11-1 Exhaust system and silencer

Reasons for rejection

Mandatory equipment
1. A vehicle does not comply with the requirements relating to mandatory equipment set out in:

- **VIRM: In-service certification, section 11-1, general vehicles**
- **VIRM: In-service certification, section 11-1, heavy vehicles**
- **VIRM: In-service certification, section 11-1, light PSVs**
- **VIRM: In-service certification, section 11-1, heavy PSVs**.

Compliance with approved standards
2. A class LC, LD, LE, MA, MB, MC, MD1, MD2, MD3, MD4, ME, NA, NB or NC vehicle, other than one listed in **Table 11-1-1**, manufactured on or after 1 January 1985 and certified for entry on or after 1 June 2008:
   a) did not comply, or cannot be demonstrated to have complied, with at least one of the approved standards listed in **Table 11-1-2** at the time the vehicle was manufactured, or
   b) exceeded the noise limits in **Table 11-1-2** when it was tested in accordance with the standards in **Table 11-1-2** at the time the vehicle was manufactured, or
   c) does not have evidence that the vehicle has passed an LVVTA objective noise test, for instance:
      i. the owner cannot produce a valid ‘Objective exhaust noise emission test certificate’ (**Figure 11-1-1**), or
      ii. the exhaust system tailpipe is not fitted with a valid LVVTA noise test label (**Figure 11-1-1**).

Condition and performance
3. A vehicle does not comply with the requirements relating to condition and performance set out in:

- **VIRM: In-service certification, section 11-1, general vehicles**
- **VIRM: In-service certification, section 11-1, heavy vehicles**
- **VIRM: In-service certification, section 11-1, light PSVs**
- **VIRM: In-service certification, section 11-1, heavy PSVs**.

### Table 11-1-1. Vehicles deemed to comply with approved noise standards and drive-by noise limits

<table>
<thead>
<tr>
<th>Evidence of compliance with an approved noise standard and noise limit is not required for the following vehicles:</th>
</tr>
</thead>
<tbody>
<tr>
<td>any vehicle that may be entry certified because it already meets all other approved vehicle standards applicable to the vehicle</td>
</tr>
<tr>
<td>any vehicle manufactured for a market that requires compliance with FMVSS, ECE, EEC, ADR or Japanese standards</td>
</tr>
</tbody>
</table>

### Table 11-1-2. List of approved noise standards and drive-by noise limits

<table>
<thead>
<tr>
<th>Approved noise standard</th>
<th>Vehicle class</th>
<th>Maximum noise level (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 362</td>
<td>LC, LD, LE (engine capacity of 125 cc or less)</td>
<td>82</td>
</tr>
<tr>
<td>BS 3425</td>
<td>LC, LD, LE (engine capacity more than 125 cc)</td>
<td>86</td>
</tr>
<tr>
<td>SAE J1470</td>
<td>MA, MB, MC, MD1, MD2, NA</td>
<td>81</td>
</tr>
<tr>
<td>ADR 28/01</td>
<td>MD3, MD4, ME, NB, NC (power output 150 kW or less)</td>
<td>86</td>
</tr>
<tr>
<td>TRIAS 20</td>
<td>MD3, MD4, ME, NB, NC (power output more than 150 kW)</td>
<td>88</td>
</tr>
</tbody>
</table>

**Figure 11-1-1. Objective exhaust noise emission test certificate**

[Image of LVVTA Objective Exhaust Noise Emission Test Certificate]
Exhaust system description & details:

(a) Exhaust manifold(s): (make/type)
(b) Front pipe(s): (OD/material/length)
(c) Muffler(s)/resonator(s) #1: (maker/material/length/CD)
(d) Intermediate pipe(s): (OD/material/length)
(e) Muffler(s)/resonator(s) #2: (maker/material/length/CD)
(f) Tail pipe(s): (OD/material/length)
(g) Other exhaust system details: (catalytic converter(s)/balance pipe/additional mufflers/other)

Low Volume Vehicle Certifier's declaration:

LVV Certifier: (Name) | (ID) | Contact Ph # ( )

PASS: Approval label: (Number) | (Location of label)

I, the above-named Low Volume Vehicle Certifier, appointed by the Low Volume Vehicle Technical Association (Inc) for the purpose of Objective Exhaust Noise Emission Testing, declare that, I carried out an objective exhaust noise emission test on the described vehicle in accordance with the procedures specified by Low Volume Vehicle Standard 90-20, and confirm that the above vehicle complies with all requirements of, and emitted exhaust noise emissions not exceeding that specified by, Low Volume Vehicle Standard 90-20. (Signed) (Date)

FAIL: Recommendations to vehicle owner on bringing the exhaust system into compliance (expert advice is offered without any guarantee of a pass as a result of the advice given or implied):

Vehicle exhaust system schematic:

[Authenticity sticker with hologram security feature]
Summary of legislation

Applicable legislation


Mandatory equipment

1. A vehicle must comply with the requirements relating to mandatory equipment set out in:

   - VIRM: In-service certification, section 11-1, general vehicles
   - VIRM: In-service certification, section 11-1, heavy vehicles
   - VIRM: In-service certification, section 11-1, light PSVs
   - VIRM: In-service certification, section 11-1, heavy PSVs.

Compliance with approved standards

2. A class LC, LD, LE, MA, MB, MC, MD1, MD2, MD3, MD4, ME, NA, NB or NC vehicle manufactured on or after 1 January 1985 and certified for entry on or after 1 June 2008 must comply with:

   a) an approved standard and not exceed the relevant noise limit, as specified in Table 11-1-2, or
   b) the LVVTA objective noise test.

Condition and performance

3. The exhaust system and silencer must comply with the requirements relating to condition and performance set out in the relevant section of the VIRM: In-service certification, section 11-1.

Modification

4. A vehicle must comply with the requirements relating to modifications set out in:

   - VIRM: In-service certification, section 11-1, general vehicles
   - VIRM: In-service certification, section 11-1, heavy vehicles
   - VIRM: In-service certification, section 11-1, light PSVs
   - VIRM: In-service certification, section 11-1, heavy PSVs.