



# PACCAR OVER-THE-AIR UPDATES

## QUICK REFERENCE GUIDE

### ABOUT OTA

- Peterbilt Class 8 trucks with a Model Year 2017 or newer PACCAR MX Engine and an active SmartLINQ® Remote Diagnostics subscription can update Engine and Aftertreatment software safely and securely via the PACCAR Solutions Portal.
- First time users must login to the PACCAR Solutions Portal or the Peterbilt SmartLINQ app and enable each chassis.

### TWO SEPARATE PROCESSES

1. **“Enabling” a Truck** – A one-time step to connect truck to PACCAR OTA system
2. **Performing an OTA Update** – Saves time. Safe and Secure. Flexible and Convenient.

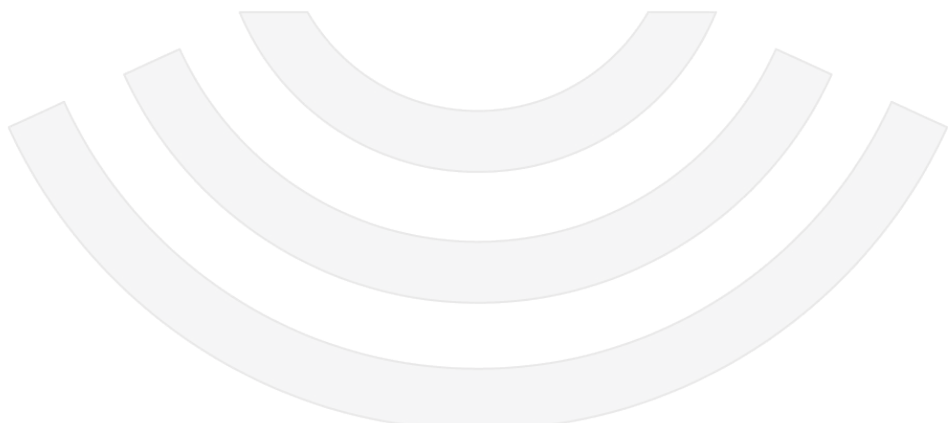
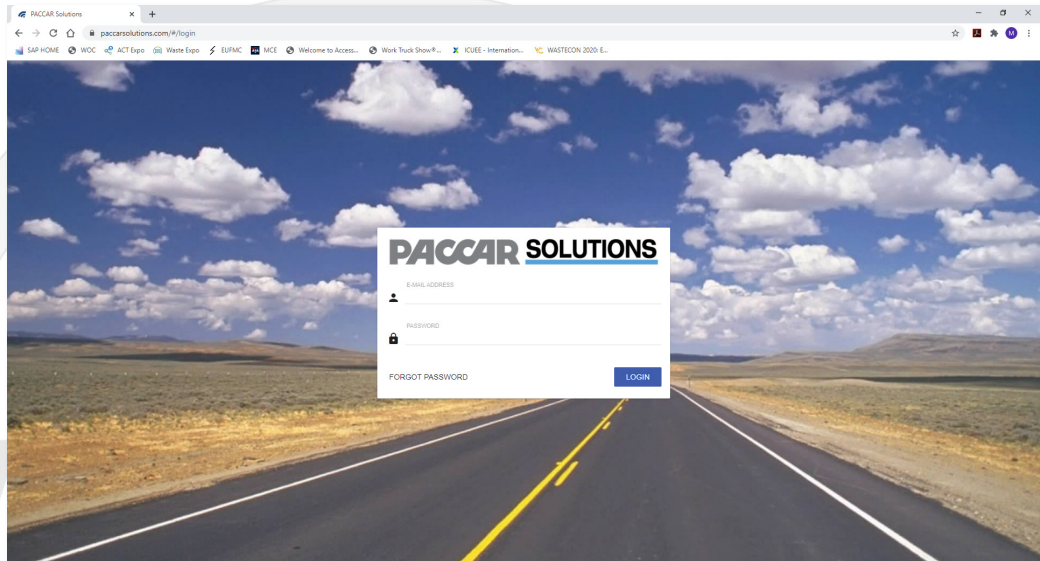
### “ENABLING” A TRUCK FOR OTA SOFTWARE UPDATES

#### What do I need?

- PACCAR Solutions Web Portal (to enable multiple trucks simultaneously) or Peterbilt SmartLINQ App (to enable one truck at a time)

#### Process:

1. To perform the Enabling process for one chassis, multiple chassis or your entire fleet, log in to PACCAR Solutions web portal. You may also use the SmartLINQ app with your PACCAR Solutions login credentials for single chassis Enabling.





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2. Toggle from Health to Software in the top right corner.  
Select Vehicles tab and Filter by “Not Enabled”.

Vehicles - Software

Dashboard > Vehicles

Health  Software

Vehicles  Not Enabled  Filter Results

Unit Number	Customer	Year	Make	Model	VIN	Installed Version	Recommended Version	Software Update Status
834-2342 BOLD Unit		2018	Peterbilt	579	1NRPDP9XSLJH474233			Not Enabled
		2019	Peterbilt	579	1NRPDP9XK0K031161			Not Enabled
		2019	Peterbilt	579	1NRPDP9XK0K031399			Not Enabled
		2019	Peterbilt	579	1NRPDP9X1K2484659			Not Enabled
		2020	Peterbilt	579	1NRPDP9X1LD647564			Not Enabled
		2019	Peterbilt	579	1NRPDP9X7K031397			Not Enabled
		2020	Peterbilt	579	1NRPDP9X8LD647562			Not Enabled
		2019	Peterbilt	579	1NRPDP9XK0K031398			Not Enabled
		2019	Peterbilt	579	1NRPDP9XK0K031169			Not Enabled
		2020	Peterbilt	579	1NRPDP9X1LD643070			Not Enabled

Maximum results reached. Recommend adding filters to refine your search or export the data for all entries.

Rows per page: 10 1 - 10 of 30685

3. To Enable an individual chassis, select the chassis number, to view the Vehicle Details screen.  
Click the “Enable Vehicle” button to initiate the Enabling process.  
The button will update to “Pending Enable”, until the process has completed.

PACCAR SOLUTIONS - Vehicle Details

Vehicle Details - Software

Dashboard > Vehicles > Vehicle Details

Health  Software

### Software Details

**Software Information**

**Not Enabled**  
The vehicle must be enabled to proceed with an OTA update.

SOFTWARE UPDATE STATUS  
Not Enabled

INSTALLED VERSION  
EMS MX13 MY2019\_RC03  
- Release Notes

RECOMMENDED VERSION  
EMS MX13 MY2019\_RC03  
- Release Notes

REQUESTED BY

**ENABLE VEHICLE**

**Vehicle Information**

CUSTOMER  
OZA Test

YEAR MAKE MODEL  
2020 Kenworth T660

UNIT NUMBER  
8445

DESCRIPTION

VIN  
1XKYDP9XSLJ383629

DSN  
7507363

MILEAGE (MI)  
2590.3

**Vehicle Performance**

FUEL ECONOMY (MPG)  
1.2

PERCENT IDLE (%)  
719.9

ENGINE HOURS (HRS)  
2063.6

### Software Log

Update Status	Previous Status	Update Version	Date/Time	Update Location	Requested By	Release Notes
Not Enabled	Up To Date	EMS MX13 MY2019_RC03	10/15/2020 1:43 PM			



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4. To conveniently Enable multiple chassis simultaneously or your entire fleet:

For multiple chassis, checkmark the specific chassis to Enable. To enable all visible chassis, simply click on the vertical ellipses to view the menu. Select “Enable Vehicles” or “Enable All Vehicles” to initiate the Enabling process. The status for each chassis will update to “Pending Enable”, until the process has completed.

The screenshot shows the 'Vehicles' page in the PACCAR SOLUTIONS interface. A table lists vehicle details including Customer, VIN, Unit Number, Installed Version, Recommended Version, and Software Update Status. A dropdown menu is open, showing options: INITIATE ALL DOWNLOADS, CANCEL ALL UPDATES, ENABLE ALL VEHICLES, EXPORT, BULK EDIT, and CONFIGURE COLUMNS. A red arrow points from the text above to the 'ENABLE ALL VEHICLES' option.

Customer	VIN	Unit Number	Installed Version	Recommended Version	Software Update Status
Peterbilt Customer	1XPB0P9X0GD359761	900	EMS MX13_MY2017_RC09	EMS MX13_MY2017_RC09	Ready To Install
Peterbilt Customer	1XPB0P9X0HD361379	925	EMS MX13_MY2017_RC09	EMS MX13_MY2017_RC09	Unsuccessful
Peterbilt Customer	1XPB0P9X0HD361382	928	EMS MX13_MY2017_RC09	EMS MX13_MY2017_RC09	Update Available
Peterbilt Customer	1XPB0P9X0HD361401	947	EMS MX13_MY2017_RC09	EMS MX13_MY2017_RC09	Ready To Install
Peterbilt Customer	1XPB0P9X0HD361432	984	EMS MX13_MY2017_RC09	EMS MX13_MY2017_RC09	Unsuccessful
Peterbilt Customer	1XPB0P9X0JD448589	111	EMS MX13_MY2017_RC09	EMS MX13_MY2017_RC09	Ready To Install
Peterbilt Customer	1XPB0P9X0JD448592	114	EMS MX13_MY2017_RC09	EMS MX13_MY2017_RC09	Ready To Install
Peterbilt Customer	1XPB0P9X0JD448608	130	EMS MX13_MY2017_RC09	EMS MX13_MY2017_RC09	Ready To Install
Peterbilt Customer	1XPB0P9X0JD448611	133	EMS MX13_MY2017_RC09	EMS MX13_MY2017_RC09	Ready To Install
Peterbilt Customer	1XPB0P9X0JD492334	142	EMS MX13_MY2017_RC09	EMS MX13_MY2017_RC09	Update Available

5. The vehicle must have good cellular reception and experience a key-on cycle within the next 24 hours to initiate the Enabling process. Once the Enabling process has completed, each vehicle's status will update to “Up to Date” or Update Available” and is ready for Over-the-Air updates.

The screenshot shows the 'Vehicle Details - Software' page. The 'Software Information' section shows a green checkmark and 'Up To Date' status, with a note: 'No OTA update is currently available for this vehicle'. Below this, it lists 'SOFTWARE UPDATE STATUS: Up To Date', 'INSTALLED VERSION: EMS MX13\_MY2019\_RC03', and 'RECOMMENDED VERSION'. The 'Vehicle Information' section lists details like CUSTOMER (OZA Test), YEAR MAKE MODEL (2020 Kenworth T660), UNIT NUMBER (9445), and DESCRIPTION. The 'Vehicle Performance' section lists FUEL ECONOMY (MPG) 1.2, PERCENT IDLE (%) 690.3, ENGINE HOURS (HRS) 2173.0, and SUBSCRIPTION STATUS (ACTIVE). A 'Software Log' table at the bottom shows a record for 'Up To Date' status, previous status 'Not Enabled', update version 'EMS MX13\_MY2019\_RC03', date/time '10/16/2020 10:12 AM', and update location '9729 Wadley Way Fort Worth, TX 76131'. A red arrow points from the text above to the 'Up To Date' status.

Update Status	Previous Status	Update Version	Date/Time	Update Location	Requested By	Release Notes
Up To Date	Not Enabled	EMS MX13_MY2019_RC03	10/16/2020 10:12 AM	9729 Wadley Way Fort Worth, TX 76131		



# PACCAR OVER-THE-AIR UPDATES

## QUICK REFERENCE GUIDE

### PERFORMING AN OTA UPDATE

Performing an OTA Software Update is a two-step process:

Step 1 –Download new software to the truck.

Step 2 –Install downloaded software to the engine.

### STEP 1 – DOWNLOAD NEW SOFTWARE TO THE TRUCK

The customer will be notified in the PACCAR Solutions portal when a new software update is available.

The truck will appear on the dashboard with “Update Available”.

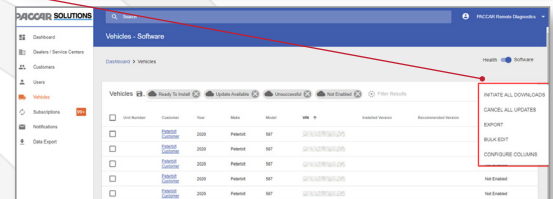
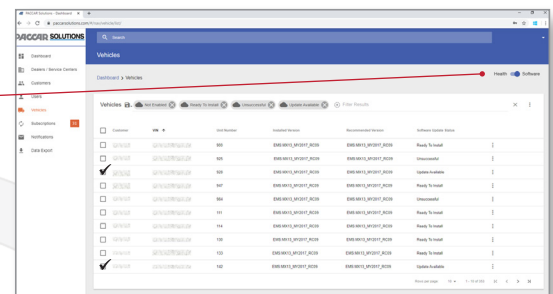
*What do I need?*

- The truck receiving the OTA update must have completed the one-time “Enabling” process (described on the previous page).
- PACCAR Solutions Portal ([www.PACCARSolutions.com](http://www.PACCARSolutions.com) or SmartLINQ mobile app)
  - Note: The user for this step must have ADMIN status on the customer’s PACCAR Solutions account.

*Process:*

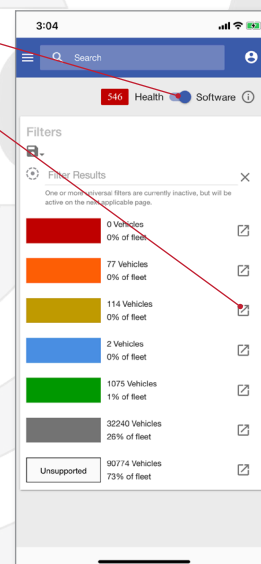
Using PACCAR Solutions Portal:

- In the PACCAR Solutions portal dashboard, a Customer Admin will toggle from “Health” to “Software”.
- In the “Vehicles” section, select the VIN that you want to download a software update.
- Select “Initiate Download” to queue the selected truck to receive a new version of the software. Confirm the download in the pop-up screen.
- The status of the selected trucks will move from “Update Available” to “Pending Download”.
- Within 24 hours, the software will be downloaded to the truck and the truck’s status will change to “Ready to Install”.



Using SmartLINQ mobile app:

- In the SmartLINQ mobile app dashboard, a Customer Admin will toggle from “Health” to “Software”, then click on “Update Available” status and select the chassis that they want to download a software update.



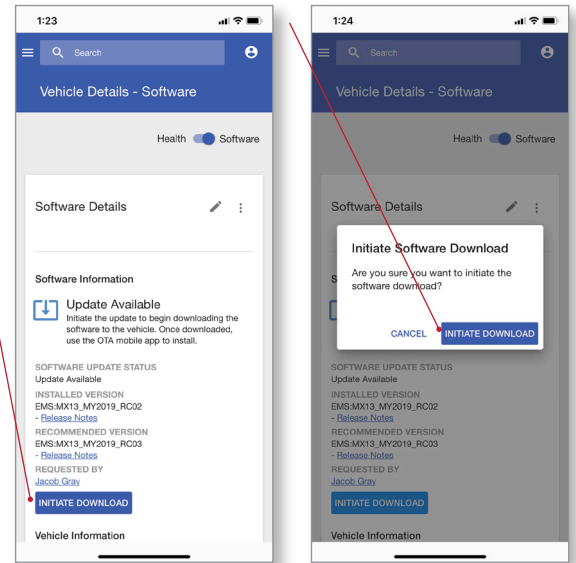


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Using SmartLINQ mobile app: *continued*

- Then select “Initiate Download” to queue the selected trucks to receive a new version of the software.
- The status of the selected trucks will move from “Update Available” to “Pending Download”.
- Within 24 hours, the software will be downloaded to the truck and the truck’s status will change to “Ready to Install”.



**SmartCARE PRO TIP:** To save time, you may queue multiple chassis for software download while they are still operating on a route. This prepares them for Step 2, once they arrive at the terminal.

# Over-The-Air



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## STEP 2 – INSTALL DOWNLOADED SOFTWARE TO THE ENGINE

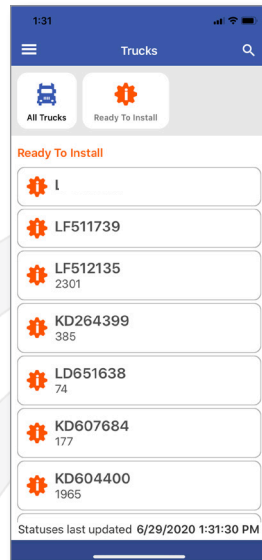
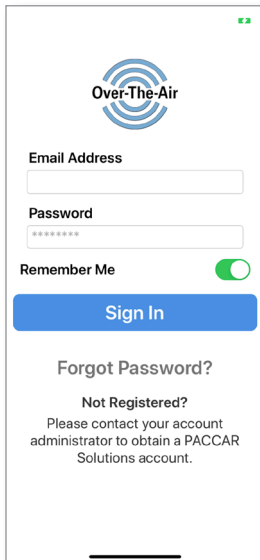
Trucks with a status of “Ready to Install” have had the software downloaded to the truck. It is now time to install this update to the engine.

### What do I need?

- Truck that is in “Ready to Install” status
- PACCAR OTA App on device with a charge level of > 20%
- One person in the truck with PACCAR OTA App, with visibility to chassis

### Process:

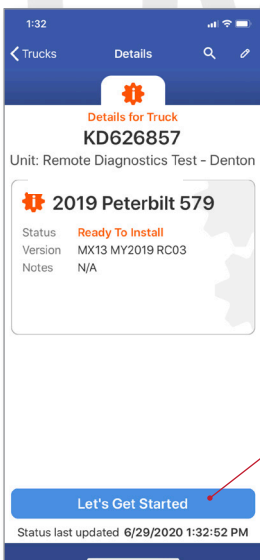
1. Sign in to the PACCAR OTA app with your PACCAR Solutions login credentials.
2. Select a VIN to update from the “Ready To Install” truck list or enter the VIN in the search bar or QR code reader. If using the QR code, scan the QR sticker on the rear of the driver’s door jamb, then confirm the correct chassis on the app screen.



Search Bar

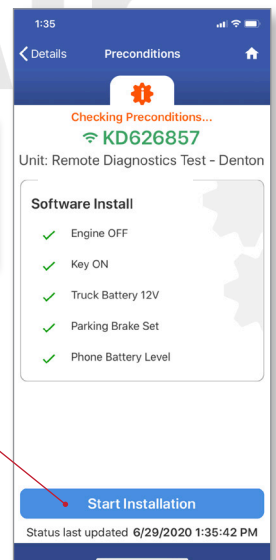
QR Code Reader

3. Select “Let’s Get Started”.



4. Follow the screen prompts:

- Turn the ignition key to the ON position. Do not start the engine.
- Press and hold the Cruise Control “SET” switch for 5 seconds when prompted.
- Preconditions will be verified:
  - Key is in ON position; Engine is OFF
  - Truck Battery is at least 12V
  - Park Brake Set
  - Phone Battery Level
- Once preconditions are verified, click “Start Installation”.

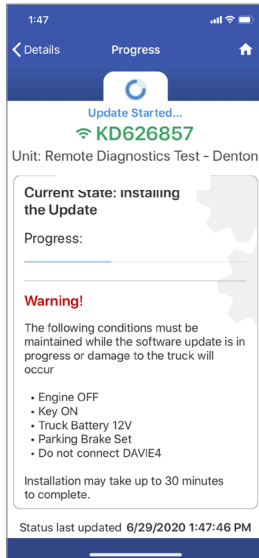




# PACCAR OVER-THE-AIR UPDATES

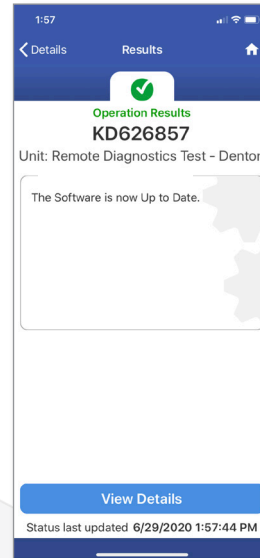
## QUICK REFERENCE GUIDE

5. A status bar will indicate the progress of the update installation. This step may take up to 30 minutes. A list of vehicle conditions will be shown that need to be maintained during the update process.



6. Once prompted, turn the key OFF.

7. After 15 seconds, turn the key back to the ON position and leave it ON until an “Up to Date” status appears in the PACCAR OTA app for that chassis. The update process is now complete.



**SmartCARE PRO TIP:** To save time, you may begin another install once the status bar is showing progress.

### Need more information?

- Additional information is available in the PACCAR Solutions portal or the SmartLINQ app. Click on your user profile and select HELP. In the Support Documents section, search “OTA”.
- View Over-The-Air videos on Peterbilt's [YouTube page](#).

# Over-The-Air



# PACCAR OVER-THE-AIR UPDATES

## FREQUENTLY ASKED QUESTIONS

### ***What Peterbilt trucks are capable of OTA updates?***

- Model Year 2017 or new PACCAR MX Engine running EPA 17 software
- An active SmartLINQ® Remote Diagnostics subscription
- OTA capable firmware on truck modem
- ECU firmware must be OTA Capable
  - VECU trucks: Must have software version R6 or newer.
  - Pre-VECU trucks: Must be updated via DAVIE4 tool to become OTA supported.
- Truck must complete the one-time “Enabling” process prior to performing the first OTA update.

### ***What are the benefits of doing a software update Over-The-Air?***

- **Increase Uptime** - Follow the SmartCARE Pro-Tips during the “Enabling” process or while installing an OTA update to complete multiple trucks simultaneously.
- **Flexibility** - Decide when and where you want to install software updates, without taking up space in your service bay.
- **Convenience** - Software updates can be downloaded to the truck at any time and are ready for installation when convenient.

### ***What tools are needed for this process?***

- See the “What Do I Need” section in the instructions.
- The PACCAR OTA app, the Peterbilt SmartLINQ app and the PACCAR Solutions portal all utilize the same login credentials. The apps are available on the Apple App Store and on Google Play.

### ***How do I know if a truck has been “Enabled” and is now connected and ready for an OTA Update?***

- The PACCAR Solutions web portal and SmartLINQ app identify trucks that are “Not Enabled”. In the “Software” section of the portal, trucks that need to be “Enabled” are listed as “Not Enabled” or “Unsupported”.
- If the truck is listed as “Unsupported” and it meets the criteria of being capable of OTA Updates, please send an email to [PeterbiltOTASupport@PACCAR.com](mailto:PeterbiltOTASupport@PACCAR.com).
- If the truck is listed as “Not Enabled”, complete the “Enabling Process”.

### ***How do I know if the “Enabling” process successfully completed?***

- In the “Software” section of the PACCAR Solutions portal, the truck status will move from “Not Enabled” to “Up to Date” or “Update Available”.

### ***How do I know if a truck has a software update available?***

- The PACCAR Solutions web portal and SmartLINQ app identify trucks that have a software update available. In the “Software” section of the portal, trucks with a software update available are listed as “Update Available”.

### ***How do I know if the truck’s modem has a new software downloaded and is ready to install to the engine?***

- In the “Software” section of the PACCAR Solutions portal, the truck status will show “Ready to Install”.

### ***Do I need to be with the truck while performing OTA updates?***

- The OTA mobile app does not need to be with the vehicle when performing OTA updates.
- OTA uses two-factor authentication in order to verify that you have the correct truck.
  - First, you must have access to the truck in the PACCAR Solutions portal.
  - Second, someone at the truck needs to perform two actions during the update – holding the Cruise Control SET switch for 5 seconds to connect to the truck, and turning the key OFF for 15 seconds when the update has completed.
- If desired, these actions can be completed by someone with the app, providing instructions to someone at the truck.





## **PACCAR OVER-THE-AIR UPDATES**

### **FREQUENTLY ASKED QUESTIONS** continued

#### ***After initiating a software download, how long does it take for the OTA package to reach the truck(s)?***

- If the truck is on the road with good cellular network coverage, the update should be “Ready To Install” within approximately 15 minutes. It is recommended to initiate the download a few days before you plan to perform the installation to ensure that the update is at “Ready to Install” status upon the truck’s arrival.

#### ***When an update is “Ready to Install”, how long do I have to install the new software to the engine?***

- Once downloaded and in “Ready to Install” status, an OTA update will be available to perform for six months. If a newer update is released during this period, the truck will return to “Update Available” status. When the next download is initiated, it will overwrite the previous download stored on the truck.

#### ***What do I do if my truck doesn’t have a cruise control switch on the steering wheel?***

- Look for a Cruise Control SET switch on the dash. In order to activate a dash-mounted switch during the “Enabling” process or while installing a software update, hold the Cruise Control SET switch in the UP position.

