






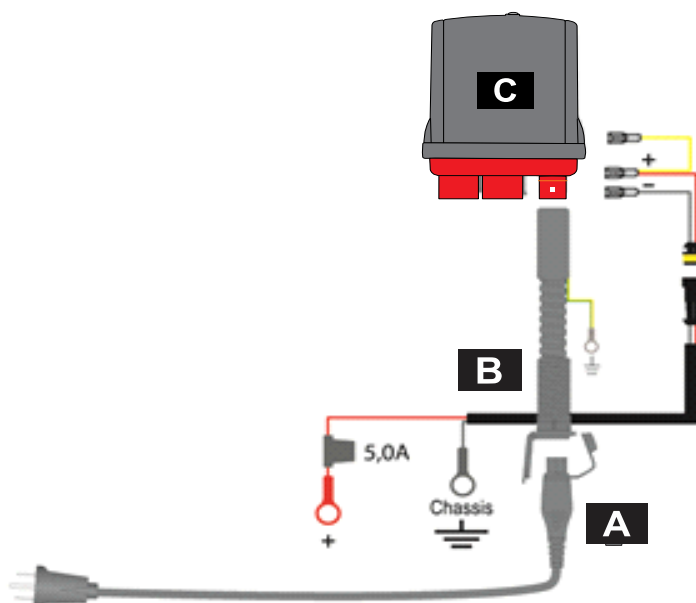
		Generic Installation instructions On-board charger + Cord set		
			ÅRSMODEL / YEAR:	Any
			MODELLKODE / CODE:	
			KAROSSERI / CAR BODY:	Any
		Available Customizable solutions for Charger Assembly + Cord set	Power: Input: 120V/15A Output to battery: 12-14V/50mA-5A 120V Output sockets: 120VAC/15A	
Any				

Notes to the Installer:

- 1) Read the entire installation instruction prior to beginning the installation of this accessory.
- 2) Ensure the vehicle is properly protected in the area(s) that the accessory is to be installed.
- 3) To prevent vehicle damage, never place tools on top of painted surfaces, seats, dash pad, console or floor carpet/mats.
- 4) Always wear appropriate safety gear including gloves and eye protection when required.

The diagram below gives an overview of all of the electrical connections in the charger kit.

	A : MiniPlug power connecting cord
	B : MiniPlug Inlet cable
	C : MultiCharger 1203X



	Disconnect the battery before installation according to the manufacturer's specifications.
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NOTE: This instruction is available for download at:

<https://www.defa.com/ca/about-defa/download/>

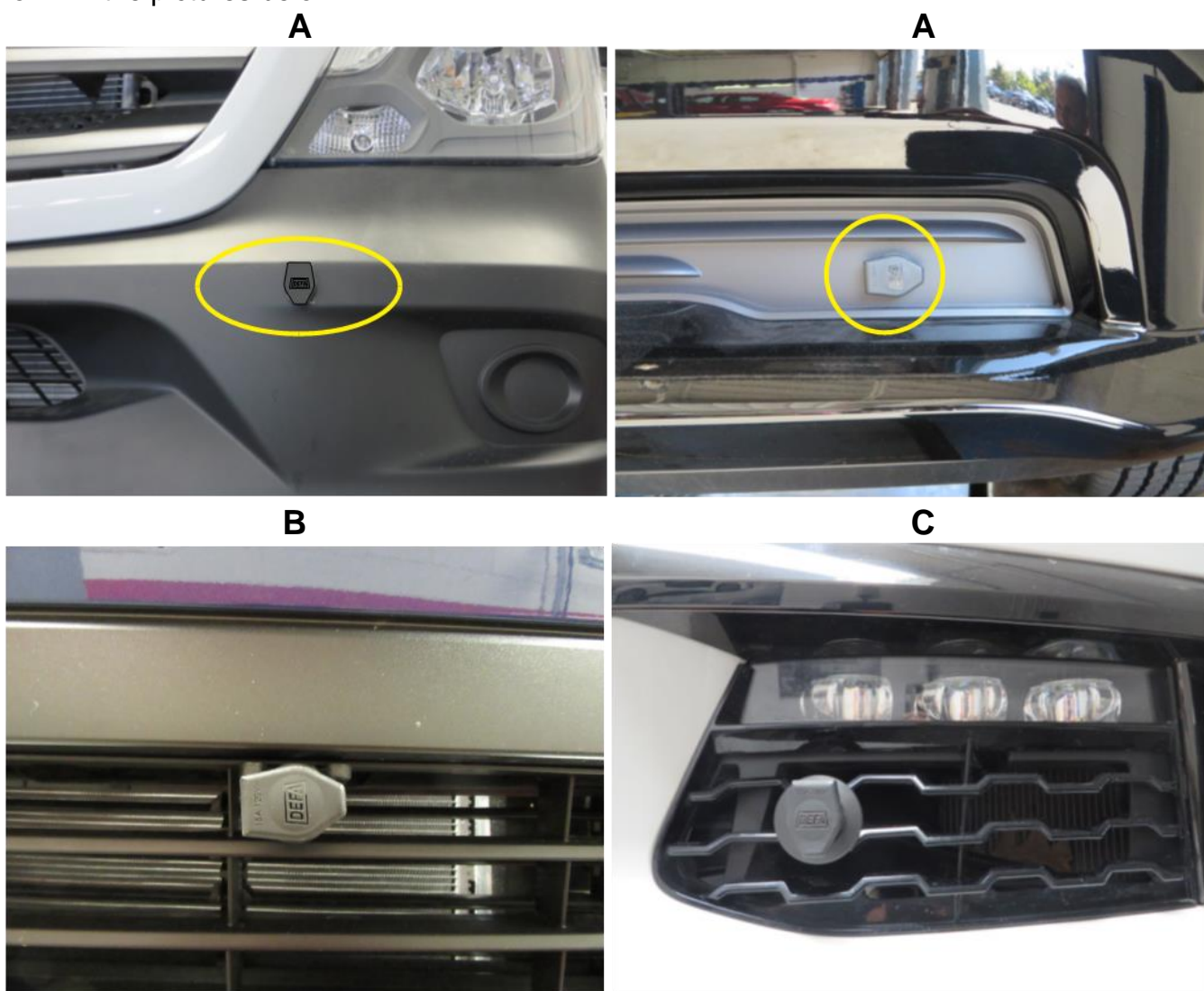
INSTALLATION – Inlet cable and Bumper Mounted MiniPlug

NOTE! READ ALL THE INSTRUCTIONS BEFORE PROCEEDING WITH THE INSTALLATION

NOTE! Insure OEM fasteners that require removal and reinstallation are torqued to specifications.

- **Avoid contact between the installed cables to any sharp or moving parts**

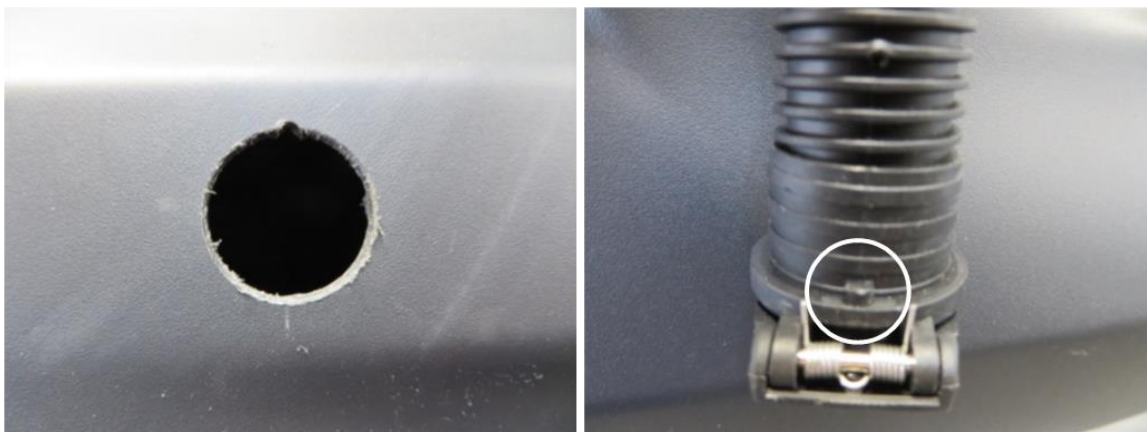
The MiniPlug can be installed in 1 of 3 possible ways. Bumper trim panel hole method **(A)** or mounting bracket method **(B)** or through the grill method **(C)** using the large mounting discs as shown in the pictures below.



If method A is preferred, drill a 24mm (15/16ths inch) hole in the desired location and make a 3mm groove at either the 9, 12 or 3 o'clock position depending on if the flap will be opened vertically or horizontally.

NOTE: There is an index tab on the backside at the top of the MiniPlug socket that is to engage into the 3mm groove upon installation. A drilling template is provided in picture 2 on page 7.

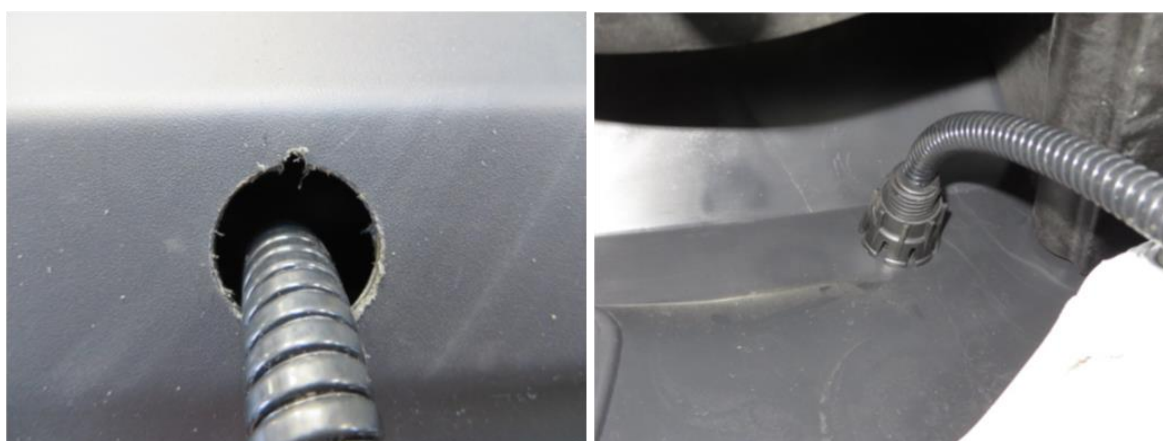
NOTE: Make sure there is proper clearance behind the bumper cover before drilling the hole.



NOTE: Remove only one of the plastic drains (the one that will be at the bottom) as pictured below and as shown in detail picture number 5 on page 7 of these instructions. Failure to do so may result in corrosion inside the socket.

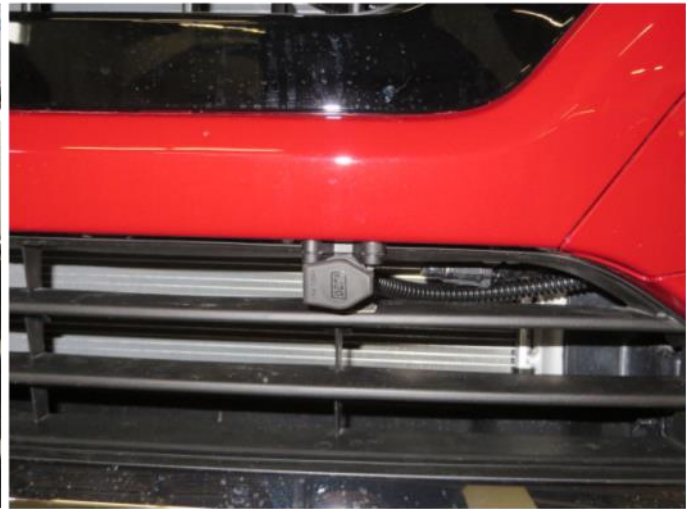


Install the Inlet cable through the hole and secure the MiniPlug socket to the bumper cover using the locking ring **(F)** and orange O-ring **(B)** as shown on pages 6 and 7.

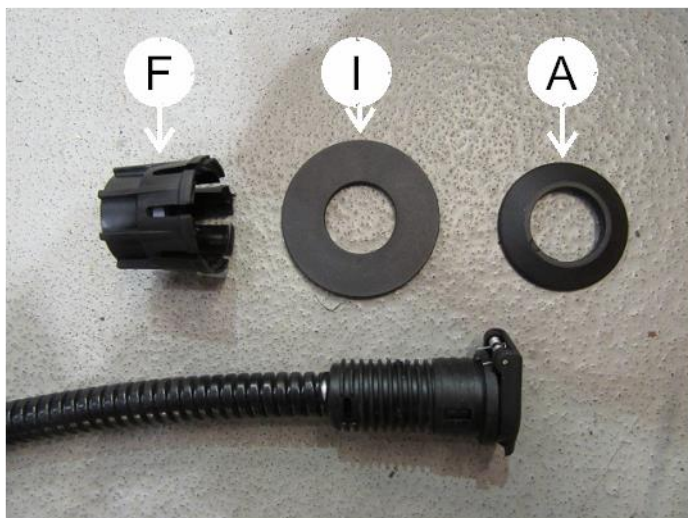


If using the mounting bracket in the grill, use the mounting bracket **(G)** to secure the MiniPlug to the upper part of the grill opening. Use the small screws **(H)** to lock the bracket into position on the MiniPlug housing. Use the self-tapping screws **(D)** to install the assembled MiniPlug on the front bumper as shown in the picture below. If needed, the bracket shim **(C)** can be used between the bracket and the bumper cover mounting area to gain extra MiniPlug flap opening clearance.

NOTE: If the vehicle is equipped with active grill shutters, ensure that the cable does not interfere with the shutter operation.



If installing the cable through the grill mesh, Install the Inlet cable through a hole in the grill and secure the MiniPlug socket to the grill using the assembly ring (**A**), the 55mm disc (**I**) and the locking collar (**F**) to secure the MiniPlug to the grill in the location indicated in the pictures below and as shown on pages 6 and 7.



Note!

- **Insure the Earth strap on the DEFA inlet cable is attached to a good clean chassis ground that is void of paint to ensure a good ground connection.**

This is for safety and for the DEFA system to work correctly.

The MiniPlug may be mounted to various locations in the front bumper that will retain the aesthetics of the vehicle. It is imperative that the plug be mounted longitudinally to the vehicle and not transversely or vertically.

NOTE: It is highly recommended to regularly clean the MiniPlug housing during vehicle maintenance or more frequently depending upon weather and road conditions. Spray the inside of the MiniPlug housing with a suitable aerosol cleaner such as Electronic Parts Cleaner. This will help to flush out any remaining moisture or debris accumulation from regular use.

See next page for more information.



Cord set

4000182

- EN User & installation guide
- FR Utilisateur et installation



120V - 15A



701907-E20 PBR 040116

EN

The MiniPlug inlet socket **2** on the MiniPlug inlet cable must be located in a position which will allow the MiniPlug power connector **3** to be inserted without difficulty. The DEFA MiniPlug may be recessed into the bodywork and fastened with the nut **4** or fitted externally by the use of bracket **5**.

Mounting

Recessed assembly. When installing the MiniPlug socket **2** into a curved surface **1** assembly ring **3** can be used. C-ring **3** (30 x 3.2 mm) must be placed between nutring **4** and bodywork. In order to recess the socket, a 24 mm diameter hole must be drilled and a keyway must be filed using e.g. a round file with diameter 3 mm **6**.

Using the bracket. The bracket **5** may be fitted either way, depending on location. The MiniPlug socket **2** can be adjusted backwards and forwards and turned to achieve the best position. Fasten the bracket to the MiniPlug contact using the two enclosed screws **7**.

Normally, the MiniPlug socket **2** should be fitted with the lid hinge at the top, but it may also be fitted with the hinge on the right- or left-hand side **8**. For preference, the MiniPlug socket should be fitted so that the front section faces downwards at a slight angle to drain out water or moisture from the MiniPlug socket. If you are using the bracket **5** you can fit the adapter **9** to obtain the same effect. If the MiniPlug socket **2** is installed in such a way that the open end faces upwards, the lowest of the three punch-out points (x3) must be opened to drain out water or moisture. Use a knife **9** or similar tool for this purpose. This applies both to bracket fitting and recessed fitting. The ground lead **10** (lead with cable eye) must be attached with the enclosed screw **11** to the chassis or an original ground point. Scrape off paint etc. at the fitting point to ensure a good ground connection.

Fasten the bracket **5** to the chassis using the enclosed screws **7**.

Ensure not to damage any original cables or tubes. Thoroughly clean the hole and add fix. Teroson FL cleaner.

In use

Connect the MiniPlug power cable connector **3** to the MiniPlug inlet socket **2** before connecting the main power plug (NEMA5-15P) **2**.

The MiniPlug power cable must be treated with care to avoid damage to insulation by heat and/or moving or sharp objects. The cover should always be fitted on the connector **3** when this is not connected. Connecting cables are developed and tested specially for use in the cold. They will not be damaged by normal use and when coiling up the cables even in very low temperatures.

Only use original DEFA MiniPlug power cables and original DEFA MiniPlug inlet cables. The DEFA MiniPlug power cable must be plugged into approved grounded outlets only.

Maintenance

Spray Electronic Parts Cleaner into the DEFA MiniPlug socket terminals under the cover before and after the season and ensure that neither the cable nor cover is damaged. Install a new cable if the cover is damaged.

Standards

Cord sets and power supply cords (UL 817, Eleventh edition, Dated March 16, 2001, Rev. October 5, 2009)

Cord sets and power supply cords (CSA C22.2 No. 21, 1950/03/01, Ed. 8, R20/09)



FR

La prise MiniPlug **2** du câble MiniPlug doit être positionnée de manière à pouvoir raccorder facilement le connecteur d'alimentation MiniPlug **3**. La prise DEFA peut être encastrée dans la carrosserie et serrée avec l'écrou **4** ou installée à l'extérieur avec un support **5**.

Montage

Montage encastré. Pour installer la prise MiniPlug **2** dans une surface incurvée **1**, une bague **3** peut être utilisée. Le joint torique (B) (30 x 3.2 mm) doit être placé entre l'écroubague **4** et la carrosserie. Pour insérer la prise, un trou de 24 mm de diamètre doit être percé et une rainure doit être tracée avec, par exemple, une lime ronde d'un diamètre de 3 mm **6**.

Utilisation du support. L'installation du support **5** dépend de l'emplacement. La prise MiniPlug **2** peut être ajustée vers l'arrière et vers l'avant, puis tournée pour obtenir la meilleure position. Serrez le support avec les deux vis fournies **7**.

Normalement, la prise MiniPlug **2** doit être installée avec la charnière vers le haut, mais elle peut aussi être installée avec la charnière à droite ou à gauche **8**. La prise MiniPlug doit de préférence être installée avec la partie avant orientée vers le bas légèrement inclinée pour éliminer l'eau ou l'humidité de la prise MiniPlug. Si vous utilisez le support **5**, vous pouvez installer l'adaptateur **9** pour obtenir le même effet. Si la prise MiniPlug **2** est installée avec l'ouverture vers le haut, le point percé le plus bas des trois (x3) doit être ouvert de façon à éliminer l'eau ou l'humidité. Pour ce faire, utilisez un couteau **9** ou un outil semblable. Cela s'applique aussi bien au montage avec support qu'au montage encastré. Le fil de mise à la terre **10** (fil avec queue) doit être relié avec la vis fournie **11** au châssis ou à une mise à la terre d'origine. Grattez la peinture, etc. sur le point d'installation pour que la connexion à la terre soit appropriée.

Fixer le support **5** au châssis à l'aide des vis comprises **7**.

Remarque ! Prenez les précautions nécessaires pour ne pas endommager les câbles ou les tuyaux d'origine. Nettoyez à fond le trou et ajoutez un nettoyeur Teroson FL.

Utilisation

Raccordez le connecteur de câble MiniPlug **3** à la prise MiniPlug **2** avant de brancher la prise secteur (NEMA 5-15P) **2**.

Le câble MiniPlug doit être manipulé avec soin pour éviter d'endommager l'isolation avec la chaleur et/ou les déplacements ou avec des objets tranchants. Le couvercle doit toujours être installé sur le connecteur **3** quand il n'est pas utilisé. Les câbles de connexion sont conçus et testés spécialement pour supporter les basses températures. Ils ne peuvent pas être endommagés quand l'utilisation est normale et en enroulant les câbles même à très basses températures.

N'utilisez que les câbles d'alimentation MiniPlug DEFA d'origine et les câbles d'admission MiniPlug DEFA d'origine. Le câble d'alimentation MiniPlug DEFA ne doit être branché que dans les prises de terre homologuées.

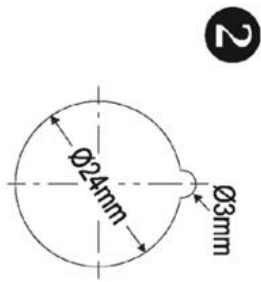
Maintenance

Vaporisez du nettoyeur pour composants électroniques sur les extrémités de prise MiniPlug DEFA sous le couvercle avant et après la saison et vérifiez l'état du câble ou du couvercle. Installez un nouveau câble si le couvercle est endommagé.

Normes

Jeux de cordon et cordons d'alimentation (UL 817, Onzième édition, 16 mars 2001, Rév : 5 octobre 2009)

Jeux de cordon et cordons d'alimentation (CSA C22.2 N° 21, 1950/03/01, Ed. 8, R20/09)

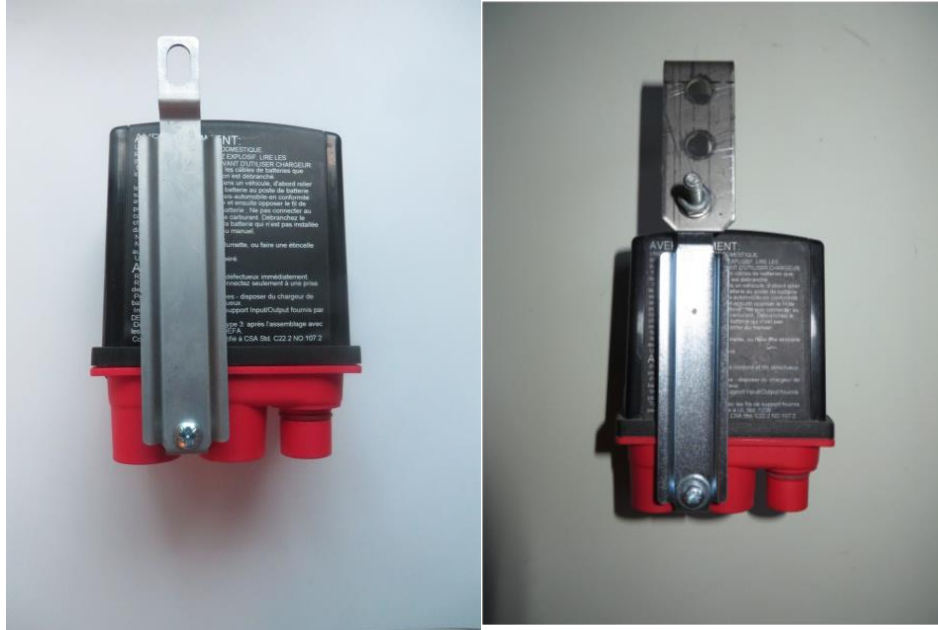


INSTALLATION - Battery Charger and wire harness:

Install the inlet cable up to the location of where the battery charger will be installed. The battery charger can be installed in the engine compartment in a convenient location within reach of the length of the Inlet cable and the charging wire harness to the battery.

NOTE: The charger and cables must not be installed directly next to any hot or rotating parts.

Assemble the battery charger's bracket(s) as shown in pictures below. The optional L bracket can be used if required depending on the installation location and position.



Install the battery charger and charging wires to the battery. Attach the charger to an available mounting point or original bolt on the inner fender or on the radiator support using the mounting bracket(s) provided as shown in the pictures below.



Attach the yellow/green ground lead to an original ground point (2) on the chassis.



Install the battery charging wire harness between the charger and the battery and secure it along the original wire harnesses using the provided zip ties. Connect the positive lead of the wire harness to the positive battery post or clamp and secure the fuse holder with a plastic cable tie. The red wire can also be connected to the positive power connection of the underhood fuse panel. Attach the black ground lead to an original ground point on the chassis.

Any excess wire length can be coiled and zip tied near the charger or other location away from hot, sharp or other moving parts.

**NOTE!**

- Insure OEM fasteners that require removal and reinstallation are torqued to specifications.
- Make sure the charging wire harness is routed away from any hot or sharp or rotating parts of the engine or steering column.



DEFA On-board battery charger

KEY checks for good installation and functionality

BEFORE YOU START THE INSTALLATION

- Read all instructions before proceeding with the installation as procedures may overlap.
- Before installation, disconnect the battery as directed by the manufacturer.

DURING THE INSTALLATION

- Ensure there is sufficient space between components to avoid chaffing or contact with moving parts.
- Ensure the ground wire on the DEFA inlet cable is attached to a good clean chassis ground that is void of paint to ensure a good ground connection.

TEST THE SYSTEM

- The light on the charger will only come on when the battery is at a low state of charge (Below 13.7V) and will not illuminate during the floating/maintaining states.
- To test the charger, place a load on the battery such as an open door or headlights on.

MAINTENANCE

- It is highly recommended to regularly clean the MiniPlug housing during vehicle maintenance or more frequently depending upon weather and road conditions. Spray the inside of the MiniPlug housing with a suitable aerosol cleaner such as Electronic Parts Cleaner. This will help to flush out any remaining moisture or debris accumulation from regular use.