

10/04/2019

CAL\_WS 42001

## **Subject: WABCO HP Air Dryer Turbo Cut-Off Valve Replacement**

**Models Affected: Western Star 4900 Model, 5700 Model, and 6900 Model trucks built from March 7, 2018, through June 7, 2019, and equipped with a WABCO HP air dryer.**

Our records indicate that you are the owner of certain vehicles, and DTNA has decided to share the following documentation with you.

Please see the attached communication in this email. We hope you find this information helpful.

10/4/2019  
CAL\_WS 42001

## Work Instructions

### Subject: WABCO HP Air Dryer Turbo Cut-Off Valve Replacement

**Models Affected: Western Star 4900 Model, 5700 Model, and 6900 Model trucks built from March 7, 2018, through June 7, 2019, and equipped with a WABCO HP air dryer.**

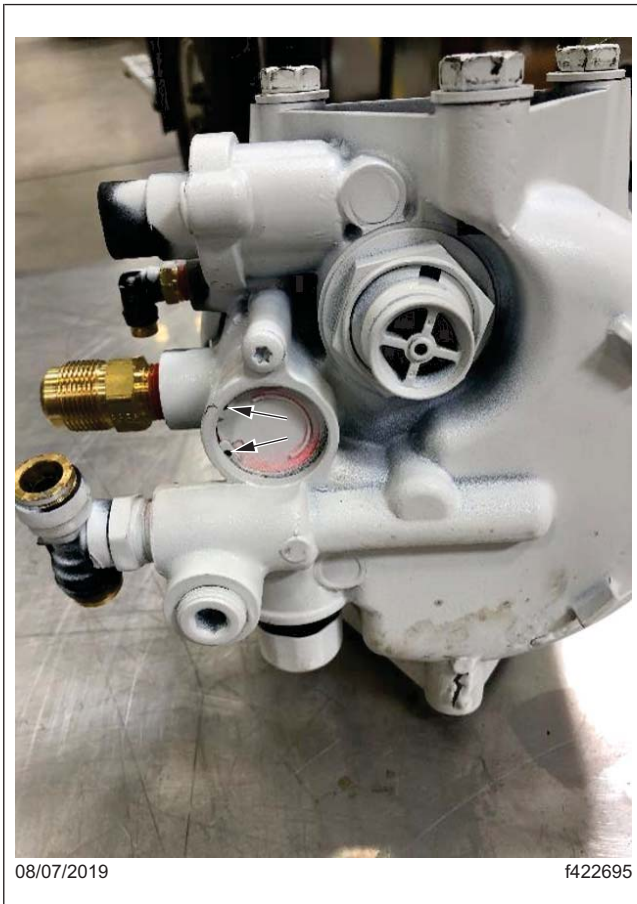
## General Information

On certain vehicles, the WABCO HP air dryer may experience signal line freeze-up, resulting in the inability of the compressor to properly charge the air system. A revised turbo cut-off valve assembly will be installed and the signal line cleared of moisture. Follow the instructions below to replace the turbo cut-off valve. Part number TDA S432 470 921 2 is superseded to WAB432 480 005 2.

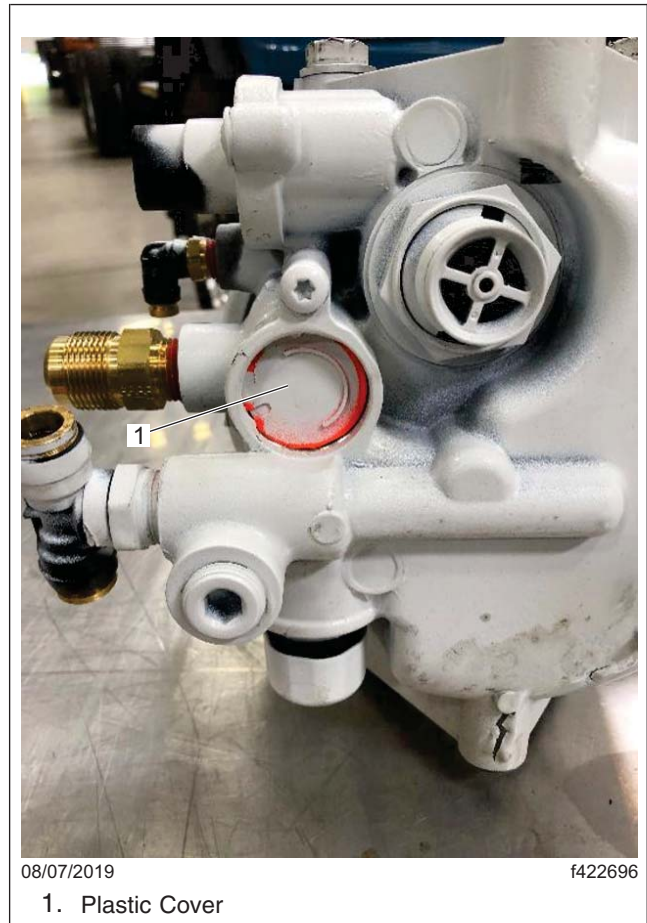
## Replacement Procedure

1. Park the vehicle on a level surface, shut down the engine, and apply the parking brake. Chock the tires.
2. Drain the air from the system.
3. Open the hood.
4. Remove the bumper. For instructions see **Group 31** of the applicable workshop manual.
5. Disconnect the air compressor signal line from the air dryer.
6. Disconnect the air compressor signal line from the air compressor side of the line.
7. Using 50 psi (345 kPa) shop air, clean the signal line.
8. Connect the signal line to the air dryer.
9. Connect the signal line to the air compressor side of the line.
10. Remove the snap ring that holds the turbo cut-off valve to the air dryer. See [Fig. 1](#).
11. Remove the plastic cover (orange and white in color) from the turbo cut-off valve. See [Fig. 2](#) and [Fig. 3](#).

10/4/2019  
CAL\_WS 42001



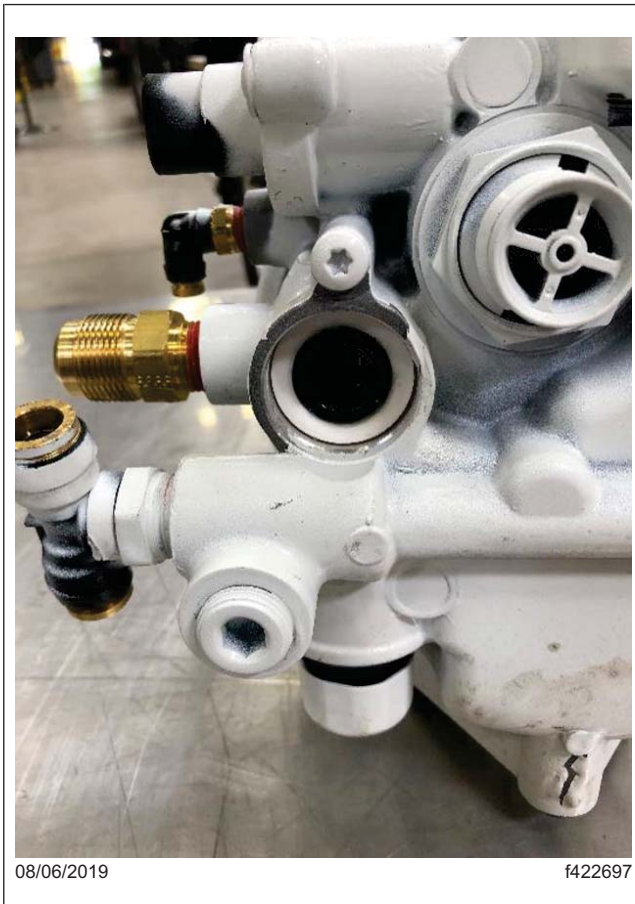
**Fig. 1, Snap Ring Holes**



**Fig. 2, Removing the Plastic Cover**

12. Install the snap ring. See [Fig. 4](#).

10/4/2019  
CAL\_WS 42001



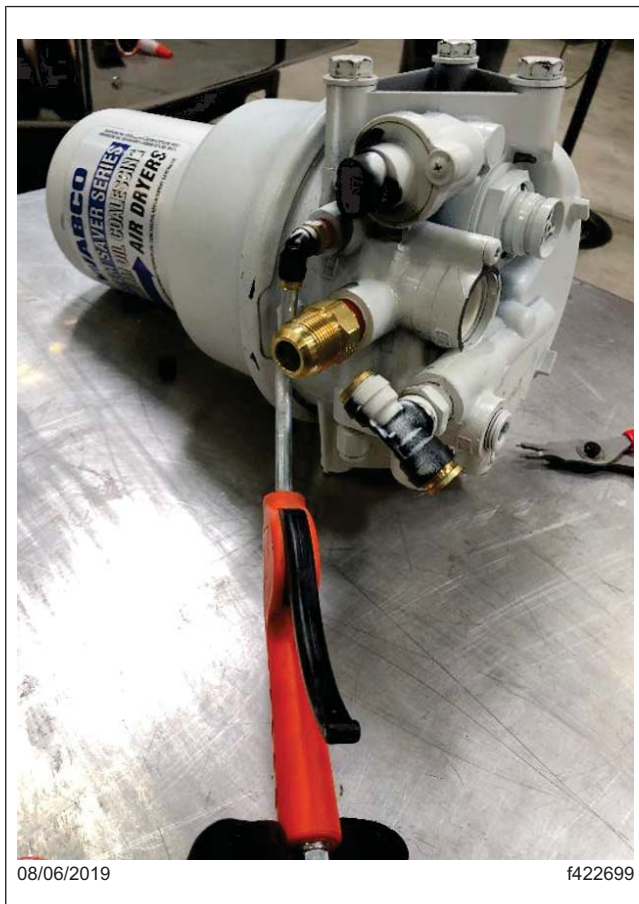
**Fig. 3, Plastic Cover Removed**



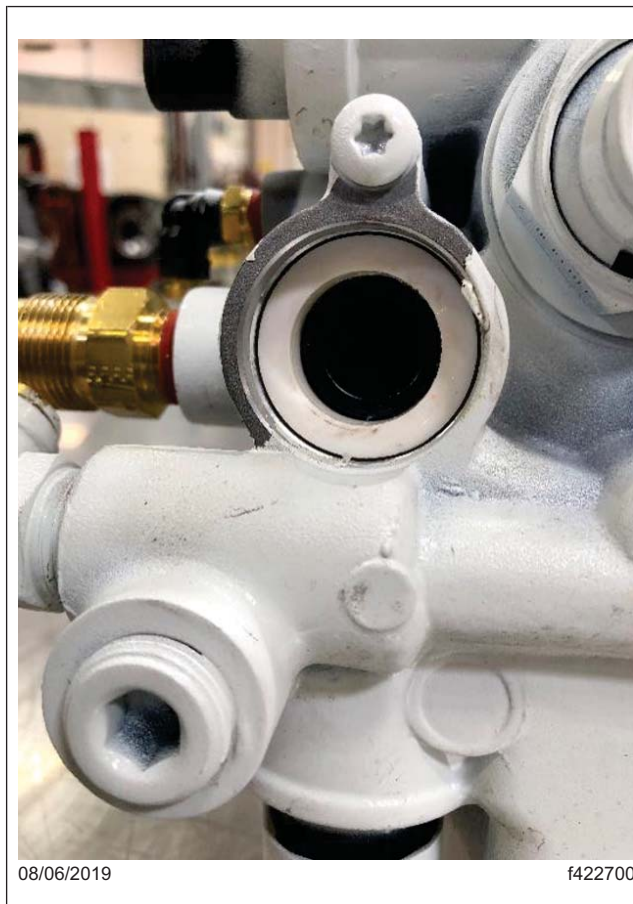
**Fig. 4, Snap Ring Installed**

13. Using 15 psi (103 kPa) shop air through the signal port of the air dryer, dislodge the turbo cut-off valve. See [Fig. 5](#).
14. Remove the snap ring again. See [Fig. 6](#)

10/4/2019  
CAL\_WS 42001



**Fig. 5, Applying Shop Air to Dislodge the Valve**



**Fig. 6, Snap Ring is Removed a Second Time**

15. Remove and discard the turbo cut-off valve. See [Fig. 7](#) for an example of the valve.
16. Clean the turbo cut-off valve bore, then inspect for any debris or damage; repair as needed.
17. Lubricate the turbo cut-off valve bore with the supplied grease.
18. Install the new turbo cut-off valve on the air dryer. See [Fig. 8](#) for an example of the valve.

10/4/2019  
CAL\_WS 42001

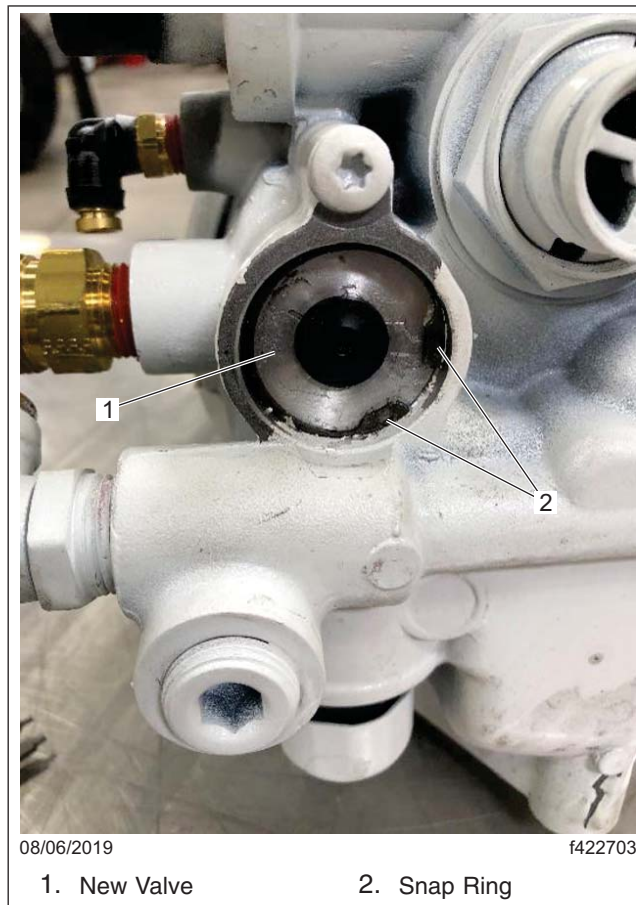


**Fig. 7, Old Valve Removed**



**Fig. 8, New Valve to be Installed**

19. Install the snap ring. See [Fig. 9](#).



**Fig. 9, Snap Ring and New Valve Installed on the Air Dryer**

10/4/2019  
CAL\_WS 42001

20. Start the engine and build system pressure. Verify proper purge from the air dryer and system cut-out.
21. Install the bumper. For instructions see **Group 31** of the applicable workshop manual.
22. Close the hood.