Model EVDC®100

Mobile A/C, Electronic Variable Displacement Compressor Tester Tool

User Manual

INTRODUCTION

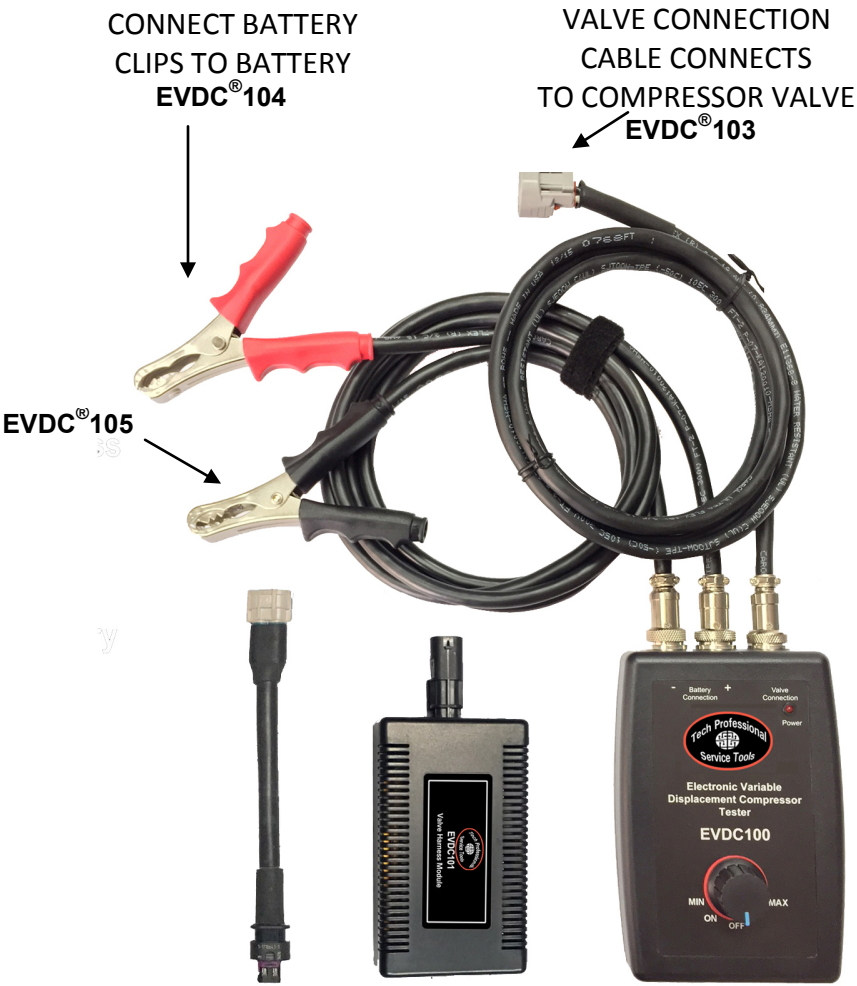
The model EVDC®100 is a unique tool that separates the compressor from the OBD II system on the vehicle, and enables a technician to manually stroke an electronic variable displacement compressor up or down. It is low in cost and OEM approved. The device tests electronic control valves in all variable displacement mobile A/C compressors when it is placed in-line between the control valve and the wiring harness connector, so that control valve issues can be diagnosed before condemning a compressor.

The electronic control valve regulates internal compressor pressure to change the compressor displacement. The tester regulates the input signal to the valve to verify the valve's operation. The device assists a technician in diagnosing mobile A/C problems with external control valve compressors. By manually controlling the operation and function of the valve, it lowers repair costs and service time, and eliminates a compressor misdiagnosis and an unnecessary compressor replacement.

FEATURES

- Eliminates Compressor Misdiagnosis
- Quick Diagnosis Lowers Repair Costs
- Verifies Valve Function
- Includes EVDC®102 Connector Adapter for both Old and Newer Compressors
- Heavy duty battery clips and cable
- Removable Cable Assemblies for easy replacement
- Long cable lengths for easier access to valve and battery
- Reverse Battery Connection Protection
- Adjustable tester output
- Powers from vehicle battery, no need for batteries
- 2- year warranty including
- Made in USA

EVDC®100 TESTER DESCRIPTION



EVDC®102 CONNECTOR ADAPTER

EVDC®101 VALVE HARNESS MODULE

EVDC®100 TESTER

Operating Instructions

1. Connect A/C manifold gauges or A/C recover/charge machine to the high-pressure and the low-pressure side of the A/C system.

2. Disconnect the control valve harness from the compressor control valve.

3. Connect the EVDC®101 Valve Harness Module to the Compressor control valve harness.

4. Connect the EVDC®103 valve connector cable to the compressor control valve.

5. Attach the EVDC®100 Tester to a 12V battery source.

6. Connect EVDC®104 red battery clip to the positive battery post terminal.

7. Connect the EVDC®105 black battery clip to the negative battery post terminal.

8. Start the engine of the vehicle and turn the A/C system to MAX A/C and make sure that the compressor clutch is on or is engaged.

9. Rotate control knob on the EVDC®100 Tester to the ON position. The red power LED will turn on. **See figure 1 below.**

10. To activate the control valve on the compressor, rotate the control knob slowly clockwise from MIN towards MAX to activate and observe pressures on the high and low sides of the A/C system. **See Figure 2 below**.

WARNING: DUE TO HEATING, DO NOT LEAVE THE VALVE HARNESS MODULE CONNECTED FOR EXTENDED PERIODS (NO MORE THAN 30 MINUTES) OR LEAVE UNATTENDED.

EVDC®100 on Minimum Stroke

Figure 1

EVDC®100 on Maximum Stroke

Figure 2

11. If no change in pressure occurs on the manifold gauges, the valve or the compressor is defective.

12. If there are changes observed and the suction low side pressure goes down or the high side pressure goes up, the compressor is working properly. Continue further diagnosing the A/C system upstream from the compressor is required.

13. Disconnect the EVDC®100 tester from the compressor control valve and the valve harness module from the harness. Reconnect the valve harness to the compressor control valve, and make any necessary repairs.

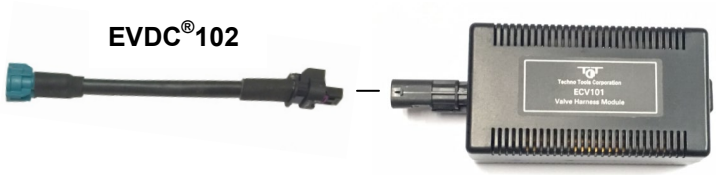
Caution: Always verify that the vehicle's refrigerant charge is at the correct specification level before condemning or replacing an EVDC Compressor.

Using the EVDC®102 Connector Adapter

<u>For the current compressor control valve connector style</u>:
Connect the EVDC®103 valve connector cable to the compressor control valve.

Connect the connector adapter EVDC®102 to the EVDC®101 Valve Harness Module and then connect to the control valve harness as shown below:

To Control Valve Harness



<u>For the new compressor control valve connector style:</u>
Connect the EVDC®102 connector adapter to the EVDC®103 valve connector cable and then connect to the compressor control valve as shown below:

EVDC®103 valve connector cable

To Compressor Control Valve

Connect the EVDC®101 Valve Harness Module (without the adapter EVDC®102) to the Valve Harness as shown below:

To Control Valve Harness

Replacement Parts

Item	Part Number
EVDC®101 Valve Harness Module	AC-EVDC101
EVDC®102 Connector Adapter	AC-EVDC102
EVDC®103 Valve Connector Cable	AC-EVDC103
EVDC®104 Battery Cable Positive	AC-EVDC104
EVDC®105 Battery Cable Negative	AC-EVDC105
Carrying Case	AC-CAS0001A
Instruction Manual	AC-EVDCMAN

Product Specifications

Model #	**EVDC®100**
Name	**AC Compressor Electronic Control Valve Tester**
Battery Cable Length	**4 ft**
Valve Cable Length	**6 ft**
Power Requirement	**12V DC (Vehicle Battery)**
Removable Cable Connector Type	**GX16**
Adapter Connectors	**Dual Function**
Tester Output	**Adjustable**
Warranty	**2 Years**
Weight, lbs	**1.5 lbs**

RETURN FOR REPAIR POLICY

Every effort has been made to provide reliable, superior quality products. However, in the event your instrument requires repair, forward unit to Service Center freight prepaid to the address below with return address, phone number and/or email address.

SERVICE CENTER
2651 W 81st Street
Hialeah, FL 33016

WARRANTY POLICY

The EVDC®100 A/C Compressor Electronic Control Valve Tester is warranted to be free of defects in materials and workmanship for a period of two years from the date of purchase. This warranty applies to all repairable instruments that have not been tampered with or damaged through improper use including unauthorized opening of the unit. Please ship warranty units that require repair freight prepaid to Service Center along with proof of purchase, return address, phone number and/or email address.