TEMP SELECT

Electronically
Controlled Variable
Displacement
Compressor (ECV)
Diagnostic Tool Kit
P/N 69636





The only thing standing between you and a misdiagnosis!

As HVAC technology evolves, diagnosing poor A/C performance has become increasingly difficult. The Four Seasons® ECV Compressor Diagnostic Tool puts <u>YOU</u> in control of measuring compressor pumping displacement, making a correct diagnosis of the ECV simple and easy!



New Technology Requires the Right Tools!

Many of todays vehicles are now equipped with an ECV compressor. These compressors do not have a conventional clutch, meaning the compressor shaft turns all the time, even when the air conditioning is off! This sophisticated technology can make it difficult to determine if poor air conditioning performance is being caused by a computer control issue or a refrigeration system issue. This can result in an expensive misdiagnosis and unnecessary compressor replacement.



Part # 69636

Kit Includes:

- Handheld ECV compressor tester unit
- · Power leads and wire harness set
- 13 Female connectors*
 - Including 11 for specific compressor applications and 2 universal connectors
- 17 Male connectors*
 - Including 15 specific for ECU applications and 2 universal connectors
- Convenient carrying case
- Instruction sheet

Quickly diagnose ECV compressor failure!

*Tool comes with 26 application specific and four universal pigtails to connect to virtually every manufacturer's computer controlled compressors. Some models from these manufacturers use ECV compressors: BMW, Chrysler, General Motors, Hyundai, Jaguar, Kia, Land Rover, Mercedes Benz, Nissan/Infiniti, Subaru, Toyota/Lexus and VW/Audi/Porsche. See catalog for full application details.





Quickly Diagnose ECV Compressor Failure!

The Four Seasons® ECV compressor diagnostic tool allows you to bypass the computer and to put YOU in direct control of compressor operation. Simply attach the diagnostic tool to the compressor solenoid using the custom pigtails provided, and manually exercise the compressor through its full displacement range. If the compressor fails to pump, the root cause of the problem could be a compressor or basic system issue. This tool makes diagnosis simple and easy!









THE BENEFITS

- Switch between manual and automatic mode to quickly differentiate between a computer control issue and a basic compressor/refrigeration system issue
- In manual mode, easily increase or decrease the compressor displacement command in discrete steps while monitoring system pressures and temperatures. The tool's LCD displays the PWM percentage being applied to the solenoid.
- Tool monitors and displays solenoid resistance
- With tool in automatic mode, monitor actual command being sent by the computer to the displacement solenoid
- Test system in colder weather when compressor might not normally operate at maximum displacement
- Comes with custom pigtails to test all major ECV compressors*
- Tool interfaces with vehicle computer to avoid setting unnecessary codes during testing





Electronically Controlled Variable Displacement Compressor (ECV) Connectors

Four Seasons® provides professional installers an easy way to expand coverage for the ECV Diagnostic Tool Kit (P/N 69636) by offering ten connectors not currently available in the existing kit for additional purchase. These application specific connectors, as well as each connector supplied in the current kit, are now available for individual purchase. Our convenient ECV Connector Guide, linked in the QR code below, provides quick access to buyers guide information for an easy part lookup. Whether you want to expand your coverage or replace a damaged connector, Four Seasons® has what you need with Quality, Coverage, Service.

All ECV connectors are available for individual purchase as needed.

As the growth of ECV compressors continues, ensure you have the latest connectors for your ECV Diagnostic Tool.





Scan here to download the ECV Connector Guide for all available connectors.

Part Number	Description	Application**
26902	Male Harness Connector	(17-10) Jaguar, (20-07) Volvo and (13-08) Land Rover
26903	Female Harness Connector	(13-07) BMW
26904	Female Harness Connector	(10-04) Jaguar and (09-05) Land Rover
26905	Female Harness Connector	(20-11) GM, (21-17) Ford, and (20-16) Honda
26906	Female Harness Connector	(20-16) BMW and (19-15) Mini
26907	Female Harness Connector	(20-19) Infiniti and (22-17) Nissan
26919	Male Harness Connector	(17-15) Hyundai
26920	Male Harness Connector	(21-16) BMW, (19-17) Hyundai, (15-13) Jaguar, (20-17) Kia, (21-17) Porsche
26921	Male Harness Connector	(21-07) BMW and (19-15) Mini
26922	Male Harness Connector	(18-17) Nissan

^{**}For a complete list of applications, visit www.4s.com



Interface Adapter, P/N 69702 Supplement Your ECV Diagnostic Tool

- Perform tests on both positive and ground side controlled solenoids
- Monitor the duty cycle command signal in "normal" mode
- Confirm compressor operation and function in "manual" mode
- Directly measure ECV control solenoid resistance
- Confirm high speed cooling fan operation by controlling high side pressure