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- SUBJECT:** **NO SMOKE EXHAUST CAPTURE SYSTEM**
- PURPOSE:** The purpose of this SOG is to define the NO SMOKE system and establish procedures for its use.
- DEFINITION:** **NO SMOKE** is an exhaust capture system that removes particulates from the exhaust of diesel engines. It does this by diverting exhaust from the regular exhaust system into a parallel system that contains a filter. It normally functions during start up, when backing, and when manually overrode. This is necessary as the system will reduce power when the vehicle is driven down the road. It would not noticeably reduce power when the engine is pumping on a scene.
- REFERENCE:** All diesel response vehicles that do not have the newer regeneration systems (Shop 28 and Shop 25).
- SCOPE:** All department personnel.
- PROCEDURE:** Normal Operation
- After starting an apparatus, the NO Smoke system will engage in 4 seconds and operate for an additional 25 seconds. This will allow the apparatus to exit the station while the system is operating.
 - After placing an apparatus in reverse, the NO SMOKE system will engage in 4 seconds and operate for an additional 25 seconds. This will allow the apparatus to back into the station and be shut down with the system operating.
 - Shop 5 (E27), Shop 23 (R27) and Shop 21 (TO26) have a drive through button. The intent of the drive through button is, after pushing the button, to drive into the station, park the vehicle, and shut off the vehicle with the system still engaged.
- Dashboard Switches
- **Red Light:** Signals driver that filter is reaching its capacity and must be replaced. When filter is full, back pressure will automatically place diverter valve into the straight exhaust position until the filter is changed. This allows the apparatus to be used as if the NO SMOKE was not installed. This would be reported in Fire House for service.
 - **Toggle Switch:** Normal setting is the ON position (switch is UP and the green light is ON). Switch should be left in this position while the vehicle is parked in the station. When starting the engine, the exhaust will then be diverted through the filter for a



preset time (twenty-five seconds), allowing time to exit the station.

- **NOTE:** Toggle switch in the OFF position (green light OFF and switch in DOWN position) should only be used when an apparatus is being backed around personnel for an extended distance such as loading hose at fire scene or when stopping and starting of the engine will occur frequently. In these cases, the switch in the OFF position will conserve filter life.
- **Manual Override:** Push switch UP to hold system in filter mode beyond the normal timing sequence. This switch should only be used when maintenance work is performed which requires the engine to be running.
- **NOTE:** *Manual Override switch in the UP position should be used on scene if this would provide a healthier environment for the patient or crews, who may be working in the area of the exhaust outlet. This should be used while driving in a parade.*

IMPORTANT: The Manual Override switch must be down for the system to operate properly. **Failure to return system to proper operating mode by pushing switch DOWN will cause premature filter buildup, cause the vehicle to lose power, and require early filter replacement.**