

ATS | **AUTOMOTIVE**
Test Solutions

BULLSEYE®

Leak Detector Patent Pending

Air Conditioning Quick Start Guide

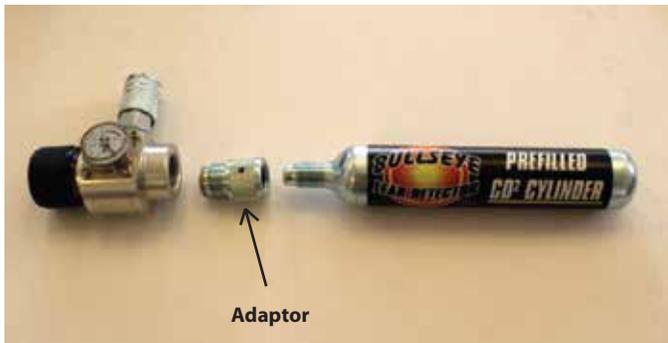
BULLSEYE Air Conditioning Quick Start Guide



Step 1. Remove safety glasses from kit and put them on in order to protect your eyes.



Step 2. Recover all the refrigerant followed by a system evacuation that will help maintain a vacuum in the condition system.



Step 3. The High Pressure Regulator has an adaptor that will allow a 90 gram CO2 canister to be used.



Step 4. The High Pressure regulator will screw directly on to a 24 oz. paint ball canister. These style canisters are available at Walmart & Sporting goods stores nationwide.



Step 5. You can also use an industrial Carbon Dioxide (CO2) gas bottle (Airgas part # CD FG5) or equivalent. When using an industrial style bottle you will use the special blue adaptor to connect the ATS high pressure regulator to this style bottle. Adaptor is included in kit.



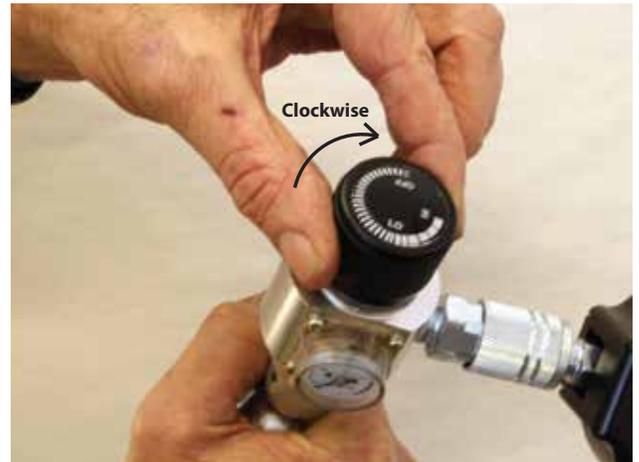
BULLSEYE Air Conditioning Quick Start Guide



Step 6. Remove electronic leak detector from kit and turn on the unit, allow unit to warm up the CO2 sensor tip. When unit is ready the red light will shut off and the green ready light will turn on, this will take about 90 seconds. For best results the leak detector CO2 sensor should be allowed to fully warm up for about 5 minutes.



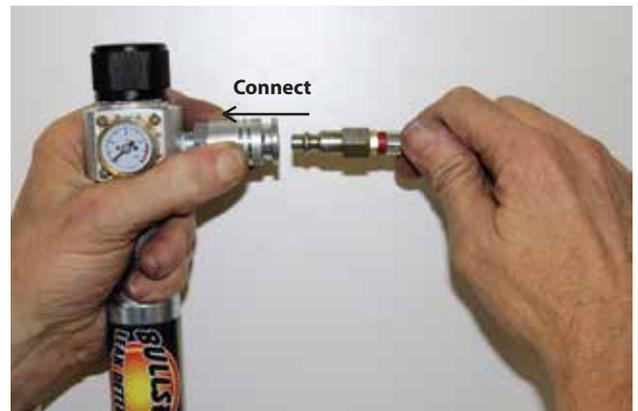
Step 7. Remove high pressure regulator with adaptor from kit and screw CO2 cylinder to high pressure regulator.



Step 8. Adjust the high pressure regulator by turning the knob on top clockwise until the gauge on the front of the regulator reads greater than 110PSI.



Step 9. Close the valve on the Bullseye High Side R-134A Adapter coupler by rotating the knob counter clockwise. Bullseye Adapter may not be included in your kit. (Order ATS part # LDT1350.)



Step 10. Connect the quick coupler on the high pressure regulator to the coupling plug on the Bullseye High Side R-134A Adapter .

BULLSEYE Air Conditioning Quick Start Guide



Step 11. Connect the Bullseye High Side R-134A Adapter to the vehicles high side charge port.



Step 12. Now rotate the Bullseye High Side R-134A Adapter knob clockwise this will open the valve and will allow CO2 to flow into the vehicles air conditioning system thus pressurizing the system.



Step 13. Watch the high pressure gauge on the front of the high pressure regulator; make sure it stays greater than 110 PSI. If a large leak is present you will not be able to pressurize the system to 110 PSI. In this case you will need to repair the large leak and then retest the system. If the pressure gets to 110 PSI and then drops you may need another CO2 cartridge in order to maintain the 110 psi level.



Step 14. The EVAP housing will have a drain hose to drain the moisture from the EVAP core. This hose is usually located on the passenger side lower fire wall in the engine compartment. Plug this drain hose with a cap plug from the Bullseye kit while the rest of the system is tested for leakage.

BULLSEYE Air Conditioning Quick Start Guide



Step 15. Using the electronic leak detector go around the system to identify the leak site area. While moving the CO2 probe tip around the system it is best to keep the CO2 sensor face perpendicular to the surface being tested. **Note: If tip is bumped against the surface being tested the detector may momentarily go off, this false alert will go off right away. If the leak detector senses CO2 gas the alert will stay on for 10 to 40 seconds.**



Step 16. When CO2 gas is detected the LED display bar is activated along with the audio alert (loud beeping noise). Once the detector has sensed CO2 the alerts will continue for about 10 to 40 seconds; **Note: Remove sensor from leak site area and let the unit stop beeping on its own.** Once the detector has stopped beeping you can now retest the leak site area with the CO2 detector.



Step 17. Once the area of the leak site is identified, take the Bullseye Leak Seeker Solution and **shake it well**, take the red tube off the can side and install it in the discharge nozzle. Now aim the red discharge tube at the leak site area and apply the leak seeker foam over the area. Note: if all the foam changes from a red color to a yellow color right away, wash the area with the Bullseye distilled water wash thoroughly. Then reapply the Bullseye Leak Seeker Solution foam. **Note: The consistency of the foam can be controlled by how much the can has been shaken; less shaken will result in a liquid consistency, and more shaken will result in a foam consistency.**

BULLSEYE Air Conditioning Quick Start Guide



Step 18. The Bullseye Leak Seeker Solution will spray on pinkish red and turn yellow at the leak site. On very small leak sites no bubbles will form. This is due to a very low gas volume escaping from the leak site.



Step 19. On large leak sites the Bullseye Leak Seeker Solution will bubble and change color from pinkish red to yellow indicating a larger leak site.

BULLSEYE Air Conditioning Quick Start Guide



Step 20. If no leak is found place CO2 detector at EVAP drain hose and remove cap plug while leak detector sensor is near hose outlet. CO2 is heavier than air and will fall to the bottom of the EVAP housing accumulating in the drain hose. If the Bullseye Leak Detector detects CO2 at the EVAP drain hose there is a leak present somewhere in EVAP housing. Note: For best results leave the system under pressure for 30-60 minutes **or longer** before removing cap plug from drain hose.



Step 21. Unscrew the high pressure regulator from the 90 gram CO2 cartridge and adaptor.

Note: *The High pressure 90 gram adaptor has a check valve that will keep the CO2 contained in the cartridge. Simply put cartridge & adaptor in case for storage.*



WARNING! Do not allow leak seeker foam to get on CO2 sensor at end of yellow flex tube! This will damage CO2 sensor and will require the CO2 sensor to be replaced.

Note: *Never directly hit or drop the leak detector on the CO2 sensor tip, this will cause the sensor to become damaged!*

BULLSEYE Air Conditioning Quick Start Guide

Re-Filling The BULLSEYE Distilled Water Wash Aerosol Bottle



1. Depress schrader valve and release any air pressure remaining in bottle.
2. Unscrew top counter clockwise from bottle.
3. Fill bottle with 8 oz. of distilled water maximum.
4. Make sure container top is securely tightened.
5. Pressurize container with 70-80 psi air pressure. **WARNING!** Do not exceed 90 PSI air pressure.
6. See warning label on back of distilled water wash can for additional instructions.

Note: Do not charge bottle with CO2 gas.

