

Correct as at 26th April 2026. It may be superseded at any time.

Extract taken from: In-service certification (WoF and CoF) > Forklifts > Exhaust

## 11 Exhaust

### 11-1 Exhaust system

#### Reasons for rejection

#### Mandatory equipment

1. A forklift is not fitted with an exhaust system that includes a means of sound reduction (Note 1).

#### Condition

2. An exhaust system is not securely mounted.
3. The exhaust system is so constructed or modified that its operation or effectiveness can be readily interfered with.
4. The exhaust system is so constructed that emitted heat or fumes are likely to harm vehicle occupants, eg the exhaust gases are not directed away from the perimeter of the vehicle's passenger compartment.

#### Performance

5. There is a leak of exhaust fumes from the exhaust system.
6. The noise output is noticeably and significantly louder than it would have been when the vehicle was manufactured with its original exhaust system.

#### Note 1

**Exhaust system** means a pipe assembly through which the engine exhaust gases pass to the atmosphere and includes some means of sound reduction such as a silencer or resonator.

## Summary of legislation

#### Applicable legislation

- [Land Transport Rule: Vehicle Equipment 2004](#).

#### Mandatory equipment

1. A forklift with an internal combustion engine must be fitted with an exhaust system (Note 1).

## Condition

2. An exhaust system must not be constructed or modified in a way that allows a person to interfere readily with its operation or reduce its effectiveness.
3. An exhaust system must be designed, constructed, positioned and maintained in a way that minimises the risk of heat or fumes emitted from the system harming the vehicle's occupants.

## Performance

4. An exhaust system must be effective and in good working order.
5. Noise from an exhaust system must not be noticeably and significantly louder than it would have been when the vehicle was manufactured with its original exhaust system.

# 11-2 Exhaust emissions

## Reasons for rejection

### Performance

1. A forklift with the engine at normal operating temperature (Note 1), other than a forklift in Reason for rejection 2, emits clearly visible smoke ([Technical bulletin 8](#)) from the exhaust tail pipe (Note 2):
  - a) for a continuous period of five seconds when the engine is idling, or
  - b) as the engine is being rapidly accelerated to approximately 2500rpm or approximately half the maximum engine speed (whichever is lower) (Note 3).
2. A forklift fitted with an engine that is designed in a way that the forklift cannot reasonably comply with Reason for rejection 1 emits smoke that is noticeably and significantly more visible than it would have been when the vehicle was manufactured and supplied with the recommended fuel (Note 4).

### Note 1 Test procedure

- a) Carry out the idling and acceleration tests in Reason for rejection 1. A vehicle that passes both tests with the engine below normal operating temperature is deemed to have passed with the engine at normal operating temperature.
- b) If the vehicle has failed either test, ensure the engine is at normal operating temperature. Then purge the system by increasing the engine speed to 2500rpm (or half the maximum engine speed if this is lower) and holding it there for about five seconds. Repeat the idling and acceleration tests in Reason for rejection 1.

### Note 2

Visible emissions caused by the condensation of water vapour do not count as smoke.

### Note 3

During the acceleration test, a diesel-powered vehicle may emit a moderate amount of smoke if this is caused by turbo lag.

#### **Note 4**

The vehicle inspector may need to take into account information from the vehicle manufacturer or their representative or other appropriate expert, eg about older or unusual forklifts.

## **Summary of legislation**

### **Applicable legislation**

- [Land Transport Rule: Vehicle Exhaust Emissions 2007.](#)

### **Performance**

1. A forklift must not emit clearly visible smoke (Note 2) when the engine is running at its normal operating temperature, under either of the following conditions:

- a) for a continuous period of five seconds when the engine is idling, or
- b) as the engine is being accelerated rapidly to approximately 2500 revolutions per minute or approximately half the maximum engine speed (whichever is lower).

2. Requirement 1 above does not apply if the driver of the forklift produces documentation that proves that the engine is original equipment for the vehicle and the engine's design does not allow the vehicle to reasonably comply.