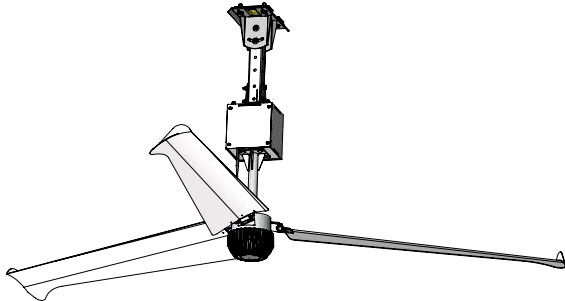
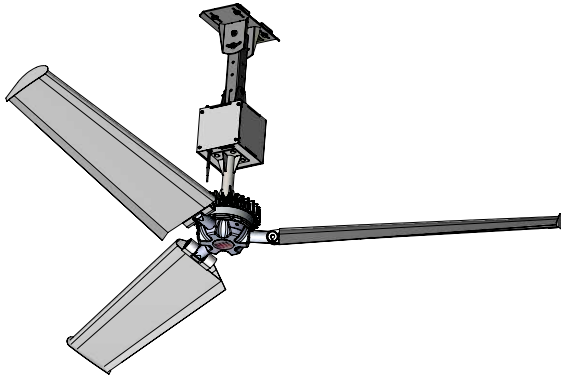


Model: **Revolution 25**



Model: **Revolution 75, 150**



Fan-Commander 2.0

Required to operate the fan(s) (ordered separately).

Use Fan-Commander 2.0 manual with this manual for complete installation and operation instructions.



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NOTICE TO USER

READ AND SAVE THESE INSTRUCTIONS.

Thank you for purchasing a Rite-Hite product.

The Revolution 25, 75, and 150 Series fans are high-volume/low-speed (HVLS) direct drive fans.

Read and understand manual prior to installation or operation of this equipment.

The English version of this manual shall prevail over any error in, or conflicting interpretation of, any translations.

Rite-Hite reserves the right to substitute and/or modify parts and drawings. If separate prints are included with the unit, they supersede those contained in the manual.

For best results, have this product serviced by an authorized Rite-Hite representative.

A Planned Maintenance Program (P.M.P.), customized to your specific operation is available and recommended. For a P.M.P., contact your local Rite-Hite representative or Rite-Hite technical support at (U.S.) 888-456-3625, (S.A.) +55 21 99616 4421, (E.U.) +49-5693 98700.

The Rite-Hite® products in this manual are covered by one or more of the following U.S. patents: 7658232, 8622712, 8142156, D631536, 7726945 and may be covered by additional pending U.S. and foreign patent applications.

Manufactured by Rite-Hite Engineered Solutions Group, Inc.

FCC Compliance

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NOTE: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Contains FCC ID: MCQ-XB900HP

Contains IC: 1846A-XB900HP

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesirable operation.

SAFETY

Safety Identifications

DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

Indique une situation dangereuse qui, si elle n'est pas évitée, peut entraîner la mort ou de graves blessures.

WARNING/AVERTISSEMENT

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

Indique une situation dangereuse qui, si elle n'est pas évitée, peut entraîner la mort ou des blessures graves.

CAUTION/ATTENTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Indique une situation dangereuse qui, si elle n'est pas évitée, peut entraîner des blessures légères à modérées.

NOTICE

Indicates a situation which can cause damage to the equipment, personal property and/or the environment, or cause the equipment to operate improperly.

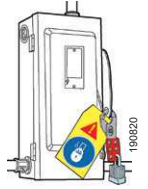
NOTE: A note is used to inform you of important installation, operation, or maintenance information.

Lockout Procedure

Barricade work area and post safety warnings.

Power supply and control must:

- Be disconnected or locked in OFF position using a lockout device approved by local codes.
 - Have signage that;
 - Clearly states repairs are being made.
 - Identifies person responsible for lockout condition.
- NOTE:** Only this person should be able to remove warnings and lockout device.
- Withstands environmental conditions (weather, wet, and damp, etc.) and remains readable.



SAFETY

General

DANGER

Installation to be completed in accordance with the National Electric Code, ANSI/NFPA 70-1999, and local codes.

L'installation doit être effectuée conformément au Code national de l'électricité, à la norme ANSI/NFPA 70-1999, et aux codes locaux.

DANGER

A qualified electrician should install the wiring in accordance with local electrical codes.

Use lockout procedures to prevent death or severe personal injury.

L'installation du câblage doit être effectuée par un électricien qualifié, conformément aux normes électriques nationales et locales.

Afin de réduire le risque de blessures graves ou mortelles, utilisez des procédures de verrouillage.

WARNING/AVERTISSEMENT

Only install Rite-Hite fans when the mounting framework of the building is constructed soundly (without defects) and capable of supporting the loads of the fan and its installation requirements.

Verification of the building's strength and stability is the sole responsibility of the customer and/or end user. Consult a structural engineer prior to fan installation.

N'installez les ventilateurs Rite-Hite que lorsque le cadre de montage du bâtiment est bien construit (sans défauts) et capable de supporter les charges du ventilateur et ses exigences d'installation.

La vérification de la solidité et de la stabilité du bâtiment est de la seule responsabilité du client et/ou de l'utilisateur final. Consulter un ingénieur en structure avant l'installation du ventilateur.

WARNING/AVERTISSEMENT

Rotating fan blades can cause serious injury.

Les lames rotatif du ventilateur peut causer des blessures graves.

CAUTION/ATTENTION

Barricade the work area during installation or maintenance.

Barricader la zone de travail pendant l'installation ou l'entretien.

NOTICE

Only use materials and hardware supplied with the fan. Rite-Hite expressly disclaims any liability arising from the use of any materials or hardware other than those supplied or recommended by Rite-Hite. Contact your Rite-Hite Representative to verify hardware specifications as required.

INSTALLATION

Preparation

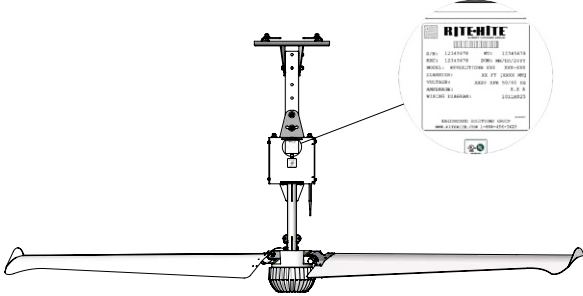
! WARNING/AVERTISSEMENT

Mount directly to a structural framing member to reduce risk of fire, electric shock or injury.

Monter directement sur un membre de charpente pour réduire les risques d'incendie, d'électrocution ou de blessure.

NOTICE

When more than one fan diameter or voltage is ordered, the specification label must be used to match the correct fan blades and power cords to their respective installed locations.



Fans ship with the motor, extension tube, and enclosure fully assembled and wired with a plug. Each assembly also includes an internally installed safety cable.

The enclosure includes brackets required to mount to a beam (steel or laminated), an open-web steel joist, or a purlin.

Remove the zip tie holding the antenna to the extension tube.

Required Tools

Revolution 25, 75, 150	
2	3/4 in wrenches (1 can be socket/driver)
1	Vice grip
1	Phillips screwdriver
1	Bubble level
1	1/4 in cable cutter
≥1	Cleaning towel(s)
Revolution 25 Only	
1	Torque wrench, minimum 74 ft-lb (102 Nm)
1	1-1/4 in socket
1	1-1/16 in wrench
1	3/16 in Allen wrench
Revolution 75,150 Only	
1	Torque wrench, minimum 200 ft-lb (270 Nm) 1/2 in drive
1	1/2 in wrench or socket/driver
1	1/2 in to 3/4 in socket adapter
1	1/2 in socket extender
1	9/16 in wrench or socket/driver

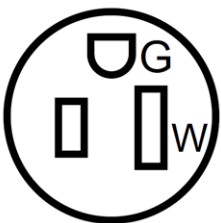


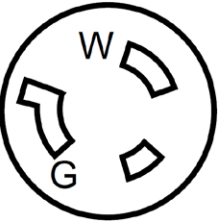
INSTALLATION

Preparation *Continued*

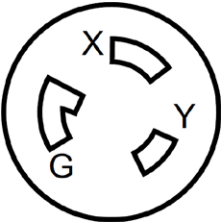

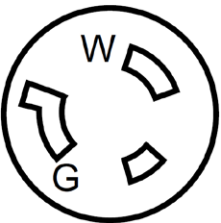

Each fan assembly includes a NEMA plug on a 5 ft cord. Before installing, ensure that a mating receptacle is available in the ceiling near the installation location.

The type of receptacle required is dependent on the ordered voltage:

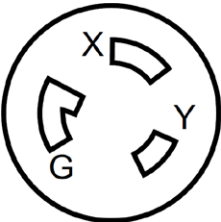
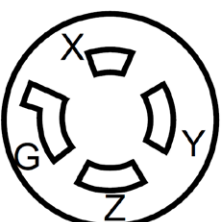

Revolution 25 Series

Supply Voltage	100-120V 1Φ	200-240V 1Φ	200-240V 3Φ	277V 1Φ
	NEMA 5-15	NEMA 6-20	NEMA 15-20	NEMA 7-20
Plug Type				
Fan F.L.A.	8.7	6.6	3.2	4.8
Maximum number of fans recommended per branch circuit:				
20A Circuit	1	2	5	3

Revolution 75 Series

Supply Voltage	200-240V 1Φ	200-240V 3Φ	277V 1Φ	400-480V 3Φ
	NEMA 6-30	NEMA 15-20	NEMA 7-20	NEMA 16-20
Plug Type				
Fan F.L.A.	15.4	7.6	11.1	3.6
Maximum number of fans recommended per branch circuit:				
20A Circuit	n/a	2	1	4
30A Circuit	1	3	2	6

Revolution 150 Series

Supply Voltage	200-240V 1Φ	200-240V 3Φ	277V 1Φ	400-480V 3Φ
	NEMA 6-30	NEMA 15-20	NEMA 7-20	NEMA 16-20
Plug Type				
Fan F.L.A.	19.9	9.7	14.3	4.5
Maximum number of fans recommended per branch circuit:				
20A Circuit	n/a	1	1	3
30A Circuit	1	2	1	5

INSTALLATION

Specifications

Diameter (Φ)	6 ft, 8 ft, 10 ft, 12 ft, 16 ft, 20 ft, and 24 ft (1830 mm, 2440 mm, 3660 mm, 4880 mm, 6100 mm and 7320 mm)
Height	3 ft to 8 ft in 6 in increments (915 mm to 2340 mm in 150 mm increments)
Blades	Aluminum
Blade and Cover Finish	Mill-finish standard or RAL K5 Custom Colors
# of Blades	3
Coverage	Up to 22,000 sq ft (2046 m ²) 85 ft (26 m) from the fan's center in all directions
Air Speed	Variable Speed
Controls	Fan-Commander 2.0 (Wireless)
Mounting Heights	15 ft to 80 ft (5 m to 24 m) Finished floor to bottom of blade

Weight*

Fan Φ	Revolution 25	Revolution 75	Revolution 150
6 ft (1830 mm)	119 lb (54 kg) – 139 lb (63 kg)	–	–
8 ft (2440 mm)	125 lb (56 kg) – 144 lb (65 kg)	203 lb (92 kg) – 221 lb (100 kg)	–
10 ft (3050 mm)	130 lb (59 kg) – 150 lb (68 kg)	–	–
12 ft (3660 mm)	134 lb (61 kg) – 154 lb (70 kg)	214 lb (97 kg) – 232 lb (105 kg)	–
16 ft (4880 mm)	–	217 lb (98 kg) – 235 lb (106 kg)	253 lb (115 kg) – 271 lb (123 kg)
20 ft (6100 mm)	–	219 lb (99 kg) – 237 lb (108 kg)	256 lb (116 kg) – 274 lb (124 kg)
24 ft (7320 mm)	–	222 lb (101 kg) – 240 lb (109 kg)	259 lb (117 kg) – 277 lb (126 kg)

*Weight is for Beam Mount only. Add 23 lbs (10 kg) for Truss Mount.

RPM

Fan Φ	Revolution 25		Revolution 75		Revolution 150	
	Min	Max	Min	Max	Min	Max
6 ft (1830 mm)	33	165	–	–	–	–
8 ft (2440 mm)	33	165	36	180	–	–
10 ft (3050 mm)	21	105	–	–	–	–
12 ft (3660 mm)	15	75	20	102	–	–
16 ft (4880 mm)	–	–	14	68	19	93
20 ft (6100 mm)	–	–	10	51	14	72
24 ft (7320 mm)	–	–	7	36	11	53

Maximum Input Current (A)

Revolution Series	Model	120V	200-240V	200-240V	277V	400-480V
		1Φ	1Φ	3Φ	1Φ	3Φ
25	210-25	8.7	6.6	3.2	4.8	N/A
75	270-75	N/A	15.4	7.6	11.1	3.6
150	270-150	N/A	19.9	9.7	14.3	4.5

All models rated 50/60Hz supply +/- 5%

All models supply voltage ratings +/- 10%

INSTALLATION

Fan Clearance

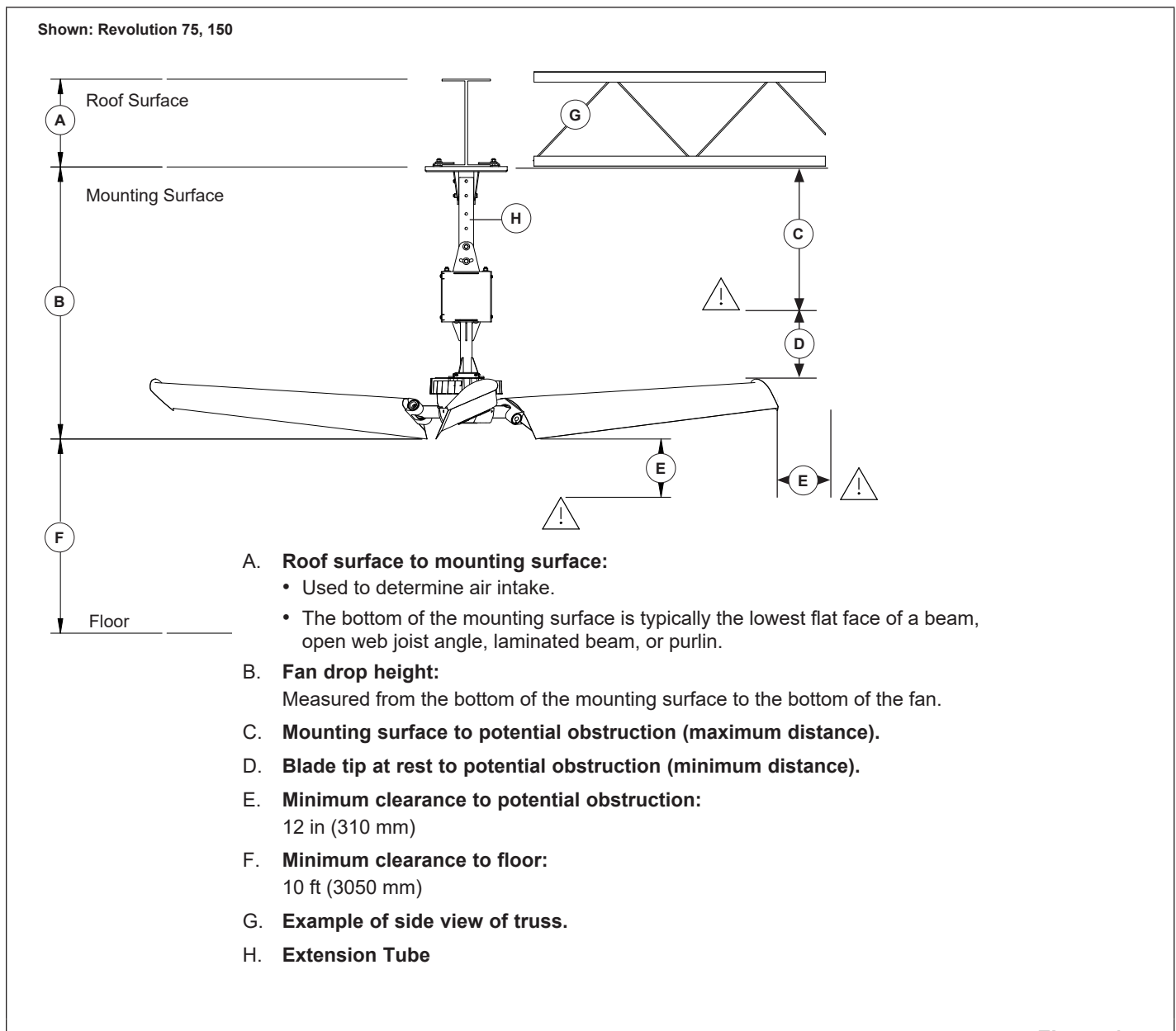


Figure 1

NOTICE

Mount the fan according to the fan clearance for your fan model and diameter:

- Fans require open space above the blades for air intake and maximum performance.
- Fan blades require safe clearance to operate. Identify any potential obstructions the fan blades could impact.

Mount the fan according to the requirements on **“Figure 3” on page 10** and **“Figure 4” on page 11**.

The distance from the mounting surface to the bottom of the lowest potential obstruction. Obstructions must be higher than the maximum distance required for each fan drop height, fan diameter and model.

NOTE: The blades move upward during operation.

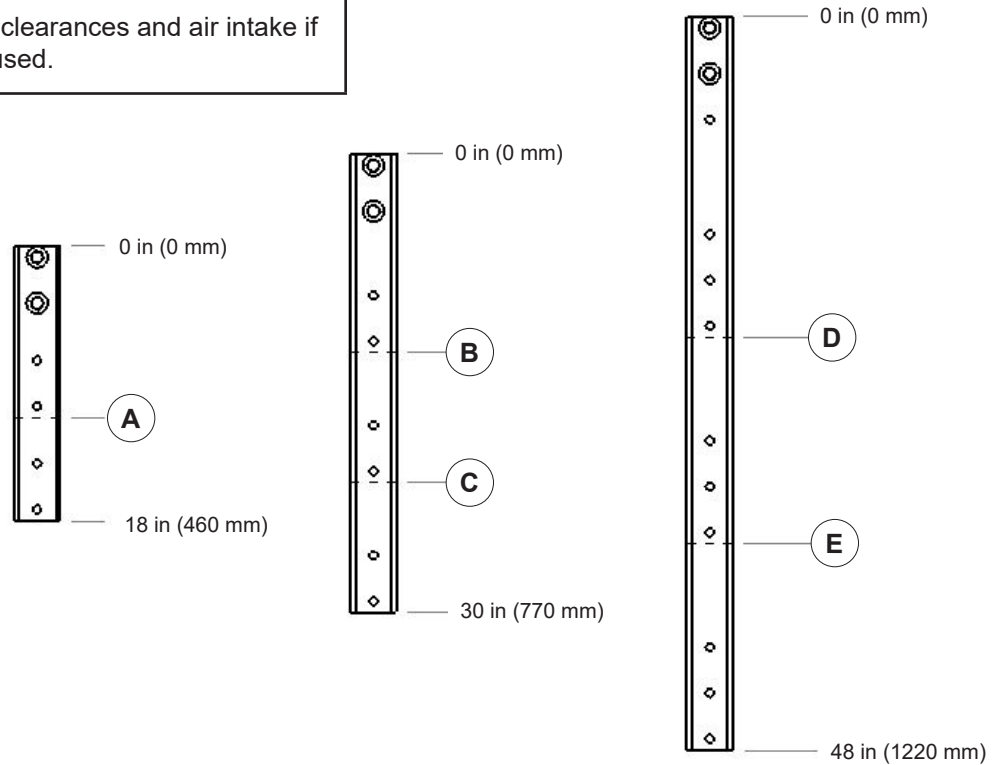
INSTALLATION

Fan Clearance *Continued*

Alternate Fan Drop Height (Revolution 25, 75, 150)

NOTICE

Re-calculate and verify fan clearances and air intake if alternate drop heights are used.



ORIGINAL FAN DROP HEIGHT	ORIGINAL EXTENSION TUBE LENGTH	ALTERNATE EXTENSION TUBE CUT LENGTHS	ALTERNATE FAN DROP HEIGHTS
56 in (1430 mm)	18 in (460 mm)	Ⓐ = 11.25 in (290 mm)	49.25 in (1260 mm)
68 in (1730 mm)	30 in (770 mm)	Ⓑ = 13.00 in (340 mm)	51.00 in (1300 mm)
68 in (1730 mm)	30 in (770 mm)	Ⓒ = 21.50 in (550 mm)	59.50 in (1520 mm)
86 in (2190 mm)	48 in (1220 mm)	Ⓓ = 21.00 in (540 mm)	59.00 in (1500 mm)
86 in (2190 mm)	48 in (1220 mm)	Ⓔ = 34.50 in (880 mm)	72.50 in (1850 mm)

Figure 2

Extension tubes include extra holes to create shorter alternate fan drop heights when field cutting.

Other fan drop heights are possible with field drilling and cutting. Factory drilled 9/16 in (14 mm) holes are 3/4 in (19 mm) from each end and spaced 3 in (76 mm) on center. Additional holes are required to route the safety cable.

Removing the extension tube:

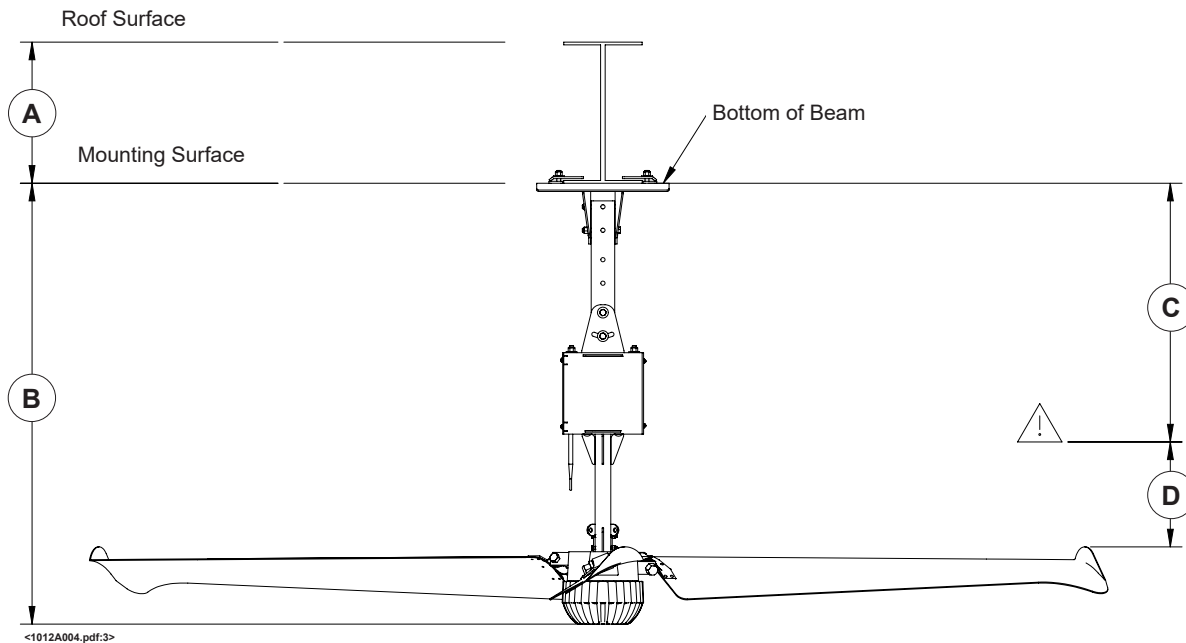
- Decreases the fan drop height to 43.00 in (1100 mm).
- Requires (4) 1/2 in x 1.5 in bolts, washers and nylon lock nuts.

INSTALLATION

Fan Clearance *Continued*

Revolution 25

Shown: Beam Mount



B = Fan Drop Height (Minimum Height Required for Air Intake)				
A = ROOF SURFACE TO MOUNTING SURFACE	FAN DIAMETER			
	6 ft (1830 mm)	8 ft (2440 mm)	10 ft (3050 mm)	12 ft (3660 mm)
6 in (160 mm)	36 in (920 mm)	36 in (920 mm)	43 in (1100 mm)	56 in (1430 mm)
12 in (310 mm)	36 in (920 mm)	36 in (920 mm)	36 in (920 mm)	43 in (1100 mm)
18 in (460 mm)	36 in (920 mm)	36 in (920 mm)	36 in (920 mm)	36 in (920 mm)

NOTE: Beam heights greater than 12 in (310 mm) do not require additional extension tube.

C = Mounting Surface to Potential Obstruction (Maximum Distance)				
FAN DROP HEIGHT	FAN DIAMETER			
	6 ft (1830 mm)	8 ft (2440 mm)	10 ft (3050 mm)	12 ft (3660 mm)
36 in (920 mm)	10 in (260 mm)	9 in (230 mm)	7 in (180 mm)	5 in (130 mm)
43 in (1100 mm)	17 in (440 mm)	43 in (1100 mm)	14 in (360 mm)	12 in (310 mm)
56 in (1430 mm)	30 in (770 mm)	56 in (1430 mm)	27 in (690 mm)	25 in (640 mm)
68 in (1730 mm)	42 in (1070 mm)	68 in (1730 mm)	39 in (1000 mm)	37 in (940 mm)
86 in (2190 mm)	60 in (1530 mm)	47 in (1200 mm)	57 in (1450 mm)	55 in (1400 mm)

FAN DIAMETER	D = Blade Tip at Rest to Potential Obstruction (Minimum Distance)
6 ft (1830 mm)	12 in (310 mm)
8 ft (2440 mm)	12 in (310 mm)
10 ft (3050 mm)	13 in (340 mm)
12 ft (3660 mm)	14 in (360 mm)

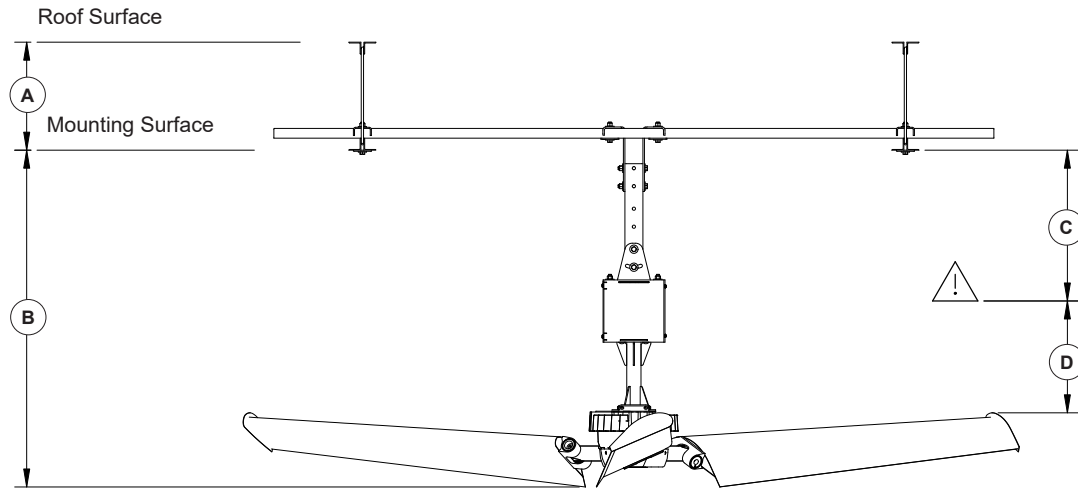
Figure 3

INSTALLATION

Fan Clearance *Continued*

Revolution 75, 150

Shown: Truss Mount



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B = Fan Drop Height (Minimum Height Required for Air Intake)					
A = ROOF SURFACE TO MOUNTING SURFACE	FAN DIAMETER				
	8 ft (2440 mm)	12 ft (3660 mm)	16 ft (4880 mm)	20 ft (6100 mm)	24 ft (7320 mm)
6 in (160 mm)	43 in (1100 mm)	43 in (1100 mm)	56 in (1430 mm)	68 in (1730 mm)	86 in (2190 mm)
12 in (310 mm)	43 in (1100 mm)	43 in (1100 mm)	56 in (1430 mm)	68 in (1730 mm)	86 in (2190 mm)
18 in (460 mm)	43 in (1100 mm)	43 in (1100 mm)	56 in (1430 mm)	56 in (1430 mm)	86 in (2190 mm)
24 in (610 mm)	43 in (1100 mm)	43 in (1100 mm)	43 in (1100 mm)	56 in (1430 mm)	68 in (1730 mm)
36 in (920 mm)	43 in (1100 mm)	43 in (1100 mm)	43 in (1100 mm)	43 in (1100 mm)	56 in (1430 mm)
48 in (1220 mm)	43 in (1100 mm)	43 in (1100 mm)	43 in (1100 mm)	43 in (1100 mm)	56 in (1430 mm)

NOTE: Beam heights greater than 48 in (1220 mm) do not require additional extension tube.

C = Mounting Surface to Potential Obstruction (Maximum Distance)					
FAN DROP HEIGHT	FAN DIAMETER				
	8 ft (2440 mm)	12 ft (3660 mm)	16 ft (4880 mm)	20 ft (6100 mm)	24 ft (7320 mm)
43 in (1100 mm)	20 in (510 mm)	19 in (490 mm)	16 in (410 mm)	14 in (360 mm)	11 in (280 mm)
56 in (1430 mm)	33 in (840 mm)	32 in (820 mm)	29 in (740 mm)	27 in (690 mm)	24 in (610 mm)
68 in (1730 mm)	45 in (1150 mm)	44 in (1120 mm)	41 in (1050 mm)	39 in (1000 mm)	36 in (920 mm)
86 in (2190 mm)	63 in (1610 mm)	62 in (1580 mm)	59 in (1500 mm)	57 in (1450 mm)	54 in (1380 mm)

FAN DIAMETER	D = Blade Tip at Rest to Potential Obstruction (Minimum Distance)
8 ft (2440 mm)	12 in (310 mm)
12 ft (3660 mm)	12 in (310 mm)
16 ft (4880 mm)	14 in (360 mm)
20 ft (6100 mm)	15 in (390 mm)
24 ft (7320 mm)	16 in (410 mm)

Figure 4

INSTALLATION

Mounting – I-Beam (TYPICAL)

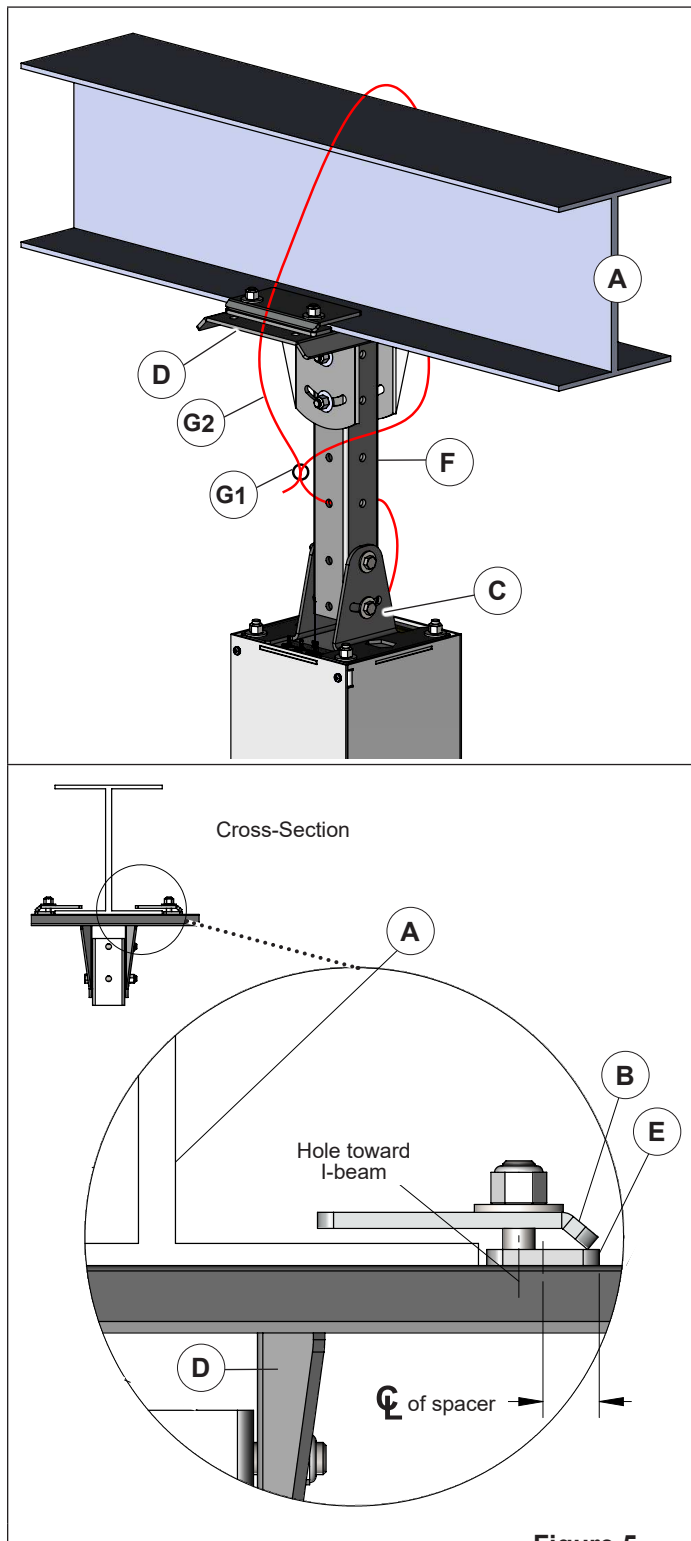


Figure 5

NOTE: The beam bracket and slotted attachment plates accommodate both angled and skewed beams.

1. Mount fan directly to building support I-beam (A) (6 in to 13.5 in [150 mm to 343 mm] wide) with supplied brackets and hardware.

NOTE: If the fan is being mounted to an I-beam that is larger than the bracket, clamp the bracket to 1 edge of the I-beam and drill holes through the I-beam to bolt the other side securely with supplied hardware.

2. Hang the I-beam bracket (D) under the I-beam. Use supplied hardware and existing holes to attach clamp plates (B) and the spacers (E). Keep spacer holes toward the edge of I-beam. Tighten (4) clamp plate nylon lock nuts.
3. If equipped with extension tube (F):
 - a. Attach the extension tube to the I-beam bracket. Use (2) 1/2 in x 4.5 in bolts, washers, and nuts.
 - b. Attach the enclosure brackets (C) to the opposing face of the extension tube. Use (2) 1/2 in x 4.5 in bolts, washers and nylon lock nuts.
4. If no extension tube is present, attach the enclosure brackets (C) to the I-beam bracket (D). Use (4) 1/2 in x 1.5 in bolts, washers and nylon lock nuts.
5. Tighten all nylon lock nuts.
6. Use a bubble level to plumb the assembly.
7. After enclosure is in place, install safety cable:
 - a. Slide the safety cable clamp (G1) onto the safety cable (G2).
 - b. Route the safety cable through the extension tube (when present), around the I-beam, and secure with the safety cable clamp.
 - c. Wrap extra cable and secure with a tie band or cut to length.

INSTALLATION

Mounting – Truss Kit

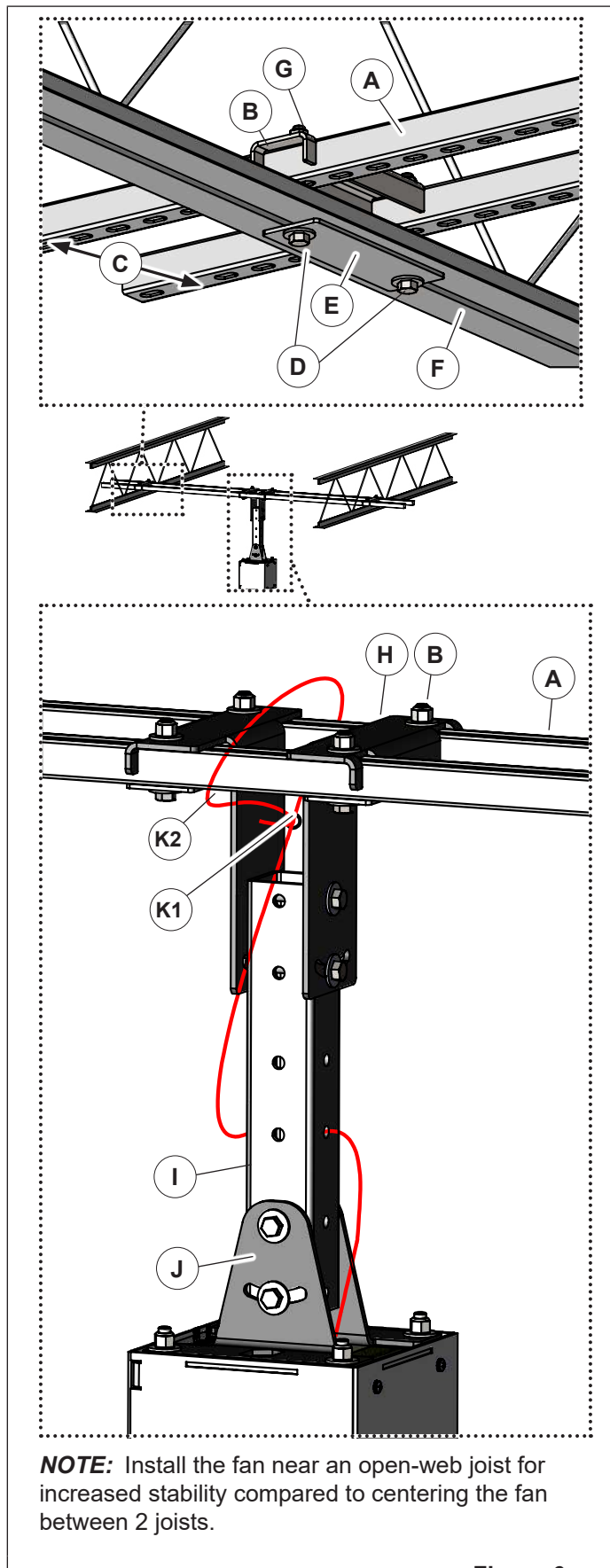


Figure 6

! WARNING/AVERTISSEMENT

Always mount the fan to 2 joists. 1 joist will not provide the rigidity and support necessary for the fan during operation, and may cause the fan to fall and cause injury.

Toujours monter le ventilateur sur deux solives. Une seule solive n'apportera pas la rigidité et le soutien nécessaire au ventilateur en marche; cela pourrait entraîner la chute du ventilateur et causer des blessures.

1. Lay (2) 120 in (3050 mm) long struts on the lowest angle of an open-web roof structure.
2. The open side of the strut (A) is up and the 2 in (51 mm) slotted holes are down. The strut brackets (B) will automatically space the struts 8 in (203 mm) on center (C).
3. Install washer and nylon lock nut (G). Install the bolts (D) with washers up through the spacer plate (E), joist angles (F), strut, and strut bracket. Repeat on the opposite end of the strut. Tighten hardware.
4. Install the drop brackets (H) at any point along the pair of struts and between the joists. Attach the spacer plate and hardware as described. Leave at least 3 in (76 mm) between the brackets. **DO NOT** tighten.
5. If equipped with a extension tube (I):
 - a. Attach the extension tube to the drop brackets. Use (2) 1/2 in x 4.5 in bolts, washers and nylon locking nuts.
 - b. Attach the enclosure brackets (J) to the opposing face of the extension tube. Use (2) 1/2 x 1.5 in bolts with nylon lock nuts.
6. If no extension tube is present, attach the enclosure brackets (J) to the drop brackets. Use (4) 1/2 x 1.5 in bolts with nylon lock nuts.
7. Tighten all nylon lock nuts.
8. Plumb the unit by adjusting the lower nuts and upper nylon lock nuts. Use a bubble level in both directions.
9. After enclosure is in place, install safety cable:
 - a. Slide the safety cable clamp (K1) onto the safety cable (K2).
 - b. Route the safety cable through the extension tube (when present), around the strut, and secure with the safety cable clamp.
 - c. Wrap extra cable and secure with a tie band or cut to length.

INSTALLATION

Mounting – Laminated Beam Kit

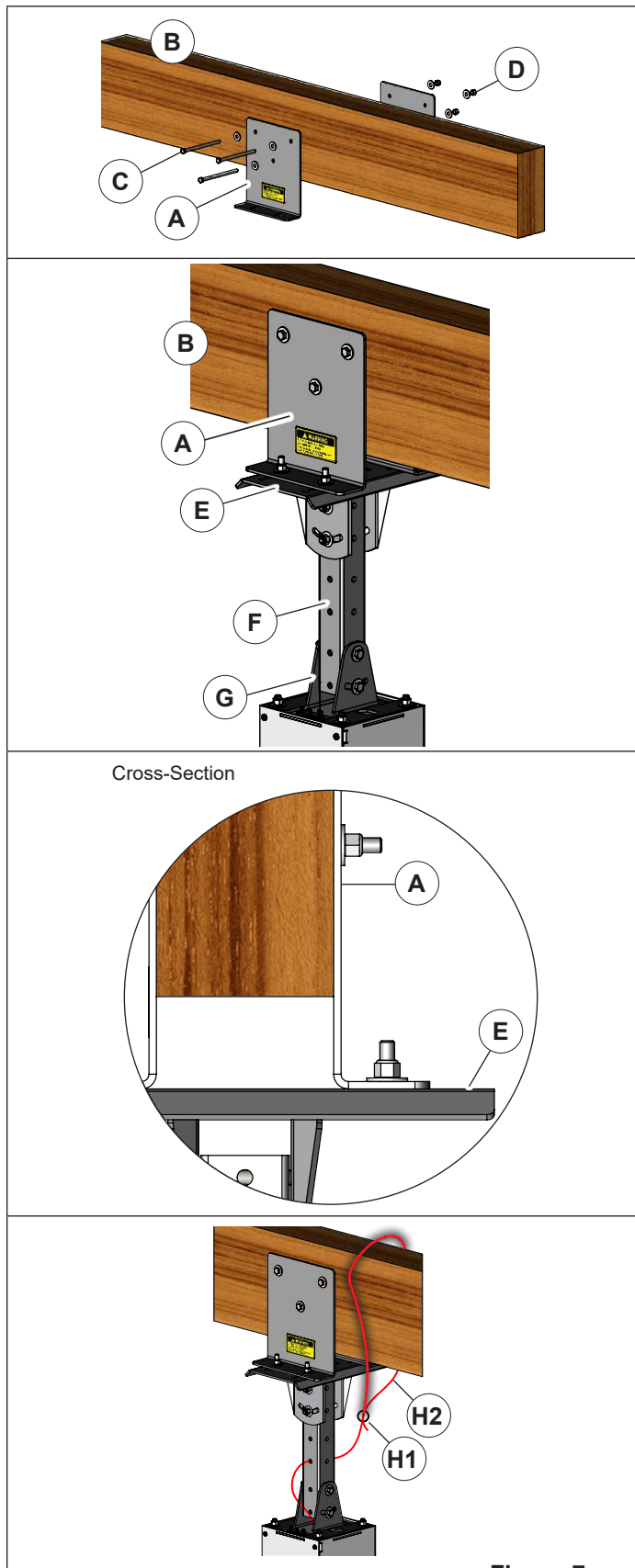


Figure 7

NOTE: The beam bracket and slotted attachment plates accommodate both angled and skewed beams.

1. Clamp the angle brackets (A) to the laminated or concrete beam (B). Keep the short leg of the angle brackets flush to or slightly below the bottom of the beam.
2. Make sure the angle bracket is plumb.
3. Use the bracket as template to drill holes through the beam.
4. Install bolts (C) through both brackets and the beam. Secure with washers and nylon lock nuts (D).
5. Bolt the beam bracket (E) directly to angle brackets with 2 in bolts.

NOTE: The clamp plates and spacers are not needed for installation to laminated beam and can be discarded.

6. If equipped with a extension tube (F):
 - a. Attach the extension tube to the beam bracket. Use (2) 1/2 in x 4.5 in bolts, washers, and nuts.
 - b. Attach the enclosure brackets (G) to the opposing face of the extension tube. Use (2) 1/2 in x 4.5 in bolts, washers and nylon lock nuts.
7. If no extension tube is present, attach the enclosure bracket (G) to the beam bracket. Use (4) 1/2 in x 1.5 in bolts, washers and nylon lock nuts.
8. Tighten all nylon lock nuts.
9. Use a bubble level to plumb the assembly.
10. After enclosure is in place, install safety cable:
 - a. Slide the safety cable clamp (H1) onto the safety cable (H2).
 - b. Route the safety cable through the extension tube (when present), around the beam and secure with the safety cable clamp.
 - c. Wrap extra cable and secure with a tie band or cut to length.

INSTALLATION

Mounting – Purlin Kit

PURLIN SPAN	PURLIN HEIGHT		
	8 in (210 mm)	9 in (230 mm)	10 in (260 mm)
< 20 ft (6096 mm)	Use Kit	Use Kit	Use Kit
< 25 ft (7620 mm)	Do Not Use Kit	Use Kit	Use Kit
< 30 ft (9144 mm)	Do Not Use Kit	Do Not Use Kit	Use Kit

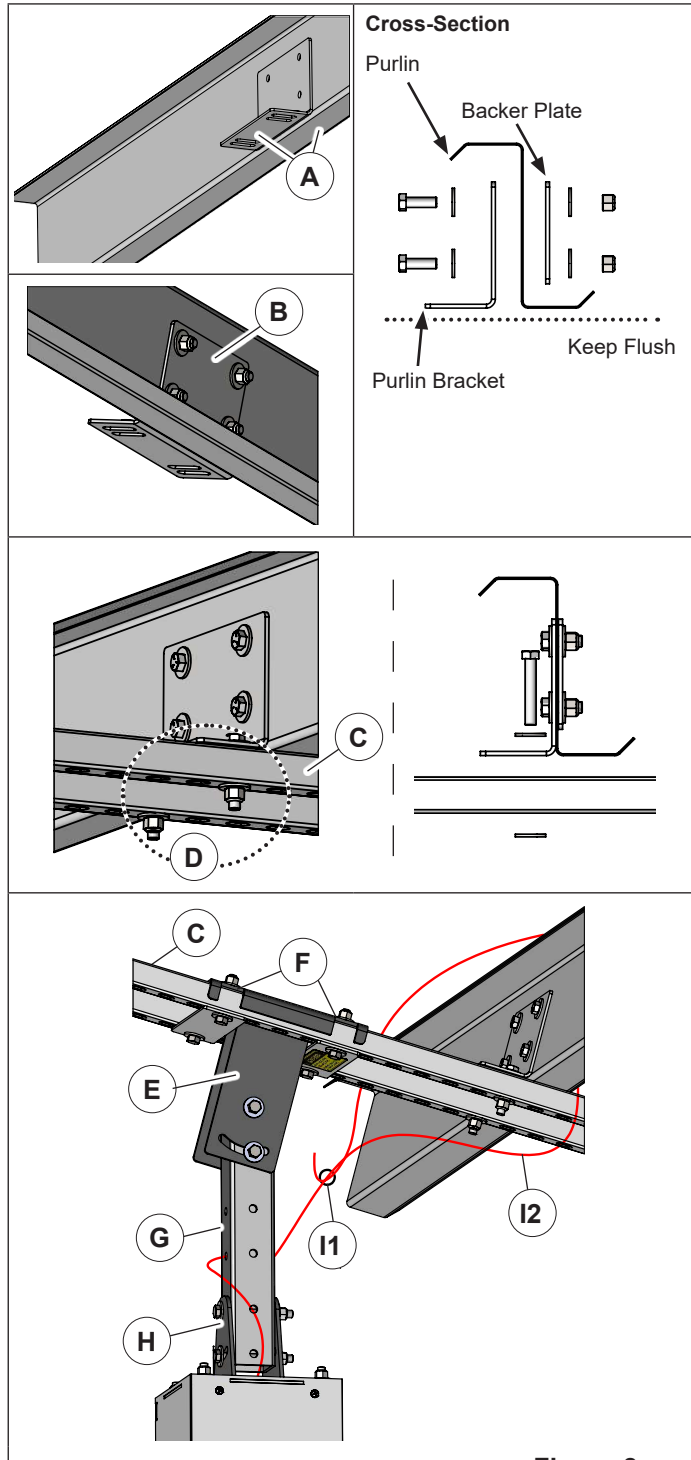


Figure 8

Purlin Requirements:

- Length: < 30 ft (9144 mm)
- < 5 ft (1524 mm) spacing
- Minimum of 14 gauge steel

1. Clamp the slotted purlin bracket to the purlin. Keep bottom of the bracket flush (A) with the bottom of the purlin.
2. Use the bracket as a template to drill (4) 9/16 in (14 mm) holes through the purlin.
3. Secure the bracket and backer plate (B) using (4) 1/2 in x 1-1/2 in bolts, (8) 1/2 in washers and 4 nylon locking nuts.
4. Repeat the bracket installation on the adjacent purlin(s). Make sure the brackets are in line with each other to avoid a diagonal strut installation.
5. Secure the strut (C) to the bottom of each of the purlin brackets (D) with (4) 1/2 in x 3 in bolts with (8) 1/2 in washers and 4 nylon lock nuts.
NOTE: The strut should be 8 in (203 mm) on center with the open side of the strut up.
6. Install the purlin bracket (E) and backer plates (F) to the strut using (4) 1/2 in x 3 in bolts with (8) 1/2 in washers and 4 nylon lock nuts.
NOTE: The purlin bracket and slotted attachment plates accommodate both angled and skewed beams.
7. If equipped with a extension tube (G):
 - a. Attach the extension tube to the purlin bracket. Use (2) 1/2 in x 4.5 in bolts, washers, and nuts.
 - b. Attach the enclosure brackets (H) to the opposing face of the extension tube. Use (2) 1/2 in x 4.5 in bolts, washers and nylon lock nuts.
8. If no extension tube is present, attach the enclosure bracket to the purlin bracket using (4) 1/2 in x 1.5 in bolts, washers and nylon lock nuts.
9. Tighten all nylon lock nuts.
10. After enclosure is in place, install safety cable:
 - a. Slide the safety cable clamp (I1) onto the safety cable (I2).
 - b. Route the safety cable through the extension tube (when present), around the purlin and secure with the safety cable clamp.
 - c. Wrap extra cable and secure with a tie band or cut to length.

INSTALLATION

Stabilization Cables

! WARNING/AVERTISSEMENT

Always use stabilization cables. They protect the fan from tilting and allowing the blades to impact a ceiling joist or object.

Toujours utiliser des câbles de sécurité. Ils protègent contre la chute d'un ventilateur dans le cas d'un relâchement de l'assemblage boulonné.

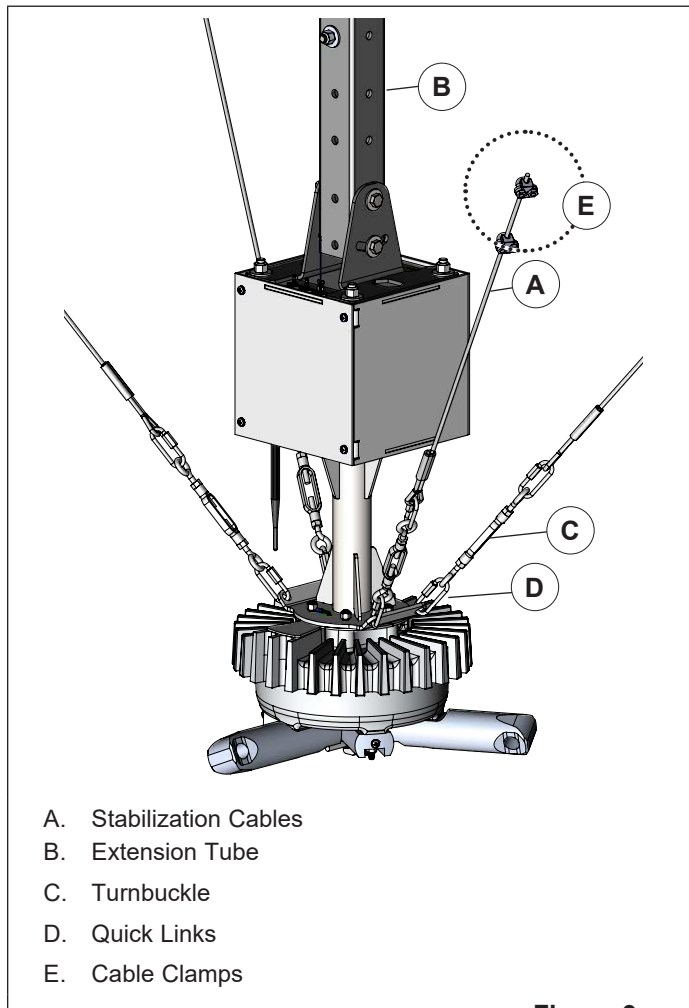


Figure 9

Crosswinds or impact could tilt the fan and cause the blades to impact a ceiling joist or other object. Stabilization cables anchor the fan. Use these cables to attach the fan bracket to the ceiling in 4 locations.

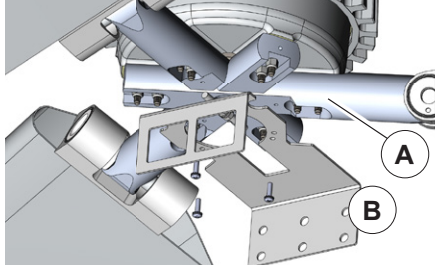
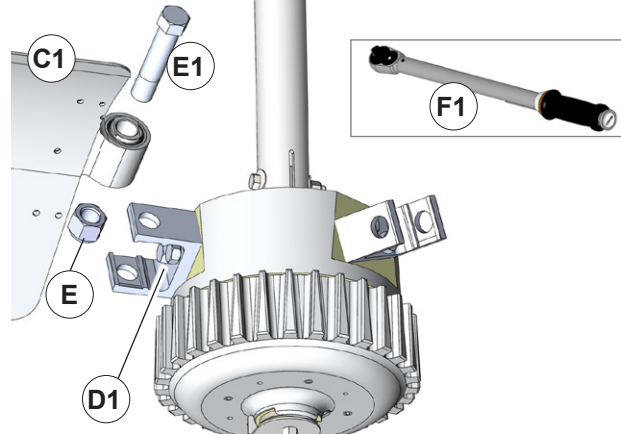
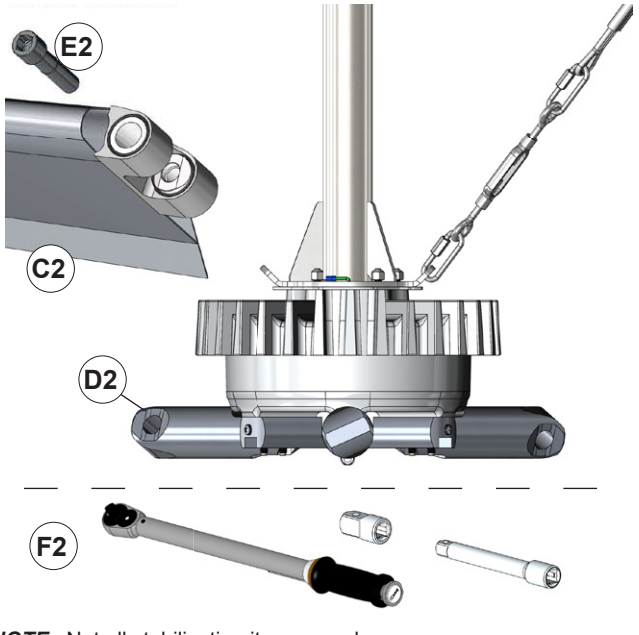
1. For greatest support, attach the stabilization cables to the ceiling at 90° to each other and as far away as possible from the point where the fan is mounted.
2. Ensure that stabilization cables are attached in a position that does not allow the blades to hit the stabilization cables when the fan is operating.
3. Attach the stabilization cables (A) to the extension tube (B) using quick links (D).
4. Wrap extra cable and secure with a tie band or cut to length as desired.
5. Secure the stabilization cables to the ceiling with 2 cable clamps (E) and tighten with a turnbuckle (C).
6. Install stabilization cable clamp nuts away from the turn back.

Fan Leveling

1. Use the turnbuckles to level the bottom of the motor in both directions.
2. Tighten the turnbuckle 1 turn past hand-tight.
3. Hold a bubble level across the center of the hub in all directions.
4. Make fine adjustments with the stabilization cables.

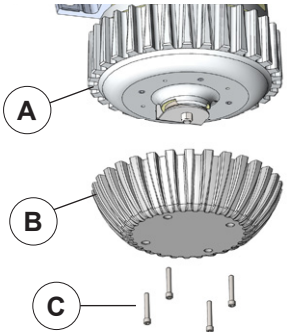
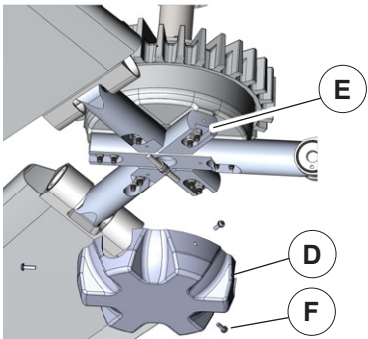
INSTALLATION

Blade Attachment

Revolution 25, 75, 150		<ol style="list-style-type: none"> 1. Remove bolts and shipping bracket (B) from fan hub (A). 2. Use a step ladder or lift to attach each fan blade to the fan hub.
Revolution 25		<ol style="list-style-type: none"> 3. Slide/raise the fan blade (C1) into the slot of the clevis (D1) on the fan hub. 4. Attach by inserting 22 mm (E1) bolt through clevis holes and fan blade. Secure with nut (E). 5. Use a torque wrench (F1) with a 1-1/4 in socket to tighten each nut to 75 ft-lb (102 Nm). 6. Repeat for each blade.
Revolution 75, 150	 <p>NOTE: Not all stabilization items are shown.</p>	<ol style="list-style-type: none"> 3. Slide/raise the fan blade (C2) over the fan arm (D2). Fan arm fits in the slot of the fan blade. 4. Attach with the 1 in bolt (E2). 5. Use a torque wrench with a 3/4 in drive extension to tighten the bolt to 200 ft-lb (271 Nm) (F2). 6. Repeat for each blade.
Revolution 25, 75, 150	<ol style="list-style-type: none"> 7. Remove the protective plastic film from each blade. Use a damp towel/rag with a mild soap to remove fingerprints and dirt after the blades are installed. 8. Measure the distance from the blade tips to any potential obstruction. See "Blade Tip at Rest to Potential Obstruction" ("Figure 3" on page 10 or "Figure 4" on page 11 according to your fan model). If the measured distance is less than the distance listed for your fan diameter, contact your Rite-Hite Representative. 	

INSTALLATION


Motor Cover

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Revolution 25</p>		<ol style="list-style-type: none"> 1. Align the motor cover ribs (B) with motor fins (A): <ul style="list-style-type: none"> • Locate the 1/4 in (6.35 mm) recessed circle inside the cover. • Position the circle toward the socket head cap screw securing the cable bracket to the motor. 2. Use a 3/16 in allen wrench to secure the cover and the motor using (4) 1/4 in x 1-1/2 in socket head cap screws (C).
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Revolution 75, 150</p>		<ol style="list-style-type: none"> 1. Slide the motor cover (D) over the fan arms (E). 2. Secure cover with (3) 1/4 in x 5/8 in bolts (F) with exterior star lock washers.

Re-level the fan after blade and cover attachment.

[\(Fan Leveling, page 16\)](#).

MAINTENANCE

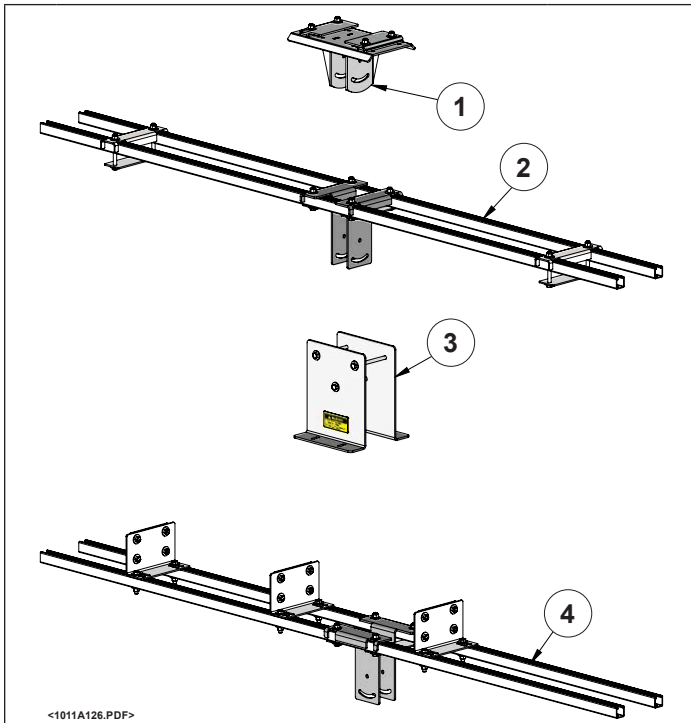
 WARNING/AVERTISSEMENT
<p>Follow lockout procedures before cleaning or re-torquing the fan.</p> <hr/> <p>Suivre les procédures de verrouillage avant le nettoyage ou le resserrage du ventilateur.</p>

Planned Maintenance

INSPECT AND PERFORM THE FOLLOWING:	
Fan Mounting	Check all fasteners and re-torque as required. Inspect fan and mounting supports for wear and tear. Tighten any loose hardware.
Cables	Re-torque clamps. Check for fraying or wear.
Motor and Blades	Check for dust and dirt. Remove using a brush or compressed air.

PARTS

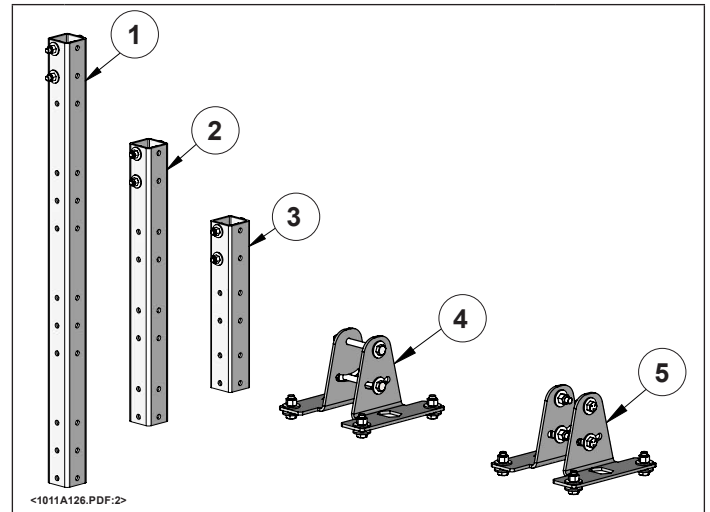
Mounts



<1011A126.PDF>

#	DESCRIPTION	PART #
1	BRKT,ASSY,SWVL,CLNG,FAN,GY	14501233
2	MOUNT,ASSY,STRUT,FAN	55290037
3	BRKT,ASSY,MNT,LAM BEAM,FAN,GY	14501239
4	KIT,HRDWR,MNT,PURLIN,REV	53760145

Extension Tubes and Enclosure Mounts

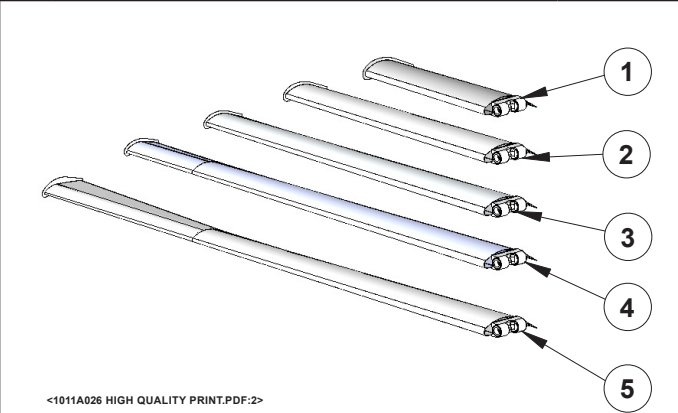


<1011A126.PDF:2>

#	DESCRIPTION	PART #
1	EXTN,ASSY,FAN,48",GY	44750046
2	EXTN,ASSY,FAN,30",GY	44750039
3	EXTN,ASSY,FAN,18",GY	44750036
4	MOUNT,KIT,ADJ TUBE,DD	55290038
5	MOUNT,KIT,NO TUBE,DD	55290039

PARTS

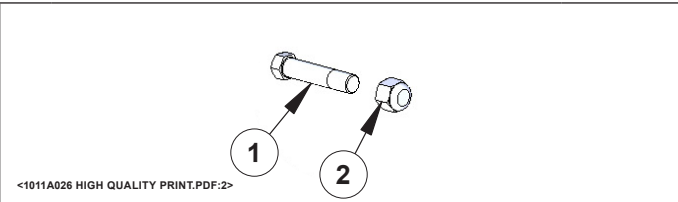
Revolution 75, 150 Blades



<1011A026 HIGH QUALITY PRINT.PDF:2>

#	DESCRIPTION	PART #
1	BLADE,SNGL,REV,8'DIA	12510049
2	BLADE,SNGL,REV,12'DIA	12510050
3	BLADE,SNGL,REV,16'DIA	12510051
4	BLADE,SNGL,REV,20'DIA	12510052
5	BLADE,SNGL,REV,24'DIA	12510053

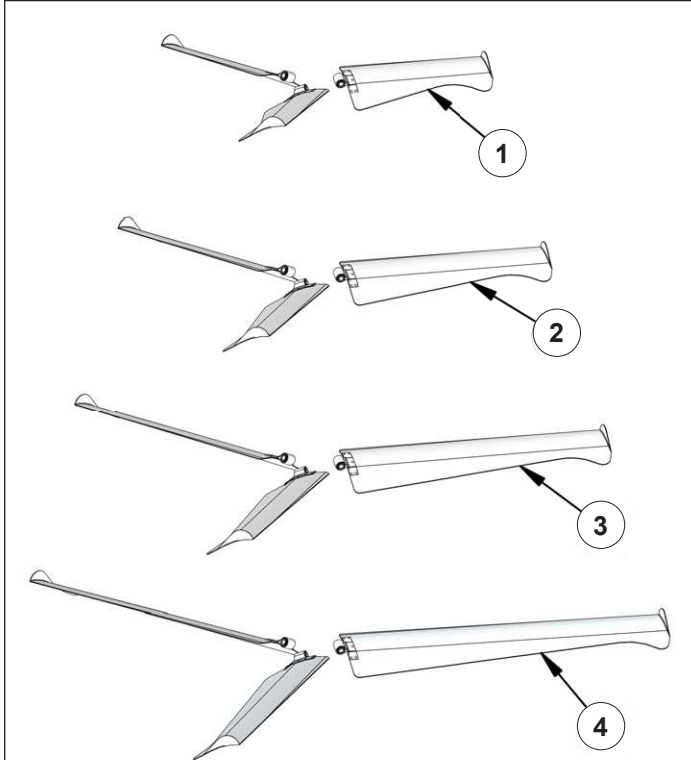
Revolution 25 Blade Bolt



<1011A026 HIGH QUALITY PRINT.PDF:2>

#	DESCRIPTION	PART #
1	NUT, BLADE BOLT, REV25	55150358
2	BOLT, BLADE, REV25	55150360

Revolution 25 Blade Set

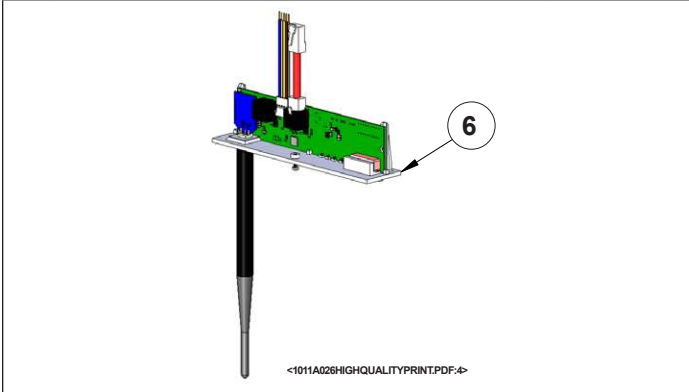
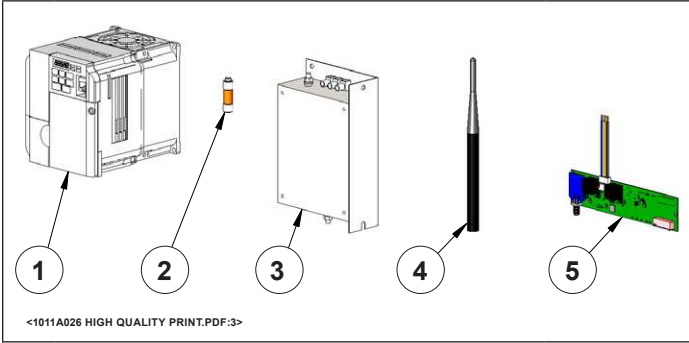


<1011A026 - PARTS LIST.PDF:2>

#	DESCRIPTION	PART #
1	BLADE,SET(3),25,6',MILL	12510048
2	BLADE,SET(3),25,8',MILL	12510028
3	BLADE,SET(3),25,10',MILL	12510027
4	BLADE,SET(3),25,12',MILL	12510026

PARTS

Electrical Components



#	DESCRIPTION	PART #
1	VFD,REV,DD	7640
2	FUSE,15A,600V,CC,ATDR	51000067
3	FILTER,EMC,YSKW,240V,3PH,14A	45500026
4	ANTENNA,900MHZ,RPSMA	11280004
5	PCB,RADIO,900MHZ,VFD	16650014
6	KIT,COMM,900 MHZ RADIO,DD	53760134

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Three (3) Year(s) on all mechanical and electrical parts (non-prorated).
 Three (3) Year(s) labor, based on Rite-Hite approved travel and labor repair times.

REMEDIES

Parts: Rite-Hite's obligations under this Limited Warranty are limited to repairing or replacing, at Rite-Hite's option, any part which is determined by Rite-Hite to be defective during the applicable warranty period. Such repair or replacement shall be Rite-Hite's sole obligation and the Owner's exclusive remedy under this Limited Warranty.

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