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This Service Bulletin is a supplement to Service Manual, number PV776-593-600SM-A, Anti-Lock Brake System, Rockwell WABCO. It replaces pages 19 and 20 of the manual.

Anti-Lock Brake System  
Rockwell WABCO  
AC, WC, WI, WG

## ABS Manual revision

This bulletin contains revised ATC and ABS modulator valve troubleshooting information for the Rockwell WABCO ABS system used in Conventional models. It covers the C2 and C3 version systems.

The tables on pages 19 and 20 of the manual PV776-593-600SM-A contain incorrect pin numbers. Pages 2 and 3 of this bulletin contain updated tables.

Please note these changes in the manual.

# Troubleshooting

## Troubleshooting the ABS modulator valve

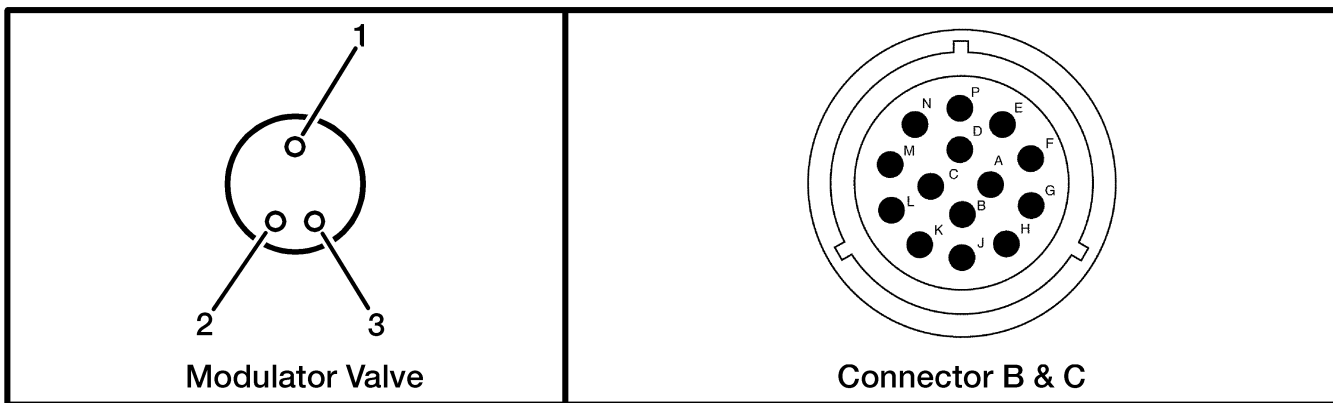
To check the ABS modulator valve, measure resistance using a digital multimeter (DMM).

- 1 First check the calibration of the DMM by touching the leads together. If there is a reading other than zero, subtract it from the measurements made with the DMM.

**Note:** All resistance measurements are made with the ignition **OFF**.

- 2 Measure the resistance across the modulator valve solenoid terminals 1 and 2, and then 1 and 3 (see Fig. 32). The resistance should be between 4.0 and 8.0 ohms.

- 3 If the resistance is greater than 8.0 ohms, clean the electrical contacts on the solenoid and check the resistance again. If resistance is still outside the tolerance range, replace the valve.



1) Ground 2) Exhaust Solenoid 3) Inlet Solenoid

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**Figure 32: ABS Modulator Valve Connector Detail**

To check the cable and ABS valve as one unit, disconnect the cable from the ECU, then measure the resistance across the pins as listed below (see Fig. 32).

Checking ABS Modulator Valve Resistance				
ABS Modulator Valve	Pin Number		Desired Value	Type of Failure
	C2 System	C3 System		
LF inlet	ABS Valve LF inlet to ground	Connector B, pin G to B	4.0 to 8.0 ohms	If the reading is outside the desired value, check for: <ul style="list-style-type: none"> <li>• Wiring between ECU and valve interrupted</li> <li>• Ground lead to valve interrupted.</li> <li>• Shorted valve solenoid.</li> </ul>
LF exhaust	ABS Valve LF exhaust to ground	Connector B, pin H to B		
RF inlet	ABS Valve RF inlet to ground	Connector B, pin K to C		
RF exhaust	ABS Valve RF exhaust to ground	Connector B, pin L to C		
LR inlet	ABS Valve LR inlet to ground	Connector C, pin C to B		
LR exhaust	ABS Valve LR exhaust to ground	Connector C, pin L to B		
RR inlet	ABS Valve RR inlet to ground	Connector C, pin A to D		
RR exhaust	ABS Valve RR exhaust to ground	Connector C, pin F to D		

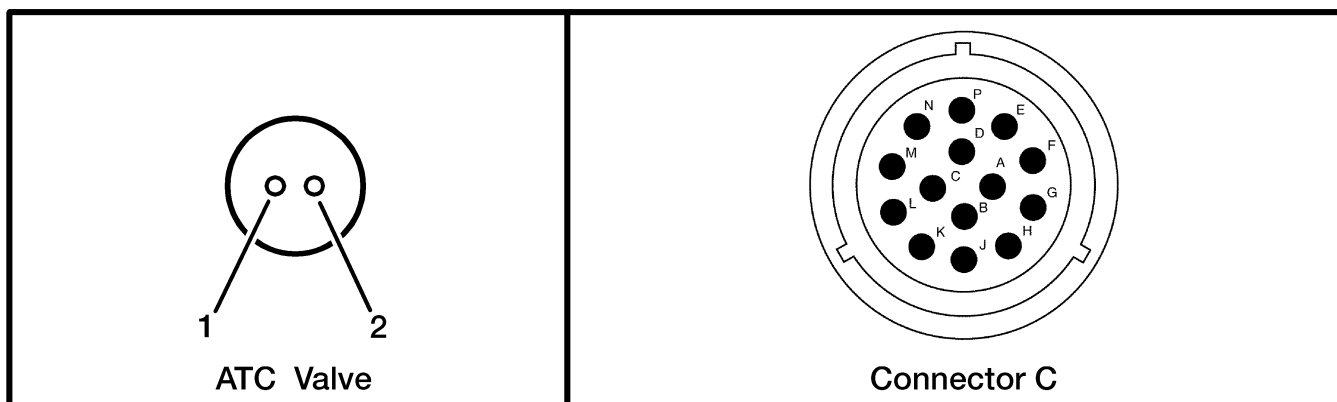
## Troubleshooting the ATC valve

To check the ATC valve, measure resistance using a digital multimeter (DMM).

- 1 First check the calibration of the DMM by touching the leads together. If there is a reading other than zero, subtract it from the measurements made with the DMM.

**Note:** All resistance measurements are made with the ignition **OFF**.

- 2 Measure the resistance across the two electrical terminals on the ATC valve solenoid (see Fig. 33). The measurement should be between 8.0 and 14.0 ohms.
- 3 If the resistance is greater than 14.0 ohms, clean the electrical contacts on the solenoid and check the resistance again. If resistance is still outside the tolerance range, replace the valve.



1) Ground 2) ATC Supply

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**Figure 33: ATC Valve Connector Detail**

To check the cable and ATC valve as one unit, measure resistance across the pins as listed below (see Fig. 33). If the valve resistance is not within range, replace the valve.

Checking ATC Valve Resistance				
ATC Valve	Pin Number		Desired Value	Type of Failure
	C2 System	C3 System		
ATC Left	Left ATC Valve Supply to ground	Connector C, pin N to M	8.0 to 14.0 ohms	If the reading is outside the desired value, check for: <ul style="list-style-type: none"> <li>• Wiring between ECU and valve interrupted</li> <li>• Ground lead to valve interrupted.</li> <li>• Shorted valve solenoid.</li> </ul>
ATC Right	Right ATC Valve Supply to ground	Connector C, pin E to P		