



# REPAIR PARTS

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## GVZC20 Outdoor Inverter Heat Pump

GVZC200241AA

GVZC200361AA

GVZC200481AA



This manual is to be used by qualified technicians only.

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# Important Information

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*Views shown are for parts illustrations only, not servicing procedures*

### Text Codes:

AR - As Required

NA - Not Available

NS - Not Shown

00000000 - See Note

QTY - Quantity Example (QTY 3) (If Quantity not shown, Quantity = 1)

M - Model Example (M1) (If M Code not shown, then part is used on all Models)

### Expanded Model Nomenclature:

Example M1 - Model#1 M2 - Model#2 M3 - Model#3
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Goodman Manufacturing Company, L.P. is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

Warranty service must be performed by an authorized technician, using authorized factory parts. If service is required after the warranty expires, Goodman Manufacturing Company, L.P. also recommends contacting an authorized technician and using authorized factory parts.

Goodman Manufacturing Company, L.P. reserves the right to discontinue, or change at any time, specifications or designs without notice or without incurring obligations.

For assistance within the U.S.A. contact:  
Homeowner Support  
Goodman Manufacturing Company, L.P.  
19001 Kermier Road  
Waller, Texas 77484  
877-254-4729-Telephone  
713-863-2382-Facsimile

For assistance outside the U.S.A. contact:  
International Division  
Goodman Manufacturing Company, L.P.  
19001 Kermier Road  
Waller, Texas 77484  
713-861-2500-Telephone  
713-863-2382-Facsimile

# Functional Parts

## Part

## No: Description:

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0151R00097	3/4" BALL VALVE (M1)
0151R00081	7/8" BALL VALVE (M2, M3)
0151L00020	ACCUMULATOR (M2, M3)
0151L00019	ACCUMULATOR (M1)
0151R00167	BASE VALVE 3/8"
4SA27011-1	CHECK VALVE (M2, M3)
4SA27006-1	CHECK VALVE (M1)
0156R00009	COMPRESSOR 2YC36MXD (M1)
0156R00013	COMPRESSOR 2YC90FXD (M2, M3)
3P356931-1	FAN MOTOR
R3269031-3	FILTER, OIL SEPARATOR
3P381424-2	HIGH PRESSURE SWITCH
3S500031-1	MOTOR OPERATED VALVE BODY (M2, M3)
2P346080-1	NF PCB (M2, M3)
0151R00144	OIL SEPARATOR
0272R01533	PCB ASSY (M1)
0272R01534	PCB ASSY (M2)
0272R01535	PCB ASSY (M3)
3E750074-1	POWER CONDITIONER (M1)
3S481010-1	PRESSURE SENSOR
3S500032-1	PULSE MOTOR EXPANS EEV (M1)
0151R00101	REVERSING VALVE (M2, M3)
0151R00099	REVERSING VALVE (M1)
0130M00692	SHARED DATA (M2)
0130M00691	SHARED DATA (M1)
0130M00693	SHARED DATA (M3)
B1225022	Solenoid Coil
0130M00186	TERMINAL BLOCK
3P381576-1	THERMISTOR AMBIENT
3P381575-1	THERMISTOR ASSY
0130M00187	TRANSFORMER

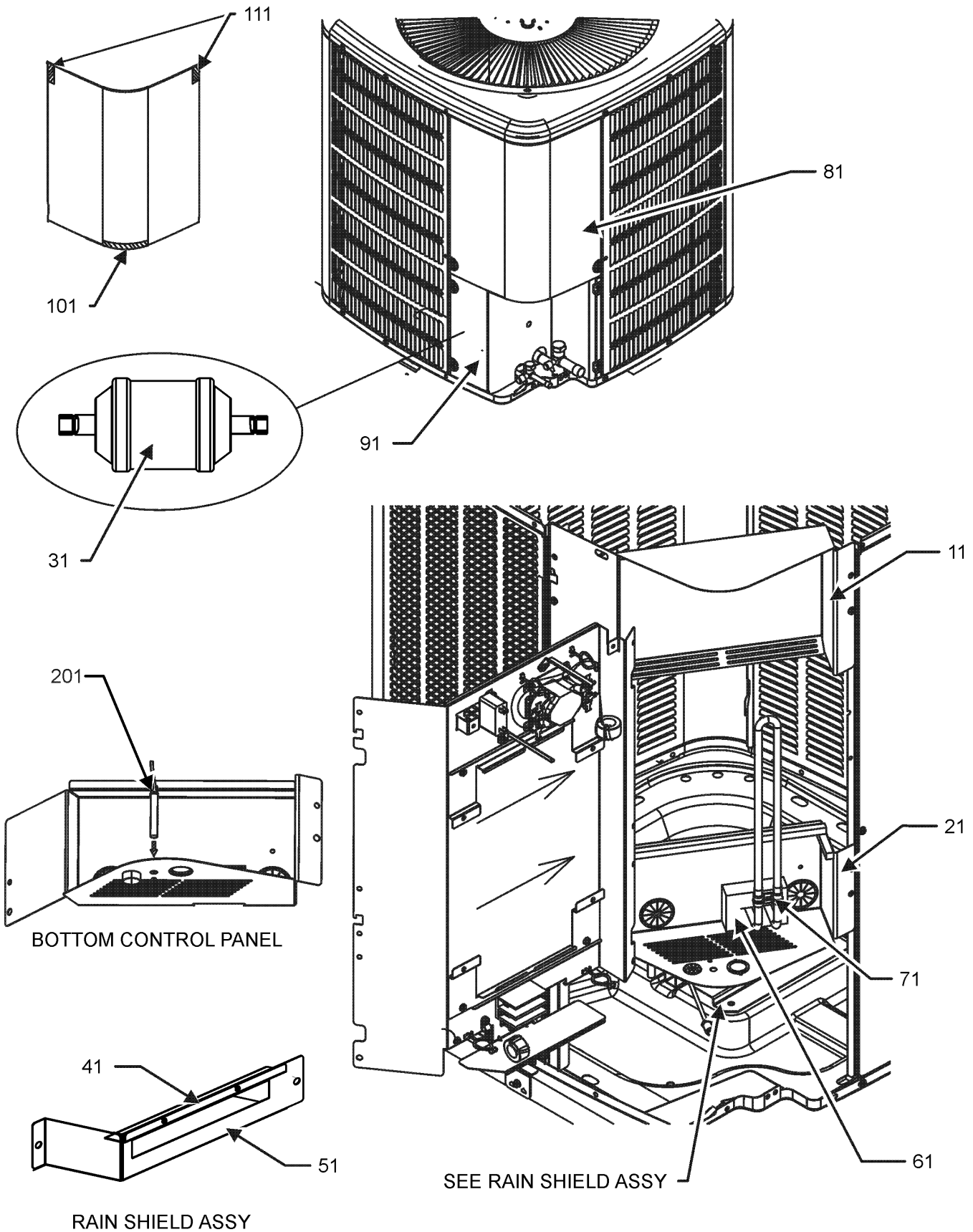
### SPECIAL PARTS

0161R00088	CAP, GRILL
0161R00101	NAMEPLATE, GOODMAN 20S
0361R00000	THERMAL GREASE

### Expanded Model Nomenclature

M1 - GVZC200241AA
M2 - GVZC200361AA
M3 - GVZC200481AA

# Control Box Assembly



# Control Box Assembly

Ref. Part No:	No:	Description:	Ref. Part No:	No:	Description:
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**Image 1:**

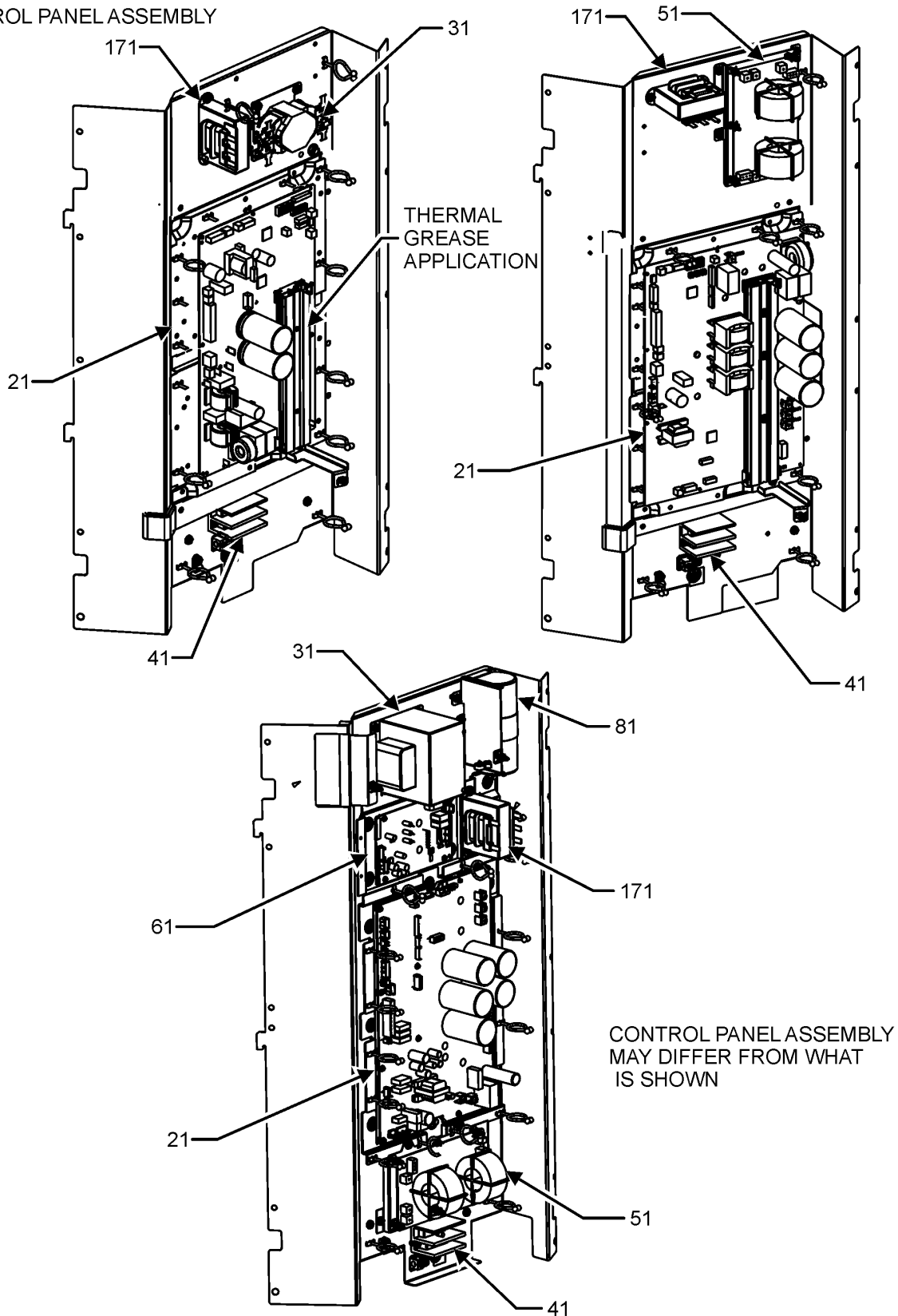
11	0272R01007PDG	TOP CONTROL PANEL ASSY
21	0121R00521PDG	CONTROL PANEL, BOTTOM
31	0162R00056	FILTER/DRIER-BI-FLOW
41	0121R00562	RAIN SHIELD COVER
51	0121R00563	Rain shield bracket
61	0154R00016	GASKET - CONTROL PANEL
71	4P305027-1	COOLING LOOP SEPARATOR
81	0121R00380PDG	CONTROL COVER (M1)
81	0121R00517PDG	CONTROL COVER (M2, M3)
91	0121R00379PDG	PANEL, LOWER ACCESS
101	0154R00023	GASKET, CONTROL PANEL COVER
111	0154R00017	GASKET - CONTROL PANEL (QTY 2)
201	3P381576-1	THERMISTOR AMBIENT
NS	0161R00088	CAP, GRILL
NS	0154R00015	GASKET - TOP CONTROL PANEL (QTY 2)
NS	0161R00101	NAMEPLATE, GOODMAN 20S
NS	0154R00026	GASKET - CONTROL PANEL

**Expanded Model Nomenclature**

M1 - GVZC200241AA
M2 - GVZC200361AA
M3 - GVZC200481AA

# Control Panel Assembly

CONTROL PANEL ASSEMBLY



# Control Panel Assembly

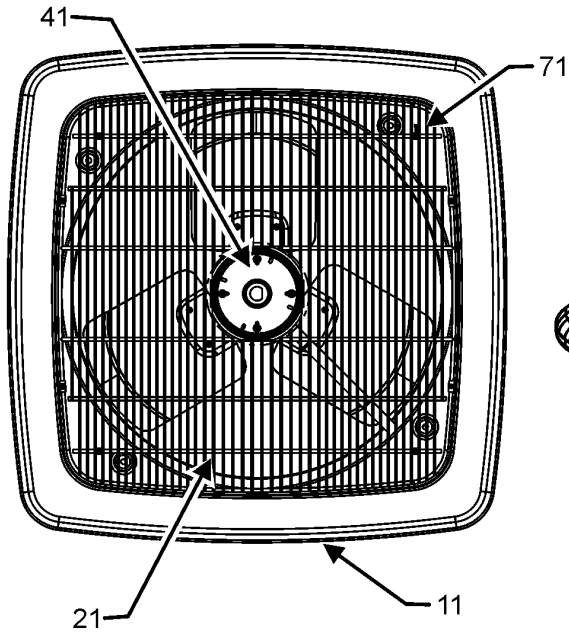
Ref. Part No:	Ref. Part No:	Description:	Description:
<b>Image 1:</b>			
21	0272R01533	PCB ASSY (M1)	
21	0272R01534	PCB ASSY (M2)	
21	0272R01535	PCB ASSY (M3)	
31	3E750074-1	POWER CONDITIONER (M1)	
41	0130M00186	TERMINAL BLOCK	
51	2P346080-1	NF PCB (M2, M3)	
171	0130M00187	TRANSFORMER	
NS	3P263839-1	FERRITE CORE	
NS	0163M00075	FLANGE NUT, SERRATED	
NS	0154R00027	GASKET	
NS	0154R00016	GASKET - CONTROL PANEL	
NS	0154R00018	GASKET - MOUNTING PANEL (QTY 4)	
NS	0154R00019	GASKET - MOUNTING PANEL (QTY 2)	
NS	0163M00092	SCREW, HWH, 10-24X.500,BZ,SLOT	
NS	0130M00691	SHARED DATA (M1)	
NS	0130M00692	SHARED DATA (M2)	
NS	0130M00693	SHARED DATA (M3)	
NS	0361R00000	THERMAL GREASE	
NS	3P381575-1	THERMISTOR ASSY	
NS	0130M00210	WIRE HARNESS (M2, M3)	
NS	0130M00211	WIRE HARNESS (M2, M3)	
NS	0130M00220	WIRE HARNESS (M1)	
NS	0130M00221	WIRE HARNESS (M1)	
NS	0130M00222	WIRE HARNESS (M1)	
NS	0130M00223	WIRE HARNESS	
NS	0130M00227	WIRE HARNESS	
NS	0130M00188	WIRE HARNESS ASSY (M2, M3)	
NS	0130M00194	WIRE HARNESS ASSY (M1)	
NS	0130M00195	WIRE HARNESS ASSY (M2, M3)	
NS	0130M00206	WIRE HARNESS ASSY (M1)	

**Expanded Model Nomenclature**

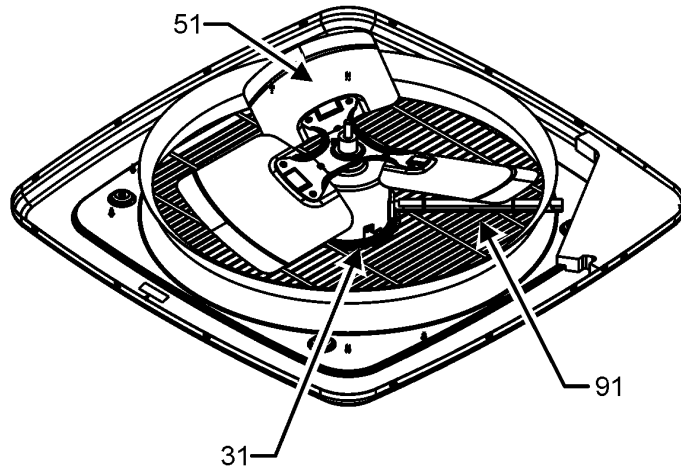
M1 - GVZC200241AA
M2 - GVZC200361AA
M3 - GVZC200481AA

# Top and Side Panel Assembly

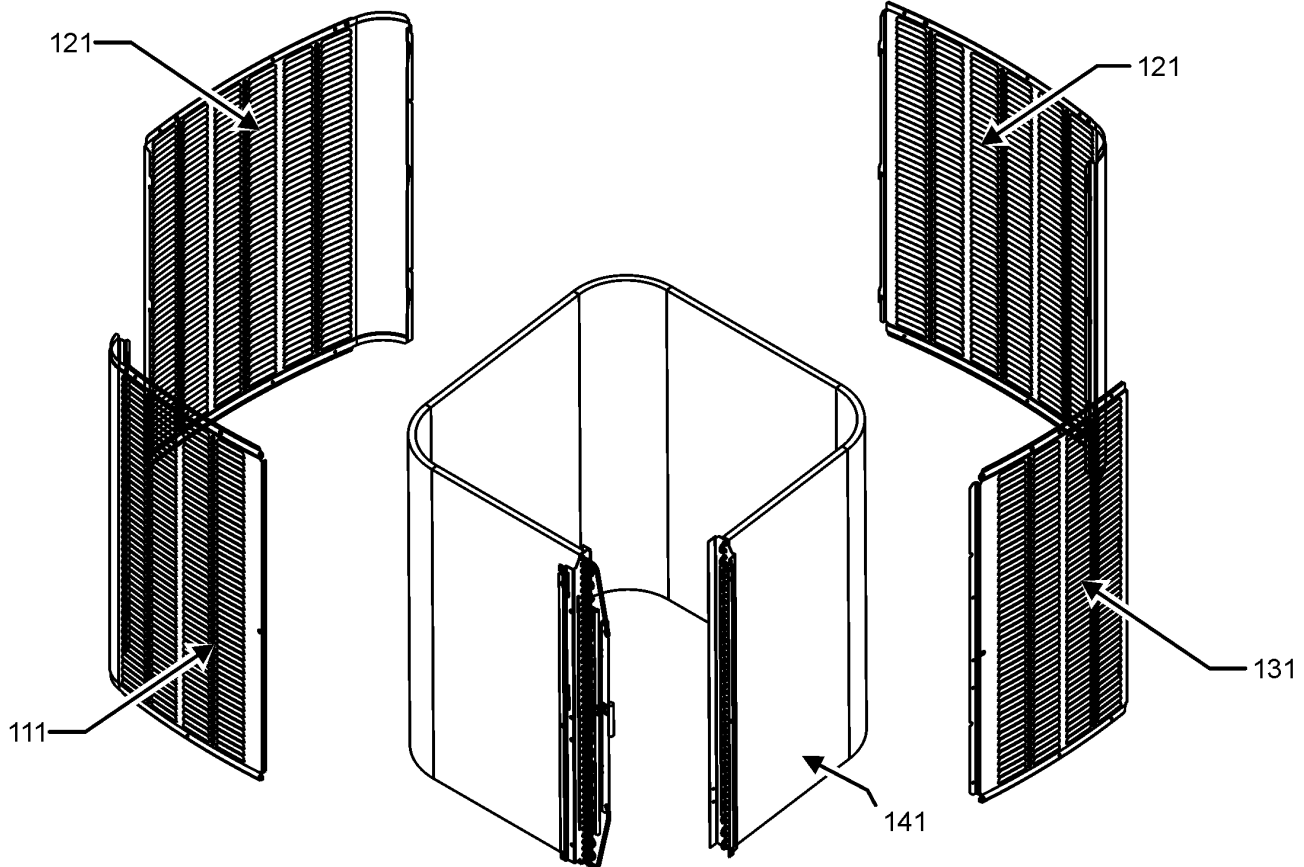
TOP PANEL ASSEMBLY



BOTTOM VIEW



LOUVER PANEL ASSEMBLY





# Top and Side Panel Assembly

Ref. Part

No: No:

Description:

Ref. Part

No: No:

Description:

**Image 1:**

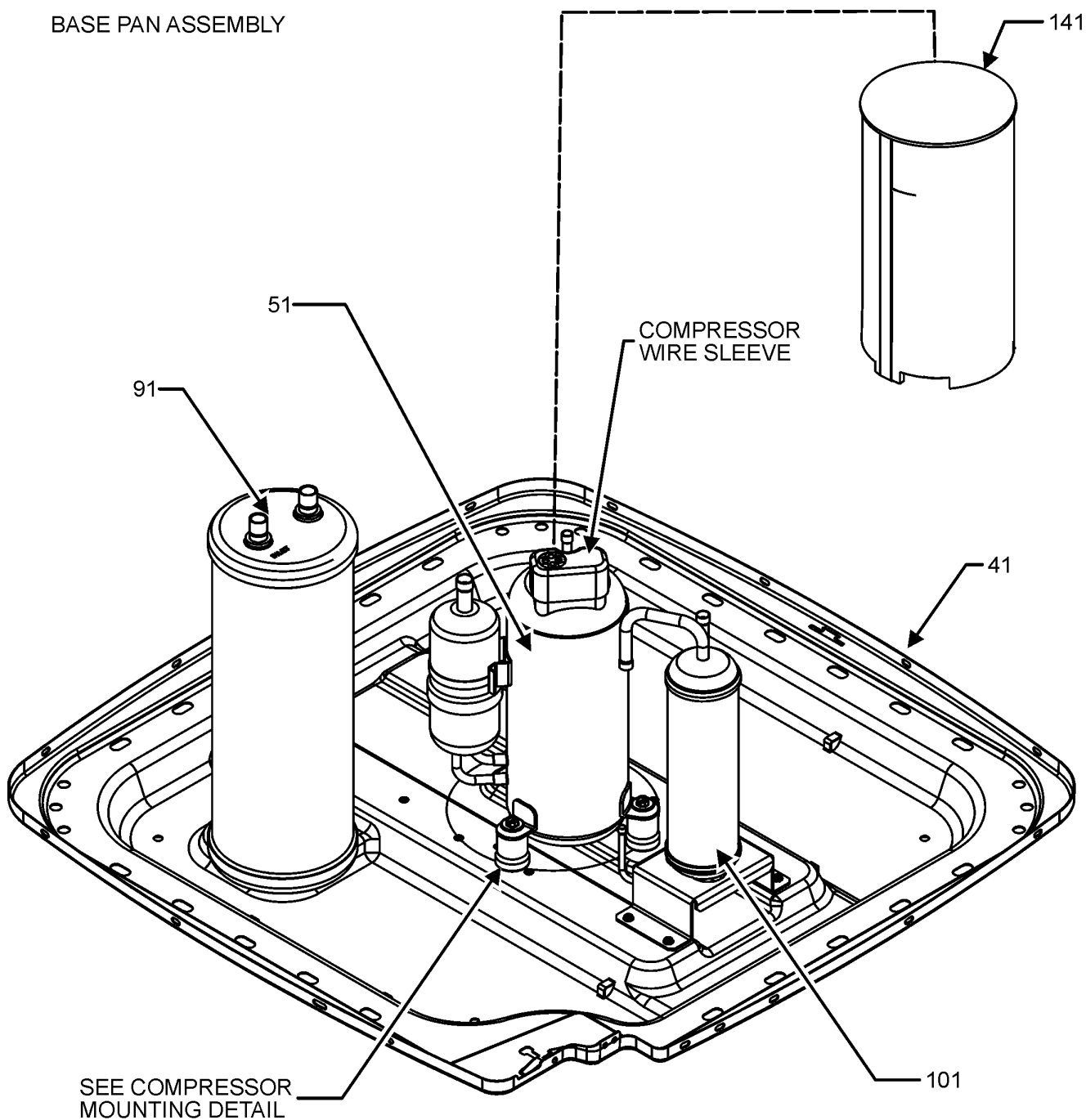
11	0121R00013PDG	PANEL, VENTURI 35"
21	0152R00016	GRILLE, WIRE 35" TOP
31	3P356931-1	FAN MOTOR
41	M0280801	HEX NUT (QTY 4)
51	10625738	FAN BLADE 26" ALUM CCW
71	0163M00003P	SCREW #10 X 1/2, A, SLOT, SR, BLACK (QTY 8)
91	0163M00385	CONDUIT-FLEXIBLE
111	0121R00363DG	PAINTED LOUVER PANEL 1 ASSY (M1)
111	0121R00513DG	PAINTED LOUVER PANEL 1 ASSY (M2, M3)
121	0121R00364DG	PAINTED LOUVER PANEL 2 ASSY (M1)
121	0121R00514DG	PAINTED LOUVER PANEL 2 ASSY (M2, M3)
131	0121R00365DG	PANEL 3, PAINTED LOUVER 35 (M1)
131	0121R00515DG	PANEL 3, PAINTED LOUVER 35 (M2, M3)
141	0201R00505	COIL TBG, 36.38xL, 22mm CTC (M1)
141	0201R00508	COIL TBG, 39.85xL, 22mm CTC (M2, M3)
NS	0121R00480	ADAPTER PLATE (M1)
NS	0121R00482	ADAPTER PLATE (M2, M3)

**Expanded Model Nomenclature**

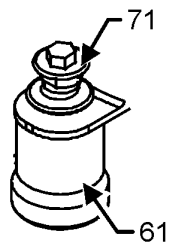
M1 - GVZC200241AA
M2 - GVZC200361AA
M3 - GVZC200481AA

# Base Pan and Compressor Assembly

BASE PAN ASSEMBLY



BASE PAN ASSEMBLY MAY DIFFER FROM WHAT IS SHOWN



COMPRESSOR MOUNTING DETAIL

# Base Pan and Compressor Assembly

Ref. Part No:	No:	Description:	Ref. Part No:	No:	Description:
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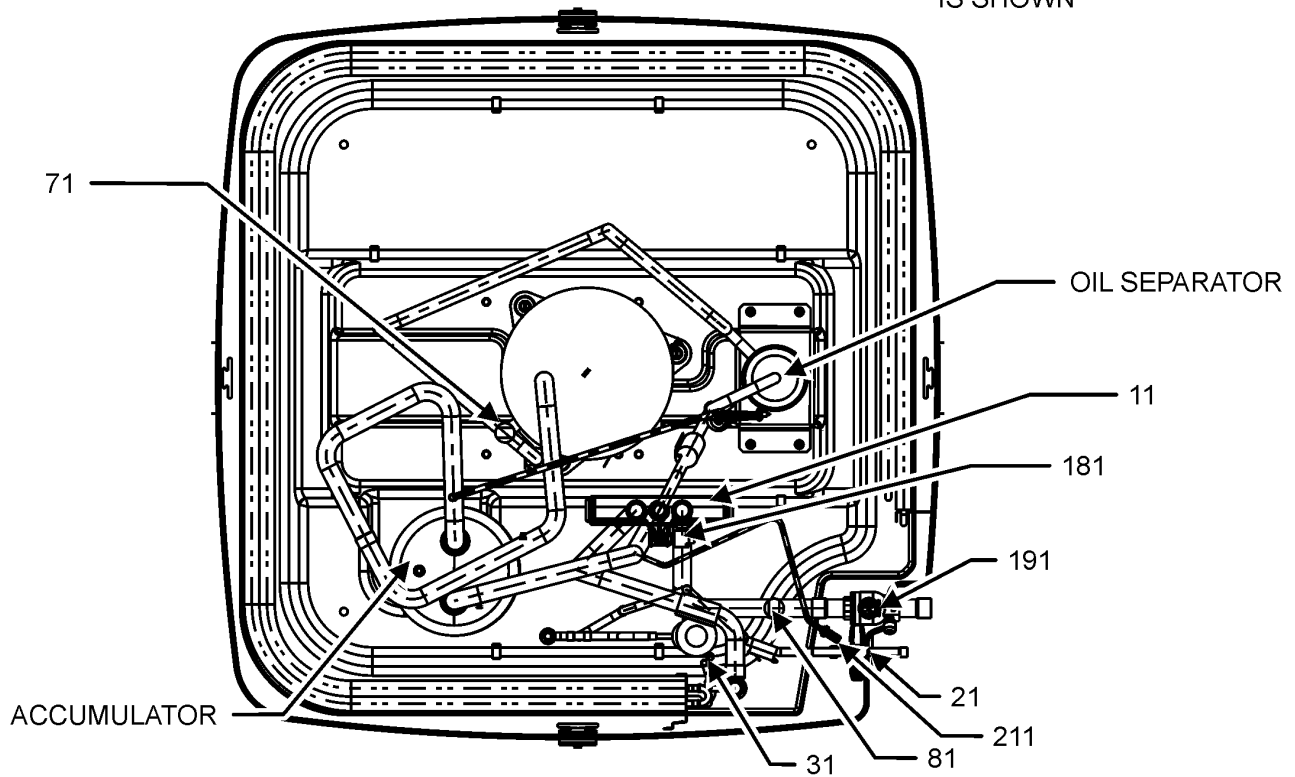
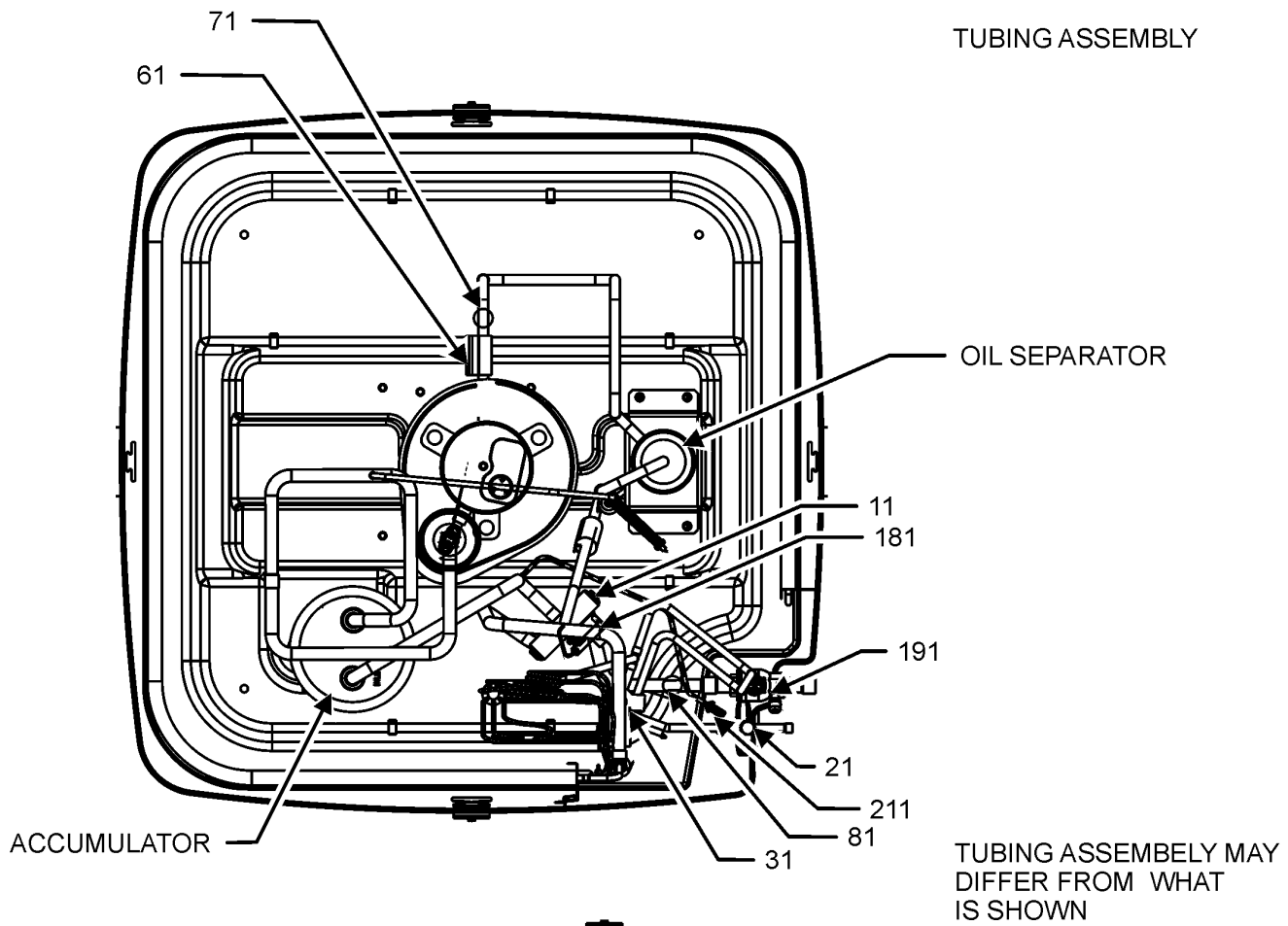
**Image 1:**

41	0121R00007PDG	BASE PAN, 35.5"
51	0156R00009	COMPRESSOR 2YC36MXD (M1)
51	0156R00013	COMPRESSOR 2YC90FXD (M2, M3)
61	0164M00027	RUBBER GROMMET (M2, M3)
61	0164M00028	RUBBER GROMMET (M1)
71	0163R00018	SCREW-SHOULDER TF (M2, M3)
71	0163R00020	SCREW-SHOULDER TF (M1)
91	0151L00019	ACCUMULATOR (M1)
91	0151L00020	ACCUMULATOR (M2, M3)
101	0151R00144	OIL SEPARATOR
141	0160M00007	COMPRESSOR BLANKET (M1)
141	0160M00008	COMPRESSOR BLANKET (M2, M3)
NS	0163R00023	ACCUMULATOR, NUT
NS	0159R00012	COMPRESSOR WIRE HARNESS (M1)
NS	0159R00013	COMPRESSOR WIRE HARNESS (M2, M3)
NS	R3269031-3	FILTER, OIL SEPARATOR

**Expanded Model Nomenclature**

M1 - GVZC200241AA
M2 - GVZC200361AA
M3 - GVZC200481AA

# Tubing Assembly



# Tubing Assembly

Ref. Part No:	No:	Description:	Ref. Part No:	No:	Description:
<b>Image 1:</b>					
11	0151R00099	REVERSING VALVE (M1)			
11	0151R00101	REVERSING VALVE (M2, M3)			
21	0151R00167	BASE VALVE 3/8"			
31	3P381420-1	EV COIL (M2, M3)			
31	3S400083-1	MOTOR OPERATED VALVE COIL (M1)			
61	4PA17856-4	THERMISTOR HOUSING TUBE			
71	3P381424-2	HIGH PRESSURE SWITCH			
81	3S481010-1	PRESSURE SENSOR			
181	0130M00409	REVERSING VALVE CABLE			
191	0151R00097	3/4" BALL VALVE (M1)			
191	0151R00081	7/8" BALL VALVE (M2, M3)			
211	B1787000	VALVE CORE			
NS	4SA27006-1	CHECK VALVE (M1)			
NS	4SA27011-1	CHECK VALVE (M2, M3)			
NS	3S500031-1	MOTOR OPERATED VALVE BODY (M2, M3)			
NS	4PA38890-1	MOUNTING SPRING, THERMISTOR (QTY 4)			
NS	R3269031-7	OIL RETURN FILTER (QTY 2)			
NS	3S500032-1	PULSE MOTOR EXPANS EEV (M1)			
NS	0130M00409	REVERSING VALVE CABLE			
NS	B1225022	Solenoid Coil			
NS	4PA55176-1	WATER PROOF CAP			

## Expanded Model Nomenclature

M1 - GVZC200241AA
M2 - GVZC200361AA
M3 - GVZC200481AA