

Euro II Horsebox

Transport for London

Low Emission Zone



A riding stable uses a Leyland-DAF 45 series chassis with specialist horsebox coachwork, plated at 7500 kg Gross Vehicle Weight (GVW) to transport horses for promotional and filming activity throughout the London area. This type of work results in relatively low annual mileages for a commercial vehicle which, coupled with the high replacement costs, mean that vehicles like this have a relatively long life.

The London Low Emission Zone will apply to this vehicle from 7 July 2008 and it will be required to meet the Euro III standard or particulate matter (PM). This standard rises to Euro IV for particulate matter in January 2012.

This particular vehicle was first registered in 1998, so its engine is of the Euro II standard. It will therefore appear as non-compliant if checked against Transport for London's (TfL's) Low Emission Zone Compliance Checker (tfl.gov.uk/lezlondon). The owner will therefore need to take some action to avoid paying the £200 daily charge for travel within Greater London from 7 July 2008.

In order to establish what action is needed, it is essential to know the exact engine make and model that is installed. The engine type identification can be read on the manufacturer's data plate, which, on a vehicle like this, should be positioned just inside the driver's door. This is important to check since some Euro II engines meet the requirements of the Low Emission Zone in 2008 without any additional modification.

This particular vehicle is powered by a Cummins B 130-20 engine with manual transmission. This engine model is listed on the LEC Eligible Engines List available on the TfL website (tfl.gov.uk/lezlondon). All engines on this list meet the Euro III standard for particulate matter even though the engine as a whole is certified as Euro II.

In other words, they meet the LEZ emissions standards for 2008. The owner can therefore take the vehicle to a VOSA test centre for certification and it will be issued with a Low Emissions Certificate (LEC) or a Reduced Pollution Certificate (RPC), provided it passes an inspection and smoke test. These certificates are valid for 12 months only and must be renewed annually. A vehicle with a valid LEC or RPC can be driven within the Low Emissions Zone without being subject to the charge.

It is important to do this as soon as possible, since if the vehicle fails the inspection or smoke test at VOSA, the operator will have to take alternative action.

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In January 2012 the emission standard is raised to Euro IV in 2012. After that date the owner will either have to either pay the daily charge, or take further action, such as fitting a filter.

Other options

It is important to check the exact engine details. If the vehicle had been fitted with the more powerful alternative engine option, for example the B 160-20, then it would need to be retro-fitted with an abatement device (eg a particulate filter) in order to meet the emission standards of the Low Emission Zone. The B 160-20 engine does not appear on the LEC Eligible Engine List.

When selecting an abatement device there are two things to consider:

- The typical operating conditions (ie low mileage, slow speed, stop-start conditions or higher speed, long distance use)
- The length of time the vehicle is expected to remain in operation (ie up to or beyond 2012 when the LEZ emissions standards increase to Euro IV for PM)

Only approved devices can be used to meet the requirements of the Low Emission Zone. It is important that any retrofit device is selected from the list published on the TfL website. It should also be matched specifically to the engine and the operating conditions of the vehicle.

Approved suppliers should be able to advise on the most appropriate equipment to suit any

vehicle. It is important to note that vehicles fitted with non-approved devices are not deemed to have met the required emissions standard and their registered keeper will thus be liable to pay the daily charge.

For a horsebox, which has an expected useful life beyond 2012, a full-flow filter which will ensure the vehicle meets the 2012 Euro IV emission standard may be appropriate. The abatement equipment must be able to work effectively given the vehicle's expected low mileage, and slow speed usage pattern.

One option would be a diesel particulate filter (DPF) system with a fuel-borne catalyst. This type of filter copes well with a relatively 'gentle' duty cycle.

All full-flow DPF systems require the periodic servicing, approximately twice per year depending on duty cycle. A service indicator, installed as part of the system, alerts the driver when this is required.

A DPF system of this type would ensure the vehicle meets a Euro IV standard for particulate matter. This system would enable the vehicle to be used in the London Low Emission Zone up to and beyond 2012 without paying the daily charge. A filter such as this would typically cost just over £4,000.

A lower cost option would be to retrofit the vehicle with a free flow filter system which could be fitted to this horsebox for around £2,500 and is unlikely to need regular cleaning.

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These systems ensure the vehicle meets a Euro III standard for particulates.

This would enable the vehicle to be driven within the Low Emission Zone without being subject to the charge until January 2012. However, when the required emission standard is increased to Euro IV for PM, the owner would have to take further action or pay the daily charge.

Once a filter has been fitted the vehicle operator must take the vehicle to a VOSA test station to be inspected and to undergo a smoke test. If it passes the test, a Low Emissions Certificate or a Reduced Pollution Certificate will be issued. When VOSA issue the certificate they will inform TfL, and the vehicle details will be updated on TfL's database within 10 days.

Please allow enough time for this before travelling in the zone. The Low Emissions Zone compliance status of the vehicle can be checked on the TfL website.

For further information visit tfl.gov.uk/lezlondon or call 0845 607 0009.

Details correct at time of publication.
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