

Zuba-Central Service Course Outline

Course Name: ZAC-O1 Zuba-Central Service & Installation

Prerequisites: None

Credits: Participants will receive an authorized technician badge and number, MEQ dealer status for Zuba-Central and a certificate of successful course completion.

Course Description:

This 1 day course will introduce installers, contractors and service personnel to Zuba-Central's variable speed inverter driven compressor and ducted vertical air handler unit. It will also provide an indebt understanding of the functions and operation of the heat pump system. Information on installation procedures, service and troubleshooting techniques will be covered. Lab sessions will provide hands on training in troubleshooting and diagnostics of electronic and refrigerant circuit. Attendants who have successfully completed the course will be granted Mitsubishi MEQ dealer status for Zuba-Central and recognition as an authorized Zuba-Central installation and service technician.

Learning Outcome:

- Participants will have improved their analytical skills which will help to resolve field problems in a more timely fashion.
- Utilize service manual to obtain troubleshooting information
- Achieve an understanding of correct installation requirements to ensure proper air circulation and correct operation
- Understanding how to read wiring diagrams
- Diagnostic strategies, through fault codes and troubleshooting procedures

Method of Instruction:

Lectures
Class and group discussions
Presentations
Hands on troubleshooting

Text/Class Material:

Service manuals, presentation handouts

Evaluation:

Written test

Course Contents

Zuba Central Installation

AHU

- Basic Clearance
- Air Handling Unit (AHU) Installation Overview
- Electrical connections
- Remote controller wiring
- Installation and connection of temperature sensors
- Duct work
- AHU configuration options
- AHU optional settings

Outdoor Unit

- Basic clearance
 - factors affecting location
- Electrical Connection
 - Electrical Voltage Requirement
 - share power supply
- Piping Limitation
- Additional Refrigerant charge
- Service valve operation
- Vacuum Requirement

Zuba Central Service

Refrigeration System

- Flow Diagram
- Components of refrigeration systems & main functions
- Thermistors & functions

AHU

- Overview of wiring diagram
- Component & functions
- Optional settings & explanation

Outdoor Unit

- Wiring Diagram
- Inverter Control
- Explanation of wiring diagram
- Component & function
- Dip switch settings & explanation

Trouble Shooting

- Self Diagnostic functions
- Self Diagnostic action table (one or two examples)
- Other troubles
- Checking of main components
- Pcb test point diagrams
- Diagnostic Tool
- Monitoring operating data
- PAR-21MA Slim smart functions

Hands On Session

- Disassembly/Reassembly procedures
- Lab session
 - Electronic cct. diagnostics
 - Compressor and inverter diagnostics
 - DC condensing fan diagnostics
 - System operation data
 - Electrical connection diagnostics
 - Refrigerant circuit diagnostics