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ISSUE NAME

OOSC, Part II, Item 1. Brake Systems, m. Air Reservoir (Tank) - Leaking

STATUS

Closed

Vehicle Committee

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SUMMARY OF ISSUE

I discovered an air reservoir tank in the air brake system of a truck tractor as well as another trailer that was severely rusted to the point where it was leaking air. In both cases, the tractor could maintain air but it could not build air past a certain point (90 PSI). These air leaks were in the body of the tank due to corrosion. Currently, this would only be an out-of-service violation if the leak causes the vehicle to fail the air loss rate test, which it did not. This issue was addressed in a previous Request for Action - Issue Number 12-005-VEH. In the previous RFA, the committee discussed a pin hole in the tank. The one I inspected had a hole large enough where I could put my finger into the tank. The tank around the hole was so rusted that if I pushed on it my whole hand would go into the tank.

JUSTIFICATION OR NEED

I believe this is as important or more important than an air line with an audible leak at other than a proper connection. With the integrity of the tank compromised the potential for rupture is imminent. In this case the trailer only had one air tank which, if it did fail, would have affected all 4 brakes on the trailer.

REQUEST FOR ACTION

I would like to see this issue revisited and take into account air tanks that have leaks and/ or are rusted so severely that they are in imminent danger of failing.

Suggested Wording: An air reservoir (tank) has an air leak due to corrosion or damage at a location other than a valve or proper connection.

ACTION TAKEN BY COMMITTEE

Comment from industry that if it passed the air loss rate test, then it is working. Comment since it is a 396 violation, it would have to be put in as an OOS violation. There are other places in Operational Policy 15 to note violations under 396 that are not OOS, such as the transmission air line. Within Ops 15 1.b(3) it would have to be changed for the air tank to be cited. Currently says anything other than brake system goes under 396 and the tank

is part of the brake system. Comment that Canada can cite the violation as this condition would be in their standard, so if US wants to note a violation that Ops Policy 15 should be modified. It was suggested that the correct violation would be 393.50. Comment from the brake industry was that 393.50 deals with sizing, and that the reservoir capacity is adequate. Comments that if it is in violation it must be fixed prior to dispatch was accepted by industry in the meeting.

A mention was made to look at 393.40 where FMVSS 121 was adopted for all brakes. Comment that in this case, it should be an imminent hazard because it could fail at any time. It was discussed that 396.7 should not be cited and placed as OOS. Discussion also indicated that if the only thing wrong is leak in air reservoir, and it is not documented as a violation, then the vehicle will get a CVSA decal and they will not be made aware of the condition of the tank. Comment that a hole in an air line is in the OOSC and that air tank should get same consideration. Answer from industry, that if hole is in tank, carriers would want to be aware of it and that 396 is appropriate and it should not be OOS. A hole in an air line should not be treated the same as a hole in an air hose. If it doesn't maintain air pressure than it should be OOS.

Motion was made to amend Operational Policy 15 to indicate that the hole in the air reservoir should be noted as a violation of 396.3(a)1 but not OOS. Discussion about whether to use the word audible. Industry wanted a specific standard for audible. Comment about referring to 393.40 and FMVSS 121 saying no leaking. Comment from industry that FMVSS 121 is referring to performance standards and allows for some leakage, 10 psi in 10 minutes. There are no specific regulations in the United States which cover when an air reservoir is leaking, and so the consensus of the committee was to document a violation of 396.3(a)(1). It was determined that a leaking brake chamber diaphragm and the air reservoir are the only 2 non-OOS violations of the 396.3(a)(1) for brakes, so the leaking brake chamber diaphragm should also be added into the Operational Policy 15. The committee voted unanimously to amend Operational Policy 15.

Operational Policy 15, Section 1
b.(3) When should an audible air leak in the brake system be documented as a violation?

ANSWER: When a vehicle has an air leak at a proper connection, or at an undetermined location and the vehicle passes the CVSA OOSC air loss rate test, inspectors will record a violation for an air leak on the inspection report.

NOTE: 393.45(d) indicates that the leak has to affect the brake performance under 393.52. Enforcement cannot determine to what extent a leak has to be to affect the brake performance; therefore, any leak in the brake system will be documented as a violation.

NOTE: An audible leak in the brake system, such as a leak discovered when the treadle valve is applied or a leak in a hose from an air reservoir to a relay valve, will be documented under 393.45(d). An audible leak in a brake diaphragm or an air reservoir will be documented under 396.3(a)(1). Any other leak that cannot be attributed to the brake system or suspension systems (see 393.207(f)) will not be placed out of service and will be documented under 396.3(a)(1).