REGEN PROCEDURE
for
CAT and DETROIT DIESEL Series 60

HOW TO PERFORM A "PARKED REGEN"

- **Must** have the DPF light on or flashing  to REGEN. Engine should be at 140 or above.
- Insure tailpipe and surrounding area is clear. **Must be done outside.**
- Set wheel blocks, start apparatus with parking brake set and in neutral.
- Release parking brake.
- Place transmission in "D", watch transmission "Monitor" to show "1".
- Return to neutral.
- Set Parking and Front Brakes.
- Request a "PARKED REGEN"
- **CAT and Pierce Arrow XT with Detroit Diesel Series 60**
  - Under dash, far left side, behind grab handle, far left bottom switch marked "REGEN"
  - Push and hold for 5 seconds, release.
- **International Chassis (water tenders, etc…)**
  - To right of steering column, switch on left marked "PARKED REGEN"
  - Push and hold for 5 seconds, release.
- Idle should increase on its own, REGEN will start.
- DPF light will go out shortly after starting, REGEN is continuing until a return to idle. (20-60) minutes.
- When Apparatus returns to idle with a successfully completed REGEN, complete **ENGINE REGENERATION RECORD in** Engineer Manual**.**

To interrupt "PARKED REGEN", release parking brake and wait to return to idle.
To interrupt "AUTOMATIC REGEN", use "REGEN INHIBIT" switch.

REGEN TYPES

- **PASSIVE-** Will occur when driving. No DPF burn, just higher exhaust temps. No action required by operator.
- **AUTOMATIC-** Active burn off of soot occurs while driving. Must be sustained "Freeway" driving or pumping of 45-60 minutes. No action required by operator.
- **PARKED-** Operator uses on board "REGEN" switch to initiate a REGEN. Works for all levels. 45-60 minutes.
- **LAPTOP-** Used by the shop to perform a REGEN when all other attempts have failed. Only true way to check and analyze system performance.

OTHER TIPS

- **CAT ARD HEAD CLEAN-** On Cat-equipped engines, if the "ARD Clean" Green LED is on (next to park brake control), attempt to continue driving or park &idle whenever possible. This will extend regen intervals & reduce out of service events.
- **INHIBIT REGEN-** If using vehicle vocationally (PTO engaged-pumping, aerial ops, etc.) and regen starts but must be interrupted, depress "Regen inhibit" switch for 5 sec. & release. It's adjacent to the "Request Regen" switches on Pierce and internationals.
- **Strike Team Response-** If freeway driving and the DPF light comes on, you can keep driving to allow an "automatic" regen. Stop and perform a "manual" regen if DPF light starts to flash, "Check Engine "light comes on or you're at the incident.

REGEN Procedure for CAT and Detroit Diesel Series 60 Engines

	The amber **Check Engine Lamp (CEL)** warning light indicates a fault with the engine controls or after treatment controls and/or components has occurred. The operator can drive the vehicle to the end of their shift and call service to remedy the problem.
	The red **Stop Engine** warning light indicates a major engine fault that may result in engine damage. The operator should move the vehicle to a safe location and shutdown the engine.
	The **Malfunction Indicator (MIL)** light provides an indication to the vehicle operator that a fault has occurred on an emission related component. This light may illuminate at the same time as the Check Engine light. The operator can drive the vehicle to the end of their shift and call service to remedy the problem.
	**High Exhaust System Temperature (HEST) Automatic** (passive) regen occurring. Continue to drive or park with the high idle on when possible. This will extend regen intervals. No other action required. No need to log this event. Note difference between this & the DPF light.

	The **Diesel Particulate Filter (DPF)** light will illuminate when a regeneration is necessary. There are progressive stages of need for regeneration indicated by this light:
LEVEL 1  *(SOLID)*	1. DPF on solid (low to medium levels of particulate build-up). The vehicle requires regeneration but should be able to complete the current mission. Perform a regeneration in a reasonable amount of time. • **In Service.** • **Ensure the Regen Inhibit Switch is not activated.** • **Initiate a DPF regeneration by switching to a more challenging duty cycle (such as highway driving for at least 20 minutes or pumping) OR perform a parked regeneration.**
LEVEL 2  *(Flashing)*	2. DPF flashing (medium to high levels of particulate build-up). DPF reaching system limits and regeneration required as soon as possible. • **Out of Service.** • **Perform a Mandatory Parked Regeneration as soon as possible.** • **Complete Regeneration Record**
LEVEL 3  *(Flashing)*	3. DPF flashing, CEL lit. System has REACHED limitations. • **Out of Service.** • **Return to quarters** • **Contact Repair Facility- Requires mechanic to do Laptop regen. Engine Damage will occur with continued operation.**
LEVEL 4  *(Flashing)*	4. DPF flashing, CEL lit, and Stop Engine light lit. System has EXCEEDED limitations. ENGINE SHUTDOWN. • **Out of Service. Stop when safe.** • **Shut down engine** • **Contact Repair Facility- Requires mechanic to do Laptop regen. Engine Damage will occur with continued operation.**