

**Gas Heating/Electric Cooling,
Electric Cooling and Heat Pump Units
3 to 15 Tons Small Rooftop Units
Louvered Hail Guard Accessory**

Installation Instructions

PART NO. CRLVHLGD004A00, CRLVHLGD011A00-CRLVHLGD016A00,
CRLVHLGD020A00-CRLVHLGD022A00, CRLVHLGD023B00,
CRLVHLGD024A00, CRLVHLGD032A00, CRLVHLGD045A00,
CRLVHLGD046A00-CRLVHLGD048A00

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PACKAGE CONTENTS AND USAGE

Table 1 — Package Contents

QTY	CONTENTS
1	Outside coil side panel
1	Outside coil end panel
1	Control box side panel*
10	Plastic inserts*
Varies based on kit	Screws

*CRLVHLGD024A00 and 032A00.

IMPORTANT: Read entire instructions before installing the accessory.

SAFETY CONSIDERATIONS

Installation and servicing of air-conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install, repair, or service air-conditioning equipment.

Untrained personnel can perform basic maintenance functions of cleaning coils and filters and replacing filters. All other operations should be performed by trained service personnel. When working on air-conditioning equipment, observe precautions in the literature, tags and labels attached to the unit, and other safety precautions that may apply.

Follow all safety codes, including ANSI (American National Standards Institute) Z223.1. Wear safety glasses and work gloves. Use quenching cloth for unbrazing operations. Have fire extinguisher available for all brazing operations.

⚠ WARNING

Electrical shock can cause personal injury and death. Shut off all power to this equipment during installation. There may be more than one disconnect switch. Tag all disconnect locations to alert others not to restore power until work is completed.

Table 2 — Package Usage

HAILGUARD PACKAGE	ROOFTOP UNIT MODEL		
CRLVHLGD004A00	50TCQ08- 12	548J*08- 12	RHS090- 120†
CRLVHLGD011A00	48/50KC*05 (3- Phase) 48/50TC*04 50TCQA04	582J*05/559J*05 (3- Phase) 580J*04/558J*04 548J*04	RGS/RAS036† RGX/RAX048 (3- Phase)† RHS036†
CRLVHLGD012A00	50HCQ 04 48/50KC*04 48/50KC*05 (1- Phase) 48/50TC*05- 06 50KCQ*04 50TCQA05 48LC/50LC*04 48/50HC*04	549J 04 582J*04/559J*04 582J*05/559J*05 (1- Phase) 580J*05- 06/558J*05- 06 547J*04 548J*05 581J*04/551J*04	RGS/RAS048- 060† RHX036† RGX/RAX036† RGX/RAX048 (1- Phase)† RHS048† RHH 036† RGH/RAH036†
CRLVHLGD013A00	50HCQ 05- 06 48/50KC*06 (1- Phase) 50KCQ*05- 06 48/50TC*07 50TCQA07 48/50LC*05- 06 48/50HC*05- 06	549J 05- 06 582J*06/559J*06 (1- Phase) 547J*05- 06 580J*07/558J*07, 548J*07 581J*05- 06/551J*05- 06	RGS/RAS072† RHS072† RGX/RAX060 (1- Phase)† RGH/RAH048- 060† RHH 048- 060, RHX048, 060†
CRLVHLGD014A00	50HCQ 07 48/50TC*A, D 08† 48/50HC*07	549J 07 580J*08†/558J*08† 581J*07/551J*07	RGS/RAS090, 091† RGH/RAH072† RHH 072†
CRLVHLGD015A00	48/50TC*A09†	580J*09(A,C)†/558J*09(A)†	RGS/RAS101†
CRLVHLGD016A00	50HCQ 08- 09 48/50LC*07 48/50TC- D09†, 48/50TC*A,D12†, 48/50TC*D14† 48/50HC*08- 12	549J 08- 09 580J*09(D,F,K,M)†/580J*12†, 580J*14 (D,F,K,M)†/ 558J*09(D,K)† 558J*12†, 558J*14(D,K)† 581J*08- 12/551J*08- 12	RGS/RAS102† RGS/RAS121, 120† RGS/RAS150† RGH/RAH090 102, 120† RHH 090- 102†
CRLVHLGD020A00	48/50TC*D08	580J*08(D,F)/558J*08D	—
CRLVHLGD021A00	48/50TC*D12	580J*12(D,F)/558J*12D	—
CRLVHLGD022A00	48/50TC*D14	580J*14(D,F)/558J*14(D)	—
CRLVHLGD023B00	50TCQA06	548J*06	RHS060†
CRLVHLGD024A00	48/50LC*08 50TCQ14	548J*14	RHS150†
CRLVHLGD032A00	50HCQ12 48/50LC*09- 12 48/50TC*16† 48/50HC*14	549J 12 580J*16†/558J*16† 581J*14/551J*14	RGS/RAS180† RGH/RAH150† RHH 120†
CRLVHLGD045A00	48/50KC*06 (3- Phase)	582J*06/559J*06 (3- Phase)	RGX/RAX060 (3- Phase)†
CRLVHLGD046A00	48/50FC*04 48/50GC*04	582K*04/559K*04 581K*04/551K*04	RAV/RGV036 RAW/RGW036
CRLVHLGD047A00	48/50FC*05 48/50FC*06 48/50GC*06	582K*05/559K*05 582K*06/559K*06 581K*05/551K*05	RAV/RGV048 RAV/RGV060 RAW/RGW048
CRLVHLGD048A00	48/50FC*07 48/50GC*06	582K*07/559K*07 581K*06/551K*06	RAV/RGV072 RAW/RGW060

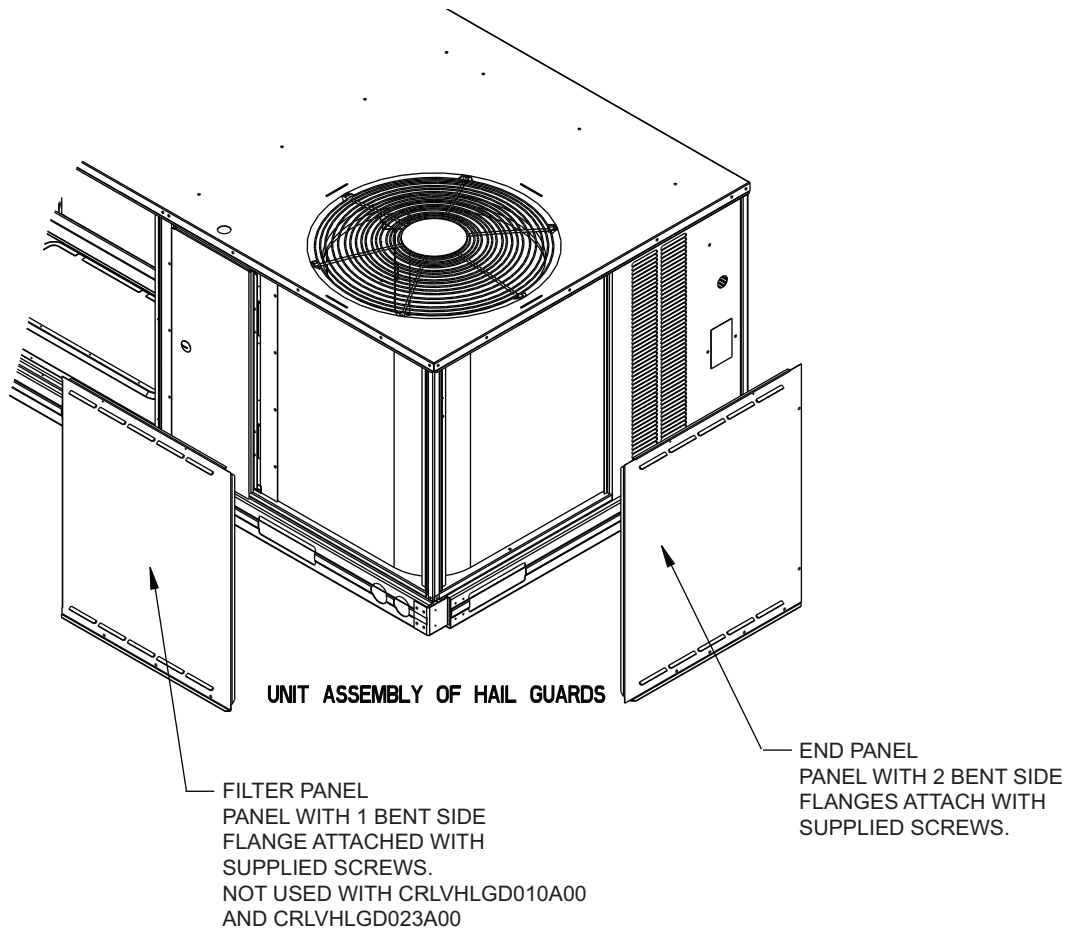
†Round tube plate fin outdoor coil only

GENERAL

Louvered hail guard packages are designed to protect the rooftop unit condenser coil from hail and general contact damage. Excessive damage to rooftop unit outdoor coils can result in diminished performance due to reduced air flow over the heat transfer surfaces.

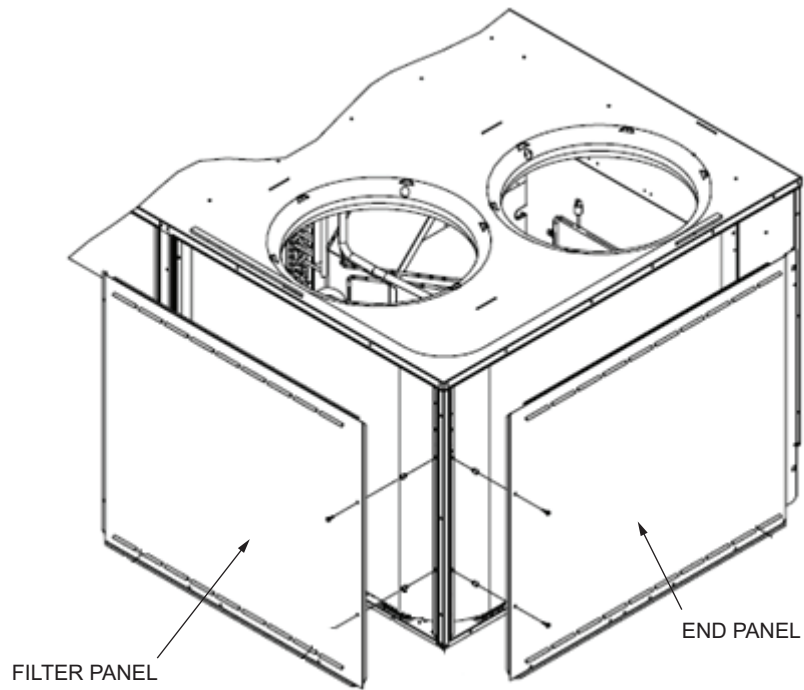
**INSTALLATION
(ALL KITS EXCEPT CRLVHLGD024A00
AND 032A00)**

1. Verify the correct hail guard part number is provided for the desired rooftop unit size. See Package Usage section above.
2. Remove the screws in the top panel of the rooftop unit above the condenser coil. Save the screws.
3. Remove the screws at the base of the outdoor coil where the hail guard panel will be installed. Save the screws.
4. Align the hail guard panel with the respective section of the outdoor coil and insert the top edge of the panel under the lip of the top panel. (See Fig. 1 and 2.)
5. Re-insert top and bottom screws from Steps 2 and 3 to hold the hail guard in place.
6. Insert side screws from the kit through the holes in the side(s) of the hail guard panels. The provided self tapping screws may be required for these screws.



PART NUMBER	FILTER PANEL				END PANEL			
	TOP	LEFT	BOTTOM	RIGHT	TOP	LEFT	BOTTOM	RIGHT
CRLVHLGD004A00	2	0	3	0	3	0	7	6
CRLVHLGD011A00	2	0	3	0	2	0	4	2
CRLVHLGD012A00	2	0	3	0	2	0	5	3
CRLVHLGD013A00	2	0	3	0	2	0	5	3
CRLVHLGD014A00	2	0	3	0	3	0	7	5
CRLVHLGD015A00	2	0	3	0	2	0	5	6
CRLVHLGD016A00	2	0	3	0	3	0	7	6
CRLVHLGD020A00	SEE FIG. 2							
CRLVHLGD021A00	SEE FIG. 2							
CRLVHLGD022A00	SEE FIG. 2							
CRLVHLGD023B00	N/A				2	0	5	2
CRLVHLGD024A00	SEE FIG. 3							
CRLVHLGD045A00	2	0	3	0	3	0	4	2
CRLVHLGD046A00	2	0	3	0	2	0	7	2
CRLVHLGD047A00	2	0	3	0	2	0	9	2
CRLVHLGD048A00	2	0	3	0	2	0	7	2

**Fig. 1 — Typical Louvered Hail Guard Screw Installation
(3-5 Ton Unit Shown)**



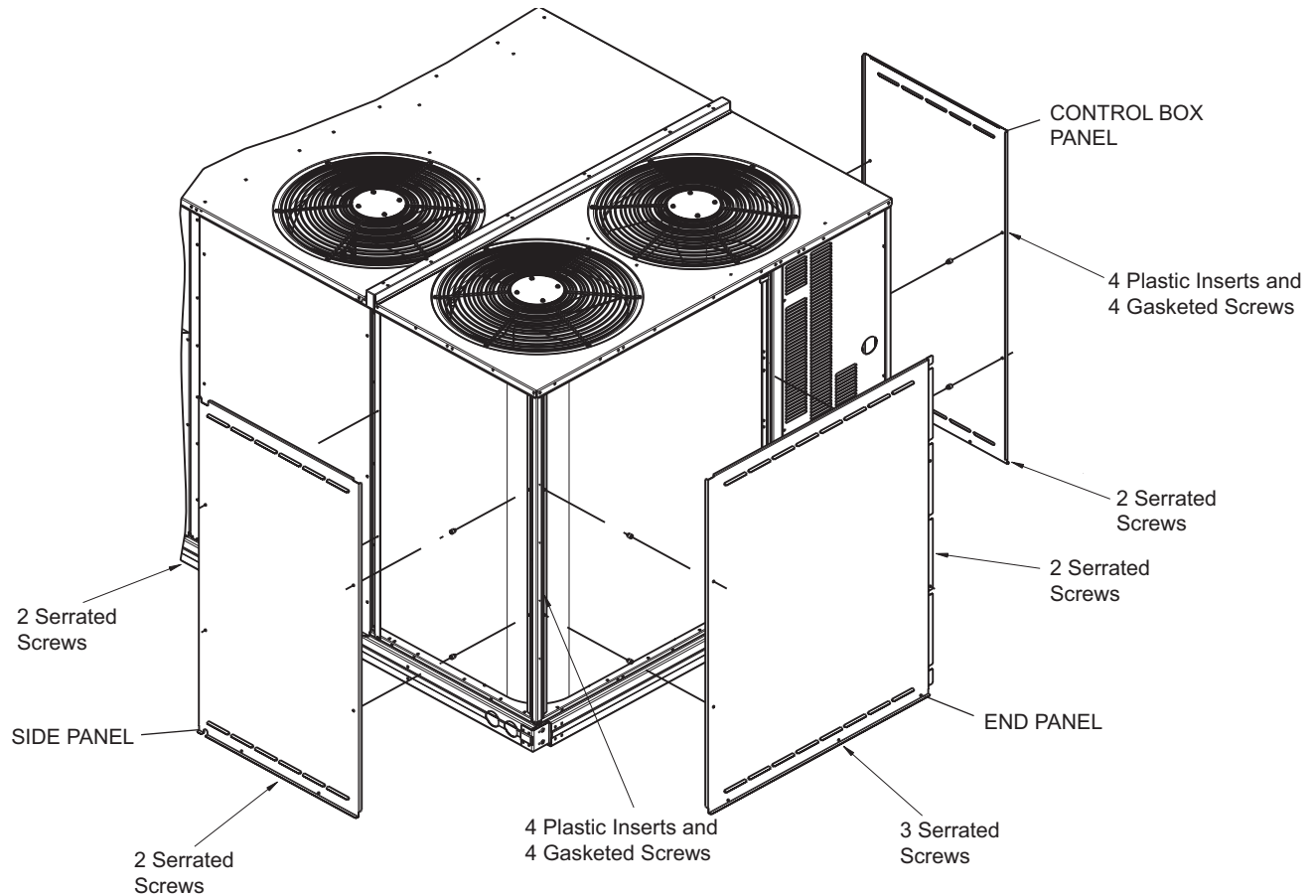
PART NUMBER	FILTER PANEL				END PANEL			
	TOP	LEFT	BOTTOM	RIGHT	TOP	LEFT	BOTTOM	RIGHT
CRLVHLGD020A00	0	4	4	2*	0	2*	7	2
CRLVHLGD021A00	0	7	6	2*	0	2*	7	4
CRLVHLGD022A00	0	3	3	2*	0	2*	7	3

*Plastic inserts and 7/8-in. long gasketed screws.

**Fig. 2 — Louvered Hail Guard Screw Installation
CRLVHLGD020A00, 021A00, and 022A00**

INSTALLATION CRLVHLGD024A00, 032A00

1. Verify the correct hail guard part number is provided for the desired rooftop unit size. See Package Usage section on page 2.
2. The units associated with this hail guard kit are shipped with a center post located on the end of the unit. It should have been removed during unit installation. This post is located approximately 1.5 ft. from the left corner post on the end of the unit. Remove this post if it has not been removed already.
3. Insert plastic inserts into both corner posts (6 inserts) and center post (2 inserts) located by the control box as indicated in Fig. 3.
4. Align the hail guard panel with the respective section of the outdoor coil and insert the top edge of the panel under the lip of the top cover.
5. Use the long $\frac{7}{8}$ in. gasketed screws to secure the hail guard in the plastic inserts (8 locations). Use the shorter serrated screws to secure the panels to the remaining holes in the vertical direction. Use shorter serrated screws to secure the panels along the bottom of the panels.



**Fig. 3 — Louvered Hail Guard Installation,
CRLVHLGD024A00, 032A00**

