

Moisture & Liquid Indicator



Installation Instructions

GENERAL - The YELLOW JACKET Moisture and Liquid Indicator may be installed anywhere in the liquid line. When located between the filter-drier and the expansion device, bubbles indicate a shortage of refrigerant or a restriction in the liquid line such as a plugged drier. **Change the drier when the color is in the caution or wet range.** When received, the indicator may not indicate dry. This in no way affects operation or calibration of the indicator. **The action of the indicator element is completely reversible and will change color whenever the moisture content of the system changes.**

The indicating element may change color rapidly on some installations, while others may take a much longer period of time. New systems or systems where the drier has been replaced will cause the indicator to start changing color almost immediately. However, it is



recommended that the equipment **operate for 12 hours** to allow the system to reach equilibrium before deciding if the drier should be changed.

The drying of the system should be continued until the indicating element stays **dark green**.

The moisture change level of the refrigerant in the Parts Per Million (PPM) for the various YELLOW JACKET Moisture and Liquid Indicator colors is shown in the chart below.

Moisture Content PPM

Indicator Shows	Refrigerant											
	11 & 12		123 & 22		134a		113, 114 & 502		404A & 507		410A	
	Liquid Line Temperature (°F)											
	75°	100°	75°	100°	75°	100°	75°	100°	75°	100°	75°	100°
Green DRY	Below 5	Below 10	Below 30	Below 45	Below 50	Below 80	Below 10	Below 20	Below 15	Below 30	Below 120	Below 75
Chartreuse CAUTION	5-15	10-30	30-90	45-130	50-200	80-225	10-45	20-65	15-90	30-140	120-180	75-150
Yellow WET	Above 15	Above 30	Above 90	Above 130	Above 200	Above 225	Above 45	Above 65	Above 90	Above 140	Above 280	Above 150

For use on refrigeration and/or air conditioning systems only.

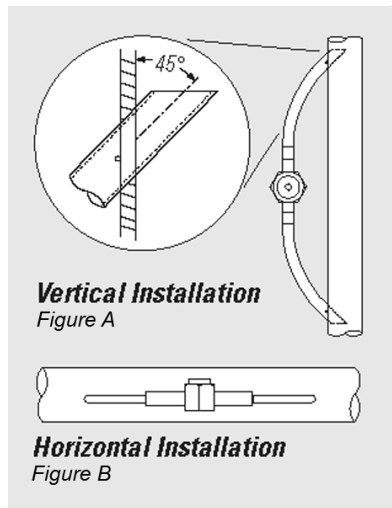
Flaring Technique:

1. Deburr tubing before flaring.
2. Use a drop of oil on the cone of the flaring tool.
3. Place drops of refrigerant oil on the front and back surface of the flare before drawing the nut tight. This allows flare and fitting to mate smoothly.
4. **It is especially important to use oil on joints where both the male and female fittings are plated steel. The oil will prevent galling.**

Application Suggestions:

The YELLOW JACKET Moisture and Liquid Indicator should not be used on systems containing methyl alcohol or similar liquid dehydrating agents unless and oversize filter-drier has been installed previously to remove these additives. Certain colored liquid leak detectors in a system may permanently discolor the moisture indicating element.

On systems containing an excessive amount of water, as a result of a broken condenser or water chiller, do not install the YELLOW JACKET Moisture and Liquid Indicator until the filter drier or the replaceable cores have been changed several times to reduce the initial high moisture content. Liquid water will dissolve and wash away the color indicator material resulting in a light yellow or white color. This type of damage is permanent - the YELLOW JACKET Moisture and Liquid Indicator will no longer change color. If the



indicator paper is damaged, it is preferable to change the YELLOW JACKET Moisture and Liquid Indicator .

Bypass Installation:

The YELLOW JACKET Moisture and Liquid Indicator may be installed in a bypass to the main liquid line when desired - and must be installed in this manner on lines larger than 2-1/8" O.D.

Bypass Installation Kits:

While satisfactory liquid and moisture indication will generally be obtained in any position, preferred methods of installation are shown in Figures A and B.

The YELLOW JACKET Moisture and Liquid Indicator is suitable for use with halocarbon refrigerants, including R-11, 12, 22, 113, 114, 134a, 404A, 407C, 410A, 502 and 507. Listed by Underwriter's Laboratories, Inc. for a working pressure of 650 psig or 4482 kPa.



YELLOW JACKET Products Division
10950 Hampshire Avenue South
Bloomington, MN 55438 USA

Phone: 952-943-1333
Phone: 800-769-8370
Fax: 952-943-1140

e-mail: custserv@ritchengineering.com
Web Site: www.yellowjacket.com