



# PREVOST

## MAINTENANCE INFORMATION

### MI20-09A

DATE :	April 2020	SECTION : 00 GENERAL
SUBJECT :	<b>PREVOST VEHICLE DISINFECTION PROCEDURE</b>	

Revision A:

05-14-2020

### APPLICATION

Model	VIN	
ALL PREVOST VEHICLES		

### DESCRIPTION

This Maintenance Information is intended to provide recommendations regarding vehicle disinfection during pandemic times. Following the recommendation listed in this document and proceeding to the disinfection of listed area of the vehicle will help to reduce the risks related to virus transmission to passengers and vehicle operators.

### IMPORTANT NOTICE

*Follow all CDC (Center for Disease Control and Prevention) policies regarding COVID-19 prevention while working on the vehicle.*

*-Practice social distancing while cleaning – 6 feet (2 meters) min.*

*-Also wear appropriate PPE (personal Protection Equipment) Including but not limited to: Disposable gloves, gowns and face masks as well as eyes protection (shield or goggles). Follow CDC recommendations*

*Refer to CDC documentation: What Bus Transit Operators Need to Know About COVID-19. Check regularly for updated information.*

<https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/transit-maintenance-worker.html>

<https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html#Cleaning>

[https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Fhealthcare-supply-ppe-index.html](https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Fhealthcare-supply-ppe-index.html)

**RECOMMENDED PRODUCTS AND USE**

PRODUCT TYPE	USE
Soap/Detergent	Recommended for all soft (porous) surfaces like carpeted areas, seats and safety belts.
Isopropyl Alcohol (70% mixture)	For small, hard (non-porous) surfaces like <b>handrails</b> , handles, belt buckles <b>steering wheel</b> and most of the driver's controls & electronics. Can also be used on leather or vinyl seats.
Disinfectant*	For large area, hard (non-porous) surfaces like flooring, overhead compartment doors and interior trims.

\*Refer to page 18 of the APTA American Public Transportation Association - The COVID-19 Pandemic Public Transportation Responds: Safeguarding Riders and Employees for an approved list of disinfectants.

- A DISINFECTANT SOLUTION CAN BE PREPARED BY MIXING 5 TABLESPOONS (1/3rd CUP) OF HOUSEHOLD BLEACH (SODIUM HYPOCHLORITE) WITH A GALLON OF WARM WATER.

THIS SOLUTION WILL LOSE ITS EFFECTIVENESS IN ABOUT 24 HOURS. MAKE A NEW BATCH EVERY DAY.

- DO NOT USE HYDROGEN PEROXIDE BASED CLEANING SOLUTION.

 CAUTION
<ul style="list-style-type: none"> <li>- <i>Do not add more than the recommended bleach concentration (1/3<sup>rd</sup> cup per gallon). Use of a higher concentration could damage some of the coach interior surfaces.</i></li> <li>- <i>To be effective, a <u>60 seconds minimum</u> (wet) contact time must be observed with the surface (at the specified bleach concentration).</i></li> <li>- <i>Make sure surface has dried completely before boarding passengers (to minimize risk of passenger cloth discoloration and vapor exposure).</i></li> </ul>

When using commercially available cleaning products, follow the manufacturer's recommendation for application, contact time, required personal protection equipment (PPE) and ventilation.

Do not mix products containing bleach (sodium hypochlorite) with ones containing ammonia.

When diluting products, use the warmest possible water.

Alcohol solution used to disinfect non-porous surfaces must contain 70% isopropyl alcohol (as opposed to 60% for hand cleaning).

Always use wet method to clean vehicles; avoid dry sweeping. It must be assumed that a virus can survive up to 72 hours on solid (non-porous) surfaces and *may* become airborne if on dust.

## UNDERSTANDING THE DIFFERENCE BETWEEN CLEANING AND DISINFECTING.

According to the Center for Disease Control and Prevention (CDC), **CLEANING** refers to the removal of germs, dirt and impurities from surfaces. It does not kill germs, but by removing them it lowers their numbers and the risk of spreading infection.

Cleaning is an important process already performed by coach operators during their regular activities (end of day or end of shift). Operators must continue and increase as much as possible the frequency of their cleaning routine during pandemic times.

**DISINFECTING** refers to the use of chemicals to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.

Disinfecting is an additional process (applied to specific high traffic - high contact areas of the coach) that should be performed by coach operators after the regular cleaning process to further reduce the risk of virus propagation during pandemic times.

## PROCEDURE



Park vehicle safely, apply parking brake, stop engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button. On Commuter type vehicles, set the battery master switch (master cut-out) to the OFF position.

1. If possible, the vehicle central HVAC should be run at fresh air setting and at the highest setting possible. *Change filters regularly. Do not run the parcel rack HVAC* since this unit recirculates internal air not bringing outside fresh air.
2. If HVAC cannot be activated (vehicle not running), open side windows as much as possible to increase ventilation.
3. Proceed to the regular cleaning of the vehicle.
4. Follow cleaning with disinfecting process. Use the checklist provided at the end of this document to ensure that all areas of concern are disinfected. Checklist can be printed and dispatched to maintenance crew.



## VEHICLE QUARANTINE PROCEDURE (APTA RECOMMENDATION)

### IF A VEHICLE WAS SUBJECTED TO A KNOWN VIRUS EXPOSURE, PROCEED AS FOLLOWS:

- Develop protocol for cleaning and disinfecting a vehicle after a person with COVID-19 was known to be in the space:
- Designate special “quarantine” parking zones for any vehicles that have suspected or known exposure to the virus.
- If the operator is still in the vehicle immediately after known exposure, ask the operator to perform the following steps, which allow for sufficient air changes to remove potentially infectious particles:
  - Park the vehicle in designated area.
  - Leave the engine running and turn on HVAC to maximum fan speed.
  - Open windows (if possible) and vehicle door.
  - Use lockdown procedures to ensure nobody can enter/exit vehicle while quarantined; this could include additional steps such as license plate removal and placing caution/warning signs on the vehicle.

Based on guidance provided for cleaning/disinfecting the vehicles, as long as air changes are occurring in vehicle via continuous running of HVAC and/or opened windows while vehicle is in use, **personnel can enter the vehicle for cleaning/disinfection after approximately 30 minutes.**

*Refer to page 6 of the APTA American Public Transportation Association - The COVID-19 Pandemic Public Transportation Responds: Safeguarding Riders and Employees for additional information.*

*Also consult this CDC information :*

*<https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/disinfecting-transport-vehicles.html>*

## VEHICLE DISINFECTION CHECKLIST – TO BE PERFORMED AFTER CLEANING

*Please take note that vehicle may not be equipped with some of the equipment listed below. Operators must adapt the procedure to each vehicle configuration.*

### PASSENGER AREA:

- |  |  |
|--|--|
| <input type="checkbox"/> Aisle & steps flooring.   | <input type="checkbox"/> Overhead console (buttons, air registers and lamps).  |
| <input type="checkbox"/> Entrance door handrails.  | <input type="checkbox"/> Seat belts (including both male and female buckles).  |
| <input type="checkbox"/> Seats.  | <input type="checkbox"/> WCL straps, belts and buckles (if so equipped).   |
| • Headrest.  | <input type="checkbox"/> Microphones (all types).  |
| • Back rest (both sides).  | <input type="checkbox"/> Front modesty panels (both sides).  |
| • Arm rests and reclining buttons.   | <input type="checkbox"/> Remote controls (audio video equipment).  |
| • Around USB and AC power outlets.   | <input type="checkbox"/> Display screens.  |
| <input type="checkbox"/> Side windows, window frames, lower grill and emergency exit handles.                | <input type="checkbox"/> Remove and discard all magazines, flyers, brochures or maps supplied by the operator or left by passengers. |
| <input type="checkbox"/> Overhead storage compartment doors and lock button.                                 |  |
| <input type="checkbox"/> Overhead storage compartment baggage retaining straps (if not equipped with doors). |  |

### LAVATORY:

- |   |   |
|---|---|
| <input type="checkbox"/> Lavatory door and, handles and lock button (both sides). | <input type="checkbox"/> Faucets and handles.                     |
| <input type="checkbox"/> Toilet seat, cover and flush handle.                     | <input type="checkbox"/> Hand sanitizer dispenser body.           |
| <input type="checkbox"/> Trash can opening.                                       | <input type="checkbox"/> Paper dispenser (toilet and hand paper). |

### DRIVER'S AREA (use alcohol based disinfectant):

- |   |  |
|---|--|
| <input type="checkbox"/> Steering wheel (including horn & control buttons)                              | <input type="checkbox"/> Left console buttons and transmission controls.       |
| <input type="checkbox"/> Steering column levers.  | <input type="checkbox"/> Destination sign controls                             |
| <input type="checkbox"/> Side window(s)   | <input type="checkbox"/> Handheld communication device and screens             |
| <input type="checkbox"/> Seat and seat controls   | <input type="checkbox"/> Back panel (modesty & clear screen)                   |
| <input type="checkbox"/> Dashboard buttons and controls (including audio/video, radio and AC controls). | <input type="checkbox"/> Utility compartments (console drawers, door & button) |

### EXTERIOR

- |  |   |
|--|---|
| <input type="checkbox"/> Entrance door opening switch.     | <input type="checkbox"/> Engine doors handles and/or latches (rear, radiator & compressor). |
| <input type="checkbox"/> Baggage compartment door handles. | <input type="checkbox"/> Evaporator & condenser door latches & handles.                     |
| <input type="checkbox"/> WCL door handle.                  | <input type="checkbox"/> Fuel & DEF traps and fill caps.                                    |
| <input type="checkbox"/> WCL remote controls.              |   |

## PARTS / WASTE DISPOSAL

Discard according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)  
Follow current health agencies recommendation regarding waste disposal



### CAUTION

All waste coming from the vehicle must be considered as potentially contaminated, including dust and particles (vacuum cleaner content). Handle accordingly.



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