

Item # 101271, 101272, 101273

BLT 50 FG Fan, 1 HP 115/230v, 230/460 3 Phase 1.5 HP 6 Aluminum Blades, Variable Speed.

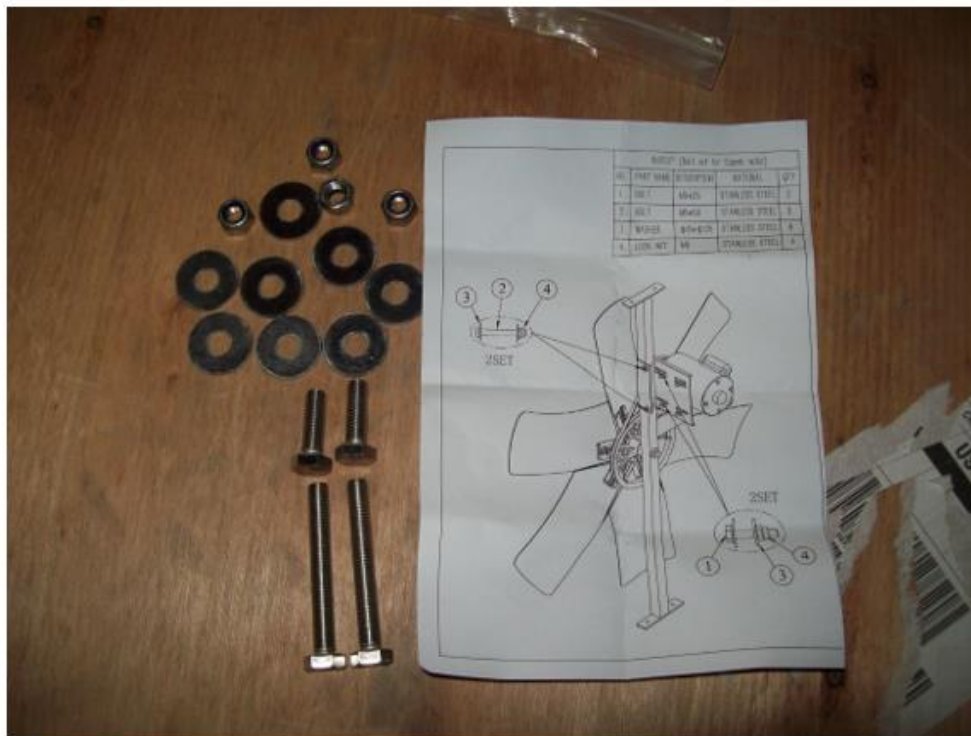
HP117-S Hardware Pack, 50" BLT Motor/Plate Mounting Used in the field to mount the motor

2	Bolt, Hex, M8 X 20mm	
2	Bolt, Hex, M3 X 70mm	
4	Nut, Nylock, M8	

(2) 2mm long M8 bolts are already attaching motor to plate on the end away from the u-shaped end. The 4 bolts in the Hardware Pack are used in the field to mount the motor.

Assembling the motor MR1013-S to the 50" Blast Fan

This shows the part of the hardware kit that is used to mount the motor and its base plate.



This label points to the location where the motor mount will be installed.

BLT 50



This is how the motor mount is set up. We place the motors and mounts on the pallet separately for shipping because that provides room for more fans



This picture shows the two holes where the motor base plate will hold the motor to the post weldment, right above the black line. The post weldment is the square tube with the Tensioner Mounting Flange welded to it. The black line is marked at the factory when they assemble the fan for testing. The motor is then taken off for shipping.

BLT 50



You can see that the hole is still empty that secures the motor to the front of the base plate. If that bolt is inserted before the other one, you cannot slide the motor base plate onto the post weldment.



Here the black mark indicates the motor is too low on the post weldment. The black line shows through the elongated hole in the motor base plate. It should be below the base plate.

BLT 50



The motor base plate is tightened down at the correct position in relation to the black line on the post weldment. Here the bolt is through the post weldment and the motor base plate. It is helpful to tighten it up, so it is almost snug, then position it correctly to the black alignment mark, then tighten it down. The short bolts to hold the front of the motor to the motor base plate are put in last.



Now the motor mount bolt can be attached to the motor base and the motor mount after the long bolt is secured to the post weldment and the motor mount.

BLT 50



The straightedge is flat on the motor pulley. Again, this indicates the motor pulley may need to come back, but it also indicates that the motor is pivoted and is out of parallel with the blade shaft.

This shows a wider gap between the straightedge and the pulley on the right side of the pulley.



Now take the belt and place it over the motor pulley first.

BLT 50



Next, pull the belt tensioner over to place the belt on the tensioned side of it.



The tensioner is pulled back in order to get the belt on the motor pulley after it is on the blade pulley. It is better to have the belt tighter, and in order to get it on it must be put on the motor pulley first, then put on the blade pulley by turning the blade pulley.

BLT 50



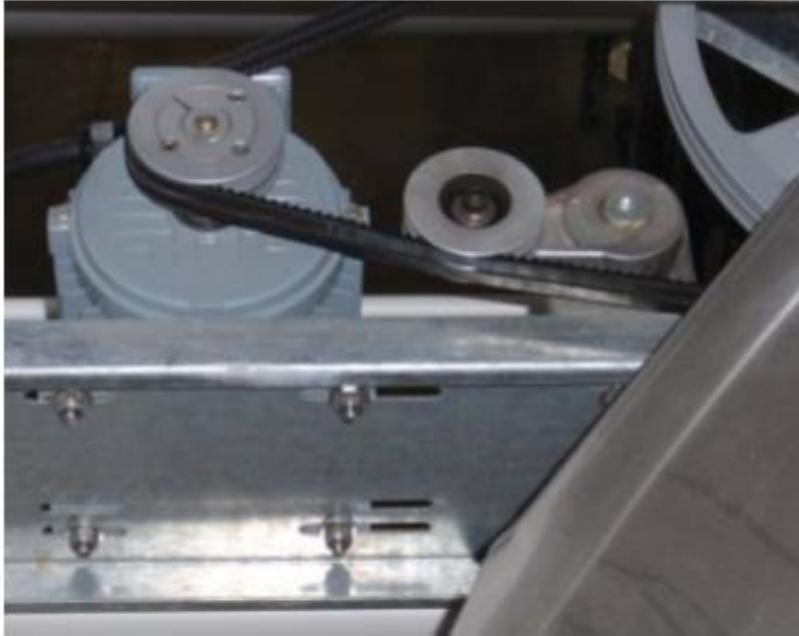
Third, rotate blade slowly as you feed the belt onto the blade pulley right below the tensioner. Move your hand around with the belt as you rotate the blade clockwise. The pulley will then pull the belt onto itself.

Correctly completed assembly. The flat part of the belt contacts the flat roller on the belt tensioner pulley.



This shows a tensioner idler pulley with V grooves for the V-Belt to fit into.

BLT 50



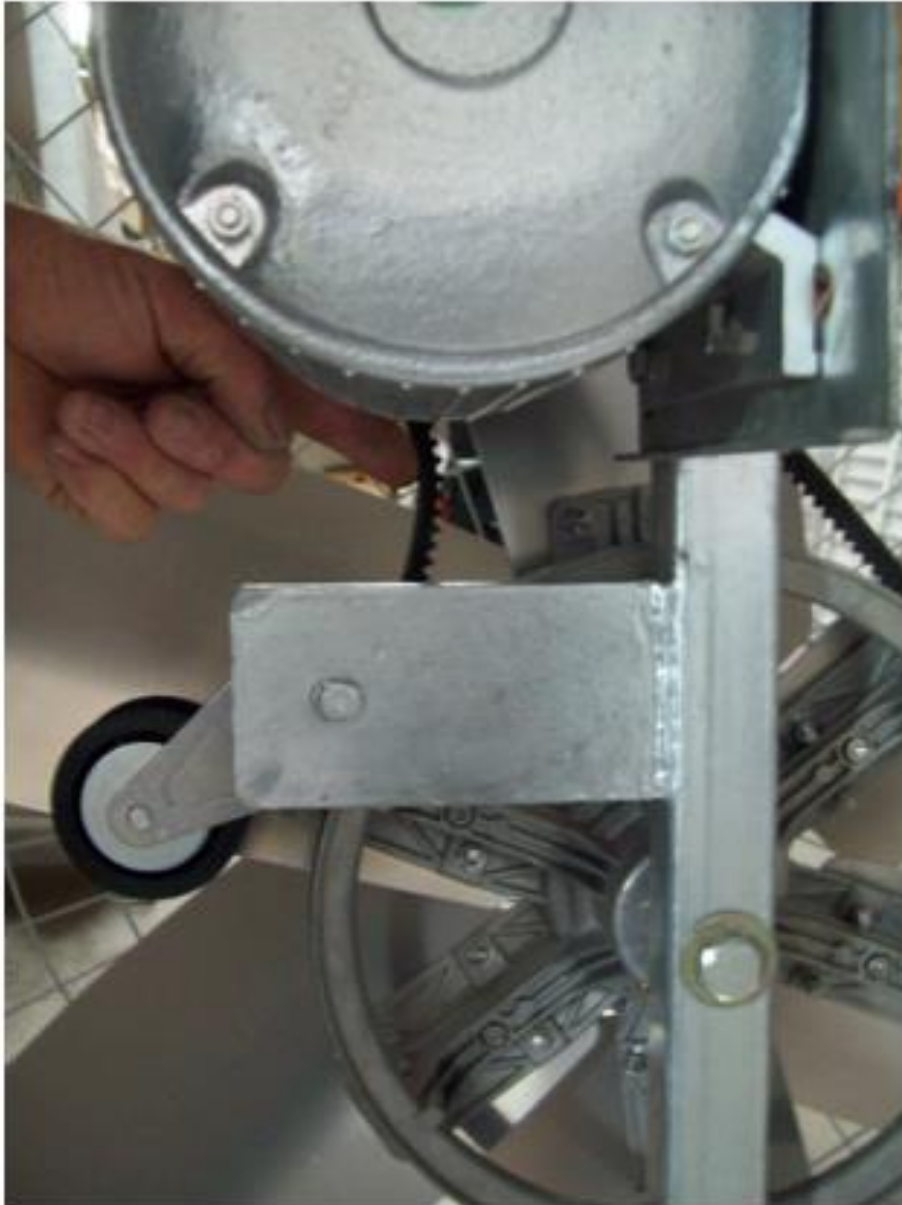
Tensioner Adjustment

Make sure the belt is reasonably tight before rotating the tensioner against it. The tensioner is only there to take up slack over time as the belt stretches. At assembly time the fan should be adjusted to run fine without the tensioner in place.



BLT 50

This belt is not tight enough.



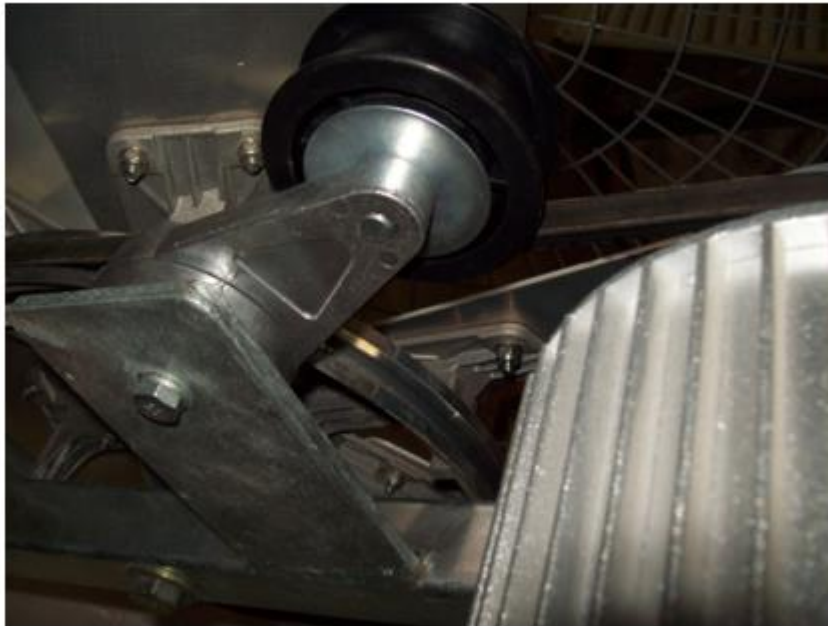
This belt is not tight enough.

BLT 50



Rotate the flat tensioner pulley against the flat side of the belt.
Push hard against the belt with the tensioner pulley, and tighten the bolt on the bracket before releasing it.
This belt is correct. There is a slight deflection from the tensioner.

BLT 50



The new belt should be run at full speed for 3 hours, then tightened more to compensate for how the belt will settle down into the V-grooves of the pulleys.