Checklist against fire for buses/coaches

Regular vehicle maintenance contributes to the early identification of vehicle problems and defects that are likely to cause a fire. IRU has developed this checklist of recommended periodic inspections to prevent vehicle fires.

Driver duties

**Before starting a journey**
The driver must always check:
- The tyre pressures (visual check on a daily basis, test tires on a weekly basis). Dual tyres should not be touching.
- That no liquids are leaking underneath the vehicle (visual check). Check that the muffler is not leaking oil and there is no excessive blue smoke.
- The proper functioning of the preheating systems (engine and interior).
- That the exhaust system is free from debris.

**When operating a vehicle**
The driver must:
- Check the coolant temperature gauge.
- Check fire detection system signal (vehicles must be equipped).
- Check smoke or heat detection systems inside the compartment (vehicles must be equipped).
- Regularly check the tyre pressure monitoring system (if vehicle equipped).
- Avoid any overheating. Stop the vehicle if the engine, brakes or retarder overheat, or if there is an unusual odor or smoke.
- Park in a safe area.
- Avoid overloading because it increases all temperatures.
- Record in the daily operation report any malfunction related to mileage or time.
- Check all warning lights.
- Check the proper functioning of the retarder (hydraulic or electric).

**After completing a journey**
The driver must:
- Inform the technician/next driver of any malfunctions.
- Hand over to the technician or fleet manager the daily operation report (copy).
- Following a visual check of the engine compartment and surrounding vehicle equipment, inform the technician of any problems.
- Ensure that any waste and litter is removed from the vehicle.
- Make sure all external heat sources, e.g. cooking and/or heating equipment is switched off.

**When returning a vehicle**
The driver must:
- Park the vehicle with the main battery switched off (if applicable). This will disconnect the batteries from the alternator, eliminating the risk of fire due to an internal electrical failure.
Duties of vehicle maintenance staff

The technician in charge of vehicle maintenance must regularly check that:

- All reports of defects from drivers are acted upon and the remedial action is recorded and filed.
- The fire detection systems in the engine compartment are connected.
- The smoke detection systems in the toilets and the driver sleeping compartment are properly connected.
- The B+ (direct battery feed) cable of the alternator and the B+ cable of the starter are properly connected.
- There are no loose wires and cables are not touching the ground.
- No liquids (fuel, power steering fluid, engine oil, hub/gear oil) can come into contact with a hot surface.
- No oil is leaking from the waste gate pivot of the turbocharger.
- Coolant and oil levels are sufficient (check on a weekly basis).
- Sensors are not leaking.
- There is no fuel or oil inside the engine compartment on isolation materials.
- The fuel lines are not leaking.
- The retarder (gas exhaust, hydraulic or electric) is functioning properly. There are no defects in the environmental equipment (broken valves, lines, no leaking of fluids).
- The exhaust system is airtight/isolated.
- The preheating systems are running correctly (engine and interior).
- The wheel hubs are sufficiently greased.
- The brakes are in good working order.
- There are extinguishers in the vehicle and they are in good working order.
- The emergency exits function properly.

Actions to be taken in the event of a fire

Try to park the vehicle in a safe area.

Inform appropriate emergency services, giving as much information about the incident or accident and passengers involved as possible.

Apply the parking brake.

Where appropriate and safe to do so, use the fire extinguishers to put out small initial fires. DO NOT OPEN THE ENGINE COMPARTMENTS IF FIRE OCCURS.

Inform the crew to take a safe distance from the vehicle.

Put on high-visibility vests and place the self-standing warning signs as appropriate. Secure the incident area.

Open doors in order to let passengers get out fast.

Make sure the crew is at a safe distance from the vehicle.

Stop the engine. Isolate the battery by activating the master switch, where available. Switch off the air-conditioning/heating.

Move away from the vicinity of the accident or emergency, advise other persons to move away and follow the advice of the emergency services.

Identify the source of the fire.

Report the incident to company management.

This checklist is provided to you by the IRU Academy, the training arm of the International Road Transport Union (IRU).

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