

SAMSUNG

SPLIT-TYPE AIR CONDITIONER

INDOOR UNIT

OUTDOOR UNIT

Basic : A QV09AWA

A QV12AWA

Model : A QV09AWB

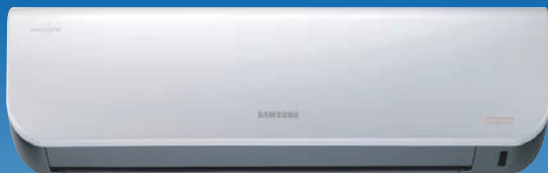
A Q V12AWB

Model Code : A QV09AWBN A QV09AWBX

A QV12AWBN A QV12AWBX

SERVICE *Manual*

AIR CONDITIONER



AQV09AWBN/AQV12AWBN



AQV09AWBX/AQV12AWBX

CONTENTS

1. Precautions
2. Product Specifications
3. Disassembly and Reassembly
4. Troubleshooting
5. Exploded Views and Parts List
6. PCB Diagram and Parts List
7. Wiring Diagram
8. Schematic Diagram
9. Reference Sheet

Refer to the service manual in the GSPN(see the rear cover) for the more information.

Contents

1. Precautions	1-1
1-1 Precautions for the Service	1-1
1-2 Precautions for the Static Electricity and PL	1-1
1-3 Precautions for the Safety	1-2
2. Product Specifications	2-1
2-1 The Feature of Product	2-1
2-1-1 The Feature of Product	2-1
2-1-2 Modified items compared with Basic model	2-2
2-1-3 New components to be applied	2-3
2-1-4. Characteristic of display	2-4
2-2 The Comparative Specifications of Product	2-5
2-3 Accessory and Option Specifications	2-6
2-3-1 Accessories	2-6
2-3-2 Filter	2-8
3. Disassembly and Reassembly	3-1
3-1 Indoor Unit	3-2
3-2 Outdoor Unit	3-6
4. Troubleshooting	4-1
4-1 Setting Option Setup Method	4-1
4-2 Display Error and Check Method	4-4
4-2-1 Display Error mode	4-4
4-3 Fault Diagnosis by Symptom	4-6
4-3-1 Communication error ↔When <i>E 10 1</i> or <i>E 10 2</i> is displayed	4-6
4-3-2 Indoor Temperature Sensor Error↔When <i>E 12 1</i> is displayed	4-7
4-3-3 Indoor Heat Exchanger Temperature Sensor Error↔When <i>E 12 2</i> is displayed	4-8
4-3-4 Indoor Fan Motor Speed Detecting Error↔When <i>E 15 4</i> is displayed	4-9
4-3-5 Outdoor temperature sensor error↔When <i>E 22 1</i> is displayed	4-10
4-3-6 Coil temperature sensor error↔When <i>E 23 7</i> is displayed	4-11
4-3-7 Discharge temperature sensor error↔When <i>E 25 1</i> is displayed	4-12
4-3-8 The Outdoor unit Fan error↔When <i>E 45 8</i> is displayed	4-13
4-3-9 Compressor start error↔When <i>E 46 1</i> is displayed	4-14
4-3-10 O.C.(Over Current) error↔When <i>E 46 4</i> is displayed	4-15
4-3-11 Total current Sensor error↔When <i>E 46 8</i> is displayed	4-16
4-3-12 DC-Link voltage sensor error↔When <i>E 46 9</i> is displayed	4-17
4-3-13 No Power (completely dead)-Initial diagnosis (Not displayed)	4-18
4-3-14 The Outdoor unit power supply error (Not displayed)	4-19
4-3-15 In case of heating at the cooling mode or cooling at the heating mode (Not displayed)	4-20

Contents

4-3-16 When the Up/Down Louver Motor Does Not Operate. (Initial Diagnosis) (Not displayed)	4-22
4-3-17 When the remote control is not receiving	4-23
4-3-18 The others	4-23
4-4 PCB Inspection Method	4-24
4-4-1 Pre-inspection Notices.....	4-24
4-4-2 Inspection Procedure.....	4-24
4-4-3 Indoor Detailed Inspection Procedure	4-24
4-4-4 Outdoor Detailed Inspection Procedure	4-25
4-5 Main Part Inspection Method	4-26
5. Exploded Views and Parts List	5-1
5-1 Indoor Unit	5-1
5-2 Outdoor Unit	5-3
6. PCB Diagram and Parts List	6-1
6-1. Block Diagram	6-1
6-1-1. Indoor MAIN PCB.....	6-1
6-1-2. Indoor MODULE PCB.....	6-2
6-1-3. Indoor DISPLAY PCB	6-2
6-1-4. Outdoor MAIN PCB	6-3
6-1-5. Outdoor EMI PCB.....	6-4
6-2. Electrical Parts List	6-5
7. Wiring Diagram	7-1
8. Schematic Diagram	8-1
8-1.PCB Circuit Description	8-1
8-1-1.Indoor Unit.....	8-1
8-1-2.Display.....	8-3
8-2 Outdoor Unit	8-5
8-2-1.EMI.....	8-7
9. Reference Sheet	9-1
9-1 Refrigerating Cycle Diagram	9-1
9-2 Index for Model Name	9-2
9-3 Distribution chart of the Pressure	9-3