

R134a Visual Inspection Sight Glass / R1234yf Visual Inspection Sight Glass

OPERATING INSTRUCTIONS



WARNING

- WEAR GOGGLES!!
- AVOID CONTACT WITH REFRIGERANT

PREPARING THE SIGHT GLASS

When Using Vacuum from a Recycling Machine

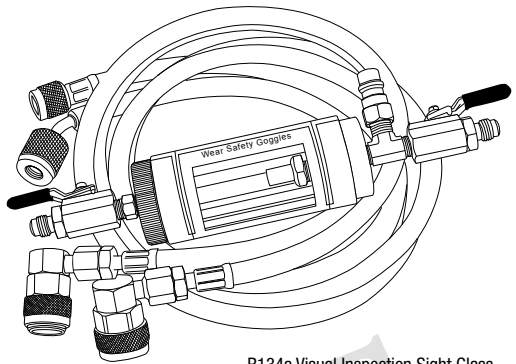
1. Connect both the red and blue hoses supplied to the corresponding end of the sight glass.
2. Connect the blue low side hose and coupler from your RRR machine to the low side fitting on the blue side of the sight glass.
3. Open both ball valves on each side of the sight glass.
4. Run a vacuum for 3 minutes from the control panel on your RRR machine. This will remove any atmosphere from the sight glass to allow for an accurate test.
5. Disconnect the low side RRR machine coupler from the sight glass when vacuum run time is completed.
6. Go to using the sight glass section.

When Using Vacuum from a Vacuum Pump

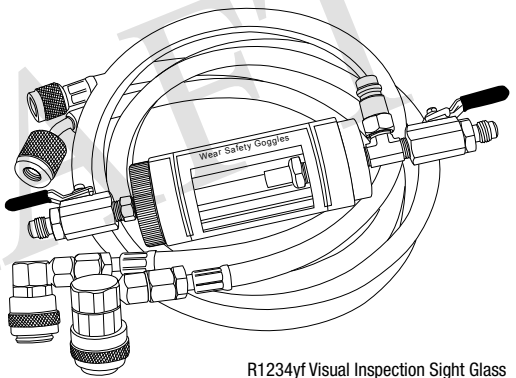
1. Connect the red hose supplied to the red side of the sight glass.
2. Connect the blue hose and blue coupler supplied to the coupler fitting on the blue side of the sight glass.
3. Connect the other end of the blue hose to your vacuum pump.
4. Open the red high side ball valve, leave the blue low side ball valve closed.
5. Run your vacuum pump for 3 minutes. This will remove any atmosphere from the sight glass to allow for an accurate test.
6. Disconnect the blue hose from the vacuum pump when vacuum time is completed. Disconnect the blue coupler from the sight glass. The fittings on the blue hose and coupler both have auto shutoff's which will maintain the vacuum created in the sight glass and hoses.
7. Connect the blue low side hose to the blue side of the sight glass.

USING THE SIGHT GLASS

1. Close both ball valves on the sight glass.
2. Connect the red coupler to the high side of the AC system.
3. Connect the blue coupler to the low side of the AC system.
4. Start the vehicle and turn the AC system on.
5. Hold the sight glass in a vertical position.
6. SLOWLY open the red side ball valve
7. When the sight glass is $\frac{1}{4}$ full of liquid refrigerant, close the red side ball valve.
8. Allow the refrigerant to stabilize.
9. Check the color of the refrigerant using the chart below. Check for any debris in the refrigerant.



R134a Visual Inspection Sight Glass



R1234yf Visual Inspection Sight Glass

CLEARING THE SIGHT GLASS OF REFRIGERANT




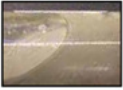


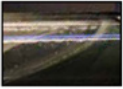



1. To put the refrigerant back into the AC system, first turn off the AC system and vehicle.
2. Remove the high side red coupler from the high side of the vehicle.
3. Turn on the vehicle and the AC system.
4. Open the red high side ball valve on the sight glass.
5. SLOWLY OPEN THE BLUE LOW SIDE BALL VALVE ON THE SIGHT GLASS.
6. Wait for 1 minute after the liquid refrigerant is removed from the sight glass. This allows any refrigerant in the blue hose to enter the AC system.
7. Remove the blue low side coupler.
8. Turn off the AC system and vehicle.

POSSIBLE CONTAMINANTS THAT CAN BE SEEN IN THE INSPECTION GLASS INCLUDE:

CARBONIZED OIL PARTICLES	When oil is exposed to high temperatures
RUBBER PARTICLES	Aggressive acids penetrating rubber parts
MOISTURE	Leaks, incorrect or insufficient vacuum or wrong/inferior quality additives
METAL SLIVER/CHIPS	Compressor seizure or metal parts abrasion
AGGRESSIVE ACIDS	Chemical reaction between moisture and refrigerant/oil or incorrect oil mixtures
VARIOUS PARTICLES	Soiled compounds created from using poor quality or incorrect additives such as leak stop agents, UV dye or oil mixture composites

UNACCEPTABLE CONDITIONS

These conditions when viewed in the inspection glass are an indication of serious system/component issues

 <p>DARK GREEN Excessive UV dye in the system</p>	 <p>RUBBER/PLASTIC COMPOUNDS Aged seals, strong additives reacting with seals and hoses, receiver dryer failure or too much dryer wear</p>
 <p>RED/ORANGE Excessive red leak tracing dye in the system</p>	 <p>BUBBLE/PEARLS Moisture in the system, contamination caused by insufficient quality additives, incorrect vacuum pulled during previous services</p>
 <p>LIGHT BROWN System or compressor subjected to overheating</p>	 <p>GEL-LIKE, CRYSTALLIZED TEXTURE Insufficient quality leak stop agents reacting with refrigerant/oil or UV dye, no/incorrect vacuum pulled before leak stop applications</p>
 <p>DARK BROWN OR BLACK System or compressor subjected to excessive overheating</p>	 <p>CREAM/UNCLEAR TEXTURE Aggressive flushing agent residues reacting with aluminum and teflon coating on the compressor's parts, incorrect flushing and vacuum pulled after flushing</p>
 <p>METAL CHIPS/PARTICLES Compressor seizure caused by oil starvation or incorrect lubrication</p>	 <p>IMBALANCED LIQUIDS MIXTURE Application of universal/incorrect oils, unbalanced, non-homogeneous mixture of various oils</p>

ACCEPTABLE CONDITIONS

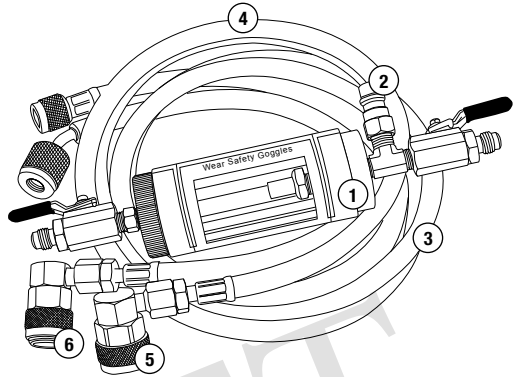
These conditions when viewed in the inspection glass are an indication that no issues are present

 <p>ACCEPTABLE CONDITION Pure mix of refrigerant and lubricant</p>	 <p>ACCEPTABLE CONDITION Appropriate mix of refrigerant, lubricant and UV dye</p>
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PARTS LIST

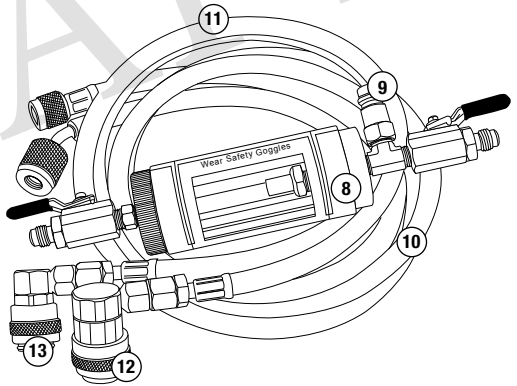
R134a Visual Inspection Site Glass

Item #	Part #	Description
1.	53375	Refrigerant Oil Visual Inspection Sight Glass
2.	82274	Low side, 1/4" (7/16"-20) x 13 mm retrofit adapter
3.	53376-601	60" Blue R134a Charging Hose
4.	53376-603	60" Red R134a Charging Hose
5.	66234	Economy High Side Coupler
6.	66334	Economy Low Side Coupler
7.	53376-PB	Plastic Box (not pictured)



R1234yf Visual Inspection Site Glass

Item #	Part #	Description
8.	53375	Refrigerant Oil Visual Inspection Sight Glass
9.	84274	1/4 fl-f x 17 mm-m R1234yf adapter with valve core
10.	53376-601YF	60" Blue R1234yf Charging Hose
11.	53376-603YF	60" Red R1234yf Charging Hose
12.	67434	R1234yf High Side Quick Coupler
13.	67534	R1234yf Low Side Quick Coupler
14.	53376-PB	Plastic Box (not pictured)



DRAFT

For parts or service contact the service department: 1-888-825-6989

⚠ WARNING: This product can expose you to chemicals including Di (2-ethylhexyl) phthalate, lead and lead compounds, which are 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