



# Mastercool<sup>®</sup> Inc.

*"World Class Quality"*

Distributing Air Conditioning, Refrigeration,  
Service Tools & Equipment Worldwide



**2021**  
Supplement

# NEW BLUETOOTH® WIRELESS TECHNOLOGY PRODUCTS

## SPARTAN SMART MANIFOLD with Bluetooth® Wireless Technology <<HVAC>>

Mastercool introduces the new SPARTAN series smart manifold with Bluetooth® wireless technology. This smart manifold is equipped with a 4.3" color touchscreen LCD, allowing the user to navigate through all of the screens and options with a quick tap of their finger. Now with a built-in premium vacuum sensor and an accuracy down to 1 micron, there is no need for additional equipment to properly diagnose and service your A/C system.



**4.3" Color LCD**  
provides easy to read diagnostic information



**Responsive Touchscreen**  
enables navigation with a quick tap of the finger



**Bluetooth® Wireless Technology**  
allows information to be viewed on compatible hand-held smart devices via the Mastercool Connect app



99923-BT-2



99926-BT-2

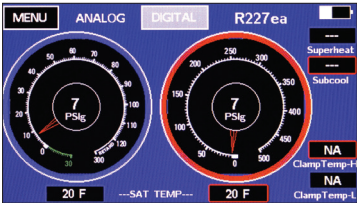
	High Pressure Hoses with Standard Fittings	Temperature Clamp	Black Vacuum Hose	Straight Adapter Fitting (90413)	USB Type C Connector
--	--	-------------------	-------------------	----------------------------------	----------------------

### SPARTAN 2 WAY SMART MANIFOLD

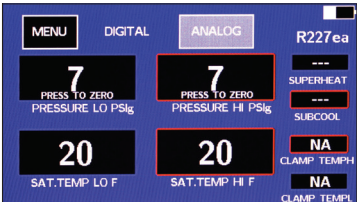
99923-BT	-	-	-	-	1
99923-BT-2	-	2	-	-	1
99926-BT	60"	1	-	-	1
99926-BT-2	60"	2	-	-	1
99927-BT	72"	1	-	-	1
99927-BT-2	72"	2	-	-	1
99926-BT-EU	60"	1	-	2	1
99927-BT-EU	72"	1	-	2	1
99926-BT-2BVE	60" with ball valves	2	-	2	1

### SPARTAN 4 WAY SMART MANIFOLD

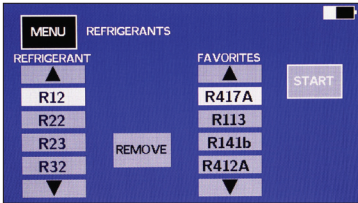
99943-BT	-	-	-	-	1
99943-BT-2	-	2	-	-	1
99946-BT	60"	1	1	-	1
99946-BT-2	60"	2	1	-	1
99947-BT	72"	1	1	-	1
99947-BT-2	72"	2	1	-	1
99946-BT-EU	60"	1	1	2	1
99947-BT-EU	72"	1	1	2	1
99946-BT-2BVE	60" with ball valves	2	-	2	1



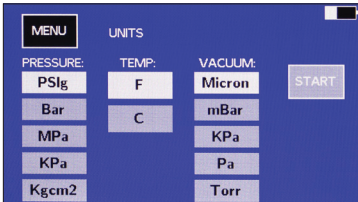
**ANALOG DASHBOARD**  
Large, easy to read analog representation of diagnostic information



**DIGITAL DASHBOARD**  
Large, easy to read digital representation of diagnostic information



**REFRIGERANTS DASHBOARD**  
Easily select and save frequently used refrigerants



**UNITS DASHBOARD**  
Quickly change any of the unit settings



**Mastercool®**  
"World Class Quality"

# NEW BLUETOOTH® WIRELESS TECHNOLOGY PRODUCTS

## 98063-BT

### DIGITAL VACUUM GAUGE WITH BLUETOOTH® WIRELESS TECHNOLOGY

Mastercool's compact hand-held digital vacuum gauge with Bluetooth® wireless technology utilizes new sensor technology with a state of the art glass beaded thermistor and temperature compensation. Bluetooth® wireless technology provides communication to hand-held smart devices through the Mastercool Connect app.

- Connection Fitting: 1/4 SAE F-FL with stem depressor
- Operating Temperature: 32 to 120°F (0 to 45°C)
- Vacuum Units: Micron, Torr, mTorr, mmHg, mBar, Pa
- Range: 20,000 to 1 micron
- Accuracy:  $\pm 10\%$  of reading (from 10,000 to 100 microns)
- Proof Pressure: 450 psi



## 52234-BT

### DIGITAL THERMOMETER/HYGROMETER WITH BLUETOOTH® WIRELESS TECHNOLOGY

- Convenient clip, can easily be attached to a vent louver or register to see results more accurately
- Works with the Mastercool Connect app to remotely provide:
  - Relative humidity (Tamb=23±5°C): 1~99%, accuracy:  $\pm 3\%$  from 20~80%, otherwise  $\pm 5\%$
  - Dry bulb temperature (DBT): -20~65°C, accuracy:  $\pm 2.5^\circ\text{C}$
  - Wet bulb temperature (WBT): -20~65°C, accuracy:  $\pm 2.5^\circ\text{C}$

## 98210-A

### ACCU-CHARGE II ELECTRONIC REFRIGERANT SCALE WITH BLUETOOTH® WIRELESS TECHNOLOGY

- Capacity: 243 lbs (110 kg)
- Accuracy:  $\pm 0.05\%$  of reading
- Resolution: 0.05 lb / 0.5 oz / 0.01 kg
- Automatic shut-off: (after 3 hrs)
- Operating temperature: 32°F to 120°F (0°C to 49°C)
- 9 x 9" (22 x 22 cm) platform

Specifications for Bluetooth® wireless technology:

- 260' (80m) maximum line-of-sight range
- Bluetooth® 4.2 and 5

Bluetooth® wireless technology provides communication to hand-held smart devices through the Mastercool Connect app.



## MASTERCOOL CONNECT APP

The Mastercool Connect app is used exclusively with Mastercool's Bluetooth® capable products. This app provides full mobility for our Bluetooth® enabled products as live activity can be easily viewed on all compatible hand-held smart devices. The Mastercool Connect app requires iOS versions 11 or later and Android versions 6 or later.



### SUPPORTED MASTERCOOL DEVICES INCLUDE:

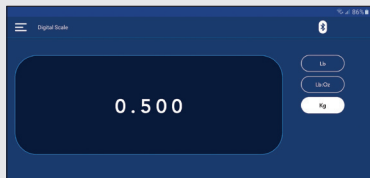
#### Spartan 2-Way Smart Manifold / Spartan 4-Way Smart Manifold with Bluetooth® Wireless Technology

- Provides all of the manifold's data remotely. Sit back in a comfortable location and watch the system's performance.
- Leak test for both pressure and vacuum. Check on the test's progress while performing other tasks away from the unit.
- Datalog the system's performance for up to 36 hours. The app gives you a way to download the information from the manifold and forward the file to your favorite spreadsheet program for analysis.



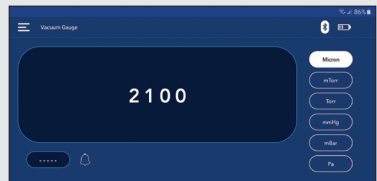
#### Electronic Charging Scale with Bluetooth® Wireless Technology

- Remote display weight of charge and recovery quantities



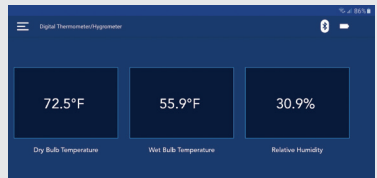
#### Digital Vacuum Gauge with Bluetooth® Wireless Technology

- Remote display vacuum. Check on the vacuum progress while away from the unit.
- Provide a remote vacuum alarm.
- Display the unit value along with the alarm set-point value.



#### Digital Thermometer/Hygrometer with Bluetooth® Wireless Technology

- Remotely read temperature and humidity. Adjust the system away from the sensor and still see the results.
- Display air temperature/dry bulb temperature, wet bulb temperature and percent humidity. Values are displayed in large, easy to read numbers.



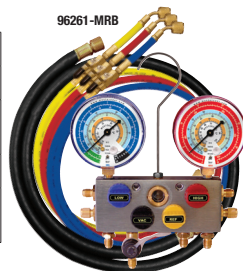
Apple® and the Apple Logo® are trademarks of Apple Inc. Google Play and the Google Play logo are trademarks of Google LLC. The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Mastercool Inc. is under license. Other trademarks and trade names are those of their respective owners.



**Mastercool®**  
"World Class Quality"

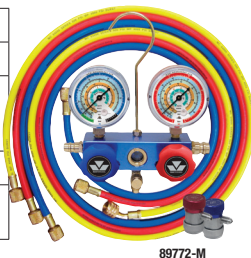
## 3/8" BORE 4-WAY BALL VALVE MANIFOLD <<HVAC>>

Gauge class – diameter	1.6 - 80mm		1.0 - 80mm	
Units	Bar/°C	Bar/PSI/°C	Bar/kPa/PSI/°C	Bar/PSI/°C
Refrigerant scales	R134a-R404A- R407C-R22-R507A	R410A- R407C-R22	R32-R410A	R455A-R448A- R449A-R452A
Manifold with gauges only	<b>96203-MB</b>	<b>96203-EB</b>	<b>96203-EBA1</b>	<b>96203-MNB1</b>
Manifold with 3-150 cm ball valve hoses + 1-150 cm black 3/8" hose	<b>96261-MB</b>	<b>96261-EB</b>	<b>96261-EBA1</b>	<b>96261-MNB1</b>



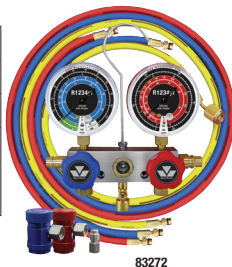
## 2-WAY PISTON VALVE MANIFOLD FOR AUTOMOTIVE A/C - R134a <<AUTOMOTIVE>>

Gauge class – diameter	1.6 - 63mm	1.6 - 80mm	
Units	Bar/°C	Bar/°C	Bar/PSI/°C
Refrigerant scales	R134a-R404A- R407C-R22- R507A	R134a-R404A- R407C-R22- R507A	R134a-R22- R12-R404A
Manifold with gauges only (1/4" SAE)	<b>85103-M</b>	<b>85103-MB</b>	<b>85103-MRB</b>
Manifold (as above) with 3-180 cm hoses, 1/4" SAE (p/n 40372) with quick couplers	<b>89772-M</b>	<b>89772-MB</b>	<b>89772-MRB</b>



## 2-WAY PISTON VALVE MANIFOLD FOR AUTOMOTIVE A/C - R1234yf <<AUTOMOTIVE>>

Gauge class – diameter	1.6 - 80mm
Unit	Bar/PSI/°F/°C
Refrigerant scales	R1234yf
Manifold with gauges, 3 x 12 mm-F fittings	<b>83102</b>
Manifold with 3-180 cm hoses and R1234yf couplers	<b>83272</b>



## 2-WAY ALUMINUM MANIFOLD – PISTON VALVES – CLASS 1.0 GAUGES <<HVAC>>

Gauge class-diameter	1.0 - 80mm	
Units	Bar/PSI/°C	Bar/PSI/°C
Refrigerant scales	R22-R407C R32-R410A	R22-R404A R407F-R134a
Manifold with gauges, fittings + central tee 1/4" SAE	<b>93103-EB1</b>	<b>93103-MRB1</b>
Manifold with 3-90 cm hoses	<b>93636-EB1</b>	<b>93636-MRB1</b>
Manifold with 3-150 cm hoses	<b>93661-EB1</b>	<b>93661-MRB1</b>
Manifold with 3-150 cm ball valve hoses	<b>92661-EB1</b>	<b>92661-MRB1</b>
Manifold with 3-180 cm hoses	<b>93772-EB1</b>	<b>93772-MRB1</b>



\* Add an -E for ball valve at the end hoses

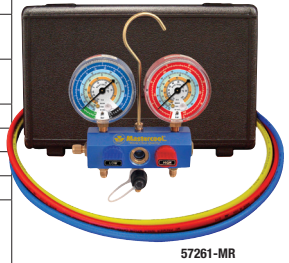
\* For more manifold gauge options please visit [www.mastercool.com](http://www.mastercool.com)



**Mastercool®**  
"World Class Quality"

## 2-WAY SIGHT GLASS MANIFOLD – BALL VALVES <<HVAC>>

Gauge class-diameter	1.6 - 63mm		
Units	Bar/PSI/°C	Bar/PSI/°C	Bar/°C
Refrigerant scales	R410A-R507A-R404A-R22	R134a-R22-R12-R404A	R134a-R404A-R407C-R22-R507A
Manifold with gauges 2 x 1/4" fittings + central tee 1/4" SAE with branch 3/8"	<b>58103-E</b>	<b>58103-MR</b>	<b>58103-M</b>
Manifold with 3-90 cm ball valve hoses	<b>57236-E</b>	<b>57236-MR</b>	<b>57236-M</b>
Manifold with 3-150 cm ball valve hoses	<b>57261-E</b>	<b>57261-MR</b>	<b>57261-M</b>
Gauge class-diameter	1.6 - 80mm		
Units	Bar/PSI/°C	Bar/PSI/°C	Bar/°C
Refrigerant scales	R410A-R407C-R22	R134a-R22-R12-R404A	R134a-R404A-R407C-R22-R507A
Manifold with gauges 2 x 1/4" fittings + central tee 1/4" SAE with branch 3/8"	<b>58103-EB</b>	<b>58103-MRB</b>	<b>58103-MB</b>
Manifold with 3-90 cm ball valve hoses	<b>57236-EB</b>	<b>57236-MRB</b>	<b>57236-MB</b>
Manifold with 3-150 cm ball valve hoses	<b>57261-EB</b>	<b>57261-MRB</b>	<b>57261-MB</b>



57261-MR

## 2-WAY BRASS MANIFOLD – PISTON VALVES <<HVAC>>

Gauge class-diameter	1.6 - 63mm		
Unit	Bar/PSI/°C	Bar/PSI/°C	Bar/°C
Refrigerant scales	R410A-R507A-R404A-R22	R134a-R22-R12-R404A	R134a-R404A-R407C-R22-R507A
Manifold with gauges, 3 x 1/4" SAE fittings	<b>33103-E</b>	<b>33103-MR</b>	<b>33103-M</b>
Manifold with 3-90 cm hoses	<b>33636-E</b>	<b>33636-MR</b>	<b>33636-M</b>
Manifold with 3-150 cm hoses	<b>33661-E</b>	<b>33661-MR</b>	<b>33661-M</b>
Manifold with 3-150 cm ball valve hoses	<b>32661-E</b>	<b>32661-MR</b>	<b>32661-M</b>
Gauge class-diameter	1.6 - 80mm		
Unit	Bar/PSI/°C	Bar/PSI/°C	Bar/°C
Refrigerant scales	R410A-R407C-R22	R134a-R22-R12-R404A	R134a-R404A-R407C-R22-R507A
Manifold with gauges, 3 x 1/4" SAE fittings	<b>33103-EB</b>	<b>33103-MRB</b>	<b>33103-MB</b>
Manifold with 3-90 cm hoses	<b>33636-EB</b>	<b>33636-MRB</b>	<b>33636-MB</b>
Manifold with 3-150 cm hoses	<b>33661-EB</b>	<b>33661-MRB</b>	<b>33661-MB</b>
Manifold with 3-150 cm ball valve hoses	<b>32661-EB</b>	<b>32661-MRB</b>	<b>32661-MB</b>



33661-MR

## 2-WAY ALUMINUM MANIFOLD – PISTON VALVES <<HVAC>>

Gauge class-diameter	1.6 - 63mm		
Units	Bar/PSI/°C	Bar/PSI/°C	Bar/°C
Refrigerant scales	R410A-R507A-R404A-R22	R134a-R22-R12-R404A	R134a-R404A-R407C-R22-R507A
Manifold with gauges, fittings + central tee 1/4" SAE	<b>93103-E</b>	<b>93103-MR</b>	<b>93103-M</b>
Manifold with 3-90 cm hoses	<b>93636-E</b>	<b>93636-MR</b>	<b>93636-M</b>
Manifold with 3-150 cm hoses	<b>93661-E</b>	<b>93661-MR</b>	<b>93661-M</b>
Manifold with 3-150 cm ball valve hoses	<b>92661-E</b>	<b>92661-MR</b>	<b>92661-M</b>
Gauge class-diameter	1.6 - 80mm		
Units	Bar/PSI/°C	Bar/PSI/°C	Bar/°C
Refrigerant scales	R410A-R407C-R22	R134a-R22-R12-R404A	R134a-R404A-R407C-R22-R507A
Manifold with gauges, fittings + central tee 1/4" SAE	<b>93103-EB</b>	<b>93103-MRB</b>	<b>93103-MB</b>
Manifold with 3-90 cm hoses	<b>93636-EB</b>	<b>93636-MRB</b>	<b>93636-MB</b>
Manifold with 3-150 cm hoses	<b>93661-EB</b>	<b>93661-MRB</b>	<b>93661-MB</b>
Manifold with 3-150 cm ball valve hoses	<b>92661-EB</b>	<b>92661-MRB</b>	<b>92661-MB</b>



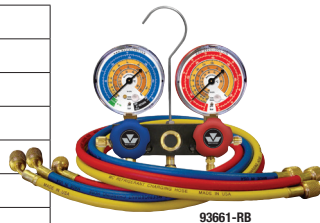
93636-MR



**Mastercool**<sup>®</sup>  
"World Class Quality"

## 2-WAY ALUMINUM MANIFOLD – PISTON VALVES – ISOBUTANE GAUGES <<HVAC>>

Gauge class-diameter	1.6 - 80mm
Units	Bar/PSI/°C
Refrigerant scales	R1270-R290-R600a
Manifold with gauges, fittings + central tee 1/4" SAE	<b>93103-RB</b>
Manifold with 3-90 cm hoses	<b>93636-RB</b>
Manifold with 3-150 cm hoses	<b>93661-RB</b>
Manifold with 3-150 cm ball valve hoses	<b>92661-RB</b>
Manifold with 3-180 cm hoses	<b>93772-RB</b>
<b>&lt;&lt;NEW&gt;&gt;</b> Aluminum 2-way manifold gauge set with 3-45 cm (18") thermoplastic capillary hoses with straight x 45° fittings with depressor for maximum precision on small capacity systems packaged in a cardboard box	<b>93618-RB-TP</b>
<b>&lt;&lt;NEW&gt;&gt;</b> Aluminum 2-way manifold gauge set with 3-60 cm (24") thermoplastic capillary hoses with straight x 45° fittings with depressor for maximum precision on small capacity systems packaged in a cardboard box	<b>93624-RB-TP</b>

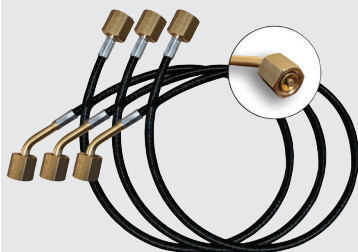


## 2-WAY PISTON VALVE MANIFOLD FOR CO2 (R744) <<HVAC>>

Gauge class – diameter	1.0 - 70 mm
Units	PSI/MPa
Refrigerant scales	R744
Manifold with oil filled gauges only (1/4" SAE)	<b>55103</b>
Manifold with 3-150 cm braided hoses	<b>55661</b>



## THERMOPLASTIC CAPILLARY TUBE ASSEMBLIES



### <<NEW>>

#### THERMOPLASTIC CAPILLARY TUBE ASSEMBLIES - STRAIGHT X 45° FITTINGS WITH DEPRESSOR

- EN 1736 and ISO 13971 - Class 2
- Inner Diameter 2 mm
- Outer Diameter 5.9 mm
- Tolerances 0.1 mm
- Bending Radius 10 mm
- Max Allowable Pressure 60 bar (870 psi)
- Working Temperature 120°C
- Min/Max Allowable Temperature -40 to 130°C
- Weight 25 g/m

- 44318** Set of 3-45 cm (18") capillary hoses with straight x 45° fittings with depressor
- 44324** Set of 3-60 cm (24") capillary hoses with straight x 45° fittings with depressor
- 44184-S45** 45 cm (18") capillary hose with straight x 45° fittings with depressor
- 44244-S45** 60 cm (24") capillary hose with straight x 45° fittings with depressor







**Mastercool®**  
"World Class Quality"

## CAPILLARY TUBES

- Provide a quick and easy connection to components like pressure switches, gauges, oil return circuits and oil leveling in air conditioning and refrigeration systems
- No need for brazing, flaring or bending
- Essential noise reduction and vibration absorption
- Excellent impermeability

<<NEW>>

### CRIMP FITTINGS FOR 2 MM CAPILLARY HOSE

	<p><b>42112-50</b> <b>STRAIGHT CRIMP FITTING WITH HEX NUT</b> packaged in a box of 50 pieces</p> <ul style="list-style-type: none"> <li>• Straight Female Fitting 1/4" SAE</li> <li>• Short Nut 16 mm</li> <li>• Thread SAE J513 - 7/16" 20 UNF</li> </ul>
	<p><b>42112-90-10</b> <b>90° CRIMP FITTING WITH HEX NUT</b> packaged in a box of 10 pieces</p> <ul style="list-style-type: none"> <li>• 90° Female Fitting 1/4" SAE</li> <li>• Short Nut 16 mm</li> <li>• Thread SAE J513 - 7/16" 20 UNF</li> </ul>
	<p><b>91391-10</b> <b>TEE FITTING</b> packaged in a box of 10 pieces</p>
	<p><b>42112-45-10</b> <b>45° CRIMP FITTING WITH HEX NUT</b> packaged in a box of 10 pieces</p> <ul style="list-style-type: none"> <li>• 45° Female Fitting 1/4" SAE</li> <li>• Short Nut 16 mm</li> <li>• Thread SAE J513 - 7/16" 20 UNF</li> </ul>
	<p><b>42044-10</b> <b>DEPRESSOR</b> packaged in a bag of 10</p>
	<p><b>69000-0011-10</b> <b>1/4" COPPER GASKET</b> packaged in a bag of 10</p>



<<NEW>>

### 2 MM THERMOPLASTIC CAPILLARY HOSE

- EN 1736 and ISO 13971 - Class 2
- Inner Diameter 2 mm
- Outer Diameter 5.9 mm
- Tolerances 0.1 mm
- Bending Radius 10 mm
- Max Allowable Pressure 60 bar (870 psi)
- Working Temperature 120°C
- Min/Max Allowable Temperature -40 to 130°C
- Weight 25 g/m

### 44004-1000

**2 MM THERMOPLASTIC CAPILLARY HOSE**  
roll of 25 meters

### 44004-2000

**2 MM THERMOPLASTIC CAPILLARY HOSE**  
roll of 50 meters



<<NEW>>

**71551**

**MANUAL CRIMPER**  
for 2 mm capillary hose



<<NEW>>

**80013**

**CAPILLARY TUBE CUTTER**  
for 2 mm capillary hose

<<NEW>>

**44425**

### CAPILLARY TUBE KIT

All the components necessary to crimp your own capillary hoses housed in Mastercool's nylon backpack.

Kit consists of:

- Mastercool backpack (MC-BACKPACK)
- 50 meters thermoplastic capillary hose (44004-2000)
- Manual crimper (71551)
- Capillary tube cutter (80013)
- Straight crimp fitting with hex nut (50 pieces) (42112-50)
- Depressor (10 pieces) (42044-10)



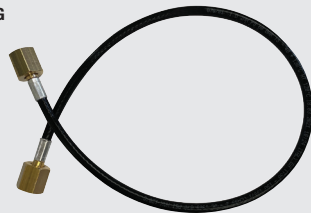
**Mastercool®**  
"World Class Quality"

# THERMOPLASTIC CAPILLARY TUBE & ACCESSORIES

## <<NEW>>

### THERMOPLASTIC CAPILLARY TUBE ASSEMBLIES - STRAIGHT X STRAIGHT FITTING

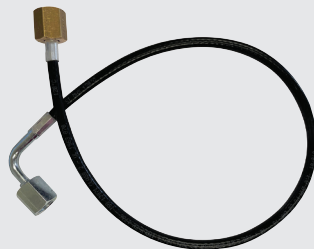
- 44124-STR** 30 cm (12") capillary hose assembly with straight x straight fittings
- 44184-STR** 45 cm (18") capillary hose assembly with straight x straight fittings
- 44244-STR** 60 cm (24") capillary hose assembly with straight x straight fittings
- 44484-STR** 120 cm (48") capillary hose assembly with straight x straight fittings
- 44604-STR** 150 cm (60") capillary hose assembly with straight x straight fittings



## <<NEW>>

### THERMOPLASTIC CAPILLARY TUBE ASSEMBLIES - STRAIGHT X 90° FITTING

- 44124-ST** 30 cm (12") capillary hose assembly with straight x 90° fittings
- 44184-ST** 45 cm (18") capillary hose assembly with straight x 90° fittings
- 44244-ST** 60 cm (24") capillary hose assembly with straight x 90° fittings
- 44484-ST** 120 cm (48") capillary hose assembly with straight x 90° fittings
- 44604-ST** 150 cm (60") capillary hose assembly with straight x 90° fittings



## COUPLERS

### R134a AUTOMOTIVE COUPLERS

Patented manual couplers adjust easily to R134a service ports.

**82834**

**HIGH SIDE MANUAL R134a QUICK COUPLER** (14mm-F x 16mm)

**82934**

**LOW SIDE MANUAL R134a QUICK COUPLER** (14mm-F x 13mm)

**82834-E**

**HIGH SIDE MANUAL R134a QUICK COUPLER** (1/4" FL-M x 16mm)

**82934-E**

**LOW SIDE MANUAL R134a QUICK COUPLER** (1/4" FL-M x 13mm)

### R134a STANDARD AUTOMOTIVE COUPLERS

**66434-R**

**HIGH SIDE STANDARD R134a ECONOMY COUPLER** (1/4" FL-M x 16mm)

**66534-R**

**LOW SIDE STANDARD R134a ECONOMY COUPLER** (1/4" FL-M x 13mm)



82834/82934



82834-E/82934-E



66434-R / 66534-R

## VALVE CORE REMOVER/INSTALLERS

**91490**

### VALVE CORE REMOVER/INSTALLER

1/4" Flare. Sturdy ball valve design controls refrigerant flow with 1/4 turn of the valve lever.

**91498**

### UNIVERSAL VALVE CORE REMOVER/INSTALLER KIT

Offers 1/2"-20 UNF and 1/4" flare fittings for all refrigerant applications.



91490



91498

## <<NEW>>

## <<AUTOMOTIVE>>

**58490-YF**

### UNIVERSAL R1234yf MASTER KIT

The perfect tool for replacing damaged valve cores with R1234yf refrigerant in the system without losing the systems charge.



**Mastercool®**  
"World Class Quality"

# ARCTIC COMMANDER

RECOVERY  
RECYCLE  
RECHARGE  
MACHINES



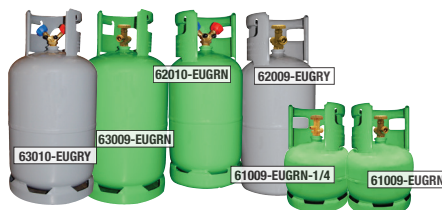
## <<AUTOMOTIVE>>

220V Models (110V models also available, please see www.mastercool.com)	COMMANDER4000-E R1234YF & HYBRID	COMMANDER3000-E R134a & HYBRID	COMMANDER2000-E R134a FULLY AUTOMATIC	COMMANDER1000-E R134a SEMI-AUTOMATIC
8" Color Command Center with Touch Screen	✓	✓	✓	✓
Automatic and Manual Procedures	✓	✓	✓	manual only
Refrigerant Database	✓	✓	✓	optional
Automatic Vacuum Leak Test: Programmable	✓	✓	✓	✓
Auto Oil Discharge, Auto and Manual Air Purge, Auto Filter and Full Tank Alarm, Low Refrigerant Alarm	✓	✓	✓	✓
Auto Oil Injection	✓	✓	✓	n/a
Thermal Printer with Ability to Email Data	✓	✓	optional	optional
Hose Flushing	✓	✓	n/a	n/a
Vehicle A/C System Flushing	✓	✓	n/a	n/a
Tank Heater	✓	✓	✓	✓
Vacuum Pump	6 CFM	6 CFM	6 CFM	3 CFM
Refrigerant Identifier	✓	n/a	n/a	n/a
Multiple Languages	✓	✓	✓	✓
New Cabinet Design for Increased Air Flow	✓	✓	✓	✓
Hard Wired Power Cord and Hose Coupler Storage	✓	✓	✓	✓
Solid Durable Wheels with Locking Casters	✓	✓	✓	✓
Multi-colored LED Status Bar	✓	✓	✓	n/a
Wi-Fi Capable	✓	✓	✓	✓

Also Available: **COMMANDER4000-E-X** (220 V): Without a Refrigerant Identifier

## RECOVERY CYLINDERS

	6 LITER		12.5 LITER	
Model	61009-EUGRN-1/4 (green)	61009-EUGRY (grey) 61009-EUGRN (green)	SINGLE VALVE	
			62009-EUGRY-1/4 (grey) 62009-EUGRN-1/4 (green)	62009-EUGRY (grey) 62009-EUGRN (green)
Model	61010-EUGRN (green)	NA NA	DOUBLE VALVE	
			62010-EUGRY (grey) 62010-EUGRN (green)	NA NA
Connection	1/4" FL-M (7/16-20)	W21.8-14.M	1/4" FL-M (7/16-20)	W21.8-14.M
Size	185 x 338 mm	185 x 338 mm	228 x 516 mm	228 x 516 mm
Tare Weight	5.18 kg	5.18 kg	8 kg	8 kg
Model	27.2 LITER			
	SINGLE VALVE			
Model	63009-EUGRY-1/4 (grey) 63009-EUGRN-1/4 (green)	63009-EUGRY (grey) 63009-EUGRN (green)		
			DOUBLE VALVE	
Model	63010-EUGRY (grey tank) 63010-EUGRN (green tank)	NA NA		
Connection	1/4" FL-M (7/16-20)	W21.8-14.M		
Size (w x h)	298 x 613 mm	298 x 613 mm		
Tare Weight	15.7 kg	15.7 kg		



**Mastercool**<sup>®</sup>  
"World Class Quality"

## TWIN TURBO

REFRIGERANT RECOVERY MACHINE



69300-220

**69300** 115V - 60 HZ  
**69300-220** 220V - 50/60 HZ

- Revolutionary double piston oil-less compressor
- Safety high pressure switch
- Largest volume recovery rate in market
- For use with all refrigerants including R410A

### SPECIFICATIONS:

- 1/2 hp oil less compressor
- Recovery rate:
  - R134a
    - Direct vapor up to 14 kg/hr
    - Direct liquid up to 130 kg/hr
    - Push pull up to 318 kg/hr
  - R22
    - Direct vapor up to 17 kg/hr
    - Direct liquid up to 206 kg/hr
    - Push pull up to 498 kg/hr
- Operating temperature: 0 to 50°C (32 to 122°F)
- Case material is HDPE (High Density Polyethylene)
- Compatible refrigerants: all CFC, HCFC, and HFC's



69350-220

**69350** 115V - 60 HZ  
**69350-220** 220V - 50/60 HZ

This unit offers all the same functions and features as the 69300. In addition it has an oil separation module, filter dryer and sight glass.

### FOR CONTAMINATED MOBILE A/C SYSTEMS DESIGNED FOR R1234yf

#### COMPATIBLE WITH COMBUSTIBLE GASES

**69390** 115V - 60 HZ  
**69390-220** 220V - 50/60 HZ

This unit offers all the same functions and features as the 69300.

#### In addition:

- Meets all SAE J2851 requirements for contaminated recovery only device
- 60" R1234yf blue hose and low side (1/4 FL-M x 13 mm) coupler
- 60" yellow transfer hose

#### 69395-220

HVAC COMBUSTIBLE GAS RECOVERY MACHINE (220V - 50/60 Hz) with 1/4" flare fittings

### REFRIGERANT RECOVERY SYSTEM

#### 69000

115V - 60 HZ  
**69000-220** 220V - 50/60 HZ

- 1/2 HP oil-less compressor
- Recovery rate:
  - direct vapor up to 12 kg/h
  - direct liquid up to 71 kg/h
  - push-pull up to 326 kg/h
- Operating temperature range: 0 to 50°C
- Refrigerants: CFC's, HCFC's, HFC's



#### COMPATIBLE WITH COMBUSTIBLE GASES

## mini TWIN TURBO

REFRIGERANT RECOVERY MACHINE

**69400** 115V - 60 HZ **69400-220** 220V - 50/60 HZ

Equipped with the same compressor as the Twin Turbo series this unit has been designed to work in all applications. Constructed with the safest spark free components allowing for use with all combustible gases.

- 1/2 HP motor
- Operating temperature: 0 to 50°C (32 to 122°F)
- Compatible with all CFC, HCFC, HFC's, and combustible gases



69400-220

#### 69200-220

220V - 50/60 HZ

This unit offers all the same functions and features as the 69000. In addition, it has an oil separation module inside the unit that will dispense used oil effortlessly and a filter dryer and sight glass that allows the technician to clean the used refrigerant and potentially re-use.



## VACUUM GAUGES

### DIGITAL VACUUM GAUGE

#### 98061-C in clam shell

#### 98061 in blow molded case

- Response time: 250 mSec.
- Thermocouple sensor
- Connection fitting: 1/4" FL-F adapter
- Operating temperature: 0 to 45°C (32 to 120°F)
- Vacuum units: Micron, Torr, mTorr, mmHg, mBar, Pa
- Range: 20,000 to 1 micron
- Accuracy range\*:
  - ATM - 1000 Microns: ±5% of reading
  - 1000 - 100 Microns: ±3% of reading
  - 100 - 1 Micron: ±1.5% of reading



### <<NEW>>

### ANALOG VACUUM GAUGES

#### 98065

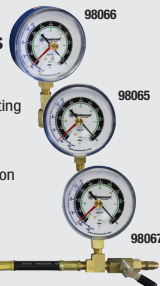
Analog vacuum gauge with 1/8" NPT male thread fitting

#### 98066

Analog vacuum gauge with 1/4" FL-F swivel nut connection

#### 98067-R

Analog vacuum gauge with control valve  
 1/4" FL-F x 1/4" FL-M



**Mastercool®**  
 "World Class Quality"

(110V models also available for all vacuum pumps, please see [www.mastercool.com](http://www.mastercool.com))

## 2 STAGE ELITE BALL BEARING DESIGN VACUUM PUMPS

MODEL	NO. OF STAGES	FREE AIR DISPLACEMENT	ULTIMATE VACUUM	MOTOR	PUMP SPEED	ELECTRICAL SPECS
90065-220	2	119 lit/min 142 lit/min	25 MICRONS	1/3 HP	1425 RPM 1725 RPM	220 V/50 HZ 220 V/60 HZ
90067-220	2	178 lit/min 213 lit/min	25 MICRONS	1/2 HP	1425 RPM 1725 RPM	220 V/50 HZ 220 V/60 HZ



## VACUUM PUMP OIL

### 90010-6

(Six) - 295 ml / 10 oz bottles

### 90016-6

(Six) - 450 ml / 16 oz bottles

### 90018-6

(Six) - 531 ml / 18 oz bottles

### 90024-6

(Six) - 708 ml / 24 oz bottles



## 2 STAGE DUAL VOLTAGE VACUUM PUMP

MODEL	NO. OF STAGES	FREE AIR DISPLACEMENT	ULTIMATE VACUUM	MOTOR	PUMP SPEED	ELECTRICAL SPECS
90063-2V-220-B	2	85 lit/min 71 lit/min	15 Microns	1/3 HP	1440 RPM	220 V 50/60 HZ
90066-2V-220-B	2	170 lit/min 142 lit/min	15 Microns	1/2 HP	1440 RPM	220 V 50/60 HZ
90066-220-BSF "SPARK FREE"	2	170 lit/min 142 lit/min	15 Microns	1/2 HP	1440 RPM	220 V 50/60 HZ
90068-2V-220-B	2	227 lit/min 189 lit/min	15 Microns	3/4 HP	1440 RPM	220 V 50/60 HZ
90612-2V-220-B	2	340 lit/min 283 lit/min	15 Microns	1 HP	1140 RPM	220 V 50/60 HZ

## 2 STAGE DUAL VOLTAGE VACUUM PUMPS WITH SOLENOID VALVE

### MODELS AVAILABLE:

90063-2V-220SVB

90066-2V-220SVB

90068-2V-220SVB

90612-2V-220SVB



90066-2V-220SVB

## SINGLE STAGE VACUUM PUMP

MODEL	NO. OF STAGES	FREE AIR DISPLACEMENT	ULTIMATE VACUUM	MOTOR	PUMP SPEED	ELECTRICAL SPECS
90059-B-220	1	51 lit/min 42 lit/min	80 MICRONS	1/4 HP	1440 RPM	220 V 50/60 HZ

## 90066-SV-220

### UNIVERSAL SOLENOID VALVE AND GAUGE ASSEMBLY

- 3/8 NPT vacuum connection port
- 1/4" flare hose connection port

\*Note: Some internal wiring assembly necessary



## <<NEW>>

### 18 VOLT CORDLESS, 1.5 CFM, 5 AMP

### 2 STAGE VACUUM PUMP

### 90058-5A-EU

Complete kit includes 18 V cordless vacuum pump, 1/4" SAE port, Mastercool designed rechargeable battery, Mastercool adapter sleeve and standard 110/220V battery charger with schuko plug



**Mastercool®**  
"World Class Quality"

## REFRIGERANT SCALES



98315  
with solenoid

### 98310

#### WIRELESS REFRIGERANT CHARGING SCALE

### 98315

#### WIRELESS REFRIGERANT CHARGING SCALE WITH SOLENOID

- Wireless unit prevents unwanted tangles in wires
- Easily store the remote in the body of the platform
- Keypad provides synchronization and zeroing
- Extremely accurate weight sensor
- Magnet on remote allows easy placement on fixtures
- Battery life symbol for platform and remote constantly displayed on LCD
- Wireless signal strength indicator conveniently displays on remote



98230

### 98230

#### CHARGING SOLENOID MODULE

This module allows the user to control the exact amount of refrigerant transferring to and from the A/C system. The 98230 with 1/4" x 1/4" fittings includes a short hose for tank connection, USB cord and 1/4" FL - 1/2" ACME adapters.

### <<NEW>>

#### HIGH PRECISION CHARGING SCALE SPECIALLY DESIGNED FOR R600a AND R290

Mastercool's high precision charging scale accurately measures small cans of refrigerant for charging systems that need a precise charge.

### 98201

High Precision Charging Scale (only)

### 98202

High Precision Charging Scale with storage for a 14 oz. refrigerant cylinder (sold separately) packaged in a custom molded plastic case

### 98202-600

High Precision Charging Scale packaged in a custom molded plastic case with a can of R600a refrigerant

### 98202-290

High Precision Charging Scale packaged in a custom molded plastic case with a can of R290 refrigerant



### <<NEW>>

### 91050-600-12

R600a REFRIGERANT CYLINDER (14.8 OZ)  
packaged 12 per box



### <<NEW>>

### 91050-290-12

R290 REFRIGERANT CYLINDER (13 OZ)  
packaged 12 per box



## REFRIGERANT IDENTIFIERS



### <<NEW>>

### <<AUTOMOTIVE>>

### 69LEGEND

#### LEGEND SERIES™ R1234YF & R134a REFRIGERANT ANALYZER

without Bluetooth / without printer certified to the SAE J2912 standard and connects directly to SAE J2843 and J3030 AC service machines that have an external analyzer USB port

### <<AUTOMOTIVE>>

### 69134-A

#### R134a REFRIGERANT IDENTIFIER

### <<AUTOMOTIVE>>

### 691234YF-MINI

#### R1234yf REFRIGERANT IDENTIFIER

- Keeps equipment safe
- Prevents contamination
- Detects air contamination



69134-A

691234YF-MINI

### <<NEW>>

### <<HVAC>>

### 69LEGEND-HFC

#### LEGEND SERIES™ HFC REFRIGERANT ANALYZER

#### DIAGNOSTIC REFRIGERANT ANALYZER FOR MULTIPLE HVAC AND REFRIGERATION APPLICATIONS

Clean air calibration is all you need to analyze your refrigerant in less than 2 minutes. No matter the application, the Legend HFC Refrigerant Analyzer is capable of measuring vapor or liquid refrigerant to confirm purity while detecting the presence of other harmful refrigerants or air.

- Analyzed Refrigerants: R22, R32, R134a, R404A, R407C, R410A, Hydrocarbons (HC) and Air
- Identified Refrigerants: R12, R1234yf, R408A, R409A, R417A, R421A, R421B, R422A, R422B, R422C, R427A, Hydrocarbons



**Mastercool**  
"World Class Quality"

<<NEW>>

**VISUAL INSPECTION SIGHT GLASS**

Allows user to visually inspect the refrigerant in any R134a or R1234yf system and identify excess dye, oil or debris

**53376**

**R134a VISUAL INSPECTION SIGHT GLASS WITH R134a QUICK COUPLERS**

**53376-YF**

**R1234YF VISUAL INSPECTION SIGHT GLASS WITH R1234YF QUICK COUPLERS**

**53377**

**R134a VISUAL INSPECTION SIGHT GLASS WITH R134a MANUAL COUPLERS**

**53377-YF**

**R1234YF VISUAL INSPECTION SIGHT GLASS WITH R1234YF MANUAL COUPLERS**



**"MASTERCLEANSE" FLUSH MACHINE**

**69900-220** 220-240 V / 50/60 Hz

**69901-220** 220-240 V / 50/60 Hz

with internal nitrogen regulator for use with European standard 1 liter nitrogen bottle

- Stainless steel ball valve controls
- 1/4" SAE connection
- Additional external container connection
- External nitrogen bottle connection
- Pump equipped with mechanical seal and PTFE gasket



69900-220

**69925**

**MULTIPLE FLUSHING & LEAK TEST ADAPTER KIT FOR FLUSH MACHINE**

Multi-purpose leak test and flushing adapters suitable for more than 80% of the automotive air conditioning systems in the market!



## SERVICE ACCESSORIES & CONSUMABLES

- 1/4" SAE flare outlet port, with control valve, to keep pressure on the regulator at all times
- T-Handle for ease of pressure adjustment
- 63 mm (2 1/2") gauges with guards
- High pressure gauge 4400 psig (300 bar), Low pressure gauge 1000 psig (70 bar)
- All kits include a nitrogen pressure regulator, 38" charging hose, leak testing adapter, R410 adapter fitting and bold molded case

NITROGEN PRESSURE REGULATORS						
Model #	<b>53001</b>	<b>53002</b>	<b>53003</b>	<b>53004</b>	<b>53005</b>	<b>53006</b>
Standard	CGA580 (US)	DIN477#6 and DIN477#10 (includes adapter to convert DIN477#6 to DIN477#10) (France/Germany)	BS3 (England)	AS2473.2 (Australia)	5-UNI11144 (Italy)	21.8 L NEN 3268 (Hydrogenated Nitrogen)
1/4 FL-M outlet connection						

(\*upon request all nitrogen pressure regular kits are available in Europe with 1 liter gas connection adapter and 1 liter bottles of nitrogen or nitrogen/hydrogen mix gas)

**53010**

**PRESSURE TESTING REGULATOR KIT (US)**

**53020**

**PRESSURE TESTING REGULATOR KIT (France/Germany)**

**53030**

**PRESSURE TESTING REGULATOR KIT (England)**

**53040**

**PRESSURE TESTING REGULATOR KIT (Australia)**

**53050**

**PRESSURE TESTING REGULATOR KIT (Italy)**

**53060**

**PRESSURE TESTING REGULATOR KIT (Hydrogenated Nitrogen)**



53010

**90935-12**

**ALUM BOND**

Aluminum Repair Kit - box of 12

Alum-bond is aluminum filled epoxy specially formulated for repairing condenser coils, tanks, valves, pumps, castings, water jackets, radiators, etc., where non-rusting, non-magnetic aluminum finish is desired.



**Mastercool<sup>®</sup>**  
"World Class Quality"

# TEMPERATURE MEASUREMENT



Model #	52224-A	52224-CC	52224-D	52225-A	52225-B
Non-Contact Temperature Range:	-50 to 550°C (-58 to 1022°F)	-60 to 760°C (-76 to 1400°F)	-60 to 760°C (-76 to 1400°F)	-60 to 760°C (-76 to 1400°F)	-60 to 1000°C (-76 to 1832°F)
Thermocouple Temperature Range:	n/a	n/a	n/a	-64 to 1400°C (-83 to 1999°F)	
Field of View:	12 : 1			30 : 1	50 : 1
Display Illumination:	Backlit LCD Color Display			Backlit LCD display	
Target Indicator:	Circular Laser		Eight Laser	Single Laser	Dual Laser
Emissivity:	0.95			0.10 (10E) to 1.0 (100E)	0.95
Resolution:	0.1°C / 0.1°F				
Modes:	n/a	n/a	E (52224-D only), MIN, MAX, DIFF & AVG		
Power Off:	Automatic after 15 seconds				

<<NEW>>

52225-MED

## MULTI-FUNCTION MEDICAL/SURFACE INFRARED THERMOMETER

Temperature measurement range:

forehead mode: 34 to 42.2°C (93.2 to 108°F)

surface mode: -22 to 80°C (-7.6 to 176°F)



Blue LED Back-light



## OPTIONAL PROBES

### Wire Thermocouple Probe

52331 - 1 m (3 ft)

52332 - 3 m (10 ft)

### 52334 Surface Probe

### 52333 Piercing Penetration Probe

### 52335 Air Probe



All thermometers include pocket holder & clip

## POCKET ANALOG DESIGNS

52220-C 1" dial, 10 to 100°C

52161 1 3/8" dial, -40 to 70°C (-40 to 160°F)

91120 1 3/4" dial, 0 to 220°F

## POCKET DIGITAL DESIGNS

52223-A 1" dial, -50 to 150°C (-58 to 302°F)



**Mastercool®**  
"World Class Quality"

## THERMAL IMAGING CAMERA

- Fully automatic, focus free
- Superior measurement/accuracy
- Micro SD card storage, reporting software included

### 52325

Thermal Imaging Camera with carry case, micro SD card, CD, USB cord and batteries



### 52230

#### PEN TYPE HYGROMETER

- Rotating cap to protect sensor
- LCD digital display
- Temperature and humidity in °F or °C
- Max/Min record function
- Data hold & auto-off

## <<HVAC>>

Part #	52251 System Analyzer	52253 Round Vane	52254 Antenna Type Meter (extends 37")	52336 3 Ft. Clamp-on Thermocouple	52252 Pressure Transducer
<b>SYSTEM ANALYZER KITS</b> in a blow molded plastic box					
52255	✓	✓	-	✓	-
52260	✓	-	✓	✓	-
52270	✓	✓	-	✓	✓
52280	✓	-	✓	✓	✓

- Calculates actual superheat and subcool temperatures
- Provides all the functions of a high-end anemometer: airflow volume, air velocity, dry bulb temperature, wet bulb temperature, relative humidity and dew point
- Optional pressure transducer for direct system readings, optional antenna type meter for any hard to reach locations



### 52233

#### DIGITAL PSYCHROMETER

- Rotating cap to protect sensor
- LCD digital display
- Data hold to capture readings
- Low battery indicator
- Max/Min record function
- Fast response, accurate reading
- Microprocessor circuitry for reliability
- Auto power off with disabling capability



### 52228

#### DIGITAL DIFFERENTIAL THERMOMETER

Provides instant measurements of TWO points. (T1, T2) and T1 – T2.

- Max & data hold function
- Temperature in °F or °C
- AUX output jacks
- Type K thermocouple input
- Resolution: 0.1°C (0.1°F)
- Includes 2-3 ft thermocouple probes



## <<HVAC>>

### 52246

#### COMPACT SUBCOOL/SUPERHEAT CALCULATOR

- Preprogrammed with 37 popular refrigerants
- Clamp-on K-type thermocouple included to achieve accurate temperature measurement
- View bubble and dew temperature for corresponding pressure on large LCD display
- Easily select superheat or subcool temperature with a touch of a button
- Easily look up saturated temperature using the pressure from any gauge set

### 52240

#### PROFESSIONAL HVAC/R CLAMP METER

- Multi-Function: frequency count, diode check and alarm
- Peak data hold, unit and sign display
- Current: (AC) 20 mA – 600A
- Voltage: AC - 200 mv - 750V, DC - 1V - 1000V
- Frequency: 10 HZ - 2 KHZ
- Ohms: (Resistance) 200m ohm - 20k ohm
- Auto power off



### 52238

#### DIGITAL SOUND LEVEL METER

- Automatic or manual ranging
- 4 measurement ranges from 40 to 130 dB
- 0.1dB resolution
- Select fast or slow response times
- Select A or C weighting
- Maximum hold function
- Record maximum or minimum measurements
- Jacks provide AC analog output



**Mastercool®**  
"World Class Quality"

## IntellaSense

55800 REFRIGERANT LEAK DETECTOR

<< MEETS AND EXCEEDS J2791 (R134a), J2913 (R1234YF) AND EN 14624 >>

Detects:

- Combustible Gases
- Hydrogen
- Refrigerants: All CFC's, HCFC's & HFC's
- Sensitivity:
  - HIGH  $\geq 0.15$  oz/yr (4.25 g/yr)
  - MEDIUM  $\geq 0.25$  oz/yr (7 g/yr)
  - LOW  $\geq 0.5$  oz/yr (14 g/yr)
- Intelligent tip design senses environmental conditions to eliminate the potential of false alarms
- First progressive color LCD corresponds to the magnitude of the detected leak

55850 IntellaSense Kit includes 12 LED UV light and UV glasses



55975

## IntellaSense III

COMBUSTIBLE GAS LEAK DETECTOR

COMPATIBLE WITH COMBUSTIBLE GASES

<< MEETS AND EXCEEDS

J2791 (R134a), J2913 (R1234YF)

AND EN 14624 >>

- Sensing element: heated tin oxide
- Sensor life: 2000 hours
- Refrigerants: detects combustible gases
- Response time: less than 1 second
- Operating temperature range: 0°F to 120°F
- Ultimate sensitivity: 50 – 1000 ppm
- Intelligent tip, with environment sensing element to eliminate the potential of false alarms
- Flexible 15.5 inch probe length for difficult to reach locations
- LED display

DETECTS: Acetone, Acetylene, Ammonia, Benzene, Butane, Butanol, Chlorine, Ethane, Ethanol, Gasoline, Hexane, Hydrogen, Hydrogen Sulfide, Isobutane, Methane (natural gas), Methanol, Methyl Acetate, Methyl Chloride, Methyl Ether, Naptha, N-Butane, Pentane, Propane, Propanol, Sulfur Dioxide and Trichloroethane



56100

<< MEETS AND EXCEEDS J1627>>

- 3 levels of sensitivity (5 levels of detection)
- Visual leak level indicator
- Detects leaks as small as 1/10 oz (3 gr) per year
- Detects all refrigerants (CFC's, HCFC's, HFC's)
- Digital signal micro processor
- Visual leak level indicator
- Sensitivity level adjustment
- Variable frequency audible alarm



56200

WITH UV BLUE LIGHT

<< MEETS AND EXCEEDS J1627>>  
Finds Leaks Fast & Easy!

- 6 levels of sensitivity (15 levels of detection)
- Detects leaks as small as 1/10 oz (3 gr) per year
- Built-in UV light delivers a brilliant fluorescent glow
- Built-in probe light can also be used to illuminate dark areas
- Detects all refrigerants (CFC's, HCFC's, HFC's)
- Digital signal micro processor
- Visual leak level indicator
- Sensitivity level adjustment
- Variable frequency audible alarm



55744

ELECTRONIC LEAK DETECTOR FOR R744

Mastercool's electronic leak detector for R744 is the most technologically advanced instrument of its kind. The minimal power requirements, small size and high sensitivity combine to create a tool which is easy to handle and ultra-effective at locating even the most difficult to find leaks.

- Operating Temperature: 0 to 50°C (32 to 122°F)
- Warm Up Time: 10 seconds
- Response Time: < 1 second
- Reset Time: < 1 second
- Sensitivity (High): < 400 ppm at 350 ppm ambient
- Sensitivity (Low): < 4,000 ppm at 350 ppm ambient
- Batteries: 4 x 1.5V 'AA' alkaline batteries (6 VDC)
- Battery Life: 20 hours



**Mastercool®**  
"World Class Quality"

## 53513-UV

### MINI UV FLASHLIGHT

- High intensity LED bulb – UV illumination
- UV wavelength: 390-400



## 53515

### MACH IV COMPACT UV LIGHT KIT

Flexible wand gets into tight areas.  
Bright LED technology. Rugged ergonomic grip.



## 53518-UV (110V Charger)

### 53518-UV-220 (220V Charger)

#### RECHARGEABLE UV FLASHLIGHT

- AAA battery holder provides backup power to flashlight
- High intensity LED
- Lamp power: 2W
- 154 – 170 µW/cm2 which is compatible to a 50 watt UV flashlight
- UV wavelength: 390-400

<<R1234YF COMPATIBLE>>



## 53909

### MINI AUTO A/C MASTER LEAK SHIELD DYE INJECTOR

"Cartridge Type" 1 oz injector with auto A/C master leak shield sealant with dye, low side hose and R12 adapter

## 53910

### AUTO A/C MASTER LEAK SHIELD

1 oz replacement cartridge of auto A/C master leak shield sealant with dye

## 53615-A

### AUTO A/C MASTER LEAK SHIELD

1 oz can of auto A/C master leak shield sealant with dye

## 53593

### COMPACT UV FLASHLIGHT KIT

Mini UV flashlight, "cartridge type" 1 oz injector with auto A/C master leak shield sealant with dye, low side hose, R12 adapter, UV safety glasses and service information labels



## 53223

### "CARTRIDGE TYPE" UNIVERSAL DYE/OIL INJECTOR

Replaceable cartridge provides 2 oz of universal dye that is compatible with R12/22/502 and R134a systems. The injector hose comes complete with a R134a coupler and auto shut-off valve adapter for 1/4" FL systems.

## 53123

### REFILLABLE "PISTON TYPE" UNIVERSAL DYE/OIL INJECTOR

Refillable universal dye/oil injector with 2 oz bottle of concentrated A/C dye.

## 53322

### REFILLABLE "PISTON TYPE" UNIVERSAL DYE INJECTOR

Refillable universal dye injector with 1/4" auto shut-off valve connection & 2 oz bottle of concentrated A/C dye.

## 92376

### REFILLABLE "IN-LINE" DYE INJECTOR

Refillable "in-line" dye injector with 1/4" auto shut-off valve connection & 2 oz bottle of concentrated A/C dye.



## 53451-110 (includes 110V charger)

### 53451-220 (includes 220V charger)

Kit contains: rechargeable UV light, batteries, rechargeable batteries, battery holder, charger, refillable 2 oz dye injector, 2 oz concentrated universal A/C fluorescent dye (25 applications), 4 oz dye remover, 25 service information labels & UV glasses

## 53451-C-110 (includes 110V charger)

### 53451-C-220V (includes 220V charger)

Same as 53451, but with replaceable 2 oz dye cartridge (25 applications)



## 53615

### MASTER LEAK SHIELD HVAC UP TO 1.5 TONS (5.3 KW)

1 oz can of master leak shield HVAC sealant with dye for use on systems up to 1.5 tons

## 53660

### MASTER LEAK SHIELD HVAC

#### 1.5 TO 6 TONS (5.3 KW TO 21 KW)

3 oz can of master leak shield HVAC sealant with dye for use on systems 1.5 to 6 tons



## ULTRAVIOLET DYES

<<HYBRID & R1234YF COMPATIBLE>>

## 92699

### UNIVERSAL STANDARD DYE

Six - 1/4 oz packs

## 92708

### R12/22/502

### UNIVERSAL STANDARD DYE

8 oz ester (POE) oil base

## 92732

### R12/22/502 UNIVERSAL STANDARD DYE

32 oz ester (POE) oil base

## 53825

### UNIVERSAL 2 OZ REPLACEABLE DYE CARTRIDGE

Ester (POE) oil base

## 53625

### UNIVERSAL DYE 2 OZ BOTTLE

Ester (POE) oil base



**Mastercool<sup>®</sup>**  
"World Class Quality"

# SPECIALTY HYDRAULIC TOOLS/TUBING TOOLS

## <<AUTOMOTIVE>>

### 71500-A HYDRA-KRIMP

Kit comes with a complete set of dies covering hose sizes #6, #8, #10, #12 and reduced barrier #6, #8, #10 and #12. The dies snap quickly into the press fixture requiring no pins or screws. (patent # 6,324,884)

### 71550 A/C HOSE CRIMPER

Manual style A/C hose crimper. Complete set of dies covering standard hose sizes #6, #8, #10 and #12. (patent # 6,324,884)



71500-A



71550

## <<HVAC>>

### 71600-A TUBE EXPANDING TOOL KIT

- Expander heads 3/8, 1/2, 5/8, 3/4, 7/8, 1 & 1 1/8"
- Hydra-Swage (71601)
- Small adapter & inner-outer reamer

### 71650-A TUBE EXPANDING TOOL KIT

- Expander heads 3/8, 1/2, 5/8, 3/4, 7/8, 1, 1 1/8, 1 3/8", 1 5/8, 2 1/8"
- Hydra-Swage (71601)
- Large adapter and inner-outer reamer

Also Available:

### 71675 (7 HEAD KIT) COMPLETE HYDRAULIC FLARING AND EXPANDING KIT

### 71676 (10 HEAD KIT) COMPLETE HYDRAULIC FLARING AND EXPANDING KIT

### 71680 HYDRAULIC FLARING ACCESSORY



71600-A



71650-A

## <<HVAC>>

### 71700 HYDRAULIC FLARING & SWAGING TOOL

The kit includes dies and adapters for flaring and swaging copper tubing sizes 1/4, 5/16, 3/8, 5/8, 1/2, 3/4 & 7/8".



70053



71700

### 70053 45° FLARING & SWAGING TOOL SET

Two flaring bars cover 9 sizes: 1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8 & 3/4" O.D. tubing, five swaging adapters cover 7 sizes: 3/16, 1/4, 5/16, 3/8, 1/2, 5/8 & 3/4" O.D. tubing.

### 70091 45° FLARING & CUTTING TOOL SET

Heavy duty tube cutter for 1/8 - 1 1/8" O.D. tubing & standard 45° flaring tool flares 7 sizes: 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 & 5/8" O.D. tubing.



70091



70051



70052

### 70051 STANDARD 45° FLARING TOOL

Flares 7 sizes: 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 & 5/8" O.D. tubing.

### 70052 SLIDING DIE-BLOCK 45° FLARING TOOL

Flares & burnishes 6 sizes: 3/16, 1/4, 5/16, 3/8, 1/2 & 5/8" O.D. tubing.



70056

### 70056 LARGE CAPACITY 45° FLARING TOOL

Flares 4 sizes: 5/8, 3/4, 7/8 & 1" O.D. tubing.

### 70057-A

### ECCENTRIC FLARING TOOL

Flares 6 Sizes: 1/4, 5/16, 3/8, 1/2, 5/8 and 3/4" O.D. tubing.

- Aluminum design
- Light weight and durable
- Automatic torque release



70058-A

### 70058-A

### ECCENTRIC FLARING TOOL KIT

includes: 70057-A eccentric flaring tool, 71685 inner-outer reamer, 70033 heavy duty tube cutter for 4 to 28 mm (1/8 - 1 1/8") O.D. tubing (1/4 to 1" nominal).

Only Eccentric Flaring Tool on the Market to Cover up to 7/8"

### 70059

### ECCENTRIC FLARING TOOL

Flares 6 sizes: 1/4, 3/8, 1/2, 5/8, 3/4, 7/8" O.D. tubing.

### 70060

### ECCENTRIC FLARING TOOL KIT

Kit includes: 70059 eccentric flaring tool, 71685 inner-outer reamer, 70033 heavy duty tube cutter for 4 to 28 mm (1/8 - 1 1/8") (1/8" - 1 1/8").



70060



**Mastercool**  
"World Class Quality"

## 70069-A

**4 – 1 LEVER STYLE 180° TUBE BENDER**  
All metal multi-purpose 180° tube bender for 3/16, 1/4, 5/16 & 3/8" O.D. tubing.



### LEVER STYLE TUBE BENDERS

MODEL#	OUTSIDE DIAMETER OF TUBING	NOMINAL SIZE	RADIUS TO CENTER OF TUBE
70061	1/4"	1/8"	9/16"
70066	3/4"	5/8"	3"

## 70076

### SPRING STYLE TUBE BENDER SET

Set of 5 spring benders for 1/4, 5/16, 3/8, 1/2 & 5/8" O.D. tubing.



## 70070

### "Ratchet Style" TUBE BENDER KIT

- Bends 5 sizes: 3/8, 1/2, 5/8, 3/4 & 7/8" O.D. soft tubing
- Heavy duty tube cutter for 1/8 - 1 1/8" O.D. tubing
- Inner-outer reamer for 3/16 - 1 1/2" O.D. tubing



## 70070-RD

### REVERSE DIRECTION BENDING ADAPTER

Bends: 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 7/8" O.D. tubing

70070

## TUBE CUTTERS

**70027 MINI CUTTER** for 1/8 - 5/8" O.D. tubing

**70029 MIDI CUTTER** for 3/8 - 1 1/8" O.D. tubing

**70030 RATCHET STYLE CUTTER** for 1/4 - 7/8" O.D. tubing

**70031 RATCHET STYLE CUTTER** for 5/16 - 1 1/8" O.D. tubing

**70033 HEAVY DUTY CUTTER** for 1/8 - 1 1/8" O.D. tubing

**70035 HEAVY DUTY CUTTER** for 1/4 - 1 5/8" O.D. tubing

**70037 SLIDING RATCHETED CUTTER** for 1/4 - 2 5/8" O.D. tubing

**70038 SLIDING RATCHETED CUTTER** for 1/4 - 3" O.D. tubing

### 70090 TUBE CUTTER KIT

includes: (1) 70027, (1) 70029 and (1) 70033

### 70090-A TUBE CUTTER KIT

includes: (1) 70027, (1) 70029, (1) 70033 and (1) 70037



## INNER-OUTER REAMERS

### 70085

- Removes inner & outer burrs before flaring
- Capacity 3/16 - 1 1/2" O.D. tubing

### 71685

Removes inner burrs, includes 1 spare tungsten blade



## 70083

### PINCH-OFF PLIER

Size: throat 7", depth 1" & jaw thickness 1/4"



## 70088

### 1/4" TUBE PIERCING PLIER



## 70025

### CAPILLARY TUBE CUTTER

Cuts all sizes of capillary tubes without collapsing the tube.



## 70078

### TORQUE WRENCH

Ensures accurate tightness of fittings, especially R410A. Kit in a blow molded case includes sizes: 17, 22, 24, 26, 27 and 29 mm.



72035



## BALL BEARING TUBE CUTTERS

**72029 "REDUCED FRICTION" TUBE CUTTER** for 1/8 - 1 1/8" (3-28mm)

**72035 "REDUCED FRICTION" TUBE CUTTER** for 1/4 - 1 1/2" (6-38mm)

## PLUMBERS TYPE MINI CUTTERS

Cuts soft copper, aluminum and thin walled steel.

### 80021 TUBE CUTTER

for 1/8 - 7/8" O.D. tubing



**Mastercool®**  
"World Class Quality"

One Aspen Drive  
Randolph, NJ 07869 USA  
Phone: (973) 252-9119  
Fax: (973) 252-2455

Zone Waas 2334  
Laagstraat 19  
9140 Temse, Belgium  
Telefon: +32 (0) 3 777 28 48  
Telefax: +32 (0) 3 777 40 62

Rua Inácio Luis da Costa, 908 Pq. São Domingos  
05112-010 - São Paulo – SP - Brasil  
Phone: (55 11) 4407 4017  
Fax: (55 11) 4407 4019

82a Chinchin St  
Islington NSW  
2296  
Phone: +61 417 401412

[www.mastercool.com](http://www.mastercool.com)



**Director Of Sales:**  
*Idean Barjesteh*  
[idean@mastercool.com](mailto:idean@mastercool.com)

**European Sales:**  
*Luca Moretti*  
[luca@mastercool.com](mailto:luca@mastercool.com)  
*Jan Vanderhenst*  
[jan@mastercool.com](mailto:jan@mastercool.com)  
*Dirk De Coninck*  
[dirk@mastercool.com](mailto:dirk@mastercool.com)  
*Paul Kleisz*  
[paul@mastercool.com](mailto:paul@mastercool.com)  
*Stefania Lacorte*  
[stefania@mastercool.com](mailto:stefania@mastercool.com)

**Latin American Sales:**  
*Gabriel Aguilera*  
[gabriel@mastercool.com](mailto:gabriel@mastercool.com)

**Middle East Sales:**  
*Edmund Hopper*  
[edmund@mastercool.com](mailto:edmund@mastercool.com)

**India Sales:**  
*Rajiv Gupta*  
[rajiv@mastercool.com](mailto:rajiv@mastercool.com)

**Brazil Sales:**  
*André Oliveira*  
[andre@mastercool.com](mailto:andre@mastercool.com)

**Asia Pacific Sales:**  
*Mark Byrnes*  
[mark@mastercool.com](mailto:mark@mastercool.com)  
*Julie Byrnes*  
[julie@mastercool.com](mailto:julie@mastercool.com)

**Authorized Dealer:**