

- I. Before Beginning:
 - A. Gather the necessary items:



- 1. Hammer
- 2. Needle Nose Pliers
- 3. 3/32" Allen Wrench
- 4. Drill with Phillips Screw Bit (Phillips head screwdriver may also be used)
- 5. New M-58 Motor
- New Mounting Screws: If motor comes with screws, use the new ones instead of the screws installed with the previous motor.



B. Unplug Center Module and move to a location with adequate workspace. You will need to have enough space to turn the center module on its side to access the skimming wheel assembly. II. Remove the Electrical Housing of the Center Module



- Remove the eight (8) screws in the housing. Two (2) in the front, one (1) on each side, and four (4) in the rear.
- B. Keep these screws for resecuring the housing when you have replaced the motor.



C. Disconnect the Jog Switch (if present):

In order to completely separate the rear enclosure, you will need to disconnect the switch by squeezing the bottom of the white connector as shown above and pulling the connections apart.





D. Remove Front Enclosure and Wiper Blade Assembly:

The front enclosure, the translucent covers and the wiper blade assembly can be lifted up and set aside.

III. Disconnect Power to the Motor



A. Two quick-connects run power to and from the motor.



B. To disconnect, use a pair of Needle Nose Pliers to grab the quick-connects by the insulated area and pull off the motor connections.

IV. Remove the Skimming Wheel

A. Turn the center module on its side with the motor fan facing away from you to access the skimming wheel assembly.



B. Straighten out the legs of the Cotter Pin.



C. Push the pin up through the shaft and set off to the side.



D. Slide the Wheel Support shaft out. It will go downward through the skimming wheel.

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E. The skimming wheel should drop down out of the assembly. Set it aside for reassembly.

V. Remove the Wheel Drive Sprocket

- A. Turn the center module right side up with the motor fan facing away from you.
- B. You may have to turn the fan to see the setscrew on the wheel drive sprocket.



C. Using the 3/32" Allen Wrench, turn the setscrew counter-clockwise to loosen the sprocket.



- D. Pull the sprocket off the motor shaft. If necessary use a hammer as a lever to remove the sprocket.
- VI. Change out the Motor



A. Remove the four (4) screws holding the M-58 to the motor mount plate.



B. Remove the existing motor.





C. Place the new motor with the drive shaft through the motor mount.



- D. Use the screws that come with the motor to secure to the motor mount.
- VII. Replace the Wheel Drive Sprocket and Skimming Wheel Assembly



A. Place the wheel drive sprocket back on the motor drive shaft. Do not tighten right now.

B. Turn the center module on its side with the motor fan facing towards you.



C. Hold the Skimming Wheel in place. It should interlock with the Wheel Drive Sprocket when centered with the holes in the support arms.



- Push the Wheel Support Shaft through with the flat portion going first. You may have to twist the shaft until it lines up with the hole on the opposite support arm. (Turn the center module over if you are having trouble getting the shaft through the hole)
- E. Turn the center module over so that the flat portion of the Wheel Support Shaft is sticking out slightly towards you.

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F. Replace the cotter pin downward through the hole in the Wheel Support Shaft.



G. Bend the legs of the Cotter Pin, so that the wheel assembly will remain in place.



H. Turn the center module upright and replace the Wheel Wiper Assembly.



I. Center the Skimming Wheel in the Wiper Blade Assembly and then center the Wheel Drive Sprocket in the Skimming Wheel Assembly.



J. Using the 3/32" allen wrench, turn the setscrew on the Wheel Drive Sprocket clockwise to tighten and hold the sprocket in place.



VIII. Reconnect Power to the Motor



- Α. Using your fingers or needle nose pliers, reconnect the two (2) quick-connects to the contacts on the motor.
- Β. The white wire should connect to the top contact and the black wire connects to the bottom contact.

IX. **Replace the electrical housing**



Α. Place the front enclosure and translucent covers back on the center module.



Β. Reconnect the Jog Switch using the white connections (if present).



C. Place the rear enclosure over the rest of the center module.



D. Replace the eight (8) screws in the housing. Two (2) in the front, one (1) on each side, and four (4) in the rear.



X. Test unit to ensure proper funtionality



A. The center module has a safety switch that is engaged when it is placed on the tank. This switch must be engaged for the center module to be tested. (To Test: Upon pressing on the safety switch, you should hear a click and feel a spring action. If it appears to be damaged, contact Thermaco to purchase a new switch.) Place the center module back on the tank for testing or find another way of engaging the safety switch for testing purposes. **KEEP HANDS AND ALL PERSONAL ITEMS AWAY FROM THE UNDERSIDE** OF THE CENTER MODULE WHEN UNIT



B. Reapply power to the center module.

DO NOT LEAVE PLUGGED IN FOR AN EXTENDED PERIOD OF TIME WITH THE HEATING ELEMENT IN OPEN AIR. C. A Power light should come on to the lower left of the timer. If not, there is no power to the unit due to a lack of electricity to the outlet, or a power cord failure.



D. Press down the Jog Switch. It is a momentary contact switch and the motor should run only while the button is pressed in. Failure to run is the result of a failed safety switch or an improperly installed motor.



E. Press in tabs on the timer and turn it CLOCKWISE until the white tabs cross over the arrow between 12 and 3. The timer should click and the motor should run. Failure to run is the result of a failed safety switch or an improperly installed motor.

Be sure to reset timer to local time after testing.