

Best Practices –Preparation

- ▶ Decide on Refrigerant and Oil
 - ▶ Different grades of POE
- ▶ Check Elastomer and Equipment Compatibility
- ▶ Ensure all materials are on-hand
 - ▶ Spare refrigerant
 - ▶ Replacement equipment. What you will need and what you might need.
 - ▶ Refrigerant labels and P-T charts
 - ▶ Refrigerant leak detector



Best Practices – Preparation

- ▶ Record system performance
- ▶ Check existing system for any leaks and repair



Best Practices – Oil change

- ▶ Changing from Mineral Oil to POE
 - ▶ Are there existing oil return issues
 - ▶ What is the existing oil analysis
 - ▶ Measure how much oil is taken out
 - ▶ Check with refrigerant manufacturer number of flushes required.
 - ▶ POE/R22 has different swell characteristics for elastomers. Check system for any leaks.



Best Practices – Leak Reduction

- ▶ Replacing seals and valves will minimize leaks
 - ▶ Receiver sight glass
 - ▶ Receiver isolations
 - ▶ Old ball valves
 - ▶ Repair/replace solenoid valves
 - ▶ Replace any opened seal
- ▶ Use of valve retrofit caps
- ▶ 500 micron vacuum before adding refrigerant



Best Practices – Refrigerant change

- ▶ For 400 series Blends, charge liquid
- ▶ Check for any leaks
- ▶ Set correct superheat and subcool
- ▶ Calculate superheat from Dew Point and Subcool from Bubble Point
- ▶ Use retrofit as an opportunity to set the system up properly to maximize energy performance

