



For 40 years Mastercool has been supplying professional quality air conditioning service tools and equipment. As one of the fastest growing companies in this market, our primary goal is to drive new product innovation and technologies to make the every day work of the HVAC/R technician easier!

With our never-ending focus on innovation and new technology, Mastercool has been awarded many patents worldwide. Our products are currently being distributed in over 76 countries and growing everyday!

MASTERCOOL LOCATIONS:

Corporate Office, Manufacturing and USA Warehouse 1 Aspen Drive, Randolph, NJ 07869 USA

European Sales Office and Warehouse Zone Waas 2334 Laagstraat 19 9140 Temse, Belgium

Brazil Sales Office and Warehouse Rua Inácio Luis da Costa, 908 Pq. São Domingos 05112-010 - São Paolo - SP - Brasil

Australian Sales Office 3 Tozer Street Port Macquarie, NSW 2444 Australia

Corporate Office
Manufacturing and USA Warehouse



European Sales Office and Warehouse



Brazil Sales Office and Warehouse



Australian Sales Office



MASTERCOOL'S EVOLUTION

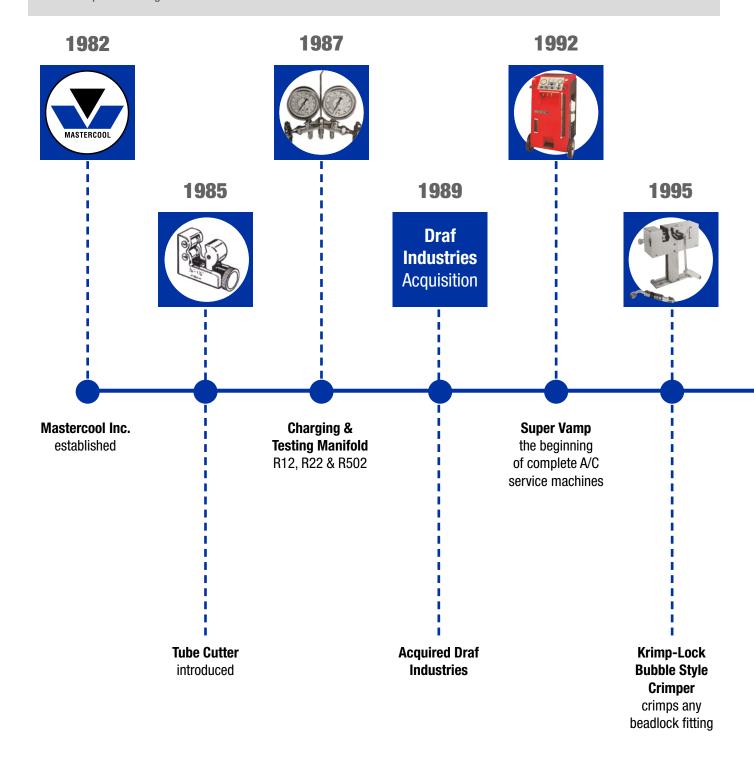


MASTERCOOL INC. a world leader in supplying professional air conditioning, service tools and equipment is celebrating 40 years since its inception in 1982.

Headquartered in the northeast United States, Mastercool was established with the objective of supplying superior quality products to automotive and HVAC technicians. Mastercool's name has become synonymous with "World Class Quality" and uniquely innovative product design.

Formed as a family owned and operated company, in Randolph, New Jersey, Mastercool has now expanded with offices featuring full inventory and staff in Belgium, Brazil and Australia and distribution to over 76 countries.

The flexibility and support of a privately owned mid-sized company has allowed Mastercool to manufacture all of its products with the highest quality components and management systems. All products are checked and tested directly at our headquarters in



MASTERCOOL'S EVOLUTION

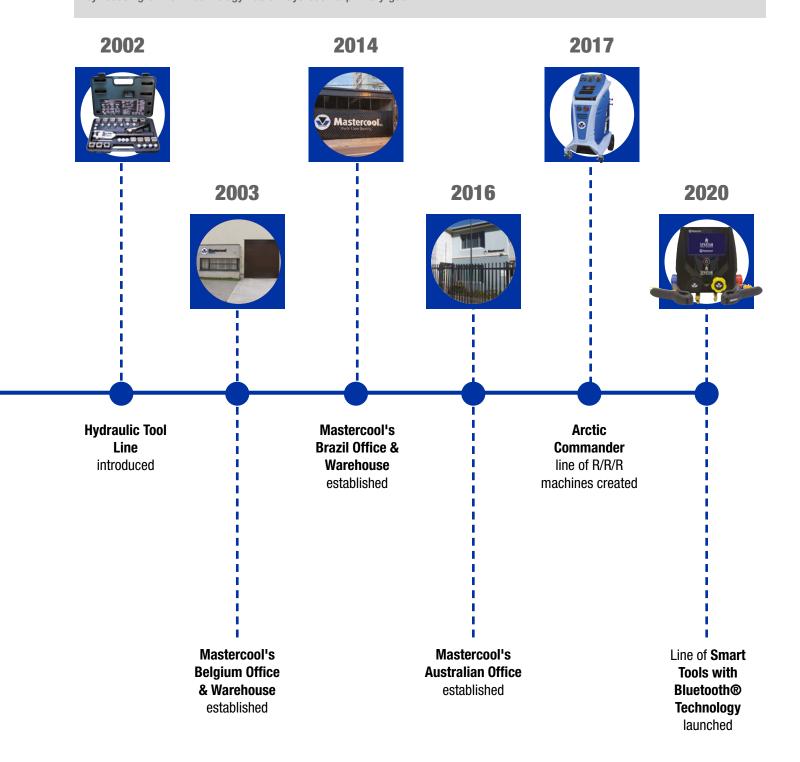


Randolph, New Jersey, USA.

The past few years have been specifically noteworthy with the addition of our Arctic Commander line of recovery/recycle/recharge machines completely designed and assembled in the United States as well as the addition of a line of smart tools utilizing Bluetooth® wireless technology in coordination with our Mastercool Connect app. Adding to our wide range of products by focusing on new technology has always been a primary goal

while driving product innovations to make the every day work of the technician easier.

We would like to thank all of our partners and distributors for their continued support as we celebrate Mastercool's past and look forward to the exciting future ahead.





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MASTERCOOL PRODUCTS ARE MADE/ASSEMBLED IN THE USA



Mastercool manufactures all of its products with the highest quality components and management systems. All products are checked and tested directly at Mastercool headquarters in Randolph, New Jersey, USA.

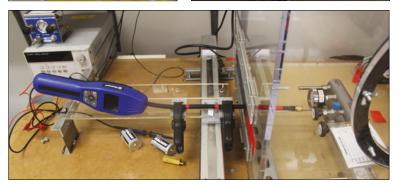
Our products comply in every respect with the requirements set forth by SAE and EPA Standards as well as ARI Standard 740-98, EU Directives and PROP 65 guidelines.











▲ All of our products comply with current PROP 65 guidelines, for more information please visit www.mastercool.com





Black Series Mini-fold COMPACT 2-WAY ALUMINUM MANIFOLD





 \in

COMPACT MANIFOLD, WITH FRONT MOUNTED HOSE HOLDERS, ALLOWS FOR PRECISE CALCULATIONS IN THE PALM OF YOUR HAND

Mastercool's Black Series Mini-fold compact 2-way digital manifold gauge set effortlessly performs pressure and temperature calculations and displays them on a large blue back-lit LCD display. Constructed of the finest materials and machined with precision to the highest quality standards, this compact manifold provides automatic shut-off, units conversion, over range alarm, max and min values and refrigerants selection providing for a powerful tool for the hard-working technician.



FEATURES:

- Compact black anodized aluminum block with matte chrome fittings offer an extremely portable solution to fit the needs of every busy technician
- Easily perform pressure/temperature calculations for up to 91 different refrigerants including R134a, R1234yf and R22 refrigerants
- Unit conversion between MPa, kPa, bar, psi, kg/m2, inHg
- Large 4-digit "blue" back-lit LCD display provides vibrant readings in even the darkest of environments
- Displays alarm indication when over range, celcius or fahrenheit designation and low battery warning directly on the LCD screen
- · Large sight glass for quick visual refrigerant checks
- Easy to grip knobs

INCLUDED REFRIGERANTS:

R11, R113, R114, R115, R116, R12, R123, R1234yf, R1234ze, R124, R125, R13, R134a, R14, R141B, R142B, R413A, R152A, R161, R170, R21, R218, R22, R23, R290, R32, R401A, R401B, R401C, R402A, R402B, R403A, R403B, R404A, R406A, R407A, R407B, R407C, R407D, R407E, R407F, R408A, R409A, R409B, R41, R410A, R410B, R412A, R413A, R414A, R414B, R415B, R416A, R417A, R419A, R420A, R421A, R421B, R422A, R422B, R422C, R422D, R423A, R427A, R437A, R441A, R442A, R443A, R444A, R448A, R449A, R449B, R450A, R452A, R455A, R50, R500, R502, R503, R504, R507A, R508A, R508B, R509A, R513A, R600, R600a, R601, R601a, R740, R744

SPECIFICATIONS:

Pressure range:
 Low pressure range: -14.5 – 500 psi (-0.1 – 3.4 MPa)
 High pressure range: -14.5 – 800 psi (-0.1 – 5.5 MPa)

Resolution: 0.5 psiAccuracy: +/-0.5% FS

· Measurement units: MPA, kPa, bar, psi, kg/cm2, inHg

Temperature units: °C/F
Over range alarm: display -OLOperating temperature: 14°F to 140°F

• Battery: CR2450

• Battery life: approximately 6 months

• Sampling rate: 1 second

Low battery indication: icon on LCD

• LCD Display: 1.4" x 0.65"

• Blue back-light: auto-off after 6 seconds

R134a Compact 2-Way Manifold

- Left fitting 1/2" ACME with R134a low side coupling holder Center fitting - 1/2" ACME fitting with 1/2" ACME holder Right fitting - 1/2" ACME with R134a high side coupling holder
- Front facing hose holder
- · Packaged in a zippered carry case

| Compact Manifold with gauges only | |
|--|--|
| Compact Manifold with 3-72" hoses and R134a manual couplers (82834, 82934) | |

R1234yf Compact 2-Way Manifold

- Left fitting 12 mm-F for R1234yf hose with R1234yf low side coupling holder Center fitting - 1/2" ACME left hand fitting with 1/2" ACME holder Right fitting - 12 mm-F for R1234yf hose with R1234yf high side coupling holder
- Front facing hose holder
- Packaged in a zippered carry case

| Compact Manifold with gauges only | 82103 |
|--|-------|
| Compact Manifold with 3-72" hoses and R1234yf manual couplers (83834, 83934) | 82172 |

84103 84472



R1234yf/R134a ALUMINUM MANIFOLD GAUGE SET





- Professional extruded aluminum block
- 2 1/2" silicone dampened, recalibrateable gauges
- · Free-floating piston type valves reduce o-ring wear
- Extra access port for vacuum line
- Extra large sight glass for visual refrigerant check
- Large easy-to-grip knobs
- R1234yf high and low side couplers with extended disconnect protection sleeve meets SAE J639 & J2888
- R134a high and low side manual couplers meet SAE, UL and EPA requirements for containment of refrigerant
- 1/2" ACME-M x 1/2" ACME-F LH thread adapter
- (2) 12 mm-M x 14 mm-F R1234yf adapters
- Set of 3 R134a standard hoses

89636-AYF R1234yf/R134a Aluminum Manifold Gauge Set

2 1/2" gauges, 3-36" R134a standard hoses, R134a manual couplers (82834, 82934), R1234yf couplers (83834, 83934), 1/2" ACME-M x 1/2" ACME-F LH thread adapter (83633), 1/2" ACME-F LH thread adapter (836333), 1/2" ACME-F LH thread ACME-F L

(2) 12 mm-M x 14 mm-F R1234yf adapters (83735)

89661-AYF R1234yf/R134a Aluminum Manifold Gauge Set

2 1/2" gauges, 3-60" R134a standard hoses, R134a manual couplers (82834, 82934), R1234yf couplers (83834, 83934), 1/2" ACME-M x 1/2" ACME-F LH thread adapter (83633),

(2) 12 mm-M x 14 mm-F R1234yf adapters (83735)

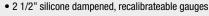
89772-AYF R1234yf/R134a Aluminum Manifold Gauge Set

2 1/2" gauges, 3-72" R134a standard hoses, R134a manual couplers (82834, 82934), R1234yf couplers (83834, 83934), 1/2" ACME-M x 1/2" ACME-F LH thread adapter (83633),

(2) 12 mm-M x 14 mm-F R1234yf adapters (83735)

R1234vf/R134a BRASS MANIFOLD GAUGE SET





- Extra access port for vacuum line
- R1234yf high and low side quick couplers
- R134a high and low side economy couplers
- 1/2" ACME-M x 1/2" ACME-F LH thread adapter
- (2) 12 mm-M x 14 mm-F R1234yf adapters
- Set of 3 R134a standard hoses

66636-AYF R1234yf/R134a Brass Manifold Gauge Set

2 1/2" gauges, 3-36" R134a standard hoses, R134a economy couplers (66234, 66334), R1234yf quick couplers (67434, 67534), 1/2" ACME-M x 1/2" ACME-F LH thread adapter

(83633), (2) 12 mm-M x 14 mm-F R1234yf adapters (83735)

66661-AYF R1234yf/R134a Brass Manifold Gauge Set

R1234yf/R134a Brass Manifold Gauge Set 2 1/2" gauges, 3-60" R134a standard hoses, R134a economy couplers (66234, 66334),

R1234vf quick couplers (67434, 67534), 1/2" ACME-M x 1/2" ACME-F LH thread adapter

(83633), (2) 12 mm-M x 14 mm-F R1234yf adapters (83735)

66672-AYF R1234yf/R134a Brass Manifold Gauge Set

2 1/2" gauges, 3-72" R134a standard hoses, R134a economy couplers (66234, 66334),

R1234yf quick couplers (67434, 67534), 1/2" ACME-M x 1/2" ACME-F LH thread adapter

(83633), (2) 12 mm-M x 14 mm-F R1234yf adapters (83735)

PARTS FOR 2-WAY ALUMINUM MANIFOLDS

85215 O-Rings for Aluminum Manifold (4 pcs)
85216 Seal and Seat Assembly (2 pcs)

PARTS FOR 2-WAY BRASS MANIFOLD

| 34215 | 0-Rings for Brass Manifolds |
|-------|--|
| 34216 | Seal and Seat Assembly for Brass Manifolds |





R134a AUTO A/C 2-WAY MANIFOLD GAUGE SETS WITH HOSES



- Hose connections for blue and red are 14 mm-M
- Yellow hose is 1/2" ACME-F with auto shut-off valve
- Gauges are 2 1/2" in PSI/°F, 3 1/8" in PSI/Kpa & °F
- Packaged in a clamshell

| HOSE LENGTH (SET OF 3) | W/MANUAL | COUPLERS | W/E-Z SNAP™ COUPLERS | | W/O COUPLERS | |
|---------------------------|----------|----------|----------------------|--------|--------------|--------|
| GAUGE SIZE | 2 1/2" | 3 1/8" | 2 1/2" | 3 1/8" | 2 1/2" | 3 1/8" |
| 36" | 89636 | 89136 | 88436 | 88136 | 85636 | 85136 |
| 60" | 89661 | 89161 | 88461 | 88161 | 85661 | 85161 |
| 72" | 89772 | 89172 | 88472 | 88172 | 85772 | 85172 |

To order manifolds with shock-resistant gauge protectors, simply place a "-G" after the part number (2 1/2" only)

AUTOMOTIVE R134a MANIFOLD GAUGE SET





- Professional extruded aluminum block
- 2 1/2" silicone dampened, recalibrateable gauges
- Free-floating piston type valves reduce o-ring wear
- Extra access port for vacuum line
- Extra large sight glass for visual refrigerant check
- Large easy-to-grip knobs
- 3 SAE approved nylon barrier hoses
- Custom molded carrying case

| 89660 | Complete Kit in a Blow Molded Case includes aluminum manifold, 60" hoses and quick couplers |
|----------|--|
| 89660-UV | Complete Kit in a Blow Molded Case includes aluminum manifold, 60" hoses, quick couplers and 10 application mini dye injector |
| 89661-UV | Complete Kit in a Blow Molded Case includes aluminum manifold, 60" hoses, manual couplers and 10 application mini dye injector |

DUAL R134a/R12 MANIFOLD GAUGE SET



- Professional extruded aluminum block
- 2 1/2" silicone dampened, recalibrateable gauges
- Free-floating piston type valves reduce o-ring wear
- Extra access port for vacuum line
- Extra large sight glass for visual refrigerant check
- Large easy-to-grip knobs
- Set of 3 R134a nylon barrier hoses
- Set of 3 R12 nylon barrier hoses
- Custom molded carrying case

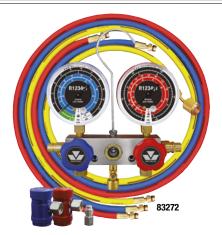
| 98660 | Complete Kit in a Blow Molded Case includes aluminum manifold, 60" hoses and quick couplers |
|-------|--|
| 98661 | Complete Kit in a Blow Molded Case includes aluminum manifold, 60" hoses and manual couplers |



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







- Manifold block assembled with (3) 12 mm-F fittings per SAE J2888
- Red & Blue nylon barrier hoses with 12 mm-M fittings on both sides meets SAE J2888, EPA, SAE & UL standards
- Yellow hose 12 mm fitting on one side and 1/2 x 16 ACME LH on the other meets SAE J2888
- R1234yf high and low side couplers with extended disconnect protection sleeve meets SAE J639 & J2888
- Piston type free-floating valves reduce o-ring wear
- Extra large sight glass for visual checks of refrigerant
- Easy to recalibrate 3 1/8" gauges to ensure accuracy

| Unit | Bar/PSI |
|--|-------------|
| Gauge p/n (HP/LP) | 87500-87350 |
| Manifold with gauges, 3 x 12 mm-F fittings | 83102 |
| $\label{eq:manifold} \mbox{Manifold with 3-72" hoses and R1234yf couplers packaged in a clam shell}$ | 83272 |

R12, R22 AND R502 2-WAY ALUMINUM MANIFOLD GAUGE SETS WITH HOSES PACKAGED IN CLAMSHELLS



- Hose connections are 1/4" SAE
- Gauges are 2 1/2" in PSI & F
- · Packaged in a clamshell

| HOSE LENGTH (SET OF 3) | | STANDARD HOSES STANDARD FITTINGS | STANDARD HOSES AUTO SHUT-OFF VALVES | NYLON BARRIER HOSES STANDARD FITTINGS | NYLON BARRIER HOSES AUTO SHUT-OFF VALVES | NYLON BARRIER HOSES MANUAL BALL VALVES |
|------------------------------|-----|---|---|---|---|---|
| | 36" | 93636 | 95636 | 96636 | 97636 | 92636 |
| | 60" | 93661 | 95661 | 96661 | 97661 | 92661 |
| | 72" | 93772 | 95772 | 96772 | 97772 | 92772 |

To order manifolds with shock-resistant gauge protectors, simply place a "-G" after the part number (2 1/2" only)

2-WAY ALUMINUM MANIFOLDS WITH GAUGES ONLY

| 93103 | R12, R22 & R502 (2 1/2" Gauges) 1/4" MFL |
|-------|--|
| 85103 | R134a (2 1/2" Gauges) 1/2" ACME-M |
| 85113 | R134a (3 1/8" Gauges) 1/2" ACME-M |

PARTS FOR 2-WAY ALUMINUM MANIFOLDS

| 85215 | 0-Rings for Aluminum Manifold (4 pcs) |
|-------|---------------------------------------|
| 85216 | Seal and Seat Assembly (2 pcs) |

BRASS 2-WAY MANIFOLD GAUGE SETS



R1234yf 2-WAY BRASS MANIFOLD FOR AUTOMOTIVE A/C





- Manifold assembled with (3) 12 mm-F fittings per SAE J2888
- Red & blue nylon barrier hoses with 12 mm-M fittings on both sides meets SAE J2888, EPA, SAE & UL standards
- Yellow hose 12 mm fitting on one side and 1/2 x 16 ACME LH on the other meets SAE J2888
- R1234yf high and low side couplers with extended disconnect protection sleeve meets SAE J639 & J2888
- Easy to recalibrate 3 1/8" gauges to ensure accuracy

| Unit | Bar/PSI |
|---|-------------|
| Gauge p/n (HP/LP) | 87500-87350 |
| Manifold with gauges, 3 x 12 mm-F fittings | 81102 |
| Manifold with 3 – 60" hoses and R1234yf couplers packaged in a clam shell | 81661 |

R12, R22 AND R502 2-WAY BRASS MANIFOLD GAUGE SETS WITH HOSES PACKAGED IN CLAMSHELLS



- Hose connections are 1/4" SAE
- Gauges are 2 1/2" in PSI & F
- · Packaged in a clamshell

| HOSE LENGTH (SET OF 3) | STANDARD HOSES STANDARD FITTINGS | STANDARD HOSES AUTO SHUT-OFF VALVES | NYLON BARRIER HOSES STANDARD FITTINGS | NYLON BARRIER HOSES AUTO SHUT-OFF VALVES | NYLON BARRIER HOSES MANUAL BALL VALVES |
|------------------------------|---|--|--|---|--|
| 36" | 33636 | 35636 | 36636 | 37636 | 32636 |
| 60" | 33661 | 35661 | 36661 | 37661 | 32661 |
| 72" | 33772 | 35772 | 36772 | 37772 | 32772 |

To order manifolds with shock-resistant gauge protectors, simply place a "-G" after the part number (2 1/2" only)

R134a AUTO A/C 2-WAY BRASS MANIFOLD GAUGE SETS WITH HOSES



- Hose connections for blue and red are 14 mm-M, yellow hose is 1/2" ACME-F with auto shut-off valve
- Gauges are available 2 1/2" and 3 1/8" in PSI/F
- Packaged in a clamshell

| HOSE LENGTH (SET OF 3) | W/MANUAL COUPLERS | | W/E-Z SNAP TM COUPLERS | | W/O COUPLERS | |
|------------------------------|-------------------|--------|--------------------------------------|--------|--------------|--------|
| GAUGE SIZE | 2 1/2" | 3 1/8" | 2 1/2" | 3 1/8" | 2 1/2" | 3 1/8" |
| 36" | 84636 | 84136 | 83436 | 83136 | 80636 | 80136 |
| 60" | 84661 | 84161 | 83461 | 83161 | 80661 | 80161 |
| 72" | 84772 >>POPULAR<< | 84172 | 83472 | 83172 | 80772 | 80172 |

To order manifolds with shock-resistant gauge protectors, simply place a "-G" after the part number (2 1/2" only)

AUTOMOTIVE R134a MANIFOLD GAUGE SETS WITH ECONOMY COUPLERS



| 66660 | Brass R134a Manifold Gauge Set |
|-------|--|
| | comes complete with $1-60$ " hose, $2-36$ " hoses and quick couplers. Packaged in a clamshell. |

66661 Brass R134a Manifold Gauge Set comes complete with 3 – 60" hoses and quick couplers. Packaged in a clamshell.

2-WAY BRASS MANIFOLDS WITH GAUGES ONLY

| 80103 | R134a (2 1/2" Gauges) 1/2" ACME-M |
|-------|---|
| 81113 | R134a (3 1/8" Gauges) 1/2" ACME-M |
| 33103 | R12, R22, R502 (2 1/2" Gauges) 1/4" MFL |

PARTS FOR 2-WAY BRASS MANIFOLD

| 34215 | O-Rings for Brass Manifolds |
|-------|--|
| 34216 | Seal and Seat Assembly for Brass Manifolds |

REPLACEMENT GAUGES



REPLACEMENT GAUGES

Mastercool offers one of the most extensive lines of high quality replacement gauges. Our wide variety of gauges are available in different sizes and styles. All of our gauges are designed with an **ANTI-FLUTTER** feature that reduces needle fluctuation and increases reading accuracy.

| | | High pressure p/n | Low pressure p/n | Gauge Diameter | Units | Refrigerant Scales |
|--|--|----------------------|------------------|-----------------------------|--|--------------------|
| MC S S S S S S S S S S S S S S S S S S S | MC S SPANIE STATE OF SPANIE STATE STATE SPANIE STATE OF SPANIE STATE OF SPANIE STATE OF SPANIE | 93500 | 93350 | 2 1/2" | PSI/F | R12 R22 R502 |
| MC MC B B B B B B B B B B B B B B B B B | PO DE PORTO DE LA CONTRACTOR DE LA CONTR | 85500 | 85350 | 2 1/2" | PSI/F | R134a R12 |
| Residence of the second of the | MG M | 85500-AYF | 85350-AYF | 2 1/2" | PSI/F | R1234yf R134a |
| MC | 250 do 1 do | 86500 | 86350 | 3 1/8" | PSI/°Kpa/F | R134a |
| R1234°F | R123d', F | 87500 | 87350 | 3 1/8" | Bar/PSI °F/°C | R1234yf |
| (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c | (R) (23) (T) (T) (T) (T) (T) (T) (T) (T) (T) (T | DG-800 | DG-500 | 1.4" x 0.65" LCD Display | MPA/kPA/Bar/PSI/ kg/cm2/inHg °F/°C | see page 10 |

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MANIFOLD REPLACEMENT PARTS

GAUGE PROTECTORS





Mastercool gauge protectors are built to cushion shock due to rough handling. The unique ribbing deadens bumps and deflects shocks. Snug fitting. Color coded. All Mastercool manifold gauge sets are available with gauge protectors installed. To order, simply place a "-G" after any gauge set number.

2 1/2" (63 MM) GAUGE PROTECTORS

93253-E 2 1/2" (63 mm) Blue Gauge Protector

93503-E 2 1/2" (63 mm) Red Gauge Protector

93553-E 2 1/2" (63 mm) Set (Red & Blue)

3 1/8" (80 MM) GAUGE PROTECTORS

91253-EE 3 1/8" (80 mm) Red Gauge Protector

91503-EE 3 1/8" (80 mm) Blue Gauge Protector

91553-EE 3 1/8" (80 mm) Set (Red & Blue)

LENS



98251-E

85253-E 2 1/2" (63 mm) Lens

98251-E 3 1/8" (80 mm) Lens

4-WAY MANIFOLD REPLACEMENT KNOBS

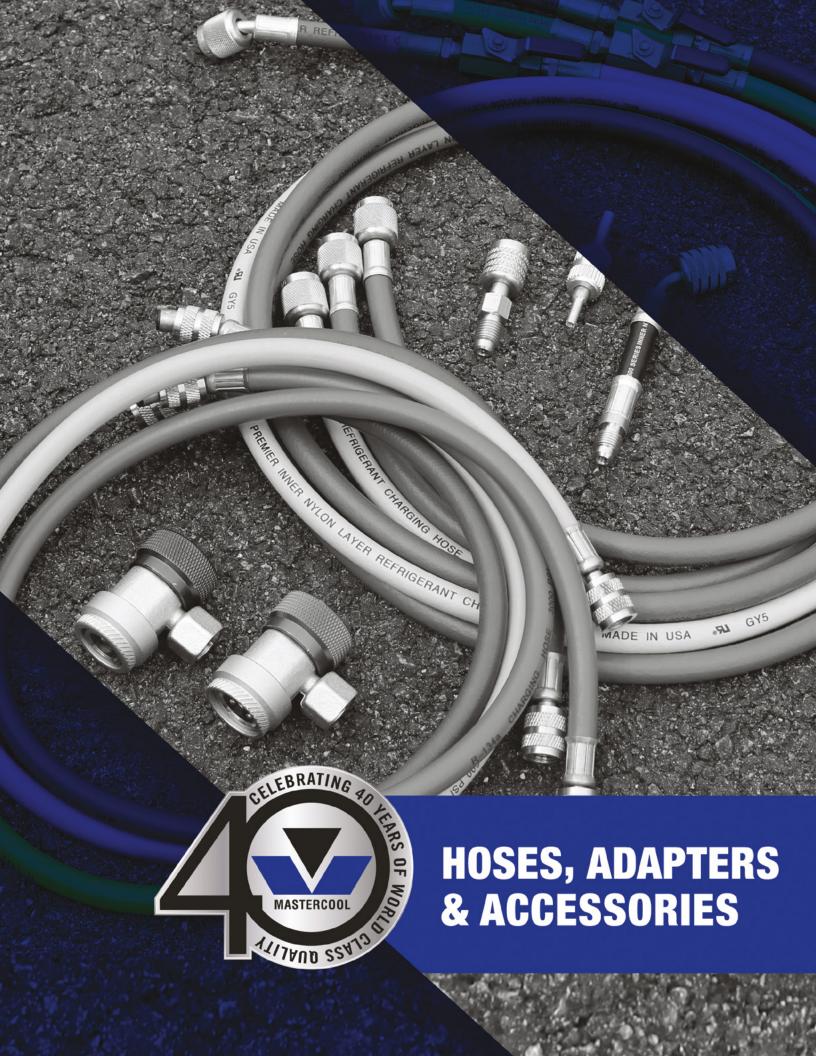


| 58211 | Blue Knob |
|-------|-------------|
| 58212 | Red Knob |
| 58213 | Yellow Knob |
| 58214 | Black Knob |

2-WAY MANIFOLD REPLACEMENT KNOBS



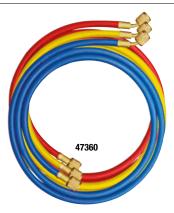
| 85211 | Blue Knob |
|---------|------------|
| 85212 | Red Knob |
| 93211 | Black Knob |
| 85211-R | Blue Knob |
| 85212-R | Red Knob |
| 93211-R | Black Knob |





Mastercool uses only (GRADE 5 HOSE) with a selection of standard and nylon barrier for high pressure applications. Knurled brass nuts make finger tightening easy. Crimped with 8 segment dies for secure fit and maximum durability. Hoses are available in sets and a variety of lengths to meet all EPA, SAE and UL requirements for containment of refrigerant. Sets include one blue, one red and one yellow hose.

STANDARD & HIGH PRESSURE HOSES W/STANDARD FITTINGS (1/4" SAE)



| Standard Hose | s, Working Press | ure 600 PSI, Burst | 3000 PSI | |
|---|-------------------|---------------------|-------------|-------|
| HOSE LENGTH | 36" | 60" | 72" | 96" |
| Blue 1/4" x 1/4" | 41361 | 41601 | 41721 | 41961 |
| Yellow 1/4" x 1/4" | 41362 | 41602 | 41722 | 41962 |
| Red 1/4" x 1/4" | 41363 | 41603 | 41723 | 41963 |
| SETS 1/4" x 1/4" | 40336 | 40360 | 40372 | 40396 |
| Nylon Barrier Hos | ses, Working Pres | ssure 800 PSI, Burs | st 4000 PSI | |
| Blue 1/4" x 1/4" | 47361 | 47601 | 47721 | 47961 |
| Yellow 1/4" x 1/4" | 47362 | 47602 | 47722 | 47962 |
| Red 1/4" x 1/4" | 47363 | 47603 | 47723 | 47963 |
| Black 1/4" x 1/4" | 47364 | 47604 | 47724 | 47964 |
| SETS 1/4" x 1/4" | 47336 | 47360 | 47372 | 47396 |
| Black 1/4" hose w/(3/8" x 3/8" fitting) | 48364 | 48604 | 48724 | 48964 |

STANDARD & HIGH PRESSURE HOSES W/AUTOMATIC SHUT-OFF VALVE FITTINGS (1/4" SAE)



| HOSE LENGTH | 36" | 60" | 72" | 96" |
|--------------------|-----------------------------|--------------------|-------------|-------|
| Blue 1/4" x 1/4" | 45361 | 45601 | 45721 | 45961 |
| Yellow 1/4" x 1/4" | 45362 | 45602 | 45722 | 45962 |
| Red 1/4" x 1/4" | 45363 | 45603 | 45723 | 45963 |
| SETS 1/4" x 1/4" | 45336 | 45360 | 45372 | 45396 |
| Nylon I | Barrier Hoses, Working Pres | ssure 800 PSI, Bur | st 4000 PSI | |
| Blue 1/4" x 1/4" | 46361 | 46601 | 46721 | 46961 |
| Yellow 1/4" x 1/4" | 46362 | 46602 | 46722 | 46962 |
| Red 1/4" x 1/4" | 46363 | 46603 | 46723 | 46963 |
| Black 1/4" x 1/4" | 46364 | 46604 | 46724 | 46964 |
| SETS 1/4" x 1/4" | 46336 | 46360 | 46372 | 46396 |

Auto shut-off valves automatically retain refrigerant in the service hose when they are removed from the system. Meets EPA, SAE and UL standards for containment of refrigerant.

STANDARD & HIGH PRESSURE HOSES W/MANUAL SHUT-OFF VALVE FITTINGS (1/4" SAE)



| Standard Hoses, Working Pressure 600 PSI, Burst 3000 PSI | | | | | |
|--|----------------------------------|-------------------------|----------|--|--|
| HOSE LENGTH | 36" | 60" | 72" | | |
| Blue 1/4" x 1/4" | 90263-36 | 90263-60 | 90263-72 | | |
| Yellow 1/4" x 1/4" | 90264-36 | 90264-60 | 90264-72 | | |
| Red 1/4" x 1/4" | 90265-36 | 90265-60 | 90265-72 | | |
| SETS 1/4" x 1/4" | 90262-36 | 90262-60 | 90262-72 | | |
| Nylon B | arrier Hoses, Working Pressure 8 | 300 PSI, Burst 4000 PSI | | | |
| Blue 1/4" x 1/4" | 49263-36 | 49263-60 | 49263-72 | | |
| Yellow 1/4" x 1/4" | 49264-36 | 49264-60 | 49264-72 | | |
| Red 1/4" x 1/4" | 49265-36 | 49265-60 | 49265-72 | | |
| SETS 1/4" x 1/4" | 49262-36 | 49262-60 | 49262-72 | | |



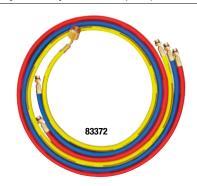
R134a HOSES WITH 1/2" ACME-F AND 14 MM-M AUTO A/C FITTINGS



| Nylon Barrier Hoses, Working Pressure 800 PSI, Burst 4000 PSI | | | | | |
|---|-------|-------|-------|-------|--|
| HOSE LENGTH | 36" | 60" | 72" | 96" | |
| Blue-14 mm-M x 1/2" ACME-F | 84361 | 84601 | 84721 | 84961 | |
| Yellow w/Shut-off Valve 1/2" ACME-F x 1/2" ACME-F | 84362 | 84602 | 84722 | 84962 | |
| Red-14 mm-M x 1/2" ACME-F | 84363 | 84603 | 84723 | 84963 | |
| Black-1/2" ACME-F x 1/2" ACME-F | 84364 | 84604 | 84724 | 84964 | |
| Black Conversion Hose 1/2" ACME-F x 1/4" FL-F | 98364 | 98604 | 98724 | 98964 | |
| Yellow w/o Shut-off Valve 1/2" ACME-F x 1/2" ACME-F | 84365 | 84605 | 84725 | 84965 | |
| SETS Blue/Red 14 mm-M x 1/2" ACME-F and Yellow w/Shut-off Valve 1/2" ACME-F x 1/2" ACME-F | 84336 | 84360 | 84372 | 84396 | |

Mastercool R134a charging hoses meet SAE J2196 specifications and are UL tested.

R1234yf HOSES (Meets J2888, EPA, SAE & UL Standards)



| Nylon Barrier Hoses, Working Pressure 800 PSI, Burst 4000 PSI | | |
|--|-------|-------|
| HOSE LENGTH | 60" | 72" |
| Blue-12 mm-M x 12 mm-M | 83601 | 83721 |
| Yellow-12 mm fitting x 1/2 x 16 ACME LH | 83602 | 83722 |
| Red-12 mm-M x 12 mm-M | 83603 | 83723 |
| SET blue/red 12 mm-M x 12 mm-M and yellow 12 mm fitting x 1/2 x 16 ACME LH | 83660 | 83372 |

SERVICE HOSE REPLACEMENT PARTS



| | 1/4" SAE | | 1/2" ACME | | 14 mm-M | UNF 1/2 - 20" | |
|----------------|----------|-----------|-----------|-----------|----------|---------------|-----------|
| | GASKET | DEPRESSOR | GASKET | DEPRESSOR | 0-RING | GASKET | DEPRESSOR |
| Charging Hoses | 42010-10 | 42014-10 | 82010-10 | 42014-10 | 83341-10 | 42010-10 | 42014-10 |
| Shut-Off Valve | 90336-10 | N/A | 90336-10 | N/A | N/A | N/A | N/A |

80011 HEAVY DUTY RATCHET HOSE CUTTER



Ratcheted action makes this cutter extremely easy to operate resulting in quick, clean cuts. Cutting blade is made of special alloy, heat treated steel for long life. Cuts all rubber hoses and PVC pipe up to 1 1/2" (38 mm) 0.D. (Not recommended for PVC200)

80111 Replacement Blade for 80011

80013 AUTOMOTIVE REFRIGERANT HOSE CUTTER



Makes quick, clean cuts. Cuts rubber automotive refrigerant hoses up to 1 1/2" 0.D.

80113 Replacement Blade for 80013



AUTOMATIC & MANUAL SHUT-OFF VALVES

Mastercool manufactures a complete line of shut-off valves for containment of refrigerant. EPA requires shut-off valves within 12 inches of the charging hose ends to prevent unnecessary venting of refrigerant. Using shut-off valves is much safer than allowing refrigerant to blow out during service.

90259 90° MANUAL SHUT-OFF VALVE SET



Needle valve design with flexible hose controls refrigerant with a twist of a knob. Meets SAE, EPA and UL requirements for containment of refrigerant. Screws onto charging hose end.

90° Manual Shut-Off Valve Set Includes:

| 90269 | Blue 1/4 x 1/4" |
|-------|--------------------|
| 90279 | Yellow 1/4" x 1/4" |
| 90289 | Red 1/4" x 1/4" |

Also Available:

90389 Red 1/4 x 3/16" (Automotive)

90262 STRAIGHT MANUAL SHUT-OFF VALVE SET



Ball valve design with flexible hose controls refrigerant with a quarter turn of the valve handle. Meets SAE, EPA and UL requirements for containment of refrigerant. One hand operation. Screws onto charging hose end.

Straight and Manual Shut-Off Valve Set includes:

| 90263 | Blue 1/4 x 1/4" |
|-----------------|--------------------|
| 90264 | Yellow 1/4" x 1/4" |
| 90265 | Red 1/4" x 1/4" |
| Also Available: | |
| 00365 | Pod 1/A v 2/16" |

MANUAL SHUT-OFF BALL VALVES



For custom application, Mastercool offers swivel ball valves without the hoses. This valve may be used to add shut-off valves to recycling equipment, manifold sets, flushing equipment, etc.

| 90430 | 1/4 FL-F x 1/4 FL-M Swivel Ball Valve (less hose) |
|-------|---|
| 82495 | 1/2" ACME x 1/2" ACME R134a Ball Valve |

AUTOMATIC SHUT-OFF VALVES





Valve simply screws onto hose end. Available in straight and 90° models. Meets SAE, EPA and UL requirements for containment of refrigerant.

<< QUICK DISCONNECT : NO LOSS OF REFRIGERANT >>

| 90333-R | 90° 1/4 FL-M x 1/4 FL-F |
|----------|------------------------------|
| 90333-UV | 90° 1/4" FFL x 13 mm |
| 90335-R | Straight 1/4 FL-M x 1/4 FL-F |



CONTROL VALVE



Ideal for use on charged systems. Eliminates refrigerant, oil or dye from spraying during connections.

| 90328 | 1/4" FFL x 1/4" MFL |
|------------|-----------------------|
| 90328-5/16 | 5/16" FFL x 5/16" MFL |

RETROFIT ADAPTERS

82357 GM HIGH FLOW ADAPTER WITH VALVE CORE & SERVICE PORT CAPS



GM High Flow Adapter

INDIVIDUAL TERMINATION (BLOCK OFF) CAPS







| 81297 | 1/4 (7/16" - 20) Aluminum |
|-------|---------------------------|
| 81379 | 3/16 (3/8"- 24) Aluminum |
| 82297 | Universal Blue Cap |
| 82379 | Universal Black Cap |

STRAIGHT ADAPTERS WITH VALVE CORE & SERVICE PORT CAPS







| 82274 | Low Side, 1/4 (7/16" - 20) x 13 mm |
|-------|------------------------------------|
| 82332 | High Side, 1/4 (7/16"- 20) x 16 mm |
| 82358 | High Side, 3/16 (3/8"- 24) x 16 mm |

90° ADAPTERS WITH VALVE CORE & SERVICE PORT CAPS





| 82275 | Low Side, 1/4 (7/16"- 20) x 13 mm |
|-------|------------------------------------|
| 82354 | High Side, 3/16 (3/8"- 24) x 16 mm |

COUPLERS AND CONNECTORS

MANUAL COUPLERS >>POPULAR<<



Patented manual couplers adjust easily to R134a service ports with varying dimensions. All metal construction for extra durability. Patented, spring loaded depressor will not damage service valves. Can be removed from service ports regardless of knob position without losing refrigerant. Meets SAE, UL and EPA requirements for containment of refrigerant. Color coded. PATENT# 5,370,359

| 82834 | High Side Manual R134a 14 mm-F x 16 mm Coupler |
|---------|--|
| 82934 | Low Side Manual R134a 14 mm-F x 13 mm Coupler |
| 82834-E | High Side Manual R134a 1/4" FL-M x 16 mm Coupler |
| 82934-E | Low Side Manual R134a 1/4" FL-M x 13 mm Coupler |
| 80034 | 0-ring for 16 mm Manual Coupler (10 pcs) |
| 80134 | 0-ring for 13 mm Manual Coupler (10 pcs) |

SAFETY-LOCK MANUAL COUPLERS



82834-SL 82934-SL

Mastercool's safety-lock manual couplers are designed for use on all R134a systems. This unique design allows the technician to work on the system without the worry of accidentally disconnecting the hose regardless of movement. Once the coupler is connected to the system, the safety-lock sleeve slides into place guaranteeing that the coupler cannot be taken off without unscrewing the manual valve. Meets all SAE, UL and EPA requirements for containment of refrigerant. Color coded.



| 82834-SL | High Side Manual R134a 14 mm-F x 16 mm Safety Lock Coupler |
|------------|--|
| 82934-SL | Low Side Manual R134a 14 mm-F x 13 mm Safety Lock Coupler |
| 82834-SL-E | High Side Manual R134a ¼" FL-M x 16 mm Safety Lock Coupler |
| 82934-SL-E | Low Side Manual R134a ¼" FL-M x 13 mm Safety Lock Coupler |
| 80034 | O-ring for 16 mm Quick Coupler (10 pcs) |
| 80134 | 0-ring for 13 mm Quick Coupler (10 pcs) |

E-Z SNAP™ COUPLERS



82214



82214-E 82224-E

This unique patented design easily snaps on and off the A/C systems service ports under any pressure. The E-Z Snap™ automatically adjusts to various service port dimensions allowing fast and immediate access into the A/C system. The swivel feature enables the user to easily access all service ports, even in the tightest quarters. Meets SAE, UL, and EPA requirements for containment of refrigerant. PATENT# 5,244,010

| 82214 | High Side E-Z Snap R134a 14 mm-F x 16 mm Quick Coupler |
|---------|--|
| 82224 | Low Side E-Z Snap R134a 14 mm-F x 13 mm Quick Coupler |
| 82214-E | High Side E-Z Snap R134a 1/4" FL-M x 16 mm Quick Coupler |
| 82224-E | Low Side E-Z Snap R134a 1/4" FL-M x 13 mm Quick Coupler |
| 80034 | O-ring for 16 mm Quick Coupler (10 pcs) |
| 80134 | O-ring for 13 mm Quick Coupler (10 pcs) |

QUICK COUPLERS



Specially designed to work in the tightest quarters. Snaps easily to A/C service ports.

| 66434-R | High Side R134a 1/4" FL-M x 16 mm Quick Coupler |
|----------|---|
| 66534-R | Low Side R134a 1/4" FL-M x 13 mm Quick Coupler |
| 60034-10 | O-ring for 66434 (10 pcs) |
| 60134-10 | O-ring for 66534 (10 pcs) |

R134a CONVERSION KIT 98370



Includes high and low side R134a couplers and R134a tank adapter.

| Consists of: | |
|--------------|--|
| 66534-R | Low Side R134a 1/4" FL-M x 13 mm Quick Coupler |
| 66434-R | High Side R134a 1/4" FL-M x 16 mm Quick Coupler |
| 82635 | 1/2" ACME-F x 1/4" FL (7/16-20")-M R134a Adapter Coupler |

COUPLERS AND CONNECTORS



R1234yf COUPLERS







· Allows recovery of entire refrigerant, including the space between the coupler and fitting

| 83834 | High Side R1234yf 12 mm-F x 17 mm Coupler with Extended Disconnect Sleeve |
|-------|---|
| 83934 | Low Side R1234yf 12 mm-F x 14 mm Coupler with Extended Disconnect Sleeve |
| 67434 | High Side R1234yf 12 mm-F x 17 mm Quick Coupler |
| 67534 | Low Side R1234yf 12 mm-F x 14 mm Quick Coupler |

R134a EXTRA LONG COUPLERS



Extra long high side R134a coupler used on BMW E60 (2003-2009 5 series), Volvo and Renault models. This extra long high side coupler can easily reach the service port.

| 82836 | High Side Extra Long 14 mm-F x 16 mm |
|---------|---|
| 82836-E | High Side Extra Long 1/4" SAE-M x 16 mm |

R134a/R1234YF CONVERSION KITS





Easily convert any R134a manifold gauge set to a R1234yf manifold gauge set.

83736-K R134a/R1234yf Conversion Kit (manual) includes: high side R1234yf 12 mm-F x 17 mm coupler (83834), low side R1234yf 12 mm-F x 14 mm coupler (83934), 1/2" ACME-M x 1/2" ACME-F LH thread adapter (83633),

(2) 12mm-M x 14mm-F R1234yf adapters (83735)

14 mm-M x 1/4" FL-M (7/16-20") Connector

63736-K R134a/R1234yf Conversion Kit (quick) includes: high side R1234yf 12 mm-F x 17 mm quick coupler (67434), low side R1234yf

12 mm-F x 14 mm quick coupler (67534), 1/2" ACME-M x 1/2" ACME-F LH thread adapter

(83633), (2) 12mm-M x 14mm-F R1234yf adapters (83735)

CONNECTORS











MALE x MALE CONNECTORS

82734

| 82735 | 14 mm-M x M10 x 1.5-M Connector |
|-------|--|
| 82736 | 14 mm-M x M12 x 1.75-M Connector |
| 82738 | 14 mm-M x 3/8" FL-M Connector |
| 83341 | O-Ring for 82733, 82734, 82735 and 82736 |
| 80234 | O-Ring for 82634, 82634-M, 90364 and 90365 |
| 83734 | 12 mm-m x 1/4" FL-M R1234vf Connector |

| FEMALE x MALE CONNECTORS | |
|--------------------------|--|
| 82634 | 1/4" FL-F (7/16-20") x 1/2" ACME-M Connector |
| 82634-M | 1/4" FL-F (7/16-20") x 1/2" ACME-M R134a Connector |
| 82635 | 1/2" ACME-F x 1/4" FL-M (7/16-20") R134a Adapter Coupler |
| 82733 | 14 mm-F x 1/2" ACME-M Connector |
| 83633 | 1/2" ACME-M x 1/2" ACME-F LH Connector |
| 83735 | 12 mm-M x 14mm-F R1234yf Adapter |
| 90364 | 1/4" (7/16-20")-F x M10 x 1.5-M Adapter |
| 90363 | 5/16" (1/2-20 UNF)-F x 1/4" FL-M Connector |

93000 **SPRING LOCK COUPLING TOOL SET**



Four sizes 3/8" (#6), 1/2" (#8), 5/8" (#10) and 3/4" (#12) used on Fords and Chryslers. Durable spring loaded design for long life and reliable fit.

Set includes:

| 93098 | 3/8" (#6) Red | 93100 | 5/8" (#10) Black |
|-------|------------------|-------|--------------------|
| 93099 | 1/2" (#8) Blue | 93101 | 3/4" (#12) Beige |





A/C CHARGING ADAPTER REPAIR KITS

91207 CHARGING AND DEPRESSOR ASSORTMENT



| Consists of: | | |
|--------------|-------------------------|--|
| 42010 | 1/4" Gasket (3 pcs) | |
| 42014 | 1/4" Depressor (3 pcs) | |
| 90368 | 3/16" Depressor (3 pcs) | |

Replacement gaskets, o-rings and depressors for charging hoses and adapters.

90369 3/16" Gasket (3 pcs) **90341** 1/8" 0-Ring (3 pcs)

91334 CHARGING ADAPTER REPAIR KIT



| 55 piece assortment of replacement gaskets, o-rings and depressors for charging hoses and adapters. | | | |
|---|---------------------------------|--|--|
| Consists of: | Consists of: | | |
| 42010 | 1/4" Gasket (10 pcs) | | |
| 42014 | 1/4" Depressor (10 pcs) | | |
| 90368 | 3/16" Depressor (10 pcs) | | |
| 90369 | 3/16" Gasket (10 pcs) | | |
| 90341 | 1/8" O-Ring (10 pcs) | | |
| 92107 | Quick Disconnect Gasket (5 pcs) | | |

91334-A R12/R134a CHARGING HOSE REPLACEMENT PARTS ASSORTMENT



| Consists of: | |
|--------------|--------------------------------------|
| 42010 | 1/4" FL Gasket (10 pcs) |
| 42014 | 1/4" FL Depressor (5 pcs) |
| 42017 | Screw type Depressor (5 pcs) |
| 90336 | Gasket for 90335 (5 pcs) |
| 82010 | Black Gasket for R134a Hose (10 pcs) |
| 83341 | O-Ring for R134a Hose (5 pcs) |
| 80034-2 | Black O-Ring for High Side (5 pcs) |
| 80134-2 | Black 0-Ring for Low Side (5 pcs) |

85200 DELUXE A/C SERVICE REPAIR KIT



| Replacement | Replacement gaskets, depressors, o-rings and nylon guides for charging hoses and adapters. | |
|--------------|--|--|
| Consists of: | Consists of: | |
| 42010 | 1/4" Gasket (10 pcs) | |
| 42014 | 1/4" Depressor (10 pcs) | |
| 80034 | 0-Ring for 82834 (10 pcs) | |
| 80034-1 | High Side Nylon Guide (5 pcs) | |
| 80134 | 0-Ring for 82934 (10 pcs) | |
| 80134-1 | Low Side Nylon Guide (5 pcs) | |
| 82010 | Gasket for R134a Hose (10 pcs) | |
| 82336 | Gasket for 82335 (10 pcs) | |
| 83341 | O-Ring for R134a Hose (10 pcs) | |
| 90336 | Gasket for 90335 Shut-Off Valve (10 pcs) | |



91335 MASTER A/C CHARGING ADAPTER REPAIR KIT



126 piece assortment of replacement gaskets, o-rings and depressors for charging hoses and adapters. Also includes valve core removal tool and replacement valve cores.

| Consists of: | |
|--------------|-----------------------------------|
| 42010 | 1/4" Gasket (20 pcs) |
| 42014 | 1/4" Depressor (20 pcs) |
| 90368 | 3/16" Depressor (20 pcs) |
| 90369 | 3/16" Gasket (20 pcs) |
| 90341 | 1/8" 0-Ring (20 pcs) |
| 92107 | Quick Disconnect Gasket (10 pcs) |
| 0377-001 | Refrigeration Valve Core (10 pcs) |
| 90378 | GM Large Bore Valve Core (5 pcs) |
| 91290 | Valve Core Removal Tool |

91336 FORD SPRING LOCK REPLACEMENT O-RING AND GARTER SPRING ASSORTMENT



| Compatible wi | ith R12 and R134a systems. |
|---------------|----------------------------|
| Consists of: | |
| 1336-006 | #6 O-Ring (10 pcs) |
| 1336-008 | #8 O-Ring (10 pcs) |
| 1336-010 | #10 O-Ring (10 pcs) |
| 1336-012 | #12 O-Ring (10 pcs) |
| 1336-016 | #6 Garter Spring (5 pcs) |
| 1336-018 | #8 Garter Spring (5 pcs) |
| 1336-110 | #10 Garter Spring (5 pcs) |
| 1336-112 | #12 Garter Spring (5 pcs) |

91337 R12/R134a VALVE CORE REPAIR KIT



| Replacement | t valve cores for valve core removers & installers. |
|--------------|---|
| Consists of: | |
| 0377-001 | Access Valve Core (20 pcs) |
| 0378-001 | Valve Core (10 pcs) |
| 0531-001 | R134a JRA High/Low import Valve Core (10 pcs) |
| 0768-001 | R134a Domestic High Flow Valve Core M8 (5 pcs) |
| 0769-001 | R134a Domestic High Flow Valve Core M10 (5 pcs) |
| 81290 | R12/R134a Valve Core Remover/Installer (1 pc) |

91339 AUTOMOTIVE R12 & R134a O-RING ASSORTMENT (270 PIECE HNBR)



| Consists of | <u>.</u> | | |
|-------------|--|----------|---|
| 91339-01 | 7/32" x 1/16" (5.29 x 1.78 mm) (20 pcs) | 91339-10 | 11 x 2 mm (15 pcs) |
| 91339-02 | 1/4" x 1/16" (6.07 x 1.78 mm) (20 pcs) | 91339-11 | 12 x 2 mm (15 pcs) |
| 91339-03 | 6.8 x 1.9 mm (20 pcs) | 91339-12 | 13.9 x 1.8 mm (10 pcs) |
| 91339-04 | 5/16" x 1/16" (7.65 x 1.78 mm) (20 pcs) | 91339-13 | 9/16" x 3/32" (13.95 x 2.62 mm) (10 pcs) |
| 91339-05 | 7.8 x 1.9 mm (20 pcs) | 91339-14 | 14 x 2 mm (10 pcs) |
| 91339-06 | 8 x 2 mm (20 pcs) | 91339-15 | 15 x 2 (10 pcs) |
| 91339-07 | 8.8 x 1.9 mm (20 pcs) | 91339-16 | 17 x 2 (10 pcs) |
| 91339-08 | 7/16" x 1/16" (10.82 x 1.78 mm) (15 pcs) | 91339-17 | 11/16" x 1/16" (17.17 x 1.78 mm) (10 pcs) |
| 91339-09 | 7/16" x 3/32" (10.77 x 2.62 mm) (15 pcs) | 91339-18 | 11/16" x 1/8" (17.04 x 3.53 mm) (10 pcs) |



58490 UNIVERSAL R12/R134a MASTER KIT









Mastercool's valve core remover/installer has a built-in ball valve to retain charge and allow access to the A/C system. Excellent for replacing valve cores without discharging the system, speeding recovery and recharging large systems. Its heavy-duty design for R134a and R12 systems allows the user to change valve cores while under pressure without any refrigerant loss. **Patent # 6253436.**

- Designed for use of servicing valve cores in R134a and R12 systems
- Universal valve core remover/installer for standard, JRA, Eaton and GM large bore valve cores
- · Access and change valve cores while the A/C system is still filled with refrigerant
- Stainless steel ball valve design and patented thread remover lets the user block off the system while changing the valves cores, allowing for no refrigerant loss

This kit consists of valve assembly, R134a high side 16mm connector, R134a low side 13 mm connector, 1/4" FL swivel connector, standard valve core remover/installer assembly, GM large bore valve core remover/installer assembly, JRA R134a valve core remover/installer assembly, Eaton R134a low side valve core remover/installer assembly, Eaton R134a high side valve core remover/installer assembly, adapter 1/4"-M x 3/16"-F high side GM/Ford, adapter 1/4"-M x 1/8"-F high side Ford.

58490-YF UNIVERSAL R1234vf MASTER KIT





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

- · Attaches to R1234yf service ports to quickly and easily remove and replace valve cores without the loss of refrigerant
- Ball Valve design with stainless steel ball provides smooth movement and durability
- Kit covers 17 mm and 14 mm high and low side service ports

Kit includes: valve assembly, high side 17 mm connector, low side 14 mm connector, standard valve core shaft, GM large bore valve core shaft, eaton R134a/R1234yf high side valve core shaft

58531 R134a STANDARD & JRA (M6) VALVE CORE KIT



Allows the user to service valve cores without losing the systems charge. Kit covers the most popular R134a valve cores.

Includes:

- · Valve assembly
- R134a high side 16 mm connector
- R134a low side 13 mm connector
- Standard valve core shaft
- JRA R134a valve core shaft

58560 R134a EATON (M8 & M10) VALVE CORE KIT



Allows the user to service valve cores without losing the systems charge. Kit covers the Eaton style R134a valve cores.

Includes:

- Valve assembly
- R134a high side 16 mm connector
- R134a low side 13 mm connector
- Eaton R134a low side valve core shaft
- Eaton R134a high side valve core shaft



90376 VALVE CORE REMOVER W/VALVE CORES FOR R12



Quickly removes valve cores. Storage area includes six replacement access valve cores.

90377 Replacement Standard Valve Cores for 90376 (6 pcs of 0377-001)

91490 STANDARD VALVE CORE REMOVER/INSTALLER



VALVE CORE REMOVERS/INSTALLERS AUTOMOTIVE/HVAC (1/4" FL)

Sturdy ball valve design controls refrigerant flow with 1/4 turn of the valve lever. Lever position also gives visual indication of whether valve is opened or closed.

81490 R134a VALVE CORE REMOVER AND INSTALLER



- For 13 mm and 16 mm high and low service port standard type valve
- Built-in ball valve retains charge and allows access to A/C system
- Excellent for replacing valve cores without discharging the system and for speeding recovery and recharging large systems

81290 R134a UNIVERSAL LARGE BORE REMOVER



Used on R12/R134a standard and JRA/EATON large bore R134a valve cores.

91290 UNIVERSAL VALVE CORE REMOVER



Double ended for easy replacement of Standard and GM R12 large bore valve cores.

CAN TAP VALVES



85530 3-IN-1 SIDE MOUNT CAN TAP VALVE



This unique design covers 2 7/8" (R134a), 2 1/2" and 2" (OIL) charge cans. Includes 1/2" ACME-M and 1/4" FL-M ports. Internal safety check valve prevents system back flow.

85510 R134a CAN TAP VALVE - SCREW-ON



- 1/2" ACME-M
- Screw-on design for R134a ACME-M can taps
- Exclusive "full grip" valve knob
- Gasket assures leak proof operation
- Built-in safety check

85525 R134a RECHARGE KIT



Charge A/C systems using R134a cans with 1/2" ACME fitting

85512 R134a 1/2" ACME-M SELF-SEALING DESIGN CAN TAP VALVE



- 1/2" ACME-M thread for use with R134a self-sealing/reusable designed cans
- · All metal construction provides durability
- Gasket assures leak proof operation

85535 R134a RECHARGE KIT



| Charge A/C syste | ms using R134a self-sealing designed cans |
|------------------|--|
| Consists of: | |
| 85512 | R134a can tap valve - self-sealing design |
| 67534-R | R134a low side economy coupler 1/4" FL-M x 13 mm |
| 98122 | R134a 12" yellow hose |



85510-YF R1234yf 1/2" ACME-LH THREAD PIERCING DESIGN CAN TAP VALVE





- 1/2" ACME-LH thread for use with R1234yf pierce designed cans
- Exclusive "full grip" valve knob
- All metal construction provides durability
- Gasket assures leak proof operation
- · Built-in safety check
- Meets SAE J2844

85525-YF R1234yf RECHARGE KIT - PIERCING DESIGN





Charge A/C systems using R1234yf pierce designed cans

Meets SAE J2844 & J2888

Consists of:

| 85510-YF | R1234yf can tap valve - piercing design |
|----------|--|
| 67534 | R1234yf low side quick coupler 12 mm-F x 14 mm |
| 83181 | R1234yf 18" blue hose |

85512-YF R1234yf 1/2" ACME-LH THREAD SELF-SEALING DESIGN CAN TAP VALVE





- 1/2" ACME-LH thread for use with R1234yf self-sealing/reusable designed cans
- · All metal construction provides durability
- Gasket assures leak proof operation
- Meets SAE J2844

85535-YF R1234yf RECHARGE KIT - SELF-SEALING DESIGN





 ${\it Charge A/C systems using R1234yf self-sealing/reusable designed cans}$

Meets SAE J2844 & J2888

Consists of:

| 85512-YF | R1234yf can tap valve - self-sealing design |
|----------|--|
| 67534 | R1234yf low side quick coupler 12 mm-F x 14 mm |
| 83181 | R1234vf 18" blue hose |



CHARGING ADAPTERS, REPLACEMENT GASKETS, DEPRESSORS

| 90° ADAPTERS | | | REPLACEMENT | GASKET/O-RING | DEPRESSOR |
|--------------|---|---------|--|---------------|-----------|
| | Α | 90333-R | Shut-Off Valve 1/4" MFL x 1/4" FFL | 90336 | - |
| A | В | 90314* | 1/4" MFL x 1/4" FFL | 42010 | 42014 |
| A A | В | 90340* | 1/4" MFL x 1/8" FFL (High Side) Ford 1977-1980 | 90341 | 90368 |
| В | В | 90354* | 1/4" MFL x 3/16" FFL (High Side) GM 1976 & Later | 90369 | 90368 |

45° ADAPTERS

| C | С | 90924 | 1/4" MFL x 1/4" FFL | 42010 | 42014 |
|---|---|--------|----------------------------------|-------|-------|
| C | С | 90927* | 1/4" MFL x 3/16" FFL (High-Side) | 90369 | 90368 |

ST

| D | | D | 82272* | R134a 1/2" ACME-F x 13 mm R134a (Low Side) | 85511 | - |
|----|---|---|---------|--|-------|------|
| | ט | Е | 82335 | R134a Shut-Off Valve 1/2" ACME-M x 1/2" ACME-F | 90336 | - |
| 1 | _ | E | 90335-R | Shut-Off Valve 1/4" MFL x 1/4" FFL | 90336 | - |
| 10 | E | Е | 90337 | Shut-Off Valve 1/4" MFL x 3/16" FFL | 90331 | - |
| MA | | F | 82634* | 1/4" FFL x 1/2" ACME-M | 90331 | - |
| | F | F | 82634-M | 1/4" FFL x 1/2" ACME-M without Valve Core | 90331 | - |
| G | | G | 82734 | 14 mm-M x 1/4" MFL | 83341 | - |
| | G | Н | 90358* | 1/4" MFL x 3/16" FFL (High Side) | 42010 | 4201 |
| | - | I | 90274 | 1/4" MFL x 1/4" FFL Swivel | 42010 | 4201 |
| Н | | I | 90332** | 1/4" MFL x 1/4" FFL Anti-Blowback Fitting | 42010 | 4201 |
| | Н | I | 90357 | 1/4" MFL x 3/16" FFL (High Side) Swivel | 90369 | 9036 |
| | ı | I | 91084* | 1/4" MFL x 3/16" FFL (High Side) Swivel Adapter GM 1976 & Later, Ford 1981 & Later | 90369 | 9036 |
| E. | | J | 90338* | GM 1991 & Later Service Adapter | 90339 | - |
| | | K | 90637 | 3/4" NPSF x 1/4" MFL Refrigeration Tank Adapter | 90638 | - |
| | J | L | 90633 | 1/4" MFL x 1/4" MFL Union | - | - |
| | | L | 82633 | 1/2" ACME-M x 1/2" ACME-M Union | - | - |
| | K | М | 83634-M | 1/4 FL-F x 1/2 ACME LH-M Fitting for R1234yf Systems without check valve | 90331 | - |

FLEX ADAPTERS

M

| N 90355* 1/4" MFL x 3/16" FFL (High Side) GM 1976 & Late N 90356* 1/4" MFL x 1/4" FFL N 90373* 1/4" MFL x 1/8" FFL (High Side) Ford 1977-1980 O 90410 Convert 1/4 SAE Hose into 5/16 SAE, Swivel Cor | 42010 | 42014 |
|---|----------------------|-------|
| N 90373* 1/4" MFL x 1/8" FFL (High Side) Ford 1977-1980 | | |
| 0 90410 Convert 1/4 SAE Hose into 5/16 SAE, Swivel Cor | 90341 | 90368 |
| | nection 82010 | - |
| CCESS SERVICE TOOLS | | |

 $^{^{\}star}$ Includes access valve core (0377-001) – (90-110 PSI opening) / ** Includes check valve core (0332-002) – (8-12 PSI opening)

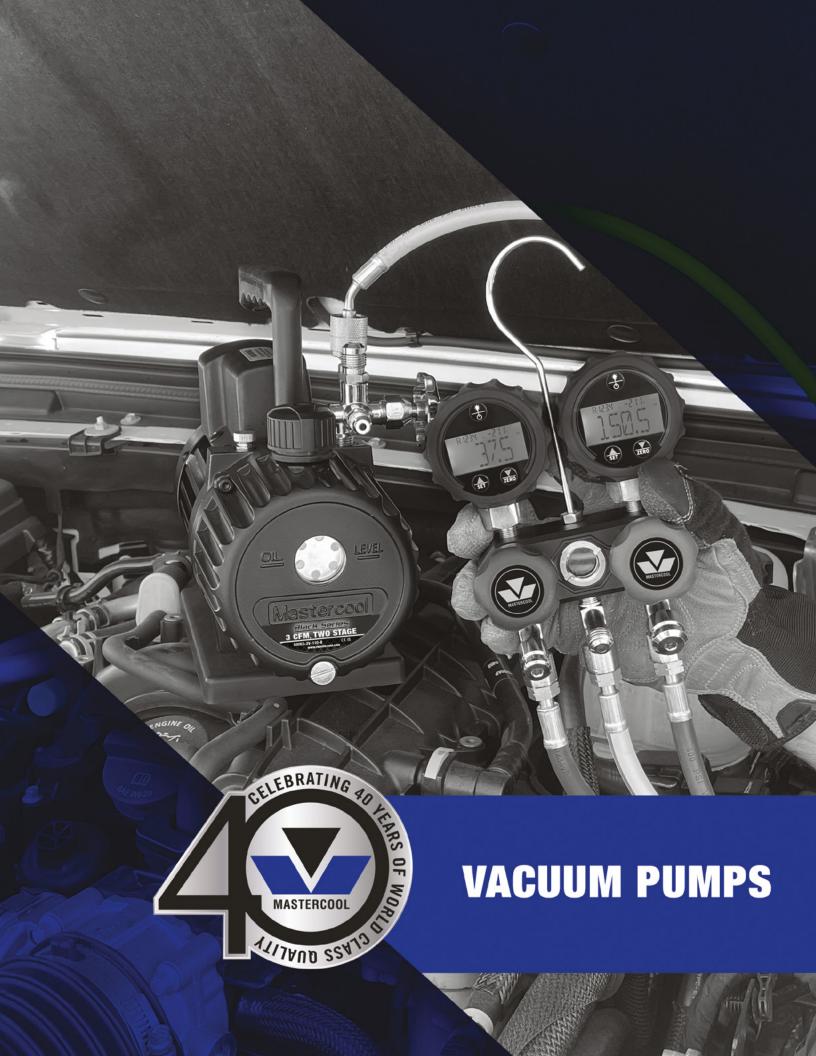
90296*

80296*

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1/4" MFL x 1/8" NPT

1/2" ACME-M x 1/8" NPT





2 STAGE ELITE BALL BEARING DESIGN VACUUM PUMPS

A good quality vacuum pump is an integral tool for complete A/C service. Mastercool vacuum pumps are durable and time tested. They stand up to the most grueling conditions and will provide years of reliable service. Mastercool offers a complete selection of pumps. Regardless of your service requirements, Mastercool has a model for your application.



BALL BEARING CARTRIDGE DESIGN

reduces running temperatures by 30% and extends the life of the pump.

Manifold valve isolates pump from the system

when testing for leaks. Includes three inlet ports - 1/4", 3/8" SAE and 1/2" ACME on 5 and 7.5 CFM models

> Internal check valve stops oil blowout in case of accidental power loss

Gas ballast valve helps prevent oil contamination caused by high moisture

Center oil fill port is accessible from front as well as sides

Durable lightweight die cast aluminum housing Two-stage design allows lower pumping pressure resulting in deeper ultimate vacuum

Oil drain valve positioned at bottom of oil reservoir assures maximum drainage

5 CFM VACUUM PUMP









| MODEL | 90065 |
|-----------------------|----------------------|
| NO. OF STAGES | 2 |
| FREE AIR DISPLACEMENT | 5 CFM |
| ULTIMATE VACUUM | 25 Microns |
| MOTOR | 1/3 HP |
| PUMP SPEED | 1425 RPM 1725 RPM |
| ELECTRICAL SPECS | 110 V / 60 HZ |
| WEIGHT | 29 lbs |
| DIMENSIONS | 14.5 x 6 x 11 x 9.5" |

7 CFM VACUUM PUMP







| MODEL | 90067 |
|-----------------------|----------------------|
| NO. OF STAGES | 2 |
| FREE AIR DISPLACEMENT | 7.5 CFM |
| ULTIMATE VACUUM | 25 Microns |
| MOTOR | 1/2 HP |
| PUMP SPEED | 1425 RPM 1725 RPM |
| ELECTRICAL SPECS | 110 V / 60 HZ |
| WEIGHT | 35.5 lbs |
| DIMENSIONS | 16 x 6 x 11 x 9.5" |



2 STAGE *Black Series* VACUUM PUMPS



[€

Mastercool's "Black Series" vacuum pumps are durable and time tested to stand up to the most grueling conditions and will provide years of reliable service. This vacuum pump provides the power and mobility necessary for a wide variety of applications.

- Refined cartridge machining process creates an improved surface finish extending the longevity of the pump life
- Upgraded seals insure maximum vacuum
- U.S. designed and tested







| MODEL | STAGES | FREE AIR DISPLACEMENT | ULTIMATE VACUUM | MOTOR | PUMP SPEED | ELECTRICAL SPECS | POWER | WEIGHT | DIMENSIONS IN CM |
|-----------------------------------|--------|--------------------------|--------------------|--------|---------------|------------------------|------------------|----------|---------------------|
| 90063-2V-110-BL | 2 | 3 CFM | 15 Microns | 1/3 HP | 1720 RPM | 110/220 V, 50/60 HZ | 110 V Cable (US) | 16 lbs | 27 x 15 x 25 |
| POPULAR 90066-2V-110-BL | 2 | 6 CFM | 15 Microns | 1/2 HP | 1720 RPM | 110/220 V, 50/60 HZ | 110 V Cable (US) | 25 lbs | 37.9 x 16.7 x 27.5 |
| 90068-2V-110-BL | 2 | 8 CFM | 15 Microns | 3/4 HP | 1720 RPM | 110/220 V, 50/60 HZ | 110 V Cable (US) | 34.5 lbs | 38 x 18 x 27 |
| 90612-2V-110-BL | 2 | 12 CFM | 15 Microns | 1 HP | 1720 RPM | 110/220 V, 50/60 HZ | 110 V Cable (US) | 35.5 lbs | 39 x 18 x 27 |

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SINGLE STAGE *Black Series* vacuum pumps











| MODEL | STAGES | FREE AIR DISPLACEMENT | ULTIMATE VACUUM | MOTOR | PUMP SPEED | ELECTRICAL SPECS | POWER | WEIGHT | DIMENSIONS IN CM |
|--|--------|--------------------------|--------------------|--------|---------------|---------------------|------------------|----------|---------------------|
| 90059-BL | 1 | 1.8 CFM | 80 Microns | 1/4 HP | 1720 RPM | 110/120 V, 60 HZ | 110 V Cable (US) | 14 lbs | 27.5 x 12.5 x 25 |
| 90062-BL | 1 | 3 CFM | 80 Microns | 1/4 HP | 1720 RPM | 110/120 V, 60 HZ | 110 V Cable (US) | 14 lbs | 27.5 x 12.5 x 25 |
| 90066-BL | 1 | 6 CFM | 80 Microns | 1/3 HP | 1720 RPM | 110/120 V, 60 HZ | 110 V Cable (US) | 20.5 lbs | 35 x 13.2 x 26 |
| ▼ Approved for all Air Conditioning Refrigerants including A2L and A3 Flammable Refrigerants ▼ | | | | | | | | | |
| <spark free=""> 90066-BL-SF</spark> | 1 | 6 CFM | 80 Microns | 1/3 HP | 1720 RPM | 110/120 V, 60 HZ | 110 V Cable (US) | 20.5 lbs | 35 x 13.2 x 26 |

SERVICE INFORMATION

| | OIL CAPACITY | REPLACEMENT CARTRIDGE | SEAL SERVICE KIT |
|-----------------------|--------------|-----------------------|------------------|
| 90065 | 18 oz | 90165-R | 90062-11-SEAL |
| 90067 | 24 oz | 90167-R | 90062-11-SEAL |
| 90063-2V-110-BL | 8.5 oz | - | - |
| 90066-2V-110-BL | 15 oz | 90166-B | - |
| 90068-2V-110-BL | 19 oz | 90168-B | - |
| 90612-2V-110-BL | 18 oz | 90112-B | - |
| 90059-BL, 90062-BL | 12 oz | - | - |
| 90066-BL, 90066-BL-SF | 18 oz | - | - |

VACUUM PUMP OIL



| 90010-6 | (Six) - 295 ml / 10 oz Bottles (90058, 90063-2V-BL) |
|---------|---|
| 90016-6 | (Six) - 450 ml / 16 oz Bottles (90059-BL, 90062-BL) |
| 90018-6 | (Six) - 531 ml / 18 oz Bottles (90065, 90066-2V-BL, 90612-2V-BL, 90066-BL, 90066-BL-SF) |
| 90024-6 | (Six) - 708 ml / 24 oz Bottles (90067, 90068-2V-BL) |
| 90032-6 | (Six) - 946 ml / 32 oz Bottles |
| 90128-4 | (Four) - 3.7 liter / 1 gallon Bottles |

^{*} PLEASE NOTE: The micron readings on all vacuum pumps represent optimal laboratory conditions. Field conditions may vary from these readings.



18 VOLT CORDLESS, 1.5 CFM, 2 STAGE VACUUM PUMP







- · Sure-grip handle, ergonomically designed for superior comfort and portability
- Reinforced base provides extreme shock resistance
- · Air cooled motor design allows for operation under high temperature conditions
- Pump runs with extremely high ultimate vacuum and low noise
- · Accessible oil drain port & sight glass make both oil maintenance and accuracy easy
- Built-in device eliminates oil mist and an oil-gas separator at the air exhaust outlet prevents oil contamination in the air exhaust

SPECIFICATIONS:

- No. of stages: 2
- Free air displacement: 1.5 CFM
- Motor: DC 18V, 90 W
- Ultimate vacuum: 15 microns/3 Pa
- Oil capacity: 3.5 oz.
- Dimensions without battery: 9.9 x 3.7 x 6.1"
- Net weight: 7.9 lb

Rechargeable Battery

• Li-ion 18 V 5.0 Ah

Battery Charger

- Input 100-240 V, 50-60 Hz, 73 W
- Output: 18V/14.4V 3A
- * Mastercool does not recommend this pump be used with any other battery

| 90058-AUT-5A | Complete Kit includes: 18 V cordless vacuum pump, 1/4" SAE port and 1/2" ACME adapter, Mastercool designed rechargeable battery, Mastercool adapter sleeve, standard 110V battery charger and 3.5 oz of oil |
|-----------------|---|
| 90058-A-AUT | 18 V Cordless Vacuum Pump, 1/4" SAE port, 1/2" ACME adapter and 3.5 oz of oil (without battery and adapter sleeve) |
| 90058-BAT-KT-5A | Mastercool Rechargeable Battery and Adapter Sleeve |
| 90058-BAT-5A | Mastercool Rechargeable Battery |
| 90058-CH | Mastercool Battery Charger, 110V standard US cable |
| 90058-SL-MC | Adapter Sleeve to allow for use with Mastercool batteries |

82031 VACUUM PUMP SWIVEL ADAPTER



"T" style adapter screws onto existing 1/4" flare fitting and converts to 1/4"-FL and 1/2" ACME

91200 AIR OPERATED LIGHT DUTY VACUUM PUMP



Requires 4.5 CFM/90 PSI shop air. No moving parts, no oil required, 1.3 CFM air displacement venturi type pump will pull up to 29 inches of vacuum (Hg.) at sea level. Includes 1/4" flare (R12) connection and 1/2" ACME (R134a) connection.

DIGITAL VACUUM GAUGES

DIGITAL VACUUM GAUGE



SPECIFICATIONS:

- Response time: 250 mSec.
- Sensor cable: spiral cable extended to 6.5 feet (2.6 meter)
- Sensor: thermocouple sensor
- Connection fitting: 1/4" flare female adapter
- Operating temperature: 32 to 120°F (0 to 45°C)
- · Power: 9V DC battery (AC/DC Adapter optional)
- . Battery life: 36 hours
- Low battery indicator: special ICON on LCD
- · Vacuum units: micron, Torr, mTorr, mmHg, mBar, Pa
- Range: 20,000 to 1 micron
- Accuracy range*: ATM-1000 microns: ±10% of reading, 1000 100 microns: ±7% of reading, 100 - 1 micron: ±5% of reading
- * Unit accuracy refers to sensor specifications and is based on optimal laboratory conditions. Field operations may greatly deviate from these levels.

| 98061 | Digital Vacuum Gauge packaged in a blow molded case | |
|----------------------|---|--|
| 98061-C | Digital Vacuum Gauge packaged in a clamshell | |
| Optional Accessories | | |
| 98061-SENSOR | Replacement Sensor | |
| 99334-110 | 110 V AC/DC Adapter | |

DIGITAL VACUUM GAUGE WITH BLUETOOTH® WIRELESS TECHNOLOGY 98063-BT









FEATURES:

99333

State-of-the-art glass beaded thermistor and temperature compensation

1/4 FL-M x 1/4 FL-M x 1/4 FL-F Tee

- Sintered bronze inlet filter to protect the sensor
- 5-digit LCD screen features an ultra-vibrant blue back-light allowing for easy readability
- · Chemical resistant sensor for ease of cleaning
- Low battery icon displayed on the LCD indicates that the batteries are low and need to be replaced
- · Calibration can be performed while in the field environment
- · Audio and visual alarm when vacuum goes below a user adjustable set point
- Bluetooth® wireless technology provides communication to hand-held smart devices through the Mastercool Connect app

SPECIFICATIONS:

- Sensor: glass bead thermistor with temperature compensation
- 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: ±10% of reading (from 10,000 to 100 microns)
- Proof pressure: 450 psi
- Auto-off: automatic after 10 minutes, blue back-light after 3 minutes
- Power: 2 AA batteries included
- Battery life: 100+ continuous hours (depending on back-light use)
 - Weight: 0.3 lb (0.13 kg) without batteries, 0.5 lb (0.23 kg) with batteries
- Dimensions: 1.9" x 6.3" x 1.4" (50 mm x 160 mm x 36 mm)

Specifications for Bluetooth® wireless technology:

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

DOWNLOAD OUR APP







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Optional Accessories

99333 1/4 FL-M x 1/4 FL-M x 1/4 FL-F Tee





ARGIG GOMMANDER









Mastercool introduces its new ARCTIC COMMANDER line of R/R/R machines. Equipped with the latest technology, all models come standard with an 8" command center. The graphic user interface (GUI) will enable navigation through all functions and features with the greatest of ease. There is no longer a need to read any external instructions or paper manuals, simply sit back, watch and learn how to use your machines. All machines are also equipped with Wi-Fi capabilities; allowing for real-time, interactive communication and troubleshooting. It's about time somebody introduced R/R/R machines for the 21st century!

SPECIFICATIONS:

Design Certified:
 R1234yf - SAE J2843
 R134a - SAE J2788

• Voltage: 110 V / 60 Hz or 220 V / 50/60 Hz

• Scale resolution: .02 lb (10 g)

- Working temperature range: 50/120°F (10/49°C)
- Compressor: hermetically sealed, 12cc, high pressure
- Recovery speed: 95% at 70 to 75°F (21 to 24°C) <30 minutes
- Recovery cylinder: 30 lb (12.5 liters), refillable
- \bullet Charge accuracy: ± 0.5 oz. at 70 to 75°F (±15 g at 21 to 24°C)
- Filter system:

R1234yf - 1 filter for cleaning and water removal R134a - 2 filters for cleaning and water removal

- Hoses: 96" (250 cm)
- Pressure gauges: Class 1
- Cylinder temperature sensor: integrated
- Cylinder heater: standard equipment
- Dimensions (mm): 1150 (h) x 600 (w) x 770 (d)



WI-FI

Wi-Fi capability allows for real time, interactive communication and troubleshooting



COMPACT DESIGN

The machine's compact design makes it easy to maneuver and requires minimal shop space



COOLING FAN

Dedicated PC board cooling fan keeps the PC board consistently cool

RECOVER/RECYCLE/RECHARGE



8" COLOR TABLET WITH TOUCH SCREEN FEATURES:



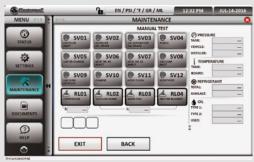
Home Screen

allows for quick touch selection of options



Status Screen

for quick reference of resources



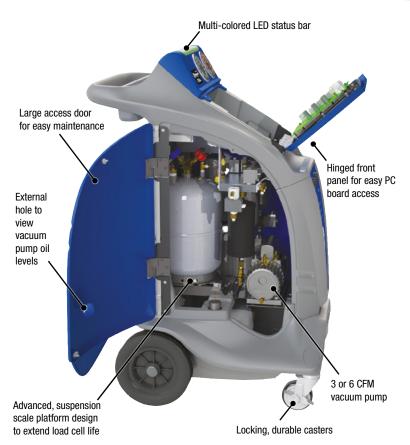
Maintenance Screen

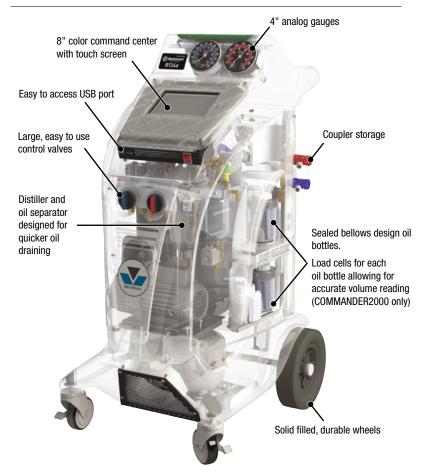
offered only to authorized service technicians allowing for quick and easy diagnosis



Maintenance Screen

offered only to authorized service technicians allowing for quick and easy diagnosis





RECOVER/RECYCLE/RECHARGE











| | COMMANDER4000 (110V) R1234yf & HYBRID | COMMANDER3000 (110V) R134a & HYBRID | COMMANDER2000 (110V) R134a FULLY AUTOMATIC | COMMANDER1000 (110V) R134a SEMI-AUTOMATIC |
|---|--|--|---|--|
| 8" Color Command Center with Touch Screen | X | X | X | X |
| Automatic and Manual Procedures | X | X | X | Manual procedures only |
| Refrigerant Database | X | X | X | Optional |
| Automatic Vacuum Leak Test: Programmable | X | X | X | X |
| Auto Oil Discharge | X | X | X | X |
| Auto and Manual Air Purge | X | X | X | X |
| Auto Filter and Full Tank Alarm | X | X | X | X |
| Low Refrigerant Alarm | X | X | X | X |
| Auto Oil Injection | N/A | N/A | X | N/A |
| Thermal Printer with E-Printing Capability | X | X | Optional | Optional |
| Hose Flushing | Χ | X | N/A | N/A |
| Vehicle A/C System Flushing | Optional | Optional | N/A | N/A |
| Tank Heater | X | X | X | X |
| Vacuum Pump | 6 CFM | 6 CFM | 6 CFM | 3 CFM |
| Refrigerant Identifier | X | N/A | N/A | N/A |
| On-board Instruction Manual | Χ | X | X | X |
| Multiple Languages | X | X | X | X |
| On-board Unit Conversion Calculator | X | X | X | X |
| New Cabinet Design for Increased Air Flow | Χ | X | Χ | Х |
| Large Analog Gauges | Χ | X | Χ | X |
| Hard Wired Power Cord | X | X | Χ | X |
| Hose Coupler Storage | Χ | X | Χ | X |
| Solid Durable Wheels with Locking Casters | Χ | X | Χ | Х |
| Multi-colored LED Status Bar | Χ | Χ | Х | N/A |
| Self-Diagnostic Check | X | X | X | Х |
| Wi-Fi Capable | Χ | X | X | Х |
| Dust Cover | Χ | X | X | Х |
| Dimensions (mm): 1150 (h) x 600 (w) x 770 (d) | X | X | X | Χ |



COMMANDER CONSUMABLES

Mastercool uses only the highest quality oils and dies with their products. In order to keep your warranty valid, please use Mastercool oils and dies at all times. For the Commander line of machines, Mastercool recommends the following consumables:

COMPRESSOR OILS



| Maximum protection with excellent thermal & oxidative stability. Moisture tolerant. OEM approved. | | |
|---|------------------------------------|--|
| 92709-65-8 | PAG 65 Oil (8 oz (236 ml) bottle) | |
| 92709-65-32 | PAG 65 Oil (32 oz (1 L) bottle) | |
| 92709-100-8 | PAG 100 0il (8 oz (236 ml) bottle) | |
| 92709-100-32 | PAG 100 0il (32 oz (1 L) bottle) | |
| 92709-150-8 | PAG 150 Oil (8 oz (236 ml) bottle) | |
| 92709-150-32 | PAG 150 Oil (32 oz (1 L) bottle) | |

92709-65-8 92709-65-32

ZEROL HD46 R1234yf MOBILE AIR CONDITIONING COMPRESSOR LUBRICANT





92709-YF-8 92709-YF-32

- Optimized miscibility in HFO refrigerant R1234yf
- Superior lubricity
- Exceptional viscosity index (VI)
- · Good high temperature and chemical stability
- · Low hygroscopicity (tendency to absorb moisture)
- · Formulating expertise
- Excellent electrical resistivity properties for electrically driven systems
- * For more information please see page 59

92709-YF-8 8 fl. oz (236 ml) Bottle 92709-YF-32 32 fl. oz (946 ml) Bottle





ULTRAVIOLET A/C DYES



| Minimum and a named Minimum and Adaptate Minimum an | Transaction of the second seco | The results of the re |
|--|--|--|
| | | International Sea |

| 92708 | Standard Universal | Dve |
|-------|--------------------|-----|

8 oz (240 ml) bottle - 32 applications

92732 Standard Universal Dye

32 oz (1 L) bottle - 128 applications

53625 Concentrated Universal Dye

2 oz (60 ml) bottle - 25 applications

COMMANDER REPLACEMENT FILTERS



Change the filter-drier when notified by the machine to assure adequate moisture and contaminant removal as well as prevent lockout.

COMD2-FLTRPK

2 Filter Pack for COMMANDER1000, COMMANDER2000, COMMANDER3000, Has a 175 lb

filtering capacity.

COMD1-FLTRPK

1 Filter for COMMANDER4000, COMMANDER4000-E, COMMANDER3000-E,

COMMANDER2000-E, COMMANDER1000-E. Has a 350 lb filtering capacity.

A/C SYSTEM FLUSH HOSE ASSEMBLY



| 69889-SFHA | R134a A/C System Flush Hose Assembly includes high and low side couplers (82834, 82934) and 8 foot yellow hose | |
|------------|--|--|
| 69843-SFHA | R1234yf A/C System Flush Hose Assembly | |



THE TWIN TURBO SERIES IS THE MOST COMPLETE SOLUTION TO YOUR RECOVERY NEEDS!

TWINTURBO





Approved for all Air Conditioning Refrigerants including A2L and A3 Flammable Refrigerants

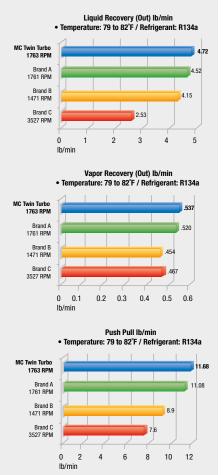
Mastercool's twin turbo dual complete recovery machine for R134a and R1234yf refrigerants incorporates a spark-free compressor and enhanced features to allow for maximum recovery capacity while at the same time decreasing size and weight. The design of the double piston compressor and cooling by the largest fan and condenser in the market makes the 69372 R134a/R1234yf complete recovery unit the most complete solution to your R134a and R1234yf recovery needs.

The twin turbo dual complete recovery machine for R134a and R1234yf refrigerants, is designed to perform A/C service on all R134a and R1234yf automotive systems. It can recover, remove oil, and filter R134a and R1234yf refrigerants.

- · Built with the safest spark-free components
- Includes all hoses and couplers needed to recover, cleanse and remove the oil from R134a and R1234yf automotive A/C systems as well as an extra filter dryer for replacement
- Easily convert between R134a and R1234yf with the included dual brass manifold gauge set, couplers and conversion fittings
- 30 lb DOT tank for R134a and 30 lb DOT tank for R1234yf refrigerants included with each unit (refrigerant sold separately). Each 30 lb DOT tank has a float switch that connects to the 69372 to shut off the recovery when the tank is 80% full

SPECIFICATIONS:

- 1/2 hp oil less compressor
- Recovery rate: R134a/R1234yf Direct vapor up to .537 lb/min Direct liquid up to 4.72 lb/min Push pull up to 11.68 lb/min
- Operating temperature: 32 to 122°F
- Weight: 28.3 lbs
- Dimensions: 18" (I) x 10" (w) x 14" (h)
- Case material is HDPE (high density polyethylene)
- Compatible refrigerants:
 All CFC, HCFC, and HFC's
- · Compatible with combustible gases



69372 R134a/R1234yf Complete A/C Recovery Set



TWIN TURBO REFRIGERANT RECOVERY MACHINE





These units offer all the same functions and features as the 69300, in addition, they have an oil separation module, filter dryer and sight glass.



| 69360 | 115 V - 60 Hz includes 30 lb DOT tank, sight glass, R134a low side coupler, oil drain bottle, a yellow and blue hose and a 1/4" FFL X 1/2" ACME-M adapter |
|-------|---|
| | Twin Turbo Complete Recovery Machine for R1234yf vehicles |

69360-YF

COMPATIBLE WITH COMBUSTIBLE GASES
includes a 30 lb DOT tank, sight-glass, R1234yf low side coupler, oil drain bottle
and R1234yf blue and yellow hose

115 V - 60 Hz
Twin Turbo Refrigerant Recovery Machine For "Refer Units" includes an oil separation module, filter dryer and sight glass

• 1/4" hose/tank connections
• For use with all refrigerants including R22, R404, R407C and R410a

115 V - 60 Hz

Heavy Duty Recovery Machine for Buses and Fleet Applications

includes 50 lb DOT tank, sight glass, R134a low side coupler, oil drain bottle, a yellow and blue hose and a 1/4" FFL X 1/2" ACME-M adapter

69500-DR Replacement Filter Dryer









COMPATIBLE WITH COMBUSTIBLE GASES

*Approved for all Air Conditioning Refrigerants including A2L and A3 Flammable Refrigerants *

FOR CONTAMINATED MOBILE A/C SYSTEMS DESIGNED FOR R1234yf

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

In addition:

- Meets all requirements of SAE J2851, contaminated recovery only device
- Comes equipped with overfill protection switch cutting off at 80% tank capacity (Recovery tanks must have floats using 3 pin Brad Harris plug)
- 60" R1234yf blue hose and low side (1/4 FL-M x 13 mm) coupler
- 60" yellow transfer hose

69390 115 V - 60 Hz

69391 115 V - 60 Hz with 30 lb DOT Tank

REFRIGERANT RECOVERY EQUIPMENT



69000 REFRIGERANT RECOVERY SYSTEM (115 V - 60 Hz)





These recovery systems are compact, lightweight and work with all refrigerants (may require additional hoses, fittings and couplers). They're ideal for commercial, residential or industrial appliance applications. Our recovery systems offer a state-of-the-art 1/2 HP oil-less compressor with a built-in high volume cooling fan. This innovative design delivers maximum cooling efficiency which keeps the compressor working at high capacities in even the hottest climates. The compressor is also protected by an automatic low pressure cut-off switch that shuts off the unit once the recovery is complete. This AUTO SHUT-OFF feature eliminates the risk of compressor failure and reduces the user's need to monitor the entire recovery system. All of our recovery systems offer our color-coded gauges with pressure readings in PSI, BAR and MPa. Our stainless steel ball valve designed manifold, controls the flow smoothly and quickly with only a 1/4 turn. With all of this protected by a reinforced hard plastic case, Mastercool's recovery systems will meet all your refrigerant recovery needs.

FEATURES:

- High performance oil-less compressor
- · High volume cooling fan design
- · Automatic low pressure cut-off switch
- Liquid compatible head-valve system
- · Safety high pressure cut-off switch
- Fully reinforced hard plastic casing

SPECIFICATIONS:

- 1/2 HP oil-less compressor
- Recovery rate:
 Direct vapor up to .44 lb/min
 Direct liquid up to 2.6 lb/min
 Push-pull up to 11.9 lb/min
- Operating temperature range: 32 to 122°F
- Weight: 38 lbs / Dimensions: 17" (l) x 10" (w) x 12" (h)
- Refrigerants: CFC's, HCFC's, HFC's

69100 COMPLETE A/C RECOVERY SYSTEM (115 V - 60 Hz)





- · Compact, lightweight and works with all refrigerants
- State of the art 1/2 hp oil-less compressor with built-in high volume cooling fan. Delivers maximum cooling
 efficiency which keeps compressor working at high capacities in even the warmest climates. Compressor is
 protected by an automatic low pressure cut-off switch that shuts off unit once the recovery is complete. This
 feature eliminates the risk of compressor failure and reduces user's need to monitor entire recovery process
- Includes an oil separator and filter dryer to cleanse the refrigerant during the recovery process
- · Color-coded gauges with pressure readings in PSI, BAR and MPA
- Stainless steel ball valve designed manifold controls the refrigerant flow smoothly and quickly with only a 1/4 turn
- Internal components have been arranged and isolated to ensure a smooth and quiet performance
- Protected by a reinforced hard plastic case

FEATURES & BENEFITS:

- High performance oil-less compressor
- · High volume cooling fan design
- Automatic low pressure cut-off switch
- Liquid compatible head-valve system
- · Safety high pressure cut-off switch
- · Fully reinforced hard plastic casing

SPECIFICATIONS:

- 1/2 HP oil-less compressor
- Recovery rate:
 Direct vapor up to .44 lb/min
 Direct liquid up to 2.62 lb/min
 Push pull up to 12 lb/min
- Operating temperature range: 32 to 122°F
- Weight: 38 lbs / Dimensions: 17" L x 10" W x 12" H
- Refrigerants: all (may require additional hoses, fittings and couplers)



AUTOMOTIVE A/C RECOVERY SYSTEM 69110



Design Certified to Meet SAE J2810

- Includes recovery unit, 30 lb DOT tank, 60" yellow service hose, 72" blue and red conversion hoses, UL approved high and low side R134a manual couplers and oil purge bottle
- Designed to meet SAE J2810 and works with all refrigerants
- · Recovers and removes oil from refrigerant
- All internal components have been arranged and isolated to ensure smooth and quiet performance
- State of the art 1/2 hp oil-less compressor with built-in high volume cooling fan
- Delivers maximum cooling efficiency, keeping compressor working at high capacities even in warmest climates
- Stainless steel ball valve design manifold controls refrigerant flow smoothly and quickly with only 1/4 turn
- · Gauges provide pressure readings in PSI, BAR and MPA

SPECIFICATIONS:

- Refrigerant R134a
- 115 Volts AC
- High Side Design Pressure 500 psig
- Low Side Design Pressure 174 psig
- 1 PH, 60 HZ., 8.6 Amps, 1.25 S/F
- Service Factor 10.75 AMP

REFRIGERANT RECOVERY MACHINE FOR CONTAMINATED R134a AND R1234vf





69400-CON



COMPATIBLE WITH COMBUSTIBLE GASES

Approved for all Air Conditioning Refrigerants including A2L and A3 Flammable Refrigerants

Mastercool's "Mini Twin Turbo" recovery machine quickly and easily removes contaminated refrigerant from R134a and R1234yf systems. This machine has been constructed with the safest spark free component allowing for use with all combustible gases.

This refrigerant recovery machine for contaminated R134a and R1234yf contains: "Mini Twin Turbo" recovery machine (69400), 30 lb DOT approved tank (62010-CON), 72" yellow hose (83722-CON), 72" blue hose (83721-CON), low side R1234yf 12 mm-F x 14 mm quick coupler (67534), low side R134a 14 mm-F x 13 mm economy coupler (66334), R1234yf adapter 12 mm-m x 14mm-f (83735)

SPECIFICATIONS:

- 115 V 60 Hz
- 1/2 HP motor
- Operating temperature: 32 to 122°F (0 to 50°C)
- · Compatible with all CFC, HCFC, HFC's, and combustible gases
- 30 lb DOT approved tank
- Weight (69400): 24 lbs (11 kg)
- Dimensions (69400): 11.8" (l) x 7.9" (w) x 10.6" (h) (300 mm (l) x 200 mm (w) x 270 mm (h))

69500 **RECOVERYMATE**



Speed up the recovery process! Remove unwanted moisture and separate oil from recovered refrigerant. (Use with any recovery machine.)

SPECIFICATIONS:

- · Lightweight and easy to carry
- 4-way ball valve manifold controls the flow smoothly and quickly with only 1/4 turn
- · Large capacity oil separator
- High performance dryer eliminates moisture from recovered refrigerant
- · Extra large sight glass monitors refrigerant flow and changes color when a dryer change is necessary
- · Rugged carrying case can stand on its own or be mounted on a wall or bench
- Length: 15" / Width: 4" / Height: 17"
- Includes 60" nylon barrier hoses ((2) blue, (2) red, (1) yellow and (1) black)

DOT-APPROVED RECOVERY CYLINDERS

Features

- · Powder coated cylinder for high gloss, durable finish
- Pre-charged cylinder provides a clean, dry interior
- 3/4" NPT opening accepts 80% fill float switch shut-off device
- Reusable and conforms to DOT-4BA400 specs and ARI guidelines
- · Collar design for ease of handling
- · Storage and transport of recovered refrigerant gases
- Y-valve for liquid/vapor
- AUS Approved and TC Canadian Approved

30 LB. DOT-APPROVED RECOVERY CYLINDERS



- Size (w x h): 9.125" x 17.52"
- Standard spec.: DOT 4BA400
- Service pressure: 400 PSI / 2.7 MPa
- Tare weight: 17.99 lb
- Body material: HP295
- Relief valve pressure: 600 PSI / 4.1 MPa
- Nominal water capacity: >26.2 LB / 11.9 L
- Tank test pressure: 800 PSI / 5.5 MPa
- Air tightness test pressure: 400 PSI / 2.7 MPa

| Model | 62010 without float switch | 62011 with float switch | 62012 with float switch & 1/4" FL-M NCG Port | 64010 without float switch | 67010 with float switch | 67011 with float switch |
|------------|-----------------------------------|--------------------------------|---|-----------------------------------|--------------------------------|-------------------------------|
| Connection | 1/4" FL-M (7/16-20) | | | 1/2" ACME | | |
| Color | yellow/gray | | blu | е | yellow/blue | |

50 LB. DOT-APPROVED RECOVERY CYLINDERS



- Size (w x h): 12.25" x 18.78"
- Standard spec.: DOT 4BA400
- Service pressure: 400 PSI / 2.7 MPa
- Tare weight: 28.71 lb
- . Body material: HP325 or HP345
- Relief valve pressure: 600 PSI / 4.1 MPa
- Nominal water capacity: >47.7 LB / 21.6 L
- Tank test pressure: 800 PSI / 5.5 MPa
- Air tightness test pressure: 400 PSI / 2.7 MPa
- 63010 65010 66010 66011 66012 without float with float with float Model without float with float switch switch switch switch switch & 1/4" FL-M NCG Port Connection 1/4" FL-M (7/16-20) 1/2" ACME Color yellow/gray yellow/gray

100 LB. DOT-APPROVED RECOVERY CYLINDERS



- Size (w x h): 11.25" x 31.81"
- Standard spec.: DOT 4BW400
- Service pressure: 400 PSI / 2.7 MPa
- Tare weight: 50.5 lb
- Body material: HP325
- Relief valve pressure: 600 PSI / 4.1 MPa
- Nominal water capacity: >92.5 LB / 41.9 L
- Tank test pressure: 800 PSI / 5.5 MPa
- Air tightness test pressure: >87 PSI / 0.6 MPa

| Model | 68010 without float switch |
|------------|-------------------------------|
| Connection | 1/4" FL-M (7/16-20) |
| Color | yellow/gray |

ENVIRO TANK (REFILLABLE CYLINDER)

30 LB. REFILLABLE CYLINDER



- Size (w x h): 8.39" x 20"
- Standard spec.: DOT 4BA400
- Service pressure: 400 PSI / 2.7 MPa
- Tare weight: 19.9 lb
- Body material: HP295
- Relief valve pressure: 600 PSI / 4.1 MPa
- Nominal water capacity: >30 LB / 13.6 L
- Tank test pressure: 800 PSI / 5.5 MPa
- Air tightness test pressure: >87 PSI / 0.6 MPa

| Model | 62020-WX |
|------------|---------------------|
| Connection | 1/4" FL-M (7/16-20) |
| Color | white |



MOBILE ELECTRONIC CHARGING STATION



Keeping the same ideals in mind as the Portable Electronic Charging Station, the mobile unit is directed towards the garage technician. With an enlarged carry cart and larger wheels, this unit can get around the shop with the greatest of ease!

• Dimensions: 45" x 18" x 16.5"

| VACUUM PUMP | 5 CFM |
|----------------------|---------|
| MANIFOLD | |
| 2 Way Aluminum Block | 91685 |
| 4 Way Aluminum Block | 91686 |
| VACUUM PUMP | 7.5 CFM |
| MANIFOLD | |
| 2 Way Aluminum Block | 91687 |
| 4 Way Aluminum Block | 91688 |

PORTABLE ELECTRONIC CHARGING STATION



A lightweight, durable, steel frame cart that contains all the necessary tools to quickly and conveniently charge the A/C system. No need for different sized charging cylinders with Mastercool's rugged die cast electronic scale. Simply place the refrigerant cylinder on the scale and charge.

FEATURES:

- A rugged, lightweight steel cart with wheels and convenient storage pocket for scale and hoses allows this portable charging station to be taken almost anywhere
- 240 lb capacity scale with long lasting 9V battery (60 hrs)
- Deep micron, rotary vane vacuum pumps
- Extruded aluminum manifold with long lasting valve design

2 STAGE PORTABLE ELECTRONIC CHARGING STATION

• Includes electronic charging scale and a set of 72" hoses

Also available:

- Refrigerant tank heater blanket (98250)
- D.O.T. cylinder without float
- * R134a automotive service couplers not included

| 5 CFM | 7.5 CFM |
|-------|---------|
| | |
| 91585 | 91587 |
| 91586 | 91588 |
| | 91585 |

R134a SINGLE STAGE PORTABLE ELECTRONIC CHARGING STATION

- 2-way manifold with 2 1/2" gauges in R134a
- Electronic charging scale, manual couplers, set of hoses

Also available:

• Refrigerant tank heater blanket (98250)

| 1.8 CFM Single Stage Vacuum Pump | 91580-A |
|----------------------------------|---------|
| 3 CFM Single Stage Vacuum Pump | 91580-B |
| 6 CFM Single Stage Vacuum Pump | 91585-B |

91585-B-YF DUAL R134a/R1234yf SINGLE STAGE PORTABLE ELECTRONIC CHARGING STATION

- *Approved for all Air Conditioning Refrigerants including A2L and A3 Flammable Refrigerants*
- 2-way manifold with 2 1/2" gauges
- 6 CFM, single stage Spark Free vacuum pump
- Electronic charging scale, R1234yf manual couplers, R134a manual couplers, 1/2" ACME-M x 1/2" ACME-F LH thread fitting, R1234yf adapter 14 mm-F x 12 mm-M, set of 60" service hoses





Black Series electronic charging scale with bluetooth® wireless technology



 ϵ

THE ULTIMATE DEVICE FOR CHARGING AND RECOVERING OF REFRIGERANT

>>POPULAR<

Mastercool's electronic charging scale with Bluetooth® wireless technology features an extra-large LCD display for easy reading from any angle and features three display modes (kgs, lbs, oz). With a high capacity of up to 243 lbs (110 kgs) it is easily one of the best on the market. Included in this package will be the capability to download our free Mastercool Connect app. This will allow for full mobility as activity can be easily viewed on all compatible hand-held smart devices.



Compact control panel features a large back-lit LCD screen and keypad

Long flexible coil allows user to easily place control panel in an array of convenient positions

SPECIFICATIONS:

- 243 lbs (110 kg capacity)
- Accuracy: ≤±0.05% of reading
- Resolution: 0.05 lb / 0.5 oz / 0.01 kg
- . Automatic Shut-off: After 3 hrs
- Operating Temperature: 32 to 120°F (0 to 49°C)
- Battery Life: Approximately 40 hrs
- 9" x 9" (22 cm x 22 cm) platform

Specifications for Bluetooth® Wireless Technology:

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

DOWNLOAD OUR APP





CALIBRATION CERTIFICATE AVAILABLE UPON REQUEST

Durable and Portable

Strong aluminum base with a rugged, non-slip platform provides extra durability while working in any environment. The included compact and heavy-duty carrying case allows for easy portability to any job site.

The large 9 x 9" platform provides for easy weighing of refrigerant tanks with an accuracy of ≤±0.05% of reading.

- CHARGE PROGRAMMING: Allows user to program desired quantities. Before charge is complete, an alarm will sound allowing ample time to turn off refrigerant supply
- PAUSE/CHARGE (Using the 98230 Charging Solenoid Module): This feature allows user to stop and continue charging
- TANK CAPACITY PROGRAMMING: EMPTY/FULL tank feature allows user to know the amount of refrigerant in the tank at any time
- REPEAT: Allows user to charge previously stored amount



CERTIFIED ELECTRONIC CHARGING SCALE WITH BLUETOOTH® WIRELESS TECHNOLOGY



OIML & CE Approved, Legal for Trade. Included in this package will be the capability to download our free Mastercool Connect app. This will allow for full mobility as activity can be easily viewed on all compatible hand-held smart devices.



FUNCTIONS:

- CHARGE PROGRAMMING: Allows user to program desired quantities. Before charge is complete, an alarm will sound allowing ample time to turn off refrigerant supply
- PAUSE/CHARGE (using the 98230 Charging Solenoid Module): This feature allows user to stop and continue
- TANK CAPACITY PROGRAMMING: EMPTY/FULL tank feature plug in power supply allows user to know the amount of refrigerant in the tank at any time
- REPEAT: Allows user to charge previously stored amount

SPECIFICATIONS:

EC type-approval

Accuracy class: III

n = 2750 / 2200

- Maximum capacity: 55 kg / 110 kg
- Minimum capacity: 400 g
- Verification scale interval: e = 20 g / 50 g
- Actual scale interval: d = 20 g / 50 g
- Maximum number of scale intervals:
- · Weighing range (s): multiple interval
- Temperature range: 0°C / +40°C
- Power supply voltage: 9 V battery; 9 V AC/DC
- · Automatic shut-off: 3 hours
- Battery life: approximately 40 hours
- Platform: 22 x 22 cm (9 x 9")

WIRELESS REFRIGERANT CHARGING SCALE

CALIBRATION CERTIFICATE AVAILABLE UPON REQUEST

FFATURES:

- · 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



• CHARGE PROGRAMMING:

Allows user to program desired quantities. Before charge is complete,

• PAUSE/CHARGE (98315 model only):

• TANK CAPACITY PROGRAMMING:

Empty/full tank feature allows user to know the amount of refrigerant in the tank at any time.

Allows user to charge previously stored amount.



• 31 cm platform

· Accepts all US & EU standard cylinders

98310 Wireless Refrigerant Charging Scale

98315-AUT



- · Wireless signal strength indicator conveniently displays on remote



an alarm will sound allowing ample time to turn off refrigerant supply.

This feature allows user to stop and continue charging.

• REPEAT (98315 model only):



98315 with solenoid



When remote is out of range the unit will automatically pause. This pause mechanism allows unit to restart when remote is back in range.

- Capacity: 243 lbs (110 kg)
- Accuracy: ≤±0.05% of reading
- Resolution: 0.05 lb / 0.5 oz / 0.01 kg
- 3 hrs auto off function
- Operating temperature: 32°F to 120°F (0°C to 49°C)
- · Battery life: approximately 20 hours

98315 Wireless Refrigerant Charging Scale with Solenoid

Wireless Refrigerant Charging Scale with Solenoid

(includes 1/4" F-FL x 1/2 ACME-M fitting without valve core (82634-M))

REMOTE RANGE:

100 FEET (30 M).

LINE OF SIGHT

98250 **ELECTRONIC TANK HEATER BLANKET**



The Mastercool refrigerant tank heater blanket speeds up recharging time.

- Assures total discharge of refrigerant from 30 lb and 50 lb tanks. Heats tanks to 125°F resulting in maximum pressure of 185 psi for R134a
- Quick working 300W heater element
- An excellent complement to all Mastercool refrigerant scales
- 110 V

98230 **CHARGING SOLENOID MODULE**



The 98230 Charging Solenoid Module turns the 98210-BL ACCU-CHARGE II & 98211-B ACCU-CHARGE III into Automatic Programmable Scales!

This module allows the user to control the exact amount of refrigerant transferring to and from the A/C system. The compact design is battery powered (9V), lightweight, portable and works with all types of refrigerant. 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.



REFRIGERANT IDENTIFIERS



69134-A REFRIGERANT IDENTIFIER FOR R134a



KEEPS EQUIPMENT SAFE, PREVENTS CONTAMINATION, DETECTS AIR CONTAMINATION

The refrigerant identifier helps confirm the presence and quality of R134a refrigerant in vehicle air conditioning systems. This process will help avoid potential damage from refrigerant contamination.

SPECIFICATIONS:

- · Weight: 0.8 kg
- Refrigerant detected: R134a (tetraflouroethane)
- Accuracy: PASS/FAIL 95% pure R134a
- Power requirements: 12 VDC
- User interface: membrane type w/ visual indicators and function key
- · Calibration method: manual pump aspirator
- Minimum input pressure: 1.38 Bar (20 Psig)
- Maximum input pressure: 20.70 Bar (300 Psig)
- Storage temperature: -10° to 50°C
- Operating temperature: 10 to 45°C
- Construction material: molded ABS housing/molded rubber sleeve



691234YF-MINI MINI ID REFRIGERANT IDENTIFIER FOR R1234vf



The Mini ID Refrigerant Identifier helps you verify the presence and quality of R1234yf refrigerant in vehicle air conditioning systems, so you can help avoid potential damage to your air conditioning service equipment and business from refrigerant contamination. The Mini ID delivers fast and accurate refrigerant analysis in a self-contained, compact, and extremely portable package. The unit is rugged and very simple to use. It automatically provides step-by-step indication of the gas sampling process.

- Keeps equipment safe the extraction of contaminated vehicle refrigerant can damage expensive R1234yf service and recovery equipment
- Prevents contamination avoids contaminating your refrigerant supply with illegal blends, propane, or butane from customer vehicles
- Detects air contamination helps you detect high levels of air contamination

SPECIFICATIONS:

- Weight: 0.8 kg
- Refrigerant detected: R1234yf (tetrafluoropropene)
- Accuracy: PASS/FAIL 95% pure R1234yf
- Power requirements: 12 VDC
- Approvals: UL, CE, RoHS compliant
- User interface: membrane type with visual indicators and function key
- Calibration method: manual pump aspirator
- Storage temperature: -10° to 50°C
- Operating temperature: 10°C to 45°C
- Construction material: molded ABS housing/molded rubber sleeve









LEGEND SERIES™ R1234yf & R134a REFRIGERANT ANALYZER



With the introduction of the new HFO-1234yf refrigerant to the automotive market, vehicle manufacturers worldwide have developed new standards for vehicle A/C service. Included in these standards is the requirement to verify the purity of the refrigerant prior to recovery of the refrigerant in the system. The LegendTM is a worldwide ready tool to meet the service needs of HFO-1234yf equipped vehicles. It is certified to the SAE J2912 standard and connects directly to SAE J2843 and J3030 AC service machines that have an external analyzer USB port.

- · Quickly and accurately determines refrigerant purity
- Displays percentage purity of R1234yf, R134a, R12, R22 and hydrocarbons
- Displays % air in pure R1234yf & R134a
- · Capable of testing R12 with optional R12 hose accessory
- Easily prints test results with optional printer
- Uses standard 2.25" (57 mm) thermal paper
- Improved oil resistance with the user replaceable oil restrictor

SPECIFICATIONS:

- Refrigerants measured: R1234yf, R134a, R12
- Contaminants measured: R22, hydrocarbons, unknown
- Accuracy: exceeds the requirements of SAE J2912
- Refrigerant % displayed: R1234yf, R134a, R22, R12, HC, unknown, air
- Ambient operating temperature range: 10°C to 49°C
- Power: 12VDC @ 1.5 amps
- Communication protocols: USB 2.0, Bluetooth 2.0
- User interface: 5" color LCD with soft keys
- Ten languages: ENG, FRE, GER, ITA, POR, SPA, CHI, JAP, KOR, RUS
- Approvals: CE, UL, SAE J2912

FEATURES:

- Suitable for R134a, R1234yf & R12 vehicles
- · Large color display
- Internal lithium battery
- Ergonomic design
- · Optional built-in printer
- Optional Bluetooth® communication

Comes complete with:

R1234yf & R134a refrigerant identifier R1234yf and R134a low side service couplers R1234yf and R134a cylinder adapters (2) R1234yf sample hoses

(2) R134a sample hoses Charging adapter

Custom case





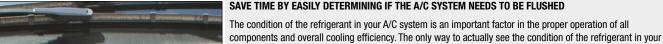
| 69LEGEND | Legend Series™ R1234yf & R134a Refrigerant Analyzer without Bluetooth® / without printer |
|--------------|--|
| 69LEGEND-P | Legend Series™ R1234yf & R134a Refrigerant Analyzer without Bluetooth® / with printer |
| 69LEGEND-BT | Legend Series [™] R1234yf & R134a Refrigerant Analyzer with Bluetooth [®] / without printer |
| 69LEGEND-BTP | Legend Series [™] R1234yf & R134a Refrigerant Analyzer with Bluetooth® / with printer |



VISUAL INSPECTION SIGHT GLASS







vehicle's A/C system is with the use of the Mastercool visual inspection sight glass.

This unit can be used with a standard vacuum pump or with the vacuum function on your R/R/R machine. Easy to

- follow instructions will guide you through the use of either option.

 Allows user to visually inspect the refrigerant in any R134a or R1234yf system and identify excess dye, oil or
- Allows the user to extract a small portion of the refrigerant for actual visual inspection
- Leak free, ball valve controlled and will allow the refrigerant extracted for the visual inspection to be deposited back into the system



R134a Visual Inspection Sight Glass with R134a Quick Couplers

Kit Includes:

- · Refrigerant oil visual inspection sight glass
- Low side, 1/4" (7/16"-20) x 13 mm retrofit adapter
- 60" blue R134a charging hose
- 60" red R134a charging hose
- High side R134a 14 mm-F x 16 mm quick coupler
- Low side R134a 14 mm-F x 13 mm quick coupler





R1234yf Visual Inspection Sight Glass with R1234yf Quick Couplers

Kit Includes:

- · Refrigerant oil visual inspection sight glass
- 1/4 fl-f x 17 mm-m R1234yf adapter with valve core
- 60" blue R1234yf charging hose
- 60" red R1234yf charging hose
- High side R1234yf 12 mm-F x 17 mm quick coupler
- Low side R1234yf 12 mm-F x 14 mm quick coupler



53377

R134a Visual Inspection Sight Glass with R134a Manual Couplers

Kit Includes:

- Refrigerant oil visual inspection sight glass
- Low side, 1/4" (7/16"-20) x 13 mm retrofit adapter
- 60" blue R134a charging hose
- 60" red R134a charging hose
- High side R134a 14 mm-F x 16 mm manual coupler
- Low side R134a 14 mm-F x 13 mm manual coupler



53377-YF

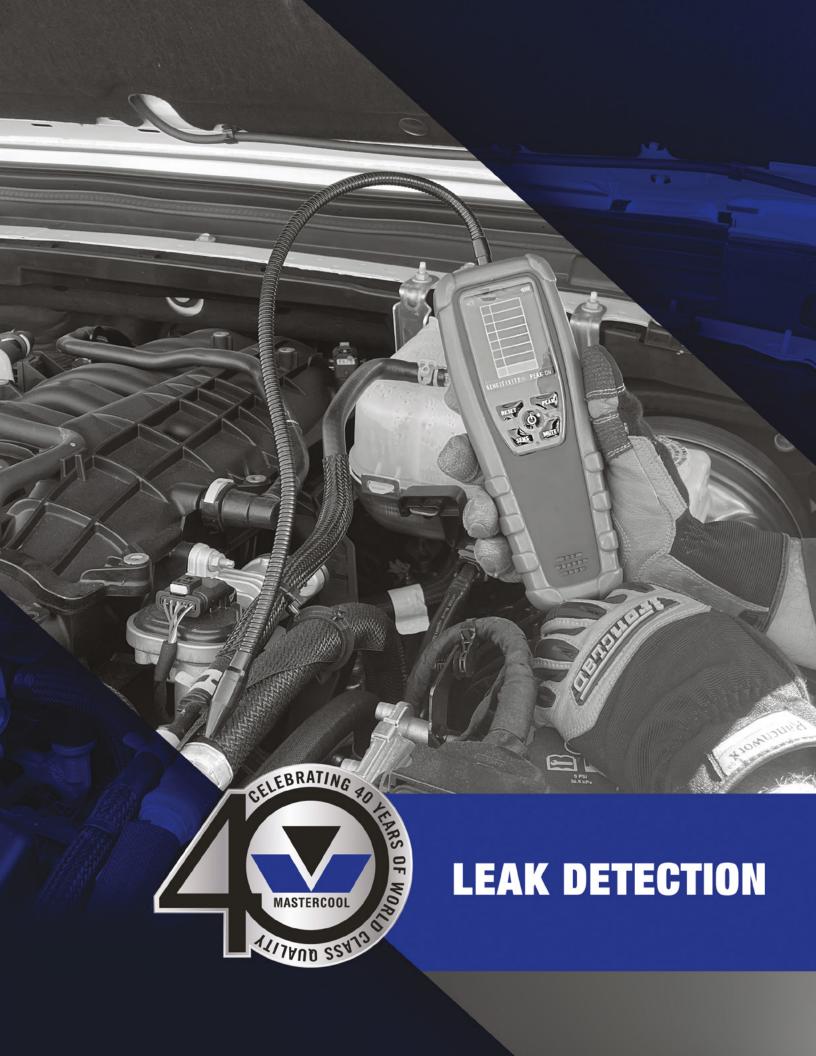
R1234yf Visual Inspection Sight Glass with R1234yf Manual Couplers

Kit Includes:

- Refrigerant oil visual inspection sight glass
- 1/4 fl-f x 17 mm-m R1234yf adapter with valve core
- 60" blue R1234yf charging hose
- 60" red R1234yf charging hose
- High side R1234yf 12 mm-F x 17 mm manual coupler
- Low side R1234yf 12 mm-F x 14 mm manual coupler

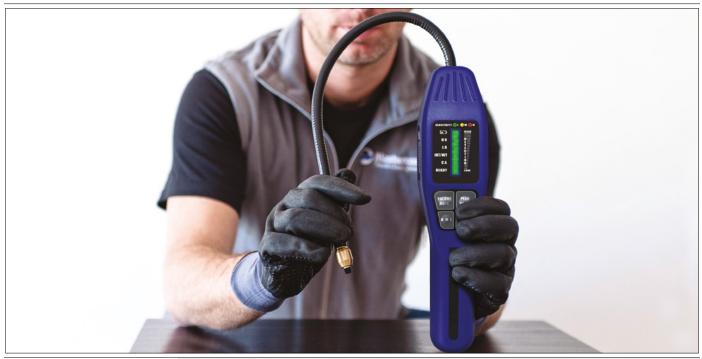






55900







Display

At the heart of this leak detector is a low power metal oxide gas sensor with superior performance properties such as lower current consumption and sensor longevity. The sensor is characterized by high sensitivity and fast response upon detecting the presence of extremely small levels of chlorofluorocarbon gases. For this reason, this sensor was selected and integrated into the 55900 leak detector. In addition, a powerful microprocessor was integrated into the design that automatically selects the best operating condition for the sensor to ensure optimum performance throughout its life.

This unit comes packaged in a blow molded case with 2 "C" batteries, leak test vial and replacement filters.

<< DESIGN CERTIFIED BY INTERTEK TO MEET J2791 (R134A), J2913 (R1234yf) AND EN 14624 >> SPECIFICATIONS:

SENSITIVITY*: high \geq 0.15 oz/yr (4 g/yr), medium \geq 0.25 oz/yr (7 g/yr), low \geq 0.50 oz/yr (14 g/yr) * based on optimal laboratory conditions

PRORE

- Intelligent tip design that senses the condition of the environment, to eliminate the potential of false alarms.
- Flexible 15.5" probe for difficult to reach locations

DISPI AV

Six vertical LED's (red, yellow or green) display the following information to the user such as:

- Relative signal level of the detected leak
- Selected sensitivity range (low/medium or high) of the unit
- Diagnostic information: low battery, interference/wait, contaminated atmosphere, readiness of the unit or fault conditions of the unit

REFRIGERANTS: Detects all refrigerants (CFC's, HCFC's, & HFC's and blends)

SENSOR LIFE: 2000 hours

SENSING ELEMENT: Heated tin oxide

OPERATING TEMPERATURE RANGE: 0 to 120°F

RESPONSE TIME: Less than 1 second

POWER: 2 C Alkaline 6000 mAh batteries

BATTERY LIFE: 30 hours WEIGHT: 1.08 lbs

"SUPER SENSITIVE FUNCTION" allows the unit further sensitizing beyond the standard settings for locating small leaks with gases such as R1234yf and R407C

KEYPAD FUNCTIONS:

ON/OFF: Press the ON/OFF button to turn the unit on or off.

VOLUME/MUTE: Press the VOLUME/MUTE button to control the volume of the unit.

H M L SENSITIVITY: Press the H M L SENSITIVITY button to select the desired sensitivity level.

PEAK/HR/LR: The PEAK/HR/LR key serves a dual purpose:

- (1) To assist the user in locating the "largest leak" in a system with multiple leaks present
- (2) To enable the user to switch between HR (high range) and LR (low range) modes



Keypad



55975







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, Sulfer Dioxide and Trichloroethane

Intella Sense III Combustible Gas Leak Detector is packaged in a blow molded case with 2 "C" batteries, leak test vial and replacement filters

• Response time: less than 1 second

• Operating temperature range: 0°F to 120°F

. Sensor life: 2000 hours

SPECIFICATIONS

- · Sensing element: heated tin oxide
- · Refrigerants: detects all refrigerants
- Battery: 2 "C" alkaline 6000 mAh batteries
- Ultimate sensitivity: 50 1000 ppm * based on optimal laboratory conditions

PROBE:

- Intelligent tip, with environment sensing element to eliminate the potential of false alarms
- Flexible 15.5 inch probe length for difficult to reach locations

DISPLAY:

Six vertical LED's enabled selectively (red, yellow or green) to display the following information to the user such as:

- The relative signal level of the detected leak
- The selected sensitivity range (low, medium or high) of the unit
- Diagnostic information (low battery, interference/wait, contaminated atmosphere readiness of the unit or fault conditions of the unit)

KEYPAD CONTROLS:

. ON/OFF, volume/mute, sensitivity for high, medium and low level selection, peak when multiple leaks are suspected

43707 COMBUSTION GAS LEAK TESTER KIT



Fast, economical and accurate method to test for combustion gas leaks from head gasket, cylinder head & engine block.

- Dual chamber for improved accuracy and to reduce the risk of coolant contaminating the test
- Works on gasoline & diesel engines
- . Indicates that a leak is present when the tester fluid changes color
- Test results in the top chamber will provide an indication of a combustion leak

Kit includes: test chamber with rubber bulb pump, combustion leak tester fluid and instructions packaged in a plastic box

43708 Radiator Cooling Test Cap Adapter with Vent

Test cap adapter will provide a leak free secure connection to ensure the correct testing of the cooling system without the use of a rubber cone. Works with caps from Mastercool radiator test kits (43300, 43301, 43302, 43305 and 43306)

43709 Replacement Combustion Leak Tester Fluid

Quickly check leaks between combustion chamber and cooling system

43710 COMBUSTION GAS LEAK TESTER KIT WITH TEST CAP ADAPTER



Fast, economical and accurate method to test for combustion gas leaks from head gasket, cylinder head & engine block. Includes expansion tank adapter with vent allowing the end user to securely attach adapters to radiator or expansion tank when performing a combustion gas leak test. Quick connect coupler will attach to the radiator cap and expansion tank adapters in the Mastercool 43300, 43301-A, 43302, 43305 and 43306. The test cap adapter will provide a leak free secure connection to ensure the correct testing of the cooling system without the use of a rubber cone.

- Dual chamber for improved accuracy and to reduce the risk of coolant contaminating the test
- · Works on gasoline & diesel engines
- Indicates that a leak is present when the tester fluid changes color
- Test results in the top chamber will provide an indication of a combustion leak

Kit includes: test chamber with rubber bulb pump, combustion leak tester fluid, radiator cooling test cap adapter with vent and instructions packaged in a plastic box



ELECTRONIC LEAK DETECTION

56100







The Raptor Refrigerant Leak Detector offers state-of-the-art features and micro-processing technology while the design sensor delivers an accurate and instantaneous response. Packaged in a blow molded case with 2 "C" batteries and sensor tip.

FEATURES:

- · Digital signal micro processor
- · Visual leak level indicator
- · Reset function and keypad control
- Sensitivity level adjustment
- · Battery test function
- Variable frequency audible alarm
- Meets and exceeds SAE J1627

SPECIFICATIONS:

- 3 levels of sensitivity (5 levels of detection)
- Detects leaks as small as 1/10 oz per year*
 *based on optimal laboratory conditions
- Detects all refrigerants (CFC's, HCFC's, HFC's)
- Power: 2 "C" batteries
- Probe: flexible 16" (43 cm)





with UV Blue Light





The Raptor Refrigerant Leak Detector with UV Blue Light offers state-of-the-art features and micro-processing technology while the design sensor delivers an accurate and instantaneous response. An ultra bright UV light is built into the end of the probe allowing for both electronic and UV leak detection of even the toughest leaks. Packaged in a blow molded case with UV glasses, 2 "C" batteries and sensor tip.

FEATURES:

- · Digital signal micro processor
- Mute function
- Visual leak level indicator
- · Reset function and keypad control
- · Battery test function
- · Sensitivity level adjustment
- Ultra bright UV/blue LED light
- Variable frequency audible alarm
- Meets and exceeds SAE J1627

SPECIFICATIONS:

- 6 levels of sensitivity (15 levels of detection)
- Detects leaks as small as 1/10 oz per year*
 *based on optimal laboratory conditions
- Detects all refrigerants (CFC's, HCFC's, HFC's)
- · Power: 2 "C" batteries

56400

• Probe: flexible 16" (43 cm)



COMPLETE ELECTRONIC & UV LEAK DETECTION KITS



The ultimate solution for all your A/C leak detection needs.

Kit includes: 56200 "Raptor" electronic leak Detector with UV blue light, UV dye injector w/25 application dye cartridge, dye injector connection hose w/ 1/4" FL adapter, dye cleaner & UV safety glasses, comes in a custom molded carrying case

56310 Kit includes: 56200 "Raptor" electronic leak detector with UV blue light, UV dye injector w/10 application dye cartridge, dye injector connection hose w/ 1/4" FL adapter, dye cleaner & UV safety glasses, comes in a custom molded carrying case

Kit includes: 56200 "Raptor" electronic leak detector with UV blue light, refillable dye injector, dye injector connection hose w/ 1/4" FL adapter, 2 oz bottle of concentrated universal dye, UV safety glasses & dye cleaner, comes in a custom molded carrying case

56



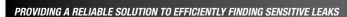
55600 Black Series INFRARED REFRIGERANT LEAK DETECTOR











Mastercool's 55600 hand-held infrared refrigerant leak detector uses an infrared sensor to effectively identify halogenated gases. The ergonomic design and rugged construction provides effortless refrigerant leak detection all while allowing the technician to easily adjust sensitivity to adapt to different environments.

This superior IR (infrared) leak detector detects the refrigerant by scanning the area in a slow target scan mode. Moving the sensor back and forth until the alarm sounds; the IR sensor zeros out when held over a leak. This unit provides the same trigger conditions for all refrigerants which is an advantage over other technologies that work better for some refrigerants than others.

Packaged in a zippered carry case this kit includes the 55600 infrared refrigerant leak detector, charging cable and replacement filters.



FEATURES:

- Innovative infrared sensor offers an extended sensor life of 10 years
- Easily select high, medium and low sensitivity levels with a maximum sensitivity up to 0.14 oz/yr
- Advanced TFT screen provides clear and easy readings using color graphics that show leakage, sensitivity, battery level and sensor fault indicators
- Peak button indicates the maximum leak detected during measurements
- · Auto-off function will automatically shut down the unit after 10 minutes
- Designed to meet EN14624, SAE1627, SAE2791 and SAE2913 standards

APPLICATIONS:

- Responds to all halogenated refrigerants including but not limited to:
 HFC's (R134a, R410A, R407C, R417A, R404A, R507, R23, R508B, R152a, R32)
 HCFC's (R22, R123, R124, R141b, R142b, R402A, R402B, R408, R409)
 CFC's (R11, R12, R13, R500, R502, R503)
 PFC's (PFC-14, PFC-116, PCF-218)
 HF0's (R1234yf)
- Responds to blends such as R410A and R407
- Detects SF-6 in high voltage circuit breakers
- · Detects halogen gases in fire-extinguishing systems

SPECIFICATIONS:

- Sensor: UV spectrum absorption
- · Sensor life: 10 years
- Alarm mode: visual and audible
- . Display: high resolution bright TFT active matrix LCD
- Automatic shutdown: 10 minutes without operation
- Operating temperature: 14 to 125.6°F (-10 to 52°C)
- Operating relative humidity: 50% to 85% RH
- Storage temperature: -4 to 140°F (-20 to 60°C)
- Probe length: 14.37"
- Battery: rechargeable (6 hours of detection)
- Weight: 15 oz.
- Size: 7.8 x 3 x 1.5"



53518-UV RECHARGEABLE 110 V HIGH INTENSITY LED UV FLASHLIGHT



- AAA battery holder provides backup power to flashlight (3 AAA batteries included)
- Battery life: 3 to 5 hours continuous leak detection
- Includes safety glasses and 110 V charger

SPECIFICATIONS:

- · High intensity LED
- · Lamp power: 2W
- 154 170 µW/cm2 which is compatible to a 50 watt UV flashlight
- Battery: lithium li-ion, full discharge and cut-off discharge of 4.2V and 2.75V



53513-UV MINI UV FLASHLIGHT (LED)



- High intensity LED bulb UV illumination
- · Easy grip texture
- · Aluminum body with anodized finish
- Includes safety glasses

SPECIFICATIONS:

- 25,000 hour bulb life
- 3 AAA batteries
- UV wavelength: 390-400

53515 MACH IV FLEXIBLE UV LIGHT (LED)



The Mach IV flexible UV light has 4 TRUE UV LEDS delivering a brilliant fluorescent glow.

- Gets into tight areas easily.
- Includes UV enhancing safety glasses

PATENT NO. 6,647,761

53515-B Light Bulb

53515-BAT-2 CR2 Lithium Battery

53312 UV MINI LIGHT (12 V/50 WATTS)



- High intensity
- 16ft. (5m) cord
- Compact & lightweight
- Instant on
- Includes UV enhancing safety glasses



53312-B Light Bulb

53312-L Lens



COMPACT UV LEAK LOCATOR KITS



Leading the way in UV LEAK DETECTION, Mastercool offers a variety of compact UV leak locator kits. Each kit offers a powerful inspection lamp, a "Refillable" or "Cartridge Type" Dye Injector and accessories. All kits are packaged in a clamshell or custom molded carrying case.



| ⊗ Mastercool. |
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| KIT PART# | INJECTOR / LIGHT | CONTENTS OF EACH KIT | VOLTAGE/WATT |
|-------------|---------------------|---|--------------|
| 53451-110 | 53123/ 53518-UV | Rechargeable UV light, batteries, rechargeable batteries, battery holder, refillable 2 oz dye injector, 2 oz concentrated universal A/C fluorescent dye (25 application), 4 oz dye remover, 25 service information labels, UV enhancing safety glasses | LED |
| 53451-C-110 | 53223/ 53518-UV | Same as 53451-110 but with replaceable 2 oz dye cartridge (25 applications) | LED |
| 53583 | 53809/ 53513-UV | Mini UV Flashlight (53513-UV), "cartridge type" 1 oz dye injector with replaceable dye cartridge, low side hose, 1/4" FL adapter, UV safety glasses, service information labels | LED |
| 53580 | 53809/ 53515 | MACH IV flexible LED UV light with 1 oz (30 ml) dye injector, w/replaceable 1 oz (30 ml) dye cartridge (10 application.), low side hose with R134a coupler, 1/4" FL adapter, 10 service information labels & UV enhancing safety glasses | LED |
| 53585 | 53809/ 53515 | Same as above, but with 1 oz OIL/ATF/Gas (53610) & diesel fluorescent dye and 1oz (30ml) engine coolant fluorescent dye (53609) | LED |
| 53500 | 53123/ 53312 | High intensity mini light w/refillable 2 oz (60 ml) dye injector, 2 oz (60 ml) concentrated universal A/C fluorescent dye (25 application.), 4 oz (120 ml) dye remover, 25 service information labels & UV enhancing safety glasses | 12 V/50 WATT |
| 53500-C | 53223/ 53312 | Same as 53500, but with replaceable 2 oz (60 ml) dye cartridge (25 Applications) | 12 V/50 WATT |
| 53351 | 53809/ 53312 | High intensity, 12V/50 watt, mini light (53312, replaceable 1 oz (10 application) dye cartridge (53809), A/C connection hose w/R134a coupler, 1/4" FL adapter, 1 oz OIL/ATF/Gas and diesel fluorescent dye, 1 oz engine coolant dye, 4 oz dye remover, 25 service information labels, UV enhancing safety glasses | 12 V/50 WATT |



REFILLABLE UNIVERSAL "PISTON TYPE" OIL/DYE INJECTOR



To inject the oil or dye, simply connect the injector to the low side of the A/C system and twist the handle until you reach the desired amount.

| 53123 | Refillable Universal Dye Injector with auto shut-off valve adapter and 2 oz (60 ml) Bottle of Concentrated A/C Dye (25 Applications) |
|---------|--|
| 53123-A | Refillable Universal Dye/Oil Injector (without dye) with auto shut-off valve adapter |
| 53134 | Refillable Oil/Dye Injector with (R134a 13 mm Connection) and 2 oz (60 ml) Bottle of Concentrated A/C Dye (25 Applications) |
| 53322 | Refillable Dye Injector with (1/4" Auto Shut-off Valve Connection) |



53123-YF REFILLABLE R1234yf OIL/DYE INJECTOR



To inject the oil or dye, simply connect the injector to the low side of the A/C system and twist the handle until you reach the desired amount. The injector hose comes complete with a R1234yf coupler.

- Heavy duty, anodized aluminum 2 oz. container with dye scales represented in 1/10 ounce, 1/4 ounce and milliliters
- Nylon barrier blue hose meets J2888, EPA, SAE and UL standards
- R1234yf low side coupler with extended disconnect sleeve and meets SAEJ639 and J2888

53223 "CARTRIDGE TYPE" UNIVERSAL DYE INJECTOR



Adding dye with the 53223 is fast and easy, simply connect the injector to the low side of the A/C system and twist the handle to the next application line. The replaceable cartridge provides 25 applications of universal dye that is compatible with all systems. The injector hose comes complete with an auto shut-off valve adapter for 1/4" FL systems.



53809 MINI DYE INJECTOR



"Cartridge Type" dye injector (10 applications) concentrated dye.

OIL INJECTOR



Excellent method for adding refrigerant oil or large amounts of UV leak detection dye to the A/C system. Add oil by allowing vacuum to pull it in after the evacuation process, or use refrigerant to push it in using the recharge system. Rugged all metal 2 oz canister. Available in standard or "easy connect" design. The standard models use a needle style valve attached between the manifold gauge set or charging equipment and A/C hose. The "easy connect" models use a ball valve design attached directly onto the end of the A/C hose. Model 82374 includes a low-side coupler on the outlet hose. Model 92376 includes auto shut-off valve on the outside hose.

STANDARD



90375 Standard 1/4" FFL x 1/4" MFL 82375 ACME 1/2" FFL x 1/2" MFL

EASY CONNECT

82374 13 mm-M x 13 mm-F Low Side Coupler (R134a)

92376 1/4" FFL x 1/4" MFL



STANDARD UNIVERSAL ULTRAVIOLET A/C DYES







| 92699 | Standard Universal Dye Six 1/4 oz packs (6 pcs) (pack = 1/4 oz (7.5 ml) - 1 application) |
|-------|--|
| 92708 | Standard Universal Dye 8 oz (240 ml) bottle - 32 applications |

92732 Standard Universal Dve 32 oz (1 L) bottle - 128 applications



CONCENTRATED UNIVERSAL ULTRAVIOLET A/C DYES



| 53825 | Concentrated Universal Dye Cartridge replaceable cartridge - 25 applications |
|-------|--|
| 53810 | Concentrated Universal Dye Cartridge replaceable cartridge - 10 applications |
| 53625 | Concentrated Universal Dye 2 oz (60 ml) bottle - 25 applications |

FLUORESCENT DYE



| 53609 | Engine Coolant (1 oz. (30 ml) bottle) |
|-------|--|
| | 1 oz for 1 vehicle application per 16 quarts (15 L) of fluid |

53610 Engine Oil (1 oz. (30 ml) bottle)

- Engine oil (Gas & Diesel) 1 vehicle application per 4-5 quarts (4 L-5 L) of oil
- Automatic transmission fluid 1 vehicle application per 4-5 quarts (4 L-5 L) of fluid
- Gasoline & diesel fuel 1 vehicle application per 2 gallons (8 L) of fuel





53615-A

- Lubricates system and helps prevent leaks
- Seals small leaks in evaporator, condenser, hoses, o-rings and gaskets

Mini Auto A/C Master Leak Shield Dye Injector

- Illuminates larger leaks through the use of high quality universal fluorescent dye
- For R1234yf, R134a A/C systems

53909

• Safe for hybrid and electric compressors



| | "Cartridge type" 1 oz injector with auto A/C master leak shield sealant with dye, low side hose, 1/4" FL adapter |
|-------|---|
| 53910 | Auto A/C Master Leak Shield 1 oz replacement cartridge of auto A/C master leak shield sealant with dye |
| 53593 | Mini UV Flashlight Kit 53513-UV mini UV flashlight, "cartridge type" 1 oz injector with auto A/C master leak shield sealant with dve. low side hose. 1/4" FL adapter. UV safety glasses, service info, labels, packaged in clam shell |

Easy to use! Stops leaks in metal and rubber automotive air conditioner parts including evaporators, condensers, o-rings, gaskets and hoses.

- For use in R134a, HFO-1234yf, hybrid and electronic A/C systems
- Includes o-ring conditioner, proprietary anti-wear and anti-oxidant additives
- Adds 1 oz. (30 ml) leak stop with U/V leak detection dye
- · Patented delivery system, does not contain refrigerant
- Safe, does not contain harmful polymers
- HFC Free Aerosol

US Patent No. 8,074,009, other US and foreign patents pending

53615-A Auto Master Leak Shield

1 oz can of auto master leak shield sealant with dye



DIAGNOSTIC SMOKE MACHINES



43060-EV EVAP DIAGNOSTIC SMOKE MACHINE





For all evap, intake, exhaust, vacuum lines and vacuum components, passenger compartment window and sunroof, headlight/tail-light fixtures and much more. This unit provides the option of compressed air, inert gases and a built-in internal compressor to inject the smoke into the system.

Accessories included: full set of block off caps, exhaust cone, evap schrader valve remover/installer, evap service port adapter hose (green cap), high intensity smoke illuminating battery powered flashlight and 8 oz smoke producing fluid

FEATURES:

- · Compact, heavy-duty design for years of reliable service
- Multiple options for smoke injection include built-in internal compressor, shop air and inert gases
- · Quick smoke generation
- · Built-in safety pressure relief valve
- Built-in pressure regulated at 0.5 PSI for safe evap testing
- Large easy to read pressure decay gauge 0-30 in. H20 (70 mbar)
- · Easy to read and clean flow meter
- Non-toxic and non-corrosive smoke
- 10' 12V power cables with durable clamps
- · Heavy-duty 10' smoke injection hose
- Velcro strap for hose and power cable storage
- · High intensity, battery operated smoke illuminating telescoping flashlight

SPECIFICATIONS:

- Voltage: 12 VDC
- Output pressure: 12 14 inH20 (30 35 mBar)
- Auto shut-off: 5 minutes
- Flow meter: 0 0.040 in. (0 1.0 mm)
- . Operating humidity: No Restrictions
- Operating temperature: 0°F to 140°F (-17°C to 60°C)
- · Power cable: 10 feet

- Input pressure: max 100 psi (7 bar)
- Safety pressure relief: 120 (±5) psi
- Oil fill line indicator: 3.4 oz (100 ml (±10 ml)
- Power consumption: max 6.5 amps
- Operating altitude: No restrictions
- Vapor output hose: 10 feet
- · Pressure supply: air/inert gas/pump

NEW

43060-HD HEAVY DUTY TRUCK DIAGNOSTIC SMOKE MACHINE



For all HD truck intakes, exhaust, vacuum lines and components, cabin air and water leaks and much more. Not for EVAP testing

Accessories included: two large inflatable block-off bladders with safety chains, 6" rigid smoke stack ring, pressure sensor port adapter, oxygen sensor port adapter, temperature sensor port adapter, high intensity battery powered smoke illuminating flashlight and 8 oz smoke producing fluid

FEATURES:

- · Compact, heavy-duty design for years of reliable service
- Operates on shop air or inert gas
- Quick smoke generation
- · Built-in safety pressure relief valve
- Pressure can be regulated from 0 to 28 PSI
- Large easy to read pressure decay gauge 0 to 30 PSI
- Non-toxic and non-corrosive smoke
- 10' 12V power cables with durable clamps
- Heavy-duty 10' smoke injection hose
- Velcro strap for hose and power cable storage

SPECIFICATIONS:

- Voltage: 12 VDC
- Output pressure: Max 28 psi (190 kPa)
- · Auto shut-off: 5 minutes
- Flow meter: 0 0.040 in. (0 1.0 mm)
- · Operating humidity: no restrictions
- Operating temperature: 0°F to 140°F (-17°C to 60°C)
- Power cable: 10 feet

- Input pressure: max 100 psi (7 bar)
- Safety pressure relief: 120 (±5) psi
- Oil fill line indicator: 3.4 oz (100 ml (±10 ml)
- Power consumption: max 6.5 amps
- . Operating altitude: no restrictions
- Vapor output hose: 10 feet
- · Pressure supply: air/inert gas

Optional Accessories

43060-DW-LG Diffuser Assembly - Long

43060-HDBR-9 9" Bladder Ring

43060-HDLB-9 Large Bladder for Heavy-Duty Truck

DIAGNOSTIC SMOKE MACHINES



TURBO/INTAKE DIAGNOSTIC SMOKE MACHINE 43060-TB





For all turbo, intakes, exhaust, vacuum lines and vacuum components, manifolds, passenger compartment window and sunroof, headlight/tail-light fixtures and much more. Not for EVAP testing. This unit provides the option of compressed air, inert gases and a built-in internal compressor to inject the smoke into the system. Accessories included: inflatable intake bladder, full set of block off caps, exhaust cone, high intensity battery powered smoke illuminating flashlight and 8 oz smoke producing fluid

FFATURES:

- · Compact, heavy-duty design for years of reliable service
- Multiple options for smoke injection include built-in internal compressor, shop air and inert gases
- · Quick smoke generation
- · Built-in safety pressure relief valve
- · Pressure can be regulated from 0 to 28 PSI
- Large easy to read pressure decay gauge 0 30 PSI
- · Non-toxic and non-corrosive smoke
- 10' 12V power cables with durable clamps
- Heavy-duty 10' smoke injection hose
- · Velcro strap for hose and power cable storage

SPECIFICATIONS:

- Voltage: 12 VDC
- Internal pump max 22 psi (150 kPa) External pressure source max 28 psi (190 kPa)
- · Auto shut-off: 5 minutes
- Flow meter: 0 0.040 in. (0 1.0 mm)
- Operating humidity: no restrictions
- Operating temperature: 0°F to 140°F (-17°C to 60°C)
- · Pressure supply: air/inert gas/pump

- Input pressure: max 100 psi (7 bar)
- · Vapor output hose: 10 feet
- Safety pressure relief: 120 (±5) psi
- Oil fill line indicator: 3.4 oz (100 ml (±10 ml)
- Power consumption: max 6.5 amps
- . Operating altitude: no restrictions
- Power cable: 10 feet

Optional Accessories

43060-DW-ST Diffuser Assembly - Short

HEAVY DUTY/TRUCK SMOKE MACHINE UNIVERSAL COOLING SYSTEM ADAPTER KIT





Mastercool's heavy duty/truck smoke machine universal cooling system adapter is used with our heavy duty diagnostic smoke machine (43060-HD) or any smoke machine with a standard quick disconnect.

- · Universal design will fit most heavy duty radiator and expansion tanks
- · Easily smoke test any empty cooling system with the use of the universal adapter
- Ultimate coverage provided by 3 rubber ring gaskets included in the kit
- Secure fit using the simple twist style design

HIGH PRESSURE/TURBO SMOKE MACHINE UNIVERSAL COOLING SYSTEM ADAPTER KIT





Mastercool's high pressure/turbo smoke machine universal cooling system adapter is used with diagnostic smoke machines.

- · Universal design will fit most automotive radiators and expansion tanks
- · Easily smoke test any empty cooling system with the use of the universal adapter
- · Rubber hose fitting on adapter will connect to most diagnostic smoke machines
- Ultimate coverage provided by 3 rubber ring gaskets included in the kit
- · Secure fit using the simple twist style design





DUAL EVAP/HIGH PRESSURE DIAGNOSTIC SMOKE MACHINES

These units are for evap, turbo/intake and heavy duty truck testing providing a solution to difficult to diagnose automotive leaks. Mobile repairs are now possible as both units include an internal compressor which allows use without the need of shop air while also having the ability to utilize shop air and inert gases. These specifically engineered units allow today's technician to quickly and efficiently locate and repair the complete spectrum of evap, turbo, heavy duty truck, intakes, exhausts, vacuum lines, cooling systems, manifolds, catalytic converters, brake boosters, passenger compartment air, water leaks and much more. The 43065 comes complete with all the adapters for evap low pressure testing and universal high pressure testing capabilities. The 43070 includes all the adapters for evap, high pressure and heavy duty truck testing. Mastercool now offers the professional technician the capability of complete automotive smoke detection testing in a single unit.



DUAL EVAP/HIGH PRESSURE DIAGNOSTIC SMOKE MACHINE



FEATURES:

- · Compact, heavy-duty design for years of reliable service
- · Multiple options for smoke injection include built-in internal compressor, shop air and inert gases
- · Quick smoke generation
- · Built-in safety pressure relief valve
- Built-in pressure regulated at 0.5 PSI for safe evap testing
- Large easy to read pressure decay gauge 0-30 in. H20 (70 mbar)
- · Easy to read and clean flow meter
- · Non-toxic and non-corrosive smoke
- 10' 12V power cables with durable clamps
- · Heavy-duty 10' smoke injection hose
- · Velcro strap for hose and power cable storage
- · High intensity, battery operated smoke illuminating telescoping flashlight

SPECIFICATIONS:

- · Voltage: 12 VDC
- Output pressure: 12 14 inH20 (30 35 mBar)
- · Auto shut-off: 5 minutes
- Flow meter: 0 0.040 in. (0 1.0 mm)
- . Operating humidity: No restrictions
- Operating temperature: 0°F to 140°F (-17°C to 60°C)
- · Power cable: 10 feet

- Input pressure: max 100 psi (7 bar)
- Safety pressure relief: 120 (±5) psi
- Oil fill line indicator: 3.4 oz (100 ml (±10 ml)
- Power consumption: max 6.5 amps
- · Operating altitude: no restrictions
- · Vapor output hose: 10 feet
- · Pressure supply: air/inert gas/pump



Dual Evap/High Pressure Diagnostic Smoke Machine

Accessories included: smoke hose, power cord, full set of block off caps, exhaust cone, evap schrader valve remover/installer, evap service port adapter hose, high intensity smoke illuminating battery powered flashlight, 8 oz smoke producing fluid and bladder for intake testing

43070

Dual Evap/High Pressure Diagnostic Smoke Machine with Truck Adapter Accessory Kit Accessories included: smoke hose, power cord, full set of block off caps, exhaust cone, evap schrader valve remover/installer, evap service port adapter hose, high intensity smoke illuminating battery powered flashlight, 8 oz smoke producing fluid, bladder for intake testing, (2) bladders for heavy duty/truck applications, 6" ring, temperature sensor port adapter, oxygen sensor port adapter and pressure sensor port adapter

43062

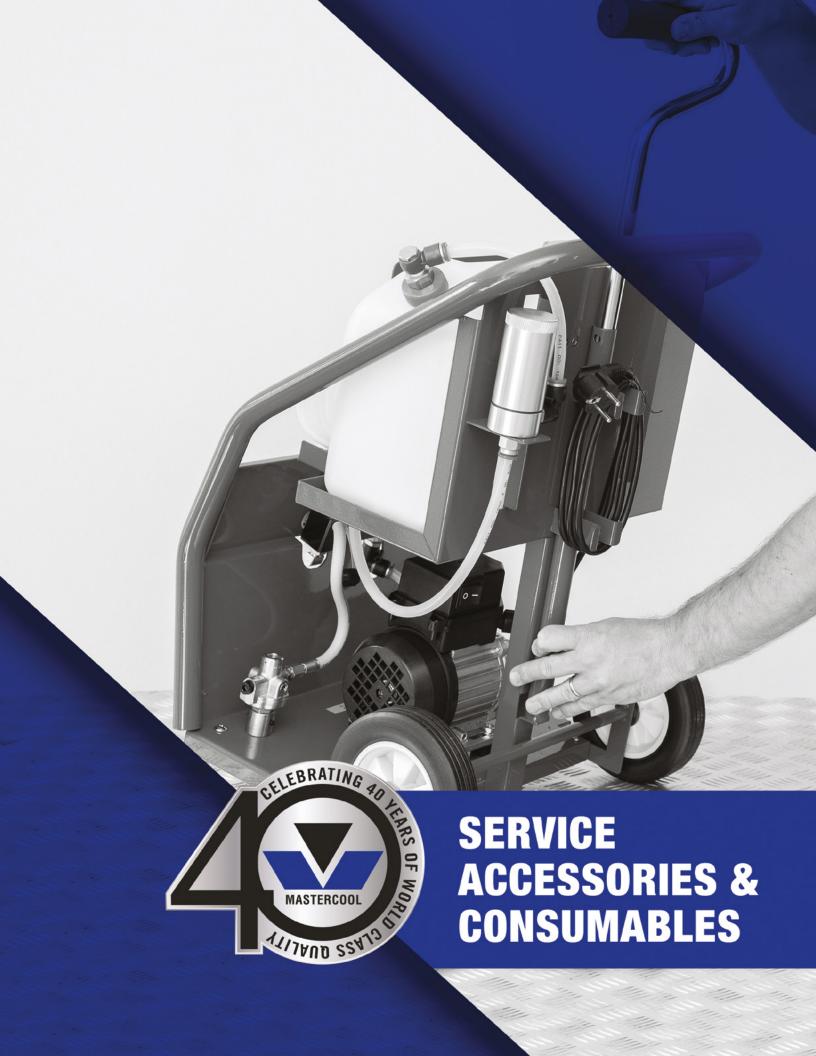
Truck Adapter Diagnostic Smoke Machine Accessory Kit

The 43062 contains the bladders and adapters to service trucks and heavy-duty equipment. Standard guick connect fittings, large bladders and sensor test fittings allow for easy and quick smoke diagnosis. The 43062 can also be used in conjunction with the 43060-TB to allow the technician to perform high-pressure diagnostic leak tests on all passenger cars and trucks as well as all commercial and heavy duty vehicles.

Accessories included:

- · Smoke hose
- (2) bladders for heavy duty/truck applications
- 6" ring
- Temperature sensor port adapter
- · Oxygen sensor port adapter
- · Pressure sensor port adapter





NITROGEN PRESSURE REGULATOR

NITROGEN PRESSURE REGULATOR



Mastercool's nitrogen regulator is specifically designed to meet the specifications of HVAC/R and automotive A/C systems. This single stage nitrogen regulator is used to test systems for leaks when they do not contain refrigerant.

- 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)

53001

CGA580 (US) Standard, 1/4 FL-M outlet connection

53010-AUT

Pressure Testing Regulator Kit

- 53001 nitrogen pressure regulator
- CGA580 (US) standard
- 1/4 FL-M outlet connection
- 38" yellow charging hose (47382)
- Leak testing adapter (53042)
- High side standard R134a, 1/4" FL-M x 16 mm economy coupler (66434-R)
- Blow molded case (53000-PB)

OPTIONAL ACCESSORIES

| 66434-R | High Side R134a 1/4" FL-M x 16 mm Economy Coupler |
|-----------|---|
| 82834-E | High Side Manual R134a 1/4" FL-M x 16 mm Coupler |
| 90413 | R410a Straight Adapter 1/4" FL-M x 5/16" Swivel-F |
| 53042 | Leak Testing Adapter |
| 53000-42 | Leak Testing Gauge |
| 53000-70 | Low Pressure Regulator Gauge |
| 53000-300 | High Pressure Regulator Gauge |
| 47382 | 38" Yellow Charging Hose |
| 93254-E | Black Gauge Guard |
| 53000-W | Teflon Washer |

53042-YF LEAK TESTING ADAPTER FOR R1234yf





- 80 mm gauge
- R1234yf low side coupler



69900 "MASTERCLEANSE" FLUSH MACHINE (110V/60 HZ)



Mastercool introduces its new "MASTERCLEANSE" large volume flush machines designed to flush all HVAC/R and automotive systems. "MASTERCLEANSE" will be commonly used for the removal of all solids and residues caused by breakage of compressor or filters. Designed with durable roll-away wheels and handle, this machine can conveniently move as needed.

FEATURES:

- 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
- · Mechanical filter present at suction side

SPECIFICATIONS:

- Pump flow rate: 16 l/min (4 g/min)
- Pump motor: 300 watts
- Pump horsepower: 110V/60 Hz - 0.4 HP,
- Full load amperage:
 110V/60 Hz 2.4 amps
- Flush container: 2.6 gal (10 l)
- Hoses: 9 ft (3 m) flexible, clear coiled
- Dimensions: 15" (l) x 16" (w) x 24" (h) with handle extended 36" (h)
- Weight: 42 lbs (19 kg)



69925 MULTIPLE FLUSHING & LEAK TEST ADAPTER KIT FOR FLUSH MACHINE



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

- Isolates A/C system components for closed loop flushing
- Flush individual components without removing them from the vehicle
- Install adapters on A/C line ends to allow attachment of flushing equipment



A/C FLUSH SOLVENT

91049-32



91049-128

- Effectively removes debris and sludge from A/C components
- Solvent-based
- · Evaporates quickly
- Leaves no residue

 91049-32
 32 oz. Flush Solvent

 91049-32-6
 6 pack - 32 oz. Flush Solvent

 91049-128
 1 Gallon Flush Solvent

 91049-128-4
 4 pack - 1 Gallon Flush Solvent

FLUSH, OIL & ACCESSORIES



TOTAL A/C QUICK FLUSH



Specific fluid for the inner flushing of air conditioning and refrigeration systems

- 0-ring safe
- Non-Flammable
- Non-Corrosive
- For professional use
- · Pressurized container ready to use

| 91051 | Total A/C Quick Flush Kit |
|---------|--|
| 91050 | 17 oz. Total A/C Quick Flush Can |
| 91050-6 | 6 Pack - 17 oz. Total A/C Quick Flush Cans |

91046-A A/C SYSTEM FLUSH KIT





Includes flush gun, hose, canister and canister adapter. Designed to work with any light weight flushing agent which can be mixed with pressurized air. Excellent for quickly and effectively removing refrigerant oil debris during retrofitting or compressor replacement.



ZEROL HD46 R1234yf MOBILE AIR CONDITIONING COMPRESSOR LUBRICANT





ZEROL HD46 is a fully formulated ISO VG46 grade polyalkylene glycol lubricant designed specifically for application with HFO refrigerant R1234yf in mobile air conditioning (MAC) systems. The product is a double end-capped PAG, and is manufactured to exacting standards of high double end-capping efficiency. ZEROL HD46 is suitable for use in both belt and electrically driven compressors utilizing R1234yf, and is also fully suitable for use in R134a belt-driven and electric MAC compressors.

- · Optimized miscibility in HFO refrigerant R1234yf
- Exceptional viscosity index (VI) The high VI enhances compressor life by ensuring efficient running at temperature extremes
- High temperature and chemical stability, even in presence of water, resulting in system lifetime extension and reduced maintenance costs
- Low hygroscopicity (tendency to absorb moisture)
- Formulating expertise ZEROL HD46 series contain optimized additive technology to provide additional
 corrosion protection within the A/C system, to further enhance the extreme pressure and anti-wear
 performance of the PAG, and to maximize fluid lifetime by ensuring against thermal or oxidative deterioration
 of the lubricant
- Excellent electrical resistivity properties for electrically driven systems

SPECIFICATIONS:

- Viscosity @ 40°C (cSt): 42.0 48.0
- Colour (Gardner): 1 max.
- Water content (ppm): 300 max.
- Total acid value (mgK0H/g): 0.03 max.
- Pour point (°C): <-25
- Capping efficiency: 85.0% minimum
- Appearance: clear to slightly hazy, free of visible particles

92709-YF-8 8 fl. oz (236 ml) Bottle **92709-YF-32** 32 fl. oz (946 ml) Bottle



92707 HYBRID A/C COMPRESSOR OIL



- Formulated for vehicles with electric A/C compressors
- High dielectric formula provides advanced compressor protection
- Synthetic lubricant specifically created for electric hybrid air conditioning compressors
- For replenishing hybrid or electric compressor oil in accordance with the quantity evacuated or the quantity recommended by the compressor manufacturer
- Provides outstanding lubricity and compressor protection
- Compatible replacement lubricant for compressors using Honda 38899RCJA01, ND-10, ND-0IL 11 (ND-11), and SF-10Y
- High dielectric protection formula has excellent "resistivity" to potential electrical current leakage in high voltage hybrid A/C systems
- · Contains conditioners, inhibitors and anti-wear agents
- Net contents 7 oz. (210 ml)

COMPRESSOR OILS



Maximum protection with excellent thermal & oxidative stability. Moisture tolerant. OEM approved.

| | , |
|---------------|--|
| PAG 65 | |
| 92709-65-8 | PAG 65 Oil (8 oz (240 ml) bottle) |
| 92709-65-32 | PAG 65 Oil (32 oz (1 L) bottle) |
| PAG 100 | |
| 53826 | PAG 100 Oil (2 oz (60 ml) cartridge) |
| 92709-100-8 | PAG 100 Oil (8 oz (240 ml) bottle) |
| 92709-100-32 | PAG 100 Oil (32 oz (1 L) bottle) |
| PAG 150 | |
| 92709-150-8 | PAG 150 Oil (8 oz (240 ml) bottle) |
| 92709-150-32 | PAG 150 Oil (32 oz (1 L) bottle) |
| ESTER 100 OIL | |
| 53827 | Ester 100 Oil (2 oz (60 ml) cartridge) |
| 92710 | Ester 100 Oil (8 oz (240 ml) bottle) |
| 92712 | Ester 100 Oil (32 oz (1 L) bottle) |

ACCESSORIES



| 53314 | Dye Remover 4 oz (120 ml) |
|-------|---|
| 53315 | Service Labels 25 per pack, bright yellow label indicating that the system has been charged with UV Dye. |
| 92398 | UV Enhancing Safety Glasses This is a must for protection against ultraviolet light during leak detection. |

90925 CONDENSER FIN COMB



Cleans and straightens condenser and evaporator fins. Six sided head for 8, 9, 10, 12, 14 and 15 fins per inch applications.

ACCESSORIES, BLOWER FANS

ALUM BOND



A two-component epoxy formula highly concentrated with carefully selected pure aluminum particles, modified curing agents and special high quality additives to provide maximum strength, durability and ease of application. 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.

PHYSICAL PROPERTIES:

- Hardness (Shore, ASTM D 1706): 83D
- Coefficient of thermal expansion: 40 x 10-6 cm/cm/°C
- . Compression strength (ASTM D 695): 8600 psi (59 M Pa)
- Tensile strength (ASTM D 638): 3500 psi (24 M Pa)
- Maximum line pressure (after 5 hours application time): 650 psi

90935

Aluminum Repair Kit (6.5 oz package)



BLOWER FANS



Create A Cooler & Cleaner Air Flow

This multi-functional product allows equipment to not only work faster but more efficiently while also helping to extend its life. Technicians have used these units as a cooling mechanism for shop equipment such as recycling machines and vacuum pumps because of their high volumes of air output. Furthermore, these units have been used in such applications as drying floors, carpets and paint.

- 120 Volts, 60 Hz
- · Rated power: 2.0 Amp
- For indoor or outdoor use
- 3 speed switch (high, medium, low)
- Built-in overload protection
- (2 pcs) 11 amp built-In grounded receptacles
- Housing material: impact resistant ABS
- 8.5 ft cord length, SJTW 14 AWG
- 4-position adjustment feet

21200-A

1200 CFM Blower Fan

- Moves air up to: 1200 CFM
- Unit weight: 15.9 lbs

300 CFM Blower Fan

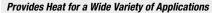
- Moves air up to: 300 CFM
- Unit weight: 11.5 lbs

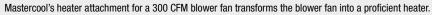
20300-A

2030

20300-HTR

HEATER ATTACHMENT FOR 300 CFM BLOWER FAN





- 1320 watts, 120 volts
- 11 amps, 5000 BTU
- Converts blower into a heater
- Clips securely onto the front of the blower and plugs into one of the outlets on the side of the blower
- 16 AWG SJT cord, grounded plug
- For indoor use only







43300 14 PIECE COOLING SYSTEM PRESSURE TEST KIT



- · Detects and exposes external system leaks
- · Detects internal engine leaks due to blown gaskets or cracked block
- Includes hand pump, thermometer and 12 adapters
 (No.'s 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13) to fit most popular domestic and import car and trucks



* For the complete pressure testing adapter chart

43301-A MASTER RADIATOR PRESSURE SYSTEM KIT AND VACUUM SYSTEM KIT

patented





* For the complete pressure testing adapter chart



- · Detects and exposes external system leaks
- · Detects internal engine leaks due to blown gaskets or cracked block
- · Vacuum type cooling system
- · Purge and refill for quick change of coolant
- Test Range: 0 − 35 psi
- Includes 1 blue radiator cap test connector R123/R125
- Includes 1 black radiator cap test connector R123/R124
- Includes 1 thermometer, 1 universal radiator cap, 1 vacuum purge and refill tool, coolant hose and additional installation accessories
- Includes hand pump and 19 adapters (No.'s 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 21, 22 and 23) to fit most popular domestic and import cars and trucks

43301-PTA UNIVERSAL COOLING SYSTEM ADAPTER KIT





Mastercool's universal cooling system adapter is used with our 27 piece master radiator pressure test kit (43301-A) and the 14 piece universal cooling system pressure test kit (43300).

- UNIVERSAL DESIGN will fit most automotive radiators and expansion tanks
- PRESSURE TEST using the 43301-A or 43300 hand pump
- VACUUM TEST using the 43301-A vacuum system filler kit or the 43013 vacuum system filler
- ULTIMATE COVERAGE provided by 3 rubber ring gaskets included in the kit
- · SECURE FIT using the simple twist style design



43302 25 PIECE COOLING SYSTEM PRESSURE TEST KIT



- · Detects and exposes external system leaks
- Detects internal engine leaks due to blown gaskets or cracked block
- · Includes blue and black radiator cap test connectors
- Includes hand pump, thermometer and 21 adapters (No.'s 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23) to fit most popular domestic and import car and trucks



* For the complete pressure testing adapter chart

43305 10 PIECE COOLING SYSTEM PRESSURE TEST ADAPTER KIT



- · Adapter update kit to be used with 43300
- · Detects and exposes external system leaks
- · Detects internal engine leaks due to blown gaskets or cracked block
- · Includes blue and black radiator cap test connectors
- Includes 8 adapters (No's 14, 15, 16, 17, 18, 19, 20, 21) to fit most popular domestic and import car and trucks



* For the complete pressure testing adapter chart

43306 HEAVY DUTY COOLING SYSTEM PRESSURE TEST & REFILL KIT



Remove the complications that often result from unreliable rubber plugs or bladders with our heavy duty cooling system pressure test & refill kit. This kit will save set-up time and provide precise test results.

- Uses shop air to uphold continual pressure to the cooling system during testing and refill
- 4 quick disconnect vacuum attachments provide quick refilling of the cooling system and eradicates airlocks
- $\bullet \quad \text{For use with Freightliner, International, Kenworth, Peterbilt, Mack, Volvo, GMC and Sterling cooling systems}\\$
- Includes heavy duty vehicle adapters, pressure test regulator and vacuum refill attachment with tubing

43390 UNIVERSAL 90° ADAPTER FITTING FOR COOLING SYSTEM PRESSURE TEST ADAPTERS



- Universal fitting for cooling system pressure test hand pumps
- Provides 90° access for hard to reach places

PRESSURE TESTING



43013 VACUUM TYPE COOLING SYSTEM FILLER KIT

patented



- . Significantly shortens time for refilling new coolant by creating a vacuum in the cooling system
- · No need to undergo time-consuming air bleeding after refilling new coolant
- Conical adapter offers a wide application to different radiator filler necks
- · Kit can be hooked underneath the vehicle's hood for easy access
- · Minimizes the risks of engine overheating
- Kit includes vacuum purge and refill tool, coolant hose, 1 universal radiator cap

43012 COOLING SYSTEM VACUUM PURGE AND REFILL KIT



- · Refill new coolant by creating a vacuum in the cooling system
- · No need to undergo time-consuming air bleeding after refilling new coolant
- Sealing collar with three rubber bushings offers a wide variety of applications for radiator filler necks
- · Minimizes the risk of engine overheating

INCLUDED IN KIT:

Vacuum gauge (43013-001-G) 0 - 30 inHg

Sealing collar Turn clockwise to expand rubber Valve To control air and coolant flow

Quick coupling For connecting vacuum pump and coolant hose
Venturi style vacuum To connect with an air compressor to create vacuum

Rubber gasket - small (43012-35) OD 35 mm \times ID 30 mm Rubber gasket - medium (43012-39) OD 39 mm \times ID 30 mm Rubber gasket - large (43012-44) OD 44 mm \times ID 30 mm Coolant hose 0 0.5" \times 47" long

Drain hose For draining residual fluid in the radiator and the tool

43014 VACUUM-TYPE COOLING SYSTEM FILLER KIT



- · Refill new coolant by creating a vacuum in the cooling system
- No need to undergo time-consuming air bleeding after refilling new coolant
- Conical adapter offers a wide variety of applications for different radiator filler necks
- · Minimizes the risk of engine overheating
- For passenger and heavy duty vehicles

INCLUDED IN KIT:

Vacuum gauge (43013-001-G) 0 - 30 inHg

Shop air connector Connect to create vacuum
Air valve To control air flow

Venturi style vacuum To connect with an air compressor to create vacuum

Conical adapter To connect to radiator or expansion tank

Coolant hose with connector and coolant
To add new coolant. Turn coolant valve to pull new coolant

Valve into system - 51" long

Drain hose For draining residual fluid in the radiator and the tool

43705 REFRACTOMETER



- Offers a quick and easy way to test the freezing point of coolant/anti-freeze
- Compatible with ethylene or propylene glycol
- · Measures battery acid gravity to verify battery life
- Automatic temperature compensation
- Large, easy to read graphics, high contrast lens and adjustable viewfinder
- Strong, steel body structure
- · Includes storage case, fluid dropper and mini screw driver

74



43050 AIR POWERED BRAKE CALIPER WIND BACK TOOL KIT



Pneumatic brake caliper piston compressor kit constructed of light weight durable anodized aluminum. Right or left hand wind-back operation for rear brake caliper pistons. Pneumatic single piston press shaft operation allows one technician to perform the brake job.

- Durable non-impact single piston shaft
- Magnetic base to secure press adapters
- 15 piece press adapter set
- Left or right wind-back operation
- 0-ring protected shaft to maintain proper pressure
- Center shaft constructed of chrome alloy steel
- · Protective rubber guard to prevent damage to shaft and caliper
- 3/8" drive adapter surface

43051 AIR POWERED BRAKE CALIPER WIND BACK TOOL



- · Pneumatic wind back tool offers energy-savings on brake calipers
- Pneumatic tool allows right and left-hand rotation

43058 DRUM BRAKE HOLD-DOWN SPRING PLIERS



- Universal application for nearly all drum brakes
- Special curved neck provides easy access to hold-down pins regardless of the barrier created by the wheel hub
- An integral forming head without welding offers high strength



52224-A INFRARED THERMOMETER WITH LASER







The 52224-A offers laser targeting accuracy, enhanced back-lit LCD Display and an expanded temperature range. The compact design is simple to use and easy to store.

SPECIFICATIONS:

Non-contact temperature range: -58 to 1022°F (-50 to 550°C)

Field of view: 12:1

Display illumination: back-lit LCD color display
Target indicator: circular laser spot

Emissivity: 0.95Resolution: $0.1^{\circ}\text{F}/0.1^{\circ}\text{C}$

Accuracy: $\pm 4^{\circ}F$ (2°C) or $\pm 2\%$ of reading

Response time: 0.5 seconds

Power off: automatic after 15 seconds
Battery life: approximately 14 hours

Included accessories: 2 AAA batteries, instruction manual,

plastic molded case



52224-CC INFRARED THERMOMETER WITH CIRCULAR LASER



Features both infrared and dual laser technologies.

SPECIFICATIONS:

Non-contact temperature range: -76 to 1400°F (-60 to 760°C)

Field of view: 12:1

Display illumination: back-lit LCD color display
Target indicator: Circular laser spot

Emissivity: 0.95

Resolution: $0.1^{\circ}F / 0.1^{\circ}C$

Accuracy: $\pm 4^{\circ}F$ (2°C) or $\pm 2\%$ of reading

Response time: 1 second

Power off: automatic after 15 seconds
Battery life: approximately 14 hours

Included accessories: 2 AAA batteries, instruction manual,

plastic molded case



52225-A DUAL TEMP PLUS INFRARED THERMOMETER



Features both infrared and contact thermometer technologies. Includes programmable HI/LO alarms and Lock Mode to capture temperature readings. The contact function offers a built-in K type jack and wire thermocouple.

SPECIFICATIONS:

Non-contact temperature range: -76 to 1400°F (-60 to 760°C)
Thermocouple temperature range: -83 to 1999°F (-64 to 1400°C)

Field of view: 30 : 1

Response time: 1 second
Power off: automatic after 15 seconds
Battery life: approximately 14 hours

Included accessories: 2 AAA batteries, 1m thermocouple probe, instruction manual, plastic

molded case

Optional accessories: 3 m wire thermocouple probe, piercing penetration probe, surface probe,

air probe



TEMPERATURE MEASUREMENT



52225-B ULTRA TEMP DUAL LASER THERMOMETER



Thermocouple

Features both infrared and contact thermometer technologies. Includes programmable HI/LO alarms, and lock mode to capture temperature readings. The built-in K type jack offers optional contact functions. Illuminates working area with built-in LED light.

SPECIFICATIONS:

Non-contact temperature range: -83 to 1832°F (-64 to 1000°C)
Thermocouple temperature range: -83 to 2552°F (-64 to 1400°C)

Field of view: 50:1

Display illumination: back-lit LCD display Target indicator: dual laser spot

Emissivity: Adjustable 0.1 to 1 step .01

Resolution: 0.1°F / 0.1°C

Modes: MIN, MAX, DIFF & AVG Accuracy: $\pm 4^{\circ}F$ (2°C) or $\pm 2\%$ of reading

Response time: 1 second

Power off: automatic after 15 seconds
Battery life: approximately 14 hours

Included accessories: 2 AAA batteries, instruction manual, plastic molded case

Optional accessories: 1 m, 3 m wire thermocouple probes, piercing penetration probe, surface

probe, air probe

52226 DUAL TEMP INFRARED/PROBE THERMOMETER



The 52226 dual temp thermometer offers both infrared and contact probe technologies.

- Infrared temperature range: -67 to 428°F (-55 to 220°C)
- Probe temperature range: -67 to 626°F (-55 to 330°C)
- Field of view ratio 1 : 1
- Adjustable emissivity
- · Lock mode for hands free scanning
- Minimum/maximum capture mode
- Contact probe locks safely on the side of the unit

52227 POCKET INFRARED THERMOMETER



The 52227 pocket infrared thermometer offers accurate non-contact temperature measurement in a compact and easy to use size.

- Temperature range: -67 to 428°F (-55 to 220°C)
- Field of view ratio 1:1
- Adjustable emissivity
- · Back-lit LCD display
- Minimum/maximum capture mode

POCKET DESIGNS



All thermometers include pocket holder and clip.

Pocket Analog Design

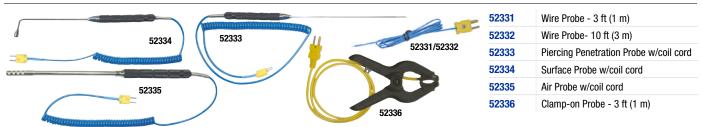
| Item# | Dial Size | Temperature Scale |
|-------|-----------|-------------------------------|
| 52220 | 25 mm | 0 to 220°F |
| 52161 | 35 mm | -40 to 160°F (-40 to 70°C) |
| 91120 | 44.5 mm | 0 to 220°F |

Pocket Digital Design

Battery operated, on/off and auto shut-off after 10 minutes, ±1°C accuracy, 0.1°C resolution

| Item# | Dial Size | Temperature Scale |
|---------|-----------|--------------------------------|
| 52223-A | 25 mm | -58 to 302°F (-50 to 150°C) |

OPTIONAL THERMOCOUPLE PROBES





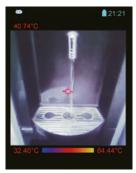
52325 THERMAL IMAGING CAMERA WITH VISIBLE CAMERA

with carry case, micro SD card, CD, USB cord, batteries and instructions





VISIBLE CAMERA:

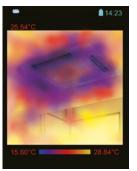




Visual

Fusion





Fusion

- Fully automatic
- Focus free
- Superior measurement/accuracy
- Micro SD card storage
- Reporting software included

SPECIFICATIONS:

Thermal image resolution: 32 x 31 pixels
Visual image resolution: 640 x 480

Measurement range: -4 to 662°F (-20 to 350°C)

Accuracy (tamb=20 to 26°C): $\pm 2\%$ of reading, or 4°F (2°C) whichever is greater

Thermal sensitivity: 0.1°F (0.1°C)
Frame rate: 9 Hz

Field of view: 40 x 40 deg

Emissivity range: 0.95 default – adjustable 0.1 to 1 step 0.1

Focus: Focus free
LCD size: 2.8" (71 mm)
LCD: Color

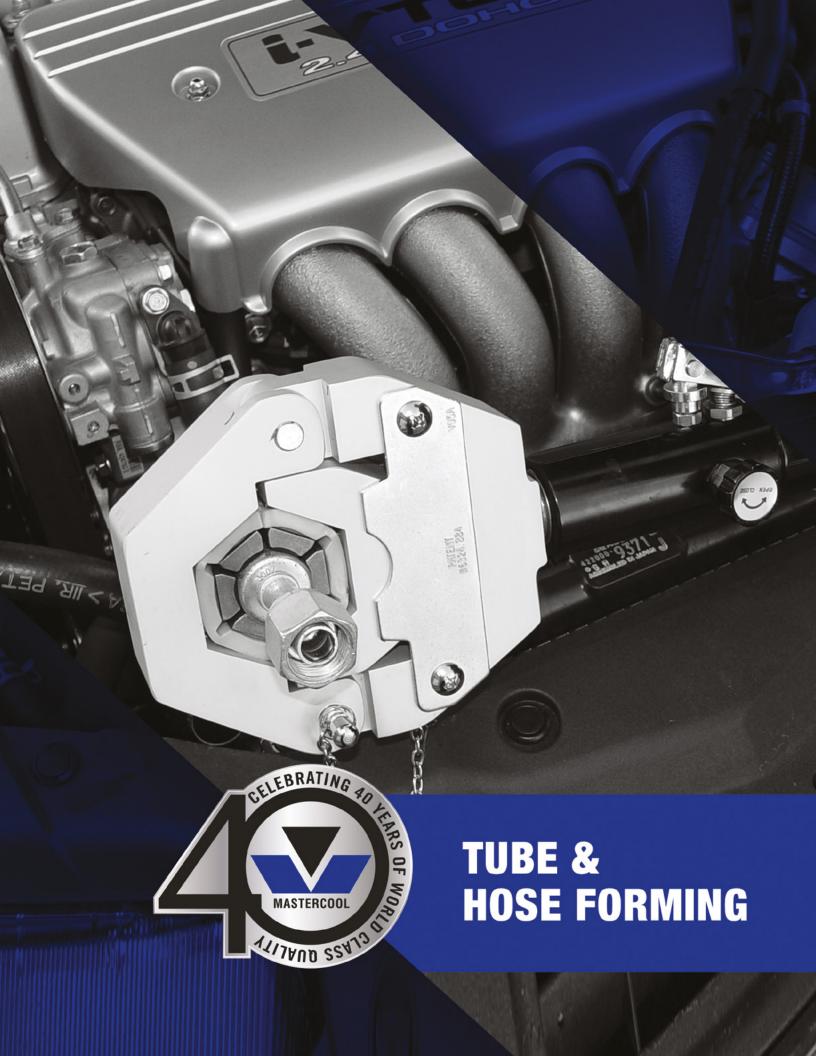
Image storage: Stores up to 25,000 images, BMP format (typical 8G micro SD card)

Memory type: Micro SD card
Sensor filter: 8 to 14 um
Interface: USB

Battery type: 3.6V Li-ion rechargeable battery

Battery life (with back-lit): 3 hours continuous use

Dimensions: 3.73 x 2.91 x 9.20 inch (94.65 x 74.03 x 233.68 mm)





72475 UNIVERSAL HYDRAULIC FLARING TOOL SET







This kit fabricates:

- Push connect 1/4, 5/16 and 3/8"
- GM fuel line flare
- Brake lines and transmission 5/16 and 3/8"
- Flare/double flare 3/16, 1/4, 5/16, 3/8 and 1/2"
- Metric bubble flare 4.75, 6, 8, and 10 mm
- Comes in a custom molded box

PATENT# 5,782,128



| 71202 | Hydra-Flare Yoke & Pump Assembly | | |
|---|-------------------------------------|-------------------------------|------------------|
| 71097-01 | 45° Flaring Cone | | |
| 72485-PB | Custom Molded Plastic Box for 72475 | | |
| Push Connect Adapters Push Connect Die Sets | | Sets | |
| 71204 | 1/4" Adapter | 71214 | 1/4" Die Set |
| 71205 | 5/16" Adapter | 71215 | 5/16" Die Set |
| 71206 | 3/8" Adapter | 71216 | 3/8" Die Set |
| GM Fuel Line Adap | oters | GM Fuel Line Die S | Sets |
| 71405 | 5/16" Adapter | 71415 | 5/16" Die Set |
| 71406 | 3/8" Adapter | 71416 | 3/8" Die Set |
| 45° & Double Flaring Adapters | | 45° & Double Flaring Die Sets | |
| 71097-03 | 3/16" Adapter | 71097-13 | 3/16" Die Set |
| 71097-04 | 1/4" Adapter | 71097-14 | 1/4" Die Set |
| 71097-05 | 5/16" Adapter | 71097-15 | 5/16" Die Set |
| 71097-06 | 3/8" Adapter | 71097-16 | 3/8" Die Set |
| 71097-08 | 1/2" Adapter | 71097-18 | 1/2" Die Set |
| Metric Bubble Flar | ing Adapters | Metric Bubble Flar | ing Die Sets |
| 71475-4M | 4.75 mm Adapter | 71475-14M | 4.75 mm Die Sett |
| 71475-6M | 6 mm Adapter | 71475-16M | 6 mm Die Set |
| 71475-8M | 8 mm Adapter | 71475-18M | 8 mm Die Set |
| 71475-10M | 10 mm Adapter | 71475-110M | 10 mm Die Set |

72485 UNIVERSAL HYDRAULIC FLARING TOOL SET





This kit fabricates: push connect 1/4, 5/16 and 3/8", GM fuel line flare, brake lines and transmission 5/16 and 3/8", flare/double flare 3/16, 1/4, 5/16, 3/8 and 1/2", metric bubble flare 4.75, 6, 8, and 10 mm, GM transmission cooling line 3/8 and 1/2". Comes in a custom molded box. **PATENT# 5,782,128**

| 71202 | Hydra-Flare Yoke & Pump Asser | nbly | |
|-------------------------|--------------------------------------|------------------------|-----------------------|
| 71097-01 | 45° Flaring Cone | | |
| 72485-PB | Custom Molded Plastic Box for | 72475 | |
| Push Connect Ad | nnect Adapters Push Connect Die Sets | | Sets |
| 71204 | 1/4" Adapter | 71214 | 1/4" Die Set |
| 71205 | 5/16" Adapter | 71215 | 5/16" Die Set |
| 71206 | 3/8" Adapter | 71216 | 3/8" Die Set |
| GM Fuel Line Ada | pters | GM Fuel Line Die | Sets |
| 71405 | 5/16" Adapter | 71415 | 5/16" Die Set |
| 71406 | 3/8" Adapter | 71416 | 3/8" Die Set |
| 45° & Double Flar | ing Adapters | 45° & Double Flari | ng Die Sets |
| 71097-03 | 3/16" Adapter | 71097-13 | 3/16" Die Set |
| 71097-04 | 1/4" Adapter | 71097-14 | 1/4" Die Set |
| 71097-05 | 5/16" Adapter | 71097-15 | 5/16" Die Set |
| 71097-06 | 3/8" Adapter | 71097-16 | 3/8" Die Set |
| 71097-08 | 1/2" Adapter | 71097-18 | 1/2" Die Set |
| Metric Bubble Fla | ring Adapters | Metric Bubble Fla | ring Die Sets |
| 71475-4M | 4.75 mm Adapter | 71475-14M | 4.75 mm Die Set |
| 71475-6M | 6 mm Adapter | 71475-16M | 6 mm Die Set |
| 71475-8M | 8 mm Adapter | 71475-18M | 8 mm Die Set |
| 71475-10M | 10 mm Adapter | 71475-110M | 10 mm Die Set |
| GM Transmission | Cooling Line Adapters | GM Transmission | Cooling Line Die Sets |
| 71099-06 | 3/8" Adapter | 71099-16 | 3/8" Die Set |
| 71099-08 | 1/2" Adapter | 71099-18 | 1/2" Die Set |
| | | _ | |



71197 45° AND DOUBLE FLARING ADAPTERS AND DIES FOR HYDRA-FLARE YOKE AND PUMP ASSEMBLY



To be used with 72475 hydraulic pump assembly.

71097-01 45° flaring cone

71097-03 3/16" 45° & double flaring adapter **71097-13** 3/16" 45° & double flaring die set **71097-04** 1/4" 45° & double flaring adapter **71097-05** 5/16" 45° & double flaring adapter **71097-06** 3/8" 45° & double flaring adapter **71097-08** 1/2" 45° & double flaring adapter

71097-14 1/4" 45° & double flaring die set 71097-15 5/16" 45° & double flaring die set **71097-16** 3/8" 45° & double flaring die set 71097-18 1/2" 45° & double flaring die set

GM FUEL LINE ADAPTERS AND DIES FOR HYDRA-FLARE YOKE AND PUMP ASSEMBLY 71144



To be used with 72475 hydraulic pump assembly.

71405 5/16" GM fuel line adapter 71415 5/16" GM fuel line die set 71406 3/8" GM fuel line adapter 71416 3/8" GM fuel line die set

71175 METRIC BUBBLE FLARING ADAPTERS AND DIES FOR HYDRA-FLARE YOKE AND PUMP ASSEMBLY



To be used with 72475 hydraulic pump assembly. Includes:

71475-6M 6 mm metric bubble flaring adapters 71475-8M 8 mm metric bubble flaring adapters 71475-10M 10 mm metric bubble flaring adapters 71475-110M 10 mm metric bubble flaring die set

71475-4M 4.75 mm metric bubble flaring adapters 71475-14M 4.75 mm metric bubble flaring die set 71475-16M 6 mm metric bubble flaring die set 71475-18M 8 mm metric bubble flaring die set

71099-TC 3/8" GM TRANSMISSION COOLING LINE DIE AND ADAPTER SET



To be used with 72475 hydraulic pump assembly. Includes:

71099-06 3/8" GM transmission cooling line adapter 71099-16 3/8" GM transmission cooling line die set

71099-TC8 1/2" GM TRANSMISSION COOLING LINE DIE AND ADAPTER SET



To be used with 72475 hydraulic pump assembly. Includes:

71099-08 1/2" GM transmission cooling line adapter 71099-18 1/2" GM transmission cooling line die set

71098 37° FLARING & DOUBLE FLARING ADAPTER SET



Includes:

71098-03 3/16" 37° double flaring adapter 71097-04 1/4" 37° double flaring adapter **71097-05** 5/16" 37° double flaring adapter 71097-06 3/8" 37° double flaring adapter

71097-08 1/2" 37° double flaring adapter

71098-01 37° cone

71098-13 3/16" 37° double flare die set

71098-14 1/4" 37° double flare die set 71098-15 5/16" 37° double flare die set 71098-16 3/8" 37° double flare die set

71098-18 1/2" 37° double flare die set

71201-001A-REPK REPAIR KIT FOR 71475, 71480, 71300, 71400, 71450, 72475, 72480, 72300, 72400, 72450, 72485



Includes snap ring "c-clip", o-ring for shaft, back Up o-ring for shaft, valve assembly kit with .187" silver ball, back check valve and shaft handle assembly

SPECIALTY HYDRAULIC TOOLS

72480 37° FLARING AND DOUBLE FLARING HYDRAULIC TOOL KIT



This kit fabricates factory style 37° and 37° double flare found on aviation and specialty automotive applications. The hand-held hydraulic pump operates easily with all steal and light stainless tubing. Includes: 3/16, 1/4, 5/16, 3/8 and 1/2" dies 3/16, 1/4, 5/16, 3/8 and 1/2" double flare adapters and 37° Cone.

| 71202 | Hydra-Flare Yoke & Pump Assembly | | | |
|------------|----------------------------------|-------------------------------------|----------------------------|--|
| 71098-01 | 37° Cone | | | |
| 72480-PB | Custom Molded Plastic Box f | Custom Molded Plastic Box for 72480 | | |
| 37° Double | Flaring Adapters & Die Sets | | | |
| 71098-03 | 3/16" Double Flare Adapter | 71098-13 | 3/16" Double Flare Die Set | |
| 71097-04 | 1/4" Double Flare Adapter | 71098-14 | 1/4" Double Flare Die Set | |
| 71097-05 | 5/16" Double Flare Adapter | 71098-15 | 5/16" Double Flare Die Set | |
| 71097-06 | 3/8" Double Flare Adapter | 71098-16 | 3/8" Double Flare Die Set | |
| 71097-08 | 1/2" Double Flare Adapter | 71098-18 | 1/2" Double Flare Die Set | |



72450 DOUBLE FLARE & METRIC BUBBLE FLARING TOOL SET



This kit fabricates flare/double flare 3/16, 1/4, 5/16, 3/8 and 1/2"; and metric bubble flare 4.75, 6, 8 and 10mm. Comes in a custom molded carrying case and includes:

| 71202 | Hydra-Flare Yoke & Pump Assembly | | |
|--------------|----------------------------------|----------------------|-----------------|
| 71097-01 | 45° Flaring Cone | | |
| 45° & Double | e Flaring Adapters | 45° & Double Fla | aring Die Sets |
| 71097-03 | 3/16" Adapter | 71097-13 3/1 | 6" Die Set |
| 71097-04 | 1/4" Adapter | 71097-14 1/4 | " Die Set |
| 71097-05 | 5/16' Adapter | 71097-15 5/1 | 6" Die Set |
| 71097-06 | 3/8" Adapter | 71097-16 3/8 | 3" Die Set |
| 71097-08 | 1/2" Adapter | 71097-18 1/2 | " Die Set |
| Metric Bubb | ole Flaring Adapters | Metric Bubble F | laring Die Sets |
| 71475-4M | 4.75 mm Adapter | 71475-14M 4.7 | 5 mm Die Set |
| 71475-6M | 6 mm Adapter | 71475-16M 6 n | nm Die Set |
| 71475-8M | 8 mm Adapter | 71475-18M 8 n | nm Die Set |
| 71475-10M | 10 mm Adapter | 71475-110M 10 | mm Die Set |



72400 GM FUEL LINE FLARING KIT



This kit fabricates the special flares found on most GM fuel lines and some GM truck power steering pump return lines (5/16"). Kit comes in a custom molded carrying case and includes:

| 71202 | Hydra-Flare Yoke & Pump Assembly | | |
|-------------|----------------------------------|-------------|---------------|
| GM Fuel Lir | ne Adapters | GM Fuel Lir | ne Die Sets |
| 71405 | 5/16" Adapter | 71415 | 5/16" Die Set |
| 71406 | 3/8" Adapter | 71416 | 3/8" Die Set |





72300 PUSH-CONNECT, 45° & DOUBLE FLARING SET WITH "HYDRA-FLARE"



Fabricates "production quality" flares quickly and easily with hand held convenience. Flaring die sets for five sizes: 3/16, 1/4, 5/16, 3/8 and 1/2" 0.D. tubing; five double flaring adapters cover 3/16, 1/4, 5/16, 3/8 and 1/2" 0.D. tubing. Set includes:

| 71202 | Hydra-Flare Yoke & Pump Assembly | | | |
|-------------------------------|----------------------------------|--------------------------|-----------------------------------|--|
| 71097-01 | 45° Flaring Cone | | | |
| Push Connect Adapters | | Push Connect Die Sets | | |
| 71204 | 1/4" Adapter | 71214 | 1/4" Die Set | |
| 71205 | 5/16" Adapter | 71215 | 5/16" Die Set | |
| 71206 | 3/8" Adapter | 71216 | 3/8" Die Set | |
| 45° & Double Flaring Adapters | | | 45° & Double Flaring Die Sets | |
| 45° & Double Flar | ing Adapters | 45° & Double | Flaring Die Sets | |
| 45° & Double Flar 71097-03 | ing Adapters 3/16" Adapter | 45° & Double 71097-13 | Flaring Die Sets 3/16" Die Set | |
| | • . | | <u> </u> | |
| 71097-03 | 3/16" Adapter | 71097-13 | 3/16" Die Set | |
| 71097-03 71097-04 | 3/16" Adapter 1/4" Adapter | 71097-13 71097-14 | 3/16" Die Set 1/4" Die Set | |



71100 METRIC BUBBLE FLARING TOOL SET



Fashions International Standards Organization (I.S.O.) bubble flare found on European, Japanese and some domestic model brake lines. Flares without removing brake lines from a vehicle. Includes hardened steel bar and carrying case. Set includes: Adapters for 4.75, 6, 8 and 10 mm 0.D. tubing.

Also available:

71101 Set of

Set of Four Bubble Flaring Adapters for 4.75, 6, 8 and 10 mm 0.D. tubing



70092 45° FLARING, DOUBLE FLARING & CUTTING TOOL SET



Includes heavy duty tube cutter 70033 for 1/8 to 1 1/8" 0.D. tubing; standard 45° flaring tool 70051 flares 7 sizes: 3/16, 1/4, 5/16, 3/8, 7/16, 1/2 and 5/8" 0.D. tubing; five double flaring adapters 70192 cover 3/16, 1/4, 5/16, 3/8 and 1/2" 0.D. tubing.

Also available:

| Also avallable. | |
|-----------------|--|
| 70097 | Same as 70092, less 70033 tube cutter |
| 70192 | Set of 5 Double Flaring Adapters for $$ 3/16, 1/4, 5/16, 3/8 and 1/2" 0.D. tubing |
| 70092-M | Metric Flaring, Double Flaring & Cutting Tool Set flares 7 metric sizes: 4, 6, 8, 10, 12, 15 and 16 mm 0.D. tubing |
| 70192-M | Metric Double Flaring Adapter Set covers 4.75, 5, 6, 8 and 10 mm 0.D. tubing |
| 70097-M | Same as 70092-M, less 70033 tube cutter |





71500-A **HYDRA-KRIMP**









The die snaps quickly into the press fixture requiring no pins or screws.





Fabricating A/C Hoses Just Got Easier...

Mastercool's patented "Hydra - Krimp" makes crimping barbed and beaded fittings as easy as 1 - 2 - 3! The lightweight hand-held hydraulic press is very portable and ideal for shop and field applications. The 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

Kit comes in a custom molded case and includes:

| 71500-001AB | Hydra-Krimp Pump |
|--------------|---|
| 71500-001B | Hydra-Krimp Yoke |
| 71500-001A-A | Yoke and Pump Complete Hydraulic Assembly |
| 71500-001C | Complete Die Set Assembly (7 pc. set) |
| 71500-6 | Die Set - #6 (5/16"), Die Set - #8 (13/32" Reduced Barrier) |
| 71500-8 | Die Set - #8 (13/32") |
| 71500-10 | Die Set - #10 (1/2") |
| 71500-12 | Die Set - #12 (5/8") |
| 71500-6SRB | Die Set - #6 (5/16" Reduced Barrier) |
| 71500-10SRB | Die Set - #10 (1/2" Reduced Barrier) |
| 71500-12SRB | Die Set - #12 (5/8" Reduced Barrier) |
| 71500-PB | Custom Molded Box |











The 71550 is our "manual style" A/C hose crimper. The dies snap quickly into place requiring no pins or screws. The unit can be easily mounted to a bench using the holding fixture or held securely in a vise. This kit comes with a complete set of dies covering standard hose sizes #6, #8, #10 and #12. PATENT# 6,324,884 *Optional reduced barrier sizes are available.





The die snaps quickly into the press fixture requiring no pins or screws



Close yoke, insert pin and turn arbor screw

Kit comes in a custom molded case and includes:

| 71550-001 | Hydra-Krimp Pump | 71500-8 | Die Set - #8 (13/32") |
|-----------|--------------------------|----------|-----------------------------|
| 71550-002 | Arbor Assembly | 71500-10 | Die Set - #10 (1/2") |
| 71550-003 | Holding Fixture Assembly | 71500-12 | Die Set - #12 (5/8") |
| 71500-6 | Die Set - #6 (5/16") | 71550-PB | Custom Molded Carrying Case |



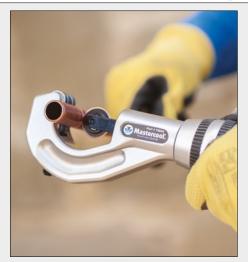
BALL BEARING CUTTERS





Mastercool's ball bearing tube cutters offer the latest "Reduced Friction" technology! Our reduced friction design incorporates ball bearings into the cutter wheel, tube rollers and a control knob. Reducing the resistance in these high friction areas allows the cutter to roll fast and easy as it slices through the tube. The "Reduced Friction" design is sure to save time and reduce fatigue!





| 72029 | "Reduced Friction" Tube Cutter for 1/8 to 1 1/8" (3-28 mm) |
|-------|--|
| 72035 | "Reduced Friction" Tube Cutter for 1/4 to 1 1/2" (6-38 mm) |
| 72030 | Replacement Cutting Wheel for 72029 |
| 72034 | Replacement Cutting Wheel for 72035 |

TUBE CUTTERS









Mastercool tube cutters are lightweight yet durable. Carbide steel cutting wheels work with hard and soft copper, aluminum, brass, thin wall steel and stainless steel. All cutters feature rollers with flare cut-off grooves to salvage as much old tubing material as possible.

| 70027 | Mini Tube Cutter for 1/8 to 5/8" (3-16 mm) 0.D. Tubing (1/8 to 1/2" Nominal) |
|-------|---|
| 70029 | Mini Tube Cutter for 3/8 to 1 1/8" (4-28 mm) O.D. Tubing (1/4 to 1" Nominal) |
| 70033 | Heavy Duty Tube Cutter for 1/8 to 1 1/8" (4-28 mm) O.D. Tubing (1/4 to 1" Nominal) |
| 70035 | Heavy Duty Tube Cutter for 1/4 to 1 5/8" (6-40 mm) O.D. Tubing (1/4 to 1 1/2" Nominal) |
| 70037 | Sliding Ratchet Tube Cutter for 1/4 to 2 5/8" (6-67 mm) 0.D. Tubing (1/4 to 2 3/4" Nominal), Triple Chrome Plated |
| 70038 | Sliding Ratchet Tube Cutter for 1/4 to 3 1/2" (6-89 mm) O.D. Tubing (1/4 to 3" Nominal) |



TUBING TOOLS

RATCHET STYLE TUBE CUTTER



When you don't have swing room, ratchet action allows cutting all the way around the tubing easy.

70030 (1/4 to 7/8" 0.D. tubing)

70031 (5/16 to 1 1/8" O.D. tubing)

80021 **PLUMBERS TYPE MINI CUTTER**



Designed for applications with limited working space. Cuts soft copper, aluminum and thin wall steel tubing. Tube cutter for 1/8 to 7/8" (4-22 mm) O.D. Tubing. (1/8 to 3/4" nom.)

80121 Spare Cutting Wheel for 80021

REPLACEMENT CUTTER WHEELS





| | 70028 | Replacement Cutting Wheels for 70027 (10 pcs). |
|--|-------|---|
| | 70034 | Replacement Cutting Wheels for 70029, 70030, 70031, 70033, 70035, 70037 (10 pcs \pm 1 holding screw) |
| | 70128 | Carbide Cutting Wheel & Screw Set for 70027 includes: 2 spare cutting wheels and 1 holding screw |
| | 70134 | Carbide Cutting Wheel and Screw Set for 70029, 70035. Includes: 2 spare cutting wheels and 1 holding screw |
| | 70138 | Replacement Cutting Wheel for 70038 (1 per pkg.) Cut hard and soft copper, aluminum, brass, thin wall steel and stainless steel $\frac{1}{2}$ |
| | 70237 | PVC Cutting Wheel for 70037. Cuts PVC and ABS |
| | 70238 | Oversize PVC Cutting Wheel for 70038. Wheel is 1 5/8" diameter. Cuts PVC and ABS |

TUBE CONSTRICTOR WHEEL



70233 Used with 70033 or 70035

INNER-OUTER REAMERS



70085 Inner/Outer Reamer for 3/16 to 1 1/2" O.D. tubing

71685 Inner/Outer Reamer

Designed to remove inner burrs easily. Full metal grip. Includes one spare tungsten blade for long use

71686-2 Two Spare Blades for 71685 (2 pcs)





70069-A 4-IN-1 LEVER STYLE TUBE BENDER



Complete 180° bend all metal multi-purpose tube bender for 3/16, 1/4, 5/16 and 3/8" 0.D. tubing.

SPRING STYLE TUBE BENDERS



Economical and effective tools for bending soft copper or aluminum tubing without kinks. Special nickel plated, spring steel is flared on one end for quick tube insertion. Each tool bends one size.

| MODEL# | SIZE | LENGTH |
|--------|-------|--------|
| 70071 | 1/4" | 10" |
| 70072 | 5/16" | 10" |
| 70073 | 3/8" | 10" |
| 70074 | 1/2" | 12" |
| 70075 | 5/8" | 14" |
| 70077 | 3/4" | 14" |

70076 SPRING STYLE TUBE BENDER SET



Set of 5 spring benders for 1/4, 5/16, 3/8, 1/2 and 5/8" 0.D. tubing.

RATCHET WRENCHES



| 70081 | Steel Forged Wrench with reversible ratchet. 9/16", 1/2" hex, 1/4" and 3/16" square |
|-------|---|
| 70082 | Compact Chrome Satin Wrench specially designed for use in hard to reach places, 1/4, 3/8, 3/16 and 5/16" square ratchet |

COMPRESSOR SERVICE TOOLS

91000-A DELUXE CLUTCH HUB PULLER/INSTALLER KIT



Kit contains a complete offering of A/C compressor clutch hub pullers and installers for GM, Ford, Chrysler and Imports. Includes a compressor identification chart and comes in a custom molded case.



92311 DELUXE ORIFICE TUBE SERVICE KIT

This 5 piece universal kit will remove and install any style orifice tube. Comes in custom molded box.



91002 GM & FORD ORIFICE TUBE REMOVER/INSTALLER



Used on all GM (CCOT) and Ford (FOTCC) systems with evaporator inlet orifice tube

91009 GM (CCOT) & FORD (FOTCC) SCREEN EXTRACTOR



Used with 91002 and 91008

91010 FORD AEROSTAR EXPANSION TUBE REMOVER/INSTALLER



Special design for condenser mounted tube

90499 UNIVERSAL CLUTCH HOLDING TOOL



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