

7/9/20 Supplier manufacturing cell setup error, leading to the creation of a lot of material with defects.

7/24/20 Bendix first receipt of defective parts from supplier; however, the defects were unknown to Bendix at that time.

7/27/20 First transfer of defective parts from inventory to Bendix production

9/29/20 Navistar Springfield Assembly Plant rejected Bendix SR7 assembly which uses SC-3 Check valve as a component because brake system leak was detected at the end of line tests. Containment and Sort begins this day at Bendix and Navistar.

9/29/20 At Bendix's request, supplier containment and root cause analysis begin.

10/15/20 Bendix began testing defective products on baseline bench testing to understand effect of defect; preliminary conclusion that defective product still functions as specified though it does not have retainer in retainer groove.

10/15/20 – 11/16/20 Bendix continued testing

- Environmental Chamber Test of Defective SC-3 + SR-7 is conducted to begin to understand "defect lifetime" (nature and ability to function) and durability
- Ambient Life / Durability Test of Defective SC-3 + SR-7 is conducted to begin to understand "defect lifetime" (nature and ability to function) and durability

Conclusion of testing is that defective product internal components will become loose from SC-3 but can still function acceptably in these tests.

11/10/20 Bendix confirmed supplier setup process corrective actions to eliminate potential for producing this defect in the future.

11/16/20 – 1/22/21

Detectability of Failure and Probability of (SR-7) Failure Testing

- Trial and simulation testing of many different scenarios of different SC-3 components and brake system components.
- Testing under X-ray to determine nature and ability to function of loose SC-3 components

1/22/21 Vehicle Rack: Failure Effects Simulation Testing

- Vehicle Test Rack (Lab simulated vehicle schematic test rack) testing for nature and ability-to-function of loose SC-3 components with complete pneumatic brake system.
- Successive trial testing of defective SC-3 with simulated failed secondary circuit

Conclusion that defective SC-3 could not reliably perform function as required to maintain circuit isolation in the event of secondary circuit failure.

2/10/21 Bendix PIC met and determined that the condition is a safety related defect requiring a safety recall.

2/18/21 Bendix filed a Part 573 Defect Information Report.