Memorandum

To: **All Thomas Dealers**

From: **Mike Stotler**

Subject: **COVID-19 BUS CLEANING INSTRUCTIONS**

Date: **March 24, 2020**

The emergence of the novel coronavirus COVID-19 as a global health concern has raised question about high touch areas, such as those in our school buses along with the cleaning of inanimate surfaces. Our dealers and customers are looking for information to assist them in making cleaning and disinfecting decisions while the students are out of school and buses are available. We have received inquiries and questions about many different products and chemicals and whether or they can be used. We are providing this as guidance in your efforts and to address the questions we have received for information.

We understand there is a lot of information being published, from a variety of sources, about the virus on surfaces and how long it could last. We are not providing any of the science or rationale for the scientific studies nor addressing those findings. Our goal is to provide some information from our material suppliers where they have some knowledge of products that can be used on their parts. We are providing guidance to support you and understand it is your decision to take action you deem necessary to support your individual situations.

The school bus is filled with different materials that require cleaning and disinfecting differently, and we have reached out to our suppliers to understand what can and cannot be used on the interior surfaces. We have additionally used guidance from the CDC-Centers for Disease Control and

the EPA- Environmental Protection Agency where helpful to support you and the information provided.

General Cleaning and Disinfecting Guidelines:

- Follow all safe handling and safety instructions on the cleaner/chemicals being used
- Use personal protection equipment such as gloves or other guidelines for safe usage and handling
- Towels used should be clean and free of any oils, dirt, debris, residue from other chemicals. Do not want to mix chemicals
- Have appropriate ventilation as specified by the cleaners/chemical agents instructions for safe usage and handling
- Use personal protection equipment such as gloves to prevent direct contact with chemicals that may affect skin. See instructions
- If splashing is possible, use personal eye protection equipment such as a face shield or goggle equipment to prevent potential eye contamination.

When Cleaning/Disinfecting Surfaces

- Surfaces may need to be "cleaned" before they are "sanitized /disinfected". Remove dirt, debris from surfaces before sanitizing.
- If the cleaner/disinfectant is not Ready To Use (RTU) on a wipe, apply the cleaner to your towel and not directly to the surface
- Do not soak, saturating or leave puddles of cleaner/chemicals. Use enough to wipe off and not leave puddling or soaking. This can be harmful to material and soak through.

Products Recommended for Metals (e.g. Sidewalls) surfaces that are Ready To Use (RTU) and require no Dilution with water.

- **Quarantine** bus for 48hrs* if possible. * Specified by supplier and supported by The Journal of Hospital Infection
- **Alcohol** Isopropyl alcohol (70% - known as Rubbing alcohol preferred) might be in short supply
- **De Natured Alcohol** (next best option) sold in paint aisle's at Home Depot & Lowes in quarts and gallons, more available than Isopropyl alcohol

Products Recommended for Seating Surfaces & Plastics that are Ready To Use (RTU) and require no Dilution with water

- Fantastik Antibacterial All Purpose
- Formula 409 Antibacterial All Purpose Cleaner
- Lysol Foaming Disinfectant Cleaner
- Virox 5 RTU
- Oxivir TB Wipes (ready to use wipes)

Specific to seating surfaces, we have been asked specifically about a product "Mediclean" and "Common Bleach".

Mediclean: This product is recommended to be used only in a diluted form with a water to cleaner ratio of 10:1. Please follow product guidelines for making dilution mixtures.

Common Bleach: This product is recommended to be used only in a diluted form with a water to bleach ratio of 10:1. Any surface cleaned with a diluted bleach solutions MUST be additionally wiped with clear water after the diluted solution is used and wiped off. Water wiping is a second operation after using the diluted solution.

Products not recommended for surfaces.

- Pure Bleach or Pure Hydrogen Peroxide on vinyl (seating surfaces) or plastic: Can cause damage to vinyl and plastics
- Pure or diluted bleach on fabric e.g. seatbelts: Can weaken the fabric potentially compromising safety over time
- Ammonia based products on plastic or vinyl: Ammonia breaks down vinyl and can make it sticky or tacky when subjected to heat and light.
- Ammonia based product on touch screens: Will damage the anti-glare and anti-fingerprint coatings.

Sources:

CDC Website for Coronavirus COVID-19 Information
The Journal of Hospital Infection
CDC's FAQ page