



Vanguard™ Fan Retro-Fit Installation Manual

Installation

Disconnect power to the Fan before beginning installation.



Remove the Fan Screen or Shutter if applicable. Remove the V-Belt (**Item 1, Figure 1**) and throw it away. Take the Motor off by removing four Flange Nuts and Carriage Bolts (**Items 2 and 3, Figure 2**). Keep the Flange Nuts and Carriage Bolts for Re-installation of the motor to the new Z-Bracket. Remove the Z-Bracket (**Item 4, Figure 3**) by removing four Lock Nuts and Carriage Bolts (**Items 4 and 3, Figure 3**). Keep the four Carriage Bolts for installing the new Z-Bracket and **discard** the four Lock Nuts. Chore-Time recommends that you replace the Lock Nuts with new Flange Nuts.



Figure 1. Remove V-Belt

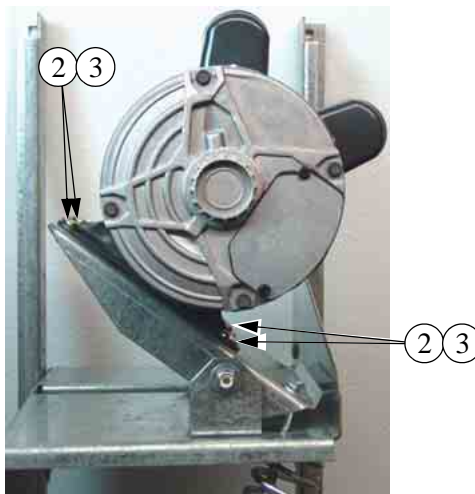


Figure 2. Remove Motor

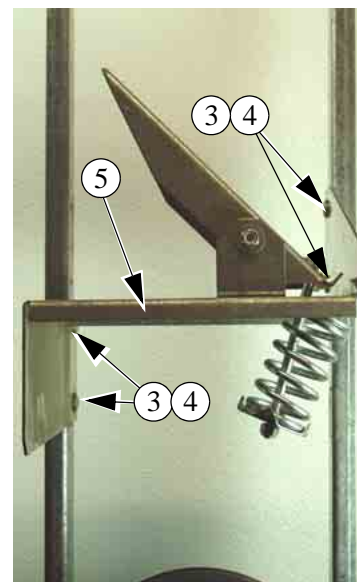
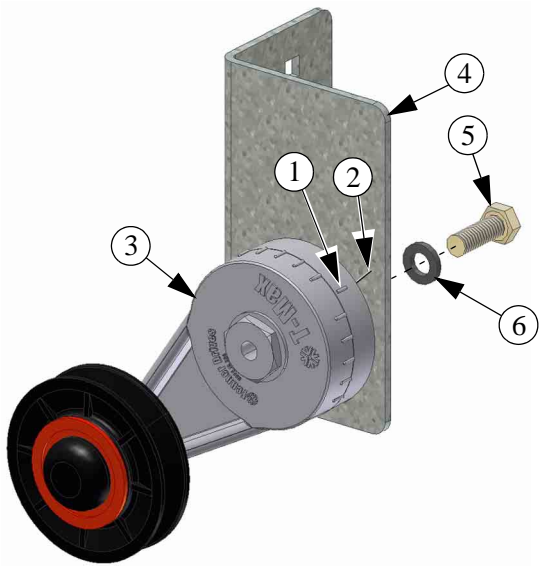


Figure 3. Remove Z Bracket

Item	Description
1	V-Belt
2	Flange Nut
3	Carriage Bolt
4	Lock Nut
5	Z-Bracket

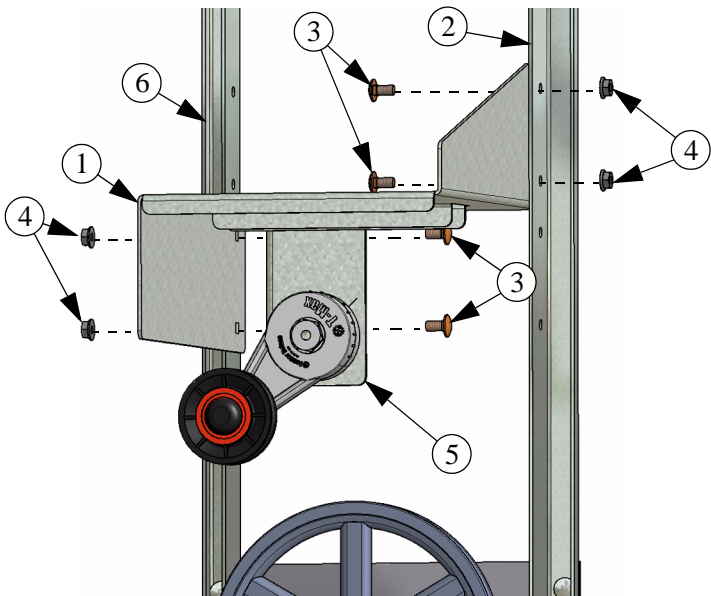
Line up the single Mark on the innermost ring of the Tensioner (**Item 1, Figure 4**) with the Etched line that is on the Tensioner Bracket (**Item 2**) and attach the Tensioner (**Item 3**) to the Tensioner Bracket (**Item 4**) with the supplied 3/8 x 16 x .75 Bolt (**Item 5**) and Washer (**Item 6**).

Attach the new Z-Bracket (**Item 1, Figure 5**) to the right Motor Mount Post (**Item 2**) with two of the Carriage Bolts (**Item 3**) and Flange Nuts (**Item 4**) that were used to attach the old Z-Bracket. *Note: Use the upper two holes in the Post.* Attach the Tensioner Bracket (**Item 5**) and the new Z-Bracket to the Left Motor Mount Post (**Item 6**) with the other two Carriage Bolts and Flange Nuts that were used to attach the old Z-Bracket as shown.



Item	Description
1	Tensioner
2	Etched Line on the Tensioner Bracket
3	Tensioner
4	Tensioner Bracket
5	3/8 x 16 x .75 Bolt
6	Washer

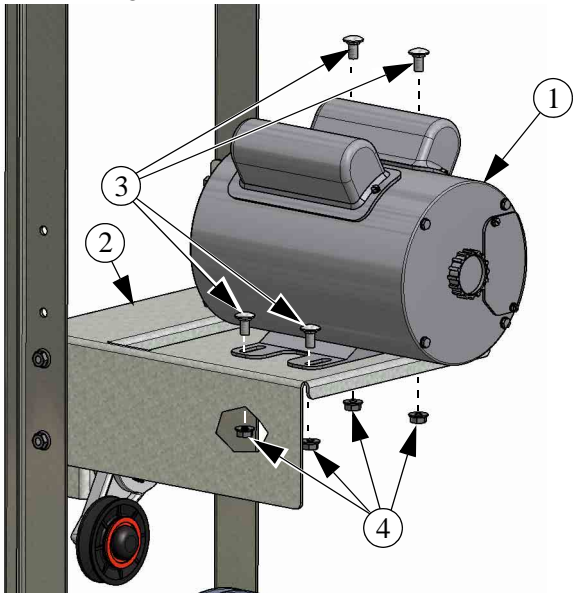
Figure 4. Attaching Tensioner to Tensioner Bracket



Item	Description
1	New Z-Bracket
2	Right Motor Mount Post
3	Carriage Bolt
4	Flange Nut
5	Tensioner Bracket
6	Left Motor Mount Post

Figure 5. Attaching the Z-Bracket and Tensioner

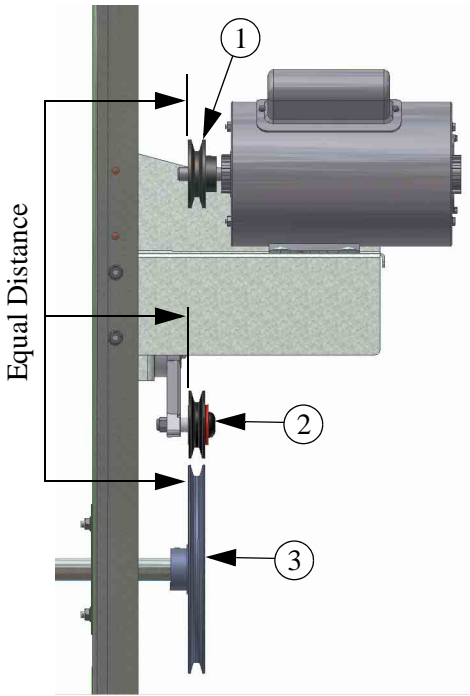
Attach the Motor (**Item 1, Figure 6**) to the new Z-Bracket (**Item 2**) with the Carriage Bolts (**Item 3**) and Flange Nuts (**Item 4**) that were removed earlier.



Item	Description
1	Motor
2	New Z-Bracket
3	Carriage Bolt (Removed earlier)
4	Flange Nut (Removed earlier)

Figure 6. Attach Motor to new Z-Bracket

Check to make sure that the Motor Pulley (**Item 1, Figure 7**), the Tensioner Pulley (**Item 2**), and the Driven Pulley (**Item 3**) are all aligned. Do this by measuring from the Motor Mount Post **as shown**.



Item	Description
1	Motor Pulley
2	Tensioner Pulley
3	Driven Pulley

Figure 7. Pulley Alignment

Install a new Belt (**Item 1, Figure 8**) as shown below in **Figure 8**. See **Table 1** below for the correct Belt for the most common Pulley combinations. When the Belt is installed, the etched mark on the Tensioner Bracket (**Item 2, Figure 9**) should line up with the 3rd mark on the outer part of the Pulley Bracket (**See Figure 9**).

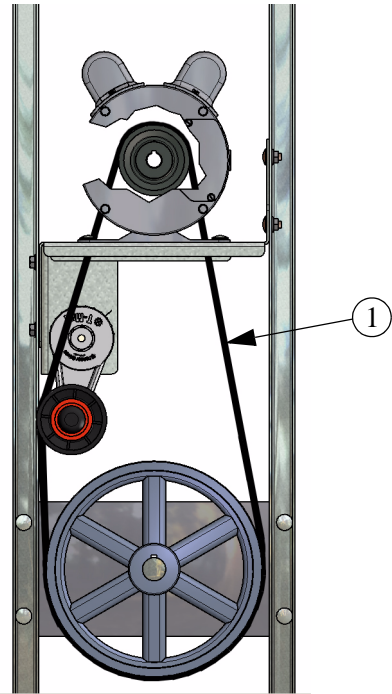


Figure 8. Installing new Belt

Item	Description
1	New Belt
2	Etched Mark

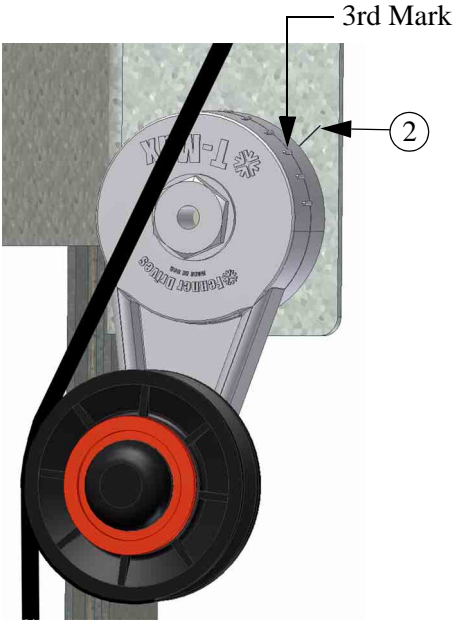
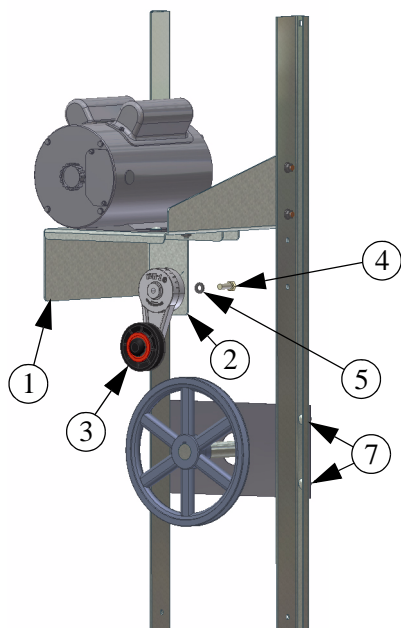


Figure 9. Correct Tensioner position

Table 1. Belt Type for Pulley Combinations		
Motor Pulley	Driven Pulley	Belt
AK28	AK84	AX51
AK30	AK94	AX53

Re-install the Shutter, turn on the power, and test run the Fan.

Part Numbers



Item	Description	Part Number
1	Z-Bracket	50840
2	Tensioner Bracket	50841
3	Tensioner	48429
4	3/8 x 16 x .75 Bolt	39-20414
5	Lock Washer	5747
6	Belt (Not Shown)	See Table 1 (page 3)
7	5/16 Flange Nut	8490

Figure 10. Part Numbers position

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Revisions to this Manual

Page No.	Description of Change
	New Manual

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