MSA
The Safety Company

Operating Manual

Legend Series Automotive Refrigerant Analyzer

Manual Part No.: H5-06-7000-80-0

Manual File: 012476 Rev. 3

CR: 800000064267

⚠ WARNING!

Read this manual carefully before using or maintaining the device. The device will perform as designed only if it is used and maintained in accordance with the manufacturer's instructions. Otherwise, it could fail to perform as designed, and persons who rely on this device could sustain serious injury or death.

The warranties made by MSA with respect to the product are voided if the product is not installed and used in accordance with the instructions in this manual. Please protect yourself and your employees by following the instructions.

Please read and observe the WARNINGS and CAUTIONS inside. For additional information relative to use or repair, call 1-800-MSA-2222 during regular working hours.

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For your local MSA contacts, please go to our website www.MSAsafety.com

Contents

1 Warranty

MSA, the Safety Company warrants that these products will be free from mechanical defect or faulty workmanship for a period of one (1) year from the date of delivery, provided it is maintained and used in accordance with MSA's instructions and/or recommendations.

This warranty does not apply to expendable or consumable parts whose normal life expectancy is less than one (1) year, such as, but not limited to, nonrechargeable batteries, filament units, filter, lamps, fuses, etc. MSA shall be released from all obligations under this warranty in the event that repairs or modifications are made by persons other than its own or authorized service personnel or if the warranty claim results from physical abuse or misuse of the product. No agent, employee, or representative of MSA has any authority to bind MSA to any affirmation, representation, or warranty concerning the goods sold under this contract. MSA makes no warranty concerning components or accessories not manufactured by MSA, but will pass on to the Purchaser all warranties of manufacturers of such components.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, IMPLIED, OR STATUTORY, AND IS STRICTLY LIMITED TO THE TERMS HEREOF. SELLER SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

1.1 Exclusive Remedy

It is expressly agreed that the Purchaser's sole and exclusive remedy for breach of the above warranty, for any tortious conduct of the Seller, or for any other cause of action, shall be the repair and/or replacement at the Seller's option of any equipment or parts thereof, which after examination by the Seller is proven to be defective. Replacement equipment and/or parts will be provided at no cost to the Purchaser, F.O.B.;Seller's Plant. Failure of the Seller to successfully repair any nonconforming product shall not cause the remedy established hereby to fail of its essential purpose.

1.2 Exclusion of Consequential Damage

The Purchaser specifically understands and agrees that under no circumstances will the Seller be liable to the Purchaser for economic, special, incidental, or consequential damages or losses of any kind whatsoever, including but not limited to, loss of anticipated profits and any other loss caused by reason of nonoperation of the goods. This exclusion is applicable to claims for breach of warranty, tortious conduct, or any other cause of action against the Seller.

1.3 Liability Information

MSA accepts no liability in cases where the device has been used inappropriately or not as intended. The selection and use of the device are the exclusive responsibility of the individual operator. Product liability claims, warranties, and guarantees made by MSA with respect to the device are voided if the device is not operated, serviced, and/or maintained in accordance with the instructions in this manual.

The warranties made by MSA with respect to the product are voided if the product is not used and serviced in accordance with the instructions in this manual. Please protect yourself and others by following them. We encourage our customers to write or call regarding this equipment prior to use or for any additional information relative to use or repairs.

2 Warnings and Cautions

The Legend Series Automotive, hereafter also referred to as "the device," is a gas analyzer intended to provide a fast, easy, and accurate means to determine refrigerant purity in refrigerant storage cylinders or directly in air conditioning systems. The device is specified to support compliance with federal, state, and local safety codes that govern emissions.

2.1 Analyzer Warnings

⚠ WARNING!

- Install, operate, and maintain the device in strict accordance with its labels, cautions, warnings, instructions, and stated limitations.
- For any maintenance procedure provided in this manual, use only genuine Neutronics replacement parts. Repair or alteration of the device beyond the scope of these maintenance instructions or by anyone other than authorized service personnel can cause incorrect operation of the device. For a list of approved parts and how to order them, refer to the Spare Parts List.
- Never expose the device to water, rain or liquids when charging.
- The device is not intrinsically safe. Do not use the device in areas classified as hazardous or locations where explosive concentrations of combustible gases or vapors can occur.
- Never admit any sample into the instrument at pressures in excess of 500 psig. Pressures above 500 psig can lead to damage within the device and create a bursting hazard.
- Some vehicles may contain flammable refrigerants such as hydrocarbons. R-1234yf is considered a flammable substance. Less than 2 grams of refrigerant are vented with each sample.
- When charging the internal battery with the supplied power supply, the power supply may become warm. If the power supply becomes warm, unplug the cord immediately. When charging multiple devices, allow the charger to cool between each battery.
- Do not utilize any hose(s) other than the MSA hose supplied with the instrument. The use of other hose types will introduce errors into the refrigerant analysis and instrument calibration.
- If the device is used in a manner not specified by the manufacturer, the protection by the device may be impaired.
- Properly vent the exhaust of the device to a safe area. Improper venting of the exhaust can cause serious personal injury or death.
- Always turn the compressor or automobile engine off before connecting the instrument to an air conditioning system.

Failure to follow these warnings can result in serious personal injury or death.

2.2 General Cautions

⚠ CAUTION!

- Always wear eye and skin protection when working with refrigerants. Escaping refrigerant vapors will present a freezing danger. Do not direct refrigerant escaping from the sample hose toward exposed skin or toward the face.
- Do not direct refrigerant vapors venting from hoses towards the skin. Refrigerant can cause serious burns if in contact with the skin.
- Do not breathe refrigerant and lubricant vapor or mist. Exposure may irritate eyes, nose, and throat. Use recycling equipment certified to meet the requirements of SAE J2788, J2843, J3030 or J2851 to remove refrigerant from the A/C system. If accidental system discharge occurs, immediately ventilate the work area. There must be adequate ventilation in the vehicle servicing area.
- Do not utilize the coupler on the service end of the Sample Hoses for any application other than with the instrument. The coupler supplied is a modified version that does not contain a check valve and is not suitable for any other refrigerant application.

Failure to follow these cautions can result in minor or moderate injury.

2.3 General Notices

NOTICE

- Operate this device with vehicles or cylinders marked to contain R-1234yf, R-134a or R-12 refrigerant. Cross contamination with other refrigerant types causes severe damage to the A/C system, to service tools, and equipment. Do NOT attempt to adapt the unit for another refrigerant. Do NOT mix refrigerant types in a system or in the same container.
- Always inspect the sample hose before each use. Replace the hose if it appears cracked, frayed, obstructed or fouled with oil.
- Replace the sample hose AS SOON AS LIQUID, OIL OR RED SPOTS (DISCOLORATION) BEGIN TO APPEAR ON THE INSIDE DIAMETER OF THE SAMPLE HOSE OR WHITE FILTER ELEMENT. Failure to properly maintain and replace the sample hose will result in severe damage or inaccurate results.
    - DO NOT attempt to introduce liquid or samples heavily laden with oil into the Low Side sampling hose configuration. Damage caused to the device due to the use of the wrong hose configuration on the wrong port will void the warranty.
- The air detection sensor is a chemical fuel cell sensor that can expire. The user must return the unit to an approved vendor in order to replace the air detection sensor whenever the instrument indicates as such. Failure to replace the air detection sensor will result in non-functionality of the device.
- Connection to power sources greater than 13 VDC could cause “out of warranty” damage.
- Avoid use of the device where condensation can collect. Condensation can clog or block sample lines, which will prevent the device from receiving new or fresh gas samples in the area being monitored.
- Install and maintain end-of-line filters in all sample inlet lines.
- To ensure correct overall operation of a gas detection instrument, test a known virgin sample of gas for which it was calibrated. Do a calibration check prior to each use.
- Do not disassemble the instrument. There are no serviceable components internal to the instrument and disassembly will void the warranty.
- Always place the analyzer on a flat and sturdy surface.
- Always verify that the refrigerant, tested from the Low Side, does not contain or will not emit heavy loads of oil or liquid. Heavy loads of oil or liquid can enter the device and cause it to become inoperable.
- Never obstruct the air intake, sample exhaust or case vent ports of the instrument during use. Obstruction can lead to calibration faults or operational errors in the device.

3 Introduction and Overview

Thank you for purchasing the Legend Series Automotive Refrigerant Analyzer.

The Legend Series Automotive Refrigerant Analyzer is designed for use independently or in conjunction with an SAE J2843 or J3030 approved A/C Service Machine to determine the purity of gaseous R-134a or R- 1234yf refrigerant. We recommend that all personnel who use this instrument read this manual to become more familiar with its proper operation.

General

Contamination of refrigerants either in storage cylinders or vehicle air conditioning systems can lead to component corrosion, elevated head pressures and system failures when utilized by unsuspecting technicians. The ability of the technician to determine refrigerant type and purity is severely hampered by the presence of air when attempting to utilize temperature-pressure relations. The development of various substitute refrigerants further complicates the ability of a technician to identify refrigerant purity based upon temperature-pressure relationships.

The Legend Series Automotive Refrigerant Analyzer will provide refrigerant purity in refrigerant storage cylinders or directly in vehicle air conditioning systems. The instrument utilizes non-dispersive infrared (NDIR) technology to determine the weight concentration of R-1234yf or R-134a refrigerant. Acceptable refrigerant purity as it relates to this instrument, has been defined by the SAE as a refrigerant mixture that contains 98.0%, or greater of R-1234yf or R-134a, by weight.

The instrument is supplied complete with an R-1234yf sample hose, an R-134a sample hose (R-12 coupler sold separately), a 100- 240 VAC power transformer, built in Lithium battery, thermal printer, and all required plumbing housed within a rugged, portable, storage case.

Sample gas is admitted into the instrument through the supplied sample hose and presented to the sensing device. The instrument provides the user with a digital display of refrigerant purity. The instrument only considers the weights of the refrigerant and contaminates in the total mixture. Air is measured, and displayed, separately. Other contents such as refrigerant oil and dye are not considered contaminants.

The instrument interfaces with the user via a full color graphic LCD, audio indications and soft key command buttons. Alarm indications are provided to alert of instrument fault conditions or contaminated refrigerant presence.

Required SAE Statement (SAE J2912): "If the refrigerant being tested is identified as contaminated (i.e., less than 98% pure R-1234yf or HFC-134a), any visual percentages displayed of HFC-134a (R-134a) and/or HFO-1234yf (R-1234yf), outside the design certified value is informational and may not be accurate."

3.1 Features

Features include:

- Advanced ergonomic design
- Displays % purity:
  - R-1234yf
  - R-134a
  - R-12 (Informational only; not certified under SAE J2912)
- Displays %:
  - R-22
  - Unknown Refrigerant
  - Hydrocarbons
- Displays AIR % independent of the refrigerant sampled
- Capable of analyzing R-12 (1/4” Flare coupler sold separately)
- Multiple Languages:
  - English, German, Spanish, French, Italian, Portuguese, Chinese, Japanese, Korean and Russian
- Easily prints test results with built-in printer (optional)
- Uses Standard 2.25” (57 mm) thermal paper
- Bluetooth compatible (optional)
- Improved oil resistance with user replaceable hose assembly
- Fender friendly resting surface
- Full Color Graphic LCD with on-screen instructions
- Ultra-fast 70 second test time
- Internal, rechargeable Lithium battery for cordless operation
- USB Port for connection to the AC Service Machine & remote software updates
- All accessories stored in hard shell carry/storage case

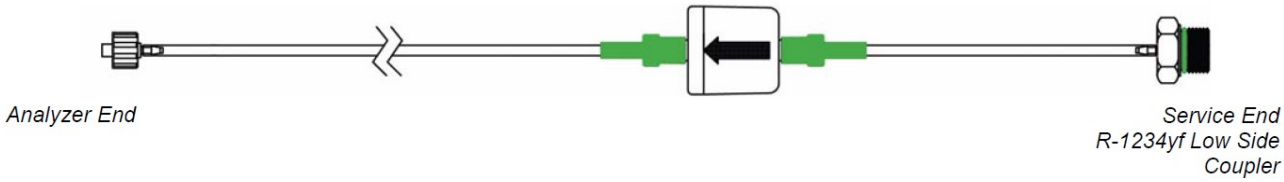
3.2 Legend Series Automotive Components

Legend Series Automotive Base Unit

The Legend Series Automotive base unit houses the Full Color Graphic LCD, Infrared Bench, Electrical Connections, and Rechargeable Battery. These components require no maintenance, **therefore there are no serviceable components internal to the instrument, and disassembly will void the warranty.**

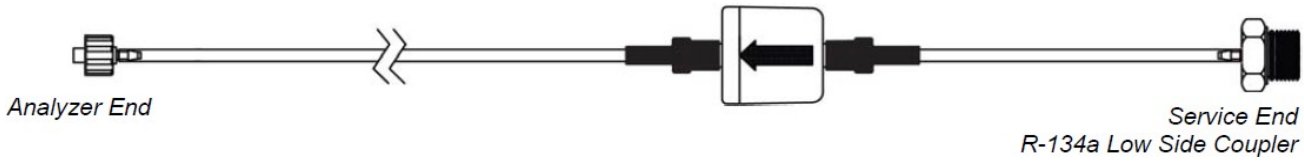
Legend R-1234yf Sample Hose

The 6.5-foot (2 meter) R-1234yf Sample Hose is constructed of polyurethane ether. The hose is provided with an instrument inlet port mating connector on one end and a brass flow restrictor on the other end. The brass flow restrictor screws into the R-1234yf Low Side Coupler. The sample hose is considered a consumable maintenance part. A spare R-1234yf Sample Hose is also provided.



Legend R-134a Sample Hose

The 6.5-foot (2 meter) R-134a Sample Hose is constructed of polyurethane ether. The hose is provided with an instrument inlet port mating connector on one end and a brass flow restrictor on the other end. The brass flow restrictor screws into the R-134a Low Side Coupler. The sample hose is considered a consumable maintenance part. A spare R-134a Sample Hose is also provided.

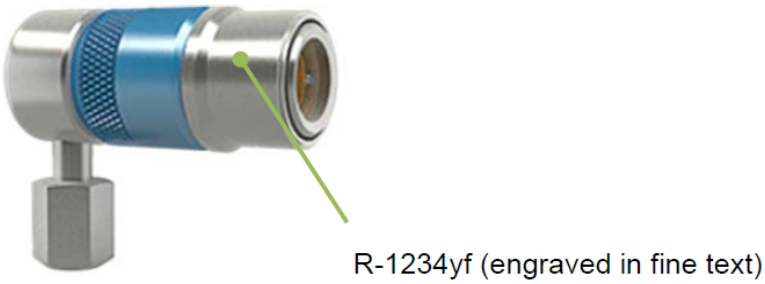


Sample Hose Extensions

The sample hose extensions allow the user to easily connect and disconnect the hose assembly to the analyzer. The extension is connected directly to the analyzer and the sample hose connects to the male feral on the opposite end.

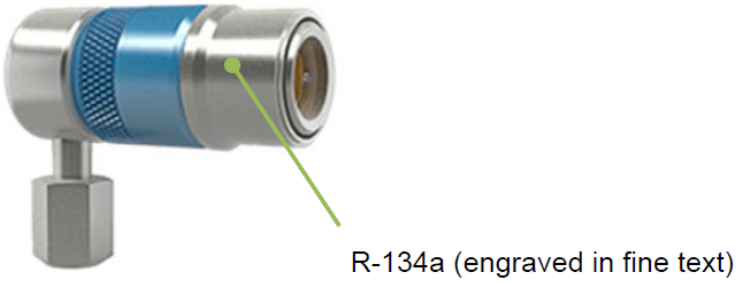
R-1234yf Low Side Coupler

The R-1234yf low side coupler is designed with a quick connect adapter to quickly connect the hose assembly to the Low Side Schrader valve on a R-1234yf vehicle.



R-134a Low Side Coupler

The R-134a low side coupler is designed with a quick connect adapter to quickly connect the hose assembly to the Low Side Schrader valve on a R-134a vehicle.

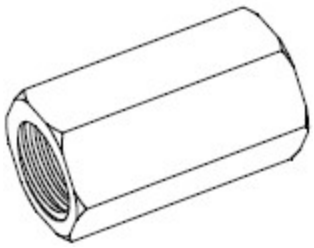


USB Cord

The USB Cord is provided to connect the refrigerant analyzer with an SAE J2843 or J3030 approved A/C Service Machine. If connecting to an approved A/C service machine follow the instructions on this machine to operate the refrigerant analyzer.

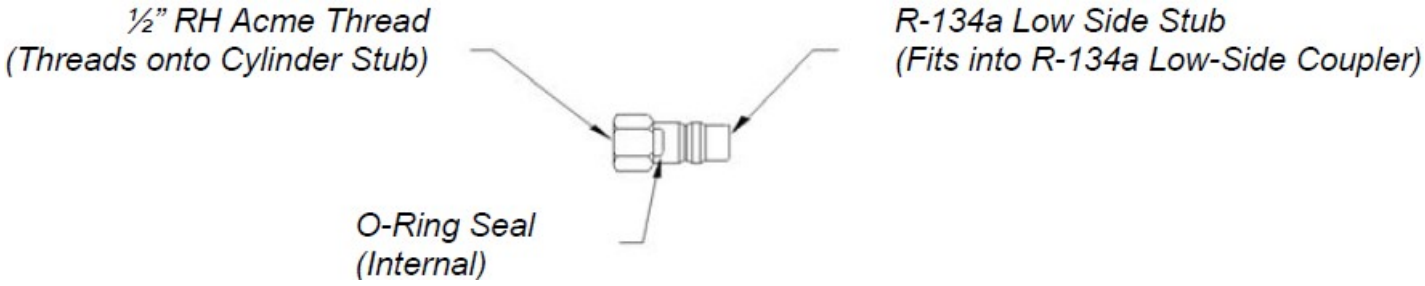
R-1234yf Tank Adapter Fitting

The R-1234yf Tank Adapter Fitting will provide the user with an adapter to allow connection of the R-1234yf Sample Hose to the ½" LH Acme threads on the R-1234yf cylinder.



R-134a Tank Adapter Fitting

The R-134a Tank Adapter Fitting will provide the user with an adapter to allow connection of the R-134a Sample Hose and Low Side Coupler to a R-134a cylinder ACME port.



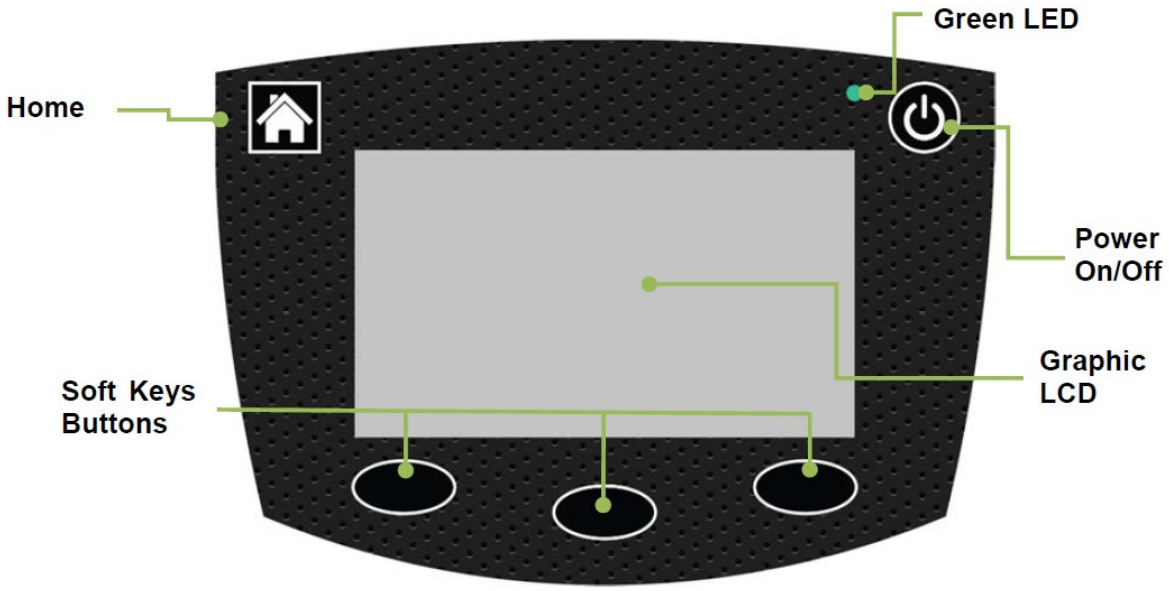
AC Power Adapter

The Legend Series Automotive is powered via a Lithium Ion battery. You can also power the unit with the AC Power Adapter which converts a standard 100-240VAC 50/60Hz wall outlet to 12VDC, 1.6A. This AC Power Adapter will also charge the battery when connected to the analyzer.

NOTE: Use of any other power source may cause damage to the unit and void the warranty.

Control Panel

The Control Panel serves as the main user interface. The Control Panel features three soft key buttons. The current function for each button is displayed above the Soft Key Buttons on the full color graphic LCD. A Home button and a Power button are also found at the top of the control panel.



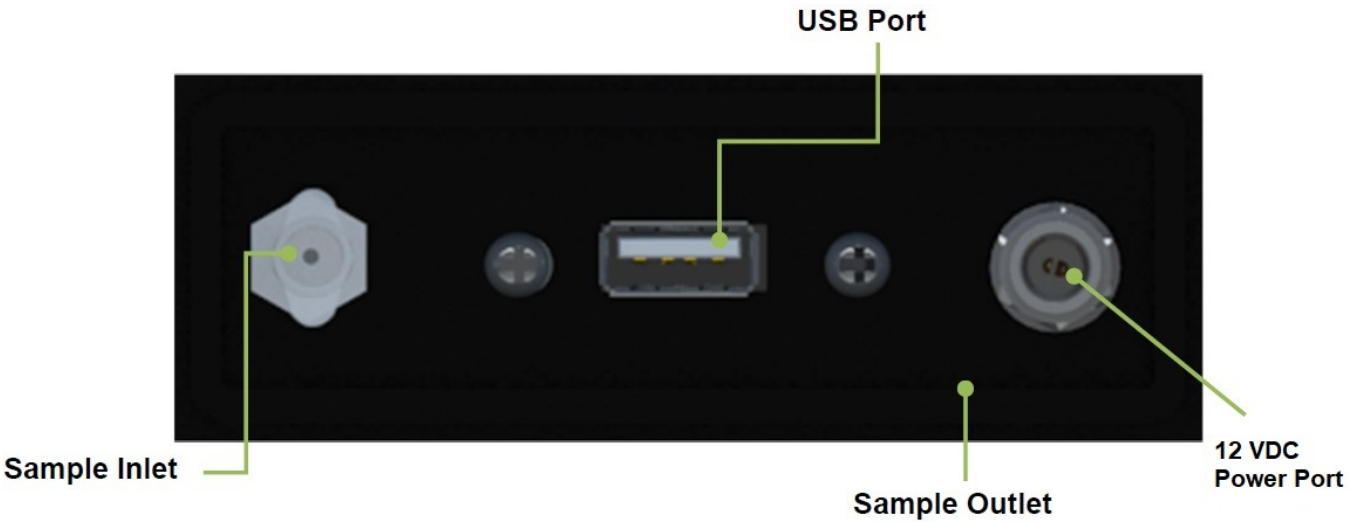
Back Panel Connections

The connections located on the back panel are illustrated below.

⚠ CAUTION!

Keep the sample outlet port free and clear at all times. Do not operate near open flame.

Failure to follow this caution can result in minor or moderate injury.



Hard-Shell Storage/Carrying Case

The hard-shell storage/carrying case is custom fit to the Legend Series Automotive. It provides rugged protection for the instrument, as well as convenient storage for all components. The enclosure is general purpose and is *not* watertight.

4 Operation

4.1 First Use

The Legend Series Automotive has a built in Lithium Ion battery. Prior to first use **charge the battery for a minimum of 2 hours** with the included AC Power Supply. The analyzer will function and charge the battery when the AC Power Supply is connected.

4.2 Power On the Analyzer

For use with an SAE J2843 or J3030 certified AC Service Machine, connect one end of the provided USB cable to the USB port on the back of the analyzer and connect the other end of the USB cable to the AC Service Machine.

NOTE: If the unit is used as an independent device the USB cable should not be connected.

Press the upper right, 'POWER' button and the splash screen shown in (Figure 1) will appear. Press 'Next' and the device will warm up as shown in (Figure 2). Warm up will take approximately 30 seconds.

Figure 1 Splash Screen

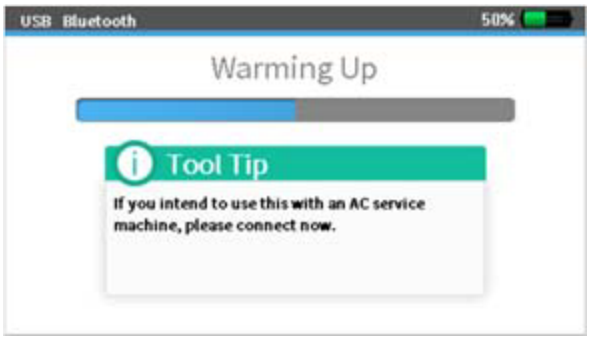


Figure 2 Warm Up Screen

Once the analyzer warms up, the screen in (Figure 3) will appear offering the option to change settings or start an analysis. If you wish to adjust factory 'Settings', select the left soft key and refer to Maintenance and Troubleshooting. To begin an analysis, select the right 'Start' soft key. Next select the type of refrigerant you wish to test (Figure 4).

NOTE: If you are going to analyze a **R-12** vehicle or cylinder you must select R-134a mode.

Figure 3 Main Screen

Figure 4 Select Refrigerant

4.3 Calibration

Each time the Legend Series Automotive begins a new test cycle it must complete an air calibration. The calibration takes 30 seconds and pulls fresh air into the unit via an internal pump. This fresh air purges any excess refrigerant from the unit to promote accurate test results. Calibration **REQUIRES** a sample hose be connected to the device and disconnected from the vehicle or refrigerant source.

Once the sample hose is connected to the analyzer, press ‘Start’ to begin an air calibration, as shown in (Figure 5). This will begin the calibration process and display the screen shown in (Figure 6).

Figure 5 Press Start to Begin Air Calibration

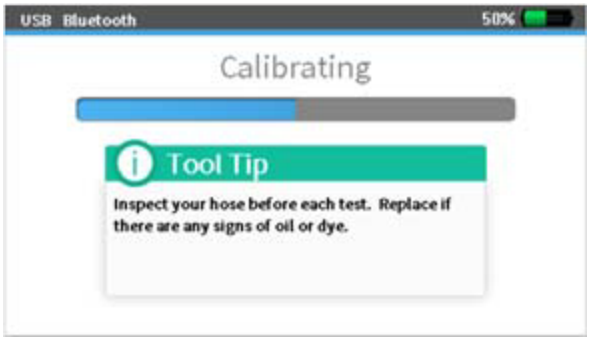


Figure 6 Calibrating

4.4 Testing the Refrigerant

After the air calibration is complete, the instrument is ready for testing. The analyzer will direct you to connect the hose to a refrigerant source as shown in (Figure 7). Connect the hose to the vehicles Low Side Schrader valve, or connect it to the Low Side Port on a refrigerant cylinder, and open the valve. Allow the refrigerant to flow for a few seconds and then press the ‘Test’ button to begin the test. The Testing screen shown in (Figure 8) will display.

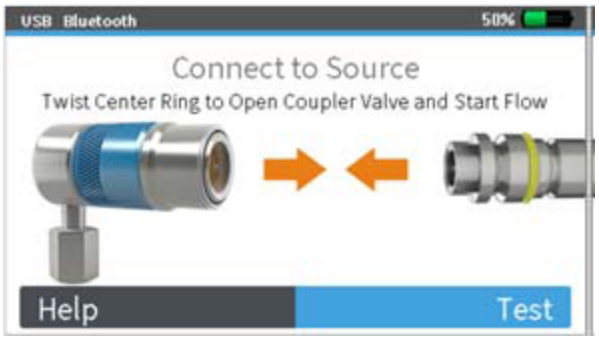


Figure 7 Connect to Source

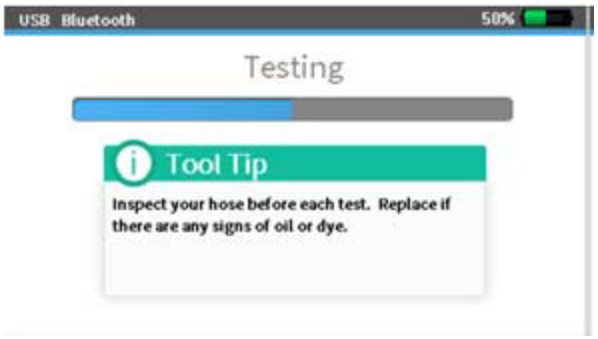


Figure 8 Testing Screen

4.5 Viewing the Results

Upon completion of testing, the Legend Series Automotive will display (Figure 9). Disconnect the coupler from the refrigerant source and select ‘Results’ to display the test results (Figure 10). The percentage displayed for each refrigerant indicates the total purity weight of that refrigerant, equaling 100%, with air and non-condensable gases measured independently. Pressing ‘Print’ will print the test results. Pressing ‘Print Prior 5 Results’ will print the last 5 tests completed.

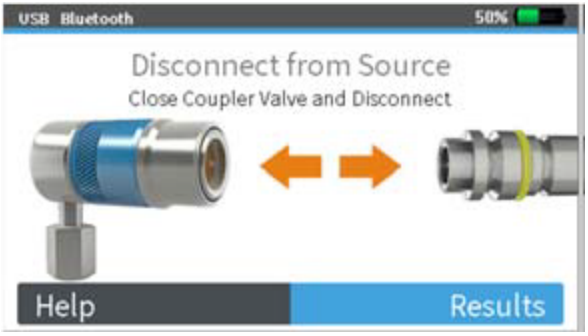


Figure 9 Disconnect from Source

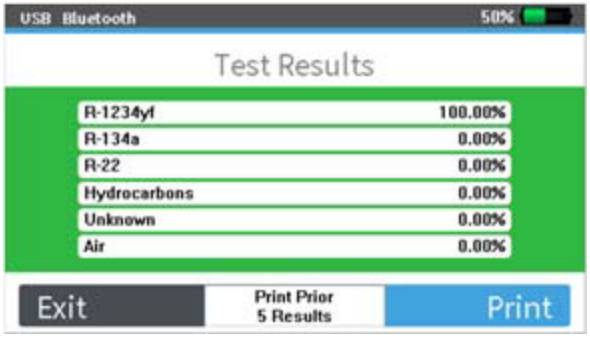


Figure 10 Test Results

If the refrigerant analyzed is 98.0% pure or better, the refrigerant is deemed suitable for standard recovery and reuse. Should the refrigerant be less than 98.0% pure, the refrigerant is not suitable for standard recovery and should not be reused. In either case, verify the hose is disconnected from the refrigerant source and press ‘Exit’ to return to the main screen (Figure 11).

Figure 11 Main Screen

NOTE: In R-134a mode, R-12 and R-1234yf are combined into one reading referred to as “R-12."

4.6 Understanding Test Results

The Legend Series Automotive is designed to analyze the base gas it is calibrated for. When testing R- 134a vehicle, R-134a should be select as shown on (Figure 12). Conversely when testing a R-1234yf vehicle, R-1234yf should be selected as shown in (Figure 13). If the wrong base refrigerant is selected the analyzer will fail the test and produce inaccurate results.

NOTE: Concentrations of R-1234yf contaminant in R-134a should be tested in R-1234yf mode.

Figure 12 R-134a Selected

Figure 13 R-1234yf Selected

The refrigerant analyzer is designed to provide visual cues after analysis is complete. When the refrigerant sampled is found to be 98% pure or greater the analyzer will display a **Green** background indicator (Figure 14).

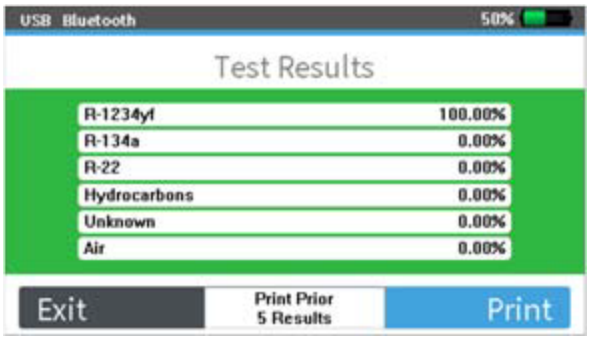


Figure 14 Refrigerant Sampled is ≥ 98% Pure

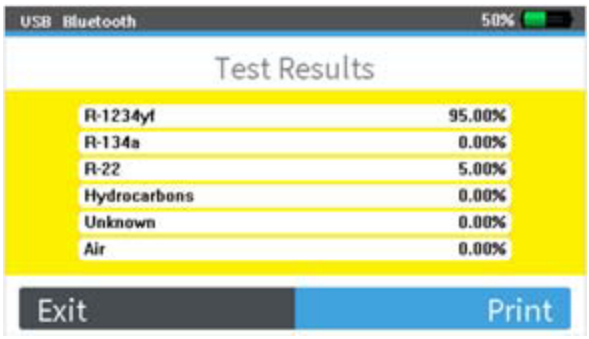


Figure 15 Refrigerant Sampled is 95% - 98% Pure

When the sampled refrigerant is found to be between 95% - 98% pure a Yellow background indicator will appear (Figure 15).

When the sampled refrigerant is found to be less than 95%, presents hydrocarbons or a has large contamination the screen will illuminate Red and CAUTION SHOULD BE TAKEN WHEN HANDLING THIS VEHICLE OR CYLINDER (Figure 16).

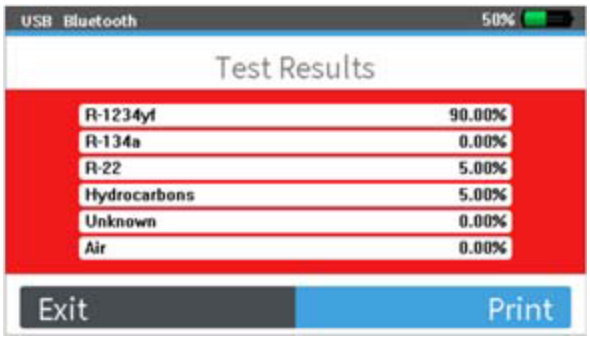


Figure 16 Refrigerant Sampled is < 95% Pure

It is important to note AIR is measured independently of the refrigerant. This means you could have a percentage of AIR present in a sample or refrigerant that totals or equals 100% refrigerant. An example of this is present in (Figure 17) below.

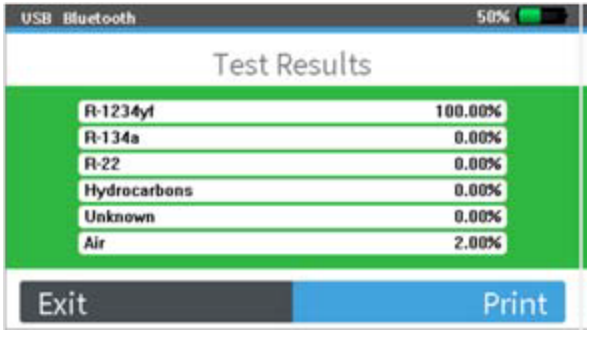


Figure 17 Percentage of Air Present

If an error message appears at all during or after analysis, refer to Maintenance and Troubleshooting.

5 Maintenance and Troubleshooting

5.1 Replacing the Sample Hose Assembly

In the event the analyzer displays an Error #3 or Error #5 this may be an indication the sample hose needs replacing. This will occur when the integrated flow restrictor becomes clogged with oil, debris or sealant. It can also occur if there is inadequate flow, less than 30 psig (2 Bar) refrigerant in the vehicle or cylinder. Replacement hoses for both the R-134a and R-1234yf couplers are provided in the kit. Additional replacements are listed in the Spare Parts List.

To replace the Sample Hose Assembly:

1. Disconnect the sample hose from the refrigerant and analyzer
2. Remove the brass restrictor end (with hose attached) from the coupler and discard. Be sure to use a backing wrench as not to damage the coupler.
3. Check for signs of oil and debris in the coupler.
4. Use a cleaner which ONLY contains Tetrachloroethylene and carbon dioxide, follow safety instructions on the can and spray all parts of the coupler with the cleaner to remove any oil. DO NOT soak the part for more than 60 seconds.
5. Allow coupler to dry. Check coupler for oil once again. Failure to clean the oil out of the coupler will result in premature obstruction of the new sample hose.
6. Install the brass end of the new sample hose assembly into the coupler and lightly tighten, usually finger tight is sufficient.

5.2 Information Screens

An “Information” icon or ‘Help’ indication will appear at various points throughout the testing process. This button will provide additional information or tips about the command screens to help complete your analysis.

5.3 Software Updates

Software updates may be made available to improve operating performance or add additional features. Some updates will be provided at no charge to improve operating efficiencies while others will be optional, paid upgrades, to add new refrigerants or functions.

The Legend Series Automotive has a USB update port located on the Back-Panel Connections. This port should not be used for any other purpose other than to install factory updates or when connecting to a certified service cart.

NOTICE

If the analyzer is not registered, MSA will not be able to inform you of any necessary software updates.

5.4 Settings

Pressing the ‘Settings’ button as shown in (Figure 18) will provide access to various device settings as shown in (Figure 19).

Figure 18 Main Screen

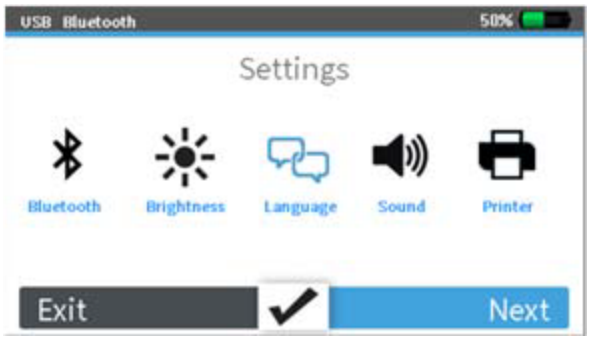


Figure 19 Settings Screen

Using the 'Next' button, scroll to the desired setting you wish to change.

Use the ✔ button to select the setting and the left button to return to the previous screen.

- **Brightness:** Enhances or dims the brightness of the LCD screen.
- **Language:** Change the language to one of 10 available languages.
  - **English (default)**
  - German
  - Spanish
  - French
  - Italian
  - Portuguese
  - Chinese
  - Japanese
  - Korean
  - Russian
- **Sound:** Turn sound ON or OFF.
- **Printer:** Information on how to load the printer paper.

When finished adjusting the settings, press 'Exit' to return to the home screen.

5.5 Error Messages

In the unlikely event an Error message is displayed on the screen, follow the on-screen prompt associated to the Error. Error messages that will appear include:

Error #1: The air or gas readings were unstable.

- Solution: Move the unit away from sources of EMF or RFI such as radio transmitters and arc welders.

Error #2: The air or gas readings were excessively high.

- Solution: Move the unit away from sources of EMF or RFI such as radio transmitters and arc welders.

Error #3: The air calibration resulted in a low output.

- Solution: Prevent refrigerant from flowing into the unit through the sample inlet during air calibration.
- Solution: Allow any refrigerant in the atmosphere to dissipate before performing air calibration.
- Solution: Verify that the air intake and the exhaust are not obstructed.
- Solution: Verify that the white filter is correctly plugged into the rubber grommets.

Error #4: The unit is beyond the operating temperature range.

- Solution: Move the unit to an area where the ambient temperature is within the specified operating range.

Error #5: The refrigerant sampled has an excessively large amount of air or there was a little or no sample flow due to a closed valve or plugged sample filter. This is the code to prompt the user to change the brass filter. This should be considered more as a prompt than an actual error.

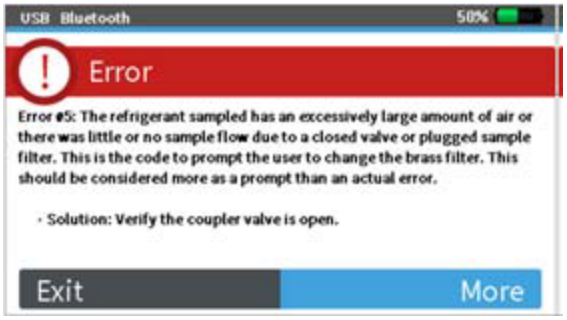
- Solution: Verify the coupler valve is open.
- Solution: Verify the sample filter is not plugged with debris or oil.
- Solution: Replace brass sample filter.

Error #6: The air sensor has expired and must be replaced before the analyzer can be used.

Error #7: The gas pressure is out of range.

- Solution: Verify the SAMPLE EXHAUST port is not obstructed.

If an Error message reappears, contact MSA or your local service department.



Appendix A Spare Parts List

Part Number	Description
4-03-5004-07-0	R-134a Tank Adapter
4-04-5500-00-6	R-12 Low Side Coupler
5-03-1000-08-1	Printer Paper Roll
5-06-7000-80-0	Operating Manual
6-01-6000-74-0	AC Power Supply
6-02-6001-37-0	R-1234yf Tank Adapter
6-02-6001-42-0	Legend R-134a Replacement Hose
6-02-6001-43-0	Legend R-1234yf Replacement Hose
6-02-6001-56-0	Legend R-134a Hose Kit
6-02-6001-57-0	Legend R-1234yf Hose Kit

Appendix B Specifications

Sample Parameters:	Vapor only, oil-free, 500 psig (2 MPa) Maximum
Detected Compounds:	R-134a, R-1234yf, R-12, R-22, HC (Hydrocarbons), Unknown, Air
Sensor Technology:	Non-Dispersive Infrared (NDIR)
Refrigerant Sample Size:	2 grams per sample
Power:	Power Supply: • Input: 90-264VAC, 50-60HZ • Output: 12VDC, 1.6 AMP Built in Lithium Battery:
Operational Temperature:	50 - 120° F (10 - 49° C)

NOTE: "HC" refers to "Hydrocarbons." Hydrocarbons are flammable contaminants such as R290, R600, R600a, R152a, etc.

For local MSA contacts, please visit us at ***MSAsafety.com***

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