

# The New Ozone Safe R-12 Replacement!

Safe • Reliable • Affordable



Scan this QR Code to watch the Hot Shot 2 Conversion Video on your mobile device!

- Direct Replacement
  - HFC - Ozone Safe
  - ASHRAE Designated R-417C
  - EPA SNAP Listed - Stationary Equipment Only
  - FREE Training Online
- Complete Specifications on Back  
**Field Performance Tested**

*\*2015 - 90% Production Cap on all HCFC Production*

## HOT SHOT2™ REPLACES:



...also replaces R-134a, R-420A, R-416A, R-500, R-414A, 426A & 437A in most applications  
**\*2015 - 90% Production Cap on all HCFC Production.**

For more information or to find a distributor near you, visit [www.icorinternational.com](http://www.icorinternational.com) or call 1-800-497-6805.

For Free Online Training at ICOR's Virtual Training Center, visit [www.icorvtc.com](http://www.icorvtc.com).

**ICOR**  
INTERNATIONAL  
"making your life easier™"

# HOT SHOT2™

## System requirements

- 1 System must be designed for use with R-12, 134a or 500
- 2 System must be designed for a direct expansion metering device, i.e. TEV, cap tube, or fixed orifice
- 3 System should be operating within its design capacity.
- 4 System should be leak free
- 5 Compressor must be charged with lubricant as required by the OEM
- 6 Suction, discharge and liquid piping must be sized, trapped and insulated for systems temperature and BTU design.

## Evaporator Temperature Range

-15 °F to 50 °F

## Oils

MO, AB, POE, PVE and PAG

## Direct Replacement for Refrigerants

12, 134a, 500, 401A/B, 409A, 414B, 416A, 420A, 426A, 437 & 414A in most applications.

## Pre and Post conversion data

- System information must be recorded for warranty.

Go to [www.icorinternational.com](http://www.icorinternational.com) for complete warranty information.

## Flooded systems

Must be approved by ICOR's Technical Support Supervisor

## System charging

**It is always recommended to fully recover any remaining refrigerant prior to charging the system with Hot Shot-2.**

- 1 Initially charge 80% of R-12.  
Do Not exceed 115% of OEM charge
- 2 Remove liquid only from cylinder
- 3 Charge refrigerant in the receiver or high side of the system with the compressor off.
- 4 Run system and add refrigerant if needed to design subcooling. Adjust TEV if needed. Never charge system by clearing sight glass
5. For Fixed Metering Device Systems. Charge by compressor superheat

## Conversion considerations

HOT SHOT2 is compatible with mineral oil, alkyl benzene and polyolester. In most cases no change of lubricant is required. Oil return is determined by a number of operating and design conditions. Minor equipment modifications (e.g. seal replacement, TEV adjustment) may be required.

## Benefits

- No TEV or cap tube replacement
- No oil change to AB or POE
- Can be topped off after leak has been repaired
- Widespread availability

## Applications

- R-12 and 134a low, medium and high temp refrigeration.
  - R-12 and 500 air conditioning
- NOT FOR USE IN MOBILE APPLICATIONS**

## Performance Comparison

- Same as R-12
- Higher than R-134a

EPA Hotline # 800.296.1996

[www.epa.gov](http://www.epa.gov)

## Technical Information

ASHRAE Designation	417C
Environmental Classification	HFC
ASHRAE Standard 34 Safety Classification	A1
EPA/SNAP Accepted (S=Stationary)	S
Ozone Depletion Potential	0
Global Warming Potential	1820
Oil Compatibility	All
Molar Mass lbm/lbmol	103.73
Normal Boiling Point (1 atm, °F)	-26.65
Critical Pressure (psia)	590.85
Critical Temperature (°F)	203.7
Critical Density (lbm/ft <sup>3</sup> )	32.12
Liquid Density (70 °F, lbm/ft <sup>3</sup> )	74.6
Vapor Density (NBP, lbm/ft <sup>3</sup> )	0.2893
Temperature Glide (NBP)	6
Temperature Glide (100 °F)	4
Pounds Per Gallon (70 °F)	9.97
Maximum Moisture (ppm)	10
Maximum Non-Condensables (% vol)	1.5
Maximum High Boiling Impurities (% vol)	0.01
Recommended Maximum Exposure Limits in Air (ppm)	1000
R-125 (% Weight)	19.5
R-134a (% Weight)	78.8
R-600 (% Weight)	1.7

**For further and Technical Assistance, please call our  
ICOR International Technical Support Team  
1-800-497-6805**

Distributed By:

**ICOR**  
INTERNATIONAL  
"making your life easier™"

10640 E. 59th Street  
Indianapolis, IN 46236  
800-497-6805  
[icorinfo@icorinternational.com](mailto:icorinfo@icorinternational.com)