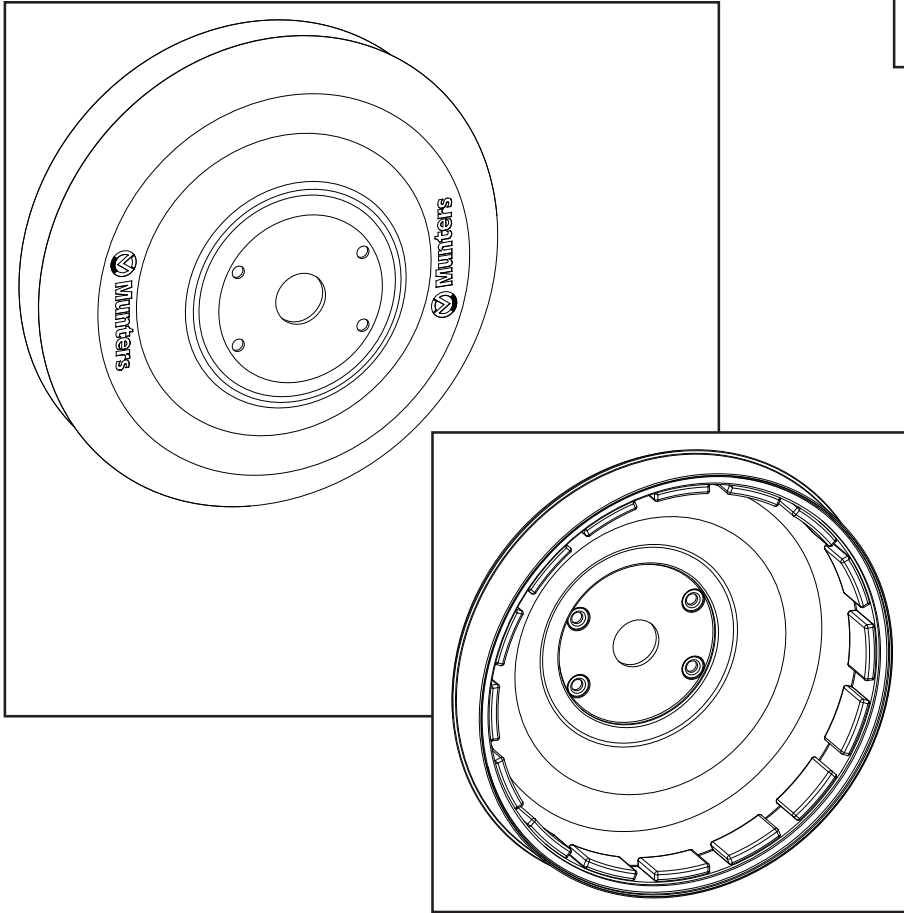


Instruction Manual



**“FM”
Munters Drive ***
Rotor
Replacement Kit
for AX and VX Fans

*Patents Pending

“FM” Munters Drive

Rotor Replacement Kit

Models: FM1231



FM - Munters Drive

Rotor Replacement Kit

Instructions for Use and Maintenance

Thank You:

Thank you for purchasing a "FM" rotor replacement kit. Munters equipment is designed to be the highest performing, highest quality equipment you can buy. With the proper installation and maintenance it will provide many years of service.

Please Note:

To achieve maximum performance and insure long life from your Munters product it is essential that it be installed and maintained properly. Please read all instructions carefully before beginning installation.

Warranty:

For Warranty claims information see the "Warranty Claims and Return Policy" form QM1021 available from the [Munters Corporation office at 1-800-227-2376 or by e-mail at aghort.info@munters.com](mailto:aghort.info@munters.com).

Conditions and Limitations:

- Products and Systems involved in a warranty claim under the "Warranty Claims and Return Policy" shall have been properly installed, maintained and operated under competent supervision, according to the instructions provided by Munters Corporation.
- Malfunction or failure resulting from misuse, abuse, negligence, alteration, accident or lack of proper installation or maintenance shall not be considered a defect under the Warranty.

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Unpacking the Equipment

1.

1.1 Parts List

Before beginning installation, check the overall condition of the equipment. Remove packing materials, and examine all components for signs of shipping damage. Any shipping damage is the customer's responsibility and should be reported immediately to your freight carrier.

Each "FM" Munters Drive Rotor Kit Includes:

- 1 - Munters Drive Rotor

All hardware removed to install the Munters Drive Rotor will be reused. Be sure to take care not to lose any of the hardware.

Installation Instructions

2.

Step 1

Disconnect power from fan before continuing. Remove the shutter from the back of the fan and set safely aside to be reinstalled later. See [Figure 1](#).

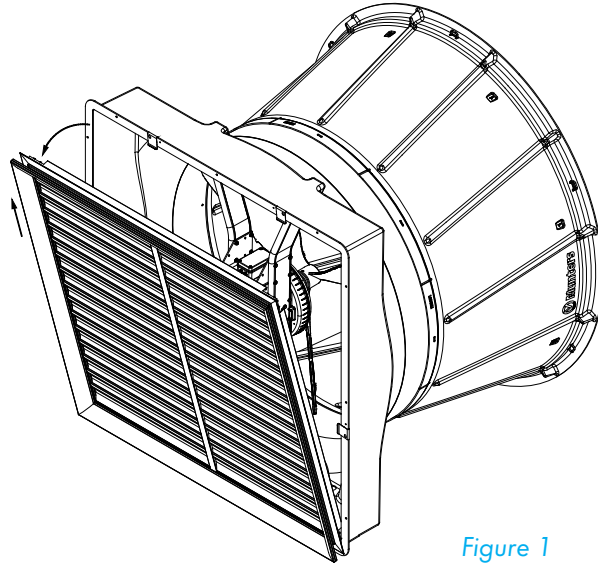


Figure 1

For AX/VX Munters Drive Fans with New Blue Box, proceed to [Step 2](#).

For AX/VX Munters Drive Fans with Old Gray Box, proceed to [Step 14](#).

2.1 AX/VX Munters Drive Fans with New Blue Box

Step 2

Remove the 4 bolts, washers and nuts holding the Munters Drive Controller to the struts and carefully set Controller in bottom of fan. Save bolts, washers and nuts for reuse. See [Figure 2](#). For the VX51/VX55 it may be possible to only remove 2 bolts, washers and nuts and rotate the Controller out of the way to access the back of the motor.

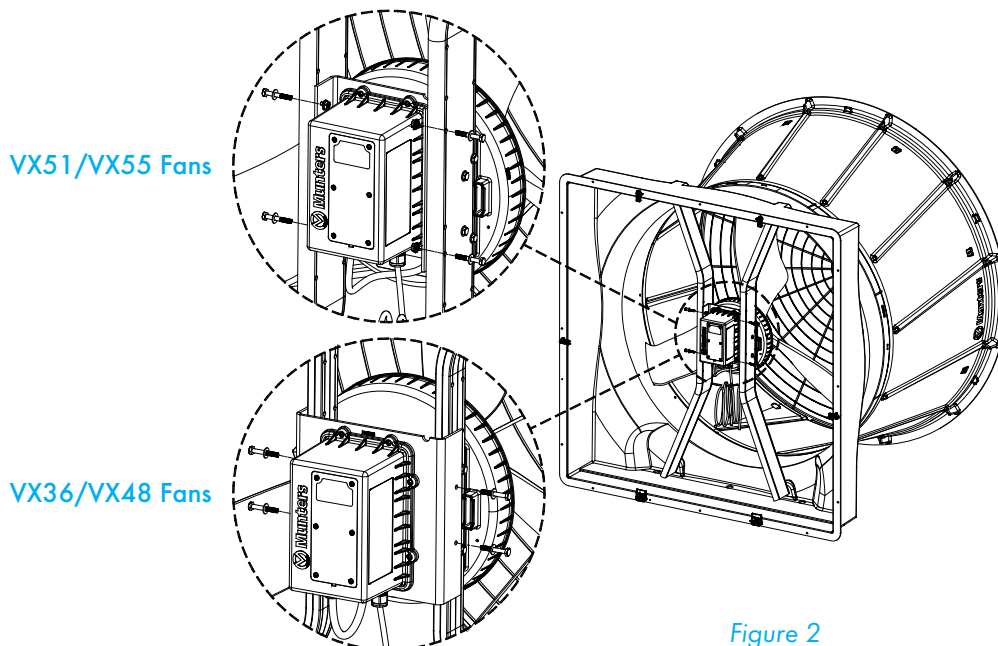


Figure 2

Step 3

Remove the Phillips screw holding the black plastic cover cap. Then remove the cover cap and set cap and screw aside to be reinstalled later. See Figure 3.

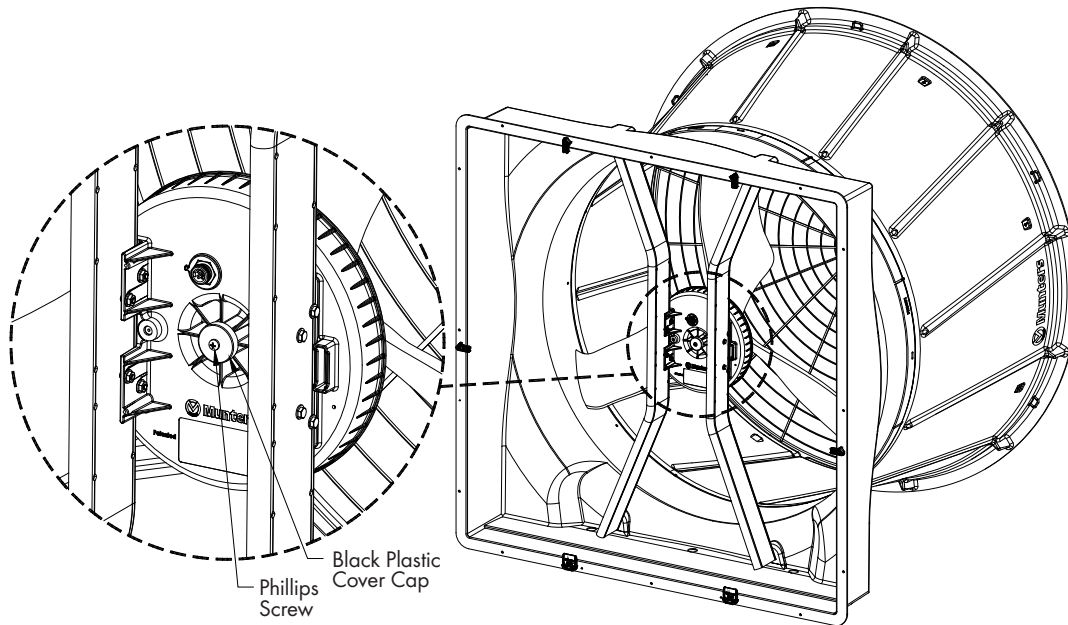


Figure 3

Step 4

Using a 36mm Socket, remove the M25 Hex Nut from the back of the Munters Drive Motor. See Figure 4.

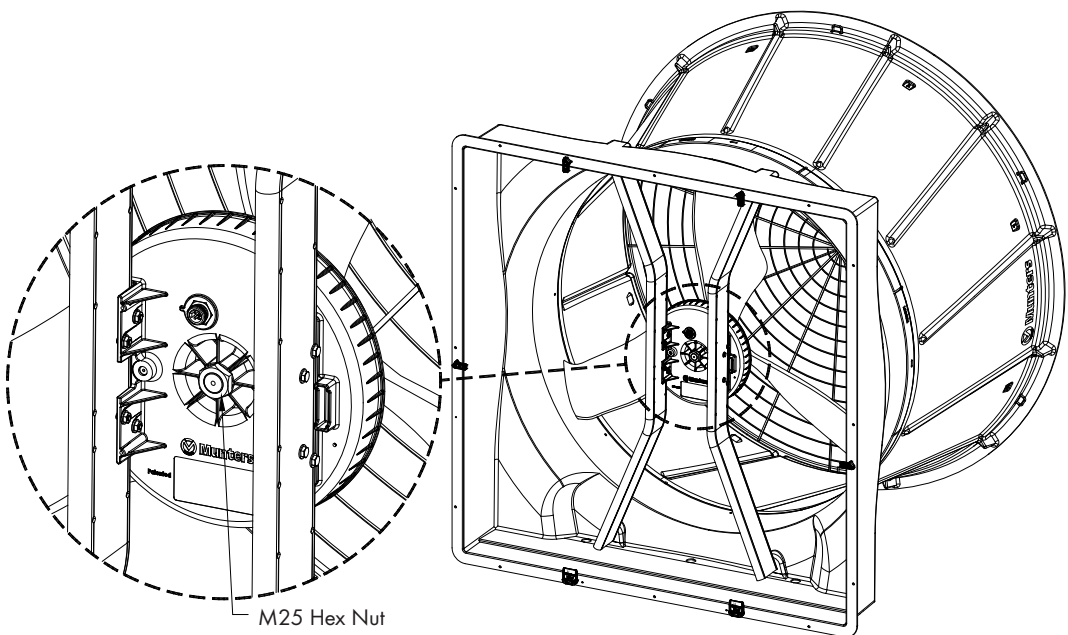


Figure 4

Step 5

Using the Propeller as a hand hold, push hard straight forward until the Rotor comes off the Munters Drive Motor. Be careful not to get fingers pinched between the Rotor and the Motor. [See Figure 5.](#)

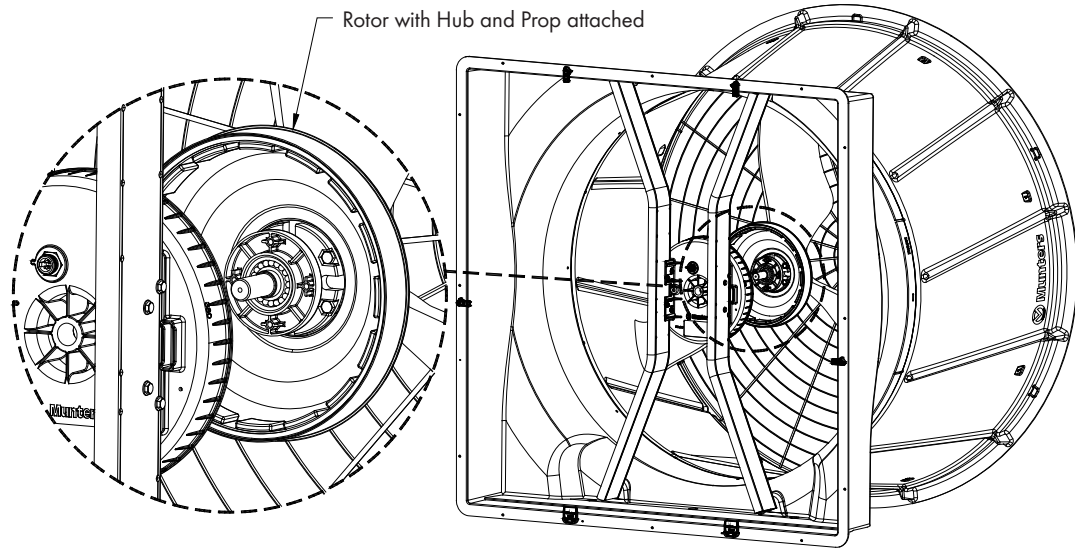


Figure 5

Step 6

Once the Rotor with Hub and Propeller is removed from the Motor, remove the (4) Nuts holding the Prop Adapter to the Rotor and set aside to be reused. [See Figure 6.](#)

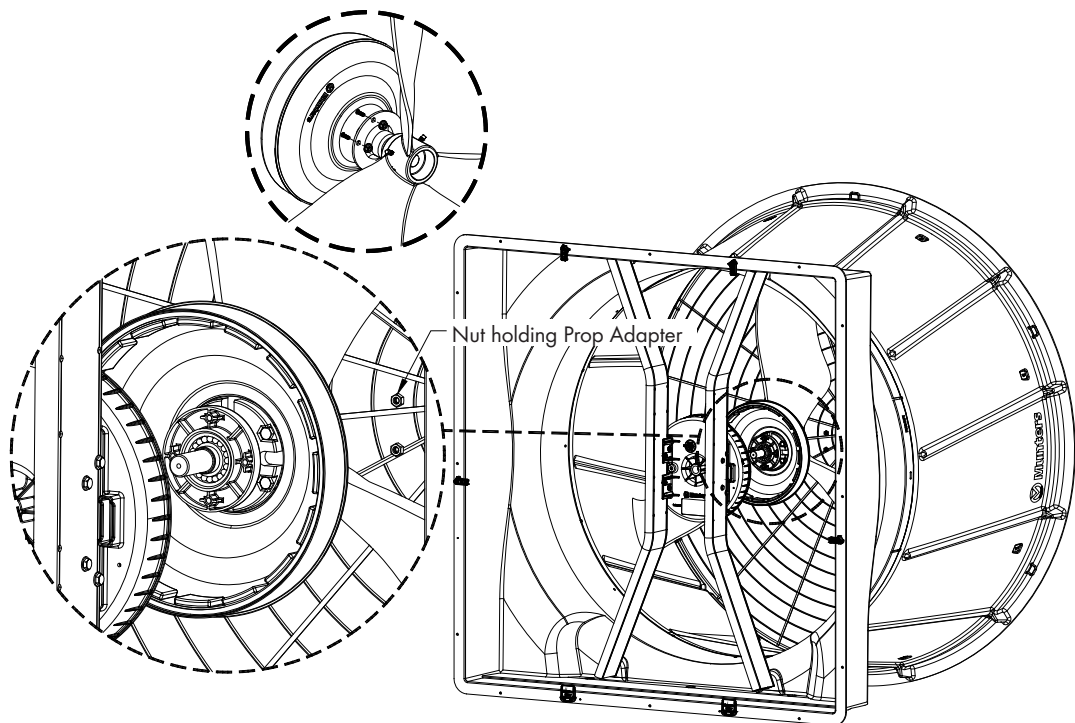


Figure 6

Step 7

Remove the Hub and Rotor from fan, leaving the Propeller with Prop Adapter in the fan. Set Hub aside to be reused. Rotor should be shipped back to Munters. See Figure 7.

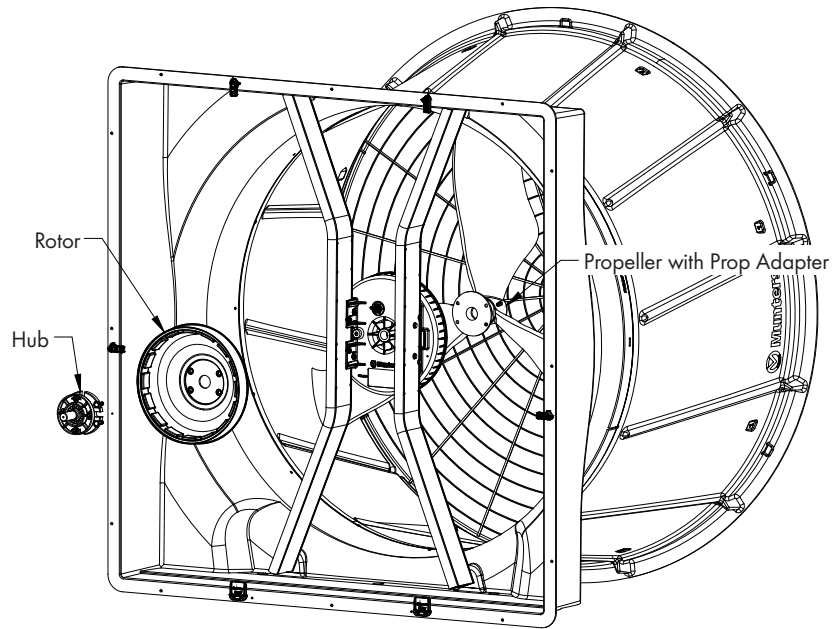


Figure 7

Step 8

Install Hub removed in last step into back of new Rotor and onto Prop Adapter attached to Propeller. See Figure 8.

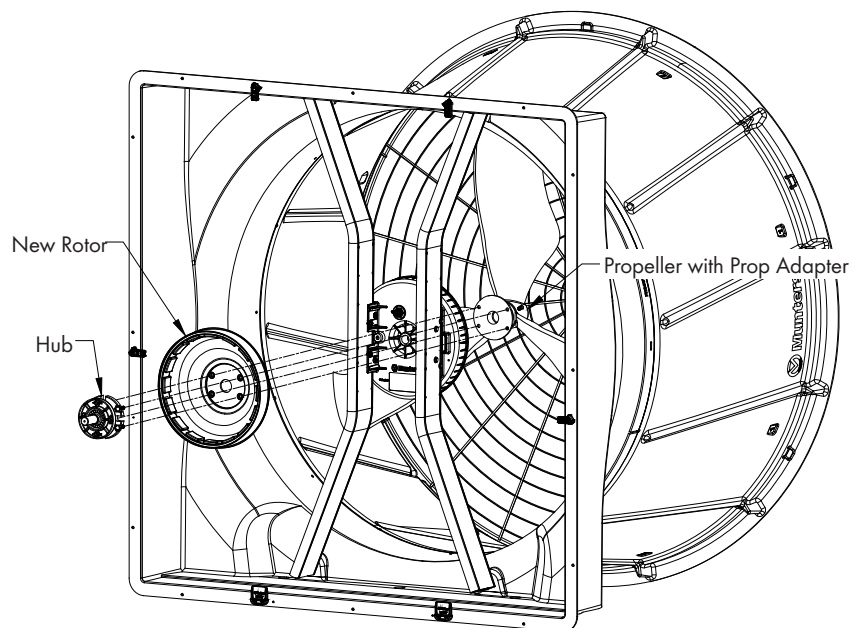


Figure 8

Step 9

Secure the Hub and New Rotor to the Prop Adapter using the (4) Nuts removed in Step 6 and tighten to 200 in-lbs. [23 N-m] of torque. [See Figure 9.](#)

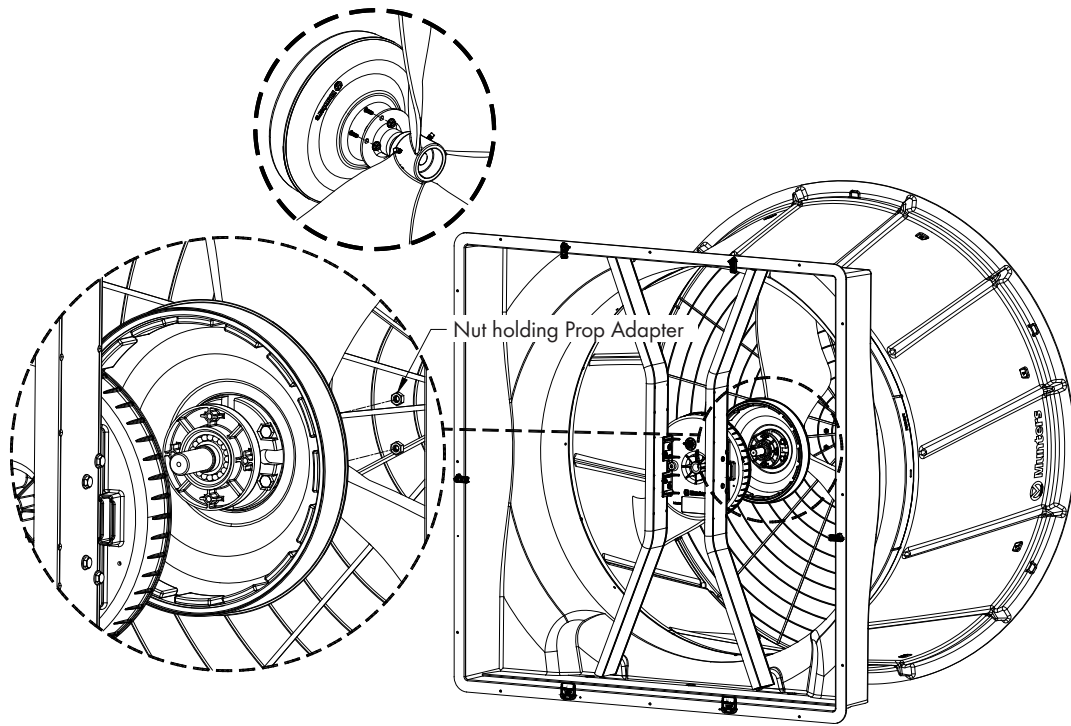


Figure 9

Step 10

Using the Propeller as a hand hold, hold Prop with New Rotor tight and position back onto Motor, taking care to not let the New Rotor slam in place. Be careful not to get fingers pinched between New Rotor and Motor. [See Figure 10.](#)

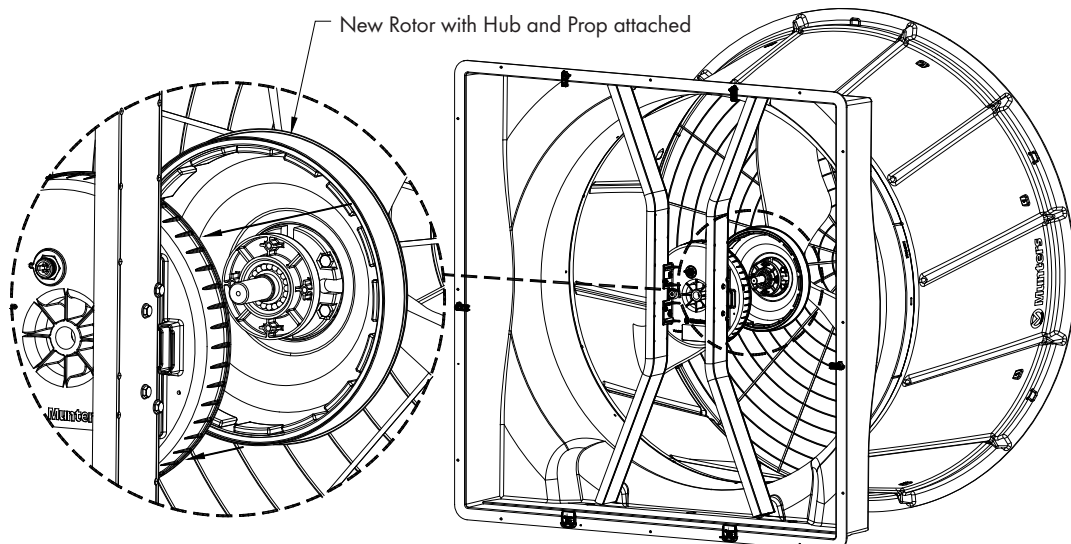


Figure 10

Step 11

Secure New Rotor with Hub and Prop to Motor with M25 Hex Nut removed in Step 4 and tighten to 210 ft-lbs. [285 N-m] torque. See Figure 11.

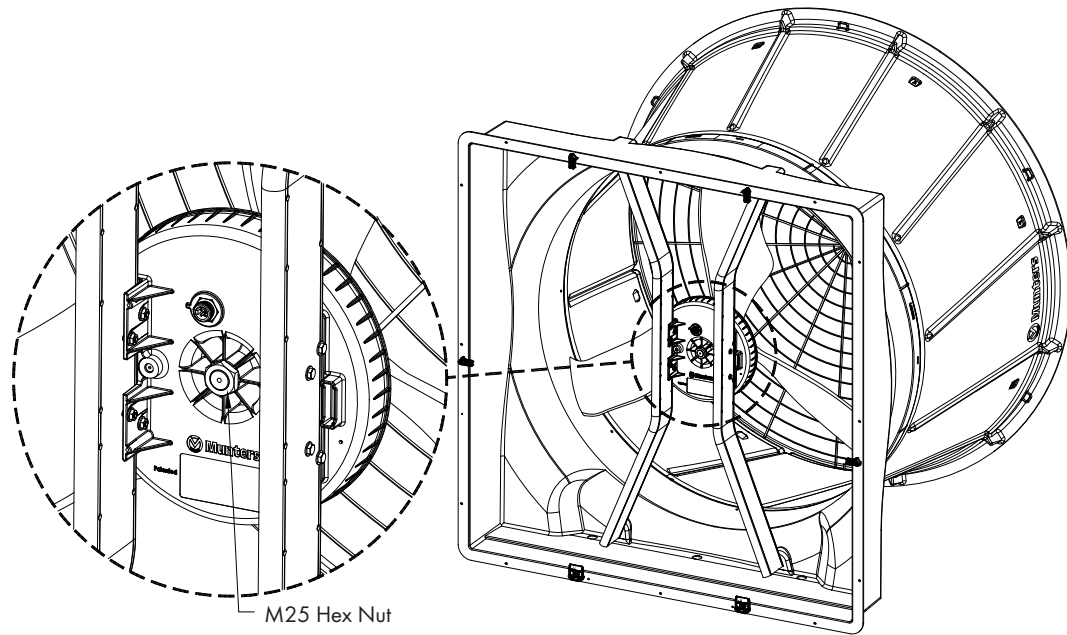


Figure 11

Step 12

Replace Black Plastic Cover Cap over M25 Hex Nut and fasten in place using Phillips Screw removed in Step 3. See Figure 12.

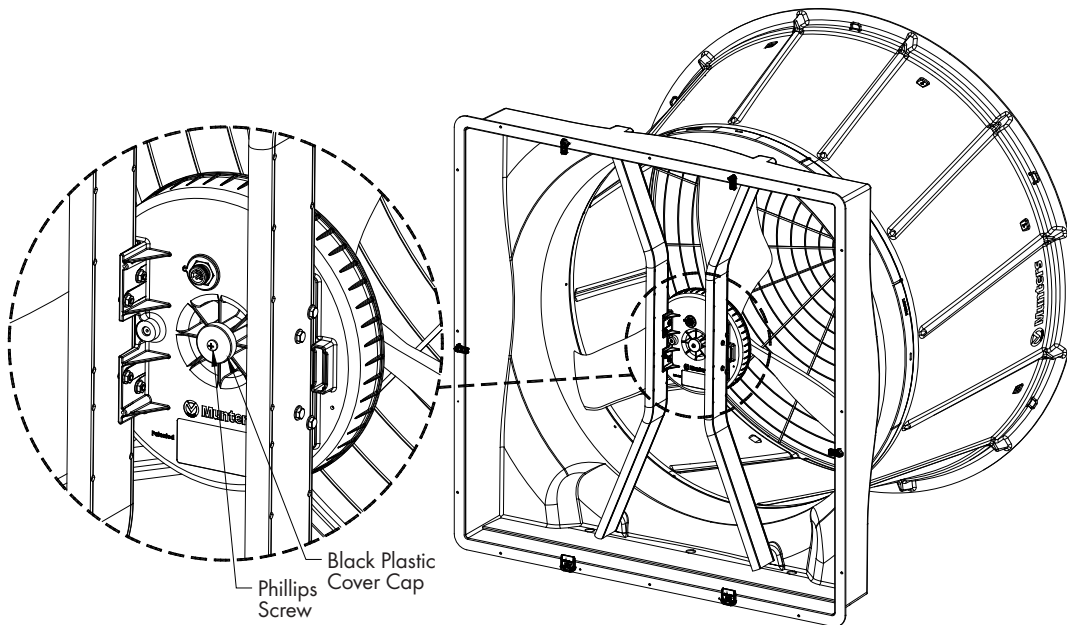


Figure 12

Step 13

If the Quick Connect Connector was disconnected from back of Motor, reconnect the Quick Connect Connector to the motor, replace the Munters Drive controller, between the Struts for VX51/VX55 or over the Struts for VX36/VX48, and secure in place using the (4) Bolts, Washers and Nuts removed in Step 2. See Figure 13.

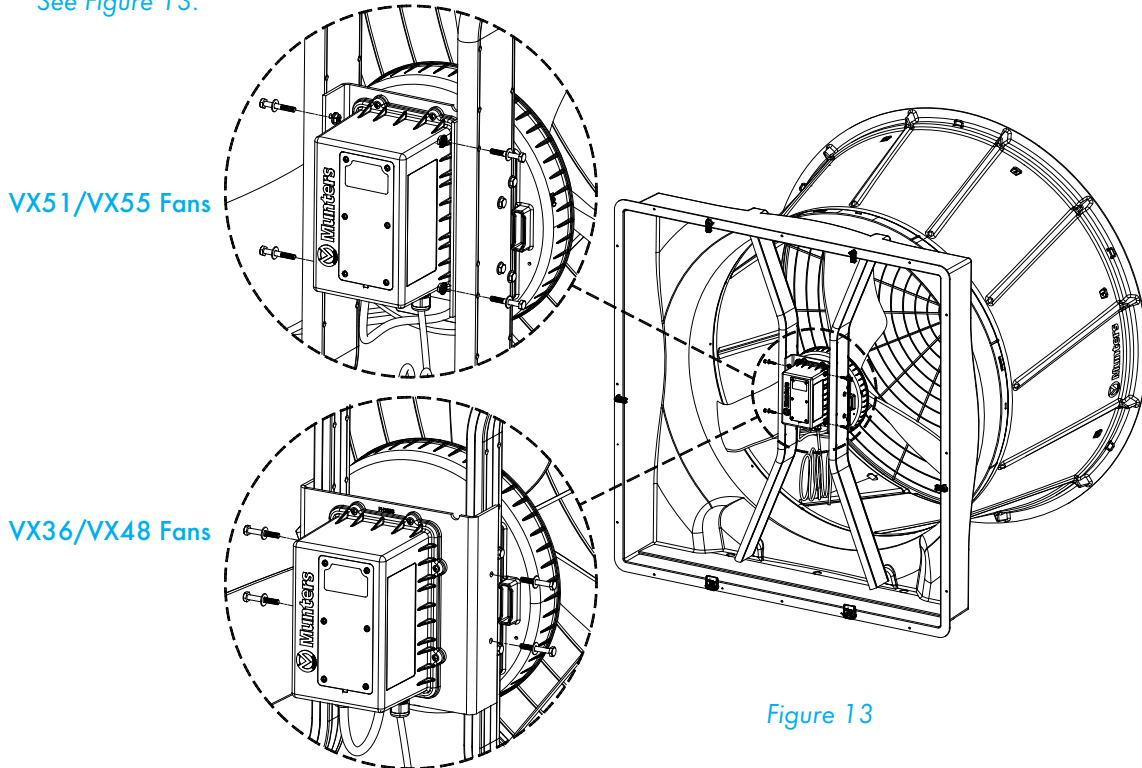


Figure 13

2.2 AX/VX Munters Drive Fans with Old Gray Box**Step 14**

If needed to access the Black Plastic Cover Cap over the M25 Hex Nut on the back of the Munters Drive Motor, remove the Drive Cover by loosening the (4) Screws holding the cover on. Set Cover aside to be reused later. See Figure 14.

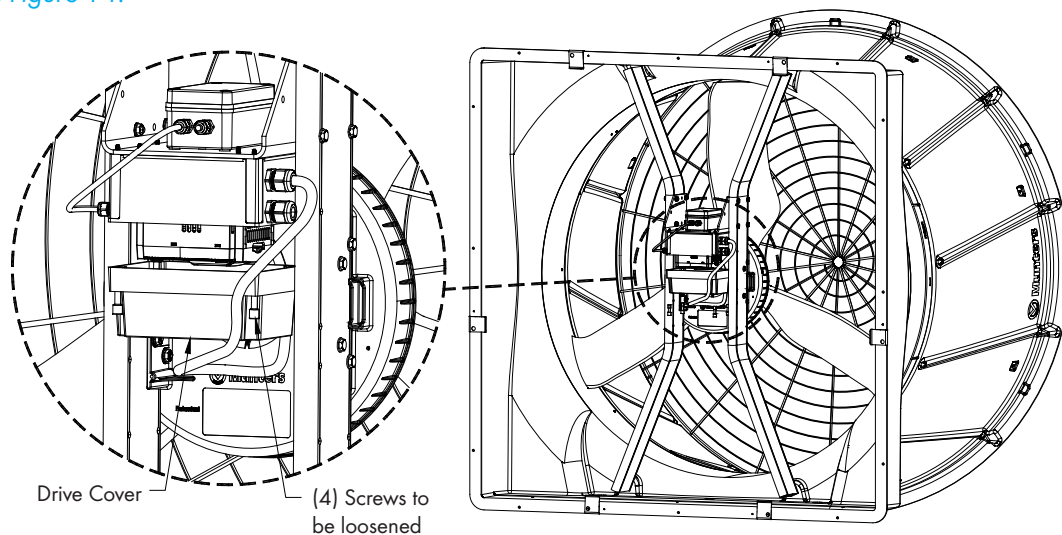


Figure 14

Step 15

Remove the Phillips screw holding the black plastic cover cap. Then remove the cover cap and set cap and screw aside to be reinstalled later. See Figure 15.

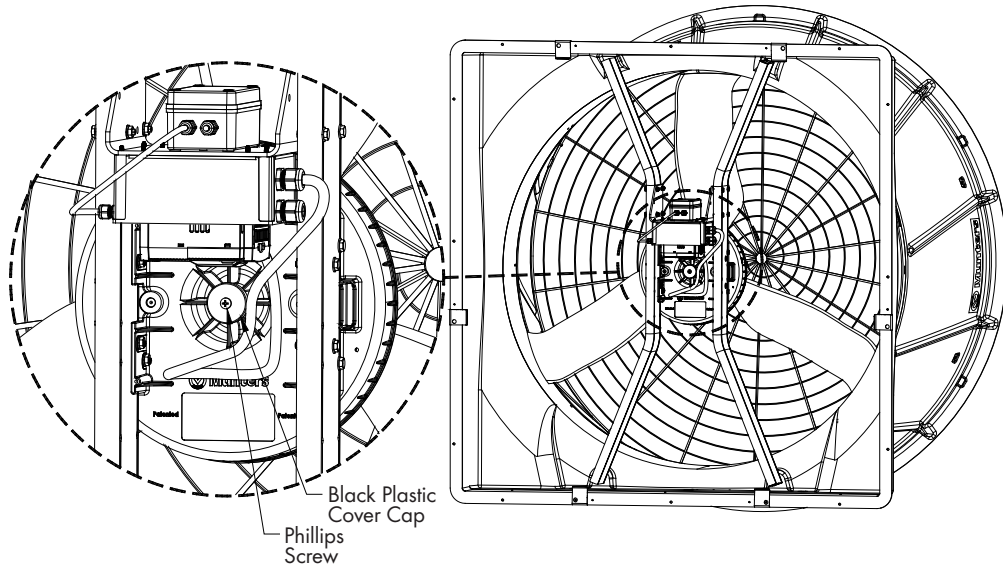


Figure 15

Step 16

Using a 36mm Socket, remove the M25 Hex Nut from the back of the Munters Drive Motor. See Figure 16.

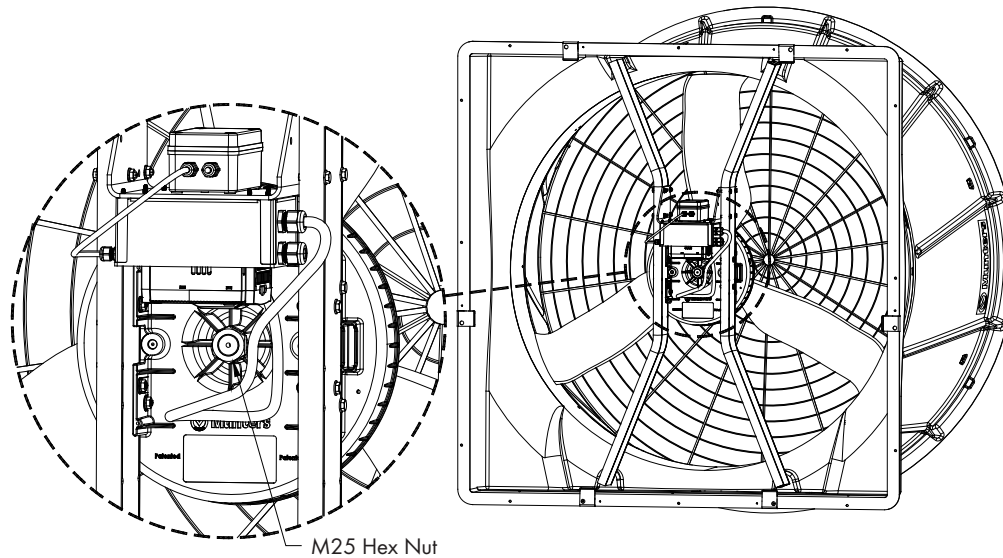


Figure 16

Step 17

Using the Propeller as a hand hold, push hard straight forward until the Rotor comes off the Munters Drive Motor. Be careful not to get fingers pinched between the Rotor and the Motor. [See Figure 17.](#)

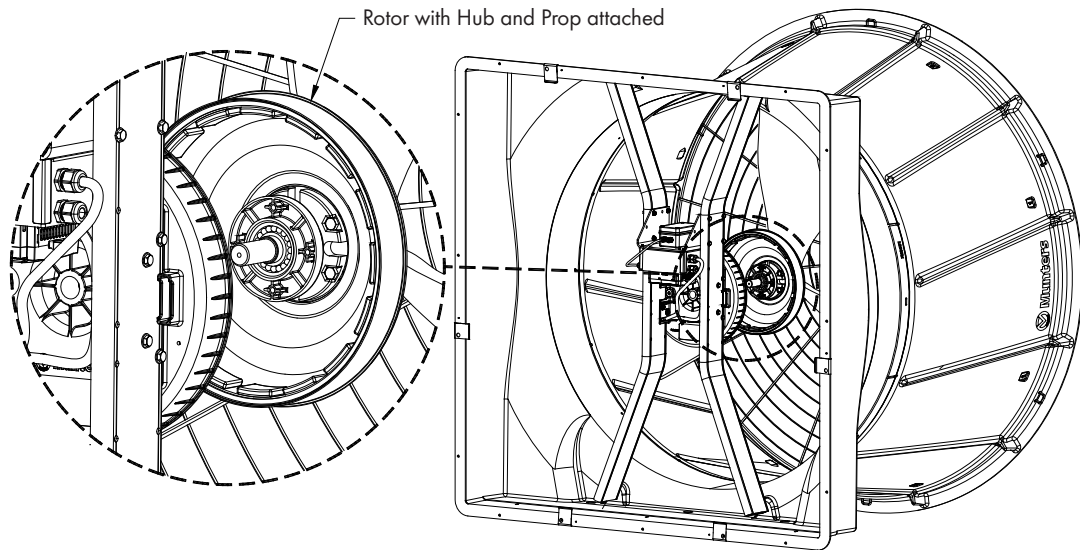


Figure 17

Step 18

Once the Rotor with Hub and Propeller is removed from the Motor, remove the (4) Nuts holding the Prop Adapter to the Rotor and set aside to be reused. [See Figure 18.](#)

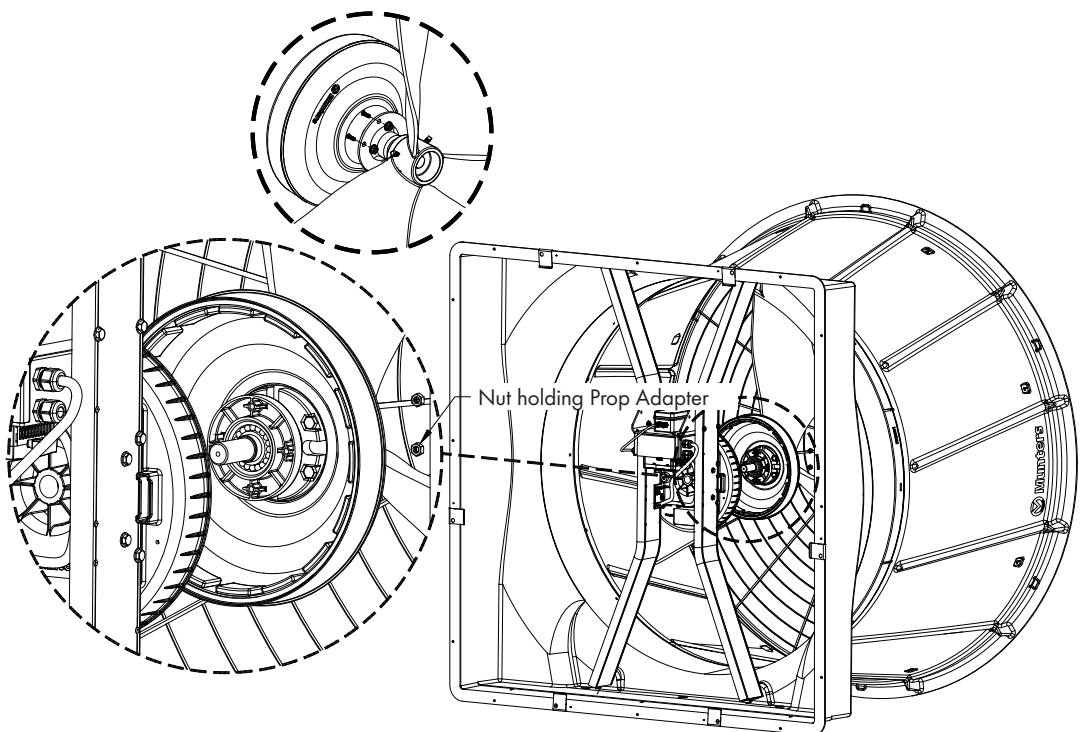


Figure 18

Step 19

Remove the Hub and Rotor from fan, leaving the Propeller with Prop Adapter in the fan. Set Hub aside to be reused. Rotor should be shipped back to Munters. See Figure 19.

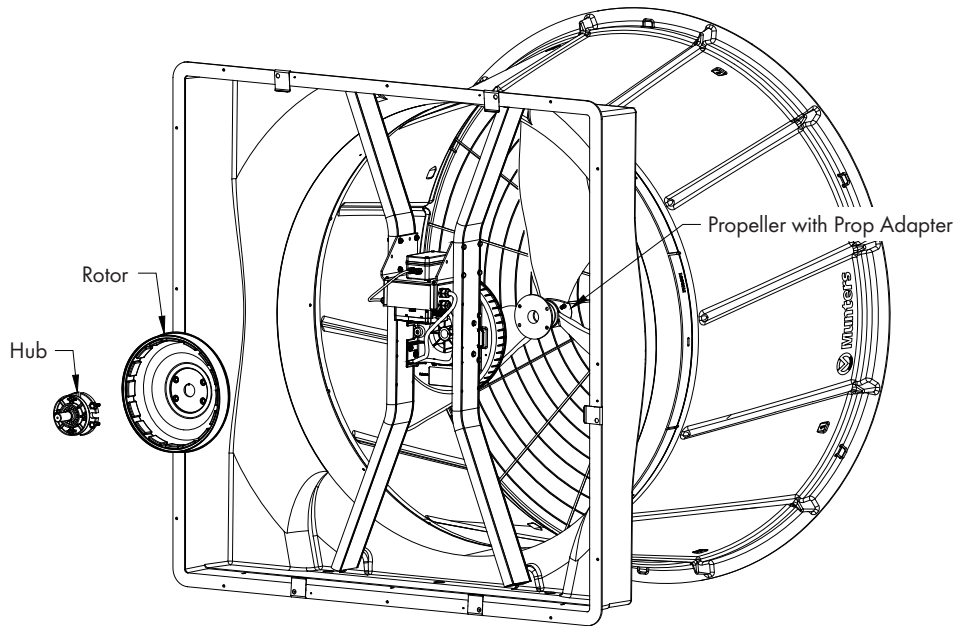


Figure 19

Step 20

Install Hub removed in last step into back of new Rotor and onto Prop Adapter attached to Propeller. See Figure 20.

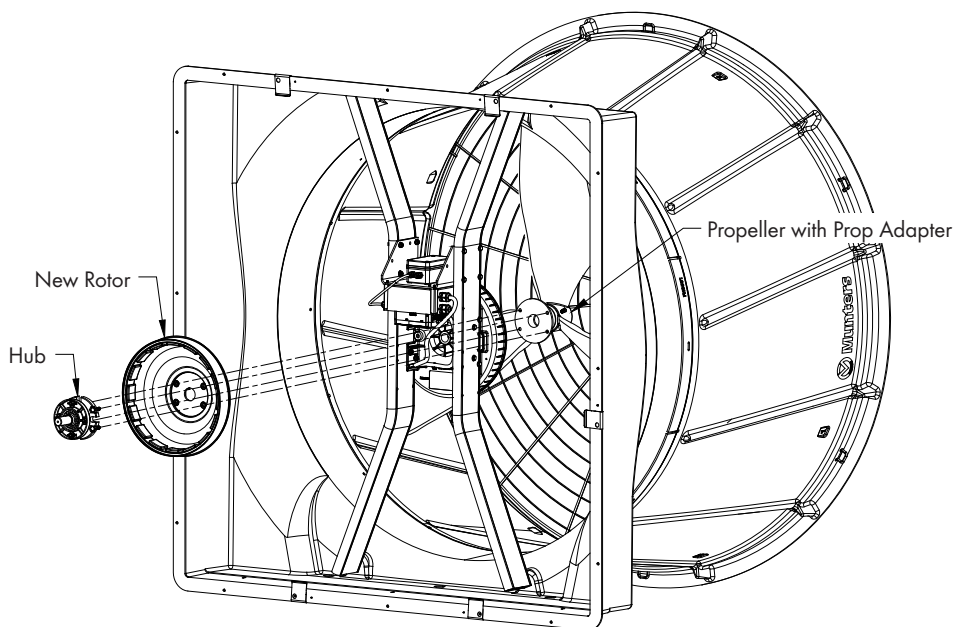


Figure 20

Step 21

Secure the Hub and New Rotor to the Prop Adapter using the (4) Nuts removed in Step 6 and tighten to 200 in-lbs. [23 N-m] of torque. See Figure 21.

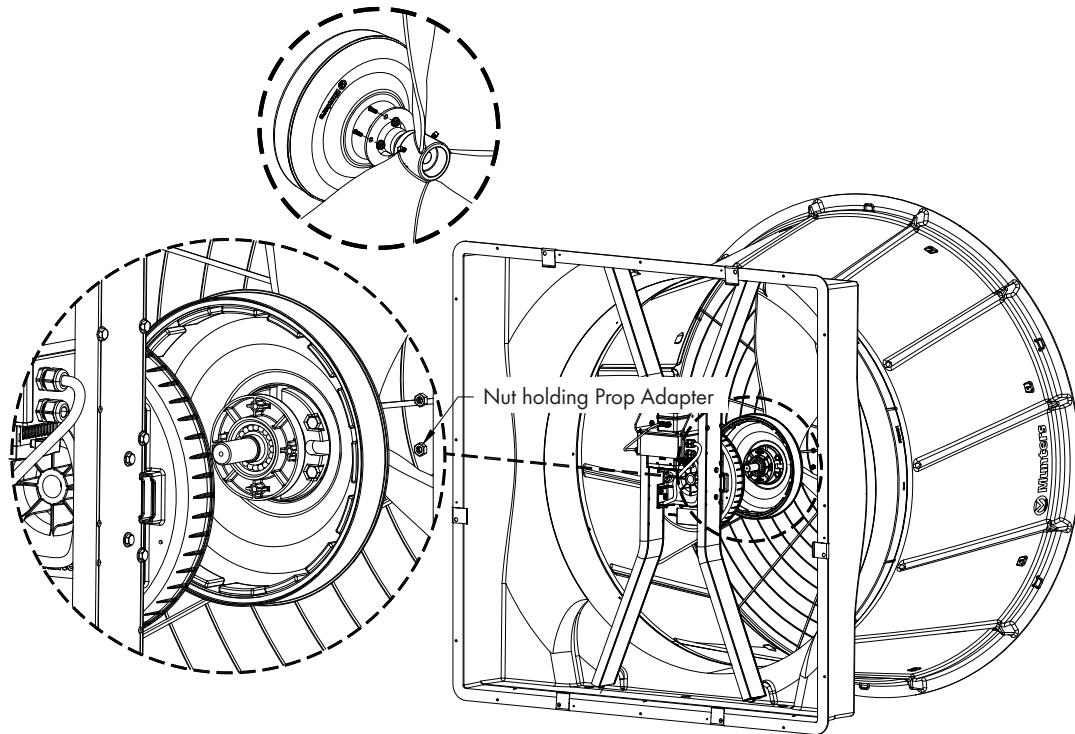


Figure 21

Step 22

Using the Propeller as a hand hold, hold Prop with New Rotor tight and position back onto Motor, taking care to not let the New Rotor slam in place. Be careful not to get fingers pinched between New Rotor and Motor. See Figure 22.

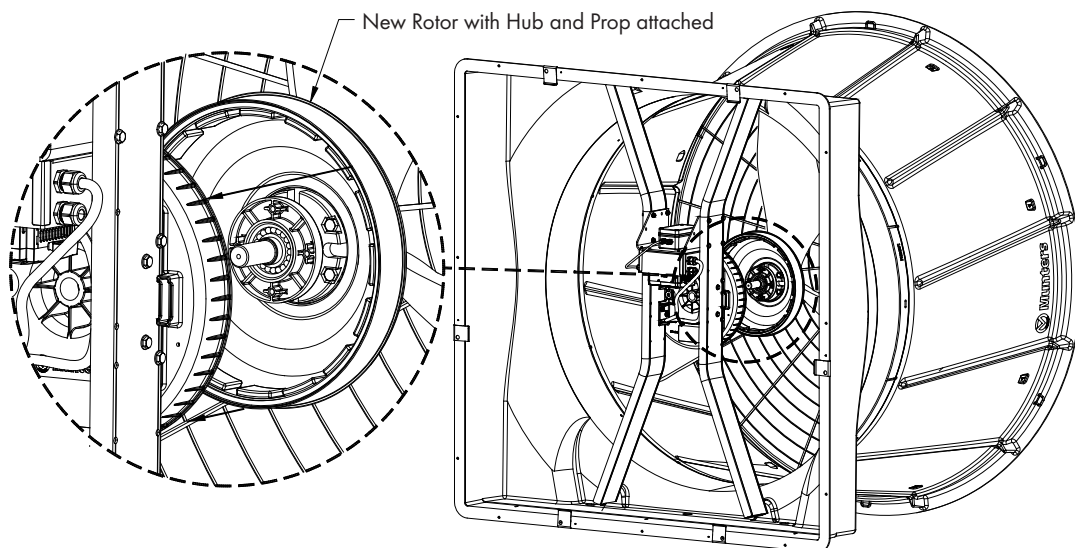


Figure 22

Step 23

Secure New Rotor with Hub and Prop to Motor with M25 Hex Nut removed in Step 4 and tighten to 210 ft-lbs. [285 N-m] torque. See Figure 23.

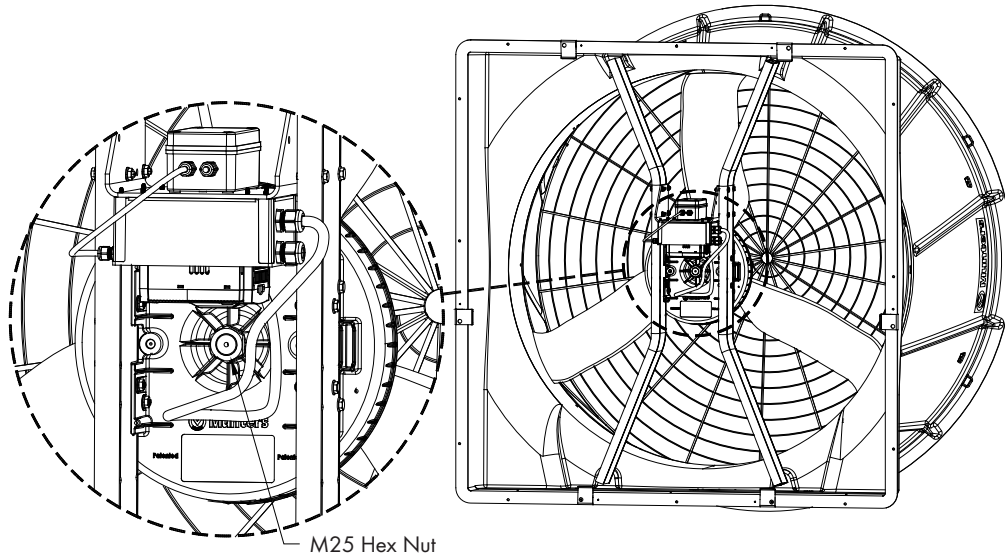


Figure 23

Step 24

Replace Black Plastic Cover Cap over M25 Hex Nut and fasten in place using Phillips Screw removed in Step 15. See Figure 24.

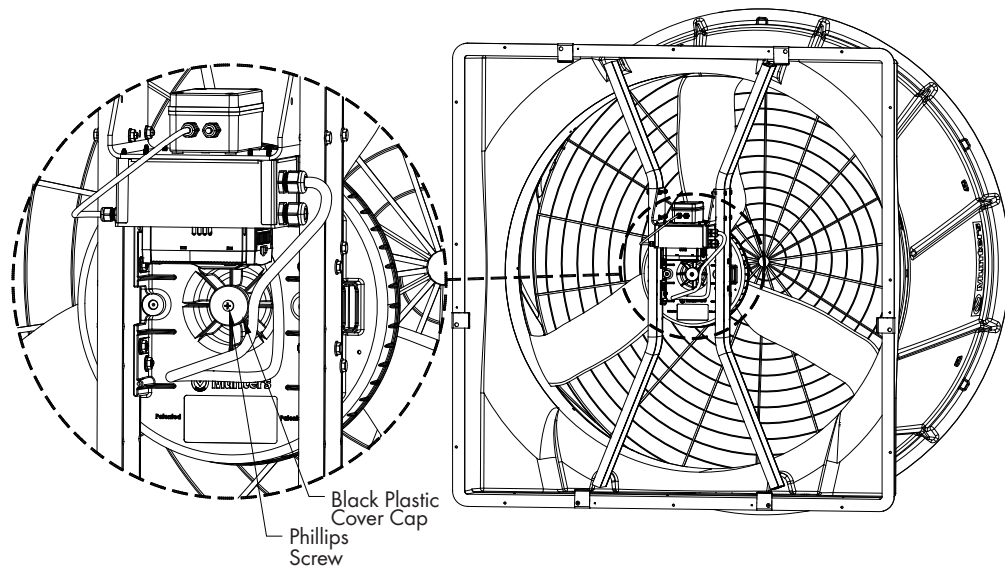


Figure 24

Step 25

If the Drive Cover was removed in Step 14, replace the Drive Cover over the Drive and secure in place by retightening screws loosened in Step 14. See [Figure 25](#).

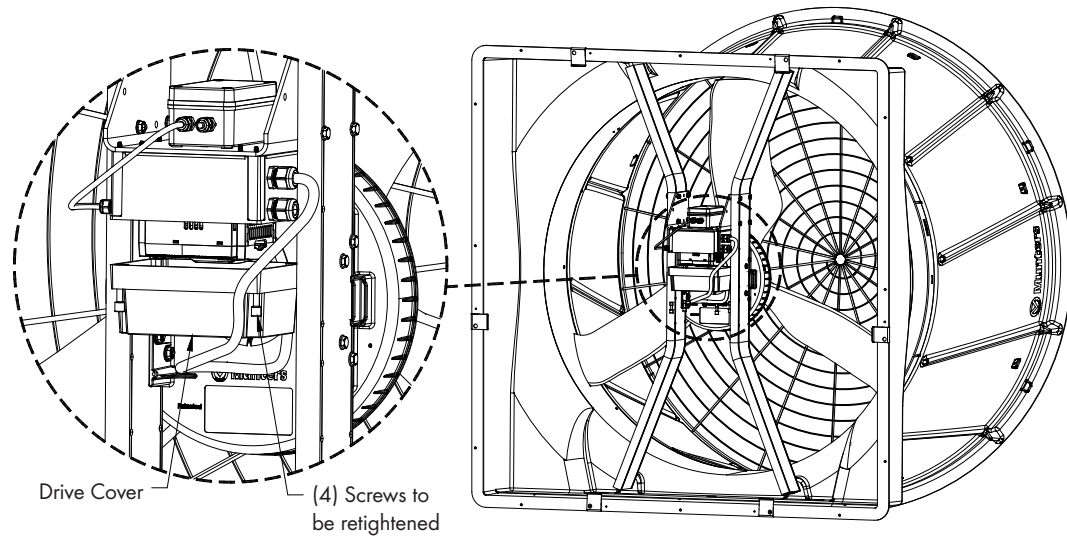
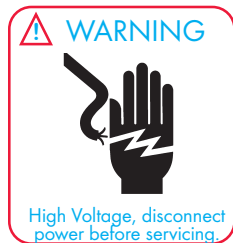


Figure 25

3.1 Troubleshooting



SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
<ul style="list-style-type: none"> Fan Not Operating 	<ul style="list-style-type: none"> Fan control set above room temperature Blown Fuse or open circuit breaker Propeller blade contacting fan housing Fan control defective (i.e. environmental control, etc.) 	<ul style="list-style-type: none"> Set to a lower temperature Replace fuse or reset breaker Realign motor in fan housing Adjust Struts Repair or replace control
<ul style="list-style-type: none"> Fan Does Not Start Caution: There is a 10 second delay for the fan to start when an 'On' command is present. 	<ul style="list-style-type: none"> Munters Drive motor/controller issue 	<ol style="list-style-type: none"> Verify AC voltage is present at fan. Turn AC power off to fan for 1 minute Verify Prop turns freely <ol style="list-style-type: none"> If not contact Munters Product Support If it turns freely go to next step Turn AC power back on to fan <ol style="list-style-type: none"> If starts up and runs, fan OK <ul style="list-style-type: none"> Periodically observe fan to verify it is still running If it continues to run, fan is OK If fan stops, look through clear window in drive cover to check what drive display reads. Contact Munters Product Support If fan tries to start but stops, look through clear window in drive cover to check what drive display reads. Contact Munters Product Support If fan doesn't try to start, verify 'On' command signal is present at circuit board. Also, slide the switch on the circuit board to the 'On' position.
<ul style="list-style-type: none"> Fan Operating - Insufficient Airflow 	<ul style="list-style-type: none"> Shutter or Damper door jammed Guard dirty/clogged 10-0V signal set incorrectly 	<ul style="list-style-type: none"> Clean shutter or damper door Clean guard Check and adjust 10-0V signal
<ul style="list-style-type: none"> Excessive Noise 	<ul style="list-style-type: none"> Propeller blade contacting fan housing 	<ul style="list-style-type: none"> Sand fan housing to remove high spot Adjust Struts
<ul style="list-style-type: none"> Excessive Vibration 	<ul style="list-style-type: none"> Motor loose on mount Propeller damaged 	<ul style="list-style-type: none"> Tighten fasteners Replace propeller

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Munters Drive Rotor replacement kit is developed and produced by Munters Corporation, Lansing, Michigan U.S.A. 1-800-227-2376



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