



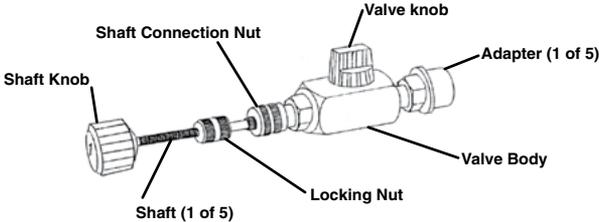
**Mastercool®**  
"World Class Quality"

## OPERATING INSTRUCTIONS

### 58490 UNIVERSAL VALVE CORE REMOVER/INSTALLER FOR R134a/R12



**PLEASE USE CAUTION** when removing valve cores from a pressurized system **ALWAYS** wear safety glasses and gloves!



### OPERATING INSTRUCTIONS

1. Select correct tool configuration for job:
  - a. Select correct adapter. There are five different adapters (1/4", 1/8", 3/16", 13mm, & 16mm)
  - b. Select correct shaft. There are five different shafts. One may need to test the shaft in the car's service port to determine the correct size needed.

### VALVE CORE REMOVAL

2. Connect the correct adapter and shaft to the valve body. Make sure all connections are tight.  
**Failure to do this can cause refrigerant leakage.**
3. Open the knob on the valve body, so the shaft can go through the body.
4. Connect the adapter to the service port of the car.
5. Push the shaft toward the service port. Slowly and carefully rotate the shaft until the tip of the shaft engages the body of the valve core.  
**\*NOTE: If the shaft tip does not reach the valve core, turn the locking nut counter clockwise and back the shaft out. Then try again.**
6. Once the valve core is engaged, turn the locking nut clockwise and screw it on to the shaft connection nut.
7. This will allow one to remove the valve core without the pressure within the system disengaging the shaft from the valve core.  
**\*NOTE: It is not necessary to use the locking nut. Simply follow the same steps without engaging the locking nut to the shaft connection nut.**
8. Rotate the shaft counter clockwise by turning the knob of the shaft.



**WARNING: MAKE SURE THE SHAFT CONNECTION NUT DOES NOT START TO TURN AS YOU ARE TURNING THE SHAFT. THIS COULD CAUSE THE SHAFT CONNECTION NUT TO LOOSEN AND REFRIGERANT WOULD LEAK OUT!**

9. Continue rotating the shaft until you cannot turn the shaft anymore. (Do not force!!!)
10. Slowly loosen the locking nut from the shaft connection nut.

**\*NOTE: If the valve core is correctly removed, the shaft will automatically travel outward due to the pressure in the system.**

If it does not travel outward, either there is no pressure in the system or the valve core was not removed.

11. With the shaft pulled out all the way, CLOSE THE VALVE.



**WARNING: FAILURE TO CLOSE VALVE COULD CAUSE INJURY AND WOULD RESULT IN A LOSS OF REFRIGERANT!!!**

12. Loosen and remove the shaft connection nut from the valve body.

13. Remove the damaged valve core.

### VALVE CORE INSTALLATION

1. Insert the new valve core onto the tip of the shaft.

2. Tighten the shaft connection nut to the valve body.

3. Open the valve knob.

4. Push the shaft forward and turn the shaft clockwise to insert the valve core.

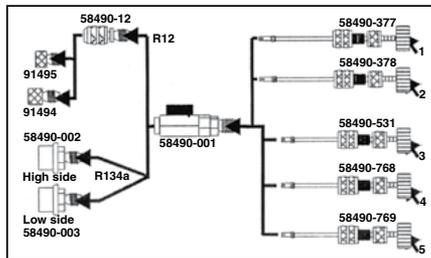
**\*NOTE: One can use the locking nut to help insert the valve core.**

5. Once the valve core is in place, pull the shaft back and turn the valve knob to the closed position.

6. Remove the shaft from the valve body.

7. SLOWLY open the valve knob to assure the valve core is in place. If the valve is in place, the pressure in the tool will dissipate quickly. If the valve core is not in place, quickly close the valve and try again.

8. Remove the adapter and valve body from the car.



### REPLACEMENT PARTS

58490	Universal R12/R134a Kit
58490-001	Valve assembly
58490-002	R134a high side 16mm connector
58490-003	R134a low side 13mm connector
58490-012	1/4" FL swivel connector
58490-377	Standard valve core shaft
58490-378	GM large bore valve core shaft
58490-531	JRA R134a valve core shaft
58490-768	Eaton R134a low side valve core shaft
58490-769	Eaton R134a high side valve core shaft
91494	Adapter 1/4"-M x 3/16"-F high side GM/Ford
91495	Adapter 1/4"-M x 1/8"-F high side Ford
58490-PB	Plastic molded box for 58490

**⚠ 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. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).



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