

CPS[®]

HVAC/R

Product Catalog

2 0 2 3

Pro-Set[®] **COMPUTE-A-CHARGE**[®] **BLACKMAX**[®] ***Leak-Seeker***[®]

CPS® designs and manufactures **QUALITY PRODUCTS** that enable service technicians to **WORK EFFICIENTLY, SMARTER**, and win more business.

Our goal is to achieve this mission every day by **CONTINUOUS SELF IMPROVEMENT** and **GROWTH** in our operations; while ensuring **PROFITABILITY** for our **CUSTOMERS**.

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FEATURE PRODUCTS

IAQPRO **STAR PRODUCT**

The Standard for Professional Indoor Air Quality Meters ...

HVAC technicians can quickly measure and record indoor air quality, identify problem causes, and share solutions on-the-fly.

CPS® link™

Paired with the CPS Link™ app, a technician can generate customized reports of products and prices to resolve any air quality issue.

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Bluetooth

CPS® link™



BFT850DR BLACKMAX® RATCHET OR DRILL- POWERED FLARING TOOL

For 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O.D. tube

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NEW

Pro-Set®

TRS21E PRO-SET® IGNITION PROOF REFRIGERANT RECOVERY MACHINE

For Class A1, A2, A2L and A3 Refrigerants

PAGES 74-75



PRO-SET® PREMIUM REFRIGERANT SERVICE HOSES WITH SAFEMATE™ VALVES

A three-pack of 5 ft barrier hoses in red, yellow and blue for safely and efficiently charging, recovering and evacuating CFC, H/CFC, HFC, HFO, plus R410a, R134a and R12234yf refrigerants in residential and commercial HVAC/R systems.

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Patented, "T" shaped, solid brass "SafeMate" female valves.



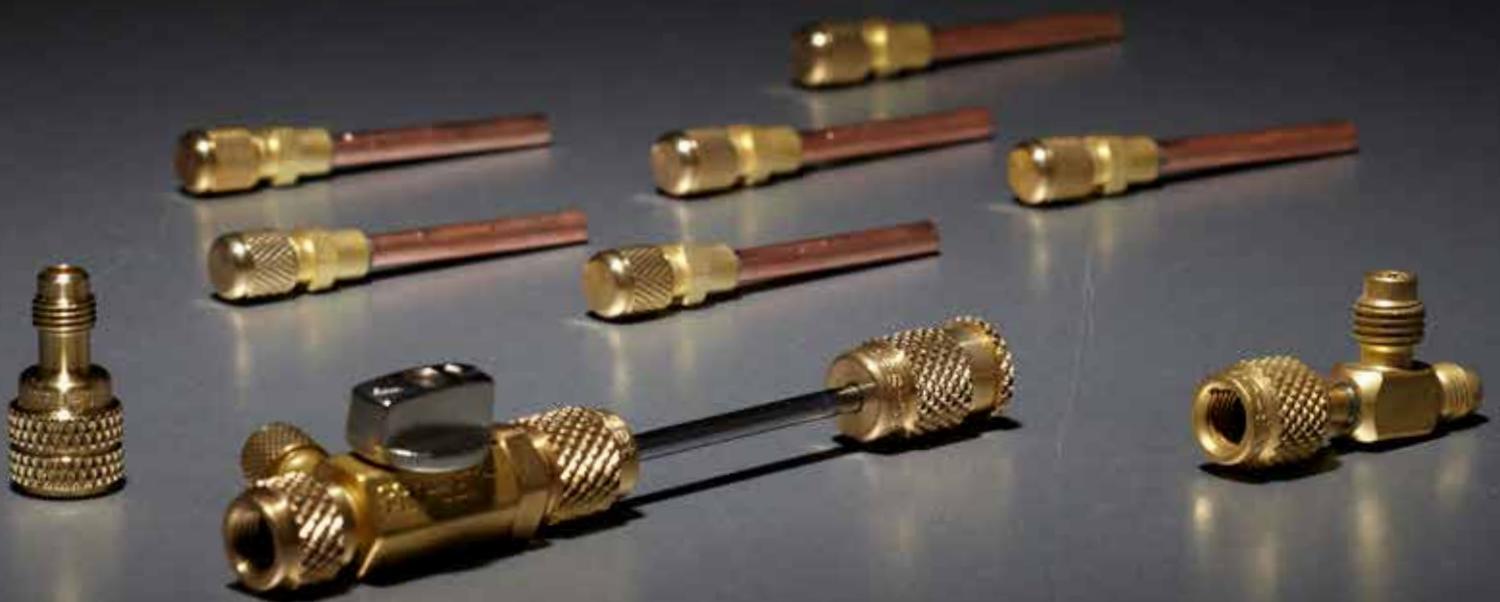
SAE Female SafeMate™ Valves



SAE Female Fittings

NEW

ADAPTERS, FITTINGS & VALVE CORE TOOLS



ADAPTERS

14mm x 1/4" SAE

AD14



Manifold Fitting

AD24



Large Cylinder

AD41



With Core & Cap

AD44



1/4" SAE Union

AD47



1/4" SAE x 3/8" SAE

AD64



1/2" ACME x 1/4" SAE

AD84



R-410A Straight w/ Core

AD87



R-410A 55° Bend & Core

AD87S



R-410A 55° Bend & Core

AVS44



- Precision machined from C360 alloy brass
- Adheres to strict AHRI specifications
- Cores for use with all refrigerants
- Deep knurling for sure grip

Part No.	Qty	Female	Male
AD14	1	-	14mm x 1/4" SAE
AD24	6	-	1/4" SAE x 1/8" MNPT
AD24B	100	-	
AD41	1	3/4" -14	1/4" SAE
AD44	6	-	1/4" SAE x 1/4" MNPT
AD47	1	-	1/4" SAE x 1/4" SAE Union
AD64	1	1/4" SAE	3/8" SAE
AD84	3	1/2" ACME	1/4" SAE
AD84B	100		
AD87	1	5/16" SAE	1/4" SAE
AD873	3		
AD87B	100		
AD87S	1		1/4" SAE 55°
AD873	3		
AD87SB	100		
AVS44	3	1/4" SAE Swivel Hex	1/4" SAE w/cap & core

ADAPTERS - TEE CONNECTORS

1/4 MNPT on Run

AVT2P



Manifold Tee

AVT4



1/4" Swivel Hex Nut

AVT44



With Core & Cap

AVT45



1/4" SAE Union

AVT48



1/4" SAE x 3/8" SAE

AVT64



1/2" ACME x 1/4" SAE

AVT87



Part No.	Qty	Side 1	Fitting 2	Run (Tee)
AVT2P	1	1/4" SAE Male w/ cap and core	1/4" SAE Male	1/4" MNPT
AVT4	1	1/4" SAE Male	1/8" MNPT	1/4" SAE Male w/cap & core
AVT44	3	1/4" SAE Male	1/4" SAE Swivel Hex nut	1/4" SAE Male w/core
AVT45	3	1/4" SAE Male	1/4" SAE Swivel knurl nut	1/4" SAE Male w/core
AVT48	1	1/4" SAE Male	1/4" SAE Swivel knurl nut	1/2" ACME Male w/core
AVT64	3	1/4" SAE Male w/ cap and core	1/4" SAE Male	1/4" SAE Female Swivel Hex nut
AVT87	1	1/4" SAE Male	5/16" SAE Female knurl nut	1/4" SAE Male w/core

CAPS

Part No.	Qty	Description
AVC4	10	1/4" SAE brass caps
AVC425	25	
AVC4B	100	1/4" SAE brass caps (bulk)
AVC4C	2	1/4" SAE brass caps w/chain
AVC4PB	100	1/4" SAE plastic caps
AVC4R	6	1/4" SAE brass wrench caps
AVC410	10	R-410A 5/16" SAE brass caps
AVC6P	3	3/8" SAE plastic caps
AVCVAC	1	Brass cap & chain kit: 1/4", 1/2", 3/8" SAE



AVC4



AVC410



AVC4PB



AVC4R



AVC4C



AVCVAC

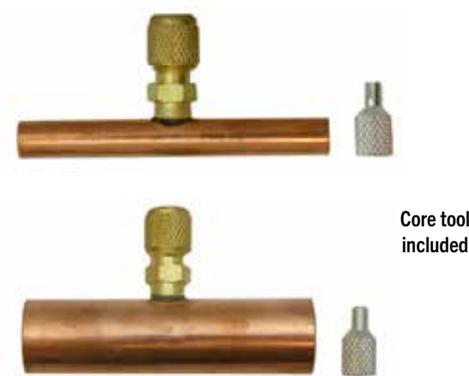
COPPER TUBE EXTENSIONS



Available with Standard or Wrench Caps

Part No.	Qty	Outer Diameter	Inner Diameter
AV2	6	1/8"	1/16"
AV2R	6	1/8"	1/16"
AV3	6	3/16"	1/4"
AV3R	6	3/16"	1/4"
AV4	6	1/4"	1/4"
AV4R	6	1/4"	1/4"
AV4410B	100	5/16"	3/8"

COPPER TUBE BRAZE TEES



Core tool included

Part No.	Qty	Outer Diameter	Fitting
AVCT4	3	1/4"	1/4" SAE Male w/ cap & core
AVCT5	3	5/16"	
AVCT6	3	3/8"	
AVCT8	3	1/2"	
AVCT10	1	5/8"	
AVCT12	1	3/4"	
AVCT14	1	7/8"	
AVCT18	1	1-1/8"	

MULTI-STEP BODIES



AVB34

AVB346

AVB456

Part No.	Qty	Outer Diameter	Inner Diameter
AVB34	6	1/8"	1/16"
AVB346	6	1/8"	1/16"
AVB456	6	3/16", 1/4", 5/16" SLDR	1/4"

Precision machined for exact fit

VALVE CORES



AVS1/AVS1B

AVS1V

Part No.	Qty	Description
AVS1	6	6 pk of cores 1/8"
AVS125	25	25 pk of cores
AVS1B	100	100 bulk pack of cores
AVS1V	6	6 pk of cores in plastic vile

VALVE CORE TOOLS

Premium Valve Core Tools

- Remove and replace damaged valve cores in systems under pressure (select items listed)
- Fully remove valve cores to increase speed of evacuation and/or charging process
- Precision machined from high quality materials to ensure long life and leak free service
- Available with or without side access port



TLVC
TLVC410
TLVC410A



TLVC
TLVCS410
TLVCS410A

Benefits of side port

- Enables connection of a vacuum gauge directly at the system
- Close ball valve to isolate the vacuum gauge and system from all service hoses, manifold & pump connections while performing a pressure rise test
- Eliminates possibility of introducing air into a system when transitioning from evacuation to charging process
- Available with or without side access port



Core storage here

TLVC1

TLVC2

Part No.	Qty	Description
TLVC	1	1/4" Female x 1/4" Male SAE Core Remover Tool- Pressure rated
TLVC1	1	Pocket Valve Core Tool w/ 4 Spare Cores
TLVC2	1	Dual Valve Core Tool (1/4" SAE Valves & Auto R-134a Valves)
TLVC410	1	5/16" Female x 5/16" Male SAE Valve Core Tool - Pressure rated
TLVC410A	1	5/16" Female x 1/4" Male SAE Valve Core Adapter Tool - Pressure rated
TLVCS	1	1/4" Female x 1/4" Male x 1/4" Male SAE (Side Port) Valve Core Tool - Pressure rated
TLVCS410	1	5/16" Female x 5/16" Male x 5/16" Male SAE (Side Port) Valve Core Tool - Pressure rated
TLVCS410A	1	5/16" Female x 1/4" Male x 1/4" Male SAE (Side Port) Valve Core Tool - Pressure rated

CHEMICALS



UV LEAK DETECTION ADDITIVES

MOONSHINE DYE CARTRIDGE

- Use with UVNJS Squeeze Gun Injector
- Cleanest, easiest and fastest method of injection
- 4 sizes to match capacity of system
- Locates source of air entering system
- Eliminates over-injection of dye
- All dyes include I.D. labels

Part No.	Qty/Px	Equipment Type	Refrigerant Charge Size
UVS101	6	Small Ice machines window units, appliances	Up to 2.9 lb (1.3 kg)
UVS1	6	Medium Residential Systems	3 to 4.9 lb (1.4 to 2.2 kg)
UVS2	6	Medium - Large Light commercial and large residential systems	5 to 9.9 lb (2.3 to 4.5 kg)
UVS3	6	Large Commercial and light industrial	10 to 25 lb (4.6 to 11.4 kg)

Small

UVS101
6 pack



Medium

UVS1
6 pack



Medium - Large

UVS2
6 pack



Large

UVS3
6 pack



UVUD6 Moonshine™ Bottled Universal Refrigerant Dye

6 pack

- Built-in measuring cap
- 8 oz (237 ml)
- Lowest cost per application
- Excellent for large systems



UVUDS Moonshine™ Universal Refrigerant Dye

6 pack

- 1 oz (30 ml) bottles
- Lowest cost per application



UVCLNR Moonshine™ Dye Cleaner

1 pack

- 32 oz (946 ml)

UV LIGHTS, KITS & ACCESSORIES

UV55

Refrigerant Uv Dye Leak Detection Kit

Conduct a fast, easy, mess-free air conditioning leak test with our ultra-flourescent universal dye.

KIT INCLUDES

- MoonLight™ flashlight with 9, true ultraviolet LEDs and 3 AAA batteries
- MoonShine™ blue light-blocking glasses
- UVNJS Mess-free and easy-to-use squeeze injector
- UVS2 universal (orange) OEM approved dye cartridge
- R-34a 90° low side snap coupler
- Carrying case and instructions



Step 1: Load cartridge.

Step 2: Connect and bleed hose.

Step 3: Inject, then discard empty cartridge.



UVPRO

Moonlight™ Flashlight And Moonshine™ Glasses

Our MoonLight™ flashlight is the most compact and efficient ultraviolet light we have ever designed. It contains nine high intensity, true ultraviolet LED engineered to maximize the fluorescing capabilities of today's most commonly used detection dyes used in AC systems, while greatly reducing the amount of "nuisance" background blue light emitted.

- Operates 8 hr (continuous on)
- Inspection range up to 3' (0.9 m)
- 100,000 hour LED life
- Instant "ON" with no heat produced
- Works with all common dye additives

REPLACEMENT PARTS

UVXG	UV Enhancing Safety Glasses
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UVNJS

Squeeze Injector

The squeeze gun™ injection system is the easiest, cleanest and fastest method of injecting dye into a system. Simply match the appropriate pre-filled, pre-measured universal dye cartridge with the size of the system being serviced then place it into the Squeeze Gun. Make your connection and inject the dye. It's that simple.

- Refillable and expandable universal dye injector (dye cartridges sold separately)
- 1/4" F BV Hose
- 1/2 oz. capacity

REPLACEMENT PARTS

UVXSGA	Adapter Hose
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UVNJ

Anodized Aluminum Flow Through Injector

- Refillable and expandable universal dye injector (dye cartridges sold separately)
- In-Line AC&R 1/4"
- 1/4 to 1/2oz. - 7.5 to 14ml



TLJ2

Anodized Aluminum Injector

- Refillable and expandable universal dye injector (dye cartridges sold separately)
- 1/4 oz. / 7.5 ml to 2 oz. / 60 ml capacity
- R-12 1/4" SAE Oil Dye Injector

REPLACEMENT PARTS

TLJX2H	Replacement Oil Injector Hose
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MiST X-Treme Is Here!

Combine the MiST Service with the new X-Treme Sanitizing Solution for a complete and safe restoration of the interior air quality.

MiST X-Treme Sanitizing Kits are designed to disinfect and sanitize vehicle interior touch points while treating the entire HVAC system and interior air spaces for sources of mold, mildew and bacteria.



OPM2000.01

Optima Ultrasonic Nebulizer

- The Optima Nebulizer allows the nebulization of a specific sanitizing liquid (MiST cleaning solution) for the sanitation of the air conditioning system of all vehicles (cars, trucks, buses etc.) and the sanitation of the interior of the vehicle cabins.
- The particles nebulized with this system have a size of less than 5 microns and are, therefore, light enough to penetrate deeply into the air conditioning system, compared to the use of classic spray cans where the sprayed liquid quickly sticks to the tubing and fails to clean the entire system.
- Completely clean the air conditioning system (including ducts and fans), blocking the proliferation of bacteria and germs, while eliminating unpleasant odours inside the passenger compartment.
- It is advisable to repeat the treatment at least once a year to ensure that you have an air conditioning system without bad odours and without bacterial contamination.

NEW



590275

MiST X-Treme Sanitizing Spray

- EPA registered and effective against bacteria, including MRSA and viruses such as Covid-19
- Allow sprayed on solution to remain in place during the entire MiST service then wipe away any excess
- One bottle will treat up to 12 passenger cars/light trucks
- Sold in cases of 12 – 32 oz. bottles w/sprayer

Award-winning Complete Vehicle Service

MiST™ penetrates the entire ventilation system and passenger compartment surfaces to restore interior air quality. MiST is a safe, simple and effective service that targets the health of the driver. MiST is the perfect preventive maintenance (PM) service because it can be run on any vehicle, leased or owned that comes into your shop, regardless of year, make, model or mileage.



**590250
MiST™ Cleaning
Solution**

- MiST service for vehicle interiors and ventilation system
- Designed for exclusive use with MiST Ultrasonic unit (Single application)



**590260
MiST™ Auto
Remarketing**

- Specially designed for used cars to treat mold, mildew and bacteria in the HVAC system and cabin of a vehicle
- Designed for exclusive use with MiST Ultrasonic unit (Single application)



**400-0501
MiST™ Ultrasonic
Solution**

- New fresh scent!
Cleans and restores the vehicle's HVAC system and cabin
- Designed to work with the CarClean™ System



**MiST™ Vent Air
Fresheners**

- Clip-on vent. Fragrance leaves vehicle smelling clean and fresh

- 590235** Summer Breeze
- 590236** Spicy Apple
- 590237** Citrus
- 590238** Vanilla
- 590239** Clean Car

Part#	Qty	Description
590250	12	MiST Cleaning Solution
590260	12	MiST Auto Remarketing Formula
590235	12	Vent Clip: Summer Breeze Air Freshener
590236	12	Vent Clip: Spicy Apple Air Freshener
590237	12	Vent Clip: Citrus Air Freshener
590238	12	Vent Clip: Vanilla Air Freshener
590239	12	Vent Clip: Clean Car Air Freshener
590155	1	12V Battery Extension Cord with accessory outlet (12ft)
590275	12	Bottle MiST X-Treme Sanitizing Solution

**The Results Speak
for Themselves**

Below are actual samples that were taken from the vehicle's HVAC system before and then two days after a MiST™ In-Car Air Quality service.

Before MiST™



After MiST™



**590250SK
MiST X-Treme Sanitizing Kit**

- 1 Qt (590275) MiST X-Treme w/sprayer
- 12 Bottles (590250) MiST Cleaning Solution
- MiST Ultrasonic Machine sold separately
- 12 MiST X-Treme Service Vent Tags
- 24 MiST X-Treme Point of Sales Brochures



**590260SK
MiST X-Treme Sanitizing and Scented Kit**

- 1 Qt (590275) MiST X-Treme w/sprayer
- 12 Bottles (590260) MiST Remarketing Solution
- MiST Ultrasonic Machine sold separately
- 12 MiST X-Treme Service Vent Tags
- 24 MiST X-Treme Point of Sales Brochures

HAND TOOLS



PRO-SET® BRAZING & SOLDERING



BRHT1 HAND TORCH

- Auto-ignite torch
- Adjustable flame control
- For use with propylene (MAPPRO), MAPP and Propane
- CGA600 Inlet Connection
- Cast aluminum and stainless steel burn tube construction
- Flame lock button, precise flame adjustment
- Clamshell packaging

REPLACEMENT PARTS BRXHTST1 Torch Tip



BRHTS1 SWIVEL HAND TORCH

- Manual Ignition
- Adjustable flame control
- For use with propylene (MAPPRO), MAPP and Propane
- CGA600 Inlet Connection
- Clamshell packaging

REPLACEMENT PARTS BRXHTS1 Torch Burner Tube Assembly



BRHT5 HAND TORCH WITH 5' HOSE & VALVE

- Auto-ignite torch
- Adjustable flame control
- For use with propylene (MAPPRO), MAPP and Propane
- CGA600 Inlet Connection
- Brass regulator, composite handle & stainless steel burn tube
- New brass regulator with 5 ft hose and valve
- Clamshell packaging

PRO-SET® INSPECTION MIRRORS



TLMIR1 CIRCULAR INSPECTION MIRROR

- Diameter 1.25" (32 mm)
- Length 7"~19.5" (178 mm ~ 495 mm)



TLMIR2 CIRCULAR TELESCOPING MIRROR

- Diameter 2" (51 mm)
- Length 12"~18" (305 mm ~ 457 mm)



TLMIR3 RECTANGULAR TELESCOPING MIRROR

- Mirror size 2" X 3-1/2" (51 mm X 90 mm)
- Length 13-1/4" ~ 19-3/8" (286 mm X 492 mm)



TLMIR4 OVAL TELESCOPING MIRROR

- Mirror size 1" X 2" (25 mm X 51 mm)
- Length 9" X 18-1/8" (229 mm X 460 mm)

PRO-SET® OIL HAND PUMP



TLOP HAND OIL PUMP

- Removes oil from systems for recovery and conversion
- Adds oil to systems (2.6 oz /78 ml) per stroke against 200 psi pressure
- Universal stopper fits standard openings in 1, 2-1/2 and 5 gallon oil containers

- Automatic bleed valve equalizes pressure inside and outside of the oil container
- Use with alkyl-benzene, ester-based, polyol ester, mineral and synthetic oils. (not for use with ammonia laden oil)
- Suction transfer hose and fittings included

CPS® MAGNETIC SOLENOID TEST TOOL

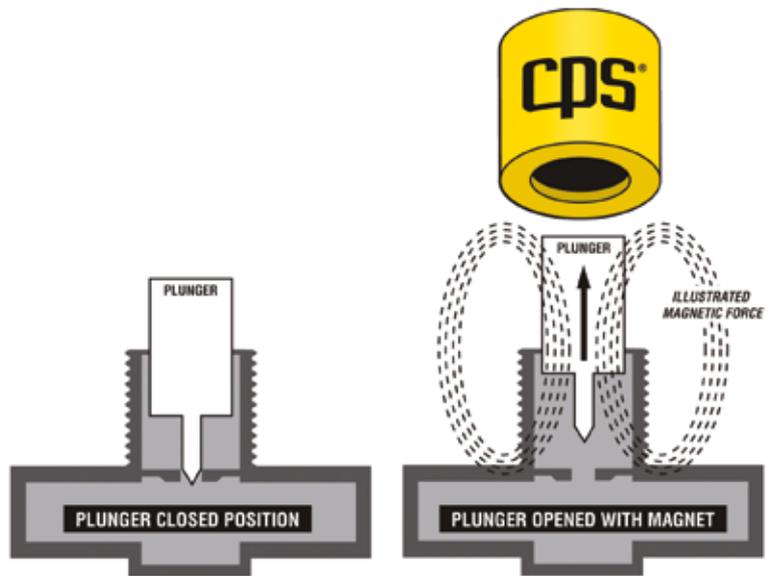


TLMKC18

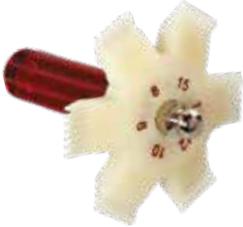
SOLENOID MAGNET

The TLMKC18 is designed to manually open solenoid valves by magnetically lifting the stem assembly and plunger. Simply slide the TLMKC18 over the valve's enclosing tube and the industrial grade magnets incorporated inside the rugged ABS plastic housing does the rest. It is an ideal tool for trouble shooting/servicing both direct connected or pilot operated 2-way solenoid, 3-way reclaim or 4-way reversing valves.

- 0.75"/18 mm opening fits all common manufactured valves



PRO-SET® FIN STRAIGHTENING TOOLS



TLFC6

UNIVERSAL 6-SIDED FIN COMB STRAIGHTENING TOOL

- Repair bent condenser fins
- For 8,9,10,12, 14 or 15 fins per inch



TLFC1

UNIVERSAL METAL FIN COMB

- For straightening evaporator and condenser fins



TLFC2

FIN STRAIGHTENER

- Large durable, easy grip handle
- For straightening evaporator and condenser fins

PRO-SET® SPECIALTY TOOLS



TLMSP

6-IN-1 SWAGING PUNCH

- (3/16", 1/4", 5/16", 3/8", 1/2", 5/8")
- Swages six sizes of tubing
- Chrome plated for strength and durability



TLPK

SWAGE PUNCH SET

- 5 Punches (1/4", 5/16", 3/8", 1/2", 5/8")



TLPORR

PRO-SET PINCH-OFF & RE-ROUND TOOL

- Pinch-Off tool & rerounds 1/4", 5/16", 3/8", and 1/2" copper and tubing



TLPP

TUBE PIERCING PLIERS

- Tube Piercing Pliers 1/4"
- TLPPX Replacement Tip
- Quick release handle



TLPO

PINCH-OFF PLIERS

- Tool locks onto tubing to prevent loss of refrigerant during service
- Rounded jaws to avoid cutting tubing
- 2 years warranty



TCAP

CAPILLARY TUBE CUTTER

- Cleanly cuts all types of refrigerant capillary tubing without constricting, swaging or flattening

CPS® TOOLS BAGS



TLBP68

TOOL STORAGE POUCH (3-Pack)

Great for organizing small parts and tools, fittings, etc.

- 6"V x 8.5"H. (15 x 22cm) size
- Heavy-duty construction for small tools/fittings
- Transparent mesh makes contents visible
- Sturdy hang-tab with metal grommet
- Internal divider organizes contents
- Bottom gusset expands 2.5" (6cm)



TLBP712

TOOL STORAGE POUCH (3-Pack)

Great for organizing larger parts and tools, electrical meters, fittings, etc.

- 7"V x 12.5"H. (18 x 32cm) size
- Heavy-duty construction tools, meters, hardware
- Transparent mesh makes contents visible
- Sturdy hang-tab with metal grommet
- Internal divider organizes contents
- Bottom gusset expands 2.5" (6cm)



TLBAG1

SQUARE TOOL ORGANIZER

10" x 10" (25 x 25 cm)

Embroidered logo



TLBAG2

RUBBER BOTTOM TOOL ORGANIZER

9" x 16" (23 x 41 cm)

Embroidered logo



BLACKMAX® BTCK TUBE CUTTER KIT

KEY FEATURES / BENEFITS

- Patented SetN Cut™ spring loaded cutting wheel/rollers for smooth, easy cuts on soft or hard copper, aluminum or brass tube
- Smooth cuts even on irregular tube
- Quick release pins for fast cutting wheel replacement
- Durable die cast and machined aluminum bodies
- Solid aluminum turning knobs (with rubber overmold on BTC200 & BTC300)
- Chromed, hardened finish cutting wheels for long life
- Smaller cutters (BTC100 & BTC200) are ideal for confined spaces

Set N Cut™
Precision Cuts Every Time

**BTC100
Ultra Mini**



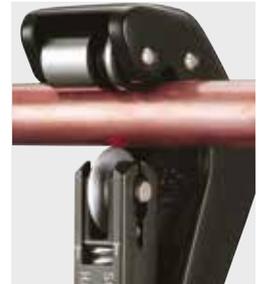
Tube Capacity
1/8" ~ 5/8"
(3 MM ~ 16 MM)

**BTC200
Mini**



Tube Capacity
1/8" ~ 7/8"
(3 MM ~ 22 MM)

**BTC350
Medium Large**



Tube Capacity
1/8" ~ 1-5/8"
(3 MM ~ 41 MM)



How to use Set N Cut™

1. Insert tube into cutter throat.
2. Turn cutter knob until wheel touches tube.
3. Further tighten knob until Wheel Alignment Mark aligns with SOFT (tube) or HARD (tube) Hardness Indicator Lines.
4. Rotate cutter around tube, until cut completed.



Spring loaded cutting wheel



BLACKMAX® PREMIUM TUBE CUTTERS

Featuring patented SetN Cut™ technology, spring-loaded center groove rollers and cutting wheels for a fast and smooth cut every time, even on slightly deformed tube.



BTC100 BLACKMAX® ULTRA MINI TUBE CUTTER

- Great for confined spaces
- Cutting Range: 1/8" - 5/8" (4-16 mm) O.D.
- Chromed, hardened cutting wheel
- Quick-release pin for fast cutting wheel replacement
- Soft/Hard cutting settings for copper and aluminum
- Durable cast aluminum
- Size (HWD) 1.9" x 1.5" x 0.6" (50 x 37 x 15 mm)

REPLACEMENT PARTS

- BTCXC3 Nickel Plated Cutting Wheel
- BTCXP4 Quick Release Pin



BTC200 BLACKMAX® MINI TUBE CUTTER

- Cutting Range: 1/8" - 7/8" (3-22 mm) O.D.
- Chromed, hardened cutting wheel
- Quick-release pin for fast cutting wheel replacement
- Provides a smooth cut, even for slightly deformed tube
- Soft/Hard cutting settings
- Durable aluminum and rubber knob

REPLACEMENT PARTS

- BTCXC1 Zinc Plated Cutting Wheel
- BTCXP1 Quick Release Pin

OPTIONAL REPLACEMENTS

- BTCXCT1 Titanium Coated Cutting Wheel
- BTCXR Plastic Ratchet (For BTC200R)



BTC200R BLACKMAX® MINI RATCHET TUBE CUTTER

- Cutting Range: 1/8" - 7/8" (3-22 mm) O.D.
- Excellent for small tube, confined spaces
- Use with or without ratchet handle
- Chromed, hardened cutting wheel
- Quick-release pin for fast cutting wheel replacement
- Soft/Hard cutting settings
- Durable aluminum and rubber knob

REPLACEMENT PARTS

- BTCXC1 Zinc Plated Cutting Wheel
- BTCXP1 Quick Release Pin
- BTCXR Plastic Ratchet

OPTIONAL REPLACEMENTS

- BTCXCT1 Titanium Coated Cutting Wheel



BTC300 BLACKMAX® TUBE CUTTER

- Cutting Range: 3/16" - 1-1/4" (5 - 32 mm) O.D.
- Two chromed, hardened cutting wheels
- Quick-release pin for fast cutting wheel replacement
- Enclosed feed screw eliminates clogging, jamming

REPLACEMENT PARTS

- BTCXC1 Zinc Plated Cutting Wheel
- BTCXP1 Quick Release Pin

OPTIONAL REPLACEMENTS

- BTCXCT1 Titanium Coated Cutting Wheel



BTC350 BLACKMAX® MEDIUM TUBE CUTTER

- Cutting Range: 1/8" ~ 1-5/8" (3~41mm) O.D.
- Lightweight aluminum forged body for brass, copper, and aluminum
- Quick-release pin for fast cutting wheel replacement
- Chromed, hardened finish cutting wheel included

REPLACEMENT PARTS

- BTCXC4 Nickel Plated Cutting Wheel



BTC400 BLACKMAX® HEAVY DUTY TUBE CUTTER

- Cutting Range: 3/8" - 2-5/8" (10 - 67 mm) O.D.
- Two chromed, hardened cutting wheels
- Quick-release pin for fast cutting wheel replacement
- Enclosed feed screw eliminates clogging and jamming
- Four grooved rollers for precise tube rotation
- Rapid adjustment with quick-slide feed mechanism
- Durable aluminum/rubber knob

REPLACEMENT PARTS

- BTCXC2 Titanium Coated Cutting Wheel
- BTCXP2 Quick Release Pin

OPTIONAL REPLACEMENTS

- BTCXC2 Chrome Plated Cutting Wheel

BTC500 BLACKMAX® LARGE TUBE CUTTER



- Cutting Range: 3/8" - 2-5/8" (10 - 67 mm) O.D.
- Two chromed, hardened cutting wheels
- Quick-release pin for fast cutting wheel replacement
- Enclosed feed screw eliminates clogging and jamming
- Four grooved rollers for precise

- tube rotation
- Rapid adjustment with quick-slide feed mechanism
- Durable aluminum/rubber knob

REPLACEMENT PARTS

- BTCXC2 Chrome Plated Cutting Wheel
- BTCXP3 Quick Release Pin

OPTIONAL REPLACEMENTS

- BTCXC2 Titanium Coated Cutting Wheel
- BTCXB Bearing for BTCXCT2 Cutting Wheel

PRO-SET® PROFESSIONAL TUBE CUTTERS

All cutter wheels are precision machined from high grade chromium steel and plated with titanium nitride to extend life—up to 5 times longer!

- Precision machined rollers feature cut-off groove to reduce tube loss in damaged flare removal
- Durable metal handle with industrial grade rubber boot provides comfortable grip
- Enclosed hardened steel, thrust bearing feed mechanism for smooth cutting action and trouble free operation
- Packaging: Clamshell



TCT127 PRO-SET® MINI TUBE CUTTER

- Cutting Range: 1/8" to 5/8", (3 to 16 mm)

REPLACEMENT PARTS

TCXT127C Titanium nitride coated cutting wheel/screw



TCT174 PRO-SET® MINI TUBE CUTTER

- Cutting Range: 1/8" to 1-1/8", (3 to 30 mm)

REPLACEMENT PARTS

TCXT174C Cutting wheel/screw



TCT274 PRO-SET® TUBE CUTTER

- Cutting Range: 1/8" to 1-3/8" (3 to 35 mm)

REPLACEMENT PARTS

TCX4CTS Cutting Wheels/Screw
 TCXT274C Cutting Wheels/Screw
 TCXT274RB Reamer Blade



TCPVC PRO-SET® HEAVY DUTY PVC TUBE CUTTER

- Cutting Range: 2-5/8" to 1-5/8" (68mm to 42 mm)



TC127 MINI TUBE CUTTER

- Cutting Range: 1/8" to 5/8" (3 to 16 mm)
- Ideal for cutting in limited access areas
- Ratchet mechanism speeds precision machined chromium steel cutting wheels

REPLACEMENT PARTS

TCX7C (10) Cutting wheels
 TCX7S (10) Cutting Wheel Screws
 TCX7CTS (1) Titanium Cutting Wheel & (1) Screw
 TCX7CS (1) Cutting Wheel and (1) Screw



TC174 MINI TUBE CUTTER

- Cutting Range: 3/8" - 1-1/8" (10 - 29 mm)



TC274 TUBE CUTTER

- Cutting Range: 1/8" to 1-1/8" (3 to 29 mm)
- Hardened steel thrust bearing feed mechanisms for smooth operation
- Precision machined chromium steel cutting wheels
- Foldaway hardened steel reamers for deburring

REPLACEMENT PARTS

TCX4R (1) Reamer Blade
 TCX4RS (1) Reamer Blade Screw
 TCX4C (10) Cutting Wheels
 TCX4CS (1) Cutting Wheel and Screw
 TCX4S (10) Cutting Wheels and Screws



TC312 HEAVY DUTY TUBE CUTTER

- Cutting Range: 1/4" to 1-5/8" (6 to 41 mm)
- Spare cutting wheel located under retractable locking reamer

REPLACEMENT PARTS

TCX4R (1) Reamer Blade
 TCX4RS (1) Reamer Blade Screw
 TCX4C (10) Cutting Wheels
 TCX4CS (1) Cutting Wheel and Screw
 TCX4S (10) Cutting Wheels and Screws

PRO-SET® TUBE CUTTERS

TCSET

TUBE CUTTER COMBO PACK

- Cutting Range: 1/8" to 1-1/8" (3 to 29 mm)
- Includes TC127 & TC274

TC127



TC274



DEBURRING TOOL



TLRM

REAMING AND DEBURRING TOOL

- For 3/16" to 1-1/2" (5mm ~ 38mm) for copper, aluminum and brass tube
- Removes burrs from inside and outside edges of tube
- Rugged 3 blade die cast metal for long life
- Ergonomic shape for clockwise or counterclockwise use

TLDB2

POCKET DEBURRING TOOL

- Remove burrs and surface defects from inner/outer straight and hole edges

REPLACEMENT PARTS

TLDB2X Replacement Blade

TLDB

POCKET DEBURRING TOOL

- For soft copper and aluminum tubing
- Remove burrs and surface defects from inner/outer straight and hole edges

REPLACEMENT PARTS

TLDBX Reamer Blade & Screw



BTLDB3

BLACKMAX® DEBURRING TOOL

- Solid aluminum handle
- For soft copper and aluminum tube
- Includes (1) spare blades in handle

REPLACEMENT PARTS

TLDB2X Replacement Blade

BLACKMAX® TUBE BENDING TOOLS



Forward bend configuration



Reverse bend configuration
(Great For Confined Spaces)

BTB300/BTB300M

BLACKMAX® PREMIUM TUBE BENDER KITS

- For soft copper and aluminum tube
- Solid aluminum, color-coded mandrels
- Forward or reverse bends from 0° to 90°
- Reverse bend mechanism for tight quarters
- Durable molded carrying case
- Packaging: Color box

BTB300 BLACKMAX® IMPERIAL TUBE BENDER KIT

MANDRELS

CPS#	Description	Color	Inside Radius Of Bent Tube
BTBX14	Mandel 1/4" O.D.	Chrome	1-1/8"
BTBX516	Mandel 5/16" O.D.	Copper	1-1/4"
BTBX38	Mandel 3/8" O.D.	Red	1-1/4"
BTBX12	Mandel 1/2" O.D.	Yellow-Orange	1-3/8"
BTBX58	Mandel 5/8" O.D.	Blue	1-5/8"
BTBX34	Mandel 3/4" O.D.	Green	1-7/8"
BTBX78	Mandel 7/8" O.D.	Red-Violet	2"

OTHER

BTBXH	Ratchet Tool, Imperial
BTBXA1	1/4"-3/8" Shoe Arm
BTBXA2	1/2"-7/8" Shoe Arm
BTBXR1	Reverse Bender Mandrel Arm
BTBXR2	Reverse Bender Shoe Arm

BLACKMAX® TUBE BENDERS (METRIC)

Item	Description		
BTB300M	Tube Bender Set (7 Benders) includes all parts indicated below. (not BTBX16M)		
REPLACEMENT PARTS			
Metric	Mandrels	BTBX6M	6 mm O.D.
		BTBX8M	8 mm O.D.
		BTBX10M	10 mm O.D.
		BTBX12M	12 mm O.D.
		BTBX15M	15 mm O.D.
		BTBX16M	16 mm O.D. Optional for BTB300M
		BTBX18M	18 mm O.D.
		BTBX22M	22 mm O.D.
BTBXHM	Ratchet Tool, Metric		
BTBXA1	6-10 mm Shoe Arm		
BTBXA2	12 - 22 mm Shoe Arm		
BTBXR1	Reverse Bender Mandrel Arm		
BTBXR2	Reverse Bender Shoe Arm		

"O.D." = Outside Diameter (of tube)

BLACKMAX® TUBE BENDERS (IMPERIAL)

Item	Description		
BTB300	Tube Bender Set (7 Benders) includes all parts listed below:		
REPLACEMENT PARTS			
Imperial	Mandrels	BTBX14	1/4" O.D.
		BTBX516	5/16" O.D.
		BTBX38	3/8" O.D.
		BTBX12	1/2" O.D.
		BTBX58	5/8" O.D.
		BTBX34	3/4" O.D.
		BTBX78	7/8" O.D.
		BTBXH	Ratchet Tool
BTBXA1	1/4"-3/8" Shoe Arm		
BTBXA2	1/2"-7/8" Shoe Arm		
BTBXR1	Reverse Bender Mandrel Arm		
BTBXR2	Reverse Bender Shoe Arm		

"O.D." = Outside Diameter (of tube)

BLACKMAX® IMPERIAL LEVER TUBE BENDERS

- Patented 2-position handle
- Available in Imperial or metric
- For soft copper, aluminum tube
- Double hinged bending arms for tight quarters
- Two pull points for smooth, easy bends
- Bends from 0° to 180°
- Packaging: Color box



BTB06
 Tube O.D. 3/8"
 Mandrel Color Violet
 Inside Radius Of Bent Tube 15/16"
 Bender Overall Length 15"

BTB10MM Metric for 10 mm O.D. Tube



BTB08
 Tube O.D. 1/2"
 Mandrel Color Gold
 Inside Radius Of Bent Tube 1-1/2"
 Bender Overall Length 20"

BTB12MM Metric for 12 mm O.D. Tube



BTB10
 Tube O.D. 5/8"
 Mandrel Color Blue
 Inside Radius Of Bent Tube 2-1/4"
 Bender Overall Length 29"



BTB12
 Tube O.D. 3/4"
 Mandrel Color Green
 Inside Radius Of Bent Tube 3"
 Bender Overall Length 32"



BTB14
 Tube O.D. 7/8"
 Mandrel Color Purple
 Inside Radius Of Bent Tube 3-1/4"
 Bender Overall Length 32"

BTB15MM Metric for 15 mm O.D. Tube

BTB16MM Metric for 16 mm O.D. Tube

BTB18MM Metric for 18 mm O.D. Tube

CPS® TUBE BENDING TOOLS



TB368
UNIVERSAL TUBE BENDER
 • Triple head lever type tube bender 1/4", 5/16", 3/8" (6, 8, 10 mm)
 • For soft copper, aluminum and thin wall steel tubing



SPRING TYPE TUBE BENDERS
 • For soft copper and aluminum tubing
 • Special spring steel with zinc finish
 • Hand bend tubing to any shape without collapsing walls

• End bell design for quick removal of tubing

- TBS04** 1/4" Spring Tube Bender
- TBS05** 5/16" Spring Tube Bender
- TBS06** 3/8" Spring Tube Bender
- TBS08** 1/2" Spring Tube Bender
- TBS10** 5/8" Spring Tube Bender
- TBS12** 3/4" Spring Tube Bender

LEVER TUBE BENDERS (METRIC)

Metric	Item	Description
	BTB10MM	Lever Tube Bender, for 10 mm O.D. Tube
	BTB12MM	Lever Tube Bender, for 12 mm O.D. Tube
	BTB15MM	Lever Tube Bender, for 15 mm O.D. Tube
	BTB16MM	Lever Tube Bender, for 16 mm O.D. Tube
	BTB18MM	Lever Tube Bender, for 18 mm O.D. Tube

"O.D." = Outside Diameter (of tube)

LEVER TUBE BENDERS (IMPERIAL)

Imperial	Item	Description
	BTB06	Lever Tube Bender, for 3/8" O.D. Tube
	BTB08	Lever Tube Bender, for 1/2" O.D. Tube
	BTB10	Lever Tube Bender, for 5/8" O.D. Tube
	BTB12	Lever Tube Bender, for 3/4" O.D. Tube
	BTB14	Lever Tube Bender, for 7/8" O.D. Tube

"O.D." = Outside Diameter (of tube)

BLACKMAX® SWAGING TOOLS



BTLH5E BLACKMAX®
HYDRAULIC TUBE EXPANDER KIT
 • Hydraulic power- the easiest way to swage tubing!
 • Includes hydraulic tool, plus 5 quick change, color coded expander heads and tube reamer
 • Five heads for expanding 3/8", 1/2", 5/8", 3/4", 7/8" O.D. soft copper or aluminum tube
 • Expander heads and replaceable blades are interchangeable with BLACKMAX BTLE9
 • Cast aluminum body with durable, rubber grip handle.
 • Extra storage for additional expander heads



BTLE9 BLACKMAX®
TUBE EXPANDER KIT
 • Swaged ends means less couplings & less refrigerant leaks
 • Imperial or metric
 • For soft copper and aluminum tube
 • Nine quick-change tube expanders
 • Durable, color-coded, aluminum heads
 • Compact, professional, patented design
 • Expander heads are interchangeable with #BTLH5E
 • Strong carrying case
 • Packaging: Color box

REPLACEMENT PARTS
 BTLEXH Tube Expander (Replacement Tool)



REPLACEMENT EXPANDER HEADS INCLUDED WITH BTLH5E AND BTBTLE9

Size	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1-1/8"
Color	Chrome	Copper	Red	Yellow-Orange	Blue	Green	Red-Violet	Black	Pink
CPS#	BTLEX14	BTLEX516	BTLEX38	BTLEX12	BTLEX58	BTLEX34	BTLEX78	BTLEX1	BTLEX118

**BTLE9M
TUBE EXPANDER KIT**

- *D = Version with 16mm and 35mm instead of 15mm and 32mm expander head



BLACKMAX® TUBE EXPANDERS (METRIC)		
Item	Description	
BTLE9M (-D*)	Tube Expander Set (9 Heads) includes all parts listed below:	
REPLACEMENT PARTS		
BTLEXH	Tube Expander (Replacement Tool)	
Metric Expander Heads	BTLEX6M	6 mm (Standard in BTLE9M)
	BTLEX8M	8 mm (Standard in BTLE9M)
	BTLEX10M	10 mm (Standard in BTLE9M)
	BTLEX12M	12 mm (Standard in BTLE9M)
	BTLEX15M	15 mm (Standard in BTLE9M)
	BTLEX16M*	16 mm (only included in -D version)
	BTLEX18M	18 mm (Standard in BTLE9M)
	BTLEX22M	22 mm (Standard in BTLE9M)
	BTLEX28M	28 mm (Standard in BTLE9M)
	BTLEX32M	32 mm (Standard in BTLE9M)
BTLEX35M*	35 mm (only included in -D version)	

BLACKMAX® TUBE EXPANDERS (IMPERIAL)		
Item	Description	
BTLE9	Tube Expander Set (9 Heads) includes all parts listed below:	
REPLACEMENT PARTS		
BTLEXH	Tube Expander (Replacement Tool)	
Imperial Expander Heads	BTLEX14	1/4" (Standard in BTLE9)
	BTLEX516	5/16" (Standard in BTLE9)
	BTLEX38	3/8" (Standard in BTLE9)
	BTLEX12	1/2" (Standard in BTLE9)
	BTLEX58	5/8" (Standard in BTLE9)
	BTLEX34	3/4" (Standard in BTLE9)
	BTLEX78	7/8" (Standard in BTLE9)
	BTLEX1	1" (Standard in BTLE9)
	BTLEX118	1 1/8" (Standard in BTLE9)

BLACKMAX® TUBE EXPANDERS (METRIC)		
Item	Description	
Metric	REPLACEMENT PARTS	
	BTLEX6MB	6 mm
	BTLEX8MB	8 mm
	BTLEX10MB	10 mm
	BTLEX12MB	12 mm
	BTLEX15MB	15 mm
	BTLEX16MB*	16 mm
	BTLEX18MB	18 mm
	BTLEX22MB	22 mm
	BTLEX28MB	28 mm
	BTLEX32MB	32 mm
	BTLEX35MB*	35 mm

BLACKMAX® TUBE EXPANDERS (IMPERIAL)		
Item	Description	
Imperial	REPLACEMENT PARTS	
	BTLEX14B	1/4"
	BTLEX516B	5/16"
	BTLEX38B	3/8"
	BTLEX12B	1/2"
	BTLEX58B	5/8"
	BTLEX34B	3/4"
	BTLEX78B	7/8"
	BTLEX1B	1"
	BTLEX118B	1 1/8"

BLACKMAX® FLARING TOOLS

BLACKMAX® TUBE FLARING TOOLS		
Item	Description	
Imperial	BFT 850	Tube Flaring Tool, Imperial Eccentric 7 Position for: 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O.D. Tube
Metric	BFT 850M	Tube Flaring Tool, Metric Eccentric 7 Position for: 6, 8, 10, 12, 15, 16, 18 mm O.D. Tube

"O.D." = Outside Diameter (of tube)



- BFT850 BLACKMAX® FLARING TOOL**
- For 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O.D. tube
 - Aluminum body is 50% lighter than steel designs
 - Internal clutch indicates when formed flare is complete
 - Seven quick-change positions for flaring soft copper and aluminum

- tube
- Compact, professional, patented design
- Eccentric hardened steel cone forms precise 45° flared ends
- Durable, molded carrying case
- Built in slide gauge for fast tube height adjustment
- Durable molded storage case
- Packaging: Color box



**BFT850D
BLACKMAX® MANUAL OR
DRILL- POWERED FLARING TOOL**

- Use with or without cordless drills
- For 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O.D. tube
- Aluminum body is 50% lighter than steel designs
- Internal clutch indicates when formed flare is complete
- Quick change removable and interchangeable handles
- Dramatically reduces time to create a precise flare

- Seven quick change positions for flaring soft copper and aluminum tube
- Built in slide gauge for fast tube height adjustment
- Eccentric hardened steel cone forms precise 45° flared ends
- Built-in clutch prevents over-compression
- Compact, professional, patented design
- Includes 1/4" Driver Bit
- Durable molded storage case
- Packaging: Color box



Quick change



Sliding depth gauge sets tube at exact height



Eccentric forming cone for easier flaring



Molded storage case



Interchangeable/removable handles



NEW



**BFT850DR
BLACKMAX® RATCHET OR
DRILL- POWERED FLARING TOOL**

- Innovative ratchet handle dramatically reduces time to make flares
- Remove ratchet handle and use with cordless drill for fastest flaring
- Innovative sight gauge shows if formed flare is correct size
- Redesigned, stronger collar for longer tool life
- For 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O.D. tube
- Aluminum body is 50% lighter than steel designs

- Quick change removable and interchangeable handles
- Seven quick change positions for flaring soft copper and aluminum tube
- Slide gauge set tube at exact position before flaring
- Eccentric hardened steel cone forms precise 45° flared ends
- Built-in clutch prevents over-compression
- Compact, professional, patented design
- Includes 1/4" Driver Bit
- Durable molded storage case
- Packaging: Color box



Ratchet handle with forward and reverse speeds flaring



Use with or without cordless drill for fastest flaring



Sliding depth gauge sets tube at exact height



Laser etched sight gauge verifies proper flare



NEW

**BFTXR
BLACKMAX® RATCHET HANDLE
ACCESSORY**

- Innovative ratchet handle dramatically reduces time to make flares
- Knurled forward/reverse thumbwheel selector
- Included with BFT850DR
- Optional accessory for use with BFT850D

**BFT850K
BLACKMAX® FLARING TOOL KIT**

- For 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O.D. tube

INCLUDES

- #BFT850 Flaring Tool
- #FTXSG Reversible R410A Flare Size Gauge
- #BTLDB3 Deburring Tool
- #BTC300 Premium Tube Cutter
- Durable, molded carrying case
- Packaging: Color box



NEW

**BFS300QC
BLACKMAX® FLARING & SWAGING
TOOL**

- Seven quick change positions for flaring soft copper and aluminum tube
- For flaring 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O.D tube
- Six quick change positions for swaging soft copper and aluminum tube
- For swaging 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O.D tube
- Hardened, 12 sided cone forms precise 45 flared ends
- Slide gauge sets tube at exact position before flaring
- Aluminum body- 50% lighter than steel designs
- Compact, professional patented design
- Durable molded storage case
- Packaging- Color box



Swages and flares



Quick change flaring and swaging heads



12 sided flaring cone



Swaging head

FT800FN**R-410A IMPERIAL CONCENTRIC FLARING TOOL & RATCHET**

- Clutch driven flaring tool with ratchet and case for 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O.D. tubing
- Unique clutch driven feed screw and eccentrically mounted cone produces uniform, clean flare walls without galling
- Engineered specifically to create stronger flare joints for higher pressure R-410A systems
- Innovative 3/8" square drive incorporated directly in yoke handle for use of ratchet
- Rugged polyethylene storage case included

**FT195 45°****IMPERIAL FLARING TOOL**

- Flares 7 of the most common sizes of tubing from 3/16" to 5/8" (5 to 16 mm)
- Rugged forged steel slip-on yoke and hardened flaring bar
- Chrome finished flaring cone forms better flares with less effort
- Positive grip flaring bar eliminates tube movement

**FT500****45° FLARING/BURNISHING TOOL**

- FT500 Imperial tool for 3/16" 3/16" 1/4", 5/16", 3/8", 1/2", 5/8"

**FT525****45° UNIVERSAL ADJUSTABLE FLARING TOOL**

- Flares from 3/16" to 5/8" (5 to 16 mm)
- Unique faceted flaring cone automatically burnishes flare face during operation
- Produces perfect 45° flares while maintaining thickness at base of flare
- Rugged forged steel slip-on yoke
- Compact design ideal for use in tight quarters

**FS275****45° FLARING & SWAGING KIT**

- Rugged forged steel slip-on yoke and hardened flaring bar
- Chrome finished flaring cone forms better flares with less effort
- Positive grip flaring bar eliminates tube movement
- Easy operation with professional results

FTXSG**R410A FLARE SIZE GAUGE**

- 1/4", 6.4 mm
- 3/8", 9.5 mm
- 1/2", 12.7 mm
- 5/8", 15.9 mm
- 3/4", 19.1 mm



WRENCHES

BTLDTW

BLACKMAX® DIGITAL TORQUE WRENCH

Ideal for HVAC mini-split installations or where OEM-specified torque settings are critical, the BlackMax digital torque wrench exceeds the capabilities of mechanical-only torque wrenches by offering a variety of user-friendly features in a lightweight, durable and ergonomic housing.

Large display numbers prevent misreading torque data, a common problem when using wrenches without digital displays. View “Peak” and “Track” torque data with audible (tone), visual (LED) and tactile (vibration) “torque alerts” to prevent over-tightening by providing advance warning when approaching or exceeding predefined torque settings.

Operates on 2 AAA batteries (included).

FEATURES

- Ensures OEM torque setting compliance
- Ideal for HVAC mini-split installations
- Jaw opening: 3/16” to 1-7/16” (5 to 35mm)
- Torque settings: Lbf.ft, Lbf.in, N-m, Kgf.m
- Pre-set and actual torque values:- View both same time
- LED Torque Alerts: Green= within 50-98%, Red= within 2%
- Memory Presets: 5 factory programmed, 5 open to enter custom torque values
- Track mode: View real-time torque value during use
- Peak mode: Maximum torque value reached is stored temporarily
- Auto-Off (Selectable): Conserves battery life
- Display: Backlight
- Owner’s Manual: Included



Molded Storage Case



Color Box



SPECIFICATIONS

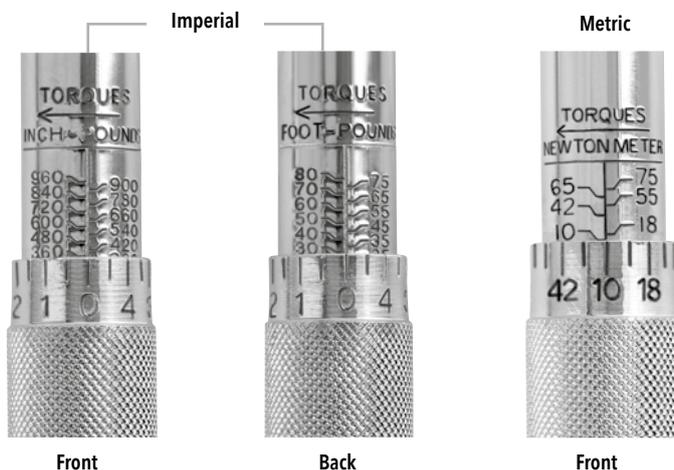
Torque Units (Selectable)	Lbf.ft	Lbf.in	N-m	Kgf.m
Torque Measurement Range	6-63	71-752	8-85	1-8
Display Resolution	0.1 Lbf.ft	1.0 Lbf.in	0.1 N-m	0.1 Kgf.m
Accuracy	± 2% clockwise and counter-clockwise of reading, 10% to 100% of full scale			
Jaw Opening	3/16” - 1-7/16” (5 - 35 mm)			
Operating Voltage	3V (2 x AAA batteries, supplied)			
Operating Temperature	32°F~104°F (0°C ~ 40°C)			
Storage Temperature	-4°F ~113°F (-20°C ~ 45°C)			
Wrench (+ Case) Weight	2.79 lb (1.27 kg)			
Wrench Length	15.25” (0.387 m)			
Green LED Flashes	Within 50% to 98% of programmed torque (in Peak or Track mode)			
Intermittent Tone	Within +/- 5N-m of programmed torque value			
Red LED On	Within 2% of programmed torque value			
Faster Tone	Within +/- 2 N-m of programmed torque value			
Continuous Tone + Constant Green LED & Handle Vibrates	When >2% over programmed torque value			
Display Constant On:	Battery life = approx. 120 hours			
Display & Backlight Constant On:	Battery life = approx. 96 hours			

PRO-SET®

MECHANICAL TORQUE WRENCHES

Professional interchangeable jaw torque wrench sets ensure compliance with OEM torque settings for high pressure systems.

- SAE (Inch) or Metric Sets: Both include 6 sizes of interchangeable ends
- Polished chrome finish
- Provides consistently accurate readings and rugged, trouble-free performance
- Includes easy instructions sheet and molded storage case



TLTWSAE

PRO-SET® IMPERIAL TORQUE WRENCH SET

- Inch wrench settings in inch-pounds (60-960) or foot-pounds (5-80)
- Includes: SAE multi-head torque wrench set with handle, heads and case (5/8", 11/16", 13/16", 15/16", 1-1/16", 1-5/16")

REPLACEMENT PARTS

- TLXTWSAE Complete Set of (6) SAE Wrench Heads
- TLXTWSAEW SAE Torque Wrench Handle

TLTWSM

PRO-SET® METRIC TORQUE WRENCH SET

- Metric wrench settings in newton-meters (10-75)
- Includes: metric multi-head torque wrench set with handle, heads and case (17, 22, 24, 26, 27, 29 mm)

REPLACEMENT PARTS

- TLXTWM Complete Set of (6) Metric Wrench Heads

PRO-SET WRENCHES

PRO-SET® ADJUSTABLE JAW HANDLE WRENCHES

- Precision machined for smooth operation
- Comfortable grip, permanently molded rubber handles reduces fatigue
- Durable and environment-resistant
- With printed display card
- Packed in clear sealed clamshell
- One year warranty
- Jaw opening (inch marks) on front



	TLAW06	TLAW08	TLAW10	TLAW12
Size	6"	8"	10"	12"
Jaw capacity	1" (25 mm)	1-1/4" (30 mm)	1-3/8" (35 mm)	1-1/2" (40 mm)

PRO-SET SERVICE WRENCHES



TLSWL
SHAPE □◇

- Large, straight. Square & hex ratchet drive
- 3/16", 1/4" Square Drive
- 1/2", 9/16" Hex Drive
- Embossed fractions and logo
- Durable, high quality, polished chrome finish
- TLSWLB In Bulk (100 pcs)



TLSWO
SHAPE □

- Small, offset. Square ratchet drive
- 3/16", 1/4", 5/16", 3/8" Square Drive
- Offset 25 degree ends
- Embossed fractions and logo
- Durable, high quality, polished chrome finish
- TLSWOB In Bulk (100 pcs)
- TLSWOA Wrench plus 3/16" & 5/16" Hex Driver Bit



TLSWS
SHAPE □

- Small, straight. Square ratchet drive
- 3/16", 1/4", 5/16", 3/8" Square Drive
- Embossed fractions and logo
- Durable, high quality, polished chrome finish
- TLSWSB In Bulk (100 pcs)
- TLSWSA Wrench plus 3/16" & 5/16" Hex Driver Bit

PRO-SET HEX, TORX, BALL END FOLDING WRENCHES

TLSWHB Combo Set: Includes TLSWH (Inch Hex Key) & TLSWB (Inch Ball Point Key Set)



TLSWH
SHAPE ◇

- Hex ends (Inch)
- Nickel Plated
- 5/64", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"
- Clamshell packaging with display card



TLSWHM
SHAPE ◇

- Hex ends (Metric)
- Nickel Plated
- 1.5, 2, 2.5, 3, 4, 5, 6, 8 mm
- Clamshell packaging with display card



TLSWT
SHAPE ☆

- Torx ends
- Nickel Plated

PRO-SET® SAFEMATE™ HOSES

SafeMate™ Hoses

HP5NG



DESCRIPTION

- All Hoses Feature – A solid brass “T” shaped SafeMate Valve on one end, and an open, straight Brass Valve Nut on the other.
- SafeMate Valves – Have a screw down core depressor that activates refrigerant flow after the Brass Valve Nut has been fully tightened onto a service port. This prevents refrigerant from escaping into the atmosphere.
- Red, Yellow Or Blue Offset Knobs – Keep hands away from the service port and help prevent refrigerant burns.
- Swivel “T” Valve – Once attached, the innovative “T” valve swivels above the Brass Valve Nut so it won’t loosen if a hose is moved during use.
- Hose Barrier Lining – Minimizes refrigerant loss vs conventional hoses.

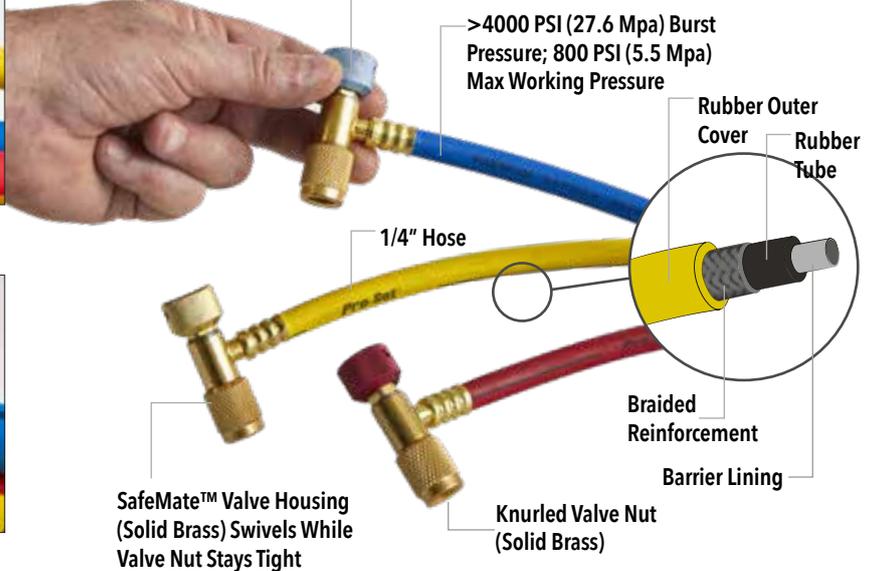


SAE Female SafeMate™ Valves



SAE Female Fittings

Knurled Solid Aluminum Knobs (Anodized) Keeps Fingers Away From Subzero Refrigerant



HOSE SPECIFICATIONS	#HP5NG	#HK5NG	#HJ5NG
Straight Fitting (Solid Brass, Aluminum Knob)	1/4" SAE Female	1/4" SAE Female	5/16" Female
SafeMate Fitting (Solid Brass, Aluminum Knob)	1/4" SAE Female	5/16" SAE Female	5/16" SAE Female
Hose Permeation Rate	≤1.01 Lbs/SqFt/Year (≤4.9 Kg/m2/Year)		
Burst Pressure	≥4000 psi (27.6 Mpa)		
Maximum Working Pressure	800 psi (5.51 Mpa)		
Tensile Pull (Per SAE J2196 and SAE J2888)	Minimum pull force to separate hose from coupling: 120 Lbs (≥534 N)		
Refrigerant Compatibility	CFC, H/CFC, HFC, HFO & R410a, R134a, R1234yf		
Patents	Taiwan: #1637133; Japan: #640222; China: #201710540651		
Replacement Gaskets for Straight End (10 Packs)	HX14G	HX14G	HX516G
Replacement Gaskets for Valve End (10 Packs)	HX145126G	HX14516G	HX14516G
Replacement O-Rings for Valve End (10 Packs)	HX14OR	-	-

PRO-SET® REFRIGERANT SERVICE HOSES

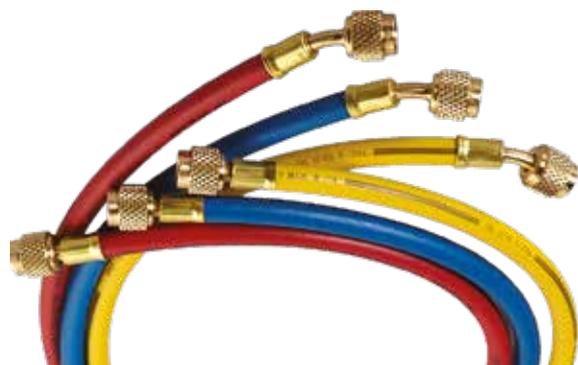
PREMIUM REFRIGERANT SERVICE HOSES

- UL recognized assemblies (File SA11622)
- Nylon permeation barrier (meets SAEJ2196 requirements for CFC, HCFC and HFC refrigerants)
- Rated for 4000 psi minimum burst and 800 psi maximum working pressure
- Extra deep knurling on nuts for easy grip
- Adjustable valve core depressor
- Made in USA

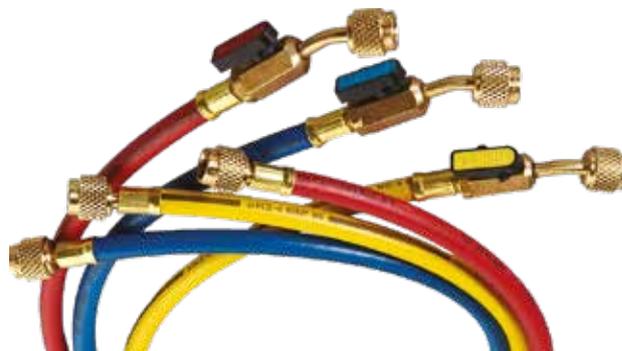
STANDARD REFRIGERANT SERVICE HOSES

- Rated for 3000 psi minimum burst and 750 psi maximum working pressure

1/4" Hoses for all refrigerants



1/4" Hoses w/45° ball valve on end

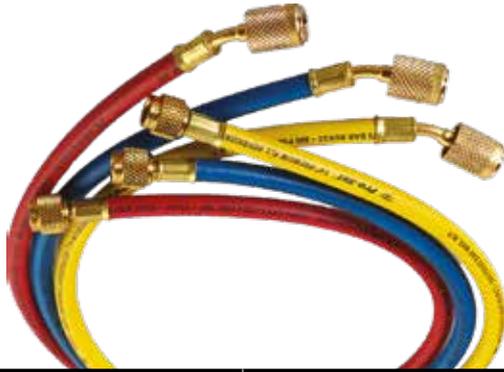


	PREMIUM	STANDARD
3' (90 cm)	HP3Y	HS3Y
	HP3B	HS3B
	HP3R	HS3R
	HP3	HS3
4' (120 cm)		HS4Y
		HS4B
		HS4R
		HS4
5' (150 cm)	HP5Y	HS5Y
	HP5B	HS5B
	HP5R	HS5R
	HP5	HS5
6' (180 cm)	HP6Y	HS6Y
	HP6B	HS6B
	HP6R	HS6R
	HP6	HS6

	PREMIUM	STANDARD
	HP3YE	HS3YE
	HP3BE	HS3BE
	HP3RE	HS3RE
	HP3E	HS3E
	HP5YE	HS5YE
	HP5BE	HS5BE
	HP5RE	HS5RE
	HP5E	HS5E
	HP6YE	HS6YE
	HP6BE	HS6BE
	HP6RE	HS6RE
	HP6E	HS6E

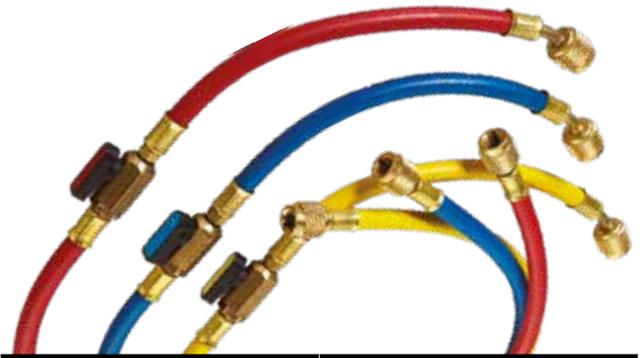
*Non-stock item (made to order). Call Customer Service for price and lead time.

1/4" Hoses w/Microseal™ anti-blowback valve



	PREMIUM	STANDARD
3' (90 cm)	HP3YA	HS3YA
	HP3BA	HS3BA
	HP3RA	HS3RA
	HP3A	HS3A
5' (150 cm)	HP5YA	HS5YA
	HP5BA	HS5BA
	HP5RA	HS5RA
	HP5A	HS5A
6' (180 cm)	HP6YA	HS6YA
	HP6BA	HS6BA
	HP6RA	HS6RA
	HP6A	HS6A

1/4" In-line ball valve hoses



	PREMIUM	STANDARD
	HP3YL	HS3YL
	HP3BL	HS3BL
	HP3RL	HS3RL
	HP3L	HS3L
	HP5YL	HS5YL
	HP5BL	HS5BL
	HP5RL	HS5RL
	HP5L	HS5L
	HP6YL	HS6YL
	HP6BL	HS6BL
	HP6RL	HS6RL
	HP6L	HS6L

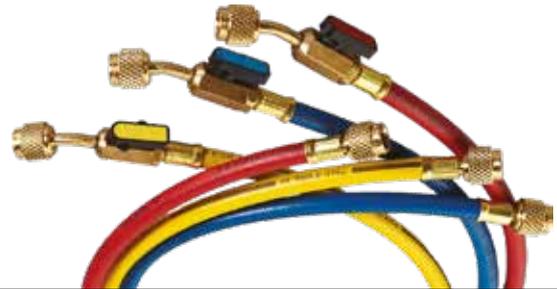
*Non-stock item (made to order). Call Customer Service for price and lead time.

R-410A Hose w/special 1/2"-20 Unf fittings



	PREMIUM
3' (90 cm)	HJ3Y*
	HJ3B*
	HJ3R*
	HJ3*
5' (150 cm)	HJ5Y*
	HJ5B*
	HJ5R*
	HJ5*

w/45° ball valve fitting



	PREMIUM
	HJ3YE*
	HJ3BE*
	HJ3RE*
	HJ3E*
	HJ5YE*
	HJ5BE*
	HJ5RE*
	HJ5E*

*Non-stock item (made to order). Call Customer Service for price and lead time.

PRO-SET® HOSE EXTENSIONS

PREMIUM BALL VALVE HOSE EXTENSIONS

- Nylon permeation barrier (Meets SAE J2196)
- Leak-proof 8-sided crimp
- 800 Psi working pressure
- 4000 Psi burst pressure
- Extra deep knurling for easy grip
- Adjustable valve core depressor
- Blow off grooves (prevents spray back)
- R-410A compatible, as well as CFC, HCFC and HFC refrigerants and blends



1/4" SAE	
6" (15,2 cm)	12" (30,5 cm)
HTYE	HT1YE
HTBE	-
HTRE	-
HTE	-

PRO-SET® PREMIUM BARRIER CHARGING HOSES

1/4" Hoses

w/45° ball valve on end

HP5BKEZ3



HP5BKZ3



PREMIUM BARRIER CHARGING HOSES WITH 1/4" SAE FITTINGS

	HP5BKEZ3	HP5BKZ3	HP5BKAZ3	HP5BKEZ	HP5BKZ
Length	5 ft.				
Hose Ends	Straight & BV (RYB)	Straight	Straight & ABB	Straight & BV	Straight
Qty Hoses	3	3	3	1	1
Neoprene Gaskets	✓				
Permeation Barrier	Nylon				
Working Pressure	800 psig				
Burst Rating	4000 psig				
Ferrule Finish	Bright Nickel				
Crimp	8 Sided				
Qty/Pack	3	3	3	1	1

PRO-SET® HEAVY DUTY VACUUM HOSES



HV5Z
(Chrome ends)



HV6

	HV5	HV5E	HV5Z	HV6	HV6E
Length	5 ft.			6 ft.	
Hose I.D.	5/16"				
Hose Color	Black				
Hose Ends	Straight	BV, Straight	Straight (Chrome ends)	Straight	BV, Straight
Neoprene Gaskets	✓				
Working Pressure	460 psig				
Burst Rating	2300 psig				
Ferrule Finish	Deep Knurl, Brass				
Crimp	8 Sided				
Qty/Pack	1				

COMPACT BALL VALVES

Pro-Set premium ball valves can be added to any existing hose to eliminate refrigerant loss and comply with EPA regulations.

- Easy 1/4 turn open/close with rugged plastic composite color-coded handles
- Oversized chrome ball for smooth operation and non-restrictive flow
- Individual valves include all three color-coded handle inserts



Part No.	Qty/Pk	Female	Male	Other
BV	1	1/4" SAE	1/4" SAE	Straight
BV3	3	1/4" SAE	1/4" SAE	Straight
BV38	1	3/8" SAE	3/8" SAE	Straight

FPT: female (internal) National Pipe Taper Threads
MPT: male (external) National Pipe Taper Threads



Part No.	Qty/Pk	Female	Male	Other
BV410A	1	5/16" (1/2" - 20 UNF)	1/4" SAE	Straight

FPT: female (internal) National Pipe Taper Threads
MPT: male (external) National Pipe Taper Threads



Part No.	Qty/Pk	Female	Male	Other
BV45	1	1/4" SAE 45°	1/4" SAE	45°
BV453	3	1/4" SAE 45°	1/4" SAE	45°

FPT: female (internal) National Pipe Taper Threads
MPT: male (external) National Pipe Taper Threads



Part No.	Qty/Pk	Female	Male	Other
BV90	1	1/4" SAE 90°	1/4" SAE	90°

FPT: female (internal) National Pipe Taper Threads
MPT: male (external) National Pipe Taper Threads



Part No.	Qty/Pk	Female	Male	Other
BVM	1	1/4" SAE	1/4" SAE	Straight

FPT: female (internal) National Pipe Taper Threads
 MPT: male (external) National Pipe Taper Threads

MICROSEAL™ QUICK COUPLERS

AB3



AB45



AB90



ABG18



AB41090A



AB410A



Part No.	Qty	Size	Description
AB3	3	1/4" SAE	Straight
AB45	1		45° female
AB90	1		90° female
ABG18	1	1/8"	FPT Adapter
AB41090A	1	1/4" SAE	90° female
AB410A	1		Straight

GASKETS & DEPRESSORS

R-134a Hose Gaskets Fits 1/2" Acme (10 Pk)

HXG



1/4" SAE Hose Core Depressors (10 Pk)

HXD



Microseal™ Antiblowback Gaskets (10 Pk)

HXGA



1/4" SAE Hose Gaskets and Core Depressors (6 Ea)

HXGD



(1/2"-20 UNF, 1/2" ACME Hose Gaskets (10 Pk)

HXG2



Hose Gaskets, 3/8" SAE Neoprene (10 Pk)

HX38A



1/4" SAE Teflon Replacement Hose Gaskets (10Pk)

HXTG



1/4" SAE Teflon Replacement Hose Gaskets (10Pk)

HX14G



5/16" SAE Teflon Replacement Hose Gaskets (10Pk)

HX516G



1/4" 5/16" SAE Teflon Replacement Hose Gaskets (10Pk)

HX14516G



1/4" Replacement Hose Rings (10Pk)

HX140R



5/16" Replacement Hose Rings (10Pk)

HX5160R



INSTRUMENTS



REFRIGERANT RECOVERY TANKS

TAKE CONTROL WITH TANKTRACKER™

Supply and recovery tank inventory management system exclusively from CPS

The Tank Tracker™ feature (Patent Pending), developed by CPS Products, Inc., provides a convenient way to manage and track your inventory of refrigerant supply and recovery tanks in the field. Tank Tracker is included within the CPS Link app (U.S. Patent) and it allows technicians to set up an electronic inventory of all their supply and recovery tanks.

Information such as tank size, type and amount of refrigerant contained in each can be entered. Tank Tracker will then record the addition or subtraction of refrigerant from a tank, along with the date, place and time the tank was used, as well as the name of the job and the customer it was used for. All of this information can be e-mailed to clients,

technicians, a home office, or others. The Tank Tracker feature is available when the CPS Link app has been activated, and any CPS wireless scale has been paired to a mobile device. This allows technicians to perform programmable charging or recovery.

For automatic charging or recovery, pair any CPS wireless scale and the SVW Wireless Solenoid Valve to a mobile device running the CPS Link app. The SVW will turn ON or OFF to automatically control refrigerant flow.

Log refrigerant usage/
disposal per EPA
requirements

Track who, when,
where and how much
refrigerant is used on
every job



T-12L



Bluetooth® SVW WIRELESS SOLENOID VALVE

The SVW is a compact, battery operated solenoid valve with 1/4" SAE IN/OUT male ports that open and close in 100 milliseconds to control refrigerant flow. Operate it manually, or in automatic mode for more precise control. Works with all CPS wireless scales using our patented CPS Link™ technology.

- Operate manually for instantaneous On/Off control of refrigerant.
- Or, pair to any CPS wireless scale for automatic, precise control of refrigerant during service routines.
- Saves time, reduces cost and extends service equipment life
- Compatible with all common CFC, HFC, HCFC, HFO refrigerants and blends
- Operates with CPS Link app
- Designed by CPS Products, Inc. in USA

SPECIFICATIONS

Transmission Range (Line Of Sight)	Up to 150 feet
Continuous Battery Life	Up to 500 hours
Maximum Working Pressure	500 Psig (34.5 Bar)
IN/OUT Fittings	Brass, 1/4 SAE male
Approvals	FCC, IC, CE
Dimensions	3" x 2-3/4" x 4.5" (76 x 70 x 114mm)
Packaging	Color box
Warranty	2 Years

Built-in clip for attaching to refrigerant tank



RECOVER & CHARGE



SVW



CHARGING SCALES



Bluetooth®
CC840W

COMPUTE-A-CHARGE WIRELESS SCALE

- 240lb (110kg) capacity
- Accuracy of 0.015% of reading [or 0.25oz (10g) whichever is greater]
- 25cm x 25cm platform
- Programmable solenoid
- Fully controllable through app



Bluetooth®
CC220EW

ENHANCED WIRELESS REFRIGERANT CHARGING SCALE

- 220 lb (100 kg) capacity
- Accurate to 0.015% of Reading [or \pm selected resolution, whichever >]
- 4 adjustable resolution settings
- 8.75" (22.3 cm) square platform
- 7 button corded/wireless control - For manual or programmable operation
- Mobile device control - For added functions, including Tank Tracker™
- Audible and visual alarms for use during charging and recovery



CC800A

PROGRAMMABLE REFRIGERANT CHARGING SCALE

- 220 lb (100 kg) capacity
- Accurate to 0.015% of Reading [or \pm 0.25 oz (10 g) whichever is greater]
- 0.25 oz (10 g) resolution
- 8.75" (22.3 CM) square aluminum platform.
- Programmable for automatic charging or recovery via built-in solenoid valves
- 7 button corded control
- Hard storage case
- Designed by CPS Products, Inc. in USA



Model #	CC840W	CC220	CC220EW	CC800A
Maximum Load	240 lb (110kg)	220 lb (100 kg)		
CONTROLS				
Control to Scale Connection	No controls. Is fully managed through the App	Flexcord	Flexcord or Wireless (CPS Link™)	Flexcord
Control Mount	-	Magnet back & 360 swivel hook		
Control Buttons (Physical Functions)	n/a	3 (On/Off, Lb/Kg, Tare)	7 (On/Off, Lb/Kg, Tare, Go/Hold, Increase, Set/Reset, Decrease)	
Tare (Empty) Weight Mode	Yes			
Programmable Solenoid	Yes	Pair with Wireless SVW	n/a	Yes
Auto Power Off Feature (ENABLED)	-	Display Turns OFF After 10 Minutes Inactivity	Default = Display Turns OFF After 10 Minutes Inactivity (Can re-set in increments of 5, 10, 15, 30, 60 mins or OFF)	10 mins (if weight on platform does not change by more than 1oz (30g) within 10 mins).
Auto Power Off Feature (DISABLED)	-	Display shows "APO OFF" at power up [Display will be constant ON]		
Smart Awake	-	Scale displays last weight measurement at time of Auto-Off, updated to current value		
CHARGE/RECOVER ALARMS				
Charge/Recover Alarm	n/a		Audible & visual alarms during charge and recovery	Continuous beep during charge
WIRELESS				
Wireless Connectivity	Yes	n/a	Yes	n/a
Transmission Range	30 ft (unobstructed)	n/a	150' (45.7m) direct line of sight	n/a
Frequency Range	30 ft (unobstructed)	n/a	2.4 GHz, ISM Band (Worldwide)	n/a
BATTERY				
Power Source	4A batteries (included)	(1 or 2) 9V Alkaline (2 Included)	Hand Control: (2) 9V Alkaline (Included)	
Continuous Battery Life	Up to 75 hours	One 9V = 75 hrs; Two 9V = 150 hrs.	One 9V = 50 hrs; Two 9V = 100 hrs.	30 Hrs
Battery Status Indicator	-	2 Segment Battery Icon	3 Segment Battery Icon	4 Segment Battery Icon
LCD DISPLAY				
Units (Weight) Readout	lb & oz, or kg & gm			
Weight Accuracy	0.015% of Reading [or ± 0.25 oz (10 g) whichever >]	0.015% of Reading [or ± 0.25 oz (10 g) whichever >]	0.015% of Reading [or ± selected resolution whichever >]	0.015% of reading, or ± 0.25 oz/10 gm (whichever greater)
Display Resolution (Increments)	-	0.25 Oz (10 g)	Selectable: 0.1 Oz (2 g); 0.2 Oz (5g); 0.25 Oz (10 g); or 0.50 Oz (25g)	0.25 Oz (10 g)
WEIGHTS, DIMENSIONS, MATERIALS				
Platform Dimensions	25cm x 25cm	8.75" x 8.75" (22.3 x 22.3 cm)		
Scale Weight (With Case)	3.9kg	5.68 lb (2.6 kg)	5.62 lb (2.55 kg)	8.5 lb (3.9 kg)
Length Of Control Cord	n/a	6' (1.8 m), Extended		
Maximum Working Pressure	500 Psig (34,5 Bar)	n/a		500 Psig (34,5 Bar)
Maximum Operating Differential	485 Psig (33,5 Bar)	n/a		485 Psig (33,5 Bar)
Rubber Platform Cover	-	No		
Storage Case	-	Molded Case		
Overload Protection	Full electronic and mechanical	Mechanical (Internal Overload Stop)		
Operating Temperature Range	14°F to 122°F (-10°C to 50°C)	14°F to 122°F (-10°C to 50°C)		
Operating Humidity Range	0% to 95% (Non-Condensing)	0% to 95% (Non-Condensing)		
APPROVALS, CALIBRATION, WARRANTY				
Approvals	CE		FCC,IC,CE	CE
Calibrated To NIST Standards	Yes			
Declaration Of Conformity	-	EN 61326-1:2013, CISPR 11:2009/A1:2010	n/a	
Warranty	2 Year			

CLAMP METERS



VOLT-100

WIRELESS CLAMP POWER METER

- Use with or without the CPS Link app. Connects to Apple and Android smart phones & tablets via Bluetooth
- Power factoring to determine true power consumption
- Data logging of electrical readings
- Utility data feed calculates actual cost/hour of appliances
- CAT. III 1,000 V rating
- True RMS measurements
- Non-contact voltage tester
- Maximum Voltage: 750 V AC; 1000 V DC
- Autorange and manual measuring
- Measuring range overload protection
- Display auto-off
- Display back light
- Automatic polarity indication
- Max/Min and relative measuring function

MEASURE:

- Inrush current
- AC current
- Resistance
- AC/DC voltage Phase angle
- Harmonics
- Frequency
- Capacitance
- Duty cycle
- Diode connection

INCLUDES:

- 39" (1 m) test leads
- Durable storage case
- 9V battery
- Owner's manual
- 2 years warranty

SPECIFICATIONS

Data Logging	Up to 1,000 samples
Sampling Rate	1X/sec. for max of 16 mins., 40 secs.
Maximum Input Current	1000A AC
Maximum Input Voltage	750V AC (TRMS); 1000V DC
Wattage	3W/100W/4000W/10kW/100kW/750kW
AC Current	60A/600A/1000A
Inrush Current	60A/600A/1000A
Resistance	600Ω/6kΩ/60kΩ/600kΩ/6MΩ/60MΩ
Capacitance	9.999nF/99.99nF/999.9nF/9.999μF 99.99μF/999.9μF/9.999mF/99.99mF
Jaw Opening	1.6" (42mm) Max.
Size (H x W x D)	9.4" x 1.9" x 3.6" (238 x 50 x 92 mm)
Weight	0.92 lb (420 g)

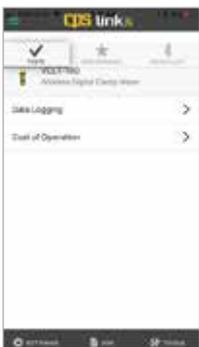


Clamshell package

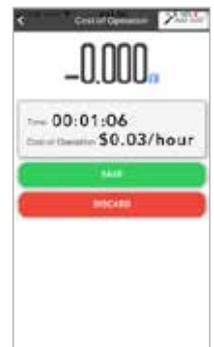


Included items

Screen Shots (When Paired To A Mobile Device Running The CPS Link App)



Data Logging Capability



Cost Of Operation Capability

AC750
DIGITAL CLAMP METER

The AC750 is a multi-functional AC/DC clamp meter and hosts an array of enhanced features such as ability to capture true inrush measurements and non-contact voltage detection.

- Versatile for testing AC/DC voltage, AC/DC current, resistance, capacitance, and frequency
- True RMS Measurement
- Inrush Current Measurement
- Relative Measurement
- Non-Contact Voltage Detection
- Auto & Manual Ranging
- Diode Open Voltage 3.2V
- MAX/MIN
- Data Hold
- Display 6000 Counts
- Jaw Opening: 1.6" (40mm)
- Auto Power Off
- Continuity Buzzer <50Ω
- Display Backlight
- Work Light
- Low Battery Display
- Secondary injection molded case, safety as per IEC1010 1000V CAT III

SPECIFICATIONS	
DC Voltage	60mV/600mV/6V/60V/600V
AC Voltage	60mV/600mV/6V/60V/600V
DC Current	60A/600A/1000A
AC Current	60A/600A/1000A
Inrush Current	60A/600A/1000A
Resistance	600Ω/6kΩ/60kΩ/600kΩ 6MΩ/60MΩ
Capacitance	10nF/100nF/1000nF/10μF 100μF/1000μF/10mF/100mF
Frequency (A)	100Hz/1000Hz
Frequency (V)	100Hz/1000Hz/10kHz
Frequency (Hz/Duty)	10Hz/100Hz/1000Hz/10kHz 100kHz/1000kHz/10MHz
Duty Cycle	0.1%~99.9%
Battery	9V battery
Dimensions (W,H,D)	8.8" x 3.4" x 1.3" (225 mm x 86 mm x 33 mm)
Weight	0.70 lb (320 g)



Clamshell package



Included items



Back view

DIGITAL GAUGES



SPECIFICATIONS	VG200W Bluetooth	VG200	PT200W Bluetooth
Description	Wireless Vacuum Gauge	Vacrometer Digital Vacuum Gauge	Wireless Pressure / Temperature Gauge
Accuracy	+/- 10% Of Reading	+/- 10% Of Reading	1% of reading ± 0.1PSIG (0.01 bar)
Display Type	Large, 5 digit LCD display with low battery indicator	5 digit LCD display with continual digital readout	LCD, 5 Digit
Display Auto-Off	After 10 minutes of no use	After 5 minutes of operation	10 minutes = default if no key pressed, no wireless connection, gauge not logging data
Operating Vacuum Range	Atmospheric pressure to 0 microns		n/a
Maximum Working Pressure	400 Psig		750 PSIG MWP, 3000 PSIG Burst
Operating Temperature Range	Compensated (Accuracy as stated): 32°F to 122°F (0°C to 50°C); Non-Compensated: Add +/- 0.5% error for every °C; Outside Compensated: -22° F to 158° F (-30° C to 70° C)		23 °F to 149 °F (-5 °C to 65 °C)
Storage Temperature	-22° F to 185° F (-30° C to 85° C)		-40 °F to 185 °F (-40 °C to 85 °C)
Operating & Storage Humidity	0 - 95%, Non-condensing		
Power Source	One 9V Alkaline Battery (ANSI 1604AC - IEC 6LR61), included		
Battery Life	20 hr continuous use		Up to 40 hours continuous use
Battery Indicator	Battery symbol with 3 segments	Battery symbol with 3 segment Power Level Bar Graph	Battery symbol with 3 segments
Mechanical Connection	Standard 1/4" Female SAE refrigerant hose with core depressor	Standard 1/4" female SAE refrigerant hose w/core depressor	1/8" NPT thread connection
			Standard 1/4" Female SAE refrigerant hose with core depressor



VG200 VACROMETER™ DIGITAL VACUUM GAUGE

- Advanced sensor design with self-heated thermistor bridge and automatic temperature compensation
- Field cleanable sensor designed to withstand 400 Psi of positive pressure
- Brass T adapter (AVT45), hanging hook (VGXH) and carrying case (VGXC) included with VG200
- Calibrated to strict NIST standards

for best-in-class accuracy and reliability

- Designed and manufactured in the USA with U.S. and globally sourced components

INCLUDES

- #AVT45 Brass Adapter
- #VGXH Swivel Hanging Hook
- #VGXC Padded Vinyl Storage Case

OPTIONAL

- #AVT45SS Stainless Steel Adapter

GAUGE ACCESSORIES



AVT45 Brass Adapter

- 1/4" SAE female knurl x 1/4" SAE male x 1/4" SAE male core



VGXH Swivel Hanging Hook

- For VG200, VG200W, PT200W



VG200W WIRELESS VACUUM GAUGE

The VG200W is a precision digital vacuum gauge for obtaining accurate pressure measurements during evacuations of HVAC and refrigeration systems. It is also ideal for obtaining vacuum data while conducting time, target, dynamic and static vacuum tests. The VG200W may be used as a standalone gauge, or it may be paired with a mobile device (using the free CPS Link app) for greatly enhanced jobsite capabilities.

FEATURES:

- Large, 5 digit LCD display with low battery indicator
- Easy 2 button control (On/Off and Units)
- Select from 4 different vacuum units (at any time).
- Atmospheric to 0 micron pressure range
- Auto-Off after 10 minutes of no use
- Operates up to 20 continuous hours on one 9V alkaline battery (included)
- Compatible with all refrigerant gases (including ammonia)
- Field cleanable sensor
- Includes stainless steel T connector, hanger hook, vinyl storage case, and Quick Start Guide - all packed in a clear clamshell
- Designed and manufactured in the USA with US and foreign components

WHEN USED WITH CPS LINK™ APP

- Choose from 8 different languages to work in
- Log vacuum test data (viewable in real time graphs)
- Client Lists- Enter and retain client information
- Job Checklist- Create and retain job reminders
- Job Tracker- Create and retain record of services performed
- Geolocation- Record where (global coordinates) and when (time stamp) jobs performed
- Set low and high alarms
- Cloud backup of data

INCLUDES

- #AVT45SS Stainless Steel Adapter
- #VGXH Swivel Hanging Hook
- #VGXC Padded Vinyl Storage Case



Bluetooth®

PT200W WIRELESS PRESSURE, TEMPERATURE GAUGE

The PT200W is a compact, portable instrument for accurately measuring and calculating HVAC/R data such as pressure, SuperHeat, SubCool, and temperature differential (tH-tL) that are critical to properly servicing HVAC/R equipment. Use the PT200W as a stand-alone gauge or pair with a mobile device to set up, store or e-mail client and job lists, jobsite data, invoices and other convenient, time saving features.

FEATURES:

- High & low temperature probe connections
- Take measurements directly from system access ports
- Large, 5 digit LCD display with low battery indicator
- Compatible with all refrigerant gases (including ammonia)
- Includes thermistor sensor (clamp, with 6 ft. lead), stainless steel T connector, hanger hook, double wall cloth storage case, and quick start guide - all packed in a clear clamshell
- Designed and manufactured in the USA with US and foreign components.

INCLUDES

- #AVT45SS Stainless Steel Adapter
- #VGXH Swivel Hanging Hook

WHEN USED WITH CPS LINK™ APP

- Client Lists - Enter and retain client information
- Job Checklist - Create and retain job reminders
- Job Tracker - Create and retain record of services performed
- Geolocation - Record where (global coordinates) and when (time stamp) jobs were performed
- Monitor readings remotely without refrigerant loss caused by manifolds and long hoses
- Share/Send Data - Conveniently e mail data to client, home office, others.
- Selectable Language - Choose from English or Spanish
- P/T tables for 105 refrigerants, and ability to add/delete
- Data Log - Pressure, temperature (tH, tL)
- Cloud backup of data

LEAK DETECTORS



LSCG COMBUSTIBLE GAS LEAK DETECTOR

The LSCG Leak-Seeker™ is a hand-held, battery operated combustible gas leak detector **for use by HVAC Pros, Plumbers, Pipefitters, Mechanical Contractors, Facility Maintenance, Factory Technicians, and other professional trades** for installing or servicing equipment that uses combustible gas on residential, commercial, or light industrial jobs.

A key benefit of the LSCG is that it has **5 different alarms to help technicians quickly pinpoint leaks**. For example, **3 different visual alarms** show “gas concentration” on the large backlit display, while **one vibration alarm** and **one audible alarm** alert technicians when working in challenging jobsite conditions. Other key features include:

- **Detects Up To 30 Combustible Gases** - Best in its class! (See list below).
- **Large Backlit LCD Display** - 1.5" x 2" (38 x 51 mm) largest in its class! **Visual alarms include:**
 - **Speedometer PPM Scale** - Great for peripheral vision while searching for leaks.
 - **PPM Readout** - Large ½" numbers are more precise than detectors that show ranges.
 - **LEL % Readout** - Large ½" numbers show what % of the lowest gas concentration that has the potential to be flammable or combustible.
- **High/Low Concentration Key** - For detecting 10 to 1,000 PPM or 100 to 10,000 PPM.
- **Long 20" (51 cm) Flexible Probe** - For hard-to-reach areas.
- **Ergonomic Housing with Intuitive Keypad** - Simple icons or abbreviations
- **Auto Features (AC, APO, AZ)** - Automatic Calibration at each power up; Auto Power Off if not used for 10 minutes; Auto Zero- resets the sensor.
- **Rechargeable Lithium-Ion Battery** - No need to buy or dispose of single-use batteries.



SPECIFICATIONS	
Audible (Beep) Alarm (dB)	85 dB volume
Audible Alarm Activation Key	Audible beep can be turned On or Off with a dedicated key
Audible (Beep) Alarm Frequency	Beep rate (frequency) is proportional to gas concentration being detected.
Vibration Alarm Activation Key	Vibration can be turned On or Off with a dedicated key
Sensor Warm Up Time	40 seconds (display counts backwards) after turning device on
Sensor Response Time	2 seconds
Replaceable Sensor	Yes (Available from CPS Products, Inc)
Auto Calibration	Each time device is turned on (display will count backwards from 40 seconds)
Gas Concentration Range, PPM (On Display Readout)	For LOW Concentration Range Setting: 10 to 1,000 ppm (Methane) For HIGH Concentration Range Setting: 100 to 10,000 ppm (Methane)

Highest PPM/LEL Readout (Methane)	10,000 PPM or 20% of the 5% LEL for Methane (= 1.25% Methane)
LEL (Lower Explosion Limit), % (On Display Readout)	0% to 100% (for gases containing a methane component). See manual for the LEL % values of 30 different gases.
Gases Detected	Natural Gas (Methane, Ethane, Propane, Butane), and Acetylene, Acetone, Acetaldehyde, Ammonia, Benzene, CO, Denatured, Alcohol, Ethanol, Ethylene, Formaldehyde, Gasoline, Hexane, Hydrogen, Hydrogen Sulfide, Isobutane, Isopropanol, Isopropyl Alcohol, Kerosene, Methanol, MEK, Mineral Spirits, Naptha, Paint Thinner, Paraxylene, Toluene, Xylene
Gas Sensitivity	<10 PPM (at X10 concentration)

THE MOST SENSITIVE, RELIABLE AND ACCURATE REFRIGERANT LEAK DETECTORS WITH THE LONGEST SENSOR LIFE



LS2 LEAK-SEEKER®II

Fully automatic sensitivity selection and control. Simply turn it on and pinpoint the leak.

- Six sensitivity ranges
- Fully automatic sensitivity selection
- High output alarm speaker
- 56 levels of sensitivity automatically selected by proprietary Powershift™ software
- 2 Year Warranty



FEATURES LSII

- Detects refrigerants including those with hydrocarbon components (CFC, HCFC, HFC, HFO, NH3, HC.
- E_MOS detection technology increases battery and sensor life, with replaceable sensor, filter and tip
- One button controls On/Off and all functions.
- Microprocessor controlled sensor improves sensitivity and reduces false alarms
- Metal sensor housing with patented water vapor stabilizing filter eliminates false alarms due to condensate
- Optimal leak-finding performance under a broad range of conditions
- Intuitive bar graph LED display for relative leak size
- Software managed sensor rejuvenation at startup ensures highest sensitivity
- Ergonomic, high-impact housing with high output alarm speaker
- Designed and manufactured in U.S.A. with U.S. and globally sourced components.

REPLACEMENT PARTS (LS2)

EMOS2



E_MOS Technology Sensor

LS2XF



E_MOS Technology Sensor Filters (10-Pk)

LS2XVF



Vapor Filter Sensing Tip

SPECIFICATIONS	LS2
Detector Type	E_Mos Technology
Sensitivity	Better than 0.1 oz (3g) / year
Sensitivity Selection	Fully Automatic Powershift Software
Refrigerant Sensitivity	All, including those with hydrocarbon components (CFC, HCFC, HFC, HFO, NH3, HC. Hydrogen trace gas in 95% N2, 5% H2 mixture)
Visual Alarm	Visual tachometer-like bar graph display with 8 high intensity LEDs
Flex Probe	15.5" flexible probe for hard-to-reach areas
Lock-Out Mode	N/A
Controls	One button controls on/off and all functions
Batteries (Included)/Life	3 "C" batteries (>50 hours continuous use)
Audible Alarms	2 user selectable alarm ranges
Low Battery Indication	Rightmost (No Battery) LED stays on when batteries at 10% capacity
Auto-Off	After 10 minutes of inactivity
Sensor Life	>500 hours continuous use
Weight	18 oz (500g)
Operating Temperature	0 to 140°F (-18 to 60°C)
Warranty	2 years
Standards	Complies with European Standard EN14624: 2012
Certifications	Individually Calibrated To NIST Traceable Leak Standard
Carrying Case	Molded Case
Earphone	No



FAST, EFFECTIVE AND ACCURATE METHOD FOR LOW PRESSURE LEAK TESTING FOR PLUMBING SYSTEMS

EZSMOKE CE-9i LEAK DETECTION SYSTEM

EZSMOKE allows a technician to use low pressure, non-toxic smoke, with a pleasant lemon scent and UV dye, to quickly locate annoying sewer gas leaks that are often difficult and time consuming to find in cuts, cracks, fractures, punctures, porosity or unsealed fittings inside or outside residential or commercial buildings.

EZSmoke uses patented technology to send non-toxic smoke containing a trace dye (UltraTrace UV) through the air (not a liquid) that is contained within pipes, wall cavities, or other forms of enclosed spaces. Any visible smoke immediately provides an indication of a large leak.

If white smoke alone does not locate the source of sewer gas odor, technicians can rely on UltraTrace UV, that is carried within the smoke vapor, to pinpoint the source of very small leaks of annoying sewer gas.

3 ways to detect a leak



Visually with the WHITE vapor



Smell the citrus scent



Trace amount of UV dye



DYE MARKS THE SPOT
EZSMOKE patented UltraTraceUV® dye travels with the white smoke and settles outside most leaks in the system, The included UV light UltraTraceUV® dye pinpoints the exact location of any leak.



FAST, VERIFIABLE RESULTS
EZSMOKE provides fast, verifiable results and easy testing of all repairs. After locating and repairing any leaks run a pressure decay test on the system again. If no pressure decay is found, all repairs are successful.

SPECIFICATIONS

Height	26" (56.0 cm)
Width	16.5" (33.0 cm)
Depth	10.5" (24.0 cm)
Weight	40 lb. (18.1 kg)
Shipping Weight	44 lb. (20 kg)
Power Supply	100-240V 50/60 Hz
Power Consumption	10 amps
Max. Ultratrace UV Vol.	32 oz. (0.9 Liter)
Inlet Pressure Required	50 to 175 psi (3.4 to 12 bar)
Supply Pressure	5 psi (0.34 bar 34 kPa)
Supply Volume	26.4 Gal (100 L) per min
Smoke Supply Line Hose	25 feet (7.6 m)
Power Cord	10 feet (3 m)
Remote Starter Cable	12 feet (3.6 m)
Operating Temp. Range	45°F to 140°F (7.2°C to 60°C)
Max Altitude	Up to 2000 M (6,561 Ft)
Fuse	10A (two required)
Warranty	2 year

ACCESSORIES INCLUDED WITH CE-9I

CEA-099
Accessory bag for smoke supply hose

CEA-063
25 ft. smoke supply hose. Connect as many hoses to each other as needed

CEA-060
Remote Control

471112
Yellow Glasses

CE0716UV
UltraTrace UV (16 OZ.) Smoke Producing Solution. (one bottle)

CEA-064
3/4" NPT Plastic Ball Valve, cam and groove connector and clip (connects to end of smoke supply hose CEA-63)

CEA-065
Adapter cone-standard size. (For introducing Diagnostic Smoke into any system 1" to 3 1/2" diameter). Threads on to adapter CEA-64

CEA-066
Adapter cone-large size. (For introducing Diagnostic Smoke into any system 3 1/2" to 6" diameter). Threads on to adapter CEA-64

INDOOR AIR QUALITY



Bluetooth

Indoor Air Quality Meter

The Standard for Professional Indoor Air Quality Meters ...

The industry's first smart tool that helps HVAC professionals identify indoor air quality issues, determine potential causes, and recommend effective solutions. The SmartAir™ diagnostic program is designed for the residential market, but has the accuracy and performance to measure indoor air quality in commercial environments as well.

BECOME AN INDOOR AIR QUALITY PROFESSIONAL

Internal sensors test 9 air quality factors every second. Simply place the meter device in the area to be tested and begin the test. Test results include numerical air quality data plus recommendations to solve air quality problems.

SELL ADDITIONAL PRODUCTS AND SERVICES

The CPS Link™ app generates a customized report of products, services and prices for technicians to resolve air quality issues all year long.

INSTANTLY SHARE A JOB SNAP-SHOT

While viewing live air quality data on a mobile device, technicians can take a snapshot or generate a full report for instant e-mailing to clients, the company office, others.

LIGHT BAR



Light bar changes color to indicate indoor air quality.

SPECIFICATIONS

Size (HWD)	5" x 3.5" x 2.9" (12.7 x 8.9 x 7.4 cm)
Weight	0.65 Lb (0.3 kg)
Wireless Transmission Range	Up to 150 Ft (45.7m) Direct Line Of Sight
Air Quality Test	30 Minutes (Default)
Power Cord	6.66 Ft. (2.02 m)
Storage Case	Molded Soft Case, With Carrying Handle
Agency Approvals	FCC, CE, ICES-003
Warranty	1 year
Geotag Feature	Time, Date, Location (Where Work Done)
Designed In USA	✓

DETECTS 9 AIR-QUALITY FACTORS

Volatile Organic Compounds

Chemical pollutants given off by interior building materials such as carpet, paint, upholstery, vinyl flooring, cleaning products, cosmetics, burning wood etc.

Combustible Gases / Non-combustible Inert Gases Carbon dioxide (CO2)

nitrogen, etc., any of which may pose a threat to humans if found in high enough concentrations inside a home or business.

Particulate Matter

Inhalable particle matter that can penetrate the lungs and cause health problems. Includes dust, pet dander, pollen and other airborne allergens with a diameter between 2.5 and 10 microns.

Temperature, Relative Humidity, Dew Point and Pressure

Indoor air temperature and dew point in Fahrenheit or Celsius, relative humidity (%) and building pressure (Hg, atm, kPa, or mb units).



Accurate, Affordable Real-Time Airflow Readings In A Matter Of Seconds

AFFORDABLE

The Easy-Hood costs hundreds or thousands less than competitive models!

EASY OPERATION

No complicated data entry needed. No traversing a grille like competitive models. Automatically generates test and balance reports. Easily share job data to validate performance.

Add the phone here also



Holds virtually any size phone



ABM-HOOD

ABM EASYHOOD™ AIRFLOW CAPTURE HOOD

For use with ABM-100 or ABM-200 airflow meters

- Adjustable spring-lock smartphone platform
- Vortex air straightener
- Rubber grip handles
- Durable molded housing
- Built-in rubber airflow seal

ABM-HOOD-200

INCLUDES ABM-HOOD AND ABM-200 AIRFLOW METER

- Expansion Hood Accessory-For larger grilles
- Integrated vortex air straightener
- Low airflow adapter plate
- Protective storage case
- * Smart phone not included

Lightweight and Compact (Weighs less than 5 pounds)

Expansion Hood Accessory

Quick Attachment



Up to 12" x 12" vents



Up to 24" x 24" vents with Expansion Hood



Low airflow adapter plate

REPLACEMENT PARTS

- ABMHOOX1 Phone Base Door
- ABMHOOX3 Expansion Base
- ABMHOOX5 Extension Pole Assembly
- ABMHOOX6 Low Airflow Plate

Easy operation with online guidance and visual instruction

EASY-TO-USE CPS LINK™ APP MAKES AIRFLOW ANALYSIS A BREEZE!



MEASURE AND RECORD USING ABM-100 USING ABM-200

AIRFLOW VOLUME Minimum, Average, Maximum	✓	✓
AIRFLOW VELOCITY	✓	
TEMPERATURE		✓
WET BULB		✓
DEW POINT		✓
RELATIVE HUMIDITY		✓



Bluetooth®

ABM-100 AIRFLOW METER

The ABM-100 easily plugs into a smart device and instantly converts air speed into air volume and records the data. Accurately measures airflow in: Linear feet per minute, cubic feet per minute, cubic meters per hour, linear meters per second

- Portable, fits in your pocket
- Easy to use — no math or formulas to remember
- Automatically generates and emails detailed reports
- 2.5" H x 1.75" W x .75" D
- Plastic storage case with color sleeve



Bluetooth®

ABM-200 AIRFLOW AND ENVIRONMENTAL METER

Measures and records a variety of data, including: Airflow velocity, airflow volume, dry bulb temperature, wet bulb temperature, relative humidity, feels like temperature, dew point, air density, wind speed/direction/gusts, indoor vs. outdoor conditions and barometric pressure.

- On-screen guidance ensures accurate readings
- Rugged housing with 1/4" 20 mount fitting for hands-free use
- Attach to the EXP-64 – a 64" aluminum extension pole (sold separately) to take readings without using a ladder
- Connects over 20X faster than traditional Bluetooth
- Emails personalized, professional reports
- 3.3" H x 1.8" W x 0.6" D
- Plastic storage case with color sleeve



EXP-64

TELESCOPIC EXTENSION POLE

Take accurate airflow readings without using a ladder. Mount an ABM-200 or TS-100 to the 1/4"-20 universal threaded end to obtain fast, easy readings from vents mounted on ceilings, high walls or other hard to reach places. The EXP-64 has a rubber grip handle and telescopes from 18" to 64". It has a second 1/4"-20" threaded fitting on the handle end to allow the EXP-64 to be mounted on a floor tripod.



Attach the ABM-200, or TS-100 to the end of the EXP-64, to access hard-to-reach areas.



Thumbwheel for attaching/removing threaded universal end



The EXP-64 can be mounted on tripods for longer term analysis of airflow from wall or ceiling vents



**TRI-MIN
MINI-TRIPOD**

This mini tripod has a 1/4"-20 top fitting to attach the TS-100 or ABM-200. It adjusts from 6-8" in height and is collapsible for compact storage.



Makes extended environmental condition readings easy.

Bluetooth®

**TS-100
TEMPERATURE AND HUMIDITY DATA
LOGGER**

Easy to use and accurate, produces readings for: dry & wet bulb temperatures, relative humidity, feels like temperature, dew point

- Data Log stores the last 20,000 temperature and humidity readings that can be uploaded to your smart device for review and to generate professional reports
- Increases productivity, safety & enhances professionalism
- Includes a ¼"-20 metal D-ring connector, key chain split-ring and alligator clip for mounting in various configurations
- Can be mounted on the EXP-64 Extension Pole & TRI-MIN Tripod – no ladder needed!
- Emails professional personalized reports
- Rugged, weather resistant housing
- Plastic storage case with color sleeve

Bluetooth®

**TS-100-6PK
TEMPERATURE AND
HUMIDITY DATA LOGGERS**

Our convenient 6-pack data logger kit makes it easy and cost effective to deploy multiple meters. Each meter can be individually named to make tracking data easy.

Reading Increments	Data Log Capacity	
	Hours	Days
5 Seconds	28	1.2
30 Seconds	167	7
1 Minute	333	14
5 Minutes	1,667	69
30 Minutes	10,000	417
Hourly	20,000	833
Daily	480,000	20,000



Bluetooth®

**SPM-K1
STATIC PRESSURE METER & PROBE KIT**

The SPM-K1 kit is the must-have smart tool that combines our popular SPM-100 manometer with our PRB-KIT and a brass gas fitting. This powerful and accurate dual port manometer harnesses the power of the smart phone to perform tests quickly, easily and accurately. Simple, intuitive and accurate readings for: static pressure, pressure differential, indoor vs. outdoor pressure, total external static pressure, gas pressure.

- Imports local weather data to ensure accurate testing
- Rugged housing with magnetic back for hands-free operation
- Two color coded (Red and Blue) stainless steel probes
- Two 6 ft. (1.8 m) rubber tubes
- One gas manifold fitting (brass)
- Plastic storage case with color sleeve

Bluetooth®

**SPM-100
STATIC PRESSURE METER**

Harnessing the power of your smart phone or tablet with a free app that provides on-screen guidance, the SPM-100 takes the guesswork out of accurately measuring static pressure! Simple, intuitive, and accurate readings for: static pressure, pressure differential, indoor vs. outdoor pressure, system external static pressure.

- Automatically imports local weather data based on GPS location
- Easily emails professional, detailed reports
- Rugged, weather resistant housing with hands-free magnetic holder
- Color display box with color sleeve



**PRB-KIT
STATIC PRESSURE PROBE
KIT**

Accurately measure and record: Static pressure, pressure differential indoor/outdoor pressure, system external static pressure, gas pressure test.

INCLUDES:

- Two color coded (lower case Red and Blue) stainless steel probes with magnetic bases
- Two 6 ft. (1.8 m) rubber tubes
- One gas manifold fitting (brass)
- Plastic storage case with color sleeve



THERMOMETERS

TM360

4 STATION THERMO-PSYCHROMETER

TM360 can accommodate all your temperature, humidity, dry/wet bulb and dew point measurements. TM360 incorporates 4 discrete temperature ports capable of min/max and memory functions including temperature differential between any 2 of the 4 available ports. A dedicated special purpose port accommodates an optional humidity transducer probe for fast and accurate measurements during superheat calculations. A generous probe storage area is provided to contain all your job specific probes.

FEATURES

- High accuracy silicon humidity transducer probe port
- Large 4-digit, easy-to-read, backlit display
- Min/Max and memory functions
- Temperature differential between any 2 of the 4 temperature ports
- Direct relative humidity and wet bulb measurements
- Calibrated to NIST traceable standards
- Integrated battery eliminator jack
- Rugged polyethylene carrying case

INCLUDES

- Accessory probes TMX2A, TMX2G, TMX2S



TMX2A
Moving Air Probe, 15' (4.5 m) Lead
COMMON USES
Air: Ducting, registers, air movement across condensers, ambient air
OPERATING TEMP RANGE
-40°F to 221°F
-40°C to +105°C



TMX2G
General Purpose Probe, 15' (4.5 m) Lead
COMMON USES
Surface, Air, Liquids: Copper pipe, ambient air, RH wet sock method
OPERATING TEMP RANGE
-40°F to 257°F
-40°C to +125°C



TMX2GA
General Purpose Air Probe, 15' (4.5 m) Lead
COMMON USES
Air, Surface, Liquids: Ambient air, ducting, registers, air movement across condensers.
OPERATING TEMP RANGE
-40°F to 257°F
-40°C to +125°C



TMX2P
Puncture Probe, 15' (4.5 m) Lead
COMMON USES
Surface, Liquids (Shaft Only): Internal temperatures of frozen materials, air ducts
OPERATING TEMP RANGE
-40°F to 257°F
-40°C to +125°C



TMX2S
Velcro Strap Pipe Probe, 15' (4.5 m) Lead
COMMON USES
Surface: Temperatures of Copper Tubing
OPERATING TEMP RANGE
-40°F to 257°F
-40°C to +125°C



TMX3C
Clamp-On Surface Probe, 15' (4.5 m) Lead
COMMON USES
Surface: temperatures of copper tubing
OPERATING TEMP RANGE
-40°F to 221°F
-40°C to +105°C



TMX3RH
Relative Humidity / Dry Bulb / Wet Bulb / Dew Point Probe
COMMON USES
Specialty RH Probe: Measure indoor air quality, set/troubleshoot humidity devices
OPERATING TEMP RANGE
-40°F to 194°F
-40°C to +90°C



TMX3WB
Wet Bulb Socks
COMMON USES
for use With TM360
OPERATING TEMP RANGE
-40°F to 194°F
-40°C to +90°C

**TMINI12
NON-CONTACT THERMOMETER**

The TMINI12 infrared thermometer provides easy, instant temperature measurement over a wide range of applications. TMINI12 offers convenient one-hand operation, 8 point laser sighting, a backlit LCD display, °F/°C selection, automatic power off feature, built-in LED light, K-Type input for use with optional accessory temperature probes.

Use the TMINI12 to quickly and easily measure temperatures of registers, ductwork, furnaces, evaporators, condensers, compressors, relays, manifolds, radiators, exhaust systems, thermostats, bearings and more. Includes carrying case and 9V alkaline battery.



Built in LED Light



TMDP
Digital Pocket Thermometer

SPECIFICATIONS

Temperature Range	-76°F to 932°F (-60°C to 500°C)
D:S (Distance to Spot Size)	12:1
Emissivity	Pre-set at 0.95 - adjustable
Accuracy	±2°C (±4°F) or ±2% of reading
Display	Digital Backlit LCD
Resolution	1°C/°F
Batteries	2 AAA
Warranty	2 year

Temperature Scale	°F & °C (selectable)
Thermal Response	Instant
Dial Size/ Lens	LCD Power: One 1.5V button-cell battery (included), Auto-Off: After 45 minutes non-use
Probe/Case	Stainless steel (5" (127mm) with Protective Plastic Sleeve for clip-on pocket
Measuring Range	-58°F ~ 302°F, -50°C ~ 150°C
Graduation	Resolution (C): 0.1C (Temps < 100C); 0.5C (Other Ranges)
Accuracy	Fahrenheit: +/- 1.8°F (30°F ~ 90°F); +/- 3.6°F (Other Ranges) Celsius: +/- 1°C (0°C ~ 100°C); +/- 2°C (Other Ranges) Meets RoHS/CE standard

MANIFOLDS





PRO-SET® THE WORKMAN'S CHOICE PREMIUM PISTON SERIES

The Workingman's Choice series 2 valve anodized aluminum block body with 1/4" SAE 45° fittings, Triple Seal piston valves, sure grip rubber over metal valve handles, easy-to-read 80 mm Class 1.0 or 1.6 accuracy gauges, protective gauge boots, extra access port in center with Schrader valve and hanging hook.

TRIPLE SEAL™ VALVES

- 3 super Neoprene o-ring design
- Back-seating o-ring seals valve nut when fully open
- Floating nylon sealing disk
- Valve stems retract fully to provide maximum flow
- Mirror-like port finish for smooth valve movement



* Different combinations possible on demand



Durable, protective gauge boots



RGO2L



RGO2H

PRO-SET® WORKMAN'S CHOICE 2 VALVE MANIFOLDS

Specifications		80 mm	
Gauge Description	Refrigerant Scales	R744	R410a, R22, R407c
	Gauge Size / Type	Class 1.0 Accuracy (subcritical)	Class 1.6 Accuracy
	Pressure Scales	BAR/PSI/kPa	BAR/PSI
	Temperature Scales	°C	°C
Fittings	Manifold and Hose fittings	1/4" SAE 45° fittings	
Two Valve Manifolds	Manifold & Gauges Only	MT2C02	MT202
	3 Premium 150 cm Pro-Set® Hoses	MT2C02P5	MT202P5
	3 Premium 150 cm Pro-Set® AB Hoses	MT2C02P5A	MT202P5A
Replacement Gauges	3 Premium 150 cm Pro-Set® BV Hoses	MT2C02P5E	MT202P5E
	Low Side Gauge	RGC02L	RGO2L
	High Side Gauge	RGC02H	RGO2H
	Replacement Gauge Boot	RGXBW	RGXBW

TRIPLE SEAL™ PISTON 2 VALVE BLACK BODY SERIES

- 2 valve anodized aluminum block body
- ¼" SAE 45° fittings
- 68 mm class 1.6 accuracy gauges
- Extra access port in center with Schrader valve and hanging hook



* Different combinations possible on demand



TRIPLE SEAL™ VALVES

- 3 super Neoprene o-ring design
- Back-seating o-ring seals valve nut when fully open
- Floating nylon sealing disk
- Valve stems retract fully to provide maximum flow
- Mirror-like port finish for smooth valve movement



MBO

MBG

MBF

TRIPLE SEAL™ PISTON 2 VALVE BLACK BODY MANIFOLDS

Specifications		68 mm			
Gauge Description	Refrigerant Scales	R12, R22, R502	R134a, R404a, R407C	R22, R410a, R407C,	R134a, R22, R1404a
	Gauge Size / Type	Class 1.6 accuracy			
	Pressure Scales	BAR/PSI			
	Temperature Scales	°C			
Fittings	Manifold & Gauges Only	¼" SAE 45° fittings			
Two Valve Manifolds	Manifold & Gauges Only	MBG	MBF	MBO	MBV
	Standard 90 cm Pro-Set® Hoses	MBGS3	MBFS3	MBOS3	MBVS3
	Standard 150 cm Pro-Set® Hoses	MBGS5	MBFS5	MBOS5	MBVS5
	Premium 150 cm Pro-Set® AB Hoses	NA	MBFP5A	MBOP5A	MBVP5A
	Premium 150 cm Pro-Set® BV Hoses	NA	MBFP5E	MBOP5E	MBVP5E
Replacement Gauges	Low Side Gauge	RGGL	RGFL	RGOL	RGVL
	High Side Gauge	RGGH	RGFH	RGOH	RGVH



* Different combinations possible on demand

PISTON PINK BODY MANIFOLD SERIES

Piston series 2 valve anodized aluminum block body with 1/4" SAE 45° fittings, Triple Seal piston valves, 68 mm/ 80 mm Class 1.0 / 1.6 accuracy gauges, extra access port in center with Schrader valve and hanging hook.

NON-FLUTTER GAUGE

Design with Rugged Metal Housing

FRONT CALIBRATION ACCESS PORT

ANODIZED ALUMINUM BLOCK BODY

EASY-TO-GRAB LARGE KNOB

TRIPLE SEAL VALVES

- 3 super Neoprene o-ring design
- Back-seating o-ring seals valve nut when fully open
- Floating nylon sealing disk
- Valve stems retract fully to provide maximum flow
- Mirror-like port finish for smooth valve movement



MCO



MCA

TRIPLE SEAL™ PISTON 2 VALVE PINK BODY MANIFOLDS		
Specifications		68 mm
Gauge Description	Refrigerant Scales	R22, R407C, R410a
	Gauge Size / Type	Class 1.6 accuracy <small>*Gauges built with internal silicon dampening cup for flutter-free operation</small>
	Pressure Scales	BAR
	Temperature Scales	°C
Fittings	Manifold & Gauges Only	1/2" - 20 UNF
	Manifold & Gauges Only	MCO
Two Valve Manifolds	3 Premium 90 cm Pro-Set® Hoses	MCOJ3
	3 Premium 150 cm Pro-Set® Hoses	MCOJ5
	3 Premium 150 cm Pro-Set® AB Hoses	-
	3 Premium 150 cm Pro-Set® BV Hoses	MCOJ5E
Replacement Gauges	Low Side Gauge	RGOL
	High Side Gauge	RGOH

1/2" - 20 UNF = 5/16" SAE



* Many different combinations available

VORTECH™ DEEP VACUUM MANIFOLD SERIES

- Two-valve, anodized aircraft aluminum block body
- 1/4" SAE 45° fittings
- Vortech™ deep vacuum valves
- Extra large sight glass
- Easy-to-read 68 mm & 80 mm Class 1.6 and 1.0 accuracy gauges
- Protective gauge boots
- Extra access port in center with Schrader valve and hanging hook



1 Ventil-Serie



2 Ventil-Serie



2 Ventil-Korpus

VORTECH™ DEEP VACUUM VALVE MANIFOLDS

Specifications		68 mm				80 mm			
Gauge Description	Refrigerant Scales	R134a, R404A, R407C	R410A, R22, R407C	R12, R22, R502	R22, R134a, R404A	R22, R134A, R404A, R407C	R134a, R404A, R407C, R507	R134a, R404A, R407C, R507	R134a
	Gauge Size/Type	Class 1.6 Accuracy				Class 1.6 Accuracy		Class 1.0 Accuracy	
	Pressure Scales	BAR / PSI	BAR / PSI	BAR / PSI	BAR / PSI	BAR / PSI	BAR / PSI	BAR	BAR
	Temperature Scales	C°	C°	C°	C°	C°	C°	C°	C°
Fittings	Manifold & Hose Fittings	1/4" SAE 45° fittings							
1 - Valve Manifolds	Manifold & Gauges Only Low side	MV1FL	MV1OL	MV1GL	MV1VL	MV1JL	MV1KL	MV1WL	MV1LL
	Manifold & Gauges Only High side	MV1FH	MV1OH	MV1GH	MV1VH	MV1JH	MV1KH	MV1WH	MV1LH
2 - Valve Manifolds	Manifold & Gauges Only	MV2F	MV2O	MV2G	MV2V	MV2J	MV2K	MV2W	MV2L
	3 Standard 90cm Pro-Set® hoses	MV2FS3	MV2OS3	MV2GS3	MV2VS3	MV2JS3	MV2KS3	MV2WS3	MV2LS3
	3 Standard 90cm Pro-Set® hoses + carrying case	MV2FS3C	MV2OS3C	MV2GS3C	MV2VS3C	MV2JS3C	MV2KS3C	MV2WS3C	MV2LS3C
	3 Standard 150cm Pro-Set® hoses	MV2FS5	MV2OS5	MV2GS5	MV2VS5	MV2JS5	MV2KS5	MV2WS5	MV2LS5
Replacement Gauges	Low Side Gauge	RGFL	RGOL	RGGL	RGVL	RGJL	RGKL	RGWL	RGLL
	High Side Gauge	RGFH	RGOH	RGGH	RGVH	RGJH	RGKH	RGWH	RGLH
Rubber Boot	Low Side Boot	RGX68BB				RGX80BB			
	High Side Boot	RGX68RB				RGX80RB			

VORTECH™ DEEP VACUUM MANIFOLD SERIES

- Four-valve, anodized aircraft aluminum block body
- ¼" SAE 45° fittings
- Vortech™ deep vacuum valves
- Extra large sight glass
- Easy-to-read 68 mm & 80 mm Class 1.6 and 1.0 accuracy gauges
- Protective gauge boots
- Extra access port in center with Schrader valve and hanging hook



4 Valve series`



5 Valve series with digital vac. gauge`



* Many different combinations available

VORTECH™ DEEP VACUUM VALVE MANIFOLDS

Specifications		68 mm				80 mm			
Gauge Description	Refrigerant Scales	R134a, R404A, R407C	R410A, R22, R407C	R12, R22, R502	R600a, R290, R600a/R290 blend	R22, R134A, R404A, R407C Oilfilled	R12, R22, R502	R22, R134a, R404A, R407C	R134a, R404A, R407C, R507
	Gauge Size/Type	Class 1.6 Accuracy				Class 1.6 Accuracy		Class 1.0 Accuracy	
	Pressure Scales	BAR / PSI	BAR / PSI	BAR / PSI	BAR / PSI	BAR / PSI	BAR	BAR	BAR
	Temperature Scales	C°	C°	C°	C°	C°	C°	C°	C°
Fittings	Manifold & Hose Fittings	¼" SAE 45° fittings							
4 - Valve Manifolds	Manifold & Gauges Only	MV4F	MV4O	MV4G	MV4HC	MV4J3	MV4Q	MV4U	MV4W
	3 Standard 150cm Pro-Set® hoses	MV4FS5	MV4OS5	MV4GS5	-	MV4J3S5	MV4QS5	MV4US5	MV4WS5
	3 Standard 150cm Pro-Set® hoses + carrying case	MV4FS5C	MV4OS5C	MV4GS5C	-	MV4J3S5C	MV4QS5C	MV4US5C	MV4WS5C
	3 Standard 150cm Pro-Set® hoses BV	MV4FS5E	MV4OS5E	MV4GS5E	MV4HCP5E*	MV4J3S5E	MV4QS5E	MV4US5E	MV4WS5E
	3 Standard 150cm Pro-Set® hoses BV + carrying case	MV4FS5EC	MV4OS5EC	MV4GS5EC	MV4HCP5EC*	MV4J3S5EC	MV4QS5EC	MV4US5EC	MV4WS5EC
5 - Valve Manifolds (Digital vac. gauge)	Manifold & Gauges Only	-	-	-	MV5HCD	MV5J3D	MV5QD	MV5UD	MV5WD
	3 Premium 150cm Pro-Set® hoses BV	-	-	-	MV5HCDP5E	MV5J3DP5E	MV5QDP5E	MV5UDP5E	MV5WDP5E
	3 Premium 150cm Pro-Set® hoses BV + carrying case	-	-	-	MV5HCDP5EC	MV5J3DP5EC	MV5QDP5EC	MV5UDP5EC	MV5WDP5EC
Replacement Gauges	Low Side Gauge	RGFL	RGOL	RGGL	RGHCL	RGJ3L	RGQL	RGUL	RGWL
	High Side Gauge	RGFH	RGOH	RGGH	RGHCH	RGJ3H	RGQH	RGUH	RGWH
Rubber Boot	Low Side Boot	RGX68BB				RGX80BB			
	High Side Boot	RGX68RB				RGX80RB			

*With premium hoses instead of standard hoses

VORTECH™ DEEP VACUUM MANIFOLD SERIES

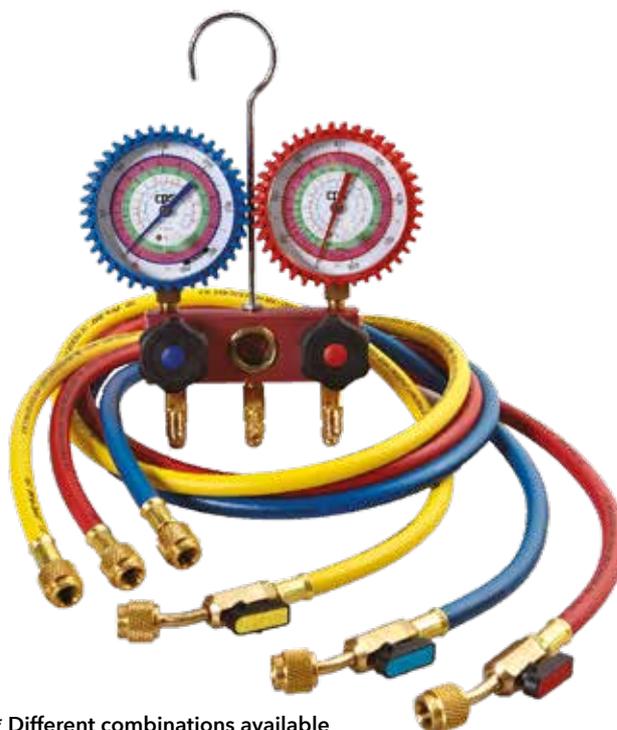
- Two-valve, r410A pink anodized aluminum block body
- ¼" SAE 45° fittings
- Vortech™ deep vacuum valves
- Extra large sight glass
- Easy-to-read 80 mm Class 1.6 and 1.0 accuracy gauges
- Protective gauge boots
- Extra access port in center with Schrader valve and hanging hook



MV12A



MV11A



* Different combinations available

VORTECH™ DEEP VACUUM VALVE MANIFOLDS

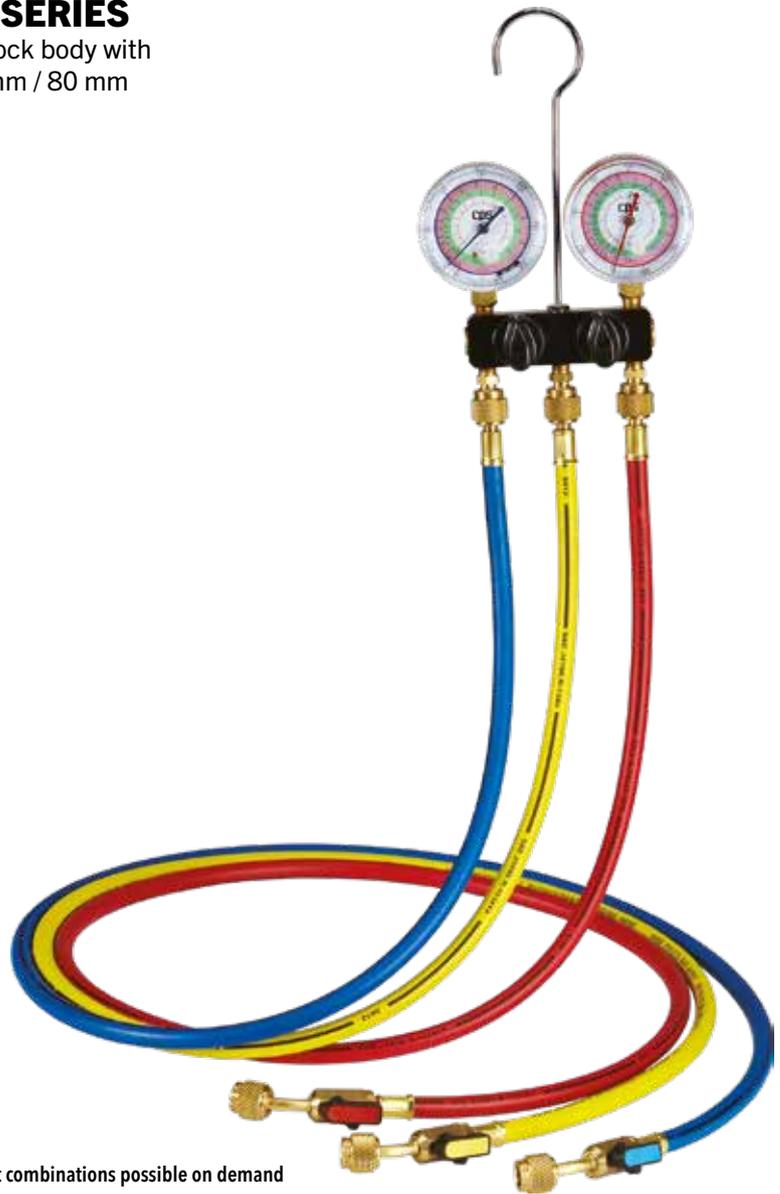
Specifications		80 mm		
Gauge Description	Refrigerant Scales	R410a, R32	R410a, R22, R407C	R410a, R32
	Gauge Size/Type	Class 1.6 Accuracy	Class 1.6 Accuracy	Class 1.0 Accuracy
	Pressure Scales	BAR	BAR/PSI	BAR
	Temperature Scales	°C	°C	°C
Fittings	Manifold & Hose Fittings	¼" SAE 45° fittings		
Two Valve Manifolds	Manifold & Gauges Only	MV11A	MV1102	MV11E
	3 Premium 150 cm Pro-Set® Hoses	MV11AJ5	MV1102J5	MV11EJ5
	3 Premium 150 cm Pro-Set® BV Hoses	MV11AJ5E	MV1102J5E	MV11EJ5E
	3 Premium 150 cm Pro-Set® BV Hoses + case	MV11AJ5EC	MV1102J5EC	MV11EJ5EC
Four Valve Manifolds	Manifold & Gauges Only	MV12A	MV1202	MV12E
	3 Premium 150 cm Pro-Set® Hoses	MV12AJ5	MV1202J5	MV12EJ5
	3 Premium 150 cm Pro-Set® BV Hoses	MV12AJ5E	MV1202J5E	MV12EJ5E
	3 Premium 150 cm Pro-Set® BV Hoses + case	MV12AJ5EC	MV1202J5EC	MV12EJ5EC
Replacement Gauges	Low Side Gauge	RGAL	RG02L	RGEL
	High Side Gauge	RGAH	RG02H	RGEH
Rubber Boot	Low Side Boot	RGX80BB	RGX80BB	RGX80BB
	High Side Boot	RGX80RB	RGX80RB	RGX80RB

BALL VALVE BODY MANIFOLD SERIES

Ball Valve series 2 valve anodized aluminum block body with 1/4" SAE fittings, full flow ball valve design, 68 mm / 80 mm Class 1.6 accuracy gauges and hanging hook.



MGO



* Different combinations possible on demand

BALL VALVE BODY MANIFOLD SERIES			
Specifications		68 mm	80 mm
Gauge Description	Refrigerant Scales	R410a, R22, R407C	R22, R134a, R404a
	Gauge Size / Type	Class 1.6 accuracy	
	Pressure Scales	* Gauges built with internal silicon dampening cup for flutter-free operation	
	Temperature Scales	BAR / PSI	BAR
Fittings	Manifold and Hose Fittings	1/4" SAE 45° fittings	
	Manifold & Gauges Only	MGO	MGV
Two Valve Manifolds	3 Premium 150 cm Barrier Hoses	MGOP5	MGVP5
	3 Premium 150 cm Barrier AB Hoses	MGOP5A	MGVP5A
	3 Premium 150 cm Barrier BV Hoses	MGOP5E	MGVP5E
Replacement Gauges	Low Side Gauge	RGHL	RGVL
	High Side Gauge	RGHH	RGVH

ACCESSORIES AND REPLACEMENT PARTS

A complete line of repair kits, parts and accessories to keep your manifold in brand-new condition. If you are looking for something or are unsure of the part you need, give us a call and let our specialists assist you.



MXC2
Rugged canvas carrying case for manifolds



MXMH
Hanging hook for all manifolds



MV4XRK
MV Series VVS valve repair kit 4 valves



MVXV
VVS (II) complete valve repair kit for manifolds



MVXKC
Replacement valve handle for BlackMax® vortech handle chrome manifolds



MXPk
Replacement valve handle w/ labels for BlackMax® manifolds



MXPkC
piston valve chrome handle



MXPkV
valve handle, end-cap, screw & label



MXPV
Complete BlackMax® piston valve assembly

DIGITAL MANIFOLDS



BLACKMAX® WIRELESS MD SERIES

BLACKMAX wireless digital manifolds combine industry-leading accuracy with a rugged nylon water-resistant housing, durable elastomeric keypad and large backlit LCD display. For use with or without CPS Link™ app— can work as a standalone device.

BEST-IN-CLASS ACCURACY

- Pressure: 1% of reading pressure
- Temperature: superior thermistor sensors for +/- 0.2°C (+/- 0.4°F) accuracy
- Vacuum: direct system attachment achieves +/- 10 microns from 0 to 25,000 microns

RUGGED DESIGN

- Water-resistant, high-strength, glass-filled nylon housing
- Precision machined anodized aluminum manifold body
- Proprietary Vortech valve system certified to 10 microns
- High-impact polycarbonate LCD window
- Advanced sight glass design



Connections For Thermistor Sensors



9V DC Charger Port

SIMPLICITY & VERSATILITY

- Preloaded with over 100 refrigerants with quick access to your favorite five
- One-touch access to your 5 favorite refrigerants

FULL SYSTEM MEASUREMENT

- 2 Pressures, 2 temperatures and vacuum (using MDXVG accessory)
- Vacuum hold and pressure hold test functions
- Simultaneously displays:
 - HI and LO pressures, superheat and subcooling
 - HI and LO pressures, T1 and T2
 - HI and LO pressures, saturation T1 and saturation T2
 - HI and LO pressures, displays T1, T2 and Delta T

USE WITH CPS LINK™ FOR ENHANCED FUNCTIONS

- Fast, convenient touch screen control
- Comprehensive views of system measurements
- Graphical depictions of test functions
- Data logging
- Geolocation data and more
- Perform and monitor system measurements—in real time without the need to physically touch the manifold
- Color scheme change according to refrigerant
- Pressure or vacuum tests can be saved, stored or emailed as a graph
- Select from different languages to work in.

Accessories (Included Or Purchase Separately)

	Accessories (Included Or Purchase Separately)	
		
Wireless Digital Manifolds	HP5BKEZ3 Three 5' Black & Chrome Ball Valve Charging Hoses	HV5Z One 5' Heavy Duty Black & Chrome Vacuum Hose
MD100W	✗	✗
MD100WVHE	✓	✓

Accuracy	+/- 10% of reading or +/- 10 microns, whichever is greater	
Sensor Type	Self - heated thermistor bridge with integral temperature compensation from 0 to 50 °C (32 to 122 °F).	
Operating Temperature Range	Compensated (accuracy as stated): 0°C TO 50°C (32°F TO 122°F)	
	Non-compensated (add +/- 0.5% of reading error for every °C outside compensated range): -10 to 0°C (14 to 32°F)	
Operating and Storage Humidity	0 to 95%, non-condensing	
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Display Pressure Range	AUTO-RANGING SCALES:	
	0 to 99 microns	1 micron resolution
	100 to 990 microns	10 micron resolution
	1000 to 9900 microns	20 micron resolution
	10000 to 25000 microns	50 micron resolution
High side pressure range	-14.5 to 800.0 PSIG (-1.0 to 55 bar)	
Low side pressure range	-14.5 to 800.0 PSIG (-1.0 to 55 bar)	
Pressure reading accuracy	+/- 1% of reading or +/- 0.5 PSIG (+/- 0.05 bar)	
Pressure reading resolution	0.5 PSIG (0.05 bar)	
High and low side burst pressure	1500.0 PSIG (103.4 bar)	
High side temperature range	-58.0 °F to 302 °F (-50 °C to 150°C)	
Low side temperature range	-58.0 °F to 302 °F (-50 °C to 150°C)	
Temperature reading accuracy	+/- 0.36 °F (+/- 0.2°C)	
Vacuum indication accuracy	+/- 10 microns (requires MDXVG accessory)	
SH, SC & saturation temperature accuracy	+/- 0.5°F (+/- 0.3°C)	
Instrument working temperature	-4.0 °F to 122°F (-20°C to 50°C)	
Communication range (with CPS Link™)	300 ft. (max) (Depends on device capabilities)	
Instrument working RH range	0% to 100% non-condensing	
APO (Automatic Power Off)	10 minutes. Can be disabled by user.	
4 valve size (L x H x W)	8.1" x 3.5" x 7.0" (20.5 cm x 8.9 cm x 17.8cm)	
4 valve weight	3.3 lb. (1.5 kg)	
Display Life using 4 industrial alkaline AA batteries (included)	Backlight full ON:	25+ hrs. continuous duty
	Backlight full OFF:	60+ hrs. continuous duty
Display Life using 4 Rechargeable NiMH AA batteries (not included)	Backlight full ON:	20+ hrs. continuous duty from full charge
	Backlight full OFF:	50+ hrs. continuous duty from full charge

RECOVERY EQUIPMENT



The ultimate in dependability.

TR700E SERIES REFRIGERANT RECOVERY MACHINES

Designed for servicing residential and commercial refrigeration systems, the BlackMAX® TR700E is the industry's best-looking and best-performing refrigerant recovery machine incorporating non-restrictive piston manifold valves, a powerful two cylinder oil-less reciprocating compressor and twin fans. The resulting system provides superior airflow and condensing, which maximizes speed in both direct liquid and direct vapor recovery speed in both direct liquid and direct vapor recovery.

- Designed with high temperature materials
- High strength bourdon tubed gauges
- Twin fan design for ultra cool operation
- Simple inlet and outlet valve blocks
- 2 year warranty

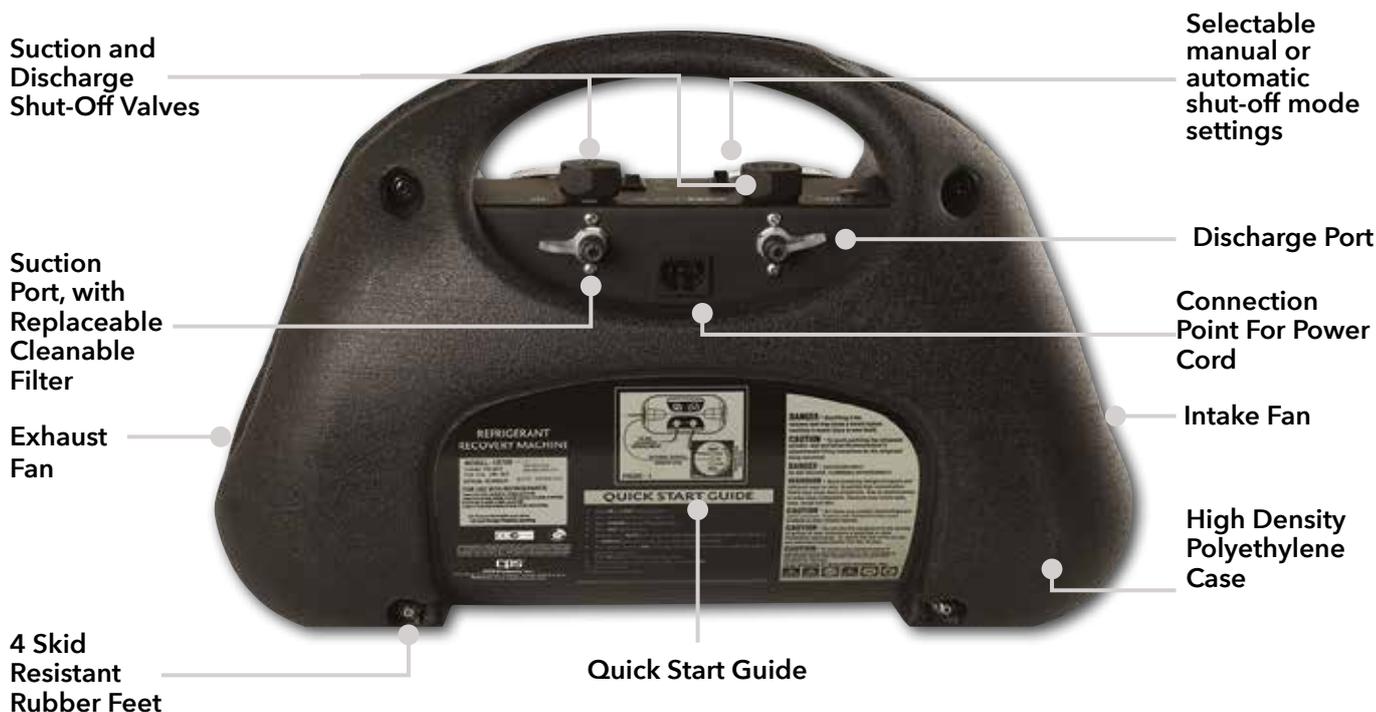
KEY FEATURES

- Powerful 2/3 HP oil-less 2 cylinder reciprocating recovery compressor
- Exceptional compressor, condensing and cooling systems allow fast recovery in high temperature environments
- Automatic low pressure shut-off feature turns unit off when recovery is completed
- Rugged high density, double walled, contemporary plastic housing with easy view top mounted controls
- R-410a ready with 38 BAR high pressure shut-off switch
- Ergonomic, well balanced design for easy transport includes shoulder strap - weighs 14,5 kg
- Built-in, removable, replaceable suction filter located under suction port
- Worldwide patents pending
- Externally serviceable valves and gauges
- Integrated component moorings for quiet operation
- Less parts provide greater reliability



TR700E

THE ULTIMATE IN DEPENDABILITY



COMPETITOR COMPARISON

Refrigerant	Test Conditions	CPS TR700E	Appion G5	Yellow Jkt 95760	Promax RG5410EX	Promax RG5410A	Inficon Vortex AC	Stinger 2000-3300
Flow rate @ 50 Hz		Kg/Hr						
R410a	Liquid	276,42	80,58	38,76	118,83	94,35	84,66	69,87
	@ 24°C Push / Pull	733,38	236,13	282,54	325,89	250,41	262,65	338,13
	Vapor	16,32	15,30	11,22	10,20	8,16	4,08	5,10
R22	Liquid	205,02	143,82	45,90	96,90	92,31	68,85	81,60
	@ 24°C Push / Pull	729,30	384,54	312,12	335,58	220,32	127,50	284,58
	Vapor	13,77	14,28	7,65	9,18	7,65	5,61	6,63
	@ 40°C High Temp Vapor	19,89	9,69	7,65	7,14	6,63	6,63	6,63
R134a	Liquid	180,54	100,47	57,63	55,59	80,07	57,63	61,71
	@ 24°C Push / Pull	593,64	256,53	312,12	270,30	185,13	175,44	253,98
	Vapor	11,73	9,69	5,10	7,14	5,61	5,10	5,10
NRTL Ratings		(UL) QVBC SA12068	(UL) QVBC SA13136	(UL) QVBC SA12038	(UL) QVBC SA12994	(UL) QVBC SA12994	(UL) QVBC SA12798	(AR) RRRE-05040-1Q

All trademarks are owned by their respective companies.

TR700E SERIES SERVICE PARTS

Item	Description	Where Used (Series)
TR21X1	Valve Rebuild Kit	All TR Recovery Machines
TR21X3	TR700E Piston/Connecting Rod Replacement	
TR21X5	Eccentric Crank Set	
TR700X1	Head Replacement	TR700E



Twin fans, high density polyethylene case, 4 skid-resistant rubber feet



Selectable manual or automatic shut-off mode settings



Large 2-1/4" diameter gauges and indicator lights for high pressure or low pressure status



Replaceable, cleanable filter



Detachable power cord



Adjustable carrying strap

IGNITION PROOF



Molded Rubber Grip Handle

Durable Housing

Low Side Gauge

High Side Gauge

Lighted ON / OFF Power Switch

Discharge Shut-Off Valve

Discharge Port (with protective cap)

Air Exhaust Vents

Rubber Feet

Suction Port with Cleanable 100 Mesh Filter (with protective cap)

Air Intake

Air Exhaust

Suction Shut-Off Valve

**TR600 SERIES
PRO-SET™ IGNITION PROOF REFRIGERANT RECOVERY
MACHINE**

FAST. COMPACT. RELIABLE.

We took six recovery machines and their verified recovery rates. The Pro-Set TR600 was the undisputed fastest recovery machine for R410a and fastest overall for R22, R134a and R407c.

- Powerful 2/3 HP oil-less 2 cylinder reciprocating recovery compressor
- Exceptional compressor, condensing and cooling systems allow fast recovery in high temperature environments
- Fastest R-410A flow rates in class!
- 550 psi high pressure shut-off switch
- Durable inlet and outlet ball valve construction with 1/4 turn gauges
- Integrated component moorings for quiet operation
- High impact injection molded housing
- Ergonomic well balanced design for easy transport
- No tool access suction housing for easy filter clean/change
- Quiet operation
- Worldwide patents pending

**TRS600 SERIES
PRO-SET™ IGNITION PROOF REFRIGERANT RECOVERY
MACHINE FOR CLASS A1, A2, A2L, A3 REFRIGERANTS**

- Designed and tested to meet ANSI 12:12.01 Ignition proof standards
- Powerful 2/3 HP oil-less 2 cylinder reciprocating recovery compressor
- Exceptional compressor, condensing and cooling systems allow fast recovery in high temperature environments
- Maintenance free oil-less compressor
- Permanently lubricated and sealed main bearings
- Ignition proof power switch
- Sealed start relay
- Hard wired 9.8 ft. (3m) power cord
- 550 psi high pressure shut-off switch
- Durable inlet and outlet ball valve construction with 1/4 turn gauges
- Integrated component moorings for quiet operation
- High impact injection molded housing
- Ergonomic well balanced design for easy transport
- No tool access suction fitting for easy filter clean/change
- Quiet operation
- Designed by CPS Products, Inc. in USA

Ignition proof power switch



High pressure shut off indicator



PRO-SET™ TR600 SERIES

Specs		TRS600E
Voltage, (Hz), Phase		220-240V (50 Hz)
Motor Size HP		2-3 HP
Motor Thermally Protected		✓
Compressor Type		Two cylinder, oilless
Overload Protection		Thermally Protected
Power Consumption		1000 W
High Pressure Shut-Off		3800 kPa (38 bar)
Suction Pressure Gauge	Outer Scale	-100 kPa to 3500 kPa
	Inner Scale	-1 bar to 35 bar
Discharge Pressure Gauge	Outer Scale	0-3800 kPa
	Inner Scale	0-38 bar
AHRI 740 Class Refrigerants (See CPS website for complete list of refrigerants)	Class III	R-12, R-1234yf, R-1234ze, R-134A, R-401C, R-406A, R-500
	Class IV	R-22, R-401 A/B, R-402B, R-407C/D/E/F, R-408A, R-409A, R-411A/B, R-4012A, R-502, R-509A
	Class V	R-32, R-402A, R-404A, R-407A/B, R-410A/B, R-507A
Operating Temperature Range		32°F to 120°F (0° C to 49° C)
Power Cord Length		9.8 ft (3.0m)
Dimensions		Inch: 8.5" x 16.7" x 12.3" (cm:21.6 x 42.4 x 31.2)
Weight		28 Lbs (12.7 Kg)
Agency Approvals		CE, TUV
Warranty (Years)		2

RECOVER LOST TIME

SMALLEST, LIGHTEST, FASTEST AND MOST RELIABLE RECOVERY MACHINE

Anybody can say they are the “fastest.” We can prove it! Pro-Set® TR21E certified ARI recovery rates are shown below as well as online at UL <http://database.ul.com>. Compare them to other brands (competing machines are listed on our website) **NOBODY is FASTER or MORE RELIABLE!**

TRS21E PRO-SET® IGNITION PROOF REFRIGERANT RECOVERY MACHINE FOR CLASS A1, A2, A2L, A3 REFRIGERANTS

- Designed and tested to meet ANSI 12:12.01 Ignition Proof standards
- Ignition proof ON-OFF switch
- Sealed start relay
- Maintenance free oil-less compressor
- Permanently lubricated and sealed main bearings
- 550 Psig high pressure cutoff switch with LED indicator
- Cleanable 100 mesh inlet filter
- Fastest recovery rates in its class
- Multi-language color box

FEATURES & BENEFITS:

- Weighs only 11,5 KG!
- Fastest ARI recovery rates in its class, best speed-to-weight ratio in the industry!
- Revolutionary “vacuum pump” style design.
- Five unique patented and patent pending design elements
- Vapor or liquid recovery, including R-410A
- Extremely compact and easy to carry



Inlet port with removable filter



Discharge port

Tank Overfill Switch on TR22,/C/S models

High pressure cutout LED

Power switch

Air intake for fan

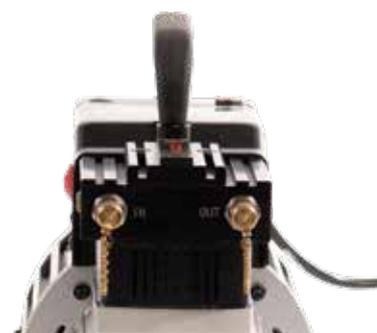
Handle

Reset button HP switch (TR21E only)



TR19E, TR21E, TR22E SERIES SERVICE KITS

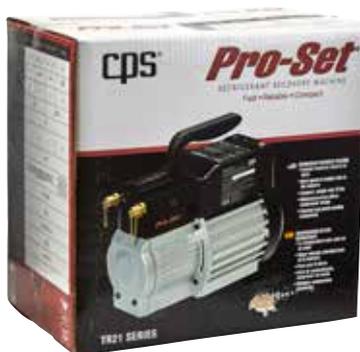
Item	Description	Where Used (Series)
TR21X1	Valve Rebuild Kit	All TR Recovery Machines
TR21X3	TR21E Piston/Connecting Rod Replacement	
TR19X1	TR19E Complete Rebuilt Kit	TR19E
TR19X2	Eccentric Crank Set	
TR21X4	TR21E Complete Head Replacement	TR19E, TR21E, TR22E
TR21X2	Complete Rebuild Kit	TR21E, TR22E
TR21X5	Eccentric Set	



Premium Brass Caps

TR21E SERIES RECOVERY RATES PER ARI-740 - 98

Type	Push Pull	Liquid	Vapor	High Temp Vapor (40°C)
	Kg/Hr			
R22	729,30	205,02	13,821	19,890
R134a	593,64	180,54	11,628	N/A
R407C	674,22	219,81	12,393	N/A
R410A	733,38	276,42	16,269	18,870



PRO-SET® TR21 SERIES

Specs	TRS21E*
Voltage, (Hz), Phase	220-240 VAC (50Hz), 1 PH
Motor HP	2/3
Pressure Gauges	NA
Overload Protection	-
Power Consumption	1000 W
High Pressure Shut-Off	522 psig (36 Bar)
Auto Vs. Manual Reset	Manual (Button)
Ignition Proof Design	✓
Suction Pressure Gauge	Outer Scale
	Inner Scale
Discharge Pressure Gauge	Outer Scale
	Inner Scale
ASHRAE Standard 34 Refrigerant Safety Classification	A1
Operating Temperature Range	32°F to 120°F (0°C to 49°C)
Power Cord Length	6 Ft. (1.82m)
Dimensions	6" x 12" x 9" (15cm x 30cm x 23cm)
Weight	24.3 lb (11.0 kg)
Agency Approvals	UL, CE, CSA on color box
Warranty (Years)	2

SUB COOLER

TRANSFORM YOUR BOTTOM LINE WITH THE MT69 MOLECULAR TRANSFORMATOR. IT DRAMATICALLY INCREASES THE SPEED OF ANY RECOVERY MACHINE.

CUT YOUR RECOVERY TIME IN HALF.

The MT69 is the only commercialized recovery subcooler manufactured for the professional A/C & R technician. It transforms molecules of hot refrigerant gas into molecules of refrigerant liquid and also transforms molecules of cold refrigerant liquid into a warm refrigerant gas. Use the MT69 in-line with the discharge line of any recovery machine to dramatically increase the speed of recovery.

FEATURES & BENEFITS:

- Dramatically increases the speed and performance of your recovery machine- (up to 95% increase in recovery speed!)
- The hotter it gets, the better it works
- Functions as a submersible condenser or evaporator
- Rugged, compact and easy to use
- Eliminates the need to change tanks when recovering R410A
- Patents Pending
- Eliminates annoying shutdown due to high pressure switch limit
- Essential for recovering R410A on hot days
- Essential for recovering liquid refrigerant on cold days
- Eliminates liquid slugging at colder temperatures
- Designed and manufactured in U.S.A. with U.S. and globally source components



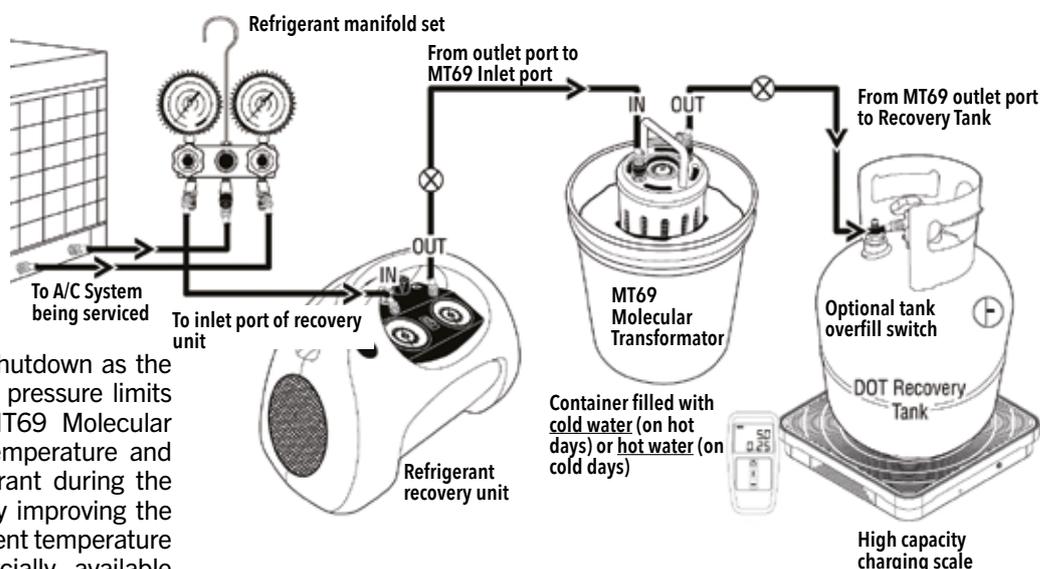
MT69

MT69 SPECIFICATIONS	
Dimensions	10,9 cm (Dia.) x 22.9 cm (H)
Weight	1,6 kg
Maximum Operation Pressure	35 BAR
Discharge Pressure Gauge	0 to 42 BAR
Inlet/Outlet Connections	¼" SAE male
Refrigerant Compatibility	Not all, Mt69 can't handle Ammonia

COMPARATIVE DATA		
Time needed to recover 7 Kg of R22 at 49°C:	WITH CPS MT69	WITHOUT CPS MT69
	17 minutes	32 minutes
Item	Description	
MT69	MT69 Molecular Transformator	
TR21EMT69KIT	TR21E & MT69 (set)	

HOW THE MT69 MOLECULAR TRANSFORMATOR WORKS:

The effects of ambient temperature and elevated tank pressures on the speed of the refrigerant recovery process are in many cases more important than the speed of the recovery machine itself. As ambient temperature increases, pressure in the recovery cylinder increases, reducing the recovery speed and in many cases can lead to a high pressure shutdown as the recovery equipment and tank pressure limits are reached. The Pro-Set MT69 Molecular Transformator reduces the temperature and pressure of recovered refrigerant during the recovery process, dramatically improving the recovery speed and high ambient temperature performance of all commercially available recovery machines in addition to extending the life of the equipment.



SPECIFICATIONS	MT69
Dimensions	4.25" x 9" (10.9 cm x 22.9 cm)
Weight	3.50 lb (1.58 kg)
Maximum Operation Pressure	500 Psig
Discharge Pressure Gauge	0 to 600 Psig
Inlet/Outlet Connections	0 to 600 Psig
Refrigerant Compatibility	CFC, HCFC, HFC, HC, and HFO
Coil	Copper



REFRIGERANT RECOVERY TANKS



T-40L MT REFRIGERANT TANK

- Capacity: 40 litre
- 1/4" connections (brass) + valves
- Working temperature: -20°C à 65°C
- Test pressure: 48 bar
- Valves protected against external damage
- Easy to carry



T-12L MT REFRIGERANT TANK

- Capacity: 12.5 litre
- 1/4" connections (brass) + valves
- Working temperature: -20°C à 65°C
- Test pressure: 48 bar
- Valves protected against external damage
- Easy to carry

HEATER STRAPS

CHARGE FASTER IN COLD WEATHER

REFRIGERANT CYLINDER HEATER STRAPS

Ideal for use on portable refrigerant charging or recovery tanks, especially in cold weather when transfer times increase, or when a tank is low on refrigerant. These durable, adjustable Velcro straps create a positive pressure between the refrigerant tank and an A/C or refrigeration system, reducing refrigerant transfer time.

SPECIFICATIONS	CCXHBV
Voltage (Hz)	240 VAC (50/60 Hz)
Watts	340 W
Amps	1.4
For Cylinder Sizes	From 8" (20 cm) to 14" (35 cm) Diameter Tanks
Control (Overheat Protection)	Automatic Thermal Cutoff (Encapsulated Thermostat)
Minimum Surface Temperature Of Tank	-
Maximum Thermostat Temperature	130°F (55°C)
Power Cord Length	20" (0.50 m)
Adjustable Velcro Strap Max Length	19" (0.48 m)
Heater Strap Width	3" (76 mm)
Heater Strap Length	24" (.60 m)
Heater Strap Color	Dark Orange
Electrical Connection Type	IEC320 Inlet



CCXHBV 220V/240V

VACUUM PUMPS



**VPB4D****IGNITION PROOF VACUUM PUMPS**

For all refrigerant systems like A1, A2, A2L, A3 and NH3. Fully spark proof, sealed electronics. Fixed power cord of 3 meters. Dual stage vacuum pump design, up to 25 micron. Built-in solenoid valve, in case of a power cut the reached vacuum level remains. Fastest motor/compressor design, double RPM at 2880 instead of 1440 RPM, double the speed. Gas ballast valve integrated, as a result an easy start at very low ambient temperatures. 1/4", 3/8" and 1/2" intake connections. Sight glass made out of real glass instead of plastic and double sealed. Useable at 230V. 2 years warranty.

FEATURES

- Lightweight, 8,8 kg
- Electro motor of 1/3 HP, easy start up guaranteed under all conditions
- VPB4D reaches 102 L/min @ 50Hz

**VPB6D****IGNITION PROOF VACUUM PUMPS**

For all refrigerant systems like A1, A2, A2L, A3 and NH3. Fully spark proof, sealed electronics. Fixed power cord of 3 meters. Dual stage vacuum pump design, up to 25 micron. Built-in solenoid valve, in case of a power cut the reached vacuum level remains. Fastest motor/compressor design, double RPM at 2880 instead of 1440 RPM, double the speed. Gas ballast valve integrated, as a result an easy start at very low ambient temperatures. 1/4", 3/8" and 1/2" intake connections. Sight glass made out of real glass instead of plastic and double sealed. Useable at 230V. 2 years warranty.

FEATURES

- Lightweight, 11 Kg
- Electro motor of 1/2 HP, easy start up guaranteed under all conditions
- VPB6D reaches 151 l/min @ 50Hz temperature ports

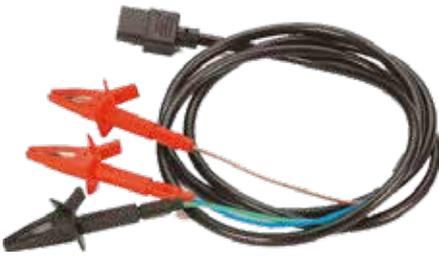
**VPB12D****IGNITION PROOF VACUUM PUMPS**

For all refrigerant systems like A1, A2, A2L, A3 and NH3. Fully spark proof, sealed electronics. Fixed power cord of 3 meters. Dual stage vacuum pump design, up to 25 micron. Built-in solenoid valve, in case of a power cut the reached vacuum level remains. Fastest motor/compressor design, double RPM at 2880 instead of 1440 RPM, double the speed. Gas ballast valve integrated, as a result an easy start at very low ambient temperatures. 1/4", 3/8" and 1/2" intake connections. Sight glass made out of real glass instead of plastic and double sealed. Useable at 230V. 2 years warranty.

FEATURES

- Lightweight, 15,2 Kg
- Electro motor of 1 HP, easy start up guaranteed under all conditions
- VPB12D reaches 302 l/min @ 50Hz

ACCESSORIES



VPXJ220

JUMPER CORD KIT

220 VAC jumper power cord for locations where 110 voltage is not available.



OIL PORT CAPS

Oil mist preventer exhaust port.

VPXOMP for 2-6 CFM
VPXOMP2 for 8-12 CFM



AVCVAC

VACUUM PUMP CAP KIT

Vacuum pump cap kit with chains on one common ring.

PUMP OILS



PRO-SET® PREMIUM VACUUM PUMP OIL

Pro-Set Premium Vacuum Pump Oil is an extremely high quality, severely hydro-treated vacuum pump oil and can be used in pumps made by most manufacturers.

Vacuum pump oil should always be clean and free of contaminants such as moisture, acids, vapors, dirt etc., to extend the life of your pump. So, change it after each use with Pro-Set Premium Vacuum Pump oil (available in pints, quarts and gallons).

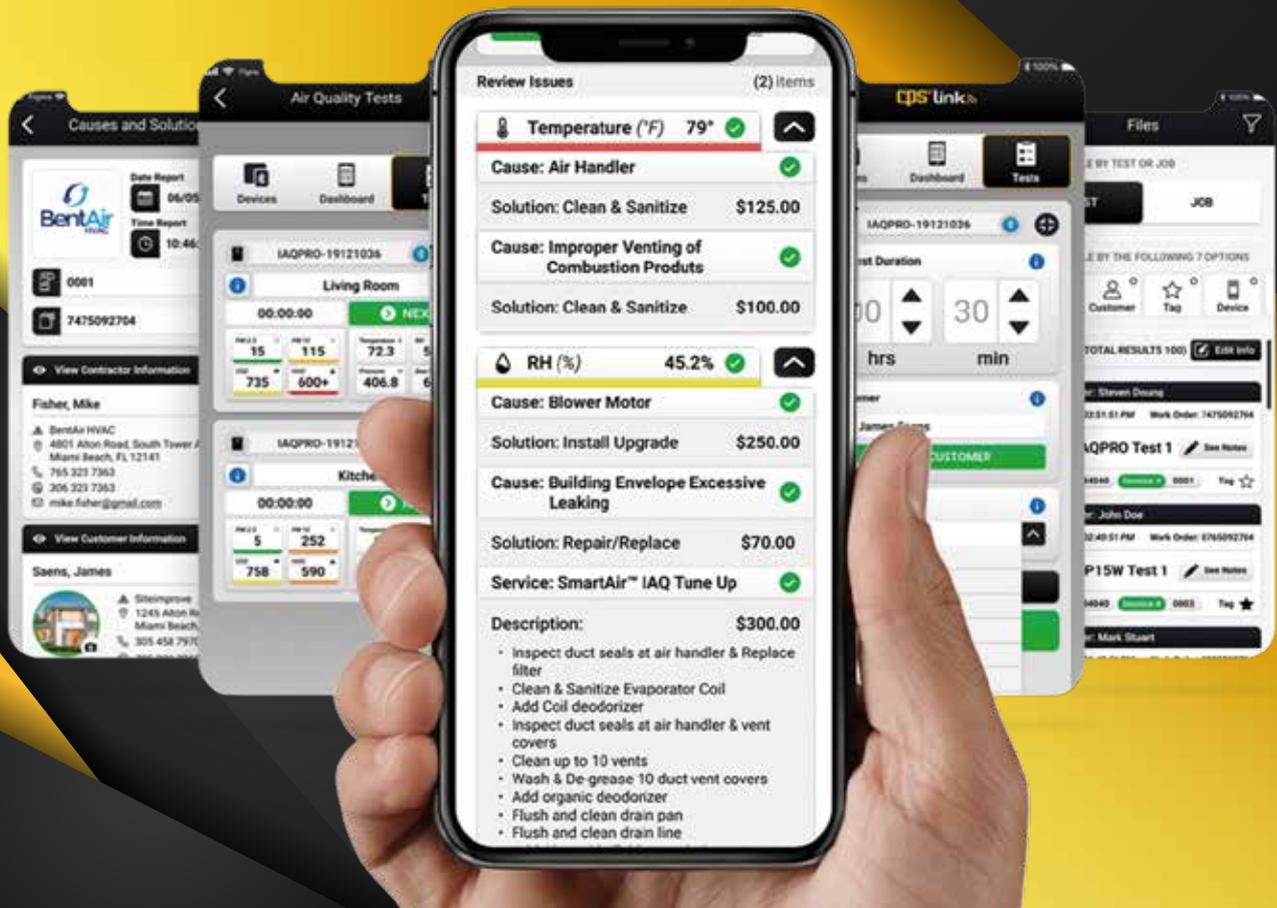
VPOG6 (1 Gallon, 6/Case)
VPOQ12 (1 Quart, 12/Case)
VPOP12 (1 Pint, 12/Case)

VPOG (1 Gallon)
VPOQ (1 Quart)
VPOP (1 Pint)

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PREMIUM QUALITY TOOLS
provide **SUPERIOR VALUE**
for professionals at all
levels of service



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CPS PRODUCT GUARANTEE

CPS® guarantees all products are free of manufacturing and material defects up to 2 years from the date of purchase. If a product should fail during the guarantee period due to defective material or workmanship, it will be repaired or replaced (at our office) at no charge to customer. This guarantee does not apply to products that have been altered, misused, or are in need of field service maintenance. All repaired products will carry an independent 6 months warranty.

