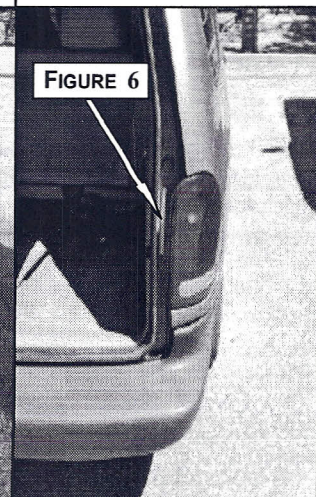


FIGURE 6 Suggested mounting location for vans, SUVs and other vehicles.



IMPORTANT: It is essential that the lock washers are used and under no circumstances should they be left out.

Now run the wire from this Rust Magnet™ to the other front Rust Magnet™, cut the wire, leaving ample length to make connection to the Rust Magnet™. Strip the end exposing 20 mm (3/4 inch) bare copper. Twist the exposed copper, bend it back over itself (doubling the copper width) and insert the exposed copper into a small (3mm) ring terminal (See Figure 9). Run the rear Rust Magnet™ wires in the same way, starting with the closest Rust Magnet™ from the Command Module, linking each Rust Magnet™ toward the furthest Rust Magnet™. Note: If the vehicle is continually exposed to extremely harsh conditions, you should first "tin" the wires with rosin-core solder and then solder the wires to the connectors.

Tips for running the rear Rust Magnet™ wire:

- For a car, SUV, van, station wagon etc. the Rust Magnet™ wire can be run from the Command Module, through a hole in the firewall under the dash through the interior of the vehicle (concealed by carpeting, trim, rubbers etc.), then, to the rear Rust Magnets™.
- For ANY vehicle the wire can be run down from the engine compartment to the underside of the vehicle, then through, or along, the vehicle frame to the rear Rust Magnets™. (The wire resists gasoline, oil etc. but be sure to secure it with plastic tie straps or other fasteners at regular intervals to prevent it from being torn loose).

(See Figure 10 for a simple wiring diagram)

4. **RUN AND CONNECT THE POWER WIRES:** Thread the **black wire** from the Command Module through the engine compartment to the vehicle's battery, securing it occasionally, and leaving ample length to connect it to the negative battery terminal. (If the wires provided are too short due to relative locations of the Command Module and Battery they may be lengthened accordingly. Be sure to insulate connections well using connectors or tape.) Strip the end by removing about 20 mm (3/4 inch) of insulation, twist the exposed copper, bend it back over itself (doubling the copper width) and insert the exposed copper into a large (8mm) ring terminal (similar to Figure 9) and crimp firmly. Fasten this to the negative battery terminal connection.

Thread the **red wire** from the Command Module through the engine compartment to the vehicle's battery, securing it occasionally, and leaving ample length to connect it to the positive battery terminal. (If the wires provided are too short due to relative locations of Command Module and Battery they may be lengthened accordingly. Be sure to insulate connections well using tape or connectors.) Strip the end by removing about 20 mm (3/4 inch) of insulation, twist the exposed copper, bend it back over itself (doubling the copper width) and insert the exposed copper into a large (8mm) ring terminal (similar to Figure 9) and crimp firmly. **IMPORTANT: Do this last;** fasten this to the positive battery terminal connection.

5. **TESTS TO ENSURE CORRECT INSTALLATION:** The best way to test the system is by using a voltmeter set to measure 50 volts DC. Place the red (positive) lead on the metal of one of the Rust Magnets™ and the black (negative) lead on any earthed (grounded) part of the vehicle. Your reading should be between 35 and 50 volts DC. The other Rust Magnets™ should read about the same. If you do not have access to a voltmeter, an alternative test can be done by placing one end of a piece of wire (you could use an off-cut from the left over Rust Magnet™ wire) to one of the Rust Magnets™ and the other to a suitable earth (ground). If the installation has been done correctly, the "Inspection Light" should come on, do this to check each Rust Magnet™.

Don't forget to register your warranty online at www.RustStop.net within 30 days.

Remember to maintain your Rust Magnets™ by keeping them clean. Refer to the RustStop® RS-5 MAINTENANCE GUIDE below for instructions.

RS-5 TROUBLESHOOTING

• IF THE GREEN "OPERATE" LIGHT IS NOT FLASHING

1. Make sure the battery has power.
2. Check the black and red wires to be sure the large ring terminals are connected to the wire properly and the ring terminals are fastened to the battery terminals securely.
3. Check if either of the battery's terminals is badly corroded, (where the ring terminal is bolted on), this can cause a bad connection.

• IF THE RUST MAGNET™ VOLTAGE IS BELOW 35 VOLTS

1. With the Rust Magnet™ adhesive strips completely dry, be sure the red (positive) voltmeter lead is touching the shiny metal Rust Magnet™ surface and the black (negative) voltmeter lead is touching a good earth (ground). NOTE: Plastic body parts and modern paints can make it difficult to find a suitable earth (ground). As a last resort run a wire from your vehicle battery's NEGATIVE terminal to your black voltmeter test lead.
2. Make sure that your battery is fully charged and has voltage reading of at least 12V. Make sure the battery is not faulty.
3. If your Rust Magnets™ and Rust Magnet™ adhesive strips are completely dry and you are still getting a reading at the Rust Magnets™ of less than 35 volts, contact your Dealer.

• IF THE "FAULT" AND/OR "INSPECTION" LIGHTS ARE ON

1. Completely unplug the Rust Magnet™ Loom-Plug from the Command Module. If the light goes out, proceed to step 2. If the light stays lit, there is an internal problem with the Command Module and you must contact your Dealer.
2. Check the Rust Magnets™ for corrosion and clean them as soon as possible to restore full protection.
3. Make sure a wire or Rust Magnet™ is not shorted to the body of the vehicle somewhere. Unplug the loom-plug and then plug one side of the plug in, then the other. For either side that the light comes on, there is a problem with the wiring and/or Rust Magnets™.

• IF THE "BATTERY LOW" LIGHT IS ON

1. Check the black and red wires to be sure the large ring terminals are connected to the wire properly and the ring terminals are fastened to the battery terminals securely.
2. Check if either of the battery's terminals is badly corroded, (where the ring terminal is bolted on), this can cause a bad connection.
3. The vehicle's battery needs recharging and/or replacement.

RUSTSTOP® RS-5 MAINTENANCE GUIDE

SUGGESTED MONTHLY INSPECTION: At least once a month check to see that the green "operate" light is flashing. At the same time look for any oxidation (white powdery residue) on the Rust Magnets™ and wipe them clean with a damp cloth. If Rust Magnet™ corrosion is more pronounced, you may use a light scrubbing brush and a mild cleanser to clean the surface (an old tooth brush and warm soapy water usually works well). **IMPORTANT:** Do not use anything that could damage your vehicle's paint. NOTE: The more the Rust Magnets™ corrode; the harder they're working to prevent rust on your vehicle! Oxidation should be noticed within 6 months under harsh conditions and within a year under normal conditions.

SUGGESTED 6 MONTHLY INSPECTION: Every 6 months it is suggested to carry out a Rust Magnet™ voltage check in conjunction with the monthly inspection. Using a voltmeter, place the positive lead on a Rust Magnet™ and the negative onto the negative battery terminal. Under normal, dry conditions this reading should be between 35V and 50V. If not, refer to the troubleshooting guide above.

RUST MAGNET™ REPLACEMENT: When Rust Magnets™ have corroded to a point where the "Inspection" light is regularly on, and cleaning only helps for short intervals, they need to be replaced. Contact your RustStop Dealer to purchase new Rust Magnets™.

Figure 8

Two wire crimping

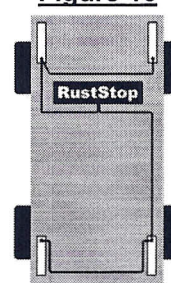


Figure 9

One wire crimping



Figure 10



NOTE: The Command Module is ALWAYS on so that the vehicle is constantly protected. The power draw is minimal and special circuitry shuts the module off in the event of a weak battery; lights left on etc. It comes back on automatically when power is restored. The electrical current operating the RS-5 system will not interfere with any of the vehicles functions or other electrical accessories and is absolutely safe.