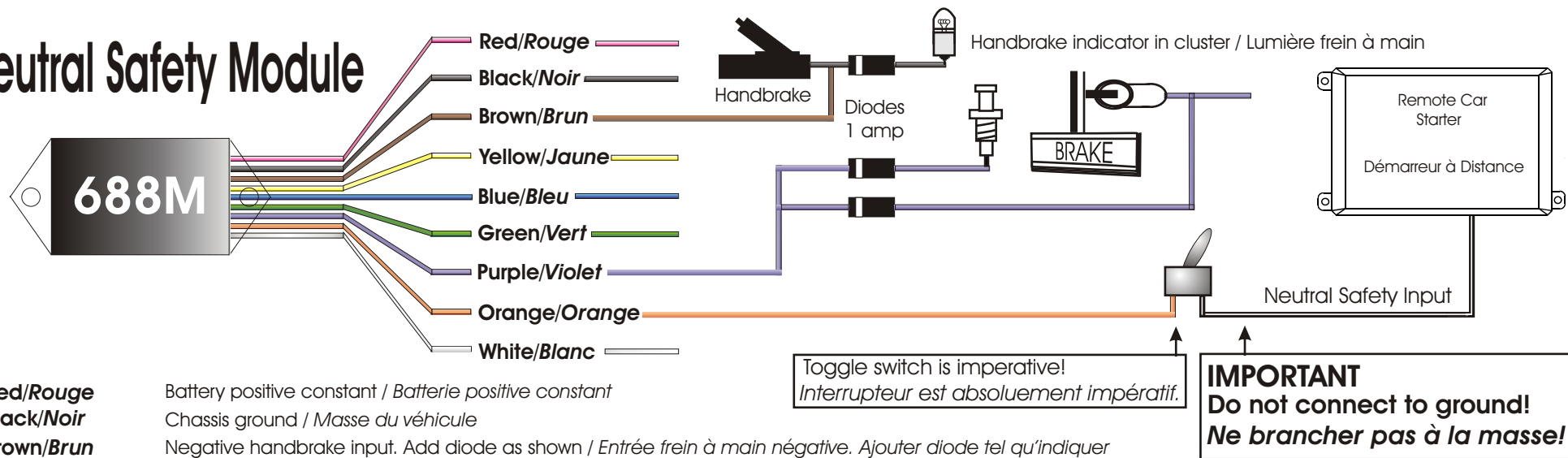


Neutral Safety Module



NOTE: Refer to wire colors, not the sequence ! Référez-vous aux couleurs plutôt que le séquence des fils !

To activate the 688M, the engine must be running at least 20 seconds with the handbrake off and transmission in neutral.

- 1) Apply the handbrake.
- 2) Press the button on the transmitter which activates a remote start sequence.
- 3) Remove the keys - at this point engine must stay running.
- 4) Exit the vehicle and close the door.
- 5) Shut down engine or lock the door via the transmitter.

The 688M is now ready to allow a remote start.

If you must re-enter the vehicle momentarily and wish to keep the ready state initiated then

this can be done by remote starting the vehicle at which point the doors can be opened and remain opened before the remote starter "times out".

There after simply repeat steps 4 and 5.

It will remain in this state unless a door is opened or brake is pressed without remote starting first, in which case it will be necessary to repeat steps 1 to 5.

Pour activer le 688M, le moteur doit être en marche d'au moins 20 secondes, le frein à main enlever et la transmission au neutre.

- 1) Appliquer le frein à main.
- 2) Appuyer sur le bouton de l'émetteur pour activer le démarreur à distance.
- 3) Enlevez les clés - à ce point, le moteur doit demeurer en marche.
- 4) Quittez le véhicule et fermez la porte.
- 5) Éteignez le moteur ou verrouillez la porte via l'émetteur.

Le 688M est maintenant prêt à permettre le démarrage à distance.

Si vous désirez maintenir le 688M en état actif, mais que vous devez entrer momentanément dans le véhicule, alors cela peut être fait en démarrant le véhicule via l'émetteur.

Les portes peuvent demeurer ouvertes avant que le démarreur à distance écoule son temps. Ensuite, simplement répéter les étapes 4 et 5.

Il restera dans l'état actif à moins qu'une porte ne soit ouverte ou le frein appuyer sans démarrer le véhicule via l'émetteur, dans le cas où il serait nécessaire de répéter les étapes 1 à 5.

688M

Installation Tips

Do's and Don'ts

- **Do** use common sense when installing a remote vehicle starter on a manual shift vehicle.
- **Don't** install in a convertible top or soft top vehicle.
- **Don't** install in a Jeep where the customer can remove his doors.
- **Don't** combine the status wire of the 688M and the ground output wire of the vehicle starter with an immobilizer bypass module nor a clutch bypass circuit.
- **Do** connect bypass modules on a different output than the one used for the 688M. The status input of the 688M must be on a dedicated negative ignition out source.
- **Don't** install the vehicle starter if the door pin switches or the brake switch seems rusty, corroded or the wires look feeble, door pinswitch is sticking or bent, if brake switch is loose in bracket, if vehicle's taillights seals allow water to enter.
- **IMPORTANT: A faulty door pin switch will allow entry without unlatching the active mode of the 688M and can be extremely dangerous causing property damage, bodily injury.**

****** Be sure customer has done repairs before proceeding. ******

- **Do** visit www.directechs.ca to be sure your info is up to date before proceeding.

Remember

- Use a negative ignition output from the remote vehicle starter to connect to the BLUE status wire of the 688M. Using the status wire from the remote vehicle starter will cause intermittent operation.
- Connect the purple wire of the 688M to the brake switch. Doing so will unlatch the 688M in case of door pin switch failure. This is an added security feature which cannot be circumvented. If the vehicle has positive polarity door pin switches connected to the purple positive input then be sure to isolate these from the brake wire using diodes.

Clutch Bypass

The clutch bypass simulates the customer depressing the clutch pedal to start his vehicle. This step is necessary to complete the installation. The clutch bypass switch is located somewhere on the clutch pedal bracket. If the vehicle has a cruise control then it's possible that there are two switches. Depressing the pedal partway activates the cruise unloader, this is *not* the one we want.

The correct clutch bypass switch we need to interface to requires that the pedal be depressed all the way to the floor.

There are four basic types of clutch bypasses.

- 1- Continuity. This type of clutch switch usually has two wires and the clutch switch merely connects the two together causing current to flow from one to the other. Do not cut either wire. Using a standard Bosch type relay, connect one wire from the clutch switch to pin 30 of the relay and the other wire of the clutch switch to pin 87 of the relay. Connect pin 85 of the relay to the status wire from the remote car starter and pin 86 of the relay to an ignition positive. Connect the crank out wire of the remote car starter in the vehicle's harness as if it were an automatic transmission vehicle.
- 2- Open. This type of clutch switch usually has two wires and the clutch switch merely opens the two, interrupting current flow from one to the other. Cutting one of the two will allow the vehicle to start. Using a standard Bosch type relay, connect one cut wire from the clutch switch to pin 30 of the relay and the other wire of the clutch switch to pin 87a of the relay. Connect pin 85 of the relay to the status wire from the remote car starter and pin 86 of the relay to an ignition positive. Connect the crank out wire of the remote car starter in the vehicle's harness as if it were an automatic transmission vehicle.
- 3- Starter wire interrupt. This type of clutch switch usually has two wires of heavier gauge and the clutch switch merely connects the two together causing current to flow from one to the other. Probe to see which wire has power during crank with the clutch pedal depressed. Connect the crank out wire of the remote car starter to this wire.
- 4- High current negative. This type of clutch switch usually has two wires and the clutch switch merely sends a high current negative to a starter relay. Do not cut either wire. Using a standard Bosch type relay, connect one wire from the clutch switch to pin 30 of the relay and the other wire of the clutch switch to pin 87 of the relay. Connect pin 85 of the relay to the status wire from the remote car starter and pin 86 of the relay to an ignition positive. Connect the crank out wire of the remote car starter in the vehicle's harness as if it were an automatic transmission vehicle.

Note to installers: This module is intended to be used with products distributed by Directed Electronics Inc., Canada.

The 688M module must be installed by qualified technicians. Incorrect use or installation of the module could cause material damage to the vehicle or its environment and could even involve bodily harm. This product must thus be installed according to the specifications of Directed Electronics Inc., Canada.

It is the responsibility of the installer to verify the compatibility of the system with the vehicle and products installed.

It is your responsibility to verify any circuit before interfacing with it, using a digital multi-meter. Directed Electronics Inc. Canada assumes no liability and accepts no responsibility with regard to the accuracy or currency of the information contained in this memo. Proper installation in every case is and remains the responsibility of the installer and DEI assumes no liability or responsibility resulting from an improper installation, even in reliance upon this information.

The information in this memo is being provided free of charge on an "as is" basis, without any representation or warranty.

Directed Electronics Inc., Canada could not be held responsible for the losses and damage incurred following a bad installation or a misuse of the 688M module.

June 2005