













COMPACT UV LEAK LOCATOR KITS

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



TYPE OF INJECTOR	TYPE OF LIGHT	KIT PART#	CONTENTS OF EACH KIT	VOLTAGE/WATT
 53123	 53012	53100	High Intensity Swivel Head Light, W/Refillable 2 oz Dye Injector, 2 oz Concentrated Universal A/C Fluorescent Dye (25 Applications), 4 oz Dye Remover, 25 Service Information Labels and UV Enhancing Safety Glasses	12 V/100 WATT
 53223	 53012	53100-C	Same as 53100, but with Replaceable 2 oz Dye Cartridge (25 Applications)	12V/100 WATT
 53123	 53411	53450 53450-220	High Intensity Cordless Rechargeable Light W/Battery Charger, Refillable 2 oz Dye Injector, 2 oz Concentrated Universal A/C Fluorescent Dye (25 Applications), 4 oz Dye Remover, 25 Service Information Labels and UV Enhancing Safety Glasses	110V/Rechrg/50 WATT 220V/Rechrg/50 WATT
 53223	 53411	53450-C 53450-220-C	Same as 53450, but with Replaceable 2 oz Dye Cartridge (25 Applications)	110V/Rechrg/50 WATT 220V/Rechrg/50 WATT
 53123	 53312	53500	High Intensity Mini Light W/Refillable 2 oz Dye Injector, 2 oz Concentrated Universal A/C Fluorescent Dye (25 Applications), 4 oz Dye Remover, 25 Service Information Labels and UV Enhancing Safety Glasses	12V/50 WATT
 53223	 53312	53500-C	Same as 53500, but with Replaceable 2 oz Dye Cartridge (25 Applications)	12V/50 WATT



UV LEAK LOCATOR KITS, UV LIGHTS & ACCESSORIES







Part# 53580



Part# 53585

Part# 53351



TYPE OF INJECTOR	TYPE OF LIGHT	KIT PART#	CONTENTS OF EACH KIT	VOLTAGE/WATT
 53809	 53515	53580	MACH IV Flexible UV Light W/1 oz Dye Cartridge W/10 Applications of Universal A/C Fluorescent Dye, Low-Side Hose with R134a Coupler, R12 Adapter, 10 Service Information Labels and UV Enhancing Safety Glasses	12 V/100 WATT
 53809	 53515	53585	Same as 53580, but with 1 oz OIL/ATF/Gas and Deisel Fluorescent Dye and 1 oz Engine Coolant Fluorescent Dye	12V/100 WATT
 53809	 53312	53351	High Intensity Mini Light with Replaceable 1 oz (10 Application) Dye Cartridge, A/C Connection Hose W/R134a Coupler, R12 Adapter, 1 oz OIL/ATF/Gas and Deisel Fluorescent Dye, 1 oz Engine Coolant Dye, 4 oz Dye Remover, 25 Service Information Labels and UV Enhancing Safety Glasses	220V/Rechrg/50 WATT

53012 UV SWIVEL HEAD LIGHT (12V/100 WATT)

- 180° Swivel Head Gets Into Tight Places
- Instant ON
- Heavy Duty Metal Construction
- Includes UV Enhancing Safety Glasses



RECHARGEABLE UV LIGHT (12V/50 WATT)

53411

- High Intensity
- Cordless with Rechargeable Battery
- Compact & Portable
- Includes UV Enhancing Safety Glasses

53412

- Same as 53411 (less battery cartridge and glasses)



53312 UV MINI LIGHT (12V/50 WATT)

- High Intensity
- Compact & Lightweight
- Instant ON
- 16 ft Cord
- Includes UV Enhancing Safety Glasses



53515 MACH IV FLEXIBLE UV LIGHT

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

- Flexible Wand Gets into Tight Areas
- Rugged Ergonomic Grip
- Includes UV Enhancing Safety Glasses

PATENT# 6,647,761



53413 BATTERY CARTRIDGE (12V/50 WATT)

This powerful rechargeable battery holds a charge equal to 30 minutes of continuous use.



BATTERY CHARGER

53414 110V/60 HZ
53414-220 220V/50-60 HZ



LIGHT PART#	LIGHT BULB PART#	LENS PART#
53012	53012-B	53012-L
53112	53012-B	53110-L
53312	53312-B	53312-L
53411	53312-B	53312-L
53515	53515-B	-



53809 MINI DYE INJECTOR

"Cartridge Type" Dye Injector (10 Applications) Concentrated Dye.



53223 "CARTRIDGE TYPE" UNIVERSAL DYE/OIL INJECTOR

Adding dye with the new **53223** is fast and easy, simply connect the injector to the low side of the A/C system and twist the handle to the next application line. The replaceable cartridge provides 25 applications of universal dye that is compatible with R12/22/502 and R134a systems. The injector hose comes complete with a R134a coupler and auto shut-off valve adapter for 1/4" FL systems.



REFILLABLE UNIVERSAL DYE/OIL INJECTOR

To inject the oil or dye, simply connect the injector to the low side of the A/C system and twist the handle until you reach the desired amount. The injector hose comes complete with a R134a coupler and auto shut-off valve adapter for 1/4" FL systems.

53123 REFILLABLE UNIVERSAL DYE INJECTOR

with 2 oz Bottle of Concentrated A/C Dye (25 Applications)

53123-A REFILLABLE UNIVERSAL DYE/OIL INJECTOR (without dye)

53134 REFILLABLE DYE INJECTOR

with (R134a 13mm Connection) and 2 oz Bottle of Concentrated A/C Dye (25 Applications)

53322 REFILLABLE DYE INJECTOR

with (1/4" Auto Shut-off Valve Connection) and 2 oz Bottle of Concentrated A/C Dye (25 Applications)



OIL INJECTORS

Excellent method for adding refrigerant oil or large amounts of UV leak detection dye to the A/C system.

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

STANDARD

82375

1/2" ACME-M x 1/2" ACME-F (R134a)

90375

1/4" FFL x 1/4" MFL

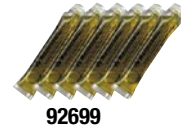


ULTRAVIOLET DYES

STANDARD UNIVERSAL A/C DYES

Pack 1/4 oz - 1 Application

92699 Standard Universal Dye
Six 1/4 oz Packs (6 pcs)



8 oz Bottle - 32 Applications

92708 R12/22/502 Standard Universal Dye

32 oz Bottle - 128 Applications

92732 R12/22/502 Standard Universal Dye

CONCENTRATED UNIVERSAL DYES

Replaceable Cartridge - 25 Applications

53825 Universal Dye Cartridge

Replaceable Cartridge - 10 Applications

53810 Concentrated Dye Cartridge

2 oz Bottle - 25 Applications

53625 Universal Dye

1 oz Bottle - 1 Vehicle Application per 16 quarts of fluid

53609 Engine Coolant Fluorescent Dye (1 oz Bottle)

1 oz Bottle - 1 Vehicle Application per 16 quarts of fluid

53610 Oil/AFT/Gas Fluorescent Dye

- Engine Oil (Gas & Deisel)

- 1 Vehicle Application per 4-5 quarts of oil

- Gasoline & Deisel Fuel

- 1 Vehicle Application per 2 gallons of fuel

- Automatic Transmission Fluid

- 1 Vehicle Application per 4-5 quarts



ACCESSORIES

53314 DYE REMOVER - 4 oz

53315 SERVICE LABELS - 25 per pack / bright yellow label indicating that the system has been charged with UV Dye

92398 UV ENHANCING SAFETY GLASSES

This is a must for protection against ultraviolet light during leak detection



COMPRESSOR OILS

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

53826 PAG 100 Oil (2 oz Cartridge)

53827 Ester Oil (2 oz Cartridge)

92709 PAG 100 Oil (8 oz bottle)

92710 Ester Oil (8 oz bottle)

92711 PAG 100 Oil (32 oz bottle)

92712 Ester Oil (32 oz bottle)



Mastercool[®]
"World Class Quality"

ELECTRONIC LEAK DETECTION

Mastercool introduces the "Next Generation" in Electronic Leak Detection!

The **55200 "INSPECTOR"** and **55100** offer revolutionary new features and state of the art micro processing technology. The new design sensor delivers an accurate and instantaneous response. Both units come in a heavy duty custom molded carrying case and meet SAE J1627 and CE conformity.

55200 / 55100 GENERAL FEATURES / SPECIFICATIONS

- Digital Signal Micro Processor
- Detects All Halogenated Refrigerants
- Flexible 16" Probe
- Keypad Control
- Power Supply (2 "C" Batteries)
- Auto Release Feature
- Battery Test Feature
- Variable Frequency Audible Alarm
- Meets SAE J1627 / CE Conformity
- Includes Custom Molded Carrying Case

55200 "INSPECTOR" 2 IN 1 ELECTRONIC / UV LEAK DETECTOR

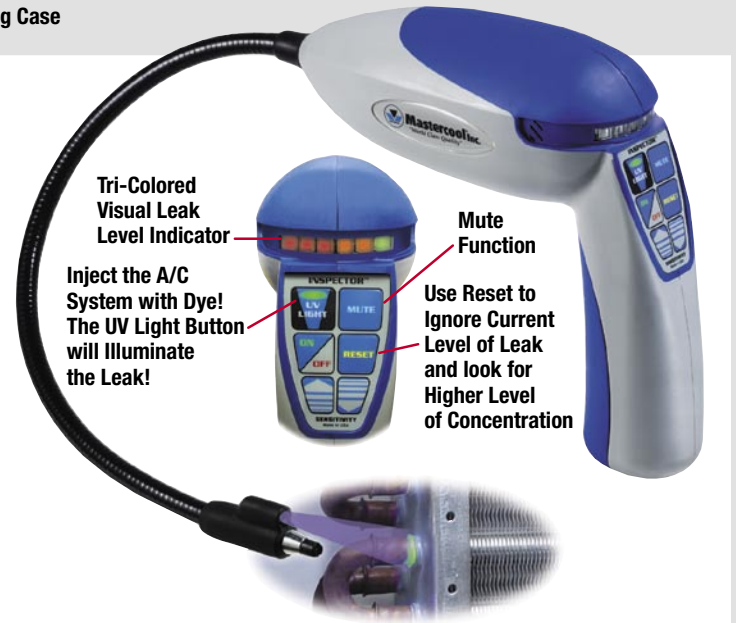
This revolutionary new design allows the user to perform Electronic and UV Leak Detection all with one tool. The "INSPECTOR" offers six levels of sensitivity (15 levels of detection) with a tri-colored LED indicator. This allows the "INSPECTOR" to pin-point leaks as small as 1/10 oz per year. The ultra bright UV light is built into the end of the probe allowing easy access into tight areas. Incorporating both electronic and UV technology into one unit insures that even the toughest leaks can be found.

SPECIFIC FEATURES

- Ultra Bright UV/Blue LED Light
- UV Safety Glasses
- 6 Levels Of Sensitivity (15 Levels Of Detection)
- Tri-Colored Visual Leak Level Indicator
- Mute Function
- Detects Leaks As Small As 1/10 oz Per Year
- Detects All Refrigerants, CFC'S, HCFC'S, HFC'S
- Includes A Custom Molded Carrying Case



Part#	Description
55315-B	LED Bulb for 55200, 55300 & 55400



PATENT# 6,647,761

55100 ELECTRONIC LEAK DETECTOR

The 55100 offers an accurate and reliable solution to Electronic Leak Detection.

SPECIFIC FEATURES

- 3 Levels Of Sensitivity (5 Levels Of Detection)
- Visual Leak Level Indicator
- Detects Leaks As Small As 1/10 oz Per Year
- Detects All Refrigerants, CFC'S, HCFC'S, HFC'S
- Includes a Custom Molded Carrying Case

Part#	Description
55100-SEN	Sensor Tip for 55100, 55200, 55300 & 55400



55300 COMPLETE ELECTRONIC & UV LEAK DETECTION KIT

This kit offers the "INSPECTOR" along with our UV Dye Injection System. Our **cartridge type** dye injector is fast and easy to use. Just twist the handle to inject the appropriate amount of dye. The **55300** kit is the ultimate solution for all your A/C leak detection needs.

SPECIFIC FEATURES

- 55200 "INSPECTOR" Electronic Leak Detector
- UV Dye Injector W/25 Application Dye Cartridge
- Dye Injector Connection Hose W/R12 Adapter
- Dye Cleaner & UV Safety Glasses

55310 – Same as 55300
(with 10 Application Dye Cartridge)



55400 COMPLETE ELECTRONIC & UV LEAK DETECTION KIT

This kit offers the "INSPECTOR" along with our UV Dye Injection System. Our **refillable** dye injector is fast and easy to use. Just twist the handle to inject the appropriate amount of dye. The **55400** kit is the ultimate solution for all your A/C leak detection needs.

SPECIFIC FEATURES

- 55200 "INSPECTOR" Electronic Leak Detector
- Refillable Dye Injector
- Dye Injector Connection Hose W/R12 Adapter
- 2 oz Bottle of Concentrated Universal Dye
- UV Safety Glasses & Dye Cleaner



55500 ELECTRONIC LEAK DETECTOR W/HEATED SENSOR

Mastercool broadens it's line by introducing it's NEW Heated Sensor Electronic Leak Detector. The **HEATED SENSOR** technology delivers fast and accurate results while eliminating non-refrigerant false alarms. The flexible 15" probe has a patented UV Blue Light built into the tip allowing dual UV and Electronic Leak Detection. This unit also includes an additional 5" flexible probe adapter for leak detection in smaller diameter areas.

55500 Electronic Leak Detector W/110V Battery Charger

55500-220 Electronic Leak Detector W/220V Battery Charger

SPECIFICATIONS:

- **Operating Temp:** 32° to 125°F
- **Power Supply:** 2 C-Size 1.2V Ni-MH Battery
- **Battery Life:** 8 hrs per cycle (1000 cycles)
- **Warm-Up Time:** 25 Seconds
- **Probe/Core Length:** 15"
- **Dimension:** 7" x 7"
- **Weight:** 1.10 lbs
- **Ultimate Sensitivity:** 1/10 oz per year

FEATURES:

- Six Sensitivity Levels
- Automatic Warm Up
- Reset Function
- Dual-colored Visual LED Leak Size Display
- Blue UV LED Light
- Rechargeable Ni-MH Battery
- Low Battery Indicator
- High Volume Pump
- 5" Probe Extension
- 3 Year Limited Warranty
- Detects all Refrigerants (CFC's, HCFC's, HFC's)
- Meets and Exceeds SAE J1627
- Made in USA



PATENT# 6,647,761

Part#	Description
53515-B	LED Bulb for 55500
55500-SEN	Replacement Sensor

55750 COMBUSTIBLE GAS LEAK DETECTOR

Mastercool introduces it's new hand-held combustible gas leak detectors. Offering the most advanced sensor technology with a state-of-the-art microprocessor, these units detect leaks fast and accurately. The flexible 15" probe has a bright LED light built into the tip for easy viewing in hard to reach locations. The membrane switch panel offers easy one touch control and operation. Each of the six levels of sensitivity has an audible alarm and visual indicator to identify leak activity. These units include the newest rechargeable Ni-MH battery (nearly double the power of existing Ni-Cad batteries) and comes in a custom molded case.

55750 Combustible Gas Leak Detector W/110V Battery Charger

55750-220 Combustible Gas Leak Detector W/220V Battery Charger

DETECTS:

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

SPECIFICATIONS:

- **Operating Temp:** 32° to 125°F
- **Power Supply:** 2 C-Size 1.2V Ni-MH Battery
- **Battery Life:** 8 hrs per cycle (1000 cycles)
- **Warm-Up Time:** 25 seconds
- **Probe/Core Length:** 15"
- **Dimension:** 7" X 7"
- **Weight:** 1.10 lbs
- **Ultimate Sensitivity:** 50 – 1000 ppm

FEATURES:

- Six Sensitivity Levels
- Automatic Warm Up
- Reset Function
- Bright LED Light
- Audible Leak Alarm
- Visual Leak Size Indicator
- Rechargeable Ni-MH Battery
- Low Battery Indicator
- Custom Molded Carrying Case
- Made in USA



PATENT# 6,647,761



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INFRARED THERMOMETERS

52224-A INFRARED THERMOMETER WITH LASER

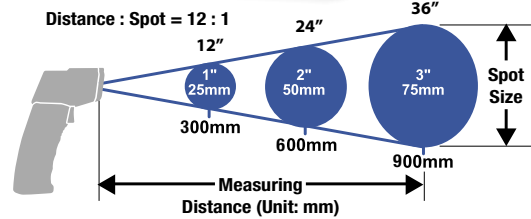
The 52224-A offers laser targeting accuracy, enhanced back-lit LCD Display and an expanded temperature range. The compact design is simple to use and easy to store.

Temperature Range: -58°F to 932°F (-50°C to 500°C)

Field of View: 12 : 1

SPECIFICATIONS:

Non-Contact Temperature Range: -58 to 932°F (-50 to 500°C)
Field of View: 12 : 1
Display Illumination: Backlit LCD display
Target Indicator: Single Laser Spot
Emissivity: 0.98
Resolution: 0.5°F / 0.5°C
Accuracy: ±2°C (4°F) or ±2% of reading
Response Time: 0.5 seconds
Power Off: Automatic after 15 seconds
Battery Life: Approx. 180 hrs.
Included Accessories: 2 AAA batteries, instruction manual, plastic molded carrying case



52225-A DUAL TEMP PLUS INFRARED THERMOMETER

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

Non-Contact Temperature Range: -76 to 1400°F (-60 to 760°C)

Field of View: 30 : 1



SPECIFICATIONS:

Non-Contact Temperature Range: -76 to 1400°F (-60 to 760°C)
Thermocouple Temperature Range: -83 to 1999°F (-64 to 1400°C)
Field of View: 30 : 1
Display Illumination: Backlit LCD display
Target Indicator: Single Laser Spot
Emissivity: 0.10(10E) to 1.0 (100E)
Resolution: 0.1°F / 0.1°C
Modes: MIN, MAX, DIFF & AVG
Accuracy: ±2% of reading
Response Time: 1 second
Power Off: Automatic after 60 seconds
Battery Life: Approx. 180 hrs.
Included Accessories: 2 AAA batteries, 3 ft. thermocouple probe, instruction manual, plastic molded carrying case
Optional Accessories: 10 ft. Wire Thermocouple Probe, Piercing Penetration Probe, Surface Probe, Air Probe

52224-B DUAL TEMP INFRARED THERMOMETER

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

Non-Contact Temperature Range: -76 to 1200°F (-60 to 648°C)

Field Of View: 15 : 1



SPECIFICATIONS:

Non-Contact Temperature Range: -76 to 1200°F (-60 to 648°C)
Thermocouple Temperature Range: -83 to 1999°F (-64 to 1400°C)
Field of View: 15 : 1
Display Illumination: Backlit LCD display
Target Indicator: Single Laser Spot
Emissivity: 0.10(10E) to 1.0 (100E)
Resolution: 0.1°F / 0.1°C
Modes: MIN, MAX, DIFF & AVG
Accuracy: ±2% of reading
Response Time: 1 second
Power Off: Automatic after 60 seconds
Battery Life: Approx. 180 hrs.
Included Accessories: 2 AAA batteries, instruction manual, plastic molded carrying case
Optional Accessories: 3ft., 10 ft. Wire Thermocouple Probe, Piercing Penetration Probe, Surface Probe, Air Probe



52225-B ULTRA TEMP DUAL LASER THERMOMETER

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

Non-Contact Temperature Range:
-76 to 1832°F (-60 to 1000°C)

Field of View: 50 : 1

SPECIFICATIONS:

Non-Contact Temperature Range:	-76 to 1832°F (-60 to 1000°C)
Thermocouple Temperature Range:	-83 to 1999°F (-64 to 1400°C)
Field of View:	50 : 1
Display Illumination:	Backlit LCD display
Target Indicator:	Dual Laser Spot
Emissivity:	0.95
Resolution:	0.1°C / 0.1°F
Modes:	MIN, MAX, DIFF & AVG
Accuracy:	±2% of reading
Response Time:	1 second
Power Off:	Automatic after 60 seconds
Battery Life:	Approx. 180 hrs.
Included Accessories:	2 AAA batteries, instruction manual, plastic molded carrying case
Optional Accessories:	3ft, 10 ft. Wire Thermocouple Probes, Piercing Penetration Probe, Surface Probe, Air Probe, Removable Magnetic Base



Optional Wire Thermocouple

All thermometers include pocket holder and clip.

Pocket Analog Designs

Item#	Dial Size	Temperature Scale
52220	1"	0 to 220°F
52161	1 3/8"	-40 to 160°F
91120	1 3/4"	0 to 220°F



52220

91120

52223-A

Pocket Digital Design

Item#	Dial Size	Temperature Scale
52223-A	1"	-58 to 302°F

Battery operated (1.5V, life of 5000 hours), on/off and auto shut-off after 10 minutes.

52226 DUAL TEMP INFRARED THERMOMETER

The 52226 Dual Temp Thermometer offers both Infrared and Contact Probe technologies.

- Infrared Temperature Range: -67°F to 428°F
- Probe Temperature Range: -67°F to 626°F
- Field of View Ratio 1 : 1
- Adjustable Emissivity
- Back-lit LCD Display
- LOCK MODE for Hands Free Scanning
- Minimum / Maximum Capture Mode
- Contact Probe Locks Safely into the Side of the Unit



52227 INFRARED THERMOMETER

The 52227 Pocket Infrared Thermometer offers accurate non-contact temperature measurement in a compact and easy to use size.

- Temperature Range: -67°F to 428°F
- Field of View Ratio 1 : 1
- Adjustable Emissivity
- Back-lit LCD Display
- Minimum / Maximum Capture Mode



OPTIONAL PROBES

52331 Wire Thermocouple Probe – 3 ft (1m)

52332 Wire Thermocouple Probe – 10 ft (3m)



52333

Piercing/Penetration Probe



52334 Surface Probe



52335 Air Probe



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