

### ELECTRONICALLY CONTROLLED VARIABLE DISPLACEMENT COMPRESSOR (ECV) TOOL P/N TEM 419635

As HVAC technology evolves, diagnosing the root cause of failure on ECV compressors has become challenging. The ECV Compressor Diagnostic Tool puts you in control of compressor pumping displacement, making diagnosis simple.



#### **ECV Tool Kit Includes**

- · Hand held ECV compressor tester unit
- · Power leads and wire harness set
- 13 female connectors\*
- 17 male connectors\*
- · Convenient carrying case
- Instruction sheet



Scan here to see more information on the ECV tool.



Scan here for the connector application guide.

### Interface Adapter for ECV Diagnostic Tool P/N 419635 P/N TEM 412923

- 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

\*Tool comes with 30 custom pigtails to connect to virtually every manufacturer's computer controlled compressor. 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.



Electronically Controlled Variable Displacement Compressor (ECV) Connectors are now available for individual purchase. To offer expanded testing capabilities, ten of these connectors, detailed below, are application specific for late model domestic and import vehicles and are not available in the ECV Diagnostic Tool Kit.



Part Number	Connector Type	Application**
801926	Male	(17-10) Jaguar, (20-07) Volvo and (13-08) Land Rover
801927	Female	(13-07) BMW
801928	Female	(10-04) Jaguar and (09-05) Land Rover
810929	Female	(20-11) GM, (21-17) Ford, (20-16) Honda
801930	Female	(20-16) BMW and (19-15) Mini
801931	Female	(20-19) Infiniti and (22-17) Nissan
801943	Male	(17-15) Hyundai
801944	Male	(21-16) BMW, (19-17) Hyundai, (15-13) Jaguar, (20-17) Kia and (21-17) Porsche
801945	Male	(21-07) BMW and (19-15) Mini
801946	Male	(18-17) Nissan

<sup>\*\*</sup> See eCatalog for full application information.

### A/C THERMOMETERS

Servicing and repairing automotive air conditioning systems today is an exacting science. Temperature testing is important for both diagnosis and validation of A/C repairs and allows each component of the A/C system to be tested for performance and efficiency.

### FOUR CHANNEL A/C THERMOMETER P/N TEM 400260



#### **Benefits of A/C Thermometers**

- Validate the repair after compressor replacement
- . Confirm and optimize the system charge level
- · Focus your diagnostic direction
- · Measure overall system efficiency
- · Part of preventative system maintenance
- Flexible surface temperature probes
- · Ideal for critical superheat calculations
- Rugged polyethylene carrying case w/ large probe storage area
- · High accuracy silicon humidity transducer probe

### TWO CHANNEL A/C THERMOMETER P/N TEM 400261



### YF REFRIGERANT LEAK DETECTOR P/N TEM 419010

The YF Refrigerant Leak Detector makes diagnosing a leak in the air conditioning system easy and quick. Being able to diagnose quickly and accurately helps ensure that the job is done right.



#### **Benefits**

- 15.5" flexible test probe
- · Infrared gas sensor
- Automatic zero and background compensation
- High/Medium/Low leak sensitivity selector
- · Carrying case included

## YF MANIFOLD GAUGE SET P/N TEM 209600

The TEMP Select® YF Manifold Gauge Set allows testing and diagnosis of A/C systems by comparing the high and low sides of the system with O.E. specifications. This set can also be used to adjust the system pressures to meet O.E. specs.



#### **Benefits**

- Anti-flutter gauges for smooth operation
- Easy to read temperature gauge scales
- · Color coded anodized front-facing knobs
- Easy gauge recalibration ensures accuracy
- Large sight glass for visual check of refrigerant

#### Includes

- (3) 72" hoses
- 2 color coded anodized R1234yf couplers

## SPOTGUN™ R1234YF INJECTION KIT P/N TEM 209846

### **Benefits**

- Inject precise amounts of dye into the A/C system
- Includes injector with R1234yf adapter, A/C ExtenDye™cartridge, service stickers
- A/C ExtenDye<sup>™</sup> is compatible with both R1234yf and R134a refrigerants and is hybrid safe\*





### **Benefits**

- Max weighting of 100kg
- Accurate at ± 0.05% RDG +10g
- Operation temperature of 14°F to 104°F
- Battery operated and requires no charging



## REFRIGERANT SCALE WITH SOLENOID VALVE P/N TEM 200025

#### **Benefits**

- Max weighting of 100kg
- Accurate at ± 0.05% RDG +10g
- Operation temperature of 14°F to 104°F
- Battery operated and requires no charging
- Included solenoid meters the exact amount of refrigerant needed



## UNIVERSAL SPANNER WRENCH P/N TEM 200496

### **Benefits**

- Use to prevent the clutch plate from turning when moving the shaft nut
- Fits both domestic and import applications
- Adjustable 3-stud design
- Sure-grip handle for ease of use



## INFRARED A/C THERMOMETER WITH LASER P/N TEM 200024

### **Benefits**

- Temperature range from -76°F to 932°F
- Accuracy of ± 4°F
- Instant temperature read
- Non-contact
- High output laser sighting to easily see where your reading is being taken
- Integrated LED work light



### VACUUM PUMP P/N TEM 209841

#### **Benefits**

- 6CFM single stage pump
- Vacuum rating as low as 50 microns
- Gas ballast valve increases vacuum speed
- Dual voltage operation of 110 V or 220 V
- Exhaust valve enables a 99.99% seal on discharge port
- Air-cooled motor designed for operation in high ambient temperatures



### NEUTRONICS REFRIGERANT IDENTIFIER P/N TEM 209850

#### **Benefits**

- Identifies R-12, R-134a and R-1234yf refrigerants
- Quickly and accurately determines refrigerant purity
- Displays percentage purity of R1234yf, R134a, R12, R22 and hydrocarbons



### **DUAL REFRIGERANT SIGHT GLASS TOOL P/N TEM 475513**

#### **Benefits**

- View real-time system operation
- Visual alert to system contamination before servicing
- Helps determine contamination severity
- Visually inspect system charge and oil
- Durable construction for long service life
- Filter traps fine debris that could restrict flow of refrigerant and oil
- Clear outer plastic sleeve protects the inner sight glass from damage



### **O-Ring Service Parts Organizers**

## P/N TEM 407813 Air Conditioning Service Parts Organizer

- Contains 626 pieces
  - O-rings, sealing washers, valve cores, caps, metal gaskets and orifice tubes
- Covers domestic, European and Asian vehicles





# P/N TEM 407819 Supplement Tray for P/N TEM 407813 Upgrade your P/N TEM 407813 kit to our P/N TEM 407817 kit with this supplement tray!

- Contains 42 pieces
- HF0-1234yf Components
  - O-rings, adapters, sealing washers, valve cores and refrigerant filters
- Covers domestic, European and Asian vehicles
- Includes late model coverage

### P/N TEM 407817 A/C Specialist Parts Assortment with HFO-1234yf Components

- Contains 551 pieces
  - O-rings, sealing washers, valve cores, caps, metal gaskets and orifice tubes
- Covers domestic, European and Asian vehicles
- Includes late model coverage





### P/N TEM 407800 R1234yf Component Tray

- Contains 56 pieces
- R1234yf Components
  - Adapters, valve cores and caps
- Covers import and domestic YF vehicles



## P/N TEM 407350 Heavy Duty & Off Road Air Conditioning Service Parts Organizer

- Contains 628 pieces
  - O-rings, garter springs, adapters, sealing washers, caps & valves, orifice tubes and valve cores
- Covers domestic, European and Asian vehicles