



SPLIT TYPE ROOM AIR
CONDITIONER

WALL MOUNTED type

SERVICE
MANUAL



Models	Indoor unit	Outdoor unit
	ASH9FSBCW	AOH9FSBC
	ASH12FSBCW	AOH12FSBC

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SPECIFICATIONS

TYPE		COOLING	COOLING
INDOOR UNIT		ASH9FSBCW	ASH12FSBCW
OUTDOOR UNIT		AOH9FSBC	AOH12FSBC
COOLING CAPACITY	(kW)	2.75	3.40

ELECTRICAL DATA

POWER SOURCE		230V 50Hz	230V 50Hz
RUNNING CURRENT	(A)	4.7	6.2
INPUT WATTS	(kW)	1.05	1.33
E.E.R	(kW/kW)	2.62	2.56
MOISTURE REMOVAL		1.3	1.8
AIR CIRCULATION-Hi	(m³/hr)	540	540

COMPRESSOR

TYPE		Hermetic type, Permanent split condenser, 2 pole, Single phase, Induction motor	
CODE		80230135 220, 230, 240V / 50Hz	80235035 220-240V / 50Hz
REFRIGERANT R410A	(g)	590	720

FAN MOTOR

POWER SUPPLY		(V)	230	230
INDOOR UNIT	Hi-SPEED	(r.p.m)	1,310	1,310
	MED-SPEED	(r.p.m)	1,190	1,230
	LO-SPEED	(r.p.m)	1,070	1,150
	S-LO	(r.p.m)	960	1,080
OUTDOOR UNIT		(r.p.m)	740	740

DIMENSIONS

INDOOR UNIT	H x W x D	257 x 808 x 187	257 x 808 x 187
OUTDOOR UNIT	(mm)	535 x 695 x 250	535 x 695 x 250

WEIGHT

INDOOR UNIT	GROSS	10 / 8	10 / 8
OUTDOOR UNIT	NET(kg)	33 / 30	35 / 32

NOISE LEVEL

INDOOR UNIT	Hi-SPEED	(dB)	39	39
	MED-SPEED	(dB)	37	37
	LO-SPEED	(dB)	34	35
	S-LO	(dB)	31	33
OUTDOOR UNIT		(dB)	45	46

ADDITIONAL CHARGE OF REFRIGERANT
(ASH9FSBCW / AOH9FSBC)
(ASH12FSBCW / AOH12FSBC)

Refrigerant suitable for a piping length of 7.5 m is charged in the outdoor unit at the factory.

When the piping is longer than 7.5 m, additional charging is necessary.

For the additional amount, see the table below.

PIPE LENGTH	7.5 m	10 m	15 m
ADDITIONAL REFRIGERANT	None	50 g	150 g

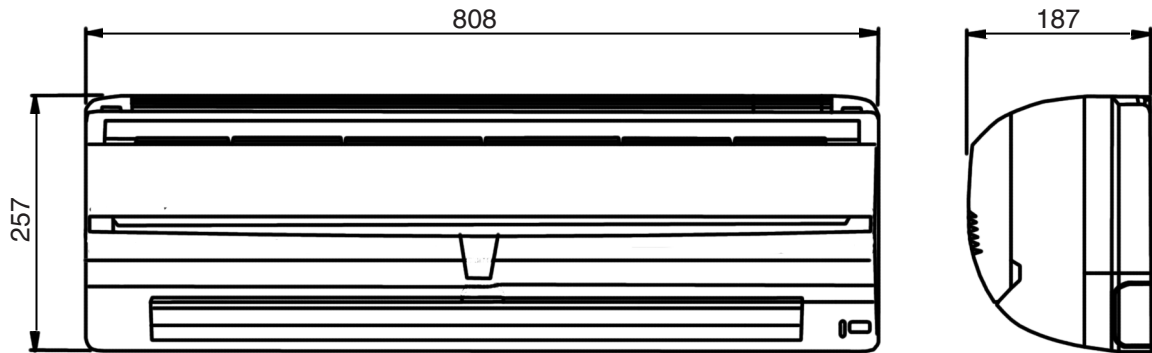
Between 7.5 m and 10 m, when using a connection pipe other than that in the table,
charge additional refrigerant with 20g /1 m as the criteria.

(The maximum length of piping is 15m. If the units are further apart than this, correct
operation can not be guaranteed.)

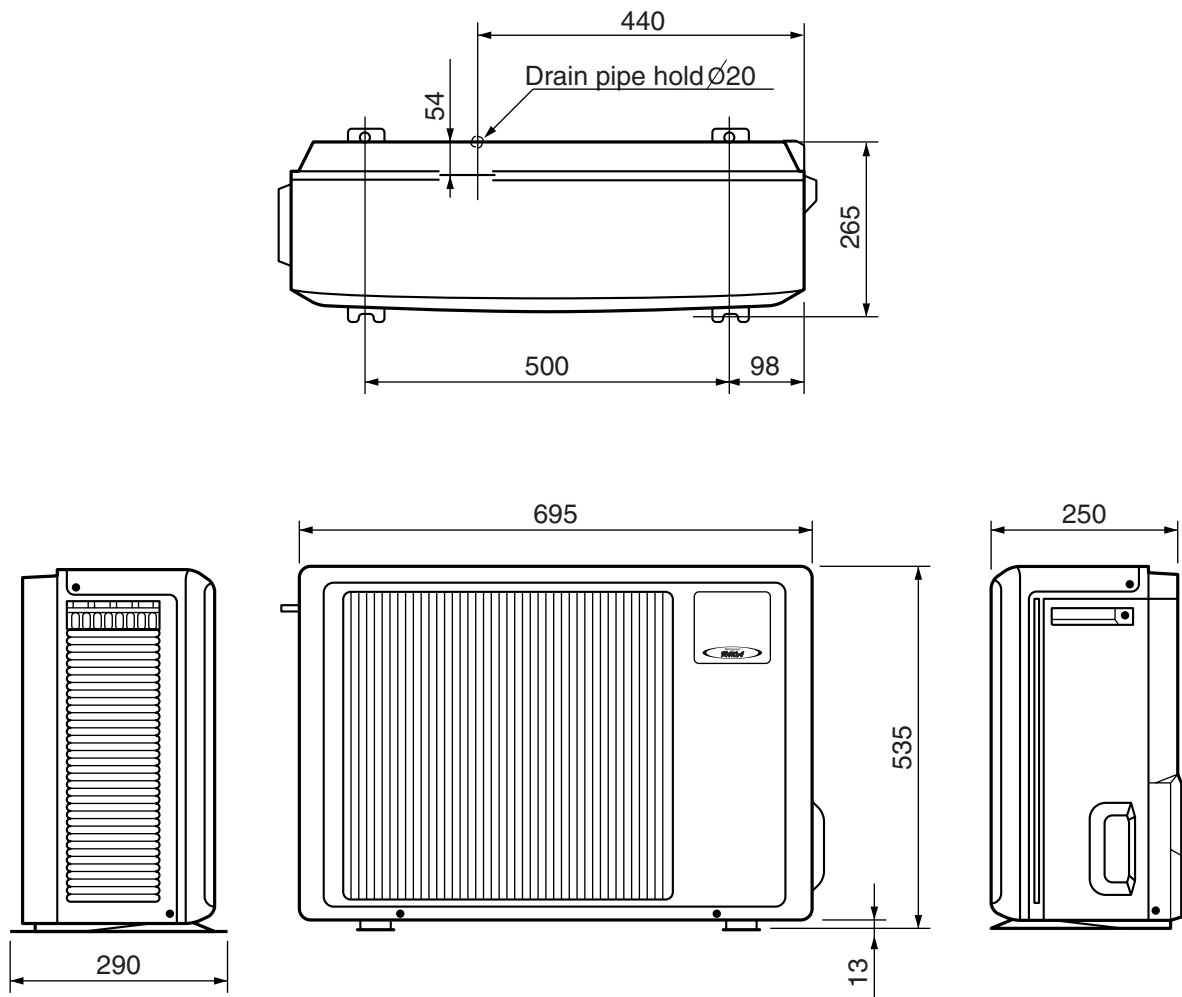
D I M E N S I O N S

INDOOR UNIT

Unit : mm

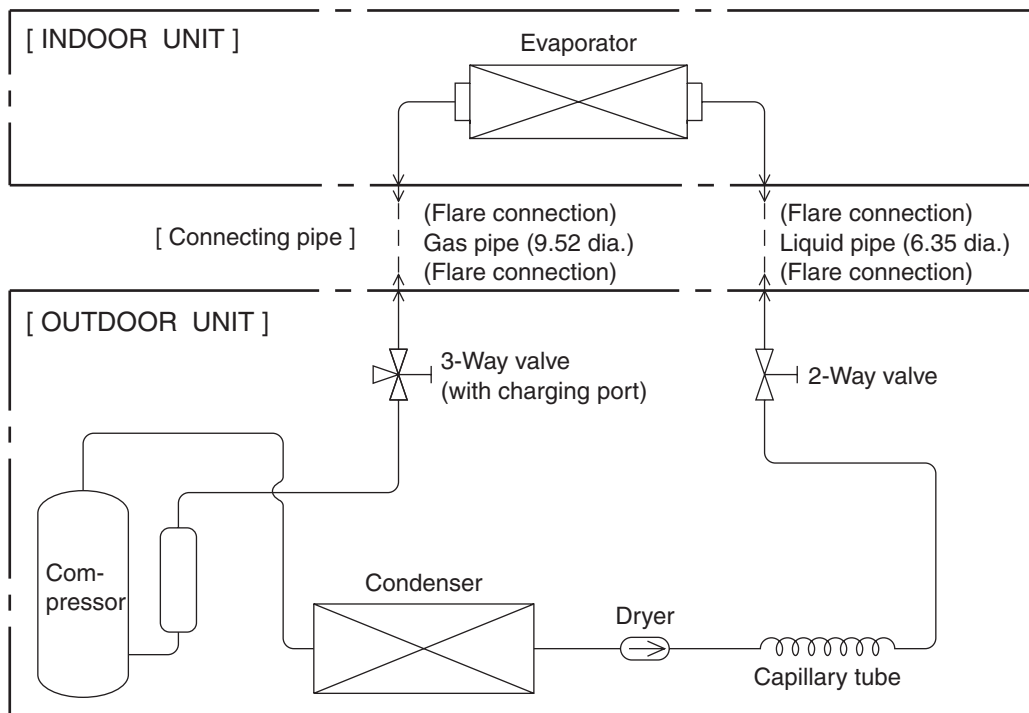


OUTDOOR UNIT

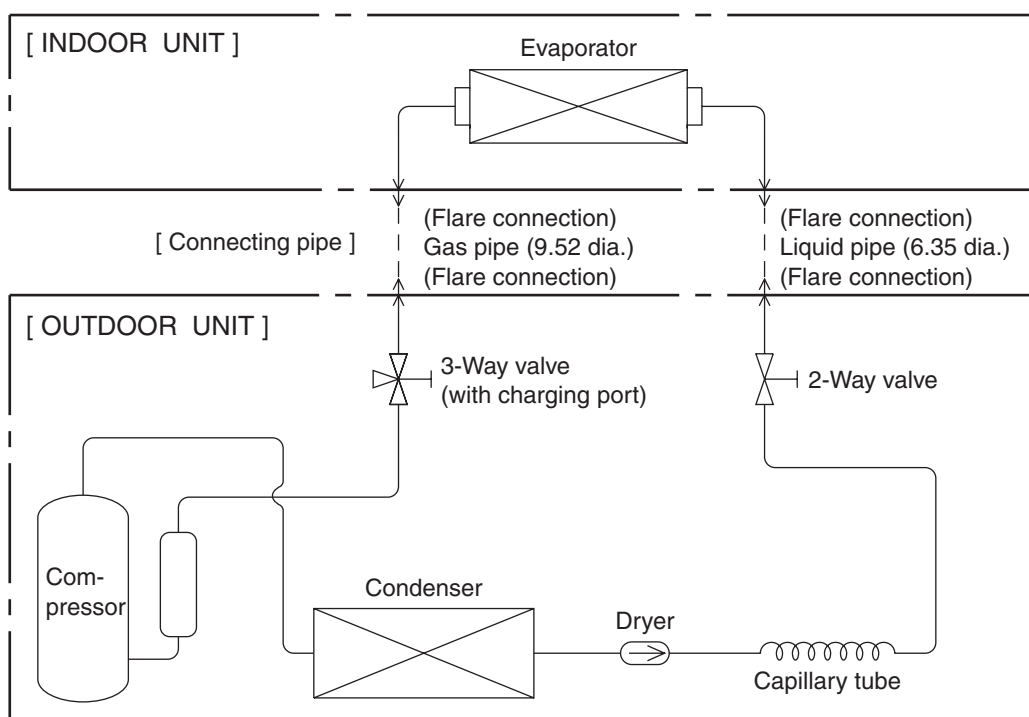


REFRIGERANT SYSTEM DIAGRAM

Models : ASH9FSBCW / AOH9FSBC

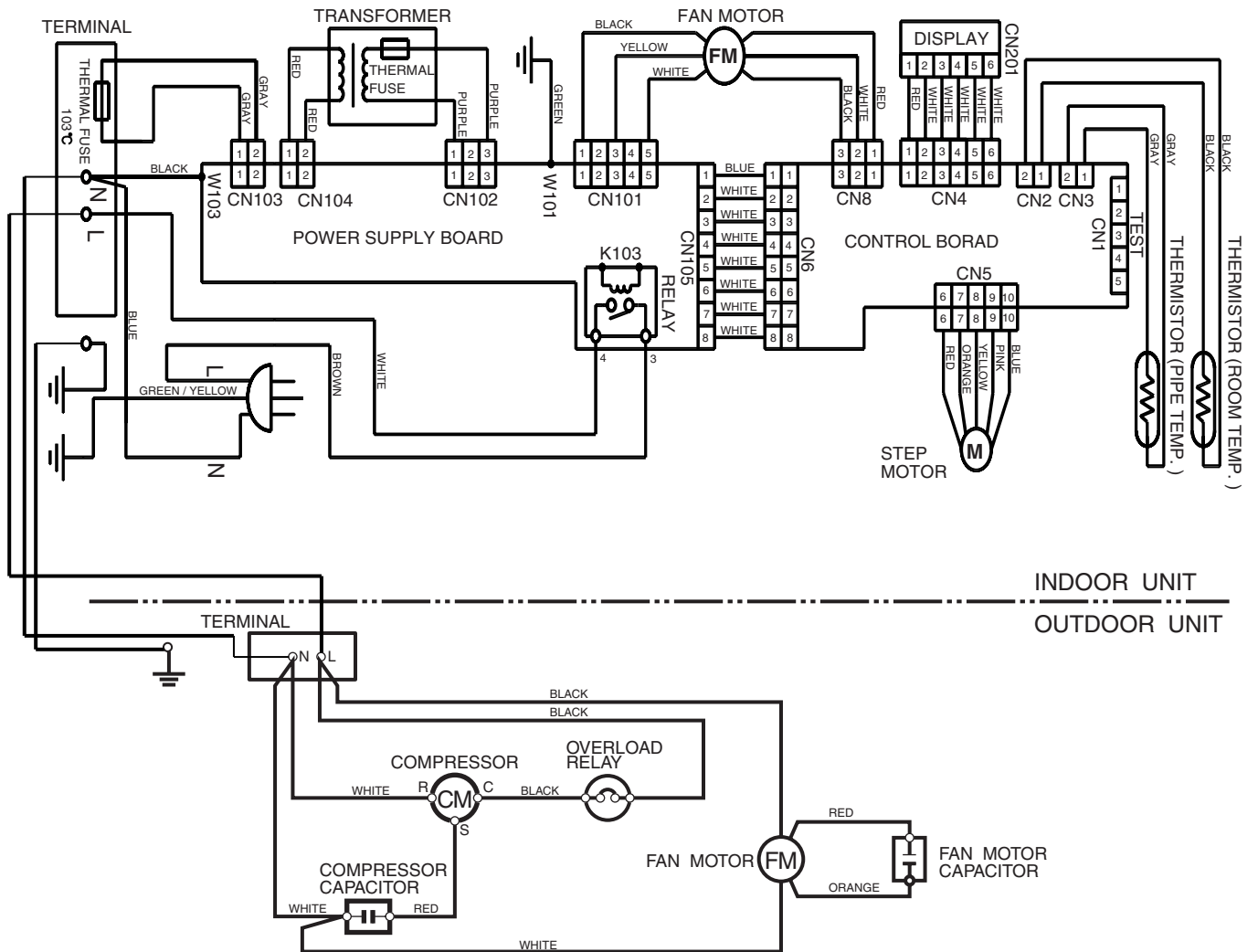


Models : ASH12FSBCW / AOH12FSBC

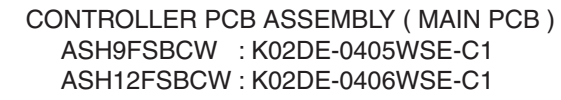


CIRCUIT DIAGRAM

Models : ASH9FSBCW / AOH9FSBC
ASH12FSBCW / AOH12FSBC



INDOOR PRINTED CIRCUIT BOARD CIRCUIT DIAGRAM



ERROR DISPLAY

Troubleshooting check table

Operation lamp : Red lamp
Timer lamp : Green lamp

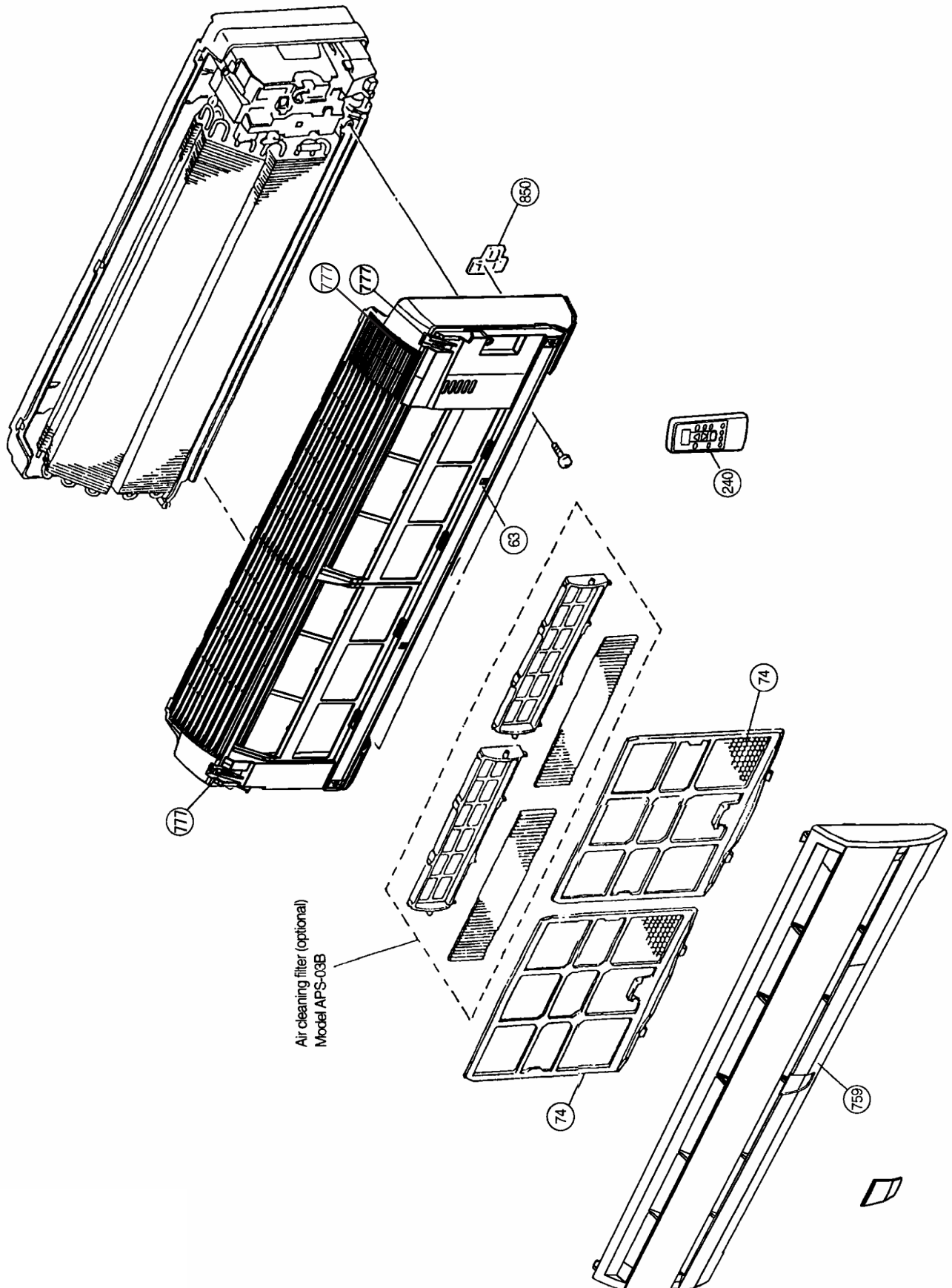
Large division indication			Small division indication		
Error contents	LED indication		Error contents	LED indication	
thermistor error	RED lamp Green lamp	● (2 times) ○	thermistor error (room temp.)	RED lamp	○
				Green lamp	● (2 times)
control unit error (indoor unit)	RED lamp Green lamp	● (4 times) ○	thermistor error (heat exchanger)	RED lamp	○
				Green lamp	● (3 times)
fan motor error (indoor unit)	RED lamp Green lamp	● (6 times) ○	MANUAL AUTO button error	RED lamp	○
				Green lamp	● (2 times)
			power source Hz decision error	RED lamp	○
				Green lamp	● (4 times)
			lock error	RED lamp	○
				Green lamp	● (2 times)
			rpm error	RED lamp	○
				Green lamp	● (3 times)

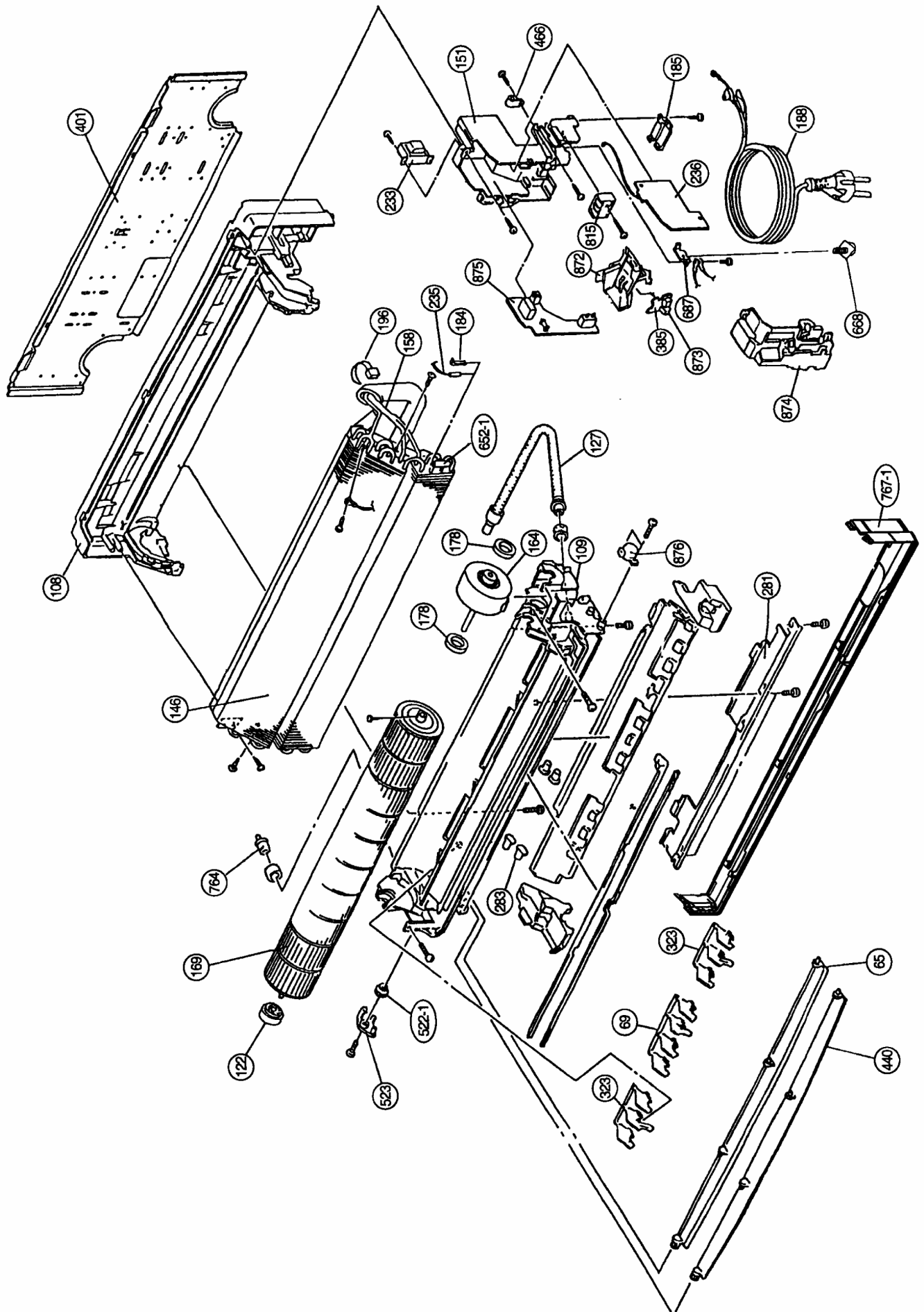
● : 0.5s ON/OFF repeated

○ : 0.1s ON/OFF repeated

DISASSEMBLY ILLUSTRATION

Model : ASH9FSBCW
ASH12FSBCW





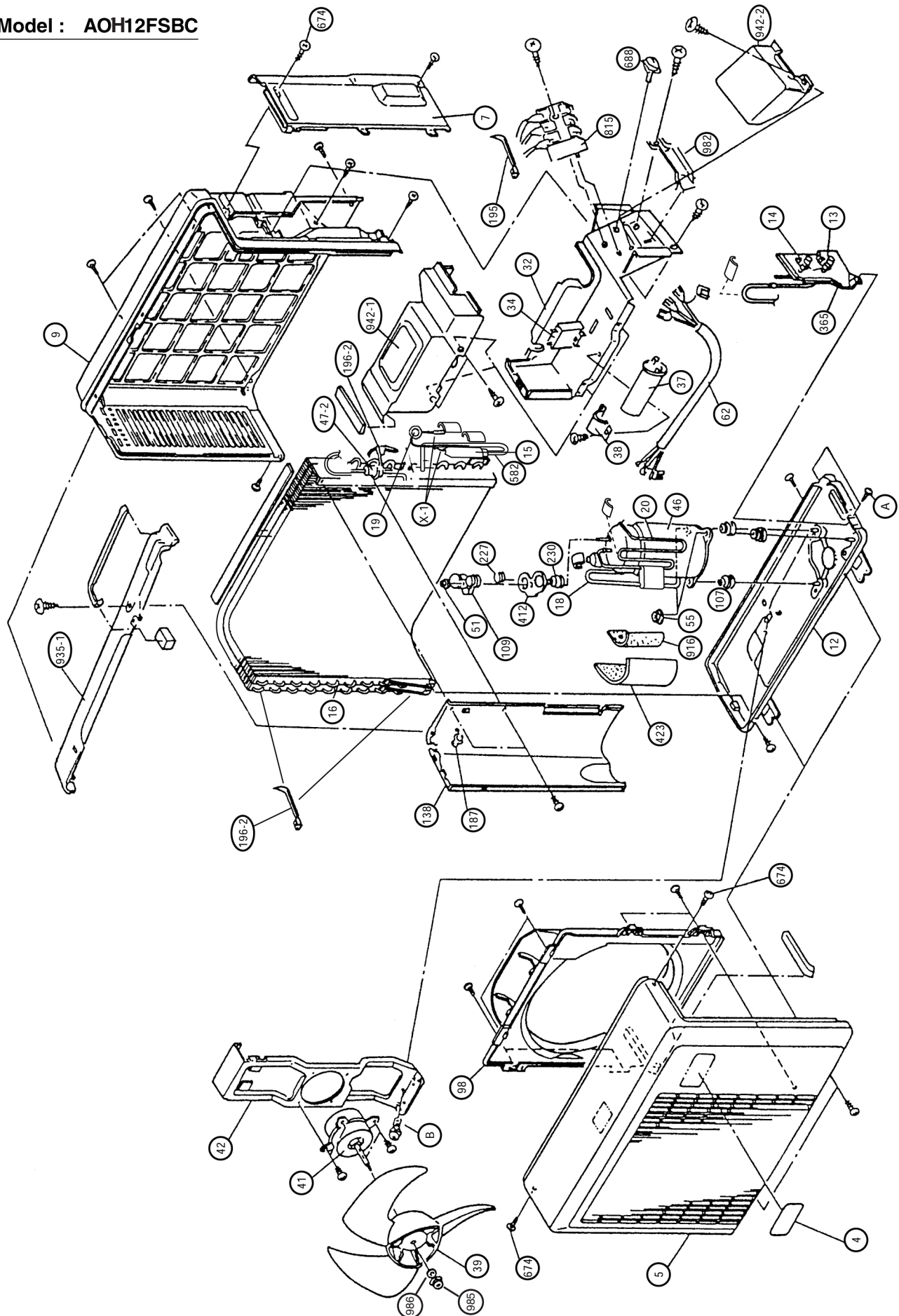
Model : AOH9FSBC

This exploded view diagram illustrates the assembly of the AOH9FSBC air conditioning unit. The components are shown in their relative positions, with dashed lines indicating the assembly paths. Key parts include the indoor unit (top left), the outdoor unit (bottom right), and various intermediate components like the fan motor, compressor, and piping. The diagram is labeled with numerous part numbers and letters (A, B) to identify specific components and their assembly points.

Key components and part numbers visible in the diagram include:

- Indoor Unit: 9, 16, 19, 32, 34, 37, 38, 42, 46, 47-2, 51, 55, 58, 62, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 85

Model : AOH12FSBC



PARTS LIST

INDOOR UNIT

When you order parts, please make a photocopy of this page and fill the number of the parts in the "Order" column.

Ref. No.	Description	Part No.		Ord. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		ASH9FSBCW	ASH12FSBCW				ASH9FSBCW	ASH12FSBCW	
63	Front Panel	9312172085	9312172115		283	Bushing-A	9303529010	9303529010	
65	Flow Control Panel-Z	9306058043	9306058043		323	Louver-B	9306056025	9306056025	
69	Louver-A	9306055028	9306055028		385	Indicator PCB Assy	9706053013	9706053013	
74	Filter	9305444014	9305444014		401	Wall Hook Bracket	9304358008	9304358008	
108	Base	9309755062	9309755062		440	Flow Control Panel-U	9306057046	9306057046	
109	Casing	9306052027	9306052027		466	Clamp NK-4N	313714328805	313714328805	
122	Shaft Holder-B	9303066010	9303066010		522-1	Gear-A	9306062002	9306062002	
127	Drain Hose Assy	9305550029	9305550029		523	Gear Bracket	9306407001	9306407001	
146	Evaporator Assy	9330144019	9330144019		652-1	Thermistor Holder Pipe	313714262805	313714262805	
151	Control Box	9330007017	9330007017		668	Screw w/Washer	313681304205	313681304205	
158	Connecting Pipe Assy	9306416010	9306416010		687	Earth Terminal	9330012011	9330012011	
164	Fan Motor Assy-IN	9601172017	9601172017		759	Intake Grille	9330002012	9330002012	
169	Cross-Flow Fan Assy	9307836015	9307836015		764	Drain Cap Assy	9304150008	9304150008	
178	Motor Cushion-M	9601302018	9601302018		767-1	Bottom Cover-A	9330004016	9330004016	
184	Thermistor Spring	313728262708	313728262708		777	Clamper(Grille)	9306755010	9306755010	
185	Wire Clamp	9330015012	9330015012		815	Terminal	9900040062	9900040062	
188	Power Cord Assy	9702595043	9702595043		850	Window (Receiver)	9330003019	9330003019	
196	Clamp SKB-150	313035356905	313035356905		872	Indicator Case	9330009011	9330009011	
233	Power Transformer	9701803026	9701803026		873	Lamp Cover	9330014015	9330014015	
235	Thermistor Assy-Pipe	9702039059	9702039059		874	Control Box Cover	9330008014	9330008014	
236	Controller PCB Assy	9706046060	9706046077		875	Power Supply PCB Assy	9706051019	9706051019	
240	Remote Control Unit	9312058037	9312058037		876	Step Motor	9900139018	9900139018	

OUTDOOR UNIT

When you order parts, please make a photocopy of this page and fill the number of the parts in the "Order" column.

Ref. No.	Description	Part No.		Ord. Q'ty	Ref. No.	Description	Part No.		Ord. Q'ty
		AOH9FSBC	AOH12FSBC				AOH9FSBC	AOH12FSBC	
4	Emblem-Rear	9308468017	9308468017		196-2	Clamp SKB-3MC	9305335008	9305335008	
5	Cabinet Front Panel, Plastic	9306386016	9306386016		230	Overload Relay	9308430007	9308445001	
7	Connector Cover (Cabinet)	9306119010	9306119010		365	Bracket (Valve)	9306748012	9306748012	
9	Cabinet Rear Panel, Plastic	9306385019	9306385019		412	Terminal Gasket (Comp.)	9351121006	9351121006	
12	Base Assy, Painted	9306118020	9306118020		423	Noise Insulation-B	9308464019	9308464019	
13	3-Way Valve	9310085011	9310085011		582	Outlet Pipe (Cond.)	9312269006	9312270002	
14	2-Way Valve	9310084014	9310084014		674	Tapping Screw (Special)	9307303012	9307303012	
15	Dryer	9312056002	9312056002		688	Screw (with Square Washer)	313681304205	313681304205	
16	Condenser Assy	9308462039	9308463036		815	Terminal-3P	9306489014	9306489014	
18	Suction Pipe	9308675002	9308679000		916	Noise Insulation-G	9306362003	9306362003	
19	Capillary Tube	9308670007	9308668004		935-1	Reinforcement(Cabinet Top)	9305973002	9305973002	
20	Discharge Pipe Assy	9308677006	9308681003		942-1	Control Box Cover-A Metal	9308562012	9308562012	
32	Control Box Metal	9308561015	9308561015		942-2	Control Box Cover-B Metal	9305975006	9305975006	
34	Capacitor (Fan Motor)	9900089023	9900089023		982	Cord Clamp (Plastic, Black)	9302271002	9302271002	
37	Capacitor (Running)	9307588013	9307588013		985	Special Nut w/Washer	9304902003	9304902003	
38	Clamp Metal (Capacitor)	313468061808	313468061808		986	Special Washer	9304903000	9304903000	
39	Propeller Fan	9305538003	9305538003		A	Screw (serrated)	9356802009	9356802009	
41	Fan Motor Assy-Out	9307715013	9307715013		B	Screw (with Spring Washer)	0700179013	0700179013	
42	Bracket (Motor)	9305536016	9305536030		X-1	Connection Pipe (Capillary)	9308667007	9308667007	
46	Compressor Assy	9310112014	9310110010						
47-2	Discharge Pipe Rubber	313185159802	313185159802			BR Sheet 100x120x T5	9305039029	9305039029	
51	Special Nut M5	313199233602	313199233602			BR Sheet 30x120x T7	-----	9305039036	
55	Special Nut M6	313252257701	313252257701			BR Sheet 180x180x T2	9305039067	9305039067	
62	Wire Assy (Shield)-A	9305695027	9305695027			BR Sheet 100x160x T5	9305039074	9305039074	
98	Fan Ring	9305581023	9305581023			BR Sheet 50x160x T3	-----	-----	
107	Rubber Seat-A	9351813017	9351813017			BR Sheet 170x130x T2	9305498062	9305498062	
109	Terminal Cover (Comp.)	9351120009	9351120009			BR Sheet 55 x 135x T2	9305039166	9305039166	
138	Separate Wall Metal	9305971008	9305971008						
187	Clamp No.1219	313361271706	313361271706						
195	Clamp SKB-100	313361275805	313361275805						

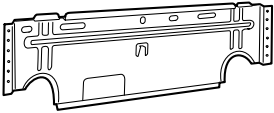
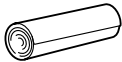
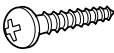
Note : Always use specified screws, since Ref No. 668, A and B are screws for the earth.

Ref No. 668 : Machine screw (with spring washer) M4 x P0.7 x L10, plating thickness 5 or more

A : Tapping screw (with inner clip washer) M4 x L10, plating thickness 5 or more

B : Machine screw (with spring washer) M4 x P0.7 x L10, plating thickness 5 or more

STANDARD ACCESSORIES

Name and Shape	Part No.	
	ASH9FSBCW	ASH12FSBCW
Wall hook bracket 	9304358008	9304358008
Remote control unit 	9312133062	9312133062
Battery (penlight) 	0600185534	0600185534
Cloth tape 	9308117007	9308117007
Tapping screw (4 x 25) 	0700076046	0700076046

