MSI Charger Reprogrammer Installation Guide

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- The page number or title of the section with the error.
- A description of the error.

Document History

Version	Description	Date
MN005630A01-AA	Initial release of the *MSI Charger Reprogrammer Installation Guide* manual.	February 2019

About Charger Reprogrammer Installation Guide

This manual guides you on how to install and configure the Motorola Solutions Charger Reprogrammer application.

The *Charger Reprogrammer Installation Guide* contains step-by-step installation instruction, feature configuration, and some basic troubleshooting topics.

Icon Conventions

The documentation set is designed to give the reader more visual clues. The following graphic icons are used throughout the documentation set.

DANGER: The signal word DANGER with the associated safety icon implies information that, if disregarded, will result in death or serious injury.

WARNING: The signal word WARNING with the associated safety icon implies information that, if disregarded, could result in death or serious injury, or serious product damage.

CAUTION: The signal word CAUTION with the associated safety icon implies information that, if disregarded, may result in minor or moderate injury, or serious product damage.

CAUTION: The signal word CAUTION may be used without the safety icon to state potential damage or injury that is not related to the product.

IMPORTANT: IMPORTANT statements contain information that is crucial to the discussion at hand, but is not CAUTION or WARNING. There is no warning level associated with the IMPORTANT statement.

NOTICE: NOTICE contains information more important than the surrounding text, such as exceptions or preconditions. They also refer the reader elsewhere for additional information, remind the reader how to complete an action (when it is not part of the current procedure, for instance), or tell the reader where something is on the screen. There is no warning level associated with a notice.

Style Conventions

The following style conventions are used:

Convention	Description
Bold	This typeface is used for names of, for instance, windows, buttons, and labels when these names appear on the screen (example: the **Alarms Browser** window). When it is clear that we are referring to, for instance, a button, the name is used alone (example: Click **OK**).
`Monospacing font in bold`	This typeface is used for words to be typed in exactly as they are shown in the text (example: In the **Address** field, type `http://ucs01.ucs:9080/`).
`Monospacing font`	This typeface is used for messages, prompts, and other text displayed on the computer screen (example: `A new trap destination has been added`).
`<Monospacing font in bold Italic>`	This typeface is used with angle brackets as placeholders for a specific member of the group that the words represent (example: ***`<router number>`***). **NOTICE:** In sequences to be typed in, the angle brackets are omitted to avoid confusion whether to include the angle brackets in the text to be typed.
CAPITAL LETTERS	This typeface is used for keyboard keys (example: Press Y, and then press ENTER).
Italic	This typeface is used for citations. A citation usually is the name of a document or a phrase from another document (example: *Dimetra IP System Overview*).
→	An → (arrow pointing right) is used for indicating the menu or tab structure in instructions on how to select a certain menu item (example: **File** → **Save**) or a certain sub-tab.

Module 1

Installation of the MSI Charger Reprogrammer Software

The following presents the software installation process for MSI Charger Reprogrammer. Read all the on-screen instructions carefully during the installation.

1.1
System Requirements

The following parameters represent the minimum hardware and software requirements.

Operating System Requirements

📝 **NOTICE:** Run the application on an English-platform operating system to ensure the application functions correctly.

- Microsoft® Windows® 7 Professional and Premium Editions with Service Pack 1
- Microsoft® Windows® 8 Professional and Enterprise Editions
- Microsoft® Windows® 8.1 Professional and Enterprise Editions
- Microsoft® Windows® 10 Professional and Enterprise Editions
- Microsoft® Windows® Server 2008 R2 with Service Pack 1
- Microsoft® Windows® Server 2012

Hardware Requirements

- 1 Universal Serial Bus (USB) Port
- 1 GB of hard disk space
- 2 GB RAM
- Internet Access

Software Minimum Requirements

Microsoft® Internet Explorer®, Version 6.0.2900.xxxx and above.

Access Rights

You must have Administrator rights to proceed with the installation.

1.2
Installing MSI Charger Reprogrammer

Prerequisites: Before starting the installation, unplug any IMPRES devices that are connected to your computer and exit all the programs running on your computer.

Procedure:

1 Unzip the application package.

The application package can be downloaded from *Motorola Online (MOL)* or Motorola Solutions website.

2 To begin the installation process right-click the application file and select **Run as administrator**.
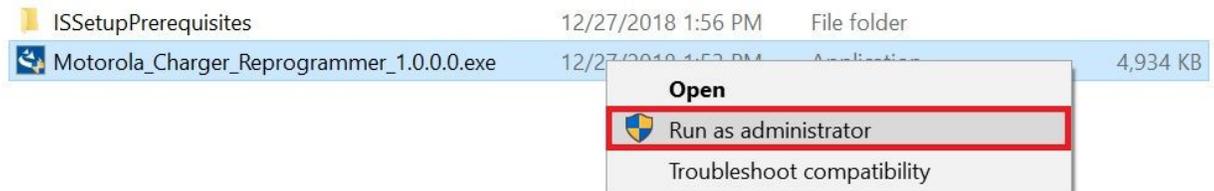
3 Install the prerequisites software if prompted. This is a requirement before installing the MSI Charger Reprogrammer software.
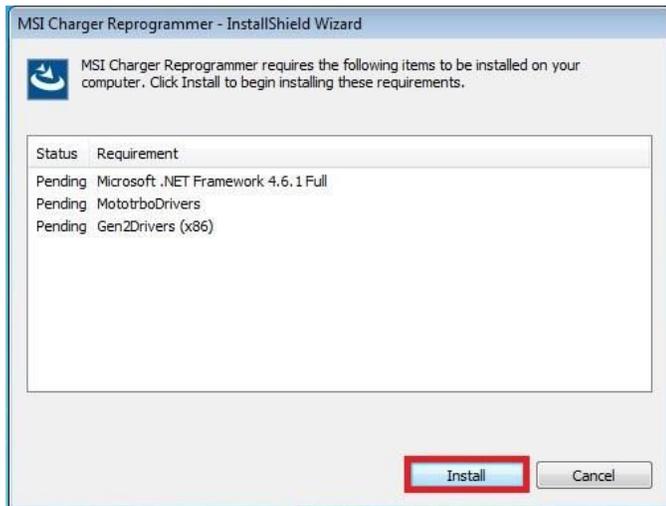
- Installing Microsoft .NET Framework 4.6.1 on page 13
- Installing MOTOTRBO Radio Driver on page 13
- Installing IMPRES Gen 2 Drivers on page 15

The MSI Charger Reprogrammer installation window is displayed once all prerequisites are fulfilled.

4 Click **Next >**.

5 Select **Complete** when prompted for a full installation. Click **Next >** to continue.
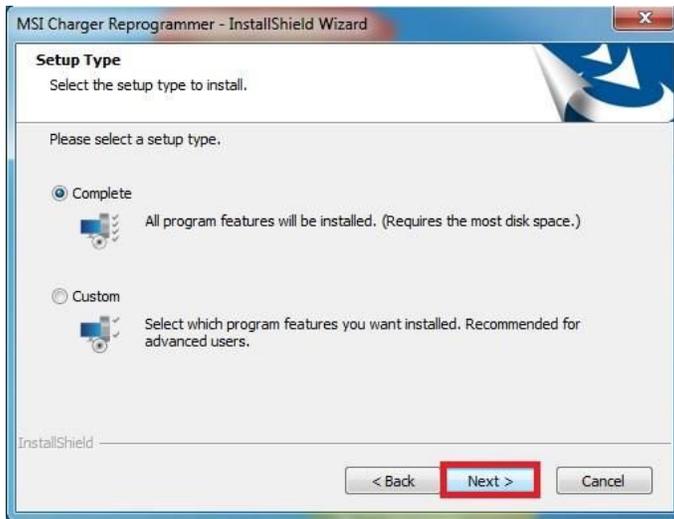
6 Click **Install** to start the installation.
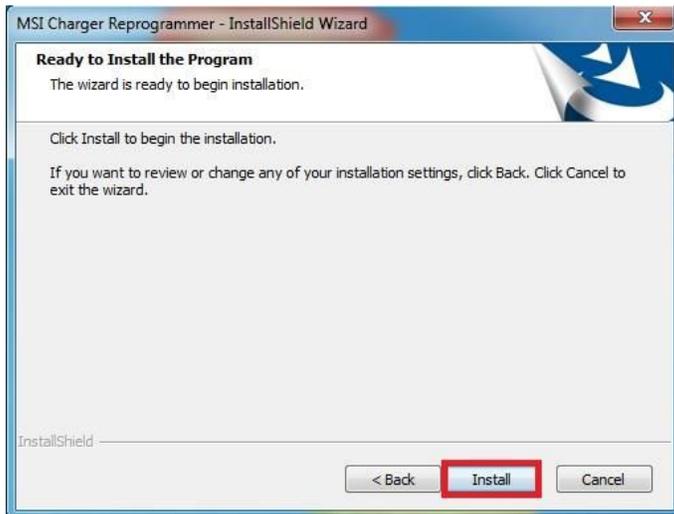
7 A completion message appears when installation is completed. Click **Finish** to close the window.

MSI Charger Reprogrammer is now installed in your computer.

Postrequisites: To launch the MSI Charger Reprogrammer, double-click the MSI Charger Reprogrammer icon on your desktop and select **Yes** when prompted.

1.2.1
Installing Microsoft .NET Framework 4.6.1

> **NOTICE:** Reboot may be required after installation of Microsoft .NET Framework 4.6.1.

Procedure:

> Select **Microsoft .NET Framework 4.6.1** and click **Install** to install Microsoft .NET Framework 4.6.1.
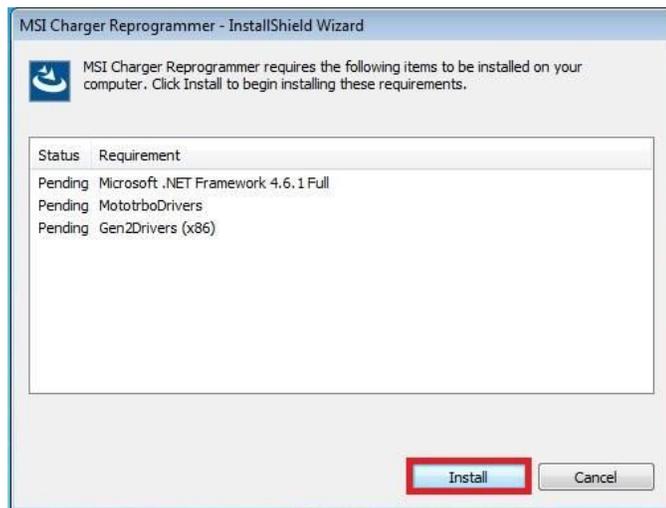
1.2.2
Installing MOTOTRBO Radio Driver

Procedure:

1 Select **MototrboDrivers** and click **Install** to install MOTOTRBO Radio Driver.

13
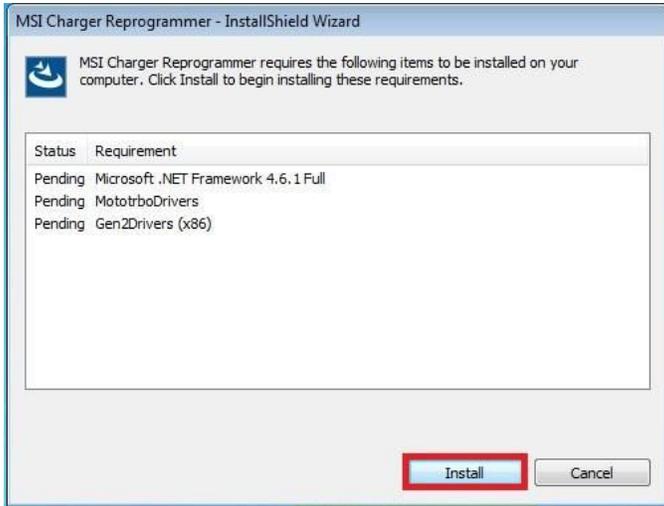
An installation window appears.

2 Click **Next >**.

3 Acknowledge the **License Agreement** and click **Next >** to continue.

4 Start the installation process.

5 A completion message appears when installation is completed. Click **Finish** to close the window.
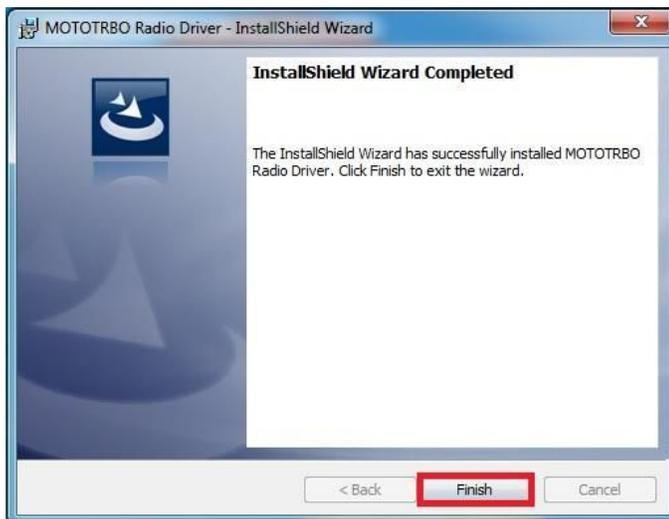
1.2.3
Installing IMPRES Gen 2 Drivers

Procedure:

1 Select **Gen2Drivers (x86)** and click **Install** to install IMPRES Gen 2 Drivers.
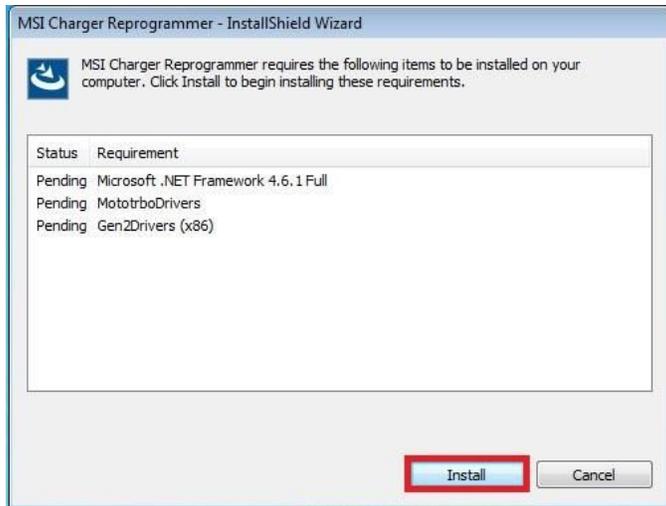
> **NOTICE:** The installation of IMPRES Gen 2 Drivers software depends on your computer software. **Gen2Drivers (x86)** is available for 32-bit computers, and **Gen2Drivers (x64)** for 64-bit computers.

An installation window appears.

2 Click **Next >**.

The window now shows a list of drivers ready for installation.

3 Select a driver and click **Next >** to start the installation.

4 In the pop-up security window, check **Always trust software from "Motorola Solutions Malaysia"** and click **Install** to continue.

Once installation is completed, the driver is shown as `Ready to use` in the installation window.

5 Repeat step 3 to step 4 for the other drivers.

6 Close the window once all drivers are installed.

1.3
IMPRES Devices Installation

IMPRES Charger Interface Unit (CIU) is used to communicate between the IMPRES charger and the computer.

The MSI Charger Reprogrammer application collects data from IMPRES chargers connected to the computer where the MSI Charger Reprogrammer application is installed. One CIU is required for each IMPRES charger connected to the computer.

Hardware Requirements
The following items are required to complete the installation (not furnished with Motorola Solutions IMPRES CIU):

1 A Personal Computer (PC) with one or more USB ports (version 1.1 or above). A compatible USB hub may be use between the IMPRES CIU and the PC.

2 A Motorola Solutions IMPRES Multi-Unit Charger (MUC) or Motorola Solutions IMPRES Single-Unit Charger (SUC).

IMPRES Charger Packing Box
The following items are included in the packing box of the supported IMPRES chargers:

1 CIU control assembly.

2 USB cable (part number: SKN6371_)

Supported IMPRES Chargers

- NNTN7677_ IMPRES Multi-Unit Charger Interface Unit
- NNTN8045_ Single-Unit Charger Interface Unit

1.3.1
Installing IMPRES Charger Interface Unit for IMPRES Multi-Unit Charger

Prerequisites: To prevent damage to the computer, IMPRES Multi-Unit Charger (MUC), and IMPRES Charger Interface Unit (CIU), follow the instructions carefully.

Procedure:

1 Disconnect power to the MUC and computer.

2 Connect the 15-pin DB-15 plug from the CIU to the 15-pin DB-15 receptacle at the back of the MUC.

3 Tighten the thumb screws to secure the DB-15 plus to the receptacle.

4 Connect the mini-USB plug of the USB cable to the mini-USB connector on the side of the IMPRES Multi-CIU.

5 Connect the standard USB plug of the USB cable to the USB connector on the computer.

6 Apply power to the IMPRES MUC and computer.

Installing IMPRES Charger Interface Unit for IMPRES Single-Unit Charger

Prerequisites: To prevent damage to the computer, IMPRES Single-Unit Charger (SUC), and IMPRES Charger Interface Unit (CIU), follow the instructions carefully.

Procedure:

1 Disconnect power to the SUC and computer.

2 Connect the RJ-11 plug from the CIU to the RJ-11 receptacle at the back of the SUC.

3 Connect the mini-USB plug of the USB cable to the mini-USB connector on the side of the CIU.

4 Connect the standard USB plug of the USB cable to the USB connector on the computer.

5 Apply power to the IMPRES SUC and computer.

Features Configuration

This chapter provides the information on the features and firmware programming of MSI Charger Reprogrammer application.

The MSI Charger Reprogrammer application provides a user-friendly environment to update the firmware of MSI IMPRES products. You can check the firmware of an MSI IMPRES charger, when connected to the application through USB, against the latest firmware version on the MSI server. If a newer version is available, the firmware can be downloaded from the MSI server and programmed into the device.

Figure 1: Typical Hardware Setup

2.1
Auto Check Option

Auto Check allows the MSI Charger Reprogrammer application to check for new firmware version on the MSI server automatically.

The application automatically checks for new firmware of a connected charger upon launching. If chargers are connected after launching the application, you can use the **Check Version** button to manually perform version check.

Auto Check is enabled by default upon application installation. If MSI server is not available, an error pop-up notification appears and **Auto Check** is disabled.

When **Auto Check** is not enabled, the application do not check for firmware version unless manually triggered using the **Check Version** button. If MSI server is not available, an error pop-up notification appears.

2.1.1
Enabling or Disabling Auto Check

Procedure:

1   Select **File**.
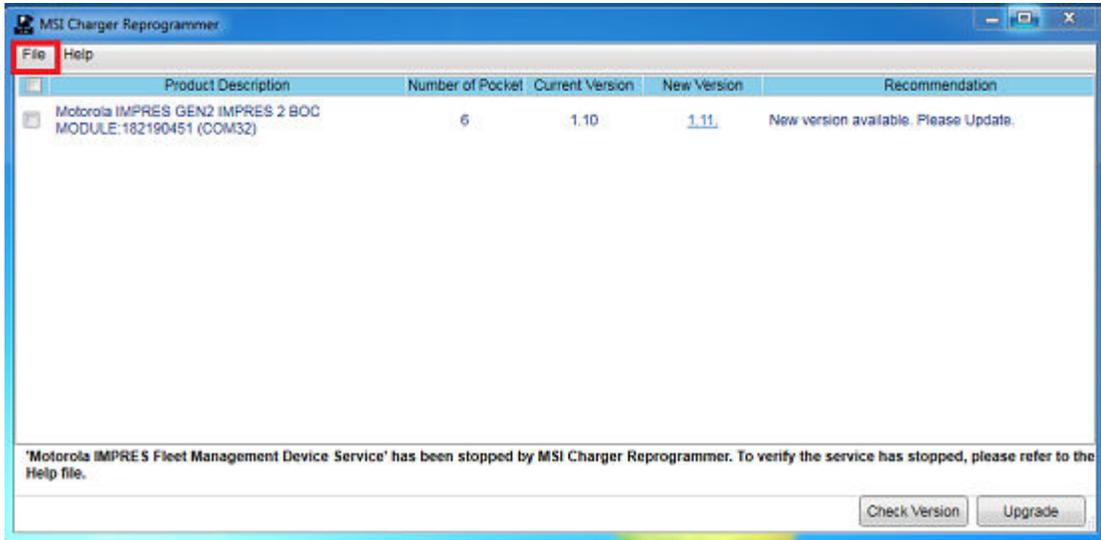
2 Click **Auto Check** to enable or disable the Auto Check feature.

Check mark besides **Auto Check** denotes that the feature is enabled.
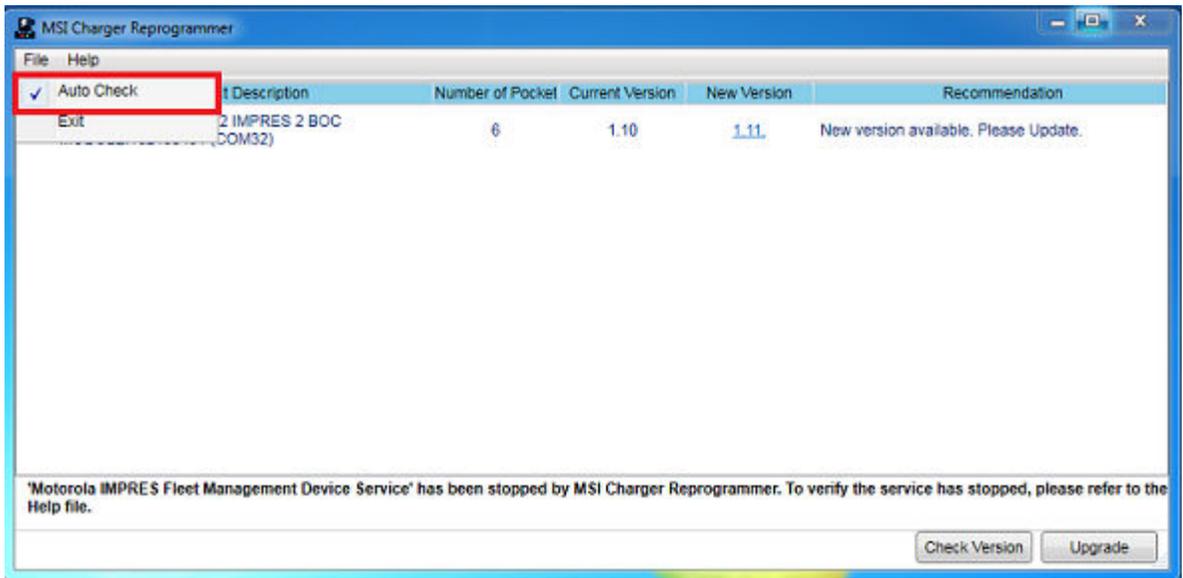
2.2
Updating Firmware

📝 **NOTICE:** Applies to all IMPRES Gen 1 and Gen 2 devices or chargers; which includes Charger Interface Unit (CIU), Battery Data Reader (BDR), Single-Unit Charger (SUC), Dual-Unit Charger (DUC), and Multi-Unit Charger (MUC).

Upgrading an IMPRES device or charger to a newer version.

Prerequisites: Remove all inserted batteries from target device or charger.

Procedure:

1 Connect the device or charger to your computer using USB.

    The connected device or charger is shown on the main window of the MSI Charger Reprogrammer.
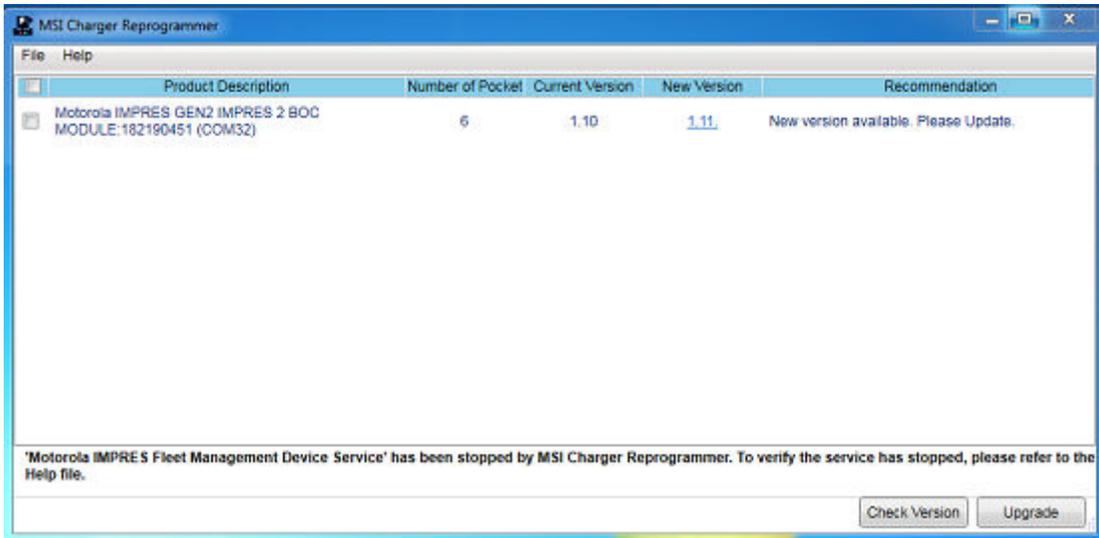
2 Click **Check Version** to find the latest available version from MSI server.
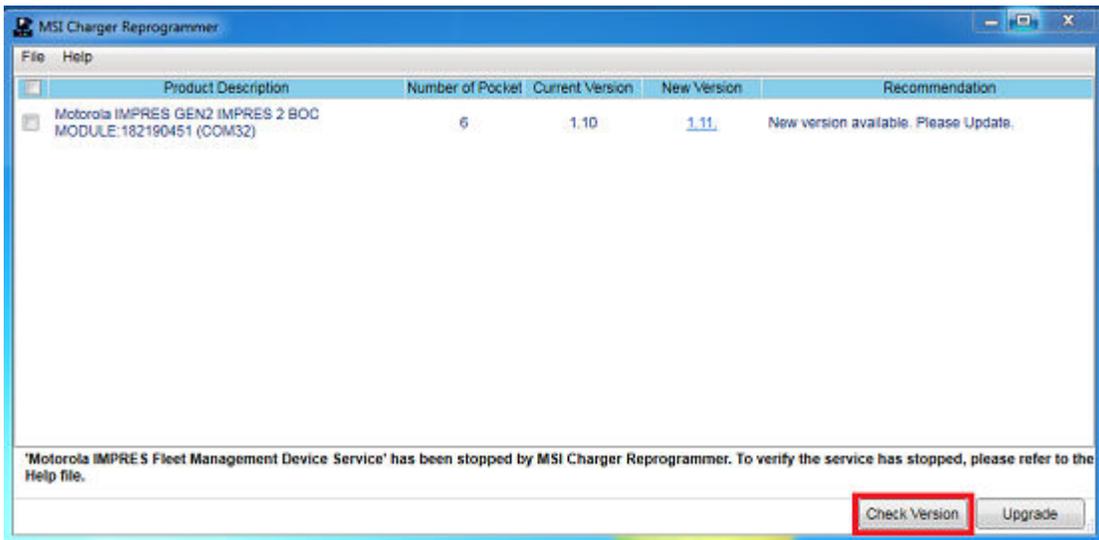
3 Select the device or charger which requires update.
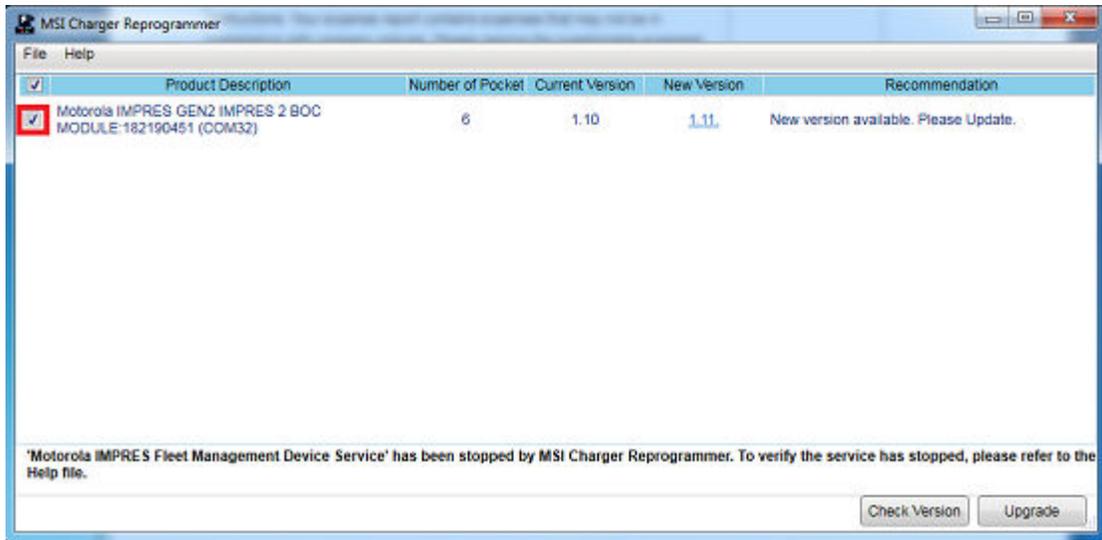
> **NOTICE:** You cannot select device or charger already updated with the latest firmware version.

4 To initiate firmware upgrade, click **Upgrade**.
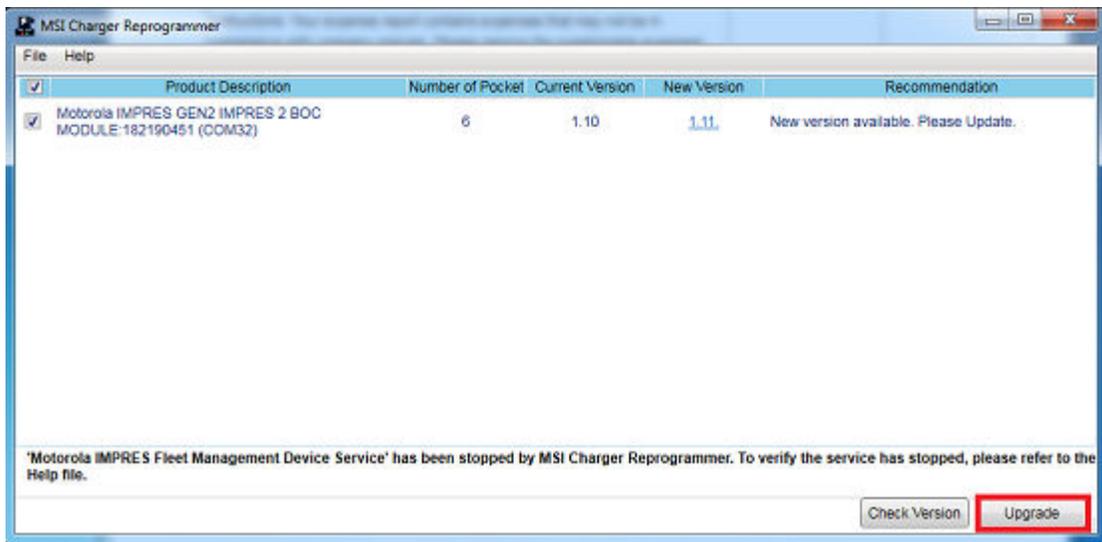
5 Click **OK** on the confirmation window when prompted to start the upgrade.
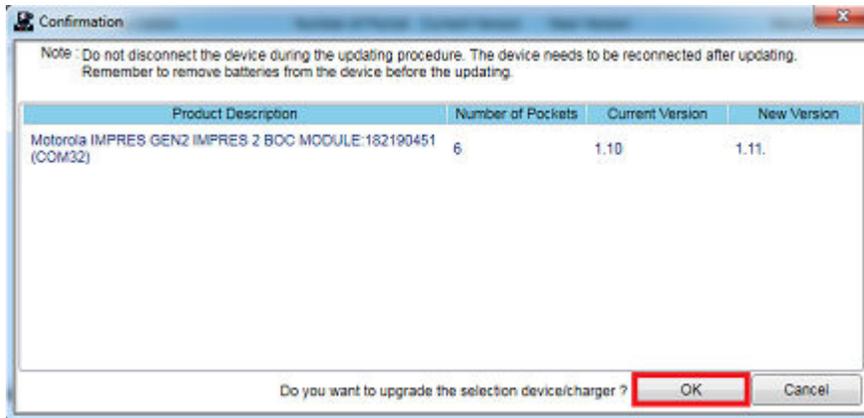
A window shows the progress of the upgrade until completion.

6 Close the window once all upgrades have been completed.
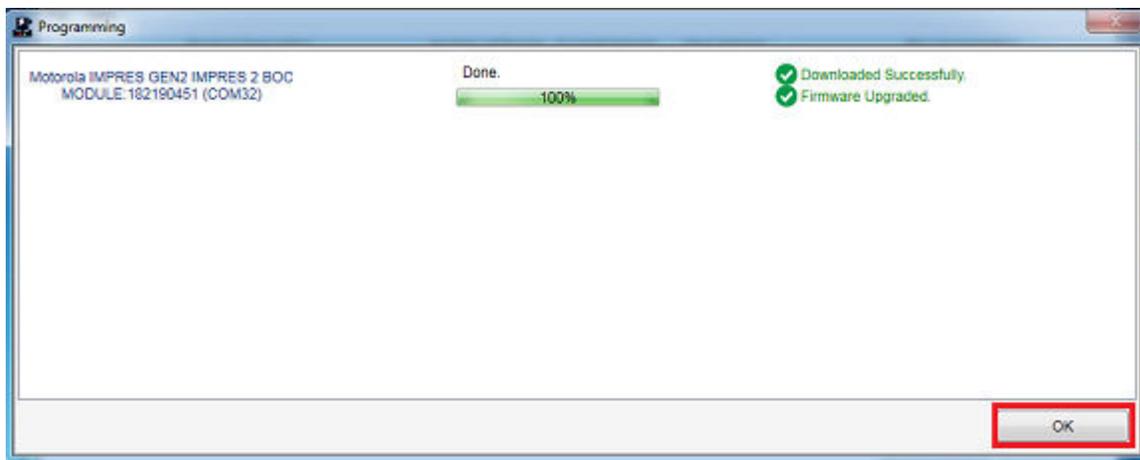
Module 3

Troubleshooting

This chapter explains the procedures required to troubleshoot your MSI Charger Reprogrammer application.

Installing IMPRES Gen 2 Charger Drivers Manually

You can perform manual installation of the drivers for IMPRES Gen 2 chargers in cases where it is not properly installed or when the MSI Charger Reprogrammer application is not able to detect a connected IMPRES Gen 2 charger.

Prerequisites:

• Exit all IMPRES programs running on your computer.

• Connect the USB cable to the USB port on your computer.

Procedure:

1 Open **Control Panel** and select **Hardware and Sound**.
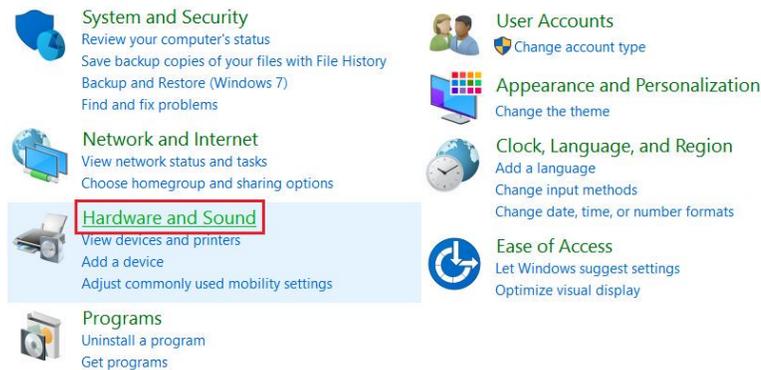
2 Select **Device Manager**.

3 In the **Device Manager**, search for the required charger under **Other devices**. Right-click and select **Update Driver Software...**.
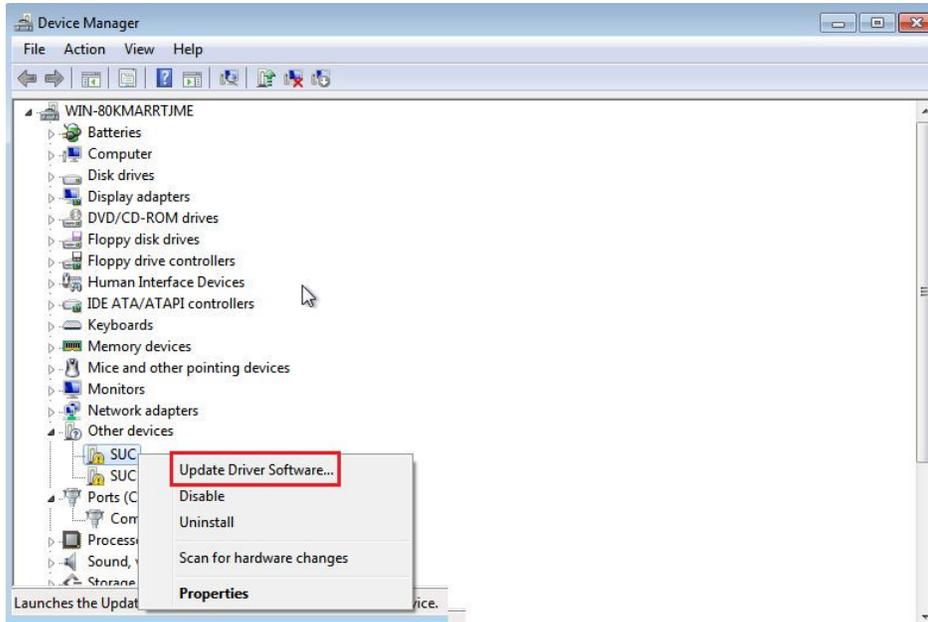
4 In the pop-up window, click **Browse my computer for driver software**.
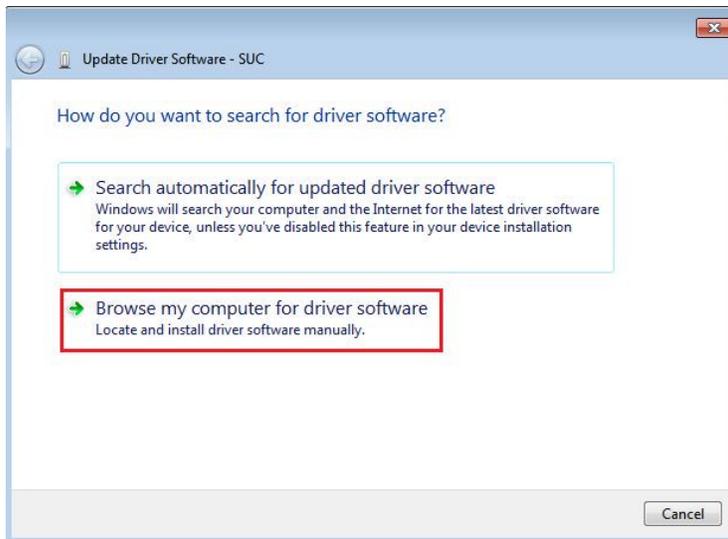
5 Click **Browse** to manually locate the driver.

> **NOTICE:** The driver files are located in the sub-folder of MSI Charger Reprogrammer `ISSetupPrerequisites` folder. Click **Next** after locating the desired driver.

6 In the pop-up security window, check **Always trust software from "Motorola Solutions Malaysia"** and click **Install** to continue.
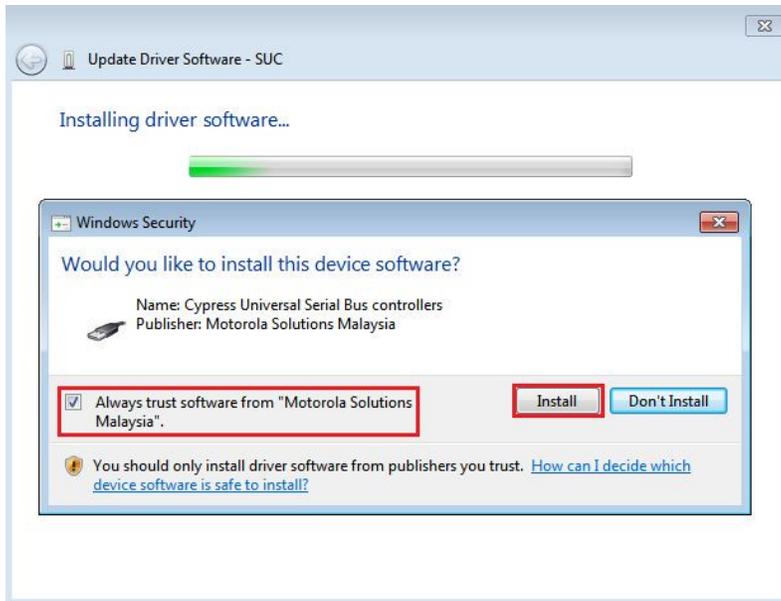
A completion message window pop-up when installation is completed. Close the window.
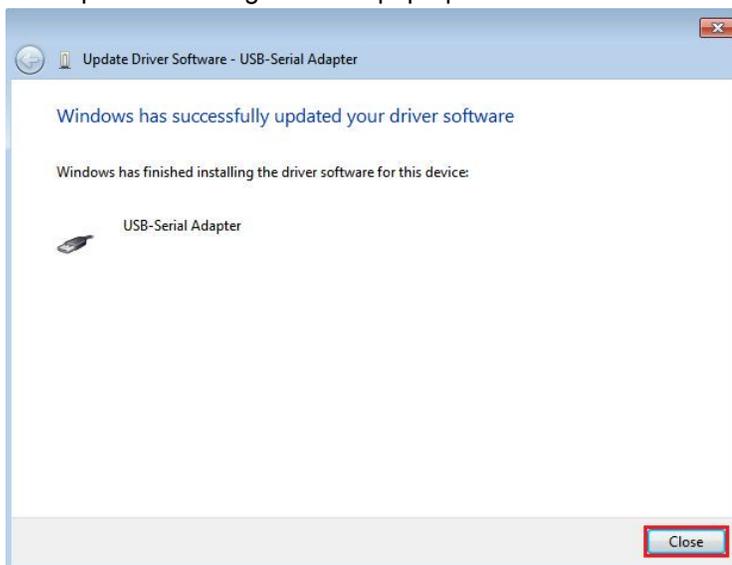
7 Perform step 3 to step 6 for any remaining chargers.

> **NOTICE:** New hardware may be found after successful installation of the driver in **Other devices**. Perform the update for the new hardware following the same procedures.
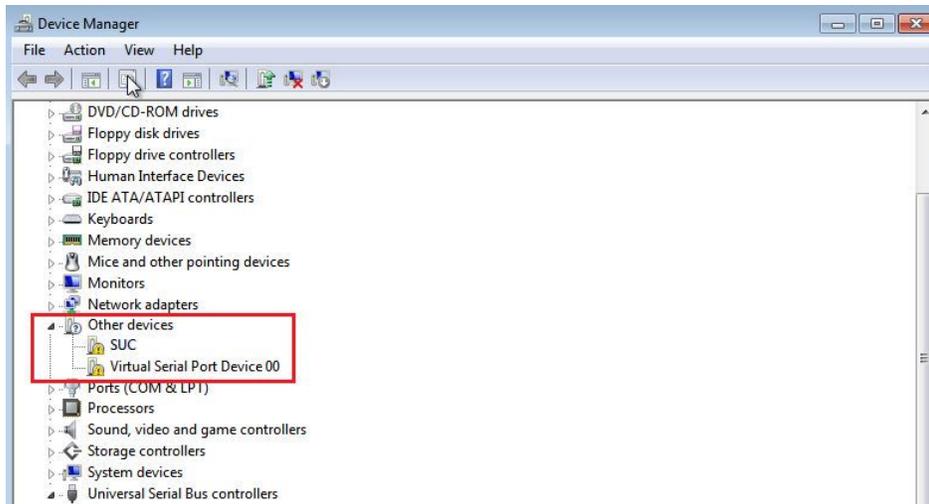
The **Device Manager** reflects the new devices under **Ports** and **Universal Serial Bus controllers**.
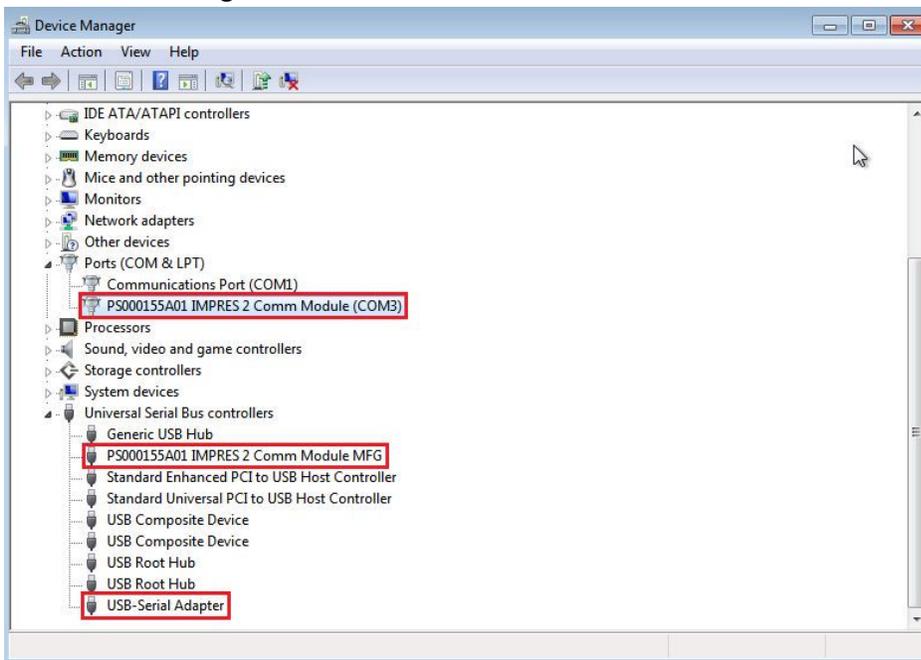
3.2
Reconnect or Reset IMPRES Gen 2 Charger

When GEN 2 chargers do not respond with proper device information during device detection or reprogramming, an error pop-up message is shown. You need to reconnect or reset the chargers.
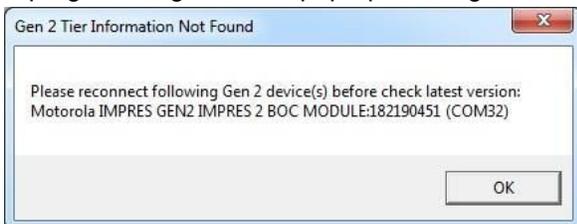
Procedure:

1 Detach the charger USB cable from the USB port on your computer.

  2 Unplug the charger power source.

  3 Replug in the charger power source.

  4 Reconnect the charger USB cable to the USB port on your computer.

3.3
Stopping Fleet Management Device Service Manually

Motorola IMPRES Fleet Management Device Service application stops automatically when MSI Charger Reprogrammer application is launch.

When and where to use:
If MSI Charger Reprogrammer application is launch but unable to detect any connected devices, check if Motorola IMPRES Fleet Management Device Service application is still running. If Motorola IMPRES Fleet Management Device Service application is still running, the MSI Charger Reprogrammer application is unable to detect any devices as Motorola IMPRES Fleet Management Device Service application is engaging the USB port. You need to manually stop the Motorola IMPRES Fleet Management Device Service application.

Procedure:

  1 Open the **Run** dialog. Enter `services.msc` to open the **Services Manager**.

  2 Select **Motorola IMPRES Fleet Management Device Service**.

  3 Click **Stop**.

  4 Restart MSI Charger Reprogrammer application.

3.4
Starting Fleet Management Device Service Manually

Motorola IMPRES Fleet Management Device Service application starts automatically when MSI Charger Reprogrammer application is closed.

When and where to use:
Motorola IMPRES Fleet Management Device Service application will not detect any devices if it is not running. If Motorola IMPRES Fleet Management Device Service application is not running after closing MSI Charger Reprogrammer application, you need to manually start the Motorola IMPRES Fleet Management Device Service application.

Procedure:

  1 Open the **Run** dialog. Enter `services.msc` to open the **Services Manager**.

  2 Select **Motorola IMPRES Fleet Management Device Service**.

  3 Click **Start**.