

INNOVATION





PROMAX ROBINAIR



TABLE OF CONTENTS Products Listed by Part Number on the Back Page

LEAK DETECTION	DIAGNOSTIC INSTRUMENTS
Refrigerant	Thermometers/Pyrometers
Electronic2	Humidity/Wet Bulb Temperature/Dew point 45
Dye	Infrared w/Laser46
Ultrasonic	Digital
Combustible Gas	Analog
	Temperature Recorder
	HVAC Analyzer
GAUGES & HOSES	Air Balancing
Manifold Gauge Sets	Digital Light Meter
Electronic	Electronic Sight Glass
2-Way	Manifold Gas Pressure
4-Way	Phototachometer
Manifold Replacement Parts	Thototachometer
Replacement Gauges/Lenses	TOTAL PURPOSE VALVES
HVAC Repair Parts Kit	GENERAL PURPOSE VALVES
Refrigerant Hoses	& FITTINGS
Standard Hoses	General Purposes Valves
Enviro-Guard™ Hoses	Tube Piercing Valves
3/8" Charging & Vacuum Hoses	General Purpose Fittings57
	Access Fittings
20' Charging Hoses	High Flow Rate Fitting
Hose Accessories & Replacement Parts 24	Snap Connection Quick Coupler
Ball Valve/Flexible Adapters	
Hose Couplers/Adapters	GENERAL TOOLS
Hose and Adapter Repair Parts/Kits25	Valve Cores and Removal/Installation Tools 59
Brass Seal Caps	Charging Valve59
	Refrigeration Hand Tools
RECOVERY	Tubing Tools
	Wrenches
Recovery Machines and Tanks	Soldering System
	Inspection Light
EVACUATION	Thermal Shield
	Heat Gun
Vacuum Pumps	
Vacuum Pump Valves, Fittings & Adapters 33	ELECTRICAL TESTERS/METERS
Vacuum Pump Oil	Clamp-on Meters
Vacuum Gauges	Multimeters and Accessories 68 & 73
	Megohmmeters/Insulation Testers
CHARGING/SCALES	Wire Tracers
Scales	Current/Breaker Testers80
Certified	Voltage Detectors 8
Standard	Receptacle Testers
	Solenoid Testers
Charging Module	Motor Rotation
Programmable	Capacitance Tester
Charging Cylinders	Microwave Leakage
Oil Injectors	Metal/Power Sensor
Heater Blankets 43	Continuity Testers 84

U.S. Patent # D 458,854, others pending

- ▶ Patent pending Heated Pentode™ Sensor technology:
 - · Refrigerant specific detection
 - Elimination of false alarms
 - Unaffected by rapid temperature change
 - Sensor cannot be "poisoned" by excessive refrigerant
- Detects ALL Halogenated refrigerants
- ▶ True Mechanical Pump provides instant response and clearing
- ▶ Tri-color visual leak size indication
- ▶ Tactile keypad controls
- Adjustable sensitivity & one touch reset
- ▶ Mute feature silences audible alarm
- ▶ Sensor status indication
- ▶ Battery self test
- ▶ 16" Flexible Stainless Probe
- ▶ Ballistic Nylon Carrying Case and Battery Charger included
- ► Certified to SAE J1627
- ▶ CE approved
- ▶ 25 year warranty

Specifications	
Ultimate Sensitivity	0.1 oz/yr (3 gr/yr) for all refrigerants, as low as 0.05 oz/yr (1.5 gr/yr) for R12
Power Supply (Standard)	4.8V Nickel-Cadmium Rechargeable Battery Pack
Power Supply (Optional)	Nickel-Metal Hydride, (Ni-MH) Rechargeable Battery Pack
Battery Life	Standard – Ni-Cad (4 to 5 hours) Optional – Ni-MH (5 to 6 hours)
Sensor Life	100 hours
Operating Temp	32° to 122° F (0° to 50° C)

International Versions	Model No.
European - 230V, 50 Hz Charger	TIFZX-1E
Japan - 100V, 50/60 Hz Charger	TIFZX-1J
Optional Accessories	Part Number
230V, 50 Hz Battery Charger (International)	TIF ZX-3E
100V, 50/60 Hz Battery Charger (Japan)	TIF ZX-3J
Remote Battery Charging Base	TIF ZX-6
Nickel-Metal Hydride (NiMH) Battery Pack	TIF ZX-7
12VDC Battery Charger (cigarette lighter style)	TIF ZX-11
Hard Carrying Case	TIF ZX-12
Kit, ZX-1 in Hard Carrying Case with all Accessories	TIF ZX-1KIT (See Page 2)
Replacement Parts (supplied with product)	Part Number

Replacement Parts (supplied with product)	Part Number	
Replacement Heated Pentode™ Sensor	TIF ZX-2	
110V-60 Hz Battery Charger	TIF ZX-3	
Nickel Cadmium (Ni-Cad) Battery Pack	TIF ZX-4	
Ballistic Nylon Carrying Case	TIF ZX-5	
Filter Elements (10 pack)	TIF ZX-8	
Probe Tip	TIF ZX-9	
Flexible Probe (includes Probe Tip)	TIF ZX-10	





Design Certified by MET Laboratories, Inc. to meet SAE J1627 for R134a, R12 and R22



TIF ZX-1KIT



Design Certified by MET Laboratories, Inc. to meet SAE J1627 for R134a, P13 and P23



ZX-1KIT Heated Pentode™ Refrigerant Leak Detector Kit

- ► TIFZX-1 Leak Detector, complete in Hard Carrying Case, with all Accessories
- ► Case includes individual compartments for each item
- Kit Includes:
 - Two (2) replacement sensors
 - Spare filter Elements (pkg. of 10)
 - Nickel Cadmium Rechargeable Battery Pack
 - Nickel-Metal Hydride Battery Pack
 - · Remote Battery Charging Base
 - 110V, 60 HZ Battery Charger
 - 12VDC Battery Charger
- ▶ 25 year warranty on the TIF ZX-1

(See TIFZX-1 for specific features & specifications)

International Versions	Model No.
European – 230V, 50 Hz Charger	TIFZX-1KITE
Japan - 100V, 50/60 Hz Charger	TIFZX-1KITJ

Optional Accessories & Replacement Parts

Listed under TIF ZX-1 Heated Pentode™ Refrigerant Leak Detector

ROBINAIR 16700 Heated Sensor Refrigerant Leak Detector

- Reliable Heated Sensor technology designed for long life, with superior sensitivity and durability
- Easy One Hand operation
- Audible and visual leak indicators
- ▶ Adjustable Sensitivity Control infinite control in contaminated areas
- Adjustable Volume Control
- ► Low Battery Indicator
- ▶ 16" Flexible Probe
- ► Includes Leak Standard (Ampoule)
- ▶ Certified to SAE J1627
- ▶ CE approved
- ▶ One year warranty

Specifications		
Ultimate Sensitivity	<0.5 oz/yr (14 gr/yr)	
Power Supply	Four "AA" Alkaline Batteries (Included)	
Battery Life	8 – 10 hours	
Operating Temp	32° to 105° F (0° to 40° C)	

Replacement Parts (supplied with product)	Part Number
Filter Kit	16703
Replacement Sensor	16704
Leak Standard	16705

XL-1, RX-1, XP-1 Refrigerant Leak Detectors

U.S. Patent #'s Re: 32,552; 4,282,521; 5,400,015

- ▶ Microprocessor controlled circuit with Advanced Digital Signal Processing, monitors the sensing tip up to 2000 times per second
- ▶ Detects all Halogenated refrigerants
- ▶ Variable frequency audible alarm
- ▶ 14" Flexible stainless steel probe with Teflon™ liner
- ► Constant Power Indication
- ▶ Power Supply: 3VDC, 2 C cell alkaline batteries (included)
- ► Sensing Tip Life: approx. 20 hours (two tips included)
- ▶ Operating Temp: 30° to 125° F (0° to 52° C)
- ▶ Blow Molded Carrying Case included, optional holster
- Certified to SAE J1627
- ▶ UL Classified & CE approved
- See chart for warranty information

Specifications	TIF XL-1	TIF RX-1	TIF XP-1
Ultimate Sensitivity	< 0.4 oz. per year (11 gr/yr)	< 0.25 oz. per year (7 gr/yr)	< 0.1 oz. per year (3 gr/yr)
True Mechanical Pump	n/a	Yes	Yes
Visual Leak Indication Levels	n/a	6 (single color)	18 (tri-color)
Sensitivity Levels	1	2	7
One Touch Reset and Keypad Controls	n/a	Yes	Yes
Mute Button	n/a	n/a	Yes
Battery Test	n/a	n/a	True voltage indication
Battery Life	Approx. 40 hrs.	Approx. 30 hrs.	Approx. 30 hrs.
Warranty	2 Years	2 Years	3 Years



TIF XP-1

Optional Accessories	Part Number
Carrying Holster	TIFXP-3
Leak Source	TIF5201
Maintenance Kit (3 Tips with protectors)	TIFXP-2

Replacement Parts (supplied with product)	Part Number
Blow Molded Carrying Case	TIFXP-4







Design Certified by MET Laboratories, Inc. to meet SAE J1627 for R134a, R12 and R22





U.S. Patent #'s Re: 32,552; 4,282,521; 5,400,015





- ▶ Two Sensitivity positions, including our unique ScanMode
- ▶ Reset Button for instant re-calibration
- ▶ Detachable probe
- ► High efficiency pump
- ► Certified to SAE J1627
- ▶ Detects ALL Halogenated Refrigerants
- ▶ UL Classified for Intrinsic Safety
- ► Constant Power Indication
- Carrying case and spare sensing tip included
- ▶ One year warranty

Full featured but easy to use, the original TIF detector. The TIF5750A offers the detachable, flexible probe with micro-pump, leak intensity indicators, and all the features you have come to know and trust. Includes the patented SCAN mode that revolutionized leak detection.

Specifications		
Ultimate Sensitivity	Less than 0.1 ounces per year (3 gr/yr)	
Power Supply	(2) 1.5V "C" Batteries	
Battery Life	30 Hours (Alkaline)	
Probe/Cord Length	Probe = 14" (35cm) Cord = 36" (91.4cm)	
Operating Temperature	32°-125° F (0°-52° C)	

Optional Accessory	Part Number
Maintenance Kit (3 tips, 3 protectors)	TIF555
Leak source	TIF5201
Replacement Parts (supplied with product)	Part Number
Replacement Parts (supplied with product) Custom molded carrying case	Part Number TIF548



ROBINAIR 16600 Electronic Refrigerant Leak Detector



- ▶ Proven Corona Discharge technology
- ▶ Detects all CFC, HCFC and HFC Refrigerants
- ► Easy One Hand operation
- Audible and visual leak indicators
- ▶ Adjustable Sensitivity Control infinite control in contaminated areas
- Adjustable Volume Control
- ▶ 16" Flexible Probe
- ▶ Includes spare Sensing Tip
- ▶ UL Design Certified to SAE J1627
- One year warranty

Specifications			
Ultimate Sensitivity	Less than 0.5 oz. per year (14 gr/yr)		
Power Supply Four "AA" Alkaline Batteries (Included)			
Battery Life 8 – 10 hours			
Operating Temp	32° to 105° F (0° to 40° C)		

Replacement Parts (supplied with product)	Part Number
Sensing Tip	16503



H10A A/C Pump Style Refrigerant Leak Detector

U.S. Patent #'s Re: 32,552

- ► High efficiency pump
- ▶ Powered by 115 volts AC (220V Available)
- Dual sensitivity positions
- Visual indicator in probe
- Certified to SAE J1627
- ▶ Built-in carrying case

This AC powered Leak Detector is ideal for continuous use and/or bench testing. It has a sensitivity adjust knob for "Fine Tuning." A unique probe with pump and a built in neon light. Audible alarm and visual indication on all CFC, HCFC, HFC leaks.

Specifications			
Ultimate Sensitivity	Less than 0.1 oz. per year		
Power Supply 115VAC/60Hz (230V/50Hz)			
Warm-up Time 30 seconds			
Probe/Cord Length	36" (91.4cm)		
Operating Temperature	32°-125° F (0°-52° C)		

International Ver	rsion Model No.		
Operating Temperature	32°-125° F (0°-52° C)		
Probe/Cord Length	36" (91.4cm)		
Warm-up Time	30 seconds		
1 Ower Suppry	113 VAC/00112 (230 V/30112)		

220V, International	TIFHIOAINTL		
Optional Accessories	Part Number		
Maintenance Kit (3 tips, 3 protectors)	TIF555		







16250A

16273

ROBINAIR 16250A UV Leak Detection Kit for HVAC-R

- ▶ Dye Injector with 1/4" connector
- ► Cartridge of universal dye, for use with any type of refrigerant
- ▶ Bright, high intensity UV Lamp with 115V transformer and 15' (4.57m) power cord
- UV shield/enhancer Glasses
- Rugged carrying case and a shock-absorbing lamp mounting mechanism designed to protect the lamp during use and storage

Ultraviolet Leak detection helps you find leaks fast, because you can actually see the leak that shows up bright yellow-green, when exposed to the UV lamp. No false triggering or background contamination to contend with. Dyes will not harm the A/C system or affect the viscosity of the refrigerant lubricants and can remain in a system for future leak searches. The convenient injector/cartridge system is easy to handle and allows you to add dye to a fully pressurized system, quickly and cleanly. Kit includes everything you need for UV leak detection.

Optional Accessories	Part Number
Battery Powered UV lamp, with 110V charger	16273
Battery Powered UV lamp, with 220V charger	16274
Replacement battery	16279
Dye Cleaner, 16 oz. bottle	16263

Replacement Parts	Part Number
Dye Cartridge	16293
Dye Injector, with 1/4" connector	16294
Dye, 12 each 1/4 oz. bottles	16276
Dye, 1 each 8 oz. bottle	16286
115V UV Lamp w/power cord & transformer (includes UV Glasses)	16298
60 Watt replacement bulb	16254
On/Off switch	16208
Replacement Lens	16216



- ▶ Great for pinpointing those "hard to find" elusive leaks
- ▶ Detects intermittent and multiple simultaneous leaks
- Verifies repairs and eliminates comebacks
- ▶ Ensures job is done right the first time, no guesswork
- ▶ Safe and easy to use

The TIF500 series of fluorescent leak detection dyes uses the patented Spotgun injection system – the simplest, quickest and most cost effective method available. No mess, no waste, no hassle. Super bright UV lamps quickly show the way to leaks in AC/R, and/or automotive systems. Complete kits, or just the Spotgun and cartridge, for those who already have a UV light, are available.

To use the Spotgun system, simply insert the cartridge, connect the hose, and squeeze the trigger. Disposable cartridges cost up to 25% less per application than alternatives, and keep you and everything else clean! Eliminate comebacks, and ensure the job is done right the first time.



500 AC/R Kit

An AC/R kit that includes everything you need. 115VAC, 100 watt MegaLite, UV glasses, Spotgun Injector, connector, 1 AC/R Dye cartridge (8oz.), 4 oz. dye cleaner spray bottle and carrying case.

510 AC/R Dye Kit

Includes the Spotgun Injector, Dye cartridge and 1/4" Flare connector.

Replacement Parts (supplied with TIF 500 product)	Part Number
AC/R Dye cartridge	TIF501
"Date Installed" labels	TIF511
1/4" Flare connector	TIF512
Spotgun	TIF514
MegaLite (115V)	TIF505
Replacement Lens for MegaLite	TIF505-1
100W, 115V Replacement Bulb	TIF506
UV Enhancing Glasses	TIF509



TIF 510

Optional Accessory	Part Number
32 oz. Dye Cleaner Spray Bottle	TIF516
MegaLite (230V)	TIF505I

ULD-300, TMULD-300 AMPROBE Ultrasonic Leak Detector



ULD-300

- ▶ Detects the ultrasonic noise created by pressure or vacuum leaks of any gas, regardless of type: CFC's, HFC's, Nitrogen, CO₂, Steam, etc.
- ▶ Unaffected by contaminants, or windy conditions
- ▶ Identifies failing solenoids, valves and bearings
- ▶ Includes: Headphones, Extension Tube, Parabola (reflector "dish" for reduction of background noise) and a Carrying Case
- ▶ Audible & Visual Leak Indicators
- Battery condition indicator

TMULD-300 (ULD-300 Plus UT-300 Ultrasonic Transmitter*)

- ► The UT-300 transmits an ultrasonic signal for non pressurized applications
- ► Tests the "air-tightness" of weather seals, tanks, ovens, refrigerators, etc.
- Locating leaks in duct work
- ▶ Finding the ends of buried PVC pipes



UT-300

Replacement Parts (supplied with product)	Part Number
Ultrasonic Transmitter (supplied with TMULD,	
can be used with ULD-300 as an Optional Accessory)	UT-300
Tubular Extension Adapter	TEA-1
Tubular Extension	TE-2
Carrying Case	ULD-CC
Parabola (reflector "dish")	PB-1
Headphones	HP-1
Instruction Manual	www.amprobe.com



ROBINAR 16450 TruTrack™ Ultrasonic Leak Detector

- ▶ Detects Refrigeration leaks, pressurized gas leaks, vacuum leaks, dry nitrogen gas leaks, steam leaks, etc. It will detect any gas under pressure or vacuum
- Allows you to identify potential failures in bearings, valves, solenoids and other operational components
- ► Complete with: headset, solid contact probe, flex-tube and a padded carrying case
- Adjustable sensitivity
- ▶ Audible and visual leak indication
- Powered by one 9V battery (included)

TruTrack™ is an ultra-sensitive leak detector, which uses ultrasound technology to "hear" the sound of a leak. It makes finding a leak fast and accurate because it eliminates annoying false triggering and interference, caused by wind, stray gases or other contaminants. TruTrack is the perfect complement to other forms of leak detection and is ideal for a wide range of service and preventative maintenance applications.

Optional Accessories	Part Number
Sound Generator	16451
Replacement Parts (supplied with product)	Part Number
Replacement Parts (supplied with product) Flex-tube	Part Number 16452
	7 5117 11511115 51



Ideal accessory for the 16450 $TruTrack^{m}$, it detects seal failures in refrigerators/freezers, vehicle compartments or any other location where a good seal is required. The battery-operated unit emits a special frequency from inside the test area, which can be heard by the 16450, anywhere a leak exists.







16451

8800, 8800A, 8850 Combustible Gas Detectors



TIF 8800A

- Detects dangerous explosive gases
- Applications include: Gas lines and pipes, aids in identifying Heat Exchanger leaks and hazardous living/working environments (Note: <u>not</u> an effective Carbon Monoxide detector - see TIF 8500A, page 54)
- Used in almost any situation where combustible gasses, vapor or residues need to be found
- Instantaneous response
- Automatic warm up
- Ultimate sensitivity as low as 1 ppm (gasoline)
- Adjustable sensitivity
- ▶ Audible "Geiger counter" type signal
- UL, CE and MSHA approved

These detectors are MSHA approved and UL Classified. The unique flexible 15" stainless probe allows you to access hard to reach places. All feature automatic warm-up and are ideal for a tremendous range of uses and are invaluable for safety in many applications.

Features	TIF8800	TIF8800A	TIF8850	TIF8800INTL	TIF8800AINTL	TIF8850I
Battery Charger	115V	115V	115V	220V	220V	220V
LED Leak Sensitivity Lights		6 Lights	6 Lights		6 Lights	6 Lights
Audio Mute button to silence alarm			Yes			Yes
Probe Length	15" (38cm)					
Power Supply	(2) 2.4V Ni-Cad Batteries					
Battery Life	4 Hours/Charge					
Operating Temp	32° to 125° F (0° to 52° C)					

Optional Accessories Part Number Cigarette lighter adapter TIF8805

Replacement Parts (supplied with product)	Part Number
Custom carrying case	TIF549
Sensor	TIF8801
Rechargeable Ni-Cad batteries (2 each)	TIF8806A
115V battery charger (Supplied with TIF8800, TIF8800A and TIF8850)	TIF8803A
220V battery charger (Supplied with TIF8800INT, TIF8800AINTL, TIF8850I)	TIF8806B





Partial List of Detectable Compounds

Compound	Min. detectable concentration	Compound	Min. detectable concentration	
Acetylene	50 ppm	Methyl Chloride	5 ppm	
Iso-Butane (R600a)	500 ppm	Hydrogen Sulfide	5 ppm	
Methane	500 ppm	Acetone	50 ppm	
Ethane (R170)	500 ppm	Methanol	50 ppm	
Propane (R290)	500 ppm	Ammonia (R717)	20 ppm	
Ethylene	500 ppm	Gasoline	1 ppm	
Hydrogen	500 ppm	Chlorine	1 ppm	
Methyl Ether	500 ppm	Carbon Dioxide	500 ppm	
Vinyl Chloride	5 ppm		* *	



ROBINAIR 16710 Combustible Gas Detector

Super-sensitive cordless gas leak detector, detects a wide range of natural gases including propane, methanol, butane and gasoline.

- ► Adjustable sensitivity levels
- ▶ Infinite control for background noise
- ► Audio volume control
- ► No calibration required
- ► Long-lasting sensing tip
- ▶ Low battery indicator

Sensor

Spe	cifications
Probe Length	16.5"
Power Source	Four AA alkaline batteries (included)
Battery Life	Approximately 30 hours
Operating Temp	32° to 105° F (0° to 40° C)



16711



ALUMINUM BLOCK MANIFOLD GAUGE SETS

Model No.	2-Way	4-Way	High Pressure	Glycerine Filled Gauges	Protective Holster	Sight Glass	80 MM Gauges	Metric Scale	Hoses Included	Page #
48430/TIF9500	V					V			72"	15
48400	V					V			none	15
TIF9575	V			V		V			72"	15
TIF9575KC/KP/MB	V			V		V		V	72"	15
TIF9600		V		V		V			72"	15
TIF9600KC/KP/MB		V		V		V		V	72"	15

FORGED BRASS MANIFOLD GAUGE SETS

Model No.	2-Way	4-Way	High Pressure	Glycerine Filled Gauges	Protective Holster	Sight Glass	80 MM Gauges	Metric Scale	Hoses Included	Page #
41670	V		/		V				60"	17
41671	~		~		V				none	17
41770	~		~		V				60"	17
40151	V							V	none	16
40153	V								36"	16
40159	V						V		none	16
41600	V				V				none	18
41612	V				V			V	none	18
41620	V				V				72"	18
41630	V				V				72"	18
41640	V				V				72"	18
41700	V				V				none	18
41720	V				V				72"	18
40152/TIF930	V								none	16
40169/TIF930KIT	V								60"	16
TIF935	V			V					none	16
TIF935KP	V			/				V	none	16
41470		V	V		V				60"	19
41400		V			V				none	19
41450		V			V				60"	19
41460		V			V				60"	19

Note: All manifolds equipped with 1/4" MFL fittings. Standard gauges are 63 mm in diameter.



ROBINAIR 41875 Electronic Manifold Plus™ 41800 Electronic Manifold

It's A Manifold - "Plus" A Whole Lot More!

- ▶ Fast, Accurate Electronic Instrument, replaces four or five other tools
- ▶ Perform system diagnosis and temperature/pressure measurements for a broad range of refrigerants in use today
- Does away with complicated calculations for superheat and sub-cooling
- ▶ No hoses needed a unique test lead design eliminates crosscontamination and trapped refrigerant in hoses
- ▶ Look at all these functions rolled into the Electronic Manifold:
 - Measures system Pressure and Temperature
 - Selectable Fahrenheit or Celsius scale
 - Calculates superheat
 - Calculates sub-cooling (Plus[™] Model 41875)
 - Measures vacuum level in microns, with built in Thermistor Vacuum Gauge (Plus™ Model 41875)
 - Stores Min/Max and average readings
 - · Automatic altitude calculations
 - 1/4" Tee-fitting accepts standard charging/evacuation hose
 - Operates on batteries for complete portability
 - · Low battery indication





For Multiple Refrigerants - For All Systems

Pressure -

Split screen shows low and high side pressures the way you're used to viewing them with a traditional manifold; leads are color coded, too.

Temperature -

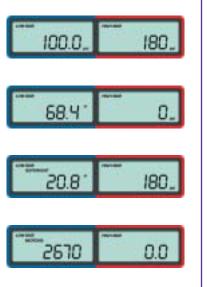
Push a button to view temperature; you can select Fahrenheit or Celsius scale; the separate temperature probe can be used for external readings.

Superheat/Subcooling -

Press a button to calculate superheat automatically, push again for subcooling ("Plus" Model No.41875) – there's no faster, easier way to get these calculations.

Vacuum -

With the thermistor vacuum gauge lead in place, "Plus" Model 41875, will measure vacuum during evacuation; the display automatically changes from inches Hg to microns.



41875 & 41800 Electronic Manifolds

Spec	ification
Low Side Pressure Range	29" Hg to 200 psi (13.78 BAR or 1378 kPa)
High Side Pressure Range	0 to 500 psi (34.47 BAR or 3447 kPa)
Vacuum Range (Model No. 41875)	10,000 to 50 microns
Temperature Range	-40 to 200° F (-40 to 93° C)
Superheat Range	0 to 200° F (-17 to 93° C)
Operating Temp Range	-10 to I20° F (-23 to 48° C)
Elevation Calibration Range	Sea Level to 20,000 feet
Power Source	Four AA alkaline batteries (Included)
Automatic Shut-Off Tine	60 minutes
Lead Lengths: Low/High & Vacuum	72" (183 cm)
Temperature Probe Cable Length	15' (4.5 meters)

41875 Electronic Manifold Plus™ – with high and low side leads,

temperature probe, Vacuum Gauge, carrying case and R-22 key

41800 Electronic Manifold – with high and low side leads, temperature

probe and carrying case

Optional Accessory

Part Number

41852

Leatherette Holster for protection during use (for 41800/41875)

Vey For Fook Defricerent

A Key For Each Refrigerant

You can throw away your pressure/temperature charts! All the data for a single refrigerant is stored in a special key. Just plug in the appropriate key and you'll get the correct readings automatically. Keys are available for all popular refrigerants and new keys will be available as new refrigerants are developed.

Refrigerant Type Key Part Number	R-12 41808	R-22 41814	R-134a 41812	R-401A 41828	R-401B 41832	R-402A 41834	R-402B 41836	R-404A 41806
Refrigerant Type Key Part Number	R-407C 41846	R-408A 41838	R-409A 41804	R-410A 41818	R-414B 41844	R-500 41848	R-502 41816	R-507 41842



Replacement Parts (supplied with product)	Part Number
Low and High Side Lead for 41800	41822
Low Side Lead for 41875	41876
High Side Lead for 41875	41878
Temperature Probe for 41800/41875	41824
Thermistor Vacuum Gauge for 41875	41880
Replacement Carrying Case for 41800/41875	41850



Aluminum Block OBNAR CFC/HCFC Gauge Sets

We offer a full range of gauge sets; 2-Way and 4-Way, Dry or Glycerine filled, for CFC/HCFC or HFC applications. Manifold Gauge sets are offered in Imperial scales with temperature scales in °F. Metric versions* and °C scales are also available; a model number suffix denotes the scale as follows: -MB, Bar; -KC, Kg/cm²; -KP, Kilo Pascals.

Designed for use with refrigerants such as R12, R134a, R22 and R502. Models TIF9575 and TIF9600 include temperature conversion scales for R12, R22, and R502.

All Gauges Feature

- ► Zero Adjustable Gauges
- ▶ Three 72" Color-Coded Hoses with shut off fittings (1/4" FFL)
- ► Extruded Aluminum Manifold Block
- ▶ Color Coded Knobs
- ► High and Low Side gauges
- ▶ Brass fittings
- ► Hanging Hook
- ▶ Optical Sightglass for visual contact

Additional TIF 9575 Features

▶ 63 mm Glycerine filled gauges

Additional TIF 9600 Features

- ▶ 63 mm Glycerine filled gauges
- ▶ 4 Way Manifold design
- ▶ 72" Black Evacuation Hose (1/4" FFL)

Specifications				
Range	Low: -29.9 inHg to 250 PSI High: 0-500 PSI			
Resolution	Low: 1 inHg and 1 PSI High: 5 PSI			
Accuracy	±2% of Mid Scale (ANSI Grade B)			
Operating Temp	32°-125° F (0°-52° C)			
Hose Length	72 inches (1.8m)			

Available without Hoses

48400/TIF9500X Manifold only TIF9575X Manifold only **TIF9600X** Manifold only

*International Versions	Model No.
TIF9575	KC, KP or MB
TIF9600	KC, KP or MB



48430/ TIF 9500



TIF 9575



ROBINAIR 40152 Two Way Brass Manifolds





40152



- Our popular Side Wheel Manifold is easy to use and designed for accuracy
- ▶ Bar Solid forged brass for long life; handwheels are durable, colorcoded Lexan®
- ▶ Universal Gauges Clearly marked so they're easy to read and protected with Lexan™ lenses
- ▶ Field Proven Face Seal Valves Provide a tight seal, less wear and improved flow
- ▶ Available with 80 mm diameter gauges or Celsius temperature scale

40152/	Two-Way Standard Side Wheel Manifold with color-coded
TIF 930	gauges, brass bar and hanging hook - No hoses included

40153 Two-Way Standard Side Wheel Manifold Set – includes Model 40152 with three 36" color coded (1/4" FFL) standard hoses and standard fittings

40159 Two-Way Standard Side Wheel Manifold with color-coded gauges, brass bar and hanging hook; with large 80 mm (3.15") diameter gauges - No hoses included (Note: Standard gauges are 63 mm (2.5") in diameter)

40169/ Two-Way Side Wheel Manifold Set – includes Model 40152 TIF 930KIT with three 60" color coded (1/4" FFL) standard hoses and standard hoses

International Version

40151 Two-Way Standard Side Wheel Manifold with color-coded gauges, temperature readings in degrees Celsius, brass bar and hanging hook - No hoses included



TIF 935

935 Economy Manifold Gauge

- Forged Brass construction, with integral hose holders
- ▶ Non Rotating Valve seats and O-rings for long life
- Extra large, high impact, color coded valve handles
- Scratch and break resistant lenses
- Replaceable brass unions for serviceability
- Works with all refrigerants (temp. scales for R12, 22 and 134a)
- ▶ Unique Glycerine Filled Polycarbonate gauges to dampen needle flutter
- ▶ 1/4" MFL Fittings
- ▶ 2-Way

International Version

TIF935KP Kilo Pascal scale - No hoses included

ROBINAIR 41671 High Pressure Brass Manifold Set

- ▶ Designed for today's **High Pressure** Refrigerants
- ▶ R-410A Scale Pressure Gauges, plus a Pressure/Temperature Chart for a wide range of other refrigerants
- ► Protective Holster Flexible cover provides protection during use and storage
- ▶ Includes Enviro-Guard™ Hose Set, rated at 740 psi working pressure, 3700 psi burst pressure; with ball valve fittings (Model 41670)



41671 High Pressure Manifold - No hoses included

High Pressure Manifold Set - include 41671 with three 60" color coded (1/4" FFL) Enviro-Guard™ Hoses with in-line ball valve fittings



ROBINAIR 41770

High Pressure Brass Block Manifold with Sight Glass

- ▶ Designed for today's **High Pressure** Refrigerants
- ▶ R-410A Scale Pressure Gauges, plus a Pressure/Temperature Chart for a wide range of other refrigerants
- ▶ Sight Glass Confirms movement and condition of refrigerant passing through the manifold
- ► Protective Holster Flexible cover provides protection during use and storage
- ▶ Includes Enviro-Guard™ Hose Set, rated at 740 psi working pressure, 3700 psi burst pressure; with ball valve fittings



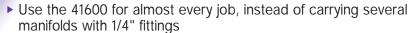


41770



ROBINAR 41600 Two Way Manifolds

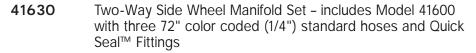




- ▶ Gauges show R-22 and 134a temperature scales
- ▶ Pressure/Temperature Chart included for other refrigerants, conveniently mounted on the rear of the holster
- ▶ Protective Holster Flexible cover provides protection during use and storage, holds P/T chart
- ► Face Seal Valves Provide a tight seal, less wear and improved flow

41600	Two-Way Side Wheel Manifold with protective holster, color-
	coded gauges, brass bar and hanging hook - No hoses
	included

41620	Two-Way Side Wheel Manifold Set – includes Model 41600
	with three 72" color coded (1/4") standard hoses and
	standard fittings



Two-Way Side Wheel Manifold Set - includes Model 41600 with three 72" color coded (1/4") Enviro-Guard™ hoses with Quick Seal™ Fittings

International Version

41612 Two-Way Side Wheel Manifold, Temperature readings in degrees Celsius – No hoses included

ROBINAIR 41700 Two Way Brass Block Manifold with Sight Glass



- ► Sight Glass Confirms movement and condition of refrigerant passing through the manifold
- ▶ Pressure/Temperature Chart included for other refrigerants, conveniently mounted on the rear of the holster
- ▶ Protective Holster Flexible cover provides protection during use and storage, holds P/T chart
- ► Face Seal Valves Provide a tight seal, less wear and improved flow

41700 Two-Way Sight Glass Manifold with protective holster – No hoses included

Two-Way Sight Glass Manifold Set – includes Model 41700 with three 72" color coded (1/4" FFL) standard hoses and standard fittings

ROBNAR 41400 Four Way Brass Manifold

- ▶ Diagnose, evacuate and charge an A/C system without switching hoses, making service work faster and more convenient
- ▶ Gauges show R-22 and 134a temperature scales
- Pressure/Temperature Chart included for other refrigerants, conveniently mounted on the rear of the holster
- ▶ Protective Holster Flexible cover provides protection during use and storage, holds P/T chart
- ▶ Double "Y" Design Bar with a 3/8" bore, 1/4" MFL charging fittings and a 3/8" MFL vacuum port fitting. The 3/8" port allows for the use of a larger evacuation hose, cutting evacuation time by up to 40%. (If you prefer all 1/4" FFL hoses, a 3/8" FFL to 1/4" MFL intake adapter is available, Part No. 13064)
- ▶ Also available with **High Pressure Gauges** (R-410A). See below.



41400

41400	Four-Way Manifold with protective holster, color-coded gauges, brass bar and hanging hook -
	No hoses included

- Four-Way Manifold Set includes Model 41400 with three 60" color coded (1/4" FFL) standard hoses and one 60" yellow (3/8" FFL) Enviro-Guard™ hose for faster evacuation
- Four-Way Manifold Set includes Model 41400 with three 60" color coded (1/4" FFL) Enviro-Guard™ hoses and one 60" yellow (3/8" FFL) Enviro-Guard™ hose for faster evacuation
- Four-Way Manifold Set with High Pressure Gauges for R-410A, with three 60" color coded (1/4" FFL) Enviro-Guard™ hoses with ball valves and one 60" yellow (3/8" FFL) Enviro-Guard™ hose for faster evacuation

Optional Accessory

Part Number

Intake fitting adapter 3/8" FFL to 1/4" MFL

1306

Replacement Gauges & Parts

ROBINAIR 11794

(Replaces 11692)

▶ Low Side, universal compound Replacement Gauge, psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees Fahrenheit

ROBINAIR 11797

► Low Side, universal compound Replacement Gauge, psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees Celsius

ROBINAIR 41675

▶ Low Side, High Pressure (R-410A) Replacement Gauge

ROBINAIR 11796

▶ Replacement Gauge Lens, quarter turn on-off





▶ Lens, TIF 9500



ROBINAR 11795 (Replaces 11693)

► **High Side**, universal Replacement Gauge, psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees **Fahrenheit**

ROBINAIR 11798

► High Side, universal Replacement Gauge, psi/kPa pressure readings, R-22 and R-134a temperature readings in degrees Celsius

ROBINAIR 41676

▶ High Side, High Pressure (R-410A) Replacement Gauge





▶ 63mm, Zero-Adjustable Low Side Compound Gauge, PSI readings, R12, R22, R502 temperature readings in degrees Fahrenheit



9550R

▶ 63mm, Zero-Adjustable High Side Gauge, PSI readings, R12, R22, R502 temperature readings in degrees Fahrenheit



TIF 9622B

▶ 63mm, Glycerin Filled Zero-Adjustable Low Side Compound Gauge, PSI readings, R12, R22, R502 temperature readings in degrees Fahrenheit





9632R

▶ 63mm, Glycerin Filled Zero-Adjustable High Side Gauge, PSI readings, R12, R22, R502 temperature readings in degrees Fahrenheit



9652B

▶ 80mm, Glycerine Filled Zero-Adjustable Low Side Compound Gauge, PSI readings, R12, R22, R502 temperature readings in degrees Fahrenheit



9662R

▶ 80mm, Glycerine Filled Zero-Adjustable High Side Gauge, PSI readings, R12, R22, R502 temperature readings in degrees Fahrenheit

Manifold Valve Stem Replacement Assembly Kits

Kits include all necessary parts to service **one** manifold valve, To replace stems on both valves, order two kits

TIF 931 Valve Kit TIF930/935

TIF 9620 Valve Repair Kit (all TIF Aluminum Manifolds)

40232 Stem Assy. Kit for Manifolds with Conical Seal (1995 and earlier models)

41617 Stem Assy. Kit for Sidewheel Manifolds, with Face Seal (1996 to current models)

includes stem with O-rings, spring and screw (will not fit Sightglass Manifolds)

19695 Stem Assy. Kit for Sightglass Manifolds, with Face Seal

41464 Stem Assy. Kit for 41400 Series Manifolds 13033 High Vacuum Silicone Grease – 1/2 oz.

Replacement Handwheels for Manifolds

40449 Set of one red and one blue, 1/4" drive ("spoke" style)
41698 Set of one red and one blue, 1/4" drive (barrel style)

41462 Black, 1/4" drive (barrel style)

TIF 9509R/B Large Valve Handle (red or blue) TIF 2-Way Aluminum Manifolds
TIF 9608R/B/Y/BL Small Valve Handle (red, blue, yellow, or black) TIF 4-Way Aluminum

Block



9675 & 9685 Digital Replacement Gauges

TIF has designed these gauges with the latest state of the art technology. Their digital display means you can have quick, easy to read, and accurate readings. These gauges allow you to read both pressure and vacuum. The high side will allow you to measure from 0 to 500 psi, while the low side ranges from – 30.0 inHg to 99.9 psi.

Gauges are compatible with all refrigerants and are individually powered by one 9V battery.

Spe	cifications
Range	Low: -30.0 inHg to 99.9 PSI High: 0-500 PSI
Resolution	Low: 0.1 inHg and 0.1 PSI High: 1 PSI
Accuracy	±2% of reading
Operating Temp	32°-125°F (0°-52°C)
Power Supply	(1) 9V battery
Battery Life	>100 hours (alkaline)





ROBINAIR 17026 HVAC Replacement Parts Kit



17026

Contains an assortment of the most commonly needed replacement parts for repairing manifolds, hoses and various other A/C tools. Kit contains:

- ▶ 2 Manifold Stem Repair Kits (Conical Seal)
- ▶ 2 Manifold Stem Repair Kits (Face Seal)
- ▶ 12 Valve Cores
- ▶ 12 Valve Core Depressors, 1/4"
- ▶ 12 Hose Gaskets
- ▶ 6 Quick Seal Caps, 1/4"
- ▶ 6 Quick Seal Gaskets
- O-rings for Quick Seal Fittings
- ▶ 1 Valve Core Remover/Installer with 6 Valve Cores
- ▶ 2 Sets of Color-coded Lexan®, Handwheels (red and blue)

ROBINAIR Refrigeration Charging Hoses



Robinair Premium Refrigerant Charging Hoses are built for long life and dependability. A strong, six-sided crimp provides a reliable connection between the hose and the barb, even at maximum pressure. The coupler nuts are deeply knurled for quick finger-tightening. Enviro-Guard™ hoses are ideal for high pressure applications, including R-410A systems.

- ► Enviro-Guard™ Hoses Special barrier material prevents permeation of refrigerant, yet remains flexible. 740 psi working pressure/3700 psi burst pressure
- ▶ Standard Hoses Neoprene-coated for flexibility and wear resistance, 500 psi working pressure/2500 psi burst pressure
- ► Tech-Plus[™] Economy hoses
- ▶ Quick Seal™ Fittings Automatically seal and prevent refrigerant from discharging when hoses are disconnected
- ▶ All hoses are equipped with a 45° bend fitting on one end, for convenient access to the system

HOSE SELECTION CHART

1/4" FFL Enviro-Guard™ High Pressure (R-410A) Hoses with standard fittings** 740 psi working pressure/3700 psi burst pressure

Length (inches)	Yellow	Blue	Red	Set (Yellow, Blue, Red)
72	67172	67272	67372	67072

1/4" FFL Enviro-Guard™ High Pressure (R-410A) Hoses with Quick Seal™ fittings* 740 psi working pressure/3700 psi burst pressure

Length (inches)	Yellow	Blue	Red	Set (Yellow, Blue, Red)
36	68136A	68236A	68336A	69036A
60	68160A	68260A	68360A	69060A
72	68172A	68272A	68372A	69072A
96	68196A	68296A	68396A	69096A

1/4" FFL Standard Hoses with standard fittings 500 psi working pressure/2500 psi burst pressure

Length (inches)	Yellow	Blue	Red	Set (Yellow, Blue, Red)
36	31036	32036	33036	30036
60	31060	32060	33060	30060
72	31072	32072	33072	30072
96	31096	32096	33096	N/A

1/4" FFL Standard Hoses with Quick Seal™ fittings* 500 psi working pressure/2500 psi burst pressure

Length (inches)	Yellow	Blue	Red	Set (Yellow, Blue, Red)
72	38172A	38272A	38372A	39072A

ROBINAIR Special Hoses for Special Jobs

Enviro-Guard™ Hoses with Ball Valves

In-line ball valves control refrigerant flow with a quarter turn

65060 60" Enviro-Guard™, 1/4" FFL hoses, with Ball Valves - Set of three

(Yellow, Blue, Red)

65160
60" Enviro-Guard™, 1/4" FFL hose, with Ball Valve - Yellow
65260
60" Enviro-Guard™, 1/4" FFL hose, with Ball Valve - Blue
65360
60" Enviro-Guard™, 1/4" FFL hose, with Ball Valve - Red

3/8" FFL Charging and Vacuum Hoses

These larger diameter hoses reduce pull-down time by as much as 40%

36036	36" Standard Hose, 3/8" FFL, with standard straight fittings – Yellow
36060	60" Standard Hose, 3/8" FFL, with standard straight fittings - Yellow
68060	60" Enviro-Guard™ Hose, 3/8" FFL, with standard straight fittings - Yellow
67560	60" Enviro-Guard™ Hose, 3/8" FFL, with standard straight fittings - BLACK

^{*}The "A" suffix in the part number denotes equipped with Quick Seal™ fittings

^{**}Also available in BLACK - see next page

ROBINAIR Special Hoses for Special Jobs

1/4" FFL Charging and Vacuum Hoses - BLACK

67436	36" Enviro-Guard™, 1/4" FFL hose, with standard fittings - BLACK
67448	48" Enviro-Guard™, 1/4" FFL hose, with standard fittings - BLACK
67460	60" Enviro-Guard™, 1/4" FFL hose, with standard fittings - BLACK
67472	72" Enviro-Guard™, 1/4" FFL hose, with standard fittings - BLACK

20' Charging Hoses

68020	20' Enviro-Guard™, 1/4" FFL hose, with standard fittings - Set, Red and Blue	
68420	20' Enviro-Guard™, 1/4" FFL hose, with Quick Seal™ fittings - Set, Red and Blue	е

Tech-Plus™ Economy Hoses

30172	72" Standard hoses (500/2500 psi), 1/4" FFL with standard fittings - Set of three
	(Red, Yellow, Blue)

38472	72" Standard hoses (500/2500 psi), 1/4" FFL with auto shut-off fittings – Set of three
	(Red, Yellow, Blue)

68472	72" Barrier High Pressure hoses (740/3700 psi), 1/4" FFL with auto shut-off fittings -
	Set of three (Red, Yellow, Blue)

ROBINAR Hose Accessories & Replacement Parts



Ball Valve Adapters

These six inch adapters connect to any 1/4" FFL charging hose for convenient in-line control of refrigerant flow. The ball valve opens and closes in just a quarter turn. The fitting features a 45° bend for easier connections, even in tight spots.

18501	1/4" MFL x 1/4" FFL, Blue
18512	1/4" MFL x 1/4" FFL, Red
18513	1/4" MFL x 1/4" FFL, Yellow
18514	1/4" MFL x 1/4" FFL, Blue, Red and Yellow (set of 3)
18511	1/4" MFL x 3/16" FFL Red



Flexible Adapters

Flexible adapters feature brass fittings and durable neoprenecoated hose, 6".

10236	1/4" MFL x 1/8" FFL, Blue
10470A	1/4" MFL x 3/16" FFL, Red
10778	1/4" MFL x 1/4" FFL, Yellow

Hose Extension Couplers

For connecting any number of hoses to get the required length

40333 1/4" MFL x 1/4" MFL (no valve core)

40404 1/4" MFL x 1/4" MFL (with valve core), pkg/3



90° Style Adapters

Solid brass fitting is ideal for tight spots.

10469A 1/4" MFL x 3/16" FFL 40563A 1/4" MFL x 1/4" FFL



Straight Style Adapters

10468A 1/4" MFL x 3/16" FFL 40560A 1/4" MFL x 1/4" FFL



Quick Seal™ Adapters

Quick Seal™ fitting automatically shuts off the charging hose when you disconnect it from the system, so any refrigerant left in the hose is not released. This also prevents "finger burn" and adds an extra measure of safety. Made of solid brass.

1/4" MFL to 1/4" FFL 10234 10242 1/4" MFL to 3/16" FFL

10248 1/4" MFL to 1/4" FFL, 90° Elbow



Quick Seal™ Repair Kits

40300 1/4" Quick Seal Repair Kit - for hoses and adapters

18451 45°, 1/4" Quick Seal Repair Kit 18180 1/4" Quick Seal O-Rings Set, pkg/6

ROBINAIR Replacement Parts for Hoses, Adapters & Couplers

40531 Replacement O-Rings for 10236 & 10242 Adapters, pkg/6 40653B 3/16" Valve Core Depressors for Hoses & Adapters, pkg/6 40082 1/4" Valve Core Depressors for Hoses & Adapters, pkg/6

3/16" Gaskets for Hoses & Adapters, pkg/6 40677 40083 1/4" Gaskets for Hoses & Adapters, pkg/6 40084 3/8" Gaskets for Hoses & Adapters, pgk/6

ROBINAR Brass Caps

1/4" solid brass Quick Seal™ caps, pkg/6 40572 1/4" solid brass Quick Seal™ cap, with chain 50570





PROMAX RG5410A Refrigerant Recovery Machine

Patent Pending











- Recovers all commonly used CFC, HFC, HCFC Refrigerants (including R410-A [Puron™])
- ▶ Designed for use with High Pressure refrigerants
- Selectable High Pressure safety "cut off" switches (400 or 550 psi)
- ► Proprietary "Oil-less" compressor capable of handling both liquid and vapor
- ▶ All new ergonomic design for easier handling
- ➤ 3/8" 3-row condensor for maximum performance in even the harshest conditions
- Corrosion proof polyethylene blow molded case
- ▶ Field serviceable semi-hermetic compressor
- Self purge feature
- ▶ Includes Filter-Drier
- ► All units pre-wired to accept 80% Tank Shut Off Kit (Part No. KT 5001)
- ► RG5410A-KT available with Optional 80% Tank Shut Off Kit installed at the factory
- ▶ Power Source 115 V 60 Hz
- ► ARI, CE, UL/C (-KT version only) & TÜV approved
- One year warranty with full year over-the-counter exchange
- ▶ Weight: 32 lbs.; dimensions: 13" H x 9" W x 19" D

International Versions	Model No.
Europe - Bar gauge/°C scale 220V 50 Hz	RG5410A-E
Japan - Kpa gauges/°C scale 100V 50/60 Hz and 80% Shut Off Kit included	RG5410A-JKT
Optional Version	Part Number
RG5410A (115V 60 Hz) with 80% Tank Shut Off Kit installed	RG5410A-KT
Optional Accessories	Part Number
80% Tank Shut Off Kit	KT5001
30Lb Recovery Tank	RGT30NS
30Lb Recovery Tank with 80% capacity sensor	RGT30
50Lb Recovery Tank	RGT50NS
50Lb Recovery Tank with 80% capacity sensor	RGT50
50Lb High Pressure Recovery Tank with 80% capacity sensor (use with R-410A)	RGT50HP
Tool Caddy	TC-2000
Replacement Parts (supplied with product)	Part Number
Filter-Drier, 1/4" MFL x 1/4" MFL	100343
Hose, Blue 4" Long	100345

PROMAX Minimax Refrigerant Recovery Machine

Patent Pending

- ► Minimum size Maximum performance; ideal for residential and appliance service
- Recovers all commonly used CFC, HFC, HCFC Refrigerants (including Puron™ R-410A)
- Proprietary "Oil-less" compressor capable of handling both liquid and vapor
- Ergonomic design for easier handling
- ▶ Tough corrosion proof polyethylene blow molded case
- ▶ Field serviceable semi-hermetic compressor
- Self purge feature
- ▶ Includes Filter-Drier
- ▶ 550 psi safety cut off switch
- ▶ All units pre-wired to accept 80% Tank Shut Off Kit (Part No. KT 5001)
- ▶ Minimax-KT Model available with 80% Tank Shut Off Kit installed at the factory
- ▶ Power Source 115 V 60 Hz
- ► ARI, CE, UL/C (-KT version only) & TÜV approved
- ▶ One year warranty with full over the counter exchange
- ▶ Weight: 28 lbs.; dimensions: 11" H x 9" W x 16" D













International Versions	Model No.
Europe - Bar gauges/°C scale, 220V 50 Hz	Minimax-E
Japan - Kpa gauges/°C scale and 80% Tank Shut Off Kit included, 100V 50/60 Hz	Minimax-JKT
Optional Version	Part Number
Minimax (115V 60 Hz) with 80% Tank Shut Off Kit installed	Minimax-KT
Optional Accessories	Part Number
80% Tank Shut Off Kit	KT5001
30Lb Recovery Tank	RGT30NS
30Lb Recovery Tank with 80% capacity sensor	RGT30
50Lb Recovery Tank	RGT50NS
50Lb Recovery Tank with 80% capacity sensor	RGT50
50Lb High Pressure Recovery Tank with 80% capacity sensor (use with R-410A)	RGT50HP
Replacement Parts (supplied with product)	Part Number
Filter-Drier, 1/4" MFL x 1/4" MFL	100343
Hose, Blue 4" Long	100345

ROBINAIR 25150B and 25175B Refrigerant Recovery Machines



25150B





25175B



Both Models Feature:

- ▶ Automatic High Pressure cut-out switch for safety
- ▶ Direct liquid recovery without damaging the compressor
- ▶ All new proprietary "Oil-less" compressor and 1/2 hp motor
- ▶ Field serviceable compressor
- ► Multi-refrigerant capable with Self-Clearing feature, which prevents cross-contamination
- ▶ One 60" hose included
- ▶ 1/4" MFL fittings
- Optional Float Cable provides automatic shut off when tanks are 80% full
- ▶ Power Source 115V 60 Hz
- ARI approved
- ▶ Weight: 34 lbs.; dimensions: 20" H x 12.5" W x 10.5" D

25150B

- ▶ Designed for the recovery of medium pressure refrigerants
- ▶ Especially suited for appliance and smaller HVAC applications
- Efficient fan for cooling compressor and condenser for use in high temperatures

International Versions	Model No.
220V-240V 50/60 Hz, metric gauge, CE approved (power cord not included)	25151B
220V Optional Float Cable Assembly	19498

25175B

- ▶ Designed for the recovery medium and high-pressure refrigerants, including R-410A
- ► Efficient fan and large 3-row condenser for high ambient temperatures

International Versions	Model No.
220V-240V 50/60 Hz, metric gauges, CE approved (power cord not included)	25176B
100V 60 Hz, metric gauges, includes tank overfill cable	25177B

Optional Accessories	Part Number
30Lb (14kg) Refillable Tank	17105
50Lb (32kg) Refillable Tank	17506
110V Optional Float Cable Assembly	KT-5001
Filter-Drier 1/4" MFL x 1/4" MFL	100343
Hose, Blue 4" Long	100345

ROBINAIR 25200B Refrigerant Recovery Machine

- ▶ Designed for the recovery medium and high-pressure refrigerants, including R-410A
- ► Automatically switches from liquid to vapor recovery
- ▶ Provides continuous recovery without the need to change the hose or flip a switch
- ▶ Automatic high pressure cut-out switch for safety
- ▶ Direct liquid recovery without damaging the compressor
- ▶ Oil-less compressor allows rapid transfer of large amounts of liquid
- ▶ Efficient fan and large condenser can handle high ambient temperatures
- ► Multi-refrigerant capable with Self-Clearing feature, which prevents cross-contamination
- ▶ Four 60" hoses, with ball-valves included
- ▶ Optional Float Cable provides automatic shut off when tanks are 80% full
- ▶ 1/4" MFL fittings
- ▶ Power Source 115V 60 Hz
- ► ARI approved
- ▶ Weight: 32 lbs.; dimensions: 20" H x 12.5" W x 10.5" D







International Versions	Model No.
220V-240V 50/60 Hz, metric gauges, CE approved (power cord not included)	25201B
220V Optional Float Cable Assembly	19498
100V 60 Hz, metric gauges, includes tank overfill cable	25202B

Optional Accessories	Part Number
30Lb (14kg) Refillable Tank	17105
50Lb (32kg) Refillable Tank	17506
110V Optional Float Cable Assembly	19497
Filter-Drier 1/4" MFL x 1/4" MFL	100343
Hose, Blue 4" Long	100345

ROBINAIR 17800B

Refrigerant Recovery, Recycle, Evacuate and Recharge Machine











- ▶ Recovers, Recycles, Evacuates and Recharges
- ► Continuous operation all through one hook up
- ▶ In-plant maintenance Ideal for departments that use different types of refrigerants for various systems
- ► Multiple Refrigerants R-12, R-134a, R-22, R-500, R-502, MP and HP Blends and many more
- ▶ Microprocessor controlled functions prompt you through programming and signal preventative maintenance
- ► Float Chamber Automatically adjusts from liquid to vapor for most efficient recovery
- ▶ Electronic Scale Makes it simple to recharge to factory specifications; also weighs recovered refrigerant and provides tank overfill protection
- Cool-Tech Vacuum Pump 6 CFM, has the capacity to thoroughly evacuate system
- ► Lockout Panel Prevents mixing of refrigerants; slides to one side for 1/4" fittings and to the other for 1/2" Acme fittings
- ▶ Single Pass Recycling Makes an initial pass through the filter-drier; additional recycling can be programmed in case of compressor burn-out, or other conditions
- ▶ Heavy Duty Filter-Drier Removes moisture and acid from the refrigerant; can handle up to 300 Lbs. between changeovers
- ▶ Power Supply 115V 60 Hz.
- ► Supplied with two 50 Lb. Tanks; one with 1/4" fittings and the other with 1/2" Acme fittings.
- ► Includes three sets of hoses Two sets for refrigerants using 1/4" SAE fittings and one set with R-134a field service couplers
- Design certified by UL to meet SAEJ-1770
- ▶ ARI, CE, ULC & TÜV approved

ROBINAIR Cool-Tech™ Vacuum Pumps

U.S. Patent #'s 4,523,897; 4,631,006; 5,209,653

Robinair Vacuum Pumps are engineered specifically to meet your A/C maintenance needs and to give you trouble-free operation. Take advantage of our years of experience and know-how developing pumps to help you do your job faster and better.

NO HASSLE WARRANTY - All Robinair Vacuum Pumps are backed by our exclusive "No Hassle" over-the-counter replacement warranty. You can return a pump to your Robinair distributor, within the first year, for an immediate exchange - with no hassle! (See product for details)



- ▶ Two Stage Design second stage starts pumping at a lower pressure to pull a deeper ultimate vacuum
- ▶ Offset Rotary Vanes Our proven design creates the deep vacuum conditions needed for a thorough evacuation
- ▶ Gas Ballast feature helps keep the pump oil clean by reducing condensation of moisture
- ▶ Iso-Valve™ isolates pump from the system with just a 1/4 turn, making it simple to measure rate of rise
- ▶ Integral Check Valve prevents pump oil from being sucked into the system if a power loss occurs
- ▶ Die-Cast Aluminum housing lightweight but durable
- ▶ Molded Base Durable polycarbonate base improves pump balance and minimizes vibration

Use this Chart as a Guide to Selecting the Right Size Pump

System	Recommended Pump Size
Up to 10 tons (35kW); Domestic Refrigeration, Passenger Cars	1.2 CFM (33.96 l/m)
Up to 30 tons (105kW); Residential A/C, Panel Trucks & RV's	4 CFM (113.2 l/m)
Up to 50 tons (176kW); Rooftop A/C systems, Tractor/Trailers, Buses	6 CFM (169.8 l/m)
Up to 70 tons (246kW)	10 CFM (283 l/m)

Designed for use on A/C-R systems using CFCs, HCFCs, and HFCs in conjunction with mineral oil, ester oil, alkylbenzene oil and PAG oil as lubricants.

Do not use with ammonia or lithium bromide systems; not for use with flammable refrigerants.

ROBINAIR 15120A - 10 CFM Vacuum Pump

Specifications		
Free Air Displacement	10 CFM	
Number of Stages	Two	
Factory Micron Rating	20 microns	
Intake Fitting	1/4" MFL and 1/2" MFL Tee	
Oil Capacity	16.5 oz. (488 ml)	
Motor Size	1/2 HP	
Voltage	115V 60 Hz	
Weight	38 lbs (17.24 kg)	



International Versions	Model No.
110-127V/220V (selectable), 50/60 Hz, 236 l/m at 50 Hz, CE approved	15121A
240V, 50/60 Hz, 236 l/m at 50 Hz	15122A

15120A (10 CFM)

ROBINAIR 15400 - 4 CFM and 15600 -6 CFM Vacuum Pumps

Specifications	Model 15400 - 4 CFM	Model 15600 - 6 CFM
Free Air Displacement	4 CFM	6 CFM
Number of Stages	Two	Two
Factory Micron Rating	20 microns	20 microns
Intake Fitting	1/4" MFL and 1/2" MFL Tee	1/4" MFL and 1/2" MFL Tee
Oil Capacity	15 oz. (445 ml)	15 oz. (445 ml)
Motor Size	1/3 HP	1/2 HP
Voltage	115V 60 Hz	115V 60 Hz
Weight	27 lbs (12 kg)	27 lbs (12 kg)





International Versions	Model No.
110-115V/220-250V (selectable), 50/60 Hz,	
93 I/m at 50 Hz, CE approved	15401
100V 50/60Hz, 93 I/m at 50 Hz	15402
110-115V/220-250V, 50/60 Hz, 142 l/m at 50 Hz, CE approved	15601
100V 50/60Hz, 142 I/m at 50 Hz	15602

Optional Accessories Part Number Deep Sump Adapter Kit – increases oil capacity from 15 oz. of oil to 23 oz. 15556

ROBINAIR 15234 -1.2 CFM Vacuum Pump



1	5234	

	-
_	
_	
-	THE OWNER WHEN
	CCIE
-	
W A P	HANTT

Specifications		
Free Air Displacement	1.2 CFM (60 Hz)	
Number of Stages	Two	
Factory Micron Rating	50 microns	
Intake Fitting	1/4" MFL and 1/2" ACME	
Oil Capacity	5 oz. (148 ml)	
Motor Size	1/8 HP	
Voltage	110-115V 50-60 Hz	
Weight	10 lbs (4.5 kg)	

International Versions	Model No.
100V, 60 Hz, 34 I/m at 60 Hz, 1/4" MFL	15210
250V, 50 Hz, 28 l/m, 1/4" MFL, CE approved	15225
220V, 50 Hz, 28 l/m, 1/4" MFL and 1/2" ACME, CE approved	15224
250V, 50 Hz, 28 I/m, 1/4" MFL and 1/2" ACME	15296

ROBINAIR 34970 Air™ Vac

► Economical – easy to use, unique design uses shop air to pull a vacuum

▶ Low maintenance - no moving parts or oil to replace

► Rugged Lexan® case – oil and scratch-resistant, comes with a convenient handle

▶ Includes both 1/4" MFL and 1/2" Acme fittings

Specifications		
Drive	Compressed Air	
Air Displacement	1 CFM	
Number of Stages	Venturi	
Input Pressure	75 psi	
Vacuum Rating	29 in./Hg	



Replacement Parts (supplied with product)	Part Number
Replacement Inlet Tee 1/4" and 1/2" Acme	34977

ROBINAIR Vacuum Valve Assemblies

Valve assemblies give the service technician maximum control during evacuation and recharging. Installed directly to the vacuum pump, they connect the pump, manifold and thermistor gauge, providing one central control. Saves time – no need to connect/disconnect hoses. Made of durable forged brass for long life.



1/2" FFL Coupler x 1/4" MFL x 3/8" MFL, Large internal porting for high CFM flow



Replacement Parts for 13047A	Part Number
1/2" Replacement Gasket for coupler	44257
Replacement Sealing Foot	13116
Replacement Stem Assembly Kit	13117

13061

1/4" FFL Coupler x 1/4" MFL x 1/4" MFL, for 15100/15234 series vacuum pumps



13061

ROBINAIR Optional Vacuum Pump Combination Inlet Tee Fittings, R-12/R-134a



Convert your pump to both R-12 and R-134a. Solid Brass Tee, replaces pump inlet fitting (1/4" MFL for R-12 & other refrigerants and 1/2" Acme for R-134a).

1/4" MFL x 1/2" Acme, for 15100/15200 series vacuum pumps 15195 15495 1/4" MFL x 1/2" Acme, for 15400/15600 series vacuum pumps

Screw-on Inlet Tee Adapter

Converts any vacuum pump to dual inlet, R-12/R-134a 1/4" FFL Coupler x 1/4" MFL x 1/2" Acme 15554

ROBINAIR Optional Vacuum Pump Intake Fitting Adapters



10459 1/2" FFL to 1/4" MFL 13064 3/8" FFL to 1/4" MFL 13066 1/2" FFL to 3/8" MFL

ROBINAIR Premium High Vacuum Pump Oil



- ► Chemically engineered to maintain maximum viscosity at high running temperatures and to improve cold weather starts
- Thermal stability resists break-down due to heat
- ▶ Lower moisture content due to special packaging and handling procedures
- ▶ Performance of your pump depends largely on the quality and purity of the vacuum pump oil that you use

13201	Premium High Vacuum Pump Oil, Pint Bottle (case of 12 bottles)
13203	Premium High Vacuum Pump Oil, Quart Bottle (case of 12 bottles)
13204	Premium High Vacuum Pump Oil, Gallon Bottle (case of 4 bottles)

Optional Accessories Part Number Flexible Plastic Oil Spout, 10" long; Fits on Quart Bottle (13203) 17191

13203

U.S. Patent # 5,136,8855

- ▶ Patented sensor technology requires no calibration for fluctuating ambient and/or sensor housing temperatures
- ▶ Not affected by the specific gas being evacuated
- ▶ Liquid Crystal Display (LCD) Reads 500,000 to 200 microns
- ▶ Dual power supply 9V battery or A/C adapter (not included)
- ▶ Three foot sensor cord
- ▶ Built into ABS Carrying Case
- ► One year warranty

Sensing Probe Assembly

Connector hose with Filter

Specifications		
Range	500,000 to 200 microns Hg (auto ranging)	
Resolution	100/10/1 microns Hg	
Vacuum fitting	1/4" FFL	
Power Supply	One 9V battery or 9VDC optional adapter	
Battery Life	8 hours (Alkaline)	
Probe Cord Length	36" (91.4 cm)	
Operating Temp	32° to 125° F (0° to 52° C)	

Vacuum fitting	1/4" FFL
Power Supply	One 9V battery or 9VDC optional adapter
Battery Life	8 hours (Alkaline)
Probe Cord Length	36" (91.4 cm)
Operating Temp	32° to 125° F (0° to 52° C)

Part Number

TIF9453

TIF9454



TIF 9450D



ROBINAIR 1	14010A	
Thermis	tor Vacuum	n Gauge

- ▶ Large analog meter clearly marked for easy reading of micron levels
- ▶ Indicates actual vacuum level in the system
- ▶ Measures from 25,000 to 0 microns

Replacement Parts (supplied with product)

- ▶ Two operation modes select between the null method for greatest accuracy or direct meter reading for continuous monitoring of the evacuation process
- ▶ Proven bridge circuit compensates for changes in ambient temperature from 30° to 120° F (-1° to 49° C) and also for variances in battery voltage
- ▶ Rugged Carrying Case, protects unit during transit and use

Specifications		
Range	25,000 to 0 microns	
Vacuum Fitting	1/4" FFL	
Power Supply	Six "C" cell batteries	



Replacement Parts (supplied with product)	Part Number
Replacement Bulb	17161
Replacement Thermistor Tube	17162



ROBINAIR 14830A Thermistor Vacuum Gauge



- ► Solid state instrument constantly monitors and visually indicates vacuum level
- ▶ Measures from 25,000 to 50 microns
- ▶ 10 segment LCD screen, can be read in direct sunlight
- ▶ No adjustments or calibrations required for atmospheric pressure or altitude
- ▶ Includes 24" connector hose
- ▶ Durable Carrying Case, protects the instrument and has a built-in storage compartment

Specifications		
Range	25,000 to 50 microns	
Vacuum Fitting	1/4" MFL	
Power Supply	Four "D" cell batteries	

Optional Accessory
Optional A/C Power Adapter, 110V

Part Number

18712

ROBINAIR 14777 Compact Electronic Thermistor Vacuum Gauge



- ► Compact, pocket-size 2.5" x 3"
- ► Takes guess work out of evacuation accurately indicates when system is ready for recharge
- ▶ Designed for use under high vacuum, reads down to 10 microns
- ► Easy-to-read LCD, automatically registers smaller numeric segments as system pulls down
- ▶ 6' long lead and magnetic mounting strip allows for convenient, easy to read, positioning

Specifications		
Range	25,000 to 10 microns	
Vacuum Fitting	1/4" MFL	
Power Supply	One 9V battery (included)	

Replacement Parts (supplied with product)	Part Number
Replacement Thermistor Tube	14778

9010C Certified Refrigerant Scale

- ▶ Legal for trade; approved under NTEP (USA) and OIML (Europe) standards
- ► Multifunction LCD readout with +/- indication, motion enunciator and low battery indicator
- High weight capacity
- ▶ High resolution
- Keypad controls
- ▶ Removable control box with 6 ft. (1.8m) coil cord
- ▶ Auto Zero feature
- ► Pounds/Kilograms selectable (n/a on Int'l. models)
- ► Sight Level Indication
- ► Level Adjustment 'feet'
- Completely portable
- CE approved
- ▶ Integrated into ABS Carrying Case
- One year warranty



((

In order to bill customers by weight for the refrigerant you have given them, a scale must be "Type" certified. Additionally, the use of "Calibrated" or "Certified" scales is already mandated in some parts of the world. The TIF9010C is among the first "Type" certified units available on the market. Complies with US (NTEP) and European (OIML) standards, this unit is Legal for Trade in most of the world!

Spe	cifications	
Range	000.0 to 100.0 lbs. OR 00.00 to 50.00 kg	
Resolution	0.1 lbs. OR 0.05 kg	
Accuracy	± 1 division (0.1 lbs. or 0.05kg)	
Power Supply	One 9V battery	
Battery Life	Approx. 20 hours	
Operating Temp	50° to 104°F (10° to 40°C)	

International Version

Model No.

Kg Display only

TIF9010CI

9010A Slimline Refrigerant Scale



TIF 9010A

► Touch Key controls

- ▶ Three display modes Lbs./oz.; Decimal Lbs., Kilograms
- ▶ Very High Resolution 0.1 oz./0.005 Lbs./2 grams
- Extreme Accuracy
- ▶ 110 Pound/50kg capacity
- ▶ Auto Zero
- Compact design, completely portable
- ► Can be used with all refrigerants
- ▶ Removable control box with prop stand/hanging hook
- ► Compatible with TIF 9020 for automatic capability
- ► CE approved
- ▶ Two year warranty

A revised and updated version of the classic TIF Slimline scale, the TIF9010A brings greater performance, reliability and usability to the trade. With the greatest resolution in the industry, and no compromise on capacity, this unit offers features and specs that you won't want to do without.

	Specific	ations
	90101A	ADS-100
Range	0 lbs. 0.0 oz. to 110 lbs. 0.0 oz., OR 0.000 lbs. to 110.000 lbs., OR 0.000 kg to 50.000 kg	0 lbs. 0.0 oz. to 199 lbs. 15.8 oz., OR 0.000 lbs. to 199.990 lbs., OR 0.000 kg to 100.000 kg
Resolution	0.1 oz./0.005 lbs./2 grams	0.2 oz./0.010 lbs./4 grams
Accuracy	± 0.5% of reading	± 0.5% of reading
Operating Temp	32° to 120°F (0° to 49°C)	32° to 120°F (0° to 49°C)
Power Supply	9VDC	9VDC
Battery Life	20 hours	20 hours
Coil Cord Length	6 ft. (1.8m)	6 ft. (1.8m)

Optional Accessory

Model No.

Remote Programmable Module

TIF9020

PROMAX ADS-100 Slimline Refrigerant Scale



ADS-100

- 200Lb or 100Kg capacity
- ▶ Three display modes, Lbs./oz.; Decimal Lbs.; Kilograms
- ▶ Very high resolution 0.2 oz./0.010 Lbs./4 grams
- Compact design and completely portable
- ► Extreme accuracy
- ► Auto Zero
- Removable platform and control box with prop stand/hanging hook
- Charging and recovery capabilities
- ► Compatible with TIF9020 for automatic capability
- CE approved
- ► Two year warranty

Optional Accessory Model No.

Remote Programmable Module

TIF9020

9020 Remote Programmable Module

- ▶ Permits automatic programmable charging or recovery using the TIF9010A or ADS-100 Electronic Scale
- ► Self-contained and portable, powered by 4 "AA" batteries
- ► Color-coded Tactile Keypad with universal symbols
- ► Compatible with all refrigerants, including High Pressure (R-410A)
- ▶ LED Indicators for Low Battery and Valve Open alerts
- ▶ Includes protective carrying case with integrated handle/hanging strap, and interface cable for TIF9010A or ADS-100
- ► High Impact case
- ► One year warranty
- ► Made in USA

The TIF9020 Remote Programmable Module is an accessory to the TIF9010A or ADS-100 Electronic Scale. The TIF9020 will interface with the scale to permit automatic, programmable charging or recovery.

Self-powered by 4 "AA" batteries, the TIF9020 is completely portable, and expands the applications of the TIF9010A or ADS-100 to permit automatic charging anywhere, anytime. The 500psi rating of the solenoid is compatible with, and capable of handling, all common refrigerants.

Spec	ifications
Charging Ports	1/4" MFL fittings; 1/2" ACME adapters
Power Supply	4 "AA" batteries
Battery Life	60 hours continuous operation
Operating Temp	32° to 120°F (0° to 49°C)
Max. Solenoid Operating Pressure	500 psi





ROBINAIR 34985 Manual Charging/Recovery Meter

- ▶ Displays refrigerant weight as you charge or recover
- ► Portable Battery operated
- ► Corner Balancing weight measurement is accurate even if the tank is placed off-center on the platform
- ► Tare Function Zeroes the display for easy reading of changes in weight
- ▶ Dual display modes: Pounds or Kilograms
- ▶ Built into Carrying Case
- ▶ Weight Range: 0 to 110 lb. (0 to 50 kg)
- ► Resolution: .02 lb. (.01 kg)
- ► Accuracy: ± 1 oz.
- ▶ Power Supply: Six "AA" Batteries (included) with "sleep mode" for extended life
- ▶ Operating Temp: 50° to 120° F (10° to 49° C)
- CE approved





9055 Programmable Charging/Recovery Meter



- ▶ 200 pound OR 100 kg capacity
- ▶ Allows automatic Charging or Recovery operations
- Color-coded keypad controls
- ► Three display modes Lbs./oz.; Decimal Lbs.; Kilograms
- ▶ Very High Resolution 0.2 oz./0.010 Lbs./4 grams
- ► Can be used with all refrigerants
- ► Advanced Charge and Recovery Modes uses tare weight & Max. capacity of cylinder to calculate maximum Charge/Recovery available
- User Programmable memory for up to 99 different stored values
- "Repeat" charge feature
- Removable platform and control box with prop stand/hanging hook
- ► Compact Design completely portable, battery powered
- Low battery indicators
- ► Five year warranty

Speci	fications
Range	0 lbs. 0.0 oz. to 199 lbs. 15.8 oz., OR 0.000 lbs. to 199.990 lbs., OR 0.000 kg to 100.000 kg
Resolution	0.2 oz./0.010 lbs./4 grams
Accuracy	+/- 0.5% of reading
Power Supply	Four AA batteries and one 9V battery
Battery Life	30 hours
Max. Solenoid operating pressure	500 psi
Operating Temp.	32 to 120° F (0 to 49°)
Inlet/Outlet Ports	1/4" MFL fittings with 1/2" ACME adapters

ROBINAIR 34990 Programmable Charging Meter



- ➤ Simply program the amount of refrigerant to be charged, and the unit automatically shuts off when charging is complete, for a "hands-off" operation
- ▶ Dual fittings for versatility includes both 1/4" MFL and 1/2" ACME fittings, mounted inside the carrying case for protection during transit and use
- ► Compatible with all refrigerants
- Corner Balancing weight measurement is accurate even if the tank is placed off-center on the platform
- Tare Function Zeroes the display for easy reading of weight changes
- ▶ Dual display modes: Pounds or Kilograms
- ▶ Weight Range: 0 to 110 lb. (0 to 50 kg)
- ▶ Resolution: .02 lb. (.01 kg)
- Accuracy: ± 1 oz.
- ▶ Power Supply: 110V 60Hz (also available in 220V see below)
- ▶ Operating Temp: 50° to 120° F (10° to 49° C)
- CE approved

International Version

Model No.

220-240V 50/60 Hz, 1/4" MFL and 1/2" ACME fittings

34991

ROBINAR Dial-A-Charge® Charging Cylinders

U.S. Patent No. 3,052,101; Canadian Patent No. 688,223

- Allows systems to be charged quickly, with the precise amount of refrigerant required by the manufacturer
- ▶ Simply "dialing" the shroud to correspond with the pressure gauge, allows you to compensate for any ambient temperature changes
- ► Sightglass allows you see the level of refrigerant in the cylinder
- Accurate charging eliminates call-backs caused by under or over-charging
- ▶ Cylinders may be economically filled from a bulk tank
- ► Includes Heater, to increase cylinder pressure and speed refrigerant transfer
- ► For safety, all cylinders are equipped with pressure relief valves, which automatically reset once a safe working pressure is restored
- ► Includes a durable Polyethylene Case for protection during storage and transit
- ▶ All Models are equipped with 1/4" SAE fittings
- ► Available in 110V or 220V versions
- ▶ 220V models are CE approved
- ▶ Made in USA



Model No.	R-12, R-22, R-502	R-134a	110V	220V CE Approved	Graduations	Capacity
43299B	V		V		1 oz.	2.5 lb.
43302B	V		V		25 g	1100 g
43678B	V		V		1 oz.	5 lb.
43681B	V		V		25 g	2200 g
43134B		V	v		1 oz. 25 g	2.5 lb. 1100 g
43534B		V	v		1 oz. 25 g	5 lb. 2200 g
20346B	V			V	25 g	1100 g
20349B	V			V	25 g	2200 g
43679B	V			V	1 oz.	5 lb.

Note: All Models are equipped with 1/4" SAE fittings

ROBINAIR 18065 Oil Injector



- ► Easy-to-use, valve controlled, for adding refrigerant oil to A/C system
- For use when the system is in a vacuum only
- ▶ Oil levels are clearly marked in ounces and milliliters
- O-Ring included as a visual guide for the amount of oil required
- ▶ Durable polypropylene with solid brass fitting
- ▶ 1/4" SAE fitting
- ▶ Bottle capacity 8 ounces (240 ml)

ROBINAIR 16258 Oil Injector



- Syringe-Type, allows you to add refrigerant oil to a fully charged A/C system
- ► Simply fill the barrel with the amount of oil required
- ► Check valve prevents any "back flow" of refrigerant
- ▶ 1/4" SAE fitting
- ► Capacity 1/2 ounce (15 ml)

Replacement Parts (supplied with product)	Part Number
Replacement Plunger	16262
Replacement O-Ring for Plunger (pkg. of 5)	16267

ROBINAIR 14388 Refrigerant Oil Pump



- ▶ Oil-Pump design allows you to add refrigerant oil to a system under pressure
- Designed for larger systems
- ▶ Siphon hose allows for the removal of old oil, preventing over-charging
- ▶ Pump universally mounts directly to one-gallon containers
- ► Allows the pumping of oil directly from the container, keeping oil free from dirt & moisture
- Pump can remain mounted on oil container during storage
- ▶ Oil is pumped at a rate of 3 ounces (90 ml) per stroke

Replacement Parts (supplied with product)	Part Number
Replacement Cap Assembly	44884
Replacement Rubber Adapter, universal size fits all one-gallon containers	44885
Replacement Siphon Kit	44887
Seal Repair Kit	18171

14388

ROBINAIR 10994 Heater Blanket

- ► Speeds charging by raising temperature, thus creating a positive pressure difference between tank and A/C system
- ▶ Fits 30 and 50 pound refrigerant tanks
- ▶ Includes Thermostat set at 125° F (55° C)
- ▶ Safety thermal cut-off switch protects against overheating
- ▶ 300 watts, 2.6 amps

International Versions	Model No.
Heater Blanket, 220-240V 50/60 Hz, Without Plug	45605
Heater Blanket, 220-240V 50/60 Hz, With Female IEC Receptacle	45610



10994

7000 Digital Thermometer/Pyrometer



- ▶ Field calibratable, interchangeable probes
- Custom fitted ABS carrying case
- Auto Zero each reading with display updates 3 times per second
- Wide sensing range
- Superfast response
- Universal connector
- ▶ °F or °C selectable
- 9V Battery powered
- ▶ One year warranty

The TIF7000, the original TIF Thermometer, comes with 3 different probes. The first is the Air Probe which can be used for instant readings of air temperatures from -40°F to over 1000°F. The second probe, the Surface Probe, is used for quick surface readings from -40°F to 1999°F. The Immersion probe tests liquid temperature from -40°F to 500°F.

Specifications		
Range	-40° to 1999°F (-40° to 1100°C)	
Resolution	1° F (1° C)	
Accuracy	± 1%, ± 1digit (32° to 212°F)	
Operating Temp	32° to 125°F (0° to 52°C)	
Power Supply	(1) 9V battery	
Battery Life	100 hours	
Response Time	1-10 seconds	
Warm-up Time	Instantaneous	
Probe Cord Length	36" (91.4cm)	

Other Models Available	Model No.
Control Box (TIF7001) with ONLY the General purpose probe (TIF7009)	TIF7500
Control Box (TIF7001) with ONLY the Penetration probe (TIF7010)	TIF7500A
Control Box (TIF7001) with ONLY Surface, Air & Penetration probes	TIF7000TP
Control Box (TIF7001) with ONLY Surface, Air and Superheat probes	TIF7000AC

Accessory Probes	Part Number
General Purpose	TIF7009
Penetration	TIF7010
Surface	TIF7002
Air	TIF7003
Immersion	TIF7004
Superheat	TIF7007
Tire	TIF7008

Replacement Parts (supplied with product)	Part Number
Coil Cord	TIF7005
Carry Case	TIF7006
Control Box	TIF7001

TH-2 Digital Thermo-Hygrometer

- ▶ Measures Temperature in Fahrenheit or Celsius
- ► Measures % Relative Humidity
- ▶ Data hold locks reading for viewing





THWD-1 Psychrometer

- ▶ Perfect for checking air conditions in an HVAC environment
- ▶ Measures Temperature in Fahrenheit or Celsius
- ▶ Measures % Relative Humidity
- ▶ Calculates Dew Point and Wet Bulb Temperatures
- ▶ Recalls Minimum and Maximum readings
- ► Auto power off feature
- ▶ Data hold, locks reading for viewing

Specifications		
Range	-4° to 122° F (-20° to 50° C)	
Resolution	0.1° F (0.1° C)	
Accuracy	± 1% F (± 1% C)	
Power Supply	2, "AAA" Alkaline	
Battery Life	500 hours	
Response Time	60 seconds typical	
Humidity (RH)	0 to 100% R.H.	



7800 & 7900 Infrared Thermometers



- Non-Contact Temperature Measurement of any surface
- Long Range, High Brightness Red Laser Targeting
- ▶ Instant response
- ▶ Auto Hold, Auto Power Off
- ▶ Compact, lightweight
- Wide temperature range
- ▶ ± 2% Accuracy

- ▶ °F/°C switchable
- ► Easy to read 1/2" LCD
- ▶ 3:1 Optics
- Surface Mount Technology
- 9V Battery powered
- ▶ Durable Case
- Carrying Case Included
- CE approved
- One year warranty

Additional 7900 Feature

▶ Special Low Temp range for refrigeration applications

The quickTemp™ series of non-contact InfraRed (IR) Thermometers provides instant temperature readings on any surface. The special IR sensor measures the radiated and absorbed energy from a surface and translates it into an easy to read digital display of temperature.

Simple one touch control permits continuous measurement and memory hold. Auto shut off circuit saves battery life. Available in two models to fit any range, need or application. USA made with a one year warranty.



APPLICATIONS

HVAC/R - Vent Outlet Temp, Evaporator, Condenser,
 Compressor, Ambient Temp. Diagnostic - Relays, Capacitors,
 Furnace, Freezer Cabinets, Display Cabinets, Frozen Foods.
 Performance - Inlet Air, Outlet Air, Superheat, Expansion Valve Setting, Ambient, Heat Exchanger.

Industrial, Commercial, Manufacturing: Asphalt, Roofing, Ovens, Kilns, Tar.

Electrical: Bulbs, Motors, Relays, Resistors, CRTs, Transformers, Preventative Maintenance.

Specifications		
Temperature Range	TIF7800; 0° to 600°F (-18° to 315°C)	
	TIF7900; -67° to 300°F (-51° to 149°C)	
Resolution	1° F (1° C)	
Accuracy	± 2% of reading, +1 digit;	
	or 3°F/2°C (whichever is greater)	
Target Size/Field of View	3:1 Optics ratio with a minimum 1" (2.5cm) target	
Repeatability	±0.5% of reading, plus one digit	
Power Supply	9VDC; 1 "9V" cell alkaline battery	
Wavelength	8 to 14 microns	
Emissivity	Fixed at 0.95	
Operating Temp	50° to 125°F (10° to 52°C)	
Battery Life	Approx. 40 hrs.	
Response Time	Instantaneous	

AMPROBE.

DT-130/DT-136 Thermocouple Digital Thermometers

Both Models Feature:

- ▶ °F or °C Reading Selectable
- ► Reading "Hold" Function
- ▶ Protective Rubber Boot
- ▶ Flip-out Stand
- ► Low Battery Indicator

DT-136 Features:

- ▶ Selectable "J" or "K" Type Thermocouple input
- ► Single or Dual Temperature reading
- ▶ Differential Temperature Reading (T1-T2)
- ▶ "Sweep" mode permits viewing of T1, T2, T1-T2
- Auto ranging
- Min & Max Hold Function
- Relative Zero Mode
- ► Range: -392° to 2498° F (-236° to 1370° C)



DT-130 Features:

- ▶ Type K Thermocouple input
- ▶ Selectable Resolution
- ► Max Hold Function
- Aux. analog output jack
- ▶ Range: -50° to 1999° F (-45° to 1093° C)

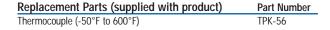
Optional Accessories	Part Number
Universal Probe, Type K, -100 to 1999° F (-73 to 1093° C)	TC-11
Surface Probe, Type K, -100 to 1999° F (-73 to 1093° C)	TC-12
Air/Gas Probe, Type K, -100 to 1999° F (-73 to 1093° C)	TC-13
Hypodermic Probe, Type K, -100 to 1999° F (-73 to 1093° C)	TC-14
2' Extension Cord, Type K	DPX-2000
Adaptor, Banana Plug to K Type Thermocouple	TAC-DMM

Replacement Parts (supplied with product)	Part Number
Thermocouple, K Type (0 to 600°F Max.)	TPK-56
Rubberized Holster	H-130R
9 Volt Alkaline Battery	MN-1640



TMA-K Temperature Adapter

- ► For use with multimeters with DC millivolt input (1mVDC per 1 degree F or C)
- ▶ Selectable Fahrenheit or Celsius measurement
- ► Supplied with the TPK-56 K-type Thermocouple (-50°F to 600°F)
- ► Range can be extended from -58°F to 1830°F by using any properly rated K-type thermocouple





TPK-56 Bead K-Type Thermocouple



- Accessory for the TMA-K and the DKTA-620
- ► Measures temperature from -50°F to 600°F

TMA-1 Dual Temperature Adapter



- ► For use with multimeters with DC millivolt input (1mVDC per degree F or C)
- Measures dual temperature
- ▶ Calculates temperatures difference
- ➤ Supplied with the single TPSF surface temperature probe (-50°F to 300°F)
- ► Fahrenheit or Celsius measurement accomplished by using appropriate probes

Optional Accessories	Part	Number
Fahrenheit Immersion Temperature Probe (-50°F to 300°F)	TPIF	
Fahrenheit Surface Temperature Probe (-50°F to 300°F)	TPSF	
Fahrenheit Air/Gas Temperature Probe (-50°F to 150°F)	TPAF	
Celsius Immersion Temperature Probe (-55°C to 150°C)	TPIC	
Celsius Surface Temperature Probe (-55°C to 150°C)	TPSC	
Celsius Air/Gas Temperature Probe (-55°C to 65°C)	TPAC	





- Accessory for multimeters and clamp-ons with temperature input
- ▶ Measures temperature from -50°F to 600°F
- Plugs directly to a meter without additional adapters

TIF 700



DKTA-620

- Accessory for multimeters and clamp-ons with temperature input
- ► Converts single temperature input to a dual temperature
- Computes differential temperature between probes



DKTA-620

Optional Accessory
Thermocouple, -50°F to 600°F

Two of TPK-56



ROBINAIR Analog Thermometers

▶ These pocket thermometers include a protective sheath with pocket clip.

Model No.	Temperature Range/Scale	Dial Diameter
Robinair 10596	-40° to 160°F	1"
Robinair 10597	0° to 220°F	1"
Robinair 40859	-40° to 70°C	1"
Robinair 10945	0° to 220°F	1-3/4"
TIF 700	-40° to 160°F and -40° to 72°C	1-3/4"



- ▶ 1-1/4" diameter dial
- ▶ Temp Range from -58° to 302° F
- ▶ 5" (12.7cm) stainless stem
- ▶ Protective sheath with pocket clip



ROBINAIR 43230 Swivel-Head Digital Thermometer



- ► Head swivels 180° easy to see at any angle
- ► Compact size convenient to carry & store
- ▶ Selectable Celsius and Fahrenheit
- ▶ Reliable readings over entire range
- ► For surface, liquid and air temperatures
- Protective sheath with pocket clip

Specifications		
Temp Range	-58° to 302° F (-50° to 150° C)	
Accuracy	± 2° F between -4° and 248° F ± 1° C between -20° and 120° C (otherwise ± 4° F or ± 2° C)	
Display Resolution	0.1° between -19.9 and 199.9, otherwise 1°	
Sampling Time	One second	
Auto Power off	10 minutes	
Battery	One 1.5 Volt, size LR44	

ROBINAIR 43240 Digital Thermometer

Replaces Amprobe PY-15



- ► Compact yet full-feature capabilities
- Accurate
- ▶ Celsius or Fahrenheit selectable
- Min./Max. and Hold features
- ▶ Battery saver mode
- ▶ For surface, liquid and air temperatures
- ▶ Durable cover to protect probe

Specifications		
Temp Range	-40° to 390° F (-40° to 200° C)	
Accuracy	± 2° F between -14° and 212° F ± 1° C between -10° and 100° C (otherwise ± 3° F or ± 1° C)	
Display Resolution	0.1° F/C throughout range	
Sampling Time	One second	
Battery	One 1.5 Volt, size LR44	

ROBINAR 14766 Superheat Thermometer

When used with Robinair's Model No. 14599 or 14650 Access Valve Core Remover/Installer, this Thermometer provides temperature readings for superheat and sub-cooling calculations.

	Speci	fications
Range		–58° to 302° F

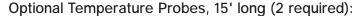


14766

AMPROBE.

LT8200RFE Temperature Recorder

- Record one or two temperatures
- ▶ Records Temperatures from -40° to 210° in three ranges
- ▶ Record one "on/off" event
- Supplied with "Event" Clamp-on current transducer, senses 4 to 300 Amps
- ► Three selectable built-in Chart Speeds
- ► "Take up" Model (-T) rerolls chart inside recorder
- ► Easy to set up and use



Part No.	Range	Туре	Chart Paper
RBT-11	-40° to 60° F	Immersion	4060 (-6)
RBT-12	-40° to 60° F	Universal	4060 (-6)
RBT-13	-40° to 60° F	Vented Air	4060 (-6)
RBT-14	-3.5° to 118° F	Universal	3118 (-6)
RBT-15	70° to 210° F	Universal	70210 (-6)



NOTE: Temperature Probes NOT supplied with recorder, they must be ordered separately to meet user requirements. For use in non-corrosive environments only. Chart paper is available in 30' or 60' rolls (-6 denotes 60' roll). 60' rolls can ONLY be used with -T "Take up" Model Recorders

Optional Accessories	Part Number
Line Splitter (Energizer - use with "Event" Clamp-on)	A47L
Replacement Parts (supplied with product)	Part Number

VA500A Digital HVAC Analyzer



- ► Measures Temperature (°F) and Humidity (%RH)
- ▶ Measures Dew Point (°F)
- ▶ Measures Velocity (FPS) and Volume (CFM)
- Measures Power in BTU/HR
- ▶ Direct Readings no additional calculations needed
- ▶ Allows measurement of rectangular and ROUND GRILLS
- Lightweight and Completely portable
- ▶ Three simple keypad controls operate ALL FUNCTIONS
- ► Low Battery Indication
- ► Audible and Visual Prompts
- ▶ Large 3/4" LCD Readout
- Memory holds cumulative volume (CFM) and power (BTU/HR) measurements
- ▶ Six foot connector cord to probe
- ▶ 9V Battery Operated
- ► CE approved
- ▶ Protective Carrying Case Included
- ► One year warranty

((

The TIF VA500A offers a range of features never before included in a single instrument. More than just an Anemometer, the VA500A measures all HVAC inlet and outlet variables, allowing an intelligent analysis of system performance. This one tool can replace up to four others, and eliminates the need for cumbersome flow hoods, psychrometers, etc. So easy to use, you will be performing complex measurements within minutes of unpacking the tool.

APPLICATIONS

Ambient Temperature, Inlet and Outlet Temperatures, Cooling Efficiency, Ambient Humidity, Inlet and Outlet Humidity, (De-) Humidification Efficiency, Inlet and Outlet Velocity, System Balancing, Calibrating/Setting Vents, Airflow Measurements, Power Measurements (BTU), System Efficiency (BTU IN vs BTU OUT), System Adjustments, Performance Checks, Fan Adjustments, Blower Performance, Heating and Air Conditioning, Air Circulation and Exchange, Refrigeration, Industrial.

Specifications		
Ranges Temperature Humidity Velocity Range	23°F to 149°F (-5° to 65°C) 10-95% RH 2.6 to 49.2 FPS (0.8 to 15 m/sec)	
Accuracy Temperature Humidity Dew Point Velocity	± 2°F ± 3% ± 3% ± 3% of rdg	
Response Time Temperature Humidity Velocity	< 5 secs <10 secs < 3 secs	
Display	4 digit 3/4" LCD	
Coil Cord Length	72 inches (1.8m)	
Operating Temperature	32°F to 122°F (0° to 50°C)	
Power Supply	One 9V Alkaline battery	
Battery Life	Approx. 8 hours continuous	

VA105 Volume-Aire™ Air Balancer

U.S. Patent # 3,277,973

- ► Reads cubic feet per minute directly (Volume)
- ► Reads feet per minute directly (Velocity)
- ▶ Fits many size diffuser grills
- No alternate power source needed
- One year warranty



TIF VA105

A quick and easy to use balancing device, the TIFVA105 provides true average readings on

most grills and/or diffusers. Direct readings and BTU calculator save you time and effort. Metric version available for liters/sec. and cm/sec readings.

Specifications		
Volume	70-3000 CFM (40 to 1400 liters/sec	
Velocity	250-1100 FPM (125 to 560 cm/sec)	
Grill Area	50-500 sq. in. (300 to 4000 cm ²)	

International Version	Part No.
Reads liters/sec and cm/sec	TIFVA105INTL
Replacement Part (supplied with product)	Part Number
Soft Vinyl Carrying Case	TIFVA106



LM-80 Digital Light Meter

- ▶ Dual measurement capability in Foot-Candles or Lux
- ▶ Measures from 0.01 to 20,000 Foot-Candles or Lux
- ► Measurement ranges of 20/200/2000/20,000 fc or Lux
- ► Analog DC Voltage output to operate with a Chart Recorder or Data Logger
- Measuring rate of 2 times/sec
- ▶ Data and Peak Hold features
- ► Cosine corrected for the angular incidence of light (C.I.E sensitivity adjustment to photo optic curve)
- CE approved

Replacement Parts (supplied with product)	Part Number
Carrying Case	LM-CC
Instruction Manual	www.amprobe.com



8500A Carbon Monoxide Analyzer



TIF 8500A

- ▶ Measures level of Carbon Monoxide (CO) in any environment
- ▶ Voice feature for audible read out
- ▶ Tactile keypad controls
- ▶ Protective Rubber "Boot"
- ▶ 15" Stainless Probe, with 5' hose
- ► Field replaceable electrochemical sensor
- ▶ Rapid warm up
- ▶ Headphones included for high noise areas or for privacy
- ► Cordless and portable
- ▶ Ranges from 1 10,000 ppm with resolution of 1 ppm

The TIF8500A is a professional grade service tool for accurate measurements of Carbon Monoxide (CO) levels in any environment or application, including ambient, appliance surroundings and furnace flues.

The TIF8500A has an industry first, "Voice" feature which allows the unit to actually speak out the measured reading.

Replacement Parts (supplied with product)	Part Number
Replacement Filter	TIF8501
Flue Probe and Hose	TIF8502
Replacement Sensor	TIF8505
Rubber Boot	TIF8506
Sensor Cover and Tubing	TIF8507





4000A Electronic Sightglass

U.S. Patent #'s 4,138,879; 4,235,095

- Optimizes refrigerant charge for maximum cooling
- Operates on any metal tubing
- ▶ Four foot cord
- Operates through use of ultrasonics
- Eliminates the need for an optical sight glass
- Checks for refrigerant floodback
- Built into ABS carrying case
- One year warranty

The TIF4000A "sees" into the refrigerant tubing by means of ultrasonics. Two sensors are used, one for transmitting and one for receiving. These sensors are in the form of clamps which attach to any metallic refrigeration tubing. An audible beeping sound quickens as bubbles or floodback are sensed, and a row of LED's light, simulating bubble movement in the tubing.

Specifications	
Operating Temp	32° to 125°F (0° to 52°C)
Power Supply	(1) 9V battery
Battery Life	60 hours (alkaline)
Response Time	Instantaneous
Probe/Cord Length	48" (1.2 m)

ROBINAR 42160 Gas Manifold Pressure Test Kits

- ▶ Use these handy kits to Measure Natural gas or LP gas pressure across appliance manifolds
- ▶ Test gas stoves, furnaces, dryers and other gas appliances
- ▶ Economical and accurate easier to use than a manometer
- ▶ Diaphragm gauge is calibrated in inches of water column, also shows ounces per square inch
- ▶ Includes fitting for quick connection to the appliance manifold
- ▶ Packed in high impact plastic case for protection during transit and use



- 42160 Manifold Pressure Test Kit, Pressure measurements from 0 - 35" of water column
- 42162 Manifold Pressure Test Kit, Pressure measurements from 0 - 10" of water column





780 Infrared Phototachometer

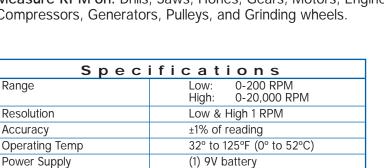
- ► Memory Hold Button
- On Target Indicator
- Low battery Indicator
- ▶ Measures RPM up to 20,000 w/1 RPM resolution
- Auto Power off
- High and Low ranges
- ▶ 4 1/2 digit LCD

Infrared technology makes the TIF780 accurate, convenient and easy to use. The Infrared beam is not affected by ambient light, and the noncontact design results in no torque loss for true precision. Quartz crystal ensures accuracy.



Battery Life

Measure RPM on: Drills, Saws, Hones, Gears, Motors, Engines, Fans, Compressors, Generators, Pulleys, and Grinding wheels.



>100 hours



TIF 780



ROBINAIR General Purpose Valves



Straight Type

40455	Straight Type 1/4 MFL x 1/4 MPT
40464	Straight Type 1/4 MFL x 1/4 MFL
40465	Straight Type 3/8 MFL x 3/8 MFL
40494	Straight Type 1/4 MFL x 1/8 FPT
40495	Straight Type 1/4 MFL x 1/4 FPT
40509	Straight Type 1/8 FPT x 1/8 FPT
40510	Straight Type 1/4 FPT x 1/4 FPT
40527	Straight Type 1/8 FPT x 1/8 MPT



Angle Type

40442 Angle Type 1/4 MFL x 1/4 MPT



Quick Coupler Style Valve

40380 Quick Coupler Style Valve 1/4 FFL Coupler x 1/4 MFL





Gauge Cocks

Brass Tee Handle 40478 1/8 FPT x 1/8 MPT **40479** 1/4 FPT x 1/4 MPT **Brass Lever Handle 40476** 1/8 FPT x 1/8 MPT **40477** 1/4 FPT x 1/4 MPT

ROBINAR Tube Piercing Valves



40288



40472

Piercing Valves with Flow Control and 1/4 S.A.E. Connector Size

40288 Fits 3/16, 1/4, 5/16, 3/8 OD **40303** Fits 1/2, 9/16, 5/8 OD

40291 Gaskets for 40288/40330, pkg/3

Piercing Valves with Valve Cores

40330 Fits 3/16, 1/4, 5/6, 3/8 OD

40336 Fits 1/2, 5/8 OD

40306 Gasket for 40303/40336, pkg/3

Straight Line Top Valves

40472 Fits 1/4, 5/16, 3/8 OD

40473 1/2, 5/8 OD

"Easy Tap" Line Tapping Valves

14749 90° Line Tap (R-1) Fits 1/4, 5/16, 3/8 OD 14809 90° Line Tap (R-2) Fits 1/2, 5/8 OD

ROBINAIR General Purpose Fittings

Tees/Fittings

40382	1/4 MFL Branch with core x 1/4 OD tube	
	or 3/8 OD solder, pkg/3*	

- 40383 1/4 MFL Branch with core x 5/16 OD tube or 3/8 OD solder, pkg/3*
- 40384 1/4 MFL Branch with core x 3/8 OD tube or 1/2 OD solder, pkg/3*
- 40386 1/4 MFL run x 1/4 FFL run with depressor x 1/4 MFL Branch with core, pkg/3
- 40396 1/4 MFL Branch with core 1/4 MFL run x 1/4 FFL swivel run, pkg/3
- **40390** 1/4 MFL Branch with core x 1/8 MPT run x 1/8 MPT, pkg/3
- 40423 1/8 MPT Branch x 1/4 MFL run x 1/4 MFL run with core, pkg/3
- 40398 1/4 FFL Swivel Branch with depressor x 1/4 MFL run with core x 1/4 MFL run, pkg/3
- 40399 1/4 FFL Swivel Branch x 1/4 MFL run x 1/4 MFL run with core, pkg/3

FFL Coupling

40410 1/4 MFL with core x 1/4 FFL with copper gasket, pkg/6

Quick Couplers with Depressors

40553 1/8 FPT x 1/4 FFL, ea. **40555** 1/4 FPT x 1/4 FFL, ea.









CHINE .

40410



ROBINAIR Access Fittings

Solder Union Type

40416	1/4 MFL x 1/8 OD Copper Tube Ext., pkg/6
	I start of the second of

- **40417** 1/4 MFL x 3/16 OD Copper Tube Ext., pkg/6
- **40418** 1/4 MFL x 1/4 OD Copper Tube Ext., pkg/6
- **40419** 1/4 MFL x 5/16 OD Copper Tube Ext., pkg/3*
- 40420 1/4 MFL x 3/8 OD Copper Tube Ext., pkg/3*
- 40424 1/4 MFL x 1/4 OD or 3/8 ID Solder with cap and chain*
- **40426** 1/4 MFL x 3/16 OD or 1/4 ID Solder, pkg/6*
- **40427** 1/4 MFL x 1/4 OD or 3/8 ID Solder, pkg/6*
- **40428** 1/4 MFL x 5/16 OD or 1/2 ID Solder, pkg/3*
- **40429** 1/4 MFL x 3/8 OD or 1/2 ID Solder, pkg/3*
- **40435** 1/4 MFL x 3/16 OD or 1/4 or 3/8 ID Solder, pkg/6*

Elbow Access Fitting

40422 1/4 MFL with core x 1/8 MPT Elbow, pkg/6

Straight Swivel Fitting

40421 1/4 FFL Swivel x 1/4 MFL with core, pkg/6





40417

40427

^{*}Comes with 40535 Valve Core Remover

^{*}Comes with 40535 Valve Core Remover

ROBINAIR 42640 High Flow Fitting



- ▶ Increase flow rate by six times, just by changing a fitting!
- ▶ Replaces standard Schraeder™ valve core service connection
- ► Charging and evacuation time is drastically reduced, saving time and money
- ► Easy to install solders to 1/4" tubing
- ► Includes double seal cap

ROBINAIR 42642 Snap Connection Quick Coupler



- ▶ Unique 90° connector pushes on/pulls off
- ► Saves time no twisting, turning or tightening required
- ► Compatible with existing field service connections
- ► Works up to 500 PSI
- ▶ Ideal for use with High Flow Fitting, P/N 42640 (above)
- ▶ Made of brass and steel for durability
- ▶ 1/4" MFL x 1/4" FFL

ROBINAIR 1/4" Valve Core Remover/Installers

40536 Valve core remover/installer with 6 valve cores



ROBINAIR 14476 Charging Valve

Use for evacuation, charging, attaching gauges, etc., for HVAC/R applications. Fits all refrigerators, freezers, R.A.C. units.

43657 Replacement spine valve for 14476 Charging Valve
45122 Replacement end seal for 14476 Charging Valve

43536 Replacement stem packing (two required) for 14476 Charging Valve

ROBINAIR 14599 Valve Core Remover/Installer

Remove and install valve cores from a 1/4" male flare access fitting without the loss of refrigerant. Durable, solid brass tool has a ball valve that can be opened or closed in just a quarter-turn, rather than a stemtype valve. Designed with a stainless steel ball and brazed side fitting for durability and long life.



ROBINAIR 14650 Valve Core Remover/Installers

Replace leaking valve cores quickly and easily, or remove the valve core and hold it out of place for evacuation or charging. Features a solid brass body with a convenient handle that opens and closes in a quarter-turn to speed service. Compact design easily fits most locations.



14650

ROBINAIR 14766 Superheat Thermometer

When used with Robinair's Model No. 14599 or 14650 Access Valve Core Remover/Installer, this Thermometer provides temperature readings for superheat and sub-cooling calculations. Range: -58° to 302°F.



ROBINAIR 14773 Thread Chaser

For use with 14599 or 14650, repairs damaged threads on valve cores in the service line, without releasing refrigerant into the atmosphere.



ROBINAIR 14774 Pick Extractor

For use with 14599 or 14650, extractor lets you remove damaged cores in the service line while the system is fully charged, without releasing refrigerant into the atmosphere.





ROBINAIR 40352 Valve Cores

40352 Replacement valve cores (pkg/6)



ROBINAIR 14998 Refrigerant Access Tool

- Provides fast & easy access to refrigeration lines not equipped with access fittings
- ▶ Supplies instant pierce and seal for fast refrigeration evacuation
- ▶ Patented clamping mechanism automatically locks on tubing
- No adjustment is required
- Comfortable cushion grip
- ▶ Steel pierce is reversible and replaceable
- Brass valve with cap improves system accessibility
- ► For use on 1/4" through 1/2" O.D. refrigerant tubing



ROBINAIR 12294 Pinch-Off Tool

- Patented clamping mechanism quickly and securely pinches off tubing and cloth-reinforced hose
- Comfortable cushion grip
- ▶ Ideal for closing off compressor process tubes
- For 3/16", 1/4", 5/16" and 3/8" tubing



ROBINAIR 42022 Mini Tubing Cutter

- Short swing radius for tight spots
- Wide capacity range
- ▶ For 1/8" to 1-1/8" O.D. tubing



ROBINAIR 42024 Mini Tubing Cutter

- Smallest cutting radius in the industry
- Ideal for extremely tight places
- Fine thread screw provides easier tightening
- ▶ For 1/8" to 5/8" O.D. tubing

ROBINAIR 42028 Tubing Cutter

- ▶ Aluminum alloy body and nickel-chrome durable finish
- Includes a pencil reamer
- For use on cooper, aluminum, steel and stainless steel tubing
- ▶ Wide capacity range
- ▶ For 1/4" to 1-3/8" O.D. tubing



ROBINAIR 42026 Ratchet Tubing Cutter

- ▶ Ratchet action for quick release
- Excellent tracking and simple cutter wheel changes
- ▶ Includes retractable reamer blade
- ▶ For use on copper, aluminum, steel & stainless steel tubing
- ▶ Wide capacity range
- ► For 1/4" to 1-5/8" O.D. tubing



ROBINAIR 42020 Tubing Cutter for Gastite™ Tubing

- ▶ Special cutter for Gastite™ tubing
- Heavy duty steel roller design cuts through the tubing without stripping the outer plastic wrapper before the cut
- ► Large knurled knob
- ▶ For 3/4" to 1" Gastite™ tubing



ROBINAIR Replacement Cutter Wheels for Tubing Cutters

Replacement Parts (supplied with product)	Part Number
For Model 42024	42058
For Models 42020, 42022 & 42046	42060
For Model 42028	42062

ROBINAIR 42032 Copper Re-Rounding Kit

- Re-round copper tubing quickly and easily
- ▶ Includes 3/4", 1", 1-1/2" and 2" tools
- Packed in a convenient plastic case

Note: For added safety, use with brass hammer only

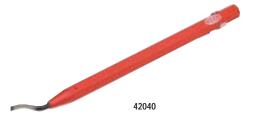


ROBINAIR 12479 Six-in-One Swaging Tool



- ▶ One convenient tool, forms solder cups on six (6) different sizes of tubing
- ▶ Made of fatigue proof steel
- ▶ Works on 3/16", 1/4", 5/16", 3/8", 1/2" and 5/8" tubing

ROBINAIR 42040 De-burring Tool



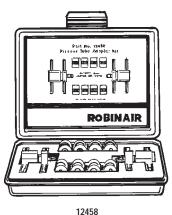
- Single blade style
- De-burrs copper tubing
- Hardened steel blade
- Aluminum handle, with pocket clip
- Works on any size tubing

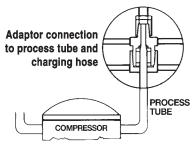
ROBINAIR 42042 De-burring Tool



- ▶ De-burrs aluminum, cooper and steel tubing
- Hardened steel blades
- ▶ Durable aluminum handle, with blade storage
- ▶ Includes three (3) spare blades
- Works on any size tubing

ROBINAIR 12458 Process Tube Adapter Kit





- Kit provides the fastest and easiest means of connecting charging lines to process tubes for evacuating and recharging a system
- Assures an absolute seal between tubing and the charging hose
- Eliminates the need for flaring and the possibility of metal chips getting into the system
- Includes Carrying Case with individual compartments
- Adapts 3/16", 1/4" 5/16" and 3/8" copper tubing to charging hose

Replacement Part (supplied with product)

Replacement Case

Part Number

43546

ROBINAIR A/C Ratchet Wrenches

10599

Reversible, 1/2" and 9/16" HEX openings on one end, 3/16" and 1/4" SQUARE on the other

10696

10696

Reversible, four SQUARE openings, 1/4" and 3/16" on one end, 3/8" and 5/16" on the other

10983

Reversible, with 25° OFFSET, four SQUARE openings, 1/4" and 3/16" on one end, 3/8" and 5/16" on the other



10983

ROBINAIR Heavy Duty Pipe Wrenches

- ► High-tensile iron handles
- ► Hardened steel parts to withstand the toughest demands
- Offset style wrenches provide longer swing in hard-to-reach places

Offset Style

Model No.	Length	Pipe Size
42048	8"	1/8" to 1"
42044	10"	1/8" to 1-1/2"
42046	12"	1/8" to 2"

Straight Style

Straight Style			
	Model No.	Length	Pipe Size
	42056	6"	1/8" to 3/4"
	42054	8"	1/8" to 1"
	42052	10"	1/8" to 1-1/2"
	42050	12"	1/8" to 2"





ROBINAIR 14528 Four-In-One Tube Bender

- Bends four sizes of soft or annealed tubing
- Prevents crimping, flattening or scratching
- ▶ Calibration allows duplication of any angle
- ▶ Long handles (8-1/2") no extensions required
- "Glass/plastic" construction combines strength with lightweight durability
- ▶ For use on 3/16", 1/4", 5/16" and 3/8" tubing

ROBINAIR 14401 & 18401 Fin Straighteners

- ► Six-in-one
- ► Cleans & straightens condenser and evaporator coil fins
- ▶ Each section clearly marked with fin size
- ► Compact size, head 3-1/8" in diameter/handle 3 1/2" long

14401 8, 9, 10, 12, 14, & 15 fins per inch 18401 10 1/2, 11, 13, 18, 20 & 22 fins per inch



ROBINAIR 45330 Inspection Light

- "Must have" tool for a variety of applications: checking for cracks on heat exchangers, inspecting coils and contacts for dirt & damage, reading serial numbers, etc.
- Fiber optics provide a bright light, while the shaft is only 7.6 mm in diameter
- ▶ 15" flexible shaft
- Includes a durable protective cover
- Powered by three AA batteries
- ▶ Replacement Bulb P/N 45331



45330

ROBINAIR 42030 Soldering System

- "Must Have" kit for copper-soldering jobs in service areas that have a
 - "No Open Flame" policy
- ▶ Unit uses resistance to provide heat for soldering
- Works on Soft soldering up to 2"/Silver soldering up to 3/4" Thawing - up to 1"
- Three-position switch optimizes output amperage for each function, while using very low voltage
- ▶ Uses standard 120V power supply
- ▶ Includes protective ABS case

ROBINAIR 13490, 13491, 13492 Thermal Shield

- Easily control unwanted heat transfer
- Use during welding & soldering operations
- Reduces the risk of accidental fire or heat-related damage
- Protect valves and other components during brazing
- Apply to adjacent sheet metal when welding
- Provides a shield against overheating or distortion
- ▶ Helps prevents weld slag from adhering to metal
- Apply to heated surfaces for rapid cooling
- ▶ Comprised of a harmless surfactant, water and an inorganic-based agent
- ▶ Environmentally safe, 100% bio-degradable, non-toxic, non-corrosive and non-flammable
- Available in paste or spray gel
- ▶ Paste is ideal for vertical & overhead surfaces
- ▶ Spray gel coats & protects even hard to reach surfaces



3491	1349
349 I	1349

Replacement Parts	Part Number
Spray Gel, 32 oz. bottle	13490
Paste, 32 oz. jar	13491
Display Package includes three 32 oz spray gels and two 32 oz nastes	13/102

ROBINAIR 14450 Heat Gun

- ▶ Direct heat source with three settings 500° F/750° F/Air only
- ► Lightweight, shock-proof & cool running with tough Lexan® housing
- ▶ Ideal for many applications
- ► Fast heating/drying of materials
- Quick curing/drying of epoxies
- Applying shrink tubing
- Softening tubing for bending
- ► Speed-drying of touch-up paint to eliminate "haze"
- ▶ Drying out condensation in motors, clutches, controls, etc.
- ▶ 115V 50/60 Hz
- Made in USA

Replacement Parts (supplied with product)	Part Number
Heater Element Assembly	44993
Carbon Brush	44996
Switch Assembly	44997





ACD-10 PRO, ACD-10 TRMS Pro Digital Clamp-on Multimeters



- AC and DC Voltage to 600V
- ► AC Current to 400A
- Resistance to 40MΩ with Continuity Buzzer
- ► Capacitance to 3000 µF
- ► Frequency measurement
- ▶ Diode test
- ► Hold and Maximum reading functions
- ► Accommodates conductors up to 1.02" (26mm) in diameter
- Auto Ranging
- ► Auto power off and low battery indication
- ► Rubber over-molded case
- Overload protected
- ► Safety: Cat II 600 V and Cat III 300 V
- ► CE Approved, UL Listed
- ► Limited Life Time Warranty

reatures	ACD-10 Pro	ACD-10 TRIVIS Pro
AC Voltage	4.000V, 40.00V, 400.0V, 600 V	
DC Voltage	0-400.0mV, 4.000V, 40.00V, 400.0V, 600 V	
AC Current	0-40.00A, 400.0 A	
Resistance with Continuity Buzzer	0-400.0Ω, 4.000kΩ, 40.00kΩ, 400.0kΩ, 0-4.000MΩ, 40.00 M Ω	
Capacitance	500.0nF, 5.000μF, 50.00μF, 500.00μF, 3000μF	
Frequency (Using Jaw or Test Leads)	40-400Hz with Jaw, 10Hz to 2kHz with test leads	
TRMS measurement	N/A	Yes





Optional Accessories	Part Number
Line splitter (Energizer)	A47L
5000A Clamp-on Current Transformer (50 to 1)	CT50-1
3000A Clamp-on Current Transformer (50 to 1)	CT50-2
600A Clamp-on Current Transformer (10 to 1)	A50-1
Dual Temperature Adapter	TMA-1
Temperature Adapter	TMA-K
Alligator Clips (For test leads)	VRC-320

Replacement Parts (supplied with product)	Part Number
Test leads with set of alligator clips (alligator clips not supplied with product)	MTL-90B
Carrying case	SV-U
Instruction Manual	www.amprobe.com

"We use a special notation to indicate range AND resolution using a single number. For example: number 40.00 indicates range of 40 and resolution 0.01 (two digits after the point with the 1 as an increment, unless otherwise specified).



- ► AC/DC Volts to 600V
- ► AC Amps to 600A
- \triangleright Ohms to 199.9 Ω
- ▶ Small jaw profile allows measurement in confined spaces
- ▶ Hold feature
- ▶ Safety: CAT III 600V, UL, CE
- ► Limited Life Time Warranty

Features	Range & Resolution*
AC Voltage	0-199.9, 600V
DC Voltage	0-600V
AC Current	0-199.9, 600A
Resistance	0-199.9 Ω

Optional Accessories	Part Number
Line splitter (Energizer)	A47L
5000A Clamp-on Current Transformer (50 to 1)	CT50-1
3000A Clamp-on Current Transformer (50 to 1)	CT50-2
Alligator Clips (For test leads)	VRC-320

Replacement Parts (supplied with product)	Part Number
Test leads with set of alligator clips (alligator clips not supplied with product)	MTL-90B
Carrying case	SV-U
Instruction manual	www.amprobe.com



DRS-1



ADF-200 Fork Multimeter

- ► Easy Amps measurement with convenient "Fork" design
- ► Compact case with built-in probe storage
- Continuity check with buzzer
- Accommodates cables up to 1/2" in diameter
- ▶ Auto power off
- ► Safety: CAT III 600V, CAT II 1000V, UL, CE
- ► Limited Life Time Warranty

Features	Range & Resolution*
AC/DC Volts (40-500Hz)	0-600V
AC Amps (45-65Hz)	0-199.9A
Resistance	0-1999Ω

Replacement Parts (supplied with product)	Part Number
Instruction Manual	www.amprobe.com



ADF-200



PMM-2

Pen Style Digital Multimeter

- Wide range of functions with plug-in heads (sold separately) including:
 - AC Amps to 400
- Dual temperature
- DC Microamps
- Humidity
- Capacitance
- ▶ Diode check
- Auto power off
- Continuity buzzer
- ► Safety: CAT II 600V and CAT III 300V, UL, CE

Features	Range & Resolution*
AC/DC Volts	4.200, 42.00, 420.0, 600V
Resistance	420.0Ω, 4.200kΩ, 42.00kΩ, 420.0kΩ, 4.200MΩ, 42.00M Ω

Optional Accessories	Part Number
Clamp-on Head	PMM-C
Dual K-Type Thermocouple Head	PKT-2
Relative Humidity Head	PRH-2
Microamp Head	PAMP-2
Capacitance Head	PCAP-2
Accessory Head Test Leads	TL-10S

Replacement Parts (supplied with product)	Part Number
Set of test leads	PMTL-5
Carrying case	SV-U



PMM-2

PMM-C



PMM-C Clamp-on Head

- Current measurement up to 400A AC
- Output: 1 mVAC per 0.1 Amp
- ► Maximum jaw opening 1.18" (30mm)
- Hand guard design
- ▶ Basic accuracy ± (1.9% of reading + 0.5A) for 50 and 60 Hz



PKT-2 Dual K-Type

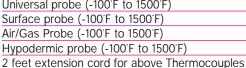
Thermocouple Head

- ► -50°F to 1832°F range
- ▶ Differential temperature
- ▶ Dual temperature measurement
- ▶ Output: 1 mVDC per °F

DPX-2000

- ▶ Basic accuracy: ± (2% of reading + 4°F) for -50°F to -10°F
 - \pm (0.5% of reading + 4°F) for -9°F to 662°F
 - ± (2% of reading + 4°F) for 933°F to 1832°F

Accessories	Part Number
Thermocouple (-50°F to 600°F)	TPK-56
Universal probe (-100°F to 1500°F)	TC-11
Surface probe (-100°F to 1500°F)	TC-12
Air/Gas Probe (-100°F to 1500°F)	TC-13
Hypodermic probe (-100°F to 1500°F)	TC-14





*We use a special notation to indicate range AND resolution using a single number. For example: number 40.00 indicates range of 40 and resolution 0.01 (two digits after the point with the 1 as an increment, unless otherwise specified).

PCAP-2 Capacitance Head

- ▶ 1µF 3000µF range
- ► Output voltage: 1 mVDC per µF
- ▶ Basic accuracy:
 - \pm (2% of reading + 2 μ F) for 1 μ F to 420 μ F
 - \pm (2% of reading + 20 μ F) for 421 μ F to 3000 μ F





PAMP-2 Microamp Head

- ▶ 0 4200µA DC range
- Output voltage: 1 mV per μA
- Polarity indication
- ▶ Basic accuracy:
 - ± (2% of reading + 0.1µA) to 420µA
 - ± (2% of reading + 1µA) to 4200µA



Test jack plug 1/8" (slide onto PAMP-2 test leads for quick connection in series - flame current measurement on systems which provide a current test plug)

Alligator clips (slide onto PAMP-2 test leads for quick connection in series – flame current measurement on systems which provide a current test points) Part Number

PFCP-1

PAC-1





PRH-2 Relative Humidity Head

- ▶ Polymer type sensor
- Output voltage: 1 mVDC per 1% RH
- ▶ Basic accuracy:
 - ± 3%RH for 35%RH to 75%RH
 - ± 5%RH for 20%RH to 35%RH and 75%RH to 90%RH
 - ± 7%RH for 10%RH to 20%RH and 90%RH to 95%RH





TL-10S Accessory Head Test Leads

▶ Allows the PMM-2 accessories to become remote from the PMM for hard to reach places



RS-1, RS-3, RS-3 Super Rotary Scale Clamp-on Multimeters FS-3L Flat Scale Clamp-on Multimeter



RS-3 Super

FS-3L

- ▶ RS and FS Series work in a wide range of temperatures
- Pointer lock
- ▶ Drop Proof to 5 feet
- ► Temperature (with optional probe) to 225°F

Additional RS Series Features:

- ▶ No battery needed for measuring volts or amp
- ▶ Easy to use rotary scale
- Recessed magnifying window

Additional FS Series Features:

- ▶ Calibrated for use on 50 or 60 Hz systems
- ▶ Taut Band meter movement

Specifications				
	RS-1	RS-3	RS-3 Super	FS-3L
AC Voltage	0-150/600V	0-150)/300/600V	0-150/300/600V
AC Current	0-6/15/40/100A	0-6/15/	40/100/300A	6/15/40/100/300A
Resistance	N/A	25Ω	Midscale	0-1000Ω, 0-100 000Ω
Frequency	60Hz	60Hz	50-400Hz	
Jaw Opening	1"		1"	
Temperature			_	-25 to +225°F

Optional Accessories	Part Number
Line splitter (Energizer)	A47L
5000A Clamp-on Current Transformer (50 to 1)	CT50-1
3000A Clamp-on Current Transformer (50 to 1)	CT50-2
600A Clamp-on Current Transformer (10 to 1)	
(RS-1, RS-3, RS-3Super)	A50-1
Extendo test leads (RS-1, RS-3, RS-3Super)	VLK-411R
Extendo test leads, Wide Temperature range,	
-40°F to 120°F	VLK-411R-WTR
Replacement probe tips for test leads	VPT
Alligator Clips	VRC-320
Attache-style case (RS-1, RS-3, RS-3Super)	С
Immersion Temperature probe (FS-3L only)	RBT-11P
Universal Temperature probe (FS-3L only)	RBT-12P
Vented Air probe (150°F max) (FS-3L only)	RBT-13P

Replacement Parts (supplied with product)	Part Number
Voltage test leads (RS-1, RS-3, RS-3Super)	VL11S
Carrying Case	SV-U
Ohmmeter adapter (RS-3, RS-3Super, RS-1007)	OHB-3HE
Fuse for OHB-3HE, 1 Amp, 600 Volt, 8AG size, FAST Blow (RS-3, RS-3Super, RS-1007)	8AG-360x023
Fuse (0.5 Amp, 250 Volt, 8AG size) (FS-3L)	8AG-361.5
Instruction Manual	www.amprobe.com

ACDC-620T Digital AC/DC Clamp-on Multimeter

- ► TRMS Measurement
- ▶ Dynamic Min/Max/Avg. Recording function
- ► In-rush Peak Current capture (1 mS response)
- ► Temperature measurement
- ▶ Dual Display of °F & °C readings
- ► Continuity Buzzer
- ▶ Reading Hold function
- ► Auto/Manual Ranging
- ▶ Auto power off
- ► Maximum jaw opening 2.04" (52mm)
- ▶ Low Battery & Over-range Indicators
- ► Analog Bar Graph
- ▶ Designed to UL, ULc, CE, IEC & TÜV Standards
- ▶ Limited Life Time Warranty



ACDC-620T



Features	Range & Resolution*
AC/DC Voltage	0-399.9, 1000V
AC/DC Current	0-399.9, 1000A
Resistance	0-399.9Ω, 4.000k Ω
Capacitance	0-399.9, 4000 μ F
Temperature	-40°F to 2500°F (-40°C to 1372°C)
In-rush Peak Current Max (AC or DC)	0-399.9, 1000A
Continuity Buzzer	<10.0 ohms

Optional Accessories	Part Number
Line splitter (Energizer)	A47L
Amptran 50-1 Current Transformer, 5000 Amps Max. (AC Only)	CT50-1
Amptran 50-1 Current Transformer, 3000 Amps Max. (AC Only)	CT50-2
Thermocouple -50°F to 600°F	TPK-59
Dual input Thermocouple adapter with two thermocouples, -50°F to 600°F	DKTA-620 and two of TPK-56

Replacement Parts (supplied with product)	Part Number
Test leads with set of alligator clips (alligator clips not supplied with product)	MTL-90B
Carrying Case	CC-ACDC
Instruction Manual	www.amprobe.com



A400 400A Clamp-On Transducer



- ► For use with multimeters, oscilloscopes, power recorders or any instrument with AC milli-volt input (1mVAC per Amp)
- ▶ AC Current measurement from 0.1A to 400A
- Measures 50 or 60 Hz current
- ► Maximum jaw opening 1.18" (3cm)
- ▶ Safety: 600V CAT II, IEC 1010-1
- Carrying case included

Accuracy	50Hz to 60 Hz
AC Current 0 to 350A	± (1.6% of reading + 0.5A)
AC Current 350 to 440A	± (3.2% of reading + 1A)

Optional Accessories	Part Number
Line Splitter (Energizer)	A-47L
Carrying Case	SV-U

Replacement Parts (supplied with product)	Part Number
Instruction Manual	www.amprobe.com



CT-600 ACDC 600A AC/DC Clamp-On Transducer



- ► For use with multimeters, oscilloscopes, power recorders or any instrument with AC and DC milli-volt input
- ▶ AC or DC Current measurement up to 600A
- ► Two ranges 100A and 600A (millivolt output respectively 1mV and 10mV per Amp)
- ▶ Wide frequency response 40-400Hz
- ► Maximum jaw opening 1.33" (3.3cm)
- Overload protection up to 800A
- ▶ Power on and low battery indication
- Carrying case included

Accuracy	DC and AC (40Hz to 400 Hz)
Current 0 to 100A	± 2% of reading ± 0.5A
Current 100 to 600A	± 2% of reading ± 2A

Optional Accessories	Part Number
Line Splitter (Energizer)	A-47L
Carrying Case	SV-U

Replacement Part (supplied with product)	Part Number
Instruction Manual	www.amprobe.com

AM-2EDP Analog Multimeter

- ▶ AC/DC Volts to 1000
- ▶ Ohms to $1M\Omega$
- ▶ DC Micro and Milliamps
- ▶ Temperature Range

Features	Range
AC Voltage	0-10/50/125/250/1000V
DC Voltage	0-0.5/2.5/10/25/125/250/1000V
DC Current	0-50 μA/25mA/250mA
Resistance	$500\Omega/5\Omega/1M\Omega$
Temperature	With optional temperature probes not supplied with product

Optional Accessories	Part	Number
Immersion temperature probe (-50°F to 250°F)	RBT-11B	
Universal temperature probe (-50°F to 250°F)	RBT-12B	
Vented air temperature probe (-50°F to 150°F)	RBT-13B	
Alligator Clips (For test leads)	VRC-320	

Replacement Parts (supplied with product)	Part Number
Carrying case	MM
Fuse 0.5 Amp fast blow	8AG-361.5
Test leads with set of alligator clips (alligator clips not supplied with product)	MTL-90B
Instruction Manual	www.amprobe.com





AM-3E Analog Multimeter

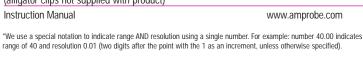
▶ Mirror scale

- ► AC/DC Volts Ranges
- ▶ High impact molded case
- ▶ Ohms to $5M\Omega$
- ▶ Self-locking meter stand handle
- ▶ DC Current

Features	Range
AC Voltage	0-30/150/300/750V
DC Voltage 0-3/30/150/300V	
DC Current	0–10μA/15μA/150 μA/1.5 mA/150mA
DC Millivolts	0-75/750/1500mV
Resistance $500\Omega/5k\Omega/50k\Omega/5M\Omega$	
Temperature	With optional temperature probes not supplied with product

Optional Accessories	Part Number
Immersion temperature probe (-10°F to 250°F)	RBT-11B
Universal temperature probe (-10°F to 250°F)	RBT-12B
Vented air temperature probe (-10°F to 150°F)	RBT-13B
Thermocouple (70°F to 1200°F)	TC-3
Alligator Clips (For test leads)	VRC-320
Current transducer 0-5/25/100/250 A, 60Hz	A603
Current transducer 0-5/25/100/250 A, 50Hz	A653
Current transducer 0-10/50/250/500 A, 60Hz	A703
Current transducer 0-10/50/250/500 A, 50Hz	A753
Deluxe carrying case	MM-4

Replacement Parts (supplied with product)	Part Number
Carrying case	MM-3
Fuse 0.1 Amp fast blow	3AG-312
Fuse 1 Amp fast blow	8AG361
Test leads with set of alligator clips (alligator clips not supplied with product)	MTL-90B
Instruction Manual	www.amprobe.com





AM-3E



RBT-11B, RBT-12B, RBT-13B



TC-3

A-603





AM-33 Intelligent Digital Multimeter

- ▶ Auto selection of Voltage or Resistance prevents meters misuse
- Autoranging
- ► Audible continuity check
- ► Auto power off
- Data hold
- ▶ Diode check
- ► Safety: CAT III 600V
- ► Limited Life Time Warranty

Features	Range & Resolution*	
DC Volts	3.999V, 39.99V, 399.9V, 600V	
AC Volts 4.000V-40.00V, 400.0V, 600V		
Resistance	400.0Ω	

Optional Accessories	Part Number
Alligator Clips (For test leads)	VRC-320

Replacement Parts (supplied with product)	Part Number
Test leads with set of alligator clips (alligator clips not supplied with product)	MTL-90B
Instruction manual	www.amprobe.com





AM-34 - Auto Ranging Digital Multimeter

- ▶ Extremely easy to use, one hand rotary switch operation
- Autoranging
- ▶ Diode and audible continuity check
- ▶ Polarity indication
- ▶ Data hold
- ► Safety: CAT III 600V
- ► Limited Life Time Warranty

Features	Range & Resolution*	
AC/DC Volts	3.999V, 39.99V, 399.9V, 600V	
AC/DC Current	10.00A	
Resistance 400.0Ω , $4.000k\Omega$, $40.00k\Omega$,		
	400.0kΩ, 4.000M Ω	

AM-34

Optional Accessories	Part Number
3000A AC Flexible Clamp-on Attachment	ACF-3AK
1000A TRMS AC/DC Clamp-on Attachment	A-1000
600A AC/DC Clamp-on Attachment	CT-600 AC/DC
400A AC Clamp-on Attachment	A400
300A AC Clamp-on Attachment	A663-4B
Milli-Amps to 30A AC/DC Clamp-on Attachment	CT-30
Single Input Thermocouple Temperature Attachment	TMA-K
Dual Input Thermocouple Temperature Attachment	TMA-1
Alligator Clips (For test leads)	VRC-320

Replacement Parts (supplied with product)	Part Number
Test leads with set of alligator clips (alligator clips not supplied with product)	MTL-90B
Instruction manual	www.amprobe.com

*We use a special notation to indicate range AND resolution using a single number. For example: number 40.00 indicates range of 40 and resolution 0.01 (two digits after the point with the 1 as an increment, unless otherwise specified).

AM-20 Digital Multimeter

- Wide range of measurement features
- ► Economically priced
- ► Large LCD display

- Compact size
- ► Easy to use
- ► Limited Life Time Warranty

Features	Range & Resolution•	
AC Volts	0-199.9, 600V	
DC Volts	0-199.9mV, 1.999, 0-19.99, 199.9, 1000V	
DC Amps	0-199.9μA, 19.99mA, 1999mA, 10.00A	
Ohms	$0-199.9\Omega$, $1.999k\Omega$, $19.99k\Omega$, $199.9k\Omega$, $1.999M\Omega$, $19.99M\Omega$	
Continuity Buzzer	<4 ohms	
Diode Test	Open circuit test Voltage: 3.2 Volts Max. Test Current: 1.0mA	

Optional	Accessories	Part Number
Alligator Clips		MTC-3
Carrying Case		SV-U

Replacement Parts (supplied with product)	Part Number
Test Leads	MTL-6
Fuse (Special 600 Volt, 2 Amp)	6.3x25-2-12
Instruction Manual	www.amprobe.com



AM-20



AM-18A Digital Multimeter

- ▶ Wide range of measurement features
- ▶ Protective holster and tilt stand
- "Third hand" test probe holder
- ► Reading Hold function
- Auto or Manual ranging

- ► Low Battery & Overload Indicators
- Auto power off
- ► Analog Bar Graph display
- ▶ Durable
- ► Limited Life Time Warranty

Features	Range
AC Voltage	0-3.000, 30.00, 300.0, 600V
DC Voltage	0-300.0mV, 3.000V, 30.00V, 300.0V, 600V
AC Current	0-300.0μA, 3000μA, 30.00mA, 300.0mA, 20A
DC Current	0-300.0μA, 3000μA, 30.00mA, 300.0mA, 20A
Resistance	0-300.0Ω, 3.000kΩ, 30.00kΩ, 300.0kΩ, 3.000MΩ, 30.00M Ω
Continuity Buzzer	<50 ohms
Capacitance	0-3.000, 0-30.00, 0-300.0μF
Diode Test	Open Circuit test Voltage: 3.3 Volts, Max Test current: 1.5mA



AM-18A

Optional Accessories	Part Number
3000A AC Flexible Clamp-on Attachment	ACF-3AK
1000A TRMS AC/DC Clamp-on Attachment	A-1000
600A AC/DC Clamp-on Attachment	CT-600 AC/DC
400A AC Clamp-on Attachment	A400
300A AC Clamp-on Attachment	A663-4B
Milli-Amps to 30A AC/DC Clamp-on Attachment	CT-30
Single Input Thermocouple Temperature Attachment	TMA-K
Dual Input Thermocouple Temperature Attachment	TMA-1
Alligator Clips	VRC-320
Carrying Case	SV-U

Replacement Parts (supplied with product)	Part Number
Test leads with set of alligator clips (alligator clips not supplied with product)	MTL-90B
Fuse, Special 600 Volt, 2 Amp	6.3x25-2-12
Fuse, Special 600 Volt, 10 Amp	6.3x25-10-12
Holster	H-18Y
Instruction Manual	www.amprobe.com

AM-52, AM-57, AM-59 Digital Multimeters



- ▶ Designed for HVAC Applications
- ▶ Test Flame Arrestor circuits
- ► Recording of Min, Max, Max-Min and Average values
- ▶ Relative zero
- ▶ Data hold
- ▶ Auto power off

- ► Continuity buzzer
- ▶ Diode test
- Protective holster
- ► Durable and dependable
- ► Safety CATIII 600V, UL, CSA
- ► Limited Life Time Warranty



-			
Features	AM-52	AM-5	AM-59
AC/DC Voltage	999.9mV, 9.999V, 99.99V, 600V		
DC Current	40μΑ, 400.0μΑ, 4.000mA, 40.00mA	40μΑ, 400.0μΑ, 4.000mΑ, 40.00mΑ, 4000mΑ, 10.00A	
AC Current	400.0μΑ 40.00mA	400.0μA, 4 4000mA,	
Resistance	999.9 Ω, 9.999kΩ	Ω, 99.99kΩ, 999.9kΩ, 4.00	0MΩ, 40.00M Ω
Capacitance	1.000μF, 10.00μF, 100.0μF, 1.000mF, 10.00mF		
Frequency	9.999Hz, 99.99Hz, 999.9Hz, 9.999kHz, 50.00kHz		
Temperature	-50°F to 932°F		
Differential Temperature	Yes		
TRMS	N/A	N/A	Yes
Harmonics index	N/A	N/A	0-99.9%

Optional Accessories	Part Number
3000A AC Flexible Clamp-on Attachment	ACF-3AK
1000A TRMS AC/DC Clamp-on Attachment	A-1000
600A AC/DC Clamp-on Attachment	CT-600 AC/DC
400A AC Clamp-on Attachment	A400
300A AC Clamp-on Attachment	A663-4B
Milli-Amps to 30A AC/DC Clamp-on Attachment	CT-30
Alligator Clips	VRC-320
Thermocouple -50°F to 600°F	TPK-59
Dual input thermocouple adapter with two thermocouples -50°F to 600°F	DKTA-620 and two of TPK-56
Carrying Case	CC-ACDC



Replacement Parts (supplied with product)	Part Number
Test leads with set of alligator clips (alligator clips not supplied with product)	MTL-90B
Holster	H-50
Fuse 600V, 15A (AM-57, AM-59)	KLK15
Fuse 250V, 0.16A (AM-52, AM-57, AM-59)	5x20-216.160
Instruction manual	www.amprobe.com

AM-91 RS Professional Digital Multimeter with PC Data Recording System

- ▶ True RMS measurements
- ▶ 4,000 or 40,000 Counts
- ▶ RECORD mode, Data Store & Recall
- Dual backlit display with analog bar-graph
- ▶ RS232 PC computer interface capabilities (Software Included)
- ▶ HOLD button
- Auto or Manual ranging
- ▶ Relative modes (Difference, Percent and Change Per Unit)
- Auto Power Off
- ▶ Crest Factor Measurement- indicates distorted waveforms
- ► SORT[™] feature
- ▶ Safety: CAT III 600V, UL
- ► Limited Life Time Warranty



AM-91 RS

Features	Range & Resolution*
DC Voltage	0-40.00mV, 400.0mV, 4.000V, 40.00V, 400.0V, 1000V
AC Voltage	0-400.0mV, 4.000V, 40.00V, 400.0V, 750V
(AC + DC) Voltage	0-4.000V, 40.00V, 400.0V, 750V
AC/DC Current	0-400.0mA, 4000mA, 40.00mA, 400.0mA, 4.000A, 10.00A
Frequency	0-99.999Hz, 999.99Hz, 9.9999kHz, 99.999kHz, 999.99kHz, 4.0000MHz
Duty Cycle	0.1% - 99.9%
Capacitance	0–4.000nF, 40.00nF, 400.0nF, 4.000μF, 40.00μF, 400.0μF, 4.000mF, 40.00mF
Resistance (Audible Continuity)	0-40.00Ω, 400.0Ω, 4.000kΩ, 40.00kΩ, 400.0kΩ, 4.000MΩ, 40.00M Ω (<10Ω)
Conductance (nS + GΩ)	0-400.0nS
Diode Tester	0.8 mA/<3.5 VDC

Optional Accessories	Part Number
3000A AC Flexible Clamp-on Attachment	ACF-3AK
1000A TRMS AC/DC Clamp-on Attachment	A-1000
600A AC/DC Clamp-on Attachment	CT-600 AC/DC
400A AC Clamp-on Attachment	A400
300A AC Clamp-on Attachment	A663-4B
Milli-Amps to 30A AC/DC Clamp-on Attachment	CT-30
Single Input Thermocouple Temperature Attachment	TMA-K
Dual Input Thermocouple Temperature Attachment	TMA-1
Alligator Clips (For test leads)	VRC-320

Replacement Parts (supplied with product)	Part Number
RS-232 connection cable	RSMCC
Software	www.amprobe.com
Test leads with set of alligator clips	MTL-90B
Holster	H-90Y
Case Gasket, Tilt Stand, Belt Clip, 2 Upper Case Screws, 2 Lower Case Screws	TSBC-90
Fuse 500V/0.63A	FA-6x32/.63
Fuse 600V/15A	KLK15
Carrying Case	CC-ACDC
Instruction Manual	www.amprobe.com

AMB-4D Digital Megohmmeter - Insulation Tester



AMB-4D

- ▶ Tests insulation of wires, cables, transformers and electrical motors
- Battery powered
- ▶ Helps cut unscheduled downtime and reduce shock hazards
- ▶ Sensitive Ohmmeter for checking resistance of motor windings
- ▶ Fast response time (less than 5 seconds)
- ▶ Automatic Dielectric Absorption Ratio Test
- Audible and visual indication in the auto mode
- Low battery indication

Features	Range & Resolution*
Insulation resistance with 250VDC testing voltage	O-200.0M Ω
Insulation resistance with 500VDC testing voltage	0-200.0M Ω
Insulation resistance with 1000VDC testing voltage	0-2000M Ω
Low resistance measurement	0-200.0Ω

Replacement Parts (supplied with product)	Part Number
Test Leads	MTL-6
Alligator Clips	MTC-3
Carrying case	MOD
Instruction Manual	www.amprobe.com



AMB-1A





AMB-2

AMB-1A, AMB-2, AMB-3 Analog Megohmmeters -Insulation Testers

- ► Tests insulation of wires, cables, transformers and electrical motors
- Battery powered
- Helps cut unscheduled downtime and reduce shock hazards
- Sensitive Ohmmeter for checking resistance of motor windings (AMB-1A and AMB-2)
- ▶ Built in voltmeter
- Battery OK test
- ▶ Mirror scale
- ► Automatic discharge of equipment capacitance for safe removal of test leads

AMPROSE	
AMPROSE.	ı
Committee (CONTRACTOR)	١
	ı
重。	ı

AMB-3 (Replaces TIF IT990)

Features	AMB-1A	AMB-2	AMB-3
Insulation resistance with 250 VDC test voltage	N/A	0-50ΜΩ	N/A
Insulation resistance with 500 VDC test voltage	0-100	ΩΜΩ	0-1000ΜΩ
Voltmeter	0-600V	0-600V AC	
Low resistance	0-10	N/A	

Replacement Parts (supplied with product)	Part Number		Part Number
Carrying case for AMB-1A and AMB-2	MOB	Fuse (1Amp fast blow) for AMB-1A and AMB-2	8AG361
Test leads for AMB-1A and AMB-2	MTL-6	Test leads with set of alligator clips for AMB-3	MTL-90B
Adaptor clins for AMR-1A and AMR-2	MTC-3		

"We use a special notation to indicate range AND resolution using a single number. For example: number 40.00 indicates range of 40 and resolution 0.01 (two digits after the point with the 1 as an increment, unless otherwise specified)

AT-1000 Advanced Tracer

- ► Trace energized lines up to 300 VAC or VDC
- ► Trace un-energized and open conductors
- ► Identifies breakers and fuses without powering down
- ► Locates shorts
- ▶ Identifies wires in a bundle
- ▶ Identifies control, alarm and telephone system wiring
- ► Traces coaxial cable shield
- ▶ Receiver range 1 to 3 feet from a cable being traced

Replacement Parts (supplied with product)	Part Number
Receiver	R1000
Transmitter	X1000
Carrying case	SV-1000
110V pigtail cord set	C2901
Alligator clip cord set	C2902
Receptacle adapter	AD-1
Instruction Manual	www.amprobe.com





CT-100, CT-326B Current Tracers

- ► Heavy duty, recommended for tough industrial applications
- ► Traces live wires buried underground or hidden behind walls up to 13 feet deep
- ▶ Performs tests without having to interrupt power
- ► Locates breakers, neutral and ground lines
- ▶ Locates and traces wires in walls, floors, conduit, computer cables, etc.
- ▶ Pinpoints shorts and ground faults
- ▶ Does not interfere with sensitive electronic equipment

Features	CT-100	CT-326B
Traces energized wires without power interruption Locates breakers without power interruption	9-300V AC/DC	9-300V AC/DC 300-600V AC
Traces unenergized wires (wire continuity and wire grounded at the end) Pinpoints shorts and ground faults	T-100 Transmitter and 9V batteries	T-300 Transmitter and 9V batteries
Digital filter to assure cutting edge accuracy in noisy industrial environment	N/A	YES
Sensitivity settings	3	12

Replacement Parts (supplied with product)	Part Number		
Transmitter for CT-326B	T300		
Probe for CT-326B	P26		
Carrying case for CT-326B	CC-326		
Earphone for CT-326B	EP-1001		
Transmitter for CT-100	T100		
Voltage converter, 2:1 transformer (supplied with CT-326B)	600CKA		
Fuse for T-100 and T-300 1/4A 250V normal blow	3AG-312.250		
Probe for CT-100	P100		
Carrying case for CT-100	CC-100		
Power cord	PC326		
Pigtail connector	PT26		
Receptacle adapter	AD-1		
Instruction Manual	www.amprobe.com		





CT-326B

AMPROSE Break'r Trac'r™



- ► Identifies 120V circuit breakers
- Adjusts sensitivity automatically
- ► Microprocessor controlled
- Quick and easy to use
- ► Extremely accurate readings (always finds the right breaker)
- ► Durable and dependable
- ▶ UL approved

Replacement Parts (supplied with product)
Instruction Manual
Part Number
www.amprobe.com





- ► Identifies circuit breaker location
- Works on all electrical systems from 90 to 250 VAC
- ▶ Perfect for office, residential and HVAC applications
- Automatic sensitivity adjustment
- Microprocessor controlled
- Quick and easy to use
- Extremely accurate reading always finds the right breaker
- ► Durable and dependable
- ▶ UL approved

BT-250

Replacement Parts (supplied with product)	Part Number
Transmitter	BT-250T
Carrying case	BT-CC
Voltage leads	BT-VLA
Light fixture adapter	BT-LFA
Instruction Manual	www.amprobe.com

VP-440 Non-Contact Volt Probe

- ▶ Detects AC Voltage (110 600V)
- Uses non-contact method of Voltage testing
- ▶ Totally insulated, no exposed metal or conductive parts
- ► Checks for AC Voltages without necessity of disconnecting the electrical system
- ► Tests for AC Voltage cables, circuit breakers, wall sockets, junction boxes, fuses, etc.





K-1 Kwik-I-E Non-Contact Volt and Amp Probe

- ▶ Non-contact measurements of Amps and Volts
- ► AC Voltage Ranges 6-60V & 60-600V
- ► AC Amps Ranges: 0.6-6A & 6-60A
- ▶ Frequency response 60Hz
- Voltage measurement is referenced to ground
- ► Accuracy +/- 15% of full scale
- ▶ Easy to read bar graph LED display
- ▶ UL & CE Approved

Optional Accessories

Part Number

Optional protective case with belt loop

CC-K-1



K-1







PY-2 110V AC Receptacle Tester with G.F.C.L.

- ▶ Tests any standard 110V AC grounded outlet
- Detects correct wiring or the following faults: open ground, reversed polarity, open hot, open neutral, hot & ground wires reversed, hot on neutral with hot open
- ▶ Checks the operation of G.F.C.I. protected circuits
- UL approved



PY-3 110V AC Receptacle Tester

- ► Tests any standard 110V AC grounded outlet
- ▶ Detects correct wiring or the following faults: open ground, open neutral, open hot, hot & ground reversed, hot & neutral reversed.
- UL approved



AC/DC Low Voltage Tester

- ► AC/DC Voltage (3/6/12/24V)
- Automatically indicates voltage under test
- ▶ 4 separate LED lamps



PY-6 Electronic Multi-Tester

- ▶ Detects live power source without actual contact with cables
- Tests for circuit continuity
- ▶ Tests live circuits and indicates whether the supply is AC or DC
- Determines polarity on DC and battery circuits
- Incorporates audio signal and indicator lights



Voltage Indicator

- ▶ Indicates AC/DC Voltage between 80 to 500V
- Safety: UL listed



PY-10 AC/DC Low Voltage Tester

- ► AC/DC Voltage (9 50V)
- Insulated alligator clips
- Neon bulb indicator

TIF660 Capacitor Tester

- ▶ Identifies good, bad and leaking capacitors
- ► Range 1 2000 µF
- ► Checks continuity of fuses and transformers
- ▶ Built in test leads

- ▶ Push button control
- ► Testing current 1 mA max
- ► Charging time 45 µF/sec

Part Number

TIF661



TIF 660



Carrying Case

PRM-1 Phase Sequence and Motor Rotation Tester

- ▶ Identifies the phase sequence of the three phase electrical system
- Checks motors for rotation direction

Optional Accessories

- ▶ Indicates normal or reversed phases as well as loss of a phase
- Voltage range from 20 600 V
- ► Frequency range from 50 400Hz
- Simple to use



PRM-1



PY-8 Solenoid Voltage Tester

- ▶ Indicates a level of applied voltage
- ► AC Voltage 120/240/277/480/600V
- ► DC Voltage 120/240/600V
- ▶ Safety: UL listed



PY-8

ROBINAIR 17760 Solenoid Tester

- ► Small, hand-held detects magnetic fields on solenoids, alternators and relays
- Quickly determine if a coil is energized
- Works on A/C and DC devices



PY-9 Metal/Power Sensor

- ▶ Electronically locates live cables, gas and water pipes and other hidden metal objects
- Incorporates dual purpose control for sweep searching and precise tracing
- ▶ Differentiates between live cables and metal pipes
- ▶ Helps prevent accident or injury when drilling in walls
- Incorporates two tone audio signal and indicator light with sensitivity adjustment control



PY-12 Microwave Leakage Detector

- Detects microwave leakage on microwave ovens and other microwave emitting sources
- ► Color coded indicator scale for easy reading
- Handy probe
- ▶ UL Listed





DV_12





- AC Volts 115/220/277/400
- DC Volts 125/300/400/600
- Automatically indicates voltage of circuit under test
- ▶ Four neon bulb indicator lamps



PY-5 Pen Type AC/DC Voltage Tester

- AC Volts (110/220/380V)
- DC Volts (150/300/500V)
- Automatically indicates voltage under test



PY-11 AMPROSE Continuity Tester

- ▶ Bulb Lights when circuit is completed
- For use on un-energized circuits
- AAA size batteries included

Replacement Part (supplied with product)

Part Number



TIF20 Continuity Tester and Flashlight

- Tests any unenergized circuit for continuity
- ► Has a built-in flashlight
- Checks fuses, alternators, diodes, etc.



CVF-3 All Weather AC/DC Voltage and Continuity Tester

- ► AC Voltage test Contact method (70-250VAC)
- ► AC Voltage test Non-contact method (70-600VAC)
- ▶ DC Voltage Test (1.5 to 250VDC)
- ▶ Polarity Test (1.5V-36VDC)
- Continuity Check (0-50MΩ)
- Microwave Leakage Detection (≥ 5mW/cm2)



VCM-2 Non-Contact AC Voltage Tester

- ► Non-Contact AC Voltage tester (70–600V)
- ▶ DC Voltage/Polarity Checker (2-36V)
- Continuity Tester (0–5MΩ)
- ▶ Metal Detector up to maximum depth of 1-1/2"
- Microwave Leakage Detector (≥ 5mW/cm2)
- Battery Checker
- Adjustable distance sensitivity and sensing arm
- Negative Ions Detector
- Visible and audible Indications

PRODUCT INDEX

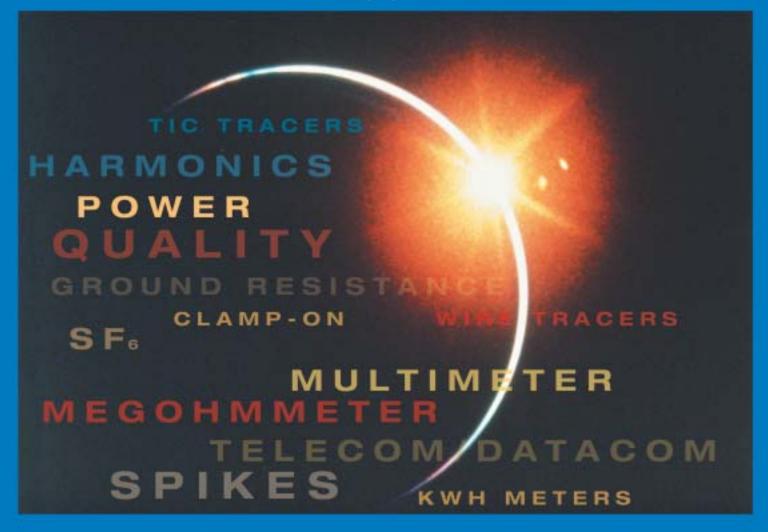
Part No. Page #	Part No. Page :	# Part No.	Page #	Part No.	Page #	Part No. Page #	Part No. Page #	Part No. Page #
3AG-31273	16451		57	42040		AM-34	RBT-12 51	TIF8850 10
3AG-312.250 79 5X20-216.160 76	16452 16453	9 40390 9 40396	5 <i>1</i> 57	42042 42044		AM-3E 73 AM-52 76	RBT-12B 73 RBT-12P 70	TIF8850I 10 TIF9010A 38
6.3X25-10-12 75 6.3X25-2-12 75	16454	9 40398	57	42046	63	AM-57 76	RRT-13 51	TIF9010C 37
6.3X25-2-12 75 8AG-360X023 70	16503	4 40399 4 40404		42048 42050		AM-59	RBT-13B 73 RBT-13P 70	TIF9010CI 37 TIF9020 38, 39
8AG36173, 78 8AG-361.570, 73	16700	2 40410	57	42052	63	AMB-1A 78	RBT-14	TIF9055 40
8AG-361.5 70, 73 600CKA 79	16703			42054 42056		AMB-2 78 AMB-3 78	RBT-15 51 RG5410A 26	TIF9450D 35 TIF9453 35
1023425	16705	2 40418	57	42058	61	AMB-4D 78	RG5410A-E 26	TIF9454 35
10236	16710	1 40419	57	42060 42062		AT-1000 79 BT-120 80	RG5410A-E 26 RG5410A-JKT 26 RG5410A-KT 26	TIF9500 15 TIF9500X 15
1024825	17026	2 40421		42160		BT-250 80	RGT3026, 27 RGT30NS26, 27	TIF9505 20
10459	17105 28, 2 17160 3	9 40422	57	42162 42640		BT-250T 80	RGT30NS 26, 27 RGT50 26, 27	TIF9509R/B 21 TIF9525B 20
10469A25	17161	5 40424	57	42642	58	BT-CC 80 BT-LFA 80	RGT50HP 26, 27 RGT50NS 26, 27	TIF9550R 20
10470A	17162	5 40426 4 40427		43134B 43230		BT-VLA 80 C 70	RGT50NS 26, 27 RS-170	TIF9575 15
10596	171913 1750628, 29, 3	0 40428		43240		C2901	RS-3 70 RS-3 Super 70	TIF9575KC 15 TIF9575KP 15
10597	17678	0 40429	57	43299B 43302B		C2902	RS-3 Super 70 RSMCC 77	TIF9575MB 15 TIF9575X 15
1077824	17800B3	0 40442	56	43534B		CC-326	SV-1000 79	TIF9600 15
10945	17801B3	0 40449		43536		CC-ACDC 71, 76, 77	SV-1000	TIF9600KC 15 TIF9600KP 15
10994	18065	2 40464	56	43546 43657		CC-K1	1100/9	TIF9600MB 15
1179419	18180	5 40465 4 40472	56	43678B 43679B		CT50-166, 67,	T300	TIF9600X 15
11795	18401	5 40473	56	43679B		67, 70, 71 CT50-2 66, 67, 70, 71	TC-3	TIF9608R/B/Y/BL 21 TIF9620 21
1179719	18501	4 40476	56	44257	33	CT-100 79	TC-11 47, 68	TIF9622B 20
1179820 1229460	18511		56 56	44884 44885		CT-326B 79 CT-600 AC/DC 72, 74,	TC-12 47, 68 TC-13 47, 68	TIF9632R 20 TIF9652B 20
1245862	185132	4 40479	56	44887	42	15, 10, 11	TC-14 47. 68	TIF9662R 20
12479	18514	4 40494 6 40495		44993 44996		CVF-3 84 DKTA-620 49, 71, 76	TC-2000 26 TE-2 8	TIF9675 21 TIF9685 21
13047A	19408	3 40509	56	44997	65	DPX-2000 47, 68	TEA-18	TIF9685 5
13061	19497	9 40510 9 40527	56 56	45122 45330		DRS-1	TH-2	TIFH10AINTL 5 TIFRX-1 3
1306634	196952	1 40531	25	45331	64	DT-130 47 DT-136 47	TIF20 84	TIFVA105 53 TIFVA105INTL 53
13116	20346B			45605 45610		EP-1001 79 FA-6X32/63 77	TIF500	TIFVA105INTL 53 TIFVA500A 52
1320134	25150B	8 40555	57	48400	15	FS-3L 70	TIF505 7	TIFVA110653
13203	25151B	8 40560A 8 40563A		48430 50570		H-130R 47 H-1BY 75	TIF505-17 TIF5051	TIFXL-1
1349065	25176B	3 40572	25	65060	23	H-50	TIF506 7	TIFXP-2
1349165 1349265	25177B	3 40653B 9 40667		65160 65260		H-90Y	TIF509	TIFXP-3
14010A35	25201B	9 40859	49	65360	23	K-181	TIF511 7	TIFZX-1
14388	25202B	9 41400 3 41450	19	67072 67172		KLK15 76, 77 KT5001 26, 27, 28	TIF512	TIFZX-1E1 TIFZX-1J1
1445065	300602	3 41460	19	67272	23	LM-80 53	TIF516 7	TIFZX-1KIT 1
1447659 1452864	30072			67372 67436		LM-CC	TIF548 4 TIF549 10	TIFZX-1KITE 2 TIFZX-1KITJ 2
1459959	31036	3 41470	19	67448	24	Minimax 27 Minimax-E 27	TIF555 4, 5 TIF560 4	TIFZX-2
1465059 1474956	31060	3 41600 3 41612		67460 67472		Minimax-E 27 Minimax-JKT 27	TIF560 4 TIF660 83	TIFZX-3
14766 51, 59	31096	3 41617	21	67560	23	Minimax-KT 27	TIF661 83	TIF7X-3.J 1
14766	32036			68020 68060		MM	TIF700 49 TIF750 49	TIFZX-4
1477459	320722	3 41640	18	68136A	23	MM-4 73	TIF780 55	TIFZX-61
14777	32096		17	68160A 68172A		MN-1640 47 MOB 78	TIF930 16 TIF930KIT 16	TIFZX-7
1480956	330602	3 41675	19	68196A	23	MOD 78	TIF931 21	TIFZX-91
14830A	33072	3 41676 3 41608	20	68236A		MTC-375, 78	TIF935 16	TIFZX-101
15120A31	34750	0 41700	18	68272A	23	MTL-6	TIF4000A54	TIFZX-111 TIFZX-121
15121A	34970	3 41720 3 41770	18	68296A		73, 74, 75, 76, 77, 78 OHB-3HE70 P2679	TIF52013, 4, 5	TL-10S 68, 69
15195	34977	3 41770 9 41800	14	68360A	23	P2679	TIF7000 44	TL-10S 68, 69 TMA-1 48, 66, 74, 75, 77
15210. 32 15224. 32 15225. 32	34990 4 34991 4 36036 2	41804 0 41806 3 41808	14	68372A 68396A	23	P100	TIF7000AC 44	TMA-K 47, 66, 74, 75, 77
15225	360362	3 41808	14	68420	24	PAMP-268, 69	TIF7001 44	TMULD-300 8
15234	36060	3 41817	14	68472 69036A		PB-18 PC351	TIF7002 44	TPAC
15400	38272A 2	3 41816	14	69060A	23	D000/ 70	TIF935KP 16 TIF4000A 54 TIF5201 3, 4,5 TIF5750A 4 TIF7000 44 TIF7000TP 44 TIF7001 44 TIF7001 44 TIF7003 44 TIF7005 44 TIF7006 44 TIF7006 44 TIF7006 44 TIF7007 44 TIF7007 44 TIF7008 44 TIF7008 44 TIF7008 44 TIF7008 44 TIF7008 44 TIF7009 44 TIF7500 44 TIF7500 44 TIF7500 44 TIF7500 44 TIF7500 44 TIF7500 5 TIF8505 54 TIF8506 54 TIF8505 54 TIF8506 54 TIF8506 54 TIF8506 54 TIF8507 54 TIF8800 10	TPIC 48
15401	38372A	3 41818 4 41822	14	69072A	23	PC326. /9 PCAP-2	TIF7005 44	TPIF
15495	39072A 2	3 41824	14	69096A 100343.26	, 27, 28, 29	PKT-2 68	TIF7007 44	68, 71, 76
15554	40082	5 41828 5 41832	14	100345 . 26 A-1000 . 74	, 27, 28, 29	PMM-2 68 PMM-C 68	TIF7008 44	TPK-59 48, 71, 76 TPSC 48
1560032 1560132	40084	5 41834	14	A400 . 72, 74	1, 75, 76, 77	PMTL-568	TIF7010 44	TPSF48
15601	40152 1	4 <i>1</i> 1838	14	A47L	51, 66, 67,	PRH-2 68, 69	TIF7500 44	TPSF
16208 6	401531 401591	6 41842 6 41844	14	A50-1	66, 70		TIF7800 46	ULD-CC. 8 UT-300 8 VCM-2 84 VL11S 70
162166 16250A6	40159	5 41844 5 41846	14	A603 Δ653		PY-1	TIF7900 46	UT-3008
162546 1625842	40169	6 41846 1 41848 6 41850	14	A653 A663-4B 74	, 75, 76, 77	PY-2	TIF8501 54	VL11S70
16258	402885	6 41850 6 41852	14	A703 Δ753	73 73	PY-4 82 PY-5 84	TIF8502 54	VLK-411R 70 VLK-411R-WTR 70
162636	402915 403002	6 41852 5 41875 6 41876	13	A753 ACD-10 PRO	66	PY-6 82	TIF8506 54	VLK-411R 70 VLK-411R-WTR 70 VP-440 81
16267	403035	6 41876	14	ACD-10TRM ACDC-620T	S PRO 66	PY-7 82 PY-8 83	TIF8507 54	VPT
162736 162746	40303	6 41878 6 41880	14	ACF-3AK 7	4, 75, 76, 77	PY-9 83	TIF8800A 10	VPT
162766 162796			61	AD-1 ADF-200	79	PY-10 82 PY-11 84	TIF8800AINTL 10 TIF8800INTL 10	X100079
16286 6	403365 403526	6 42022 0 42024	60	ADS-100	38	PY-12	TIF8801 10 TIF8803A 10	
162936 162946	40380 5	5 1/20126	61	AM-18A	75 75	K1000	IIF8803A 10 TIF8805	
16298 6	403825 403835	7 42028 7 42030	64	AM-2EDP	73	RBT-11	TIF8805	
16450 9	403845	7 42032	61	AM-33	/4	кві-ііЪ/0	TIF8806B 10	

Please see our ELECTRICAL Catalog for details regarding





Test Equipment.



Distributed by





PRINTED IN USA 7/02