



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

**USER GUIDE AND PARTS LIST**

**UV LEAK LOCATOR KITS**

53312



53518-UV



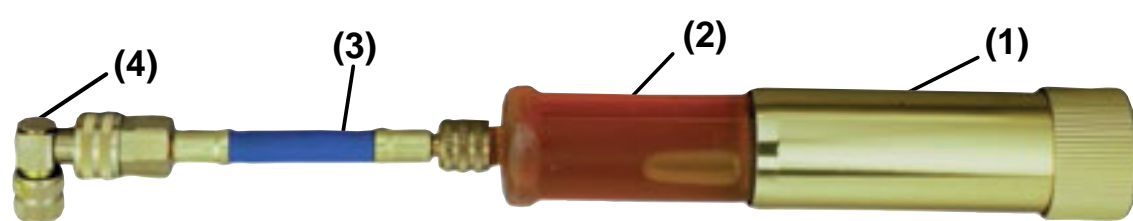
53515



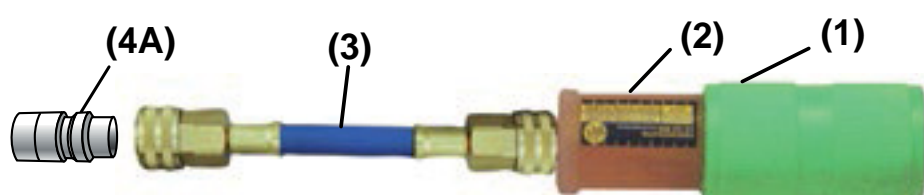
53100-C



## DYE INJECTION INSTRUCTIONS



Disposable  
Cartridge Type  
Injector (2 oz)  
53223



Mini Disposable  
Cartridge Type  
Injector (1 oz)  
53809



Refillable  
Cartridge Type  
Injector (2 oz)  
53123

### PLEASE USE CAUTION!!

- When injecting dye into a pressurized system, **ALWAYS** wear safety glasses and gloves!
- Never breathe refrigerant vapor!
- Never use the UV light without wearing the UV glasses!
- Lamp surfaces will get hot very quickly. **DO NOT TOUCH THE LENS!**

### A. PURGING AIR FROM THE HOSE ASSEMBLY

It is important to eliminate any air in the hose before injecting dye into the A/C system. (This process is necessary only once for the setup).

#### Purging Disposable Cartridge Type Injector

- Hold the cartridge (2) upward while unscrewing the cap. Snap the hose assembly (3) onto the cartridge, and coupler (4) or (4A) to the hose assembly.
- While holding the assembly upward, attach the handle (1) to the bottom of the cartridge by turning it clockwise. Continue turning while dye enters the hose and pushes the air up. Use a pen to press the depressor of the coupler (4) to release the air if necessary. Repeat this process as needed until dye appears at the coupler's end.

#### Purging Refillable Cartridge Type Injector

- Hold the dye injector (upward while unscrewing the cap/hose assembly (2B)). Turn the handle of dye injector (1) counter clockwise all the way before filling. Fill the injector with dye. Replace cap/hose (2B), tightening securely and attach coupler (4) to the hose assembly.
- While holding the assembly upward, start turning the handle (1) clockwise. Continue turning as dye enters the hose and pushes the air up. Use a pen to press the depressor of the coupler (4) to release the air, if necessary. Repeat this process as needed until dye appears at the coupler's end.

### B. INJECTION

1. Turn the A/C system and engine off!!
2. Connect injector to the low side service port of A/C system. Hold body of injector. Use (I) starting line on handle end as a guide. Turn handle clockwise to inject 1 application of dye. (Approximately 1 to 1 1/4 turn(s) for Concentrated Dye)

#### Dye Application Chart

AUTOMOTIVE	1 Application per system (for a system using up to 10 oz. [300 ml] of lubricant)
HVAC	1 Application per system (for a system using up to 7 lbs. [3.2 kg] of refrigerant)

3. Disconnect injector from the system and clean any excess dye left around the service port.

# LEAK DETECTION USING A UV LAMP

A. Turn Engine and A/C system on.

B. Allow dye to circulate throughout system.

C. Connect UV lamp to power. (If using rechargeable UV Light, make sure the battery is fully charged). SEE CHARGING INSTRUCTIONS!!

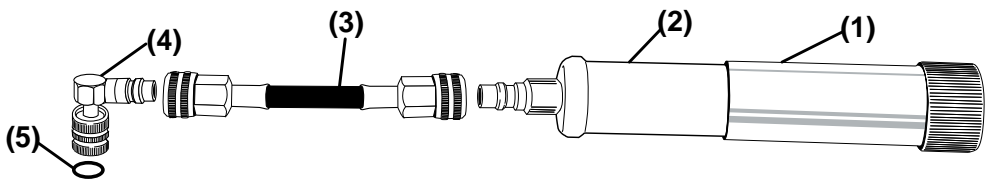
D. WEAR PROTECTIVE GLASSES!!

E. Do not use lamp near flammable materials, liquids or gases.

F. For 53012 and 53312 UV lights only: Never use lamp for more than 3 minutes at a time. Allow lamp to cool between uses, 3 MINUTES ON, 5 MINUTES OFF. If used continuously, you may damage glass lens.

G. Turn lamp on. Search for a bright green/yellow glow where the system is leaking. Clean the area around leak after repair.

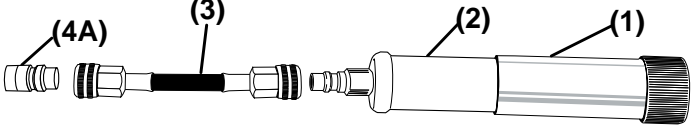
**DISPOSABLE CARTRIDGE PARTS LIST**



**Disposable Cartridge Type Injector (2 oz) 53223**

FIG.	PART#	DESCRIPTION
(1)	53223-001	Handle
(2)	53825	(25 Appl.) Cartridge
(3)	53825-002	Hose Assembly
(4)	90333-UV	R12 W/1/4"FL Shut-off Valve
(5)	90336	O-ring for 90333-UV

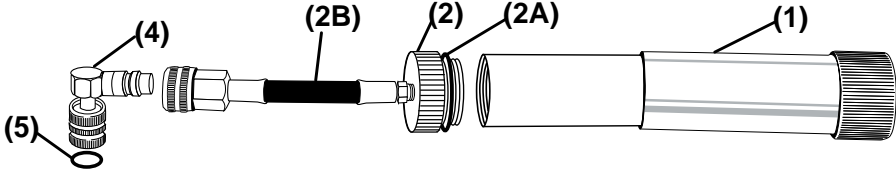
**MINI DISPOSABLE CARTRIDGE PARTS LIST**



**Mini Disposable Cartridge Type Injector (1 oz) 53809**

(1)	53807	Handle
(2)	53810	(10 Appl.) Cartridge
(3)	53825-002	Hose Assembly
(4A)	82274-x	1/4"FL x 13mm Adapter

**REFILLABLE CARTRIDGE PARTS LIST**



**Refillable Cartridge Type Injector (2 oz) 53123**

(1)	53223-001A	Dye Injector Body
(2)	53223-001B	Cap (only)
(2A)	53223-001C	O-ring
(2B)	53223-001D	Hose Assembly
(4)	90333-UV	R12 W/1/4"FL Shut-off Valve
(5)	90336	O-ring for 90333-UV

**⚠ WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm.