



Oreck Magnesium Series Service Manual

The Oreck Manufacturing Company



10/2011

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Covering all Magnesium Upright Models Including: LW100, LW125, LW1000, AND LW1500 SERIES.

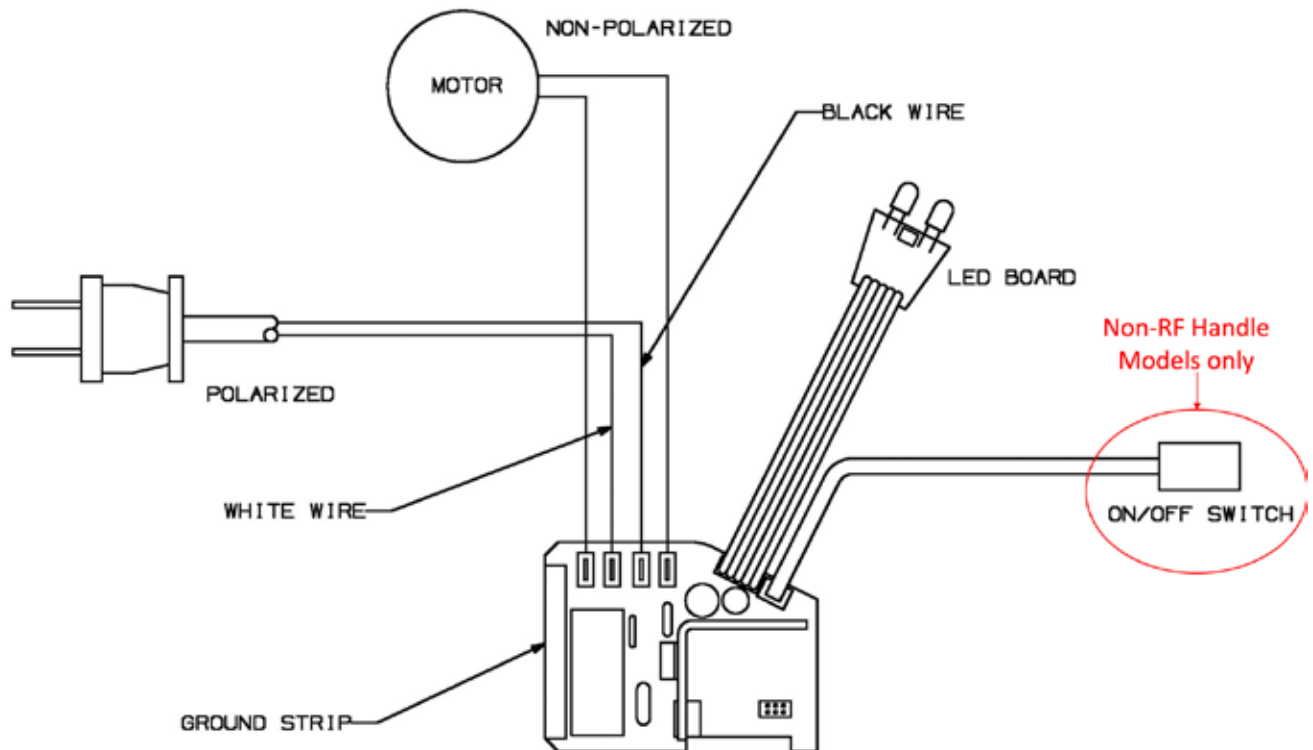
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Note: To view a current service parts list, refer to www.oreckretail.com.

Common Repairs Table

Repair Task	Where to Find It
Replace Belt	Base Unit section, steps 1 and 7-9
Replace Brushroll Assembly	Base Unit section, steps 1 and 7-10
Replace Brush Chamber-to-Inlet Seal	Base Unit section, steps 1-2 and 5
Replace Dirt Tube O-Ring	Handle/Upper Assembly section, steps 4-6
Replace Power-to-Switch-to-PCB Harness	Handle/Upper Assembly section, step 3
Replace Fan Housing Assembly	Base Unit section, steps 1-2, 5, 7-9, 11-18
Replace PCB Main	Base Unit section, steps 1-3
Replace Motor	Base Unit section, steps 1-2, 5, 7-9, 11-18

Wiring Diagram



Tune-up Checklist

Check the drive belt

Examine the condition of the Flat Corded Belt located in the base unit. Check for wear, fraying, and for pits and cracks. To remove the belt, follow step 1 and steps 7-8 of the Base Unit section.

Check the Brushroll Assembly

Spin the roller brush to determine that the turning motion is fluid and smooth without noise or binding. To remove the roller brush, follow step 1 and steps 7-10 of the Base Unit section.

Check all electrical connections

Use a voltmeter to check voltages in all circuits.

Clean the Brushroll Assembly

Clean the Brushroll Assembly of all lint, dirt, and hair, or anything that could restrict the turning motion of the brush. To remove the Brushroll Assembly, follow step 1 and steps 7-10 of the Base Unit section.

Clean housing and Baseplate

Use a small brush and compressed air to clean the housing and the Baseplate. Thoroughly wipe down the outside housing and the Baseplate. DO NOT use soap and water because the Baseplate has all parts attached. Soap and water will damage the parts.

Clean Outer Bag and Bag Dock

Use a damp cloth to wipe down the Outer Bag. Open the Outer Bag and vacuum out any dust or debris. Remove the inner, disposable bag and thoroughly wipe down the Bag Dock.

Replace any worn or damaged seals

Check the following seals within the unit for cracking, splitting, or significant wear and replace if necessary:

- O-Ring (9) at base of Collar Dirt Tube (Follow disassembly instructions steps 2-4 of the Handle/Upper Assembly section to check the dirt tube O-Ring.)
- Brush Chamber-to-Inlet Seal. (Follow disassembly instructions steps 1-2 and 5-6 of the Base Unit section to remove the Inlet Duct.)

Replace the inner bag

1. Pull tab on bag to release Bag Dock from connector. Bag Dock door hinges downward.
2. Gently pull bag cardboard collar outward from Bag Dock.
3. Slide the cardboard collar of the new bag onto the Bag Dock door.
4. Firmly push Bag Dock door with both thumbs on the indication point until it snaps.

Troubleshooting Chart

Issue	Possible Cause	Solution	RF	Non-RF
Motor does not work, lights work and flash	Connector at PCB #1 MAIN (22) not connected securely	Connect Securely	✓	✓
	Motor burned out	Replace Motor (2)	✓	✓
	Motor defective (e.g., loose wires)	Replace Motor (2)	✓	✓
	PCB #1 MAIN (22) defective	Replace PCB #1 MAIN (22)	✓	✓
Lights and Motor work, but motor stops and lights flash	Motor rotor locked		✓	✓
	+ Scroll Fan is bound and has obstruction	Remove obstruction	✓	✓
	+ Motor has locked	Replace Motor (2)	✓	✓
	Brushroll is not turning		✓	✓
	+ Belt is damaged or worn (Stops turning under load)	Replace Belt (3)	✓	✓
	+ Brushroll defective	Replace Brushroll (13)	✓	✓
	+ Obstruction in the brushroll chamber	Remove obstruction	✓	✓
	Magnet missing from center of Brushroll	Replace Brushroll (13)	✓	✓
	PCB#2 (39) not connected securely to PCB #1 (22)	Connect Securely	✓	✓
	Defective PCB#2 (39)	Replace PCB#2 (39)	✓	✓
PCB #1 MAIN (22) defective	Replace PCB #1 (22)	✓	✓	
Motor works, but lights do not OR	PCB#2 (39) not connected securely to PCB #1 MAIN (22)	Connect Securely	✓	✓
	Defective PCB#2 (39)	Replace PCB#2 (39)	✓	✓
Motor works then stops, but lights do not	PCB #1 MAIN (22) defective	Replace PCB #1 (22)	✓	✓
	Vacuum does nothing when power button is pressed	Vacuum is unplugged	Plug in Vacuum	✓
	Power cord (38) harness is damaged/defective	Power cord (38)/harness is damaged/defective	✓	✓
	AC connector at PCB #1 MAIN (22) not connected securely	Connect Securely	✓	✓
	Power Switch not functioning			✓
	+ Connectors at switch (37) not connected securely	Connect Securely		✓
	+ Connector at PCB #1 MAIN (22) not connected securely	Connect Securely	✓	✓
	+ Switch (43) is defective	Replace Switch (37)		✓
	+ Switch cable (37) damaged	Replace cable		✓
	PCB #1 MAIN (22) defective	Replace PCB #1 (22)	✓	✓
Vacuum will not run	Batteries are dead	Replace batteries		✓
	Electronics not communicating properly	Verify if battery is in place. Plug unit into power outlet. Press and hold the ON/OFF button for 15 seconds or until the headlights start to flash. Flashing headlight indicates unit is now communicating properly and is ready to use.		✓

Disassembly Instructions

Be certain to unplug the unit while servicing except when you need to test a particular function. Numbers below refer to the numbered parts in the Service Parts List.

Handle/Upper Assembly

NOTE: If no service is necessary for the upper assembly, skip to Base Unit section to disassemble the base unit.

1. Remove the Handle Assembly (40) from the upper assembly by depressing the spring plungers found underneath each of the four rubber covers where the Handle Assembly (40) meets the Outer Bag (26). **Note: Later production units have only 2 springs mounted on opposite corners.*



Rubber Cover



Spring Plunger

2. Use an Allen wrench or a small screwdriver to depress the spring plunger. As you depress the plunger, pull up on the handle until the plunger slides under the bracket slightly and stays in the depressed position. Do this with each plunger, then pull the handle up and away from the bag to remove it completely.



Spring Plunger

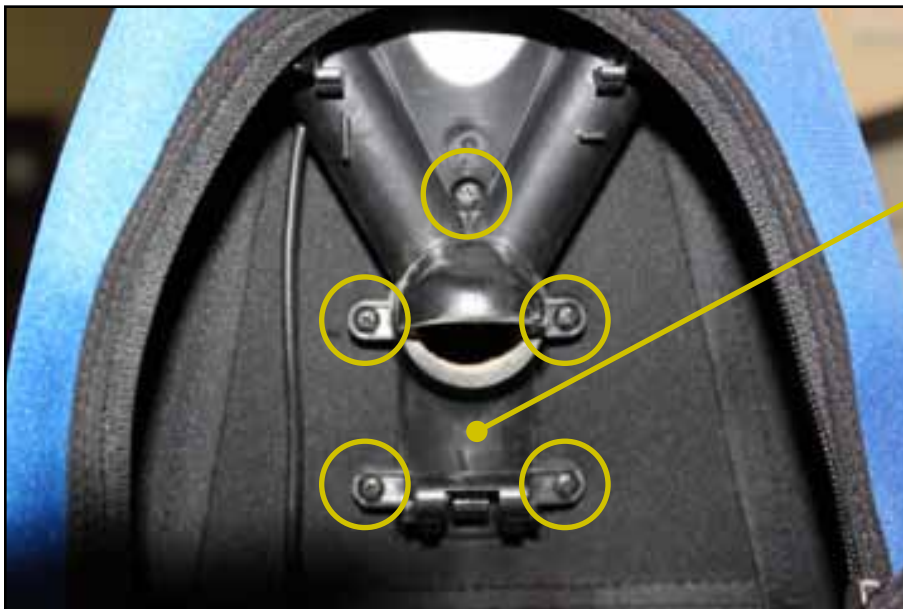
3. Remove Power Button Bracket (35) and Handle Switch Mount (34) located behind the disposable bag. Remove the five screws on the Handle Switch Mount Bracket (34) to detach both. The Power to Switch to PCB Harness (37) is located behind the Power Button.



**Power Button (37)
and Switch Bracket
(21) Non-RF Units
Only.**

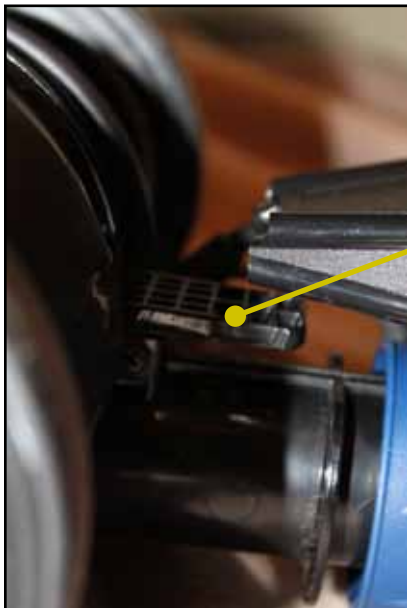


**Power Button and spring (36) located in Power
Button Bracket (35) Non-RF Units Only.**



**Handle Switch Mount
Bracket (34) All Units**

4. Detach Pagoda (27) from Scroll Tongue (7) by lifting straight up.

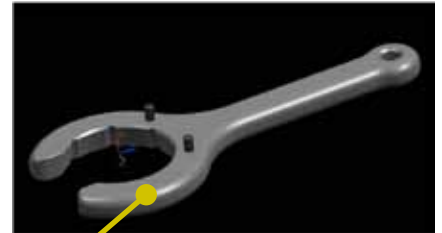


5. Unscrew Dirt Tube Collar (8). Use special multi-tool #72591-01 to prevent cosmetic damage.



Dirt Tube (29)

Dirt Tube Collar (8)



Multi-tool #72591-01

6. Remove Dirt Tube from base at the Fan Housing Assembly (41) by pulling straight up.



Dirt Tube Collar
O-ring (9)



Base with upper
assembly removed
Non RF Unit Shown

Base Unit

1. Remove Sole Plate with wheels (5) by removing the 2 Sole Plate screws. Remove screws of Baseplate.



Baseplate
screws

Sole Plate, already
removed in this view

2. Remove Tunnel Top Cover (18) to reveal the PCB #1 Main (22). Find the tab on the Top Tunnel Cover and push it to unlock the cover from the inlet duct to avoid breaking the cover. To work with the Inlet Duct (11), skip to step 5.

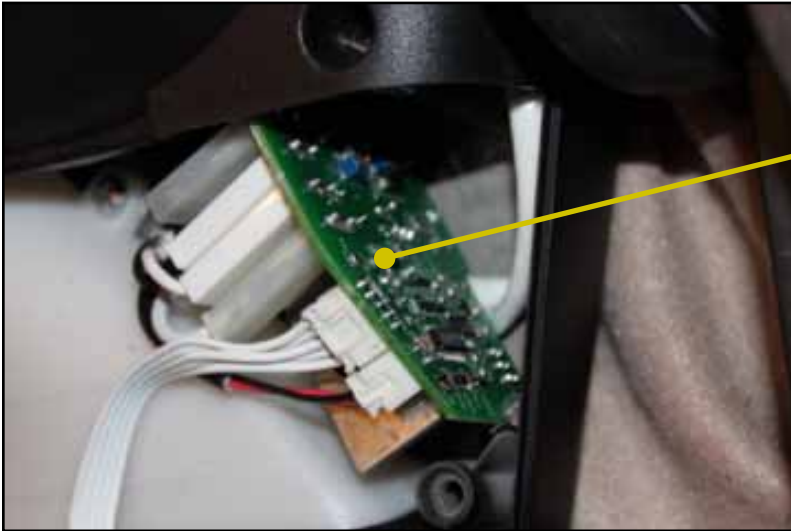


Tunnel Top Cover

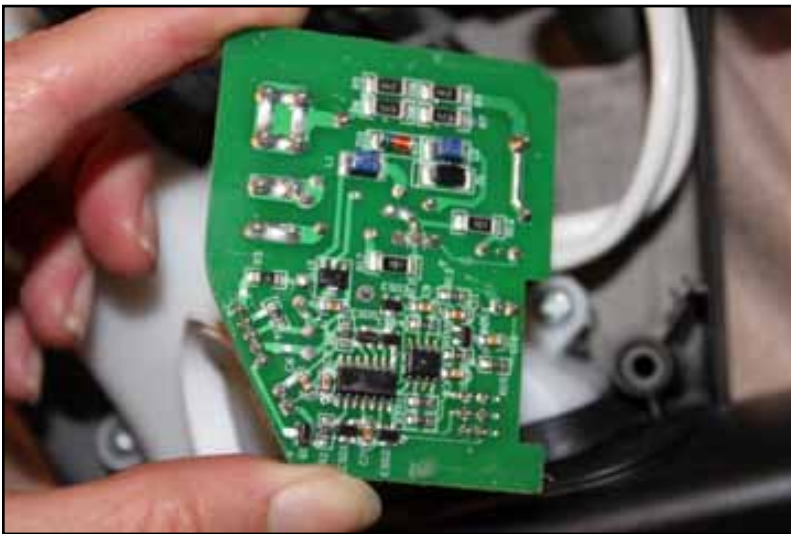


PCB Main #1 (22)

3. Remove PCB #1 Main (22).



PCB #1 Main

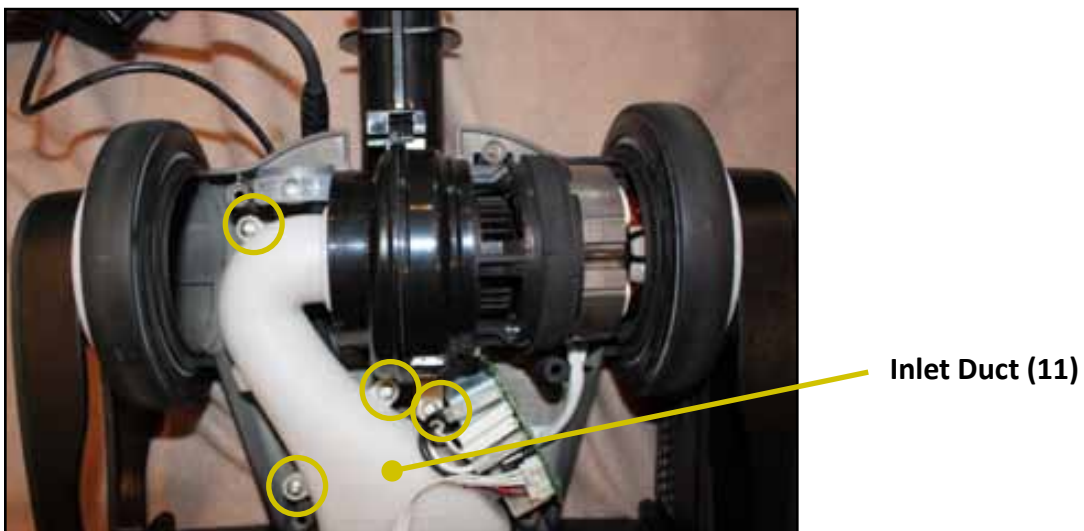
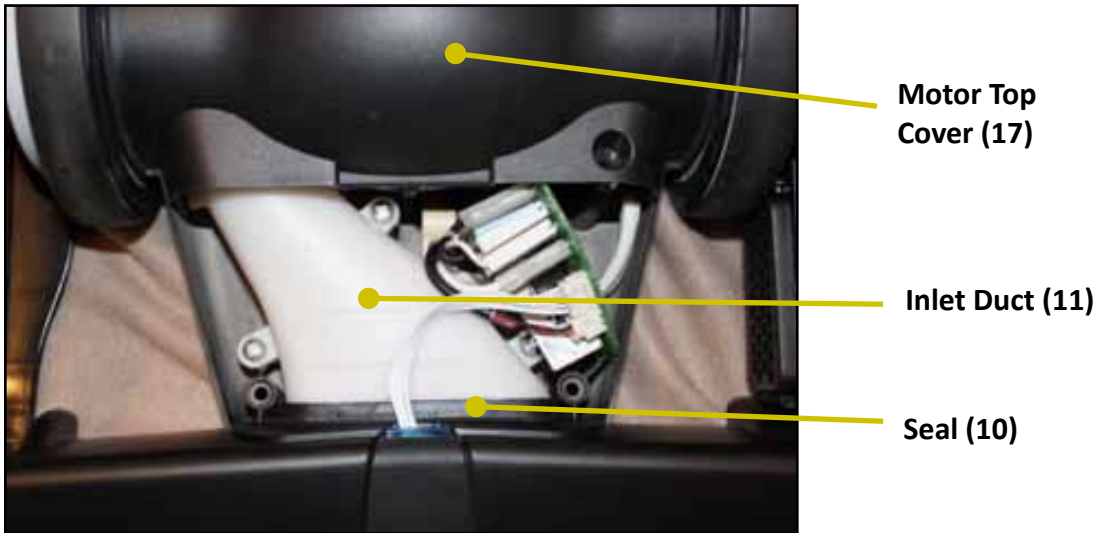


4. If replacing a defective low voltage or power cord, remove LV/AC Wire-to-Base Clamp (23).



**LV/AC Wire-to-Base
Clamp (23) Non-RF
Units Only.**

5. To work with the Inlet Duct, Motor, or Fan Housing Assembly, remove Motor Top Cover (17). Remove Inlet Duct (11) and Seal (10).



6. If defective, remove Detent (4). Skip this step unless the Detent is defective.

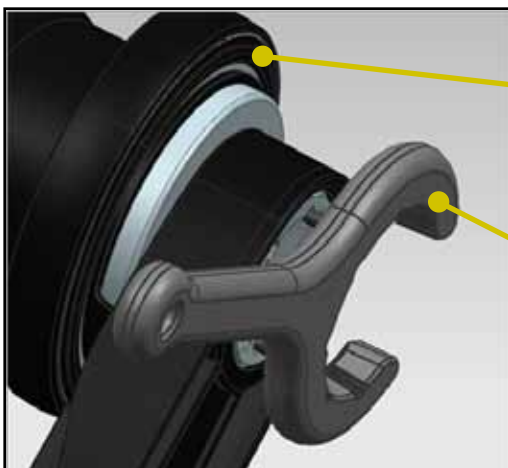


Detent (4)

7. Unlock the Rear Wheel Assembly (14) by rotating the white disc to the unlock position. Use Multi-tool #72591-01 to prevent cosmetic damage when removing the track and hub. If the #72591-01 is not available, use a pair of needle-nose pliers with caution so as not to damage the surface.



Track (15 and 16)



Rear Wheel Assembly

Multi-tool #72591-01

8. Remove the Left Track with Belt Tunnel (15) and reveal the Belt.



Belt (3)

9. Remove the Belt (3) and the Filter Holder Inlet (19).



Belt (3)



Filter Holder Inlet (19), with replaceable foam filter (42)

10. You may now remove the Brushroll Assembly (13), if necessary.



**Brushroll
Assembly (13)**

11. Remove the Belt Cover with Slots (20).

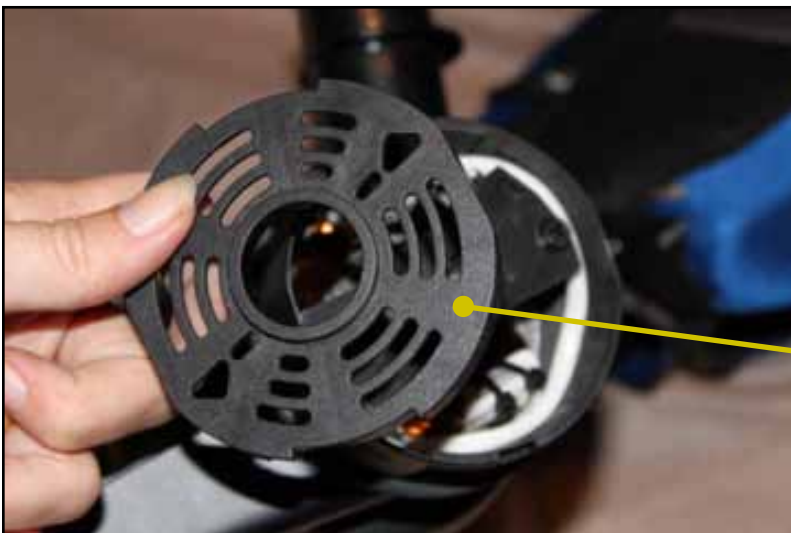


**Belt Cover with
Slots (20)**

12. Remove the inner section of the Rear Wheel Assembly (14).



13. Remove the Motor Support Disk (25).

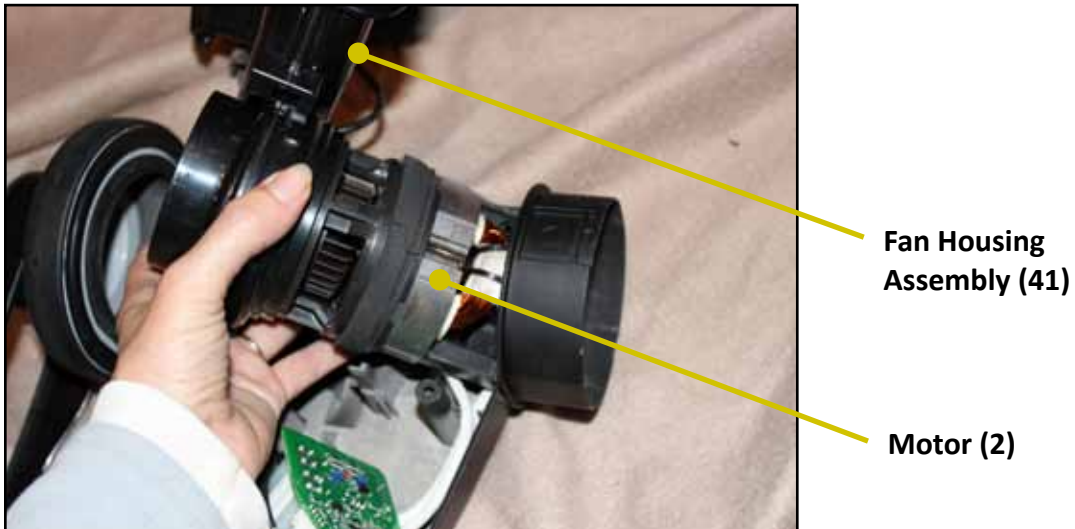


**Motor Support
Disk (25)**

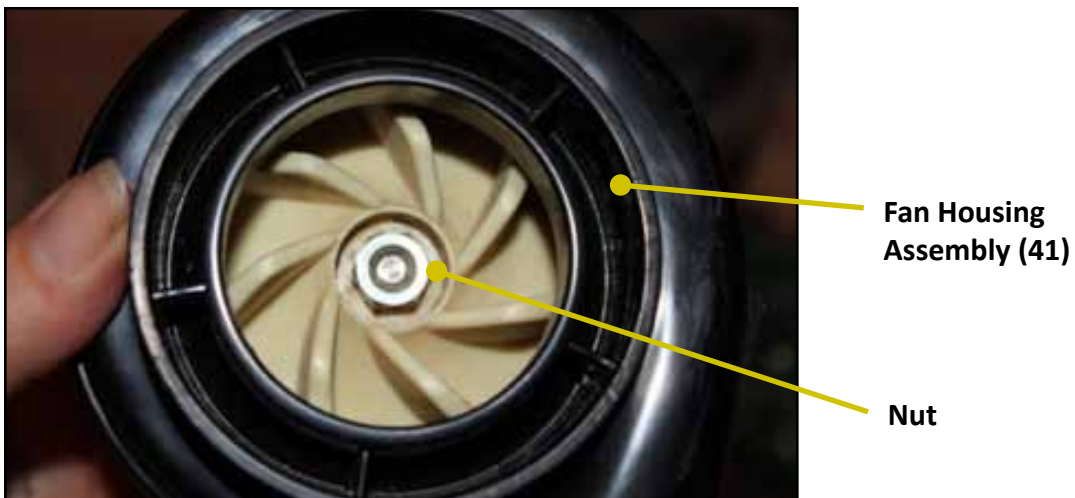
14. Note the orientation of the Motor underneath the cover. On re-assembly, orient the Motor exactly as it appears at this step. You will not be able to reinstall the Motor Support Disk (25) if you do not orient the Motor properly.



15. Remove Motor (2) and Fan Housing Assembly (41) at the same time.



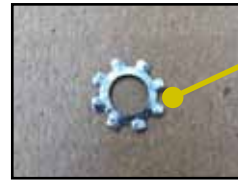
16. To remove the Motor (2) from the Fan Housing Assembly, unscrew the nut holding the Fan Housing Assembly to the Motor (2). Note that the nut has a left-handed thread and requires a 7/16" socket to remove it.



17. Next, remove the toothed lock washer noticing its orientation. The top of the washer faces out and meets the bolt. Be certain to orient the toothed washer correctly when you reassemble.



Toothed Lock Washer

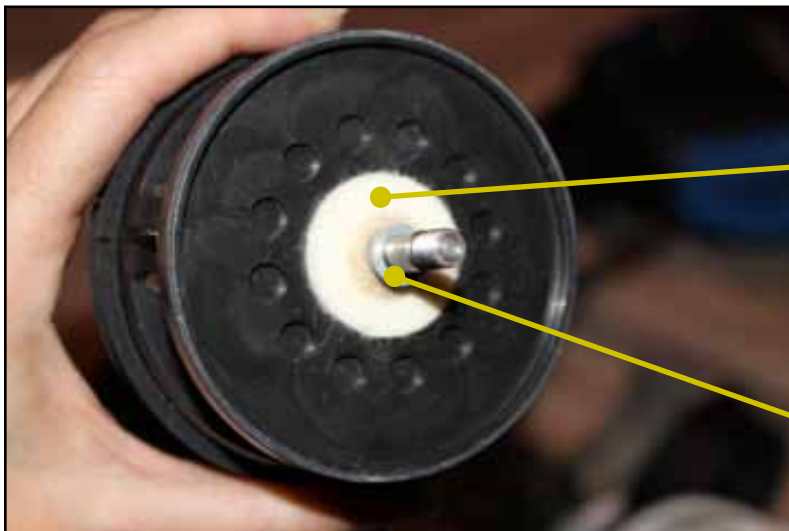


Toothed Lock Washer - Top



Toothed Lock Washer - Bottom

18. Lift the fan assembly off the motor shaft. Once detached, be careful to keep the felt seal and the small flat washer in place during reassembly.



Felt Seal (motor-to-fan housing)

Small Flat Washer

Maintenance Instructions For Swivel and RF Handle Models

Tune Up Procedure for Swivel Models

1. Remove the rear fascia using a small flatblade screwdriver to unsnap from the fan housing.



Rear Fascia

Fan Housing Assembly (41)

2. Using a phillips head screwdriver, remove the clamp screw, being careful to retain the antivibration nut it is threaded into on the opposite side of the clamp.

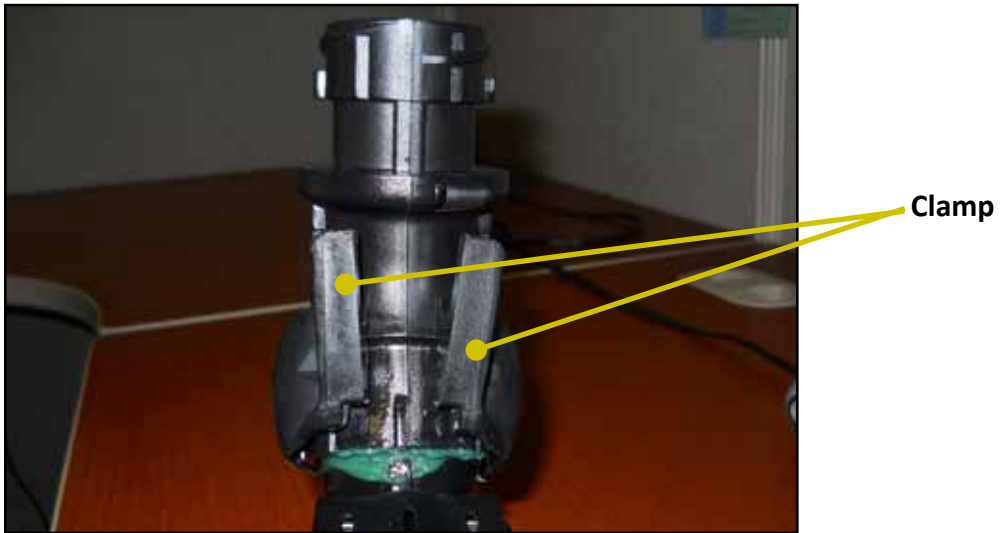


Clamp Screw

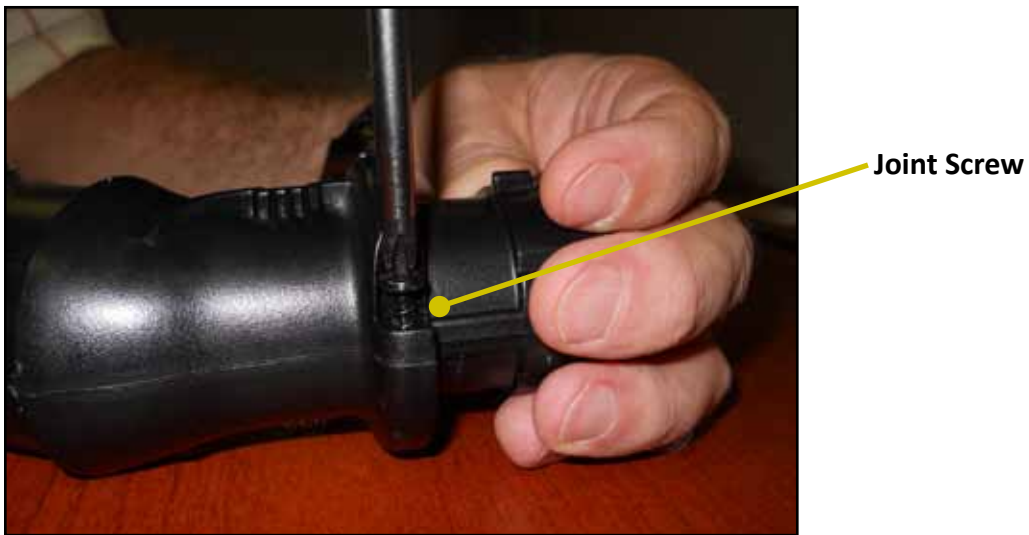
Antivibration Nut



3. Spread the clamp about an inch and slip the clamp upwards over the top of the exhaust nozzle.



4. Remove the two joint screws from the fan housing assembly.



5. Remove the joint halves from the fan housing.



6. Remove the two rope gaskets from the left joint. Remove the felt seal from the fan housing neck



Rope Gaskets



Felt Seal

7. Check joint and fan housing neck for defects and for possible wear of joint grooves. If wear is evident replace the joint.
8. Clean all grease, debris, and adhesive from the joint and fan housing.
9. Replace the felt seal. Once housing is clean, stretch the felt seal so the tongue and groove interlock.



10. Apply grease to interlocked felt seal until the entire seal is evenly coated. Be sure to not overgrease the seal or joint, as it may lead to leaking and transfer of grease to the surfaces being vacuumed. Wipe down all surfaces during reassembly of the joint and housing.

11. Fit the rope gaskets into the left joint. The photo below uses white fan housings to show the pattern that the grease should be administered. The thick line of grease is applied primarily against the upper lip of the groove. The wavy line of grease should be smeared on the flat surface.



12. Fit the joint halves to the fan housing neck and secure with two screws.



Screw

13. Spread the clamp, bring it over the top of the joint and fit to the bottom of the joint.



14. Fit the clamp screw through and thread to the antivibration nut. Hand tighten. Swivel the joint all over to evaluate function and ease of movement. **The swivel joint to fan housing will be stiff when just turning the joint. Be sure to test swivel action with the unit fully assembled before being concerned with joint swivel stiffness.**

Replacement of Battery in RF Handle Models

1. Using a coin, twist the battery compartment door in a counter-clockwise motion.



2. Remove the compartment door exposing the battery



Battery
Compartment
Door



Battery
Retainer Clip

3. Using a small flat blade screwdriver, gently push the battery retainer clip to release the battery. The battery will pop when released from the clip.



4. Replace battery with CR2032 cell battery. The + positive side will be facing up when inserted into the battery compartment. Push the battery gently in place until the battery retainer snaps and secures the battery.
5. Thread the battery compartment door back in place turning it clockwise until it stops turning and is secure.

Help/Support

For more information, contact Rick Polston at rpolston@oreck.com

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