Vehicle Safety Inspection Program Bulletin

ASED-017

Date: January 27, 2020 (Revised, Original Bulletin Issued 01/01/2019)

Bulletin: All Inspection Station Personnel

From: Automotive Safety Enforcement Division

RE: Pressure Line and Hose Inspection

Vehicle safety inspection of pressure lines for regulated equipment includes lines and hoses for the air and hydraulic brake systems, the fuel systems, and the steering systems. Automotive approved materials must be used for pressure lines and hoses. Hydraulic brake lines and hoses shall be rejected for any indications of leakage. Lines or hoses other than those used for hydraulic brake systems may not be actively leaking or crimped or bent to restrict fluid flow. Damage or improper routing that exposes lines and hoses to damage is not allowed. Line and hose fittings must be constructed of automotive approved materials. Improper splicing or repairs are not allowed.

Metal pressure lines may not be corroded to the extent of pitting or other obvious loss of material that would weaken the line’s ability to contain pressure. Slight surface rust or corrosion is not an obvious loss of material. Lines must be properly secured to prevent damage. Compression fittings are not allowed on hydraulic brake systems.

Flexible rubber or braided hoses may not be swollen or have other indications of extreme softness, or may they be hardened to the extent of lack of flexibility. There may not be cracks or damage that expose the structural cording of the hose. Hoses must be properly secured to prevent damage. Hose clamp splices or repairs are not allowed. Rubber impregnated fabric cover is not a reinforcement ply subject to rejection unless the second layer is exposed.

Plastic or other synthetic lines must be of automotive approved material and may not be improperly installed or exposed to excessive heat or other damage. Some OEM and aftermarket plastic or synthetic lines are equipped with compression fittings or “O” ring seal fittings rather than pressed or crimp-on fittings.
Fluid leakage has been classified into three (3) classes of leakage by condition and action for emergency and military vehicles for many years. ASED has followed these guidelines in interpreting the regulations for vehicle safety inspection. The chart below identifies leakage by class with descriptions and the appropriate action required for vehicle safety inspection. This chart may be used to determine the level of leakage from regulated equipment during vehicle safety inspections to establish consistent inspection procedures statewide. The only exceptions to the application of these classifications are hydraulic brake lines and hoses, and fuel lines and hoses which shall be rejected for any indications of leakage present.

<table>
<thead>
<tr>
<th>Leakage</th>
<th>Conditions</th>
<th>Actions</th>
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<tbody>
<tr>
<td>Class-1</td>
<td>Seepage of fluid, as indicated by wetness or discoloration, but does not form drops</td>
<td>No Action Required</td>
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<tr>
<td>Class-2</td>
<td>Fluid leakage forms drops, but does not cause drops to fall from item being inspected</td>
<td>Advise Owner/Agent</td>
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<tr>
<td>Class-3</td>
<td>Leakage of fluid that cause drops to fall from item being inspected</td>
<td>Reject Equipment</td>
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If you have additional questions, please feel free to contact ASED at: 410-768-7388 or MSP.ASED@maryland.gov