MOPAR®

Chrysler/Dodge Minivan (RS)
Remote Start System

Système de démarrage à distance

INSTALLATION INSTRUCTIONS
Professional Installation Is Recommended

NOTICE D'INSTALLATION
Installation par un spécialiste conseillée

Warning! Remote Start Systems are only applicable to vehicles with automatic transmission!

102424-9
REV. B
10/04

Technical Support
For Authorized Dealers - **(800) 34-MOPAR**
Hours: **9:00 a.m. - 6:00 p.m. EST Monday thru Friday**
10:00 a.m. - 2:00 p.m. EST Saturday

K6859222

Chrysler/Dodge RS Minivan Remote Start
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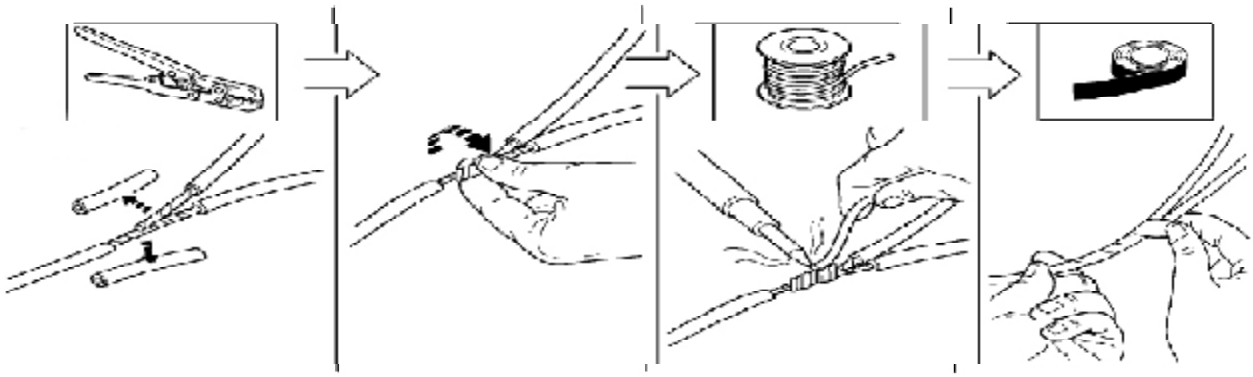
The soldering procedure illustrated below must be followed when performing wire connections under the hood. Failure to use this procedure could result in improper performance of the remote start system.

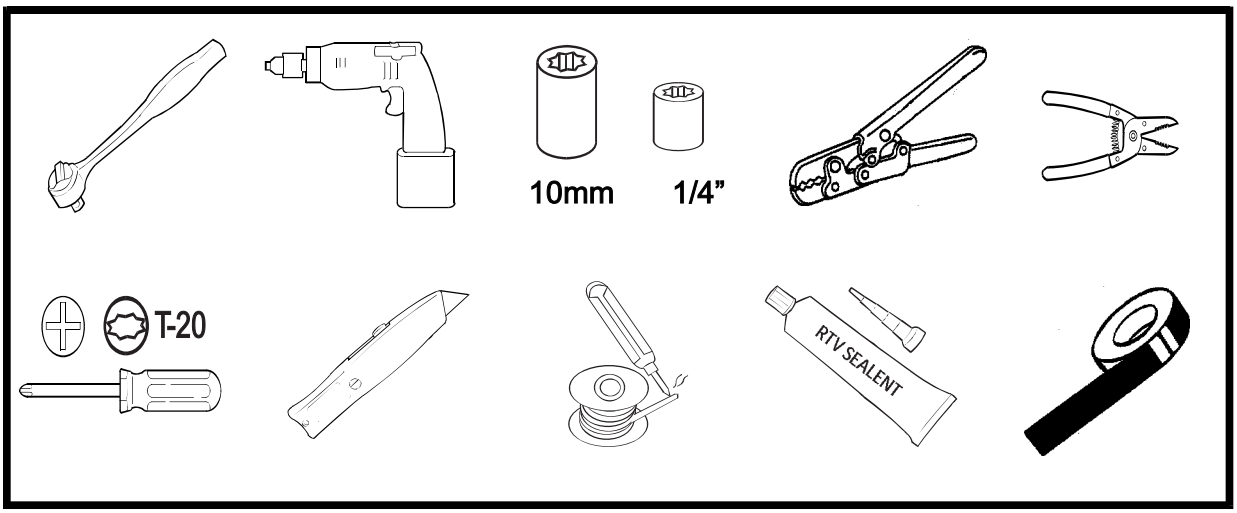


This product was manufactured in environmentally friendly manufacturing facility and may contain certain recycled materials. All materials meet or exceed original specifications for quality and reliability.

VEHICLE PREPARATION

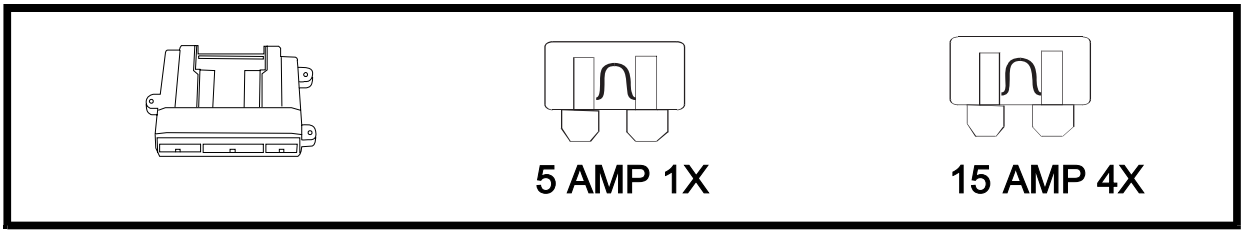
1. Lower one or more of the passenger windows so the keys do not get locked in the vehicle.
2. Disconnect and isolate the negative battery cable. The battery will need to be re-connected before programming.
3. Vehicle requires 2 valid Sentry Keys present at the time of installation.

TOOLS REQUIRED

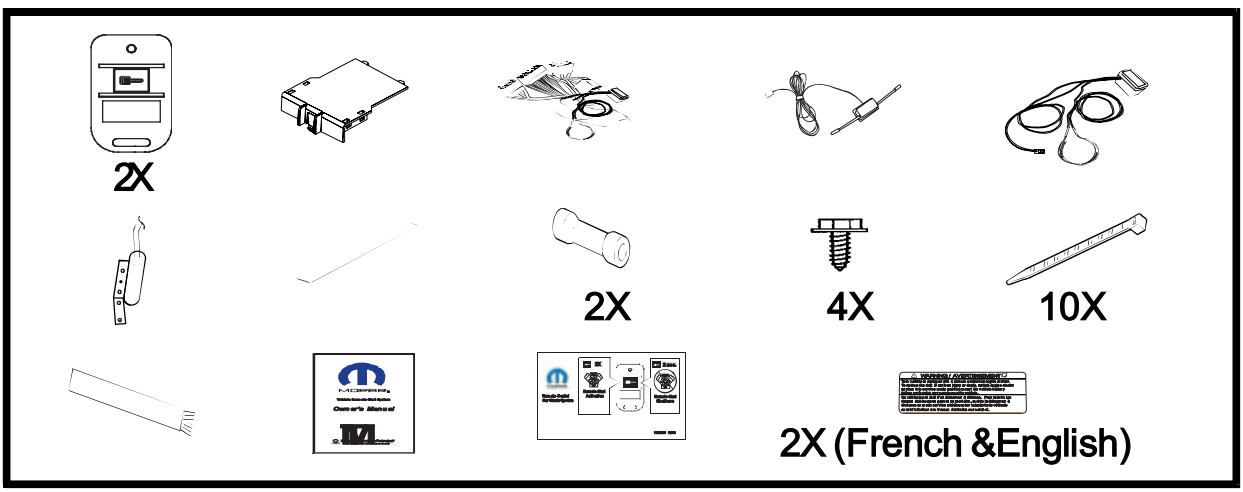


PARTS REQUIRED

Part Number 82208859



Part Number 82208862



Overview

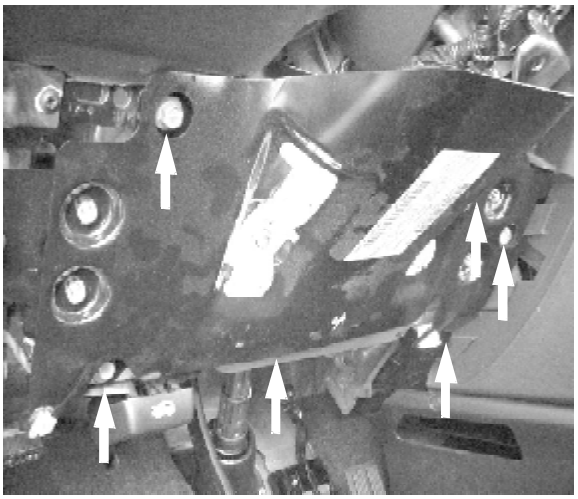
The remote starter module harness will interface with the existing RS ignition switch connector, four center-splice connections, and a ground termination. Two wires will be routed through the cowl panel, to a hood-mounted safety switch and tachometer connection.

Vehicle Preparation

1. **Remove driver's side lower dash panel, located directly under the steering column.**
   A. Remove (2) screws on bottom left side and right side of dash panel.

   B. Remove (2) screws from left side of dash

   C. Unsnap dash panel - (2) snap clips are located on the top back side of the dash panel.



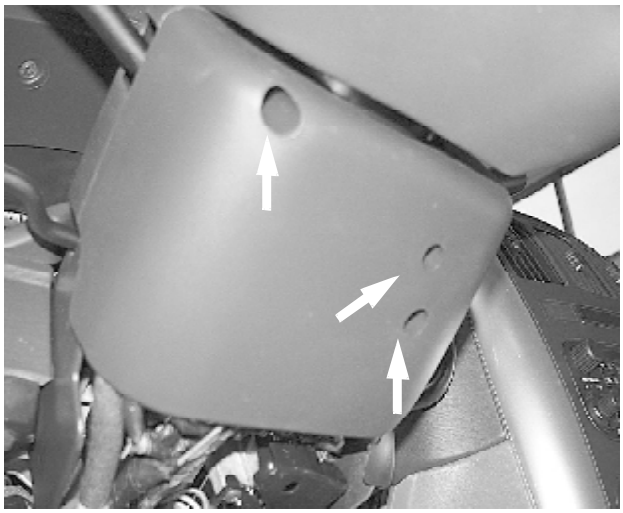
2. **Remove driver's side knee bolster dash panel, located directly under the steering column.**
   A. Remove (6) 10mm bolts from the knee bolster air bag. Note: If vehicle is not equipped with this air bag option, you must remove the (8) phillips head screws and the plastic panel.

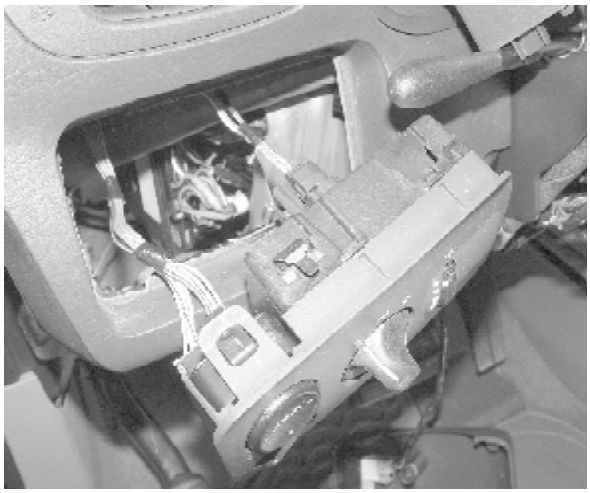
   B. Disconnect yellow air bag connector (if applicable).

Warning: Allow the system to discharge for 2 minutes after disconnecting the negative battery terminal prior to disconnecting the yellow airbag connector.

2. **Remove steering column shroud.**
   A. Remove (3)screws from the lower column shroud.

   B. Pull apart shroud and remove. Disconnect any connectors from shroud.



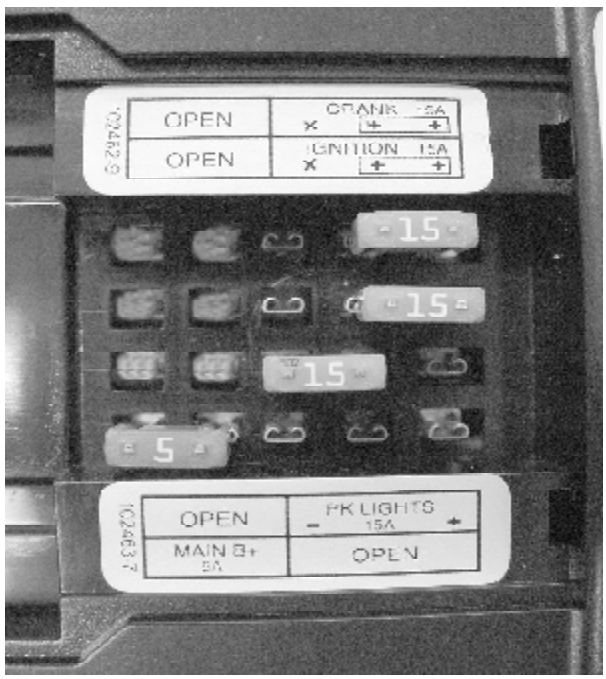


3. **Remove Headlamp switch assembly.**
   A. Reach behind headlamp assembly and gently push out to remove. Do not disconnect harnesses.

<u>Module Preparation</u>

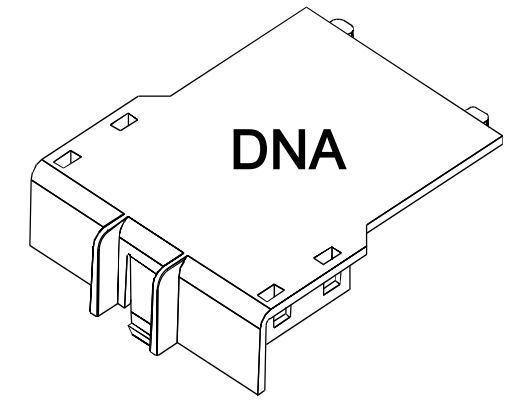
1. **Place fuses into the control module.**

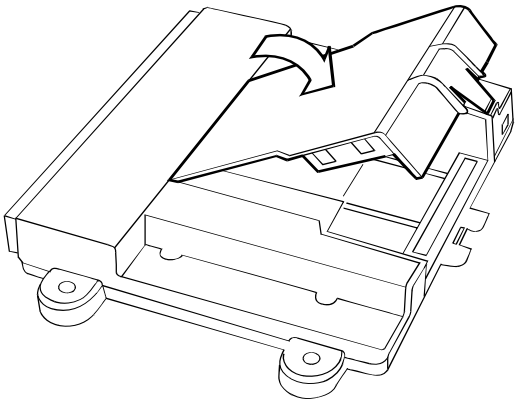
   A. Observe fuse amperage ratings. Place the 5 Amp fuse into the "Main B+" location. Populate the remaining fuse locations, as shown in the diagram, with the 15 Amp fuses.



2. Install DNA into the control module.

A. Insert DNA into the control module. Ensure the DNA assembly snaps completely in place.

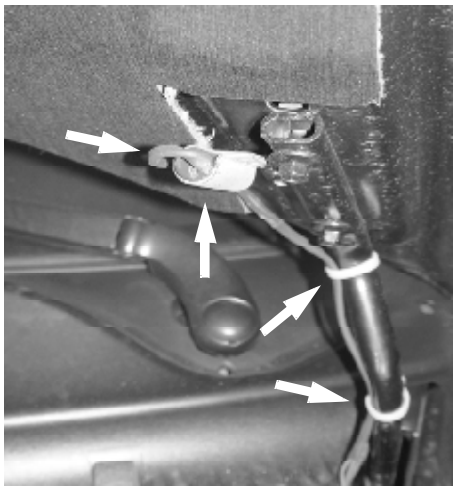




<u>Component Installation</u>

1. Install Hood Safety Switch.

A. Using (2) supplied 1/4" screws, secure hood safety switch on driver's side rear corner of hood per the diagram. **Note**: Wire exits top of switch. Switch must be bent at 45 degree angle.

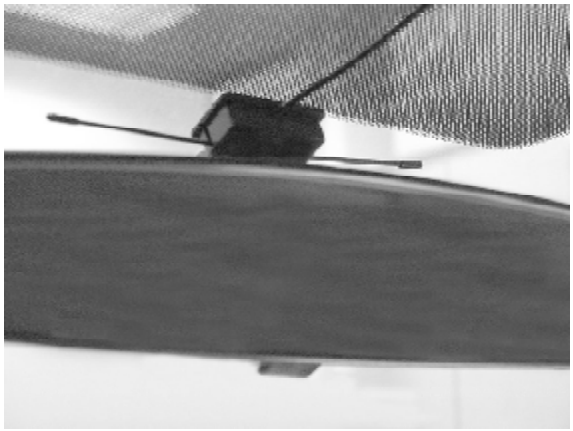


B. Using supplied wire ties, attach hood safety switch wire to the hood support arm.

C. Using a supplied 1/4" screw, secure the ground lead from the switch to the cowl as shown in the diagram. The remaining wire will be connected later.

2. Install Dipole Antenna.

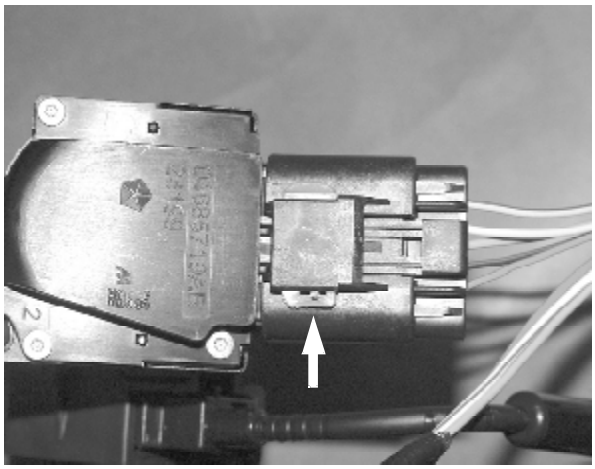
A. Mount dipole antenna to the windshield above the rearview mirror and below the black windshield grid.



B. Run the antenna wire above the headliner to the driver's A-pillar. Temporarily remove the A-pillar rubber gasket and run the antenna lead down through the left side dash opening. Replace the rubber gasket and left side dash panel. Ensure the antenna is securely tucked above the headliner and is not visible along the entire length.

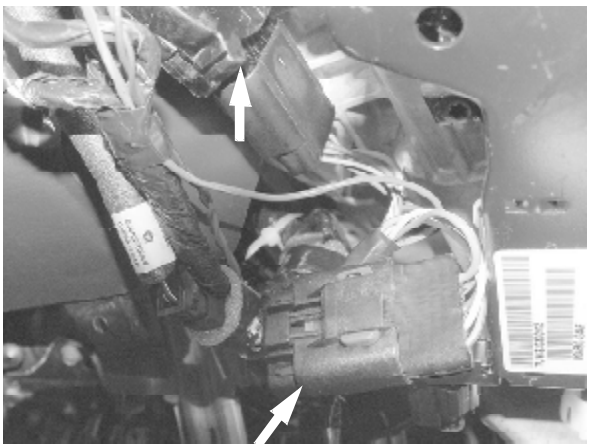
3. Install Custom Harness.

A. Locate ignition switch connector, directly behind the ignition switch. Release the red secondary lock. While pushing on main release, remove connector from ignition switch.

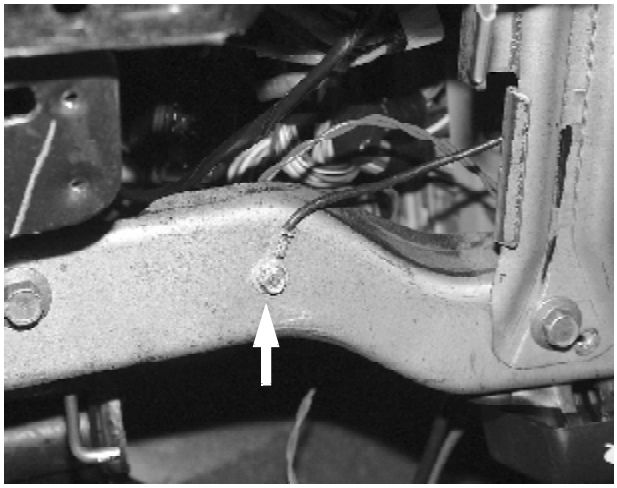


B. Connect the harness 5-way female connector to the vehicle's ignition switch.

C. Connect the harness 5-way male connector to the vehicle's 5-way ignition connector previously removed from the ignition switch.

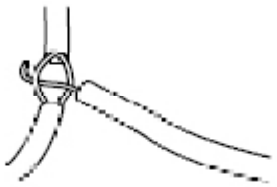


D. Using supplied 1/4” screw, secure the black ground wire with ring terminal to the metal cross-brace as shown in diagram.



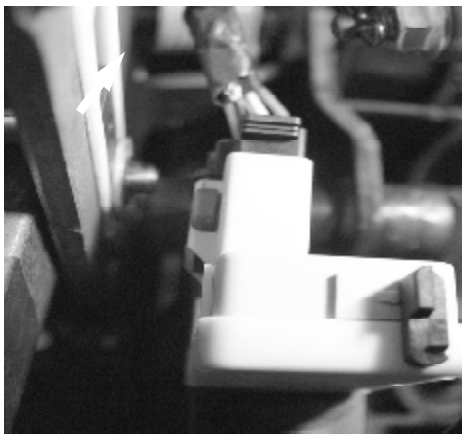
E. Run the harness white wire to the brake switch. Connect by center-splice to the white/tan wire in Cavity #2 of the 6-way brake connector following the center-splice procedure above.

Center-Splice Procedure

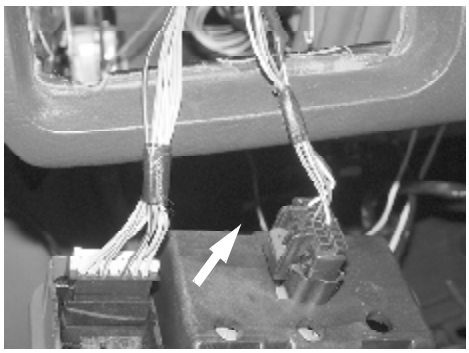


Caution: Keep wire away from the exposed steering column!

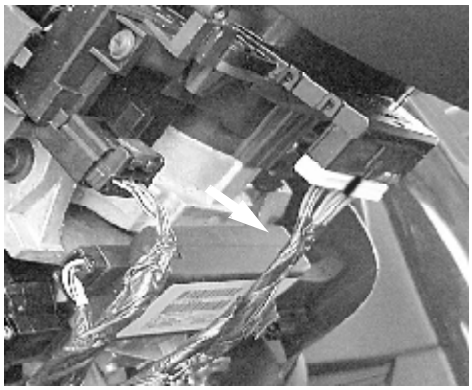
Caution: Do not remove the brake lamp switch from the mounting bracket. If the switch is removed from the mounting bracket, it MUST be replaced with a new switch.



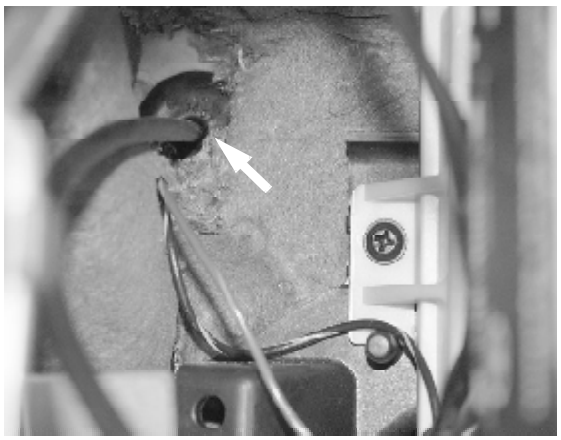
F. Locate the white/brown wire in pin #11 of the black 13-way headlamp switch connector, found directly behind the light switch. Center-splice the harness white/brown wire into this wire following the center-splice procedure above.



G. Locate the dark green/violet wire in pin #3 of the white 6-way connector, found directly beneath the steering column. Center-splice the harness dark green/violet wire into this wire following the center splice procedure on page 8.



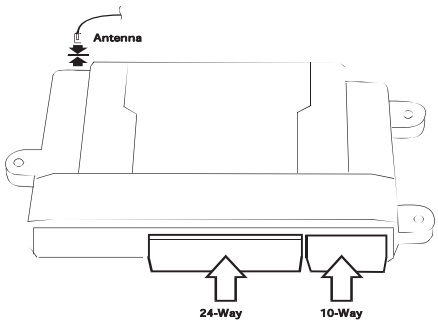
H. Route the two remaining wires (black/white and blue/green) through the cowl panel and into the engine compartment.



I. Using the supplied butt connector, connect the black/white wire to the remaining wire from the hood safety switch.

J. Route the blue/green wire to the top of the engine at the coil connection point as shown. Temporarily disconnect the center spark plug wire to make connection easier. Center-splice the blue/green wire to the blue/green wire in pin #3 at the coil following the center-splice procedure on page 8. Solder the connection.

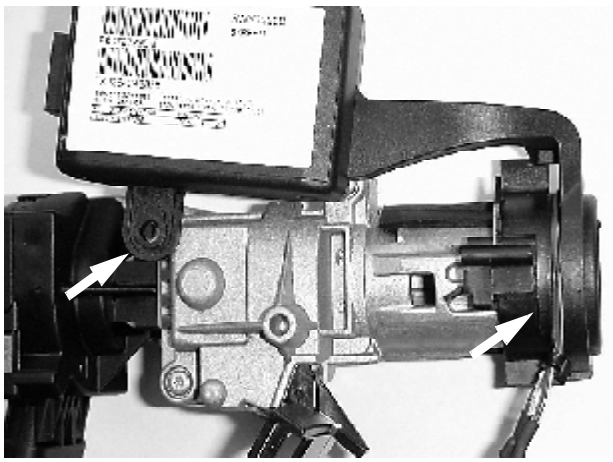
K. Connect the 24-way and 10-way connectors into the PC-12 Remote Start module. Also, connect the 2-way antenna connector (on end opposite the main harness connections).



4. Install SKREEM Interface Module.

A. Remove the T-20 Torx screw securing the SKREEM. Slide SKREEM and antenna assembly off the ignition cylinder.

B. Route the SKREEM Transponder Interface antenna loop to the ignition cylinder.



C. Take your gray ribbon cable and remove the gray portion of the cable and just use the single red tracer wire. Wrap the SKREEM Transponder Interface antenna loop around the ignition cylinder.

D. Using a supplied wire tie, secure the antenna coil as shown.

E. Replace SKREEM and secure with T-20 Torx screw

System Programming

Notes:

1. Reconnect the negative battery terminal prior to programming.
2. Up to a total of 8 transmitters can be programmed into memory.
3. Transmitters shipped with complete kits are pre-programmed to the DNA and do not need to be programmed at this time.

1. Transmitter Programming.

A. Make sure battery is connected.
B. Close hood.
C. Turn the ignition to the "on" position.
D. Press and hold the programming button. *After 10 seconds the horn will chirp and the lights will flash **3 times** indicating the system is now in transmitter learn mode.*
E. Release the programming button.
F. Press button on transmitter to be programmed. *The horn will chirp and the lights will flash 1 time indicating that the transmitter has been learned.*
G. Repeat step F for additional transmitters.

2. Option Programming.

The remote start system has several installer programmable options which can be changed to accomodate different circumstances. In most cases, there will be no need to change any default settings. There will be cases (such as diesel vehicles), where the delay before crank option must be set.

Note:
This system has 2 option banks. Bank 1 has 7 options, and Bank 2 has 2 options. Refer to the Option Bank Chart on page 16 for details.

A. Follow the steps above to enter Transmitter Learn Mode.
B. Press and release the programming button. *The horn will chirp and the lights will flash **4 times** indicating the system has entered Option Bank 1.*
C. Press and release the brake pedal. *The horn will chirp and the lights will flash 1 time indicating the system is at option 1.* Additional press and releases of the brake pedal will advance to the next option. *The horn will chirp and the lights will flash according to which option is selected (i.e. Two chirps and flashes indicates option 2).*
D. Pressing the transmitter button changes the setting of the option. The status LED (located in the main harness approximately 4" from the module) indicates the setting of the option. LED "on" indicates the option is on, LED "off" indicates the option is off.

Option Programming - continued.

E. Pressing and releasing the programming button again will put the system into Option Bank 2. *The horn will chirp and the lights will flash **5 times** indicating the system has entered Option Bank 2.*

F. Press and release the brake pedal to cycle through the options in Bank 2.

Notes:

1. Once the system has reached the last option in a bank, pressing and releasing the brake pedal will return back option 1 in that bank.
2. Once the system has reached Option Bank 2, pressing and releasing the programming button will return back to Option Bank 1.
3. To reset options back to their default setting, while in option learn mode, push and hold the transmitter button until the horn chirps and lights flash 5 times.

3. Tach Rate Programming (Required for sytem to operate).

A. Close hood.

B. Turn the ignition to the "on" position.

C. Press and hold the programming button. *After 10 seconds the horn will chirp and the lights will flash **3 times**.*

D. Release the programming button.

E. Press and release the programming button again. *The horn will chirp and the lights will flash **4 times** indicating the system has entered Option Bank 1.*

F. Press and release the programming button again. *The horn will chirp and the lights will flash **5 times** indicating the system has entered Option Bank 2.*

G. Advance to option 2 by pressing and releasing the brake pedal 2 times. *The horn will chirp and the lights will flash 2 times indicating the system is at option 2.*

H. Start the vehicle with the key. *The horn will chirp and the lights will flash once approximately every 3 seconds indicating a valid tach signal.*

I. Once the engine has settled to a normal idle speed, press and release the brake pedal to set the tach rate and turn the ignition off.

Note:

If the system is not chirping the horn and flashing the lights every 3 seconds after the ignition has started, the system is not seeing a valid tach signal. Check your tach connection (blue/green at coil). Repeat the Tach Rate Programming procedure.

Tach Rate Programming must be done before the SKREEM learn procedure.

4. SKREEM Transponder Interface Programming.
2 programmed Sentry keys are required for this step!

NOTE: Review and understand steps A-J prior to performing.

A. Close hood.

B. Insert one of the two valid Sentry Keys into the ignition switch and turn the ignition switch to the "on" position.

C. After the ignition has been activated for more than 3 seconds (but no more than 15 seconds), cycle the ignition switch back to the "off" position. Remove the key and keep it at least 2 feet away from the ignition switch.

D. Within 15 seconds of removing the first key, insert the second valid Sentry Key into the ignition switch and turn the ignition switch to the "on" position.

E. Approximately 10 seconds after the ignition has been activated by the second Sentry Key, the dash theft-security light will start to flash, and a single audible chime (not the key-in-cylinder chime) will sound to indicate that the system has entered "Customer Learn" programming mode.

F. Cycle the ignition switch back to the "off" position. Remove the key and keep it at least 2 feet away from the ignition switch. Theft-security light will turn off.

G. Press and release the programming button located on the custom harness.

H. Within 60 seconds, press the start button on the remote start transmitter **(2) times**.

I. Approximately 10 seconds after completion of Step H, a single audible chime will sound and the theft-security light will stop flashing and stay on solid for 3 seconds, and then turn off to indicate that the SKREEM Interface module has been successfully programmed.

J. The system will remote start the engine approximately 15 seconds after Step H. Press the brake pedal to shut down the remote start system.

Note:

In some vehicles, during the SKREEM Interface learn procedure, the vehicle will start and stall on the first remote start attempt. The second remote start attempt will be successful. This is a normal condition of the learn procedure. If the vehicle does not start, refer to the Trouble-shooting guide on page 17.

Once a SKREEM Interface Module has been programmed to a WCM/vehicle, it is permanently assigned to that WCM/vehicle and cannot be used on any other WCM/vehicle.

System Testing

1. Use the following checklist to ensure all features function as indicated.

- ☐ Remote start - Press start button 2X.
- ☐ Remote stop - Press and hold start button for 2 seconds.
- ☐ Hood safety switch shutdown - While under remote start, open hood - engine should shut down.
- ☐ Brake safety shutdown - While under remote start, press brake - engine should shut down
- ☐ Key-in-sense circuit - With key in the ignition cylinder, remote start should not activate.
- ☐ Overrev shutdown - While under remote start, press accelerator - system should shut down at 3X idle.
- ☐ Service Mode - With ignition turned on with key, press remote start button 3X. Repeat to exit Service Mode.
- ☐ Heater/Air Conditioning - Ensure Heater/AC works during remote start.

Service Mode

Service mode is used whenever it is necessary to disable the remote start feature, such as during vehicle service. The vehicle will not start by remote if Service mode is activated.

1. Entering Service mode.

A. Turn ignition on with the key.

B. Press the start button on the remote transmitter 3 times. *2 seconds later, the horn will chirp and the lights will flash 3 times, indicating the system is in Service mode.*

C. While in Service mode, whenever a remote start attempt is made, the horn will chirp and the lights will flash 3 times alerting the user that the system is in Service mode.

2. Exiting Service mode.

A. Turn ignition on with the key.

B. Press the start button on the remote transmitter 3 times. *2 seconds later, the horn will chirp and the lights will flash 1 time, indicating the system has exited Service mode.*

Reassembly

1. **Module & Harness mounting.**

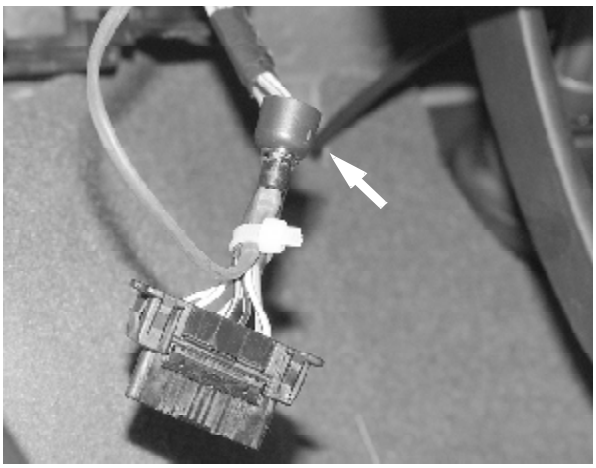
   A. **Disconnect battery (if knee bolster air bag equipped).**

   B. Using supplied wire ties, secure the remote start module to existing wire harnesses under the left side of the dash.

   C. Using supplied wire ties, secure the SKREEM Interface module to an existing wire harness under the dash.

   D. Using supplied wire ties, secure the main harness and SKREEM Interface harnesses to existing wire harnesses under the dash. Ensure no wires will become entangled in the steering column knuckle and that they are not visible to vehicle occupants.

   E. Using a supplied wire tie, secure the programming button to the harness leading to the vehicle's diagnostic connector. Consistency in mounting this switch in the same place every time, will make it easier to find in case the system comes back for service. Also, the dash will not have to be disassembled to access it.



2. **Dash reassembly.**

   A. Reverse the dash dissassembly procedure.

   B. After the yellow 2-way air bag connector is connected (if applicable), re-connect the battery.

Option Bank Chart

Option Bank #1 (4 chirps) **Factory Setting**

1. Not used
   Reserved for future upgrade feature.....On

2. Not used
   Reserved for future upgrade feature..... .On

3. Tach diagnostic mode
   This feature should only be used for troubleshooting
   purposes only!.....Off

4. Car start run time
   LED “on” - 15 minutes, LED “off” - 10 minutes.....Off

5. Not used
   Reserved for future upgrade feature.....Off

6. Diesel timer
   Delays crank attempt 30 seconds after ignition on.....Off

7. Horn pulse short/long
   LED “on” - Short output, LED “off” - Long output.....On

Option Bank #2 (5 chirps) **Factory Setting**

1. Key-in-sense polarity
   LED “on” - Positive, LED “off” - Negative.....Off

2. Learn tachometer
   Horn will chirp every 3 seconds, press brake to set idle speed.

Troubleshooting

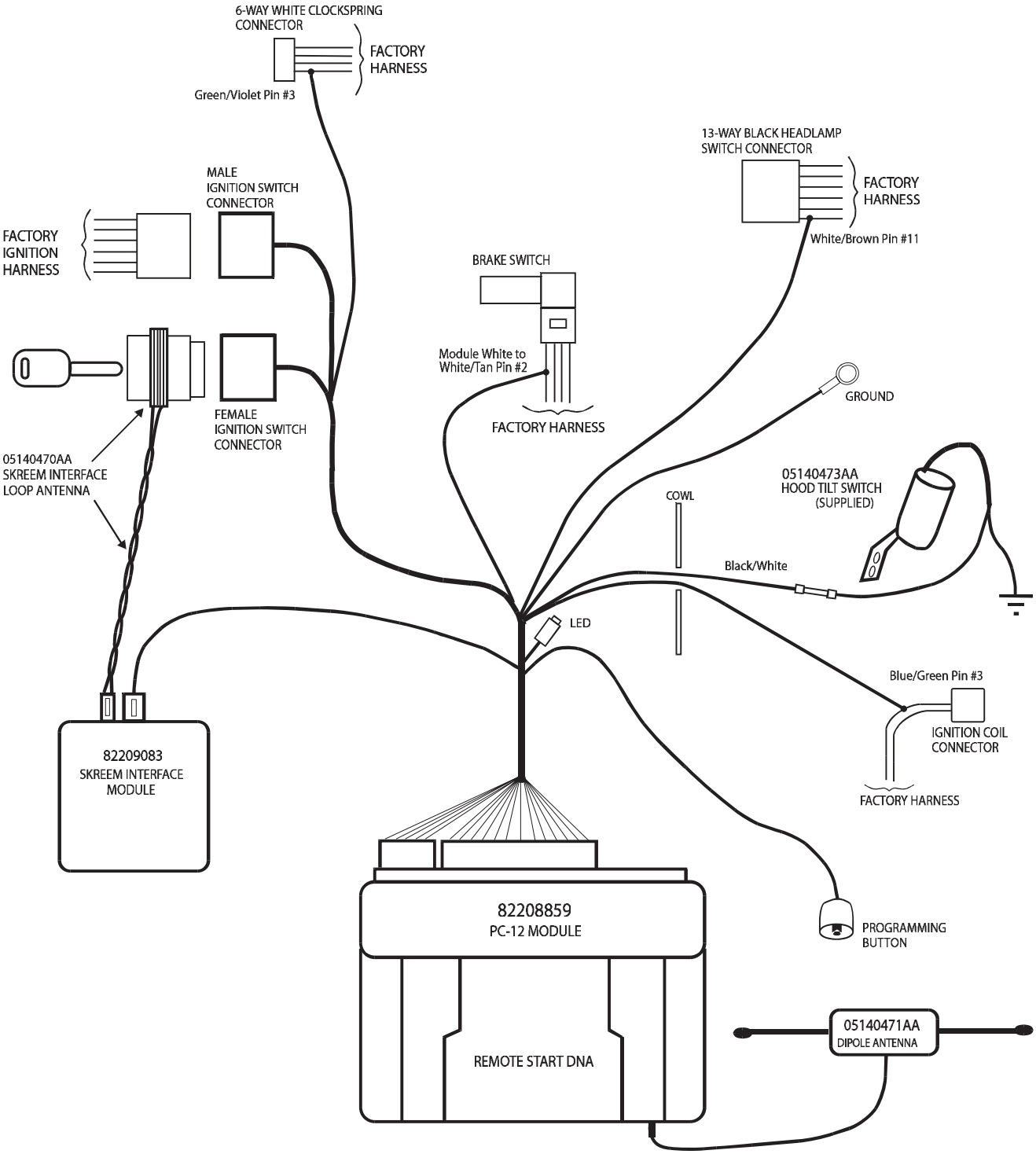
1. **Horn honks 4 times & vehicle does not start - no tach learned.**
   A. Ensure good connection at tach wire.
   B. Re-program tach (see page 12).
2. **Starter cranks too long.**
   A. Re-program tach - allow vehicle to come to a low idle during tach learn procedure.
3. **Ignition turns on, then horn honks 2 times & vehicle does not start - Key-in-sense circuit activated.**
   A. Remove key from ignition cylinder.
   B. Key-in-sense polarity set incorrectly. Program for negative input (see option bank chart page 16).
4. **Horn honks 2 times & vehicle does not start - safety input activated.**
   A. Ensure hood is closed.
   B. Ensure hood switch is grounded and has a good connection.
   C. Ensure brake switch is not depressed.
   D. Ensure brake switch wire is connected to correct vehicle wire.
5. **Horn honks 3 times & vehicle does not start - Service Mode engaged.**
   A. Disengage service mode (see page 14).
6. **Vehicle starts then stalls - SKREEM Transponder Interface not learned.**
   A. Ensure 2 and 4 way connectors are connected
   B. Ensure antenna coil is wrapped tightly around the ignition cylinder SKREEM antenna ring.
   C. Re-learn SKREEM Transponder Interface (see page 13).
7. **Horn honks 8 times & vehicle does not start - Safety feature - vehicle will only remote start 8 consecutive times until the vehicle key is used.**
   A. Start vehicle with the ignition key to reset.

Changing the Remote Control Battery; Mopar part # 05140773AA

1. With a small flathead screwdriver, carefully pry the two halves of the remote transmitter apart.
2. Gently pry the transmitter circuit board out of the case.
3. Slide the black battery holder out of the bottom of the circuit board. Do not lose the black battery holder.
4. Remove the old batteries and replace with new ones. Observe the (+) and (-) signs when removing the old batteries.
5. Gently snap the circuit board back into the transmitter case.
6. Carefully snap the case halves back together, then test the remote control.

It is not necessary to re-program the remote control after changing the batteries.

CHRYSLER/DODGE RS SYSTEM LAYOUT



This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions.
(1)This device may not cause harmful interference, and
(2)This device must accept any interference received, including interference that may cause undesired operation.

Per FCC 15.21, you are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.