



**RMM-1 TO RMM-IV CONVERSION  
(Parts Needed)**

The microcomputer sends commands to the light drive module (LDM), which in turn controls the on/off and dimming range of the light fixture. Note: The microcomputer “reads” the presence of the LDM by detecting the operation of a small light emitting diode within the optocoupler on the LDM. If the LDM is not present (or the optocoupler is defective or wiring is open) the microcomputer will assume that no light fixture is attached to the fan and will operate differently. On power up, the fan will begin accelerating in speed automatically until the user operates the fan button to select the desired speed. Also, the microcomputer will not allow any of the special programs to be selected.

The microcomputer also controls the direction of the fan through a small reversing relay mounted on the RMM-I circuit board.

To control motor speed, the microcomputer selects one of six outputs, each of which turns on an electronic switch known as a triac. These six triacs are located on the RMM-I circuit board. In high speed, a triac drives the motor directly. In all other speeds, a triac drives the motor through one or all five dropping resistors contained within the BFR-1. This reduces power to the motor while maintaining a pure sine wave drive.

The BFR-1 is a flexible, printed circuit resistance network of five resistors for the motor drive. The BFR-1 also contains two power resistors used in the power supply circuitry for the RMM-I.

**INSTALLATION INSTRUCTIONS  
RMM Conversion Kit P/N 0001880**

**Parts Needed**

- 1** (1) RMM Conversion Harness
- 2** (1) LDM Conversion Harness
- 3** (1) BFR
- 4** (2) Wire Nuts
- 5** (1) RMM-IV PC Board
- 6** (1) W-32 Wall Control

**1**

**RMM  
Conversion Harness**



**2**

**LDM  
Conversion Harness**



**3**

**BFR**



**4**

**Wire Nuts**



**5**

**RMM-IV**



**6**

**W-32 Wall Control**

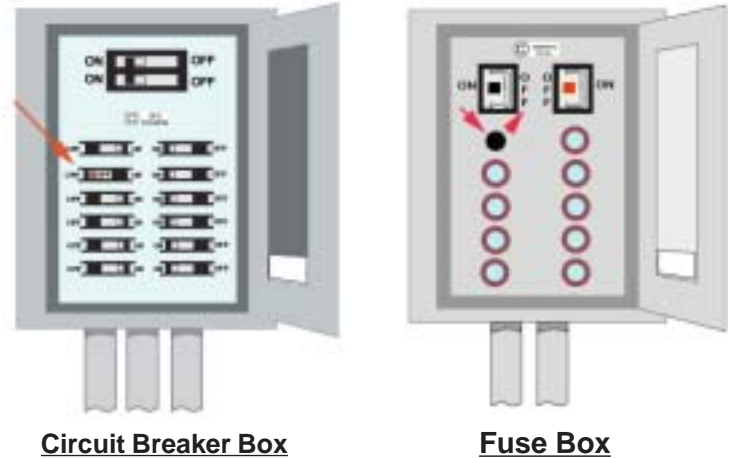




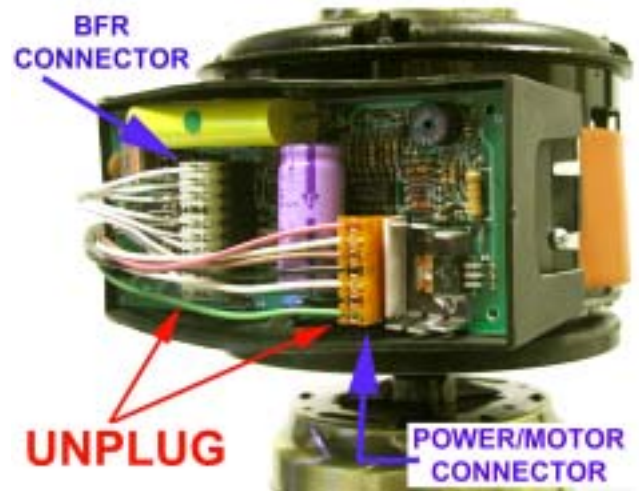
## INSTALLATION INSTRUCTIONS RMM Conversion Kit P/N 0001880

Turn **OFF** power at its source

1. Turn off power at its source (fuse or circuit breaker)
2. Remove blades and blade holders, light fixture and/or switch housing cap.
3. Remove bottom plate and center band.



4. Disconnect both the AC/Motor and BFR connector from the RMM assembly.



5. Remove both the RMM and the BFR. These will not be reused.

- A. Remove two (2) screws on each side of the RMM-I.
- B. Remove the BFR by peeling it off of the motor. Make sure that all orange pieces of rubber has been removed, the NEW BFR will need a clean surface to stick to.





6. Install the new BFR by carefully peeling the paper backing off. Make sure that all air pockets have been removed from the BFR and is stuck secured to the motor.

**CAUTION:** Sharp bending or folding of the BFR will cause damage. Handle with care.

Position one end over the support screw hole, then gently, but firmly, wrap the BFR around the motor, keeping it in alignment so that the holes in the BFR align with the holes on the motor.



7. Reinstall the two screws loosely and slide the Hi-Rel support into place as shown in (Fig 2). Tighten the screws as shown in (Fig 1).



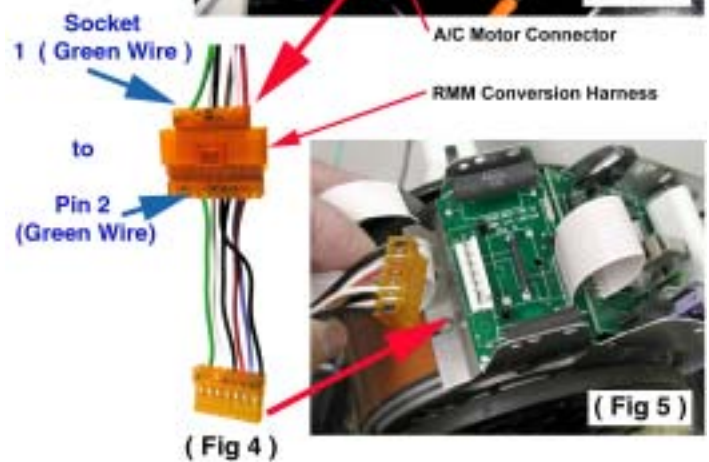
( Fig 1 )



( Fig 2 )

8. Plug the AC/Motor connectors into the RMM Conversion Harness. (Fig 4) **Note: Pin #1 OF THE A/C Motor connectors must align with Pin #2 of the RMM Conversion Harness.**

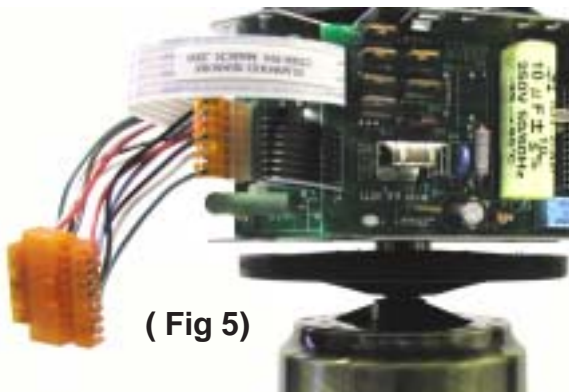
Now plug the RMM Conversion Harness into the Hi-Rel assembly (Fig 5).



( Fig 4 )



( Fig 5 )



( Fig 5 )

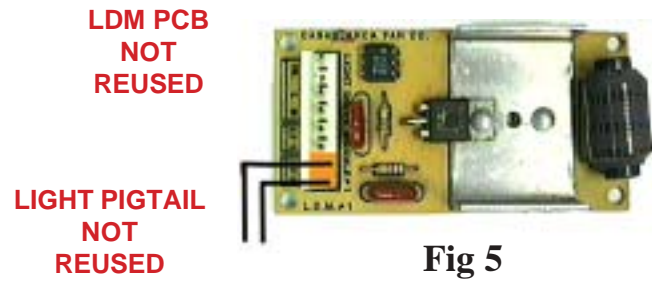


9. Plug the BFR cable connector into the Hi-Rel BFR Header.  
 (Fig 4)



**Fig 4**

10. Disconnect the LDM assembly (LDM, PCB and pigtail) and remove. (Fig 5) These will not be reused.



**Fig 5**

11. Plug the LDM connector into LDM Conversion Harness.  
 (Fig 6)

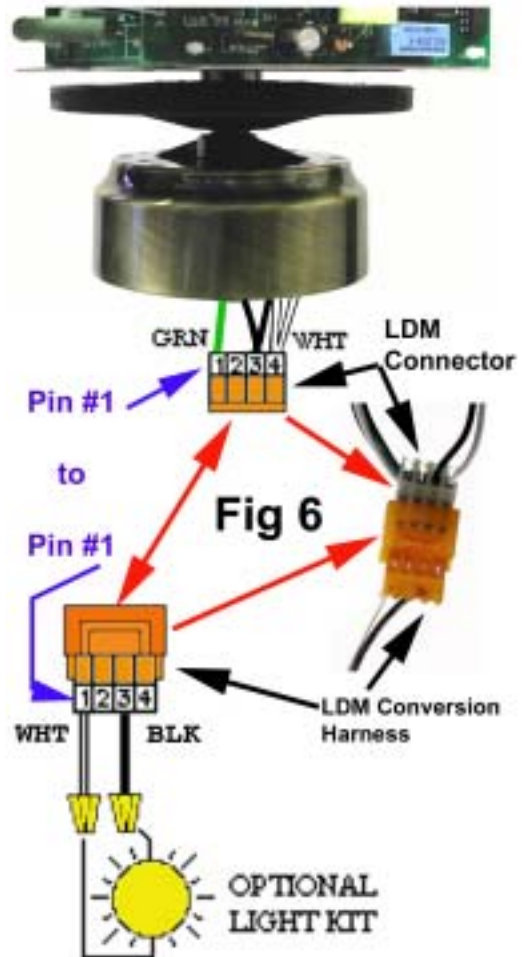
Note: Pin#1 of the LDM Connector must align with Pin #1 of the LDM Conversion Harness.

The black and white wires are now the light fixture supply leads.

**CAUTION!** If a light fixture is not used, cut the bare ends off and install wire nuts.

12. Re-assemble fan body, blade and bladeholders, light fixture and/or switch housing cap.

**NOTE:** When converting RMM 'FLIK' to HI-REL 'Non-FLIK', a W-32 wall switch **MUST** be installed. Refer to W-32 installation instructions.





**FLIK & NON-FLIK OPERATION**

The terms refer to the operational modes of our Inteli-Touch computerized fans. The Inteli-Touch fans utilize a control logic board which has a resident microprocessor. The microprocessor is the computer center for the fan. Like a computer which needs a software program to operate, the micro-processor chip requires a program so that it can operate as planned. The microprocessor has resident memory allocated for the specific program that is installed at the point of manufacture. The resident memory is called ROM (Read Only Memory), and the term firmware refers to the programmed microprocessor chip.

Casablanca has two sets of firmware for the microprocessor chips, FLIK the first generation and NON-FLIK the second generation. Lets compare the operation of the two modes:

**FLIK**

FLIK was the original program that was introduced at a time when the typical fan purchase did not include a light kit option and the only wall control unit for the fan was a toggle switch. The early operation procedures described controlling the computerized fan with a flick of the switch, referring to the wall toggle switch. The actual loading of control instructions is slow and awkward, as you might suspect, because you are using a single toggle switch. The W-11/12 and W-32 can access all the programs listed below, the FLIK only those on the left.

**OPERATIONAL DIFFERENCES**

Operational differences between FLIK and NON-FLIK when the fan has a standard light kit attached, **NOT Halogen.**

**FLIK**

**POWER ON = Lights turn on to full intensity and stay on.**



**NON-FLIK**

**POWER ON = Lights will dimly flicker one time to confirm the power on sequence.**



**NOTE:** The above described sequence is normal and only distinguishes between the two microprocessor chips. A few technicians have observed the NON-FLIK description and believed that they had a defective FLIK operation, and replaced the RMM portion of the fan.

**NON-FLIK**

NON-FLIK was the second generation of microprocessor control. It supports the use of special wall controls such as: W-11, W-12, and W-32. The features are the same with an additional feature, FAN-MINDER.

NON-FLIK mode executes some of its instructions in an improved manner to make full utilization of the W-32 controls.

- FLIK**
- POWER - ON/OFF
  - LIGHTS - ON FULL
  - FAN SPEED
  - REVERSE

- WITH W-11, W-12 or W-32**
- BRIGHTNESS
  - AUTO-DEMO
  - LIGHT-MINDER
  - HOME-SAFE
  - SAFE-EXIT

- POWER - ON/OFF
- LIGHTS - ON/OFF
- BRIGHTNESS - SIX INTENSITIES
- SPEED - SIX SETTINGS
- REVERSE
- AUTO-DEMO
- LIGHT-MINDER
- HOME-SAFE
- SAFE-EXIT
- FAN-MINDER



**RMM-1 TO RMM-V CONVERSION  
(Troubleshooting)**

**TROUBLESHOOTING**

**Before Requesting Service: Please follow this troubleshooting guide before contacting your dealer for assistance.**

**Caring for Finishes:** For cleaning, a soft brush or lint-free cloth should be used to prevent scratching the finish. A vacuum cleaner brush nozzle can remove heavier dust. Surface smudges or an accumulation of dirt and dust can easily be removed by using a mild detergent and slightly dampened soft cloth. An antistatic agent may be used, but **never** use abrasive cleaning agents, they will damage the finish. Painted and high-gloss blades may be cleaned in the same manner.

**Blades:** Wood finish blades should be cleaned with a furniture polishing cloth. Occasionally, a light coat of furniture polish may be applied for added protection and beauty.

**Never Lubricate this Fan!**

The precision motor at the heart of your Casablanca fan features sealed bearings that are lubricated for life. Do not attempt to oil the motor.

**Changing Light Bulbs**

Be sure to turn power to the fan OFF at the wall switch or circuit breaker before changing light bulbs. Replace bulbs with same type as removed from the fixture. Each fan is rated for a maximum **TO-TAL** wattage of lighting.

Exceeding the rated maximum allowable wattage for the fan will cause failure of the fan electronics module and void the warranty.

**PROBLEM**

**POSSIBLE REMEDIES.**

**NO FAN OR LIGHT**

Check main circuit fuses, curcuit breakers, or wall switch position. Check all wire connections, making sure the power is turned off during this inspection.

**FAN WOBBLER OR SHAKES EXCESSIVELY**

Be sure canopy pin is properly set into the slot on the ball.  
Check the screws holding the blade holders to the fan motor. Tighten as necessary.  
Check the angle of the blades to make sure that a blade holder has not been bent during instalation.

**FAN NOISY DURING OPERATION**

Check and tighten light fixture retaining screws, glass shade screws and/or the light bulb(s).  
Tighten canopy screws and mounting plate assembly.  
Tighten the blade to blade holder screws and blade holders to flywheel.  
Make sure all screws in the motor housing are snug, but not overly tight.  
Check that the wire nuts inside the canopy and switch housing are not touching the metal parts or have fallen off the wire splices. Tighten or adjust as necessary.

**BREAK-IN PERIOD DOES NOT RUN ON LOW SPEED**

Let fan run at high speed for two (2) hours  
If new, "break-in" may be required - run at higher speed for several days

**LIGHTS FLASH OR BLINK DURING OPERATION OF W-32 WALL CONTROLS/FAN MAY ROTATE OR MAKE AUDIBLE TONES DURING OPERATION OF THE W-11 AND W-12 WALL CONTROLS: Normal operation.**

**WHEN AC POWER IS TURNED ON FOR THE FIRST TIME, THE LIGHTS OPERATE NORMALLY, BUT W-32 WALL CONTROL OPERATION IS REVERSED: FAN BUTTON OPERATES THE LIGHTS; LIGHT BUTTON OPERATES THE FAN: Reverse the 2 black and white striped wire connections.**

**FAN OR LIGHTS APPEAR TO OPERATE BY THEMSELVES (CHANGING SPEED OR INTENSITY), WALL CONTROL OPERATION IS INTERMITTENT: Check AC supply for irregularities, (noise spikes, fluctuations, or failure); or circuit board assembly.**

**TECHNICAL ASSISTANCE**

**FOR FUTHER INFORMATION OR ASSISTANCE PLEASE CALL TOLL FREE 1 (888) 227-2178, MONDAY THROUGH FRIDAY, 7:00AM TO 4:00 PM OR GO TO THE WEB AT [www.casablancafانrepair.com](http://www.casablancafانrepair.com) AND [www.casablancafانco.com](http://www.casablancafانco.com)**



**IMPORTANT NOTE!**

There are no field serviceable components on the printed circuit board. If a fault condition is determined the complete assemble must be changed.

Be sure to inspect the run capacitor to identify that it is a standard 10 $\mu$  used on the K-55 and XLP2000 motors. The XLP 21000 motor uses a 11 $\mu$  capacitor.

If a 9 $\mu$  capacitor is found the PCB must be replaced by the same type.

**GENERAL TROUBLESHOOTING**

Before doing any in-depth troubleshooting, it is wise to give the ceiling fan a good visual inspection for mechanical problems or poor electrical connections. To do this thoroughly:

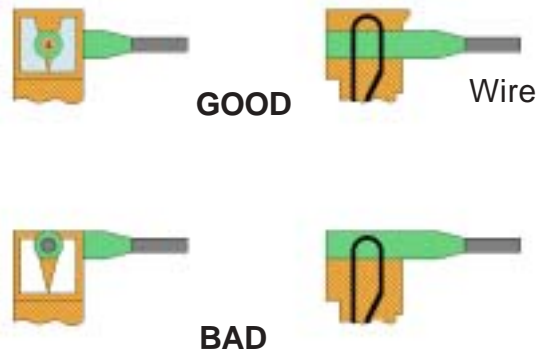
**MAKE SURE THE POWER HAS BEEN TURNED OFF AT THE MAIN BREAKER BOX OR THAT THE FUSE HAS BEEN REMOVED BEFORE PROCEEDING**

1. Spin the fan blades by hand to be sure that they rotate freely and are not rubbing against any fan surfaces. If the flywheel assembly is resting on the switch housing, lift up on the flywheel assembly and tighten the set-screw.

2. Remove the switch housing bottom cap and check that the black and white light supply wires are either; 1) capped off with wire nuts if no light kit is installed or; 2) that the connection to the light kit is correct with no shorting wires to the switch housing.

3. Remove the bottom plate and center band to gain access to the PCB and shroud assembly. Check that the connections to the seven pin power plug are in good condition, see diagrams to the right.

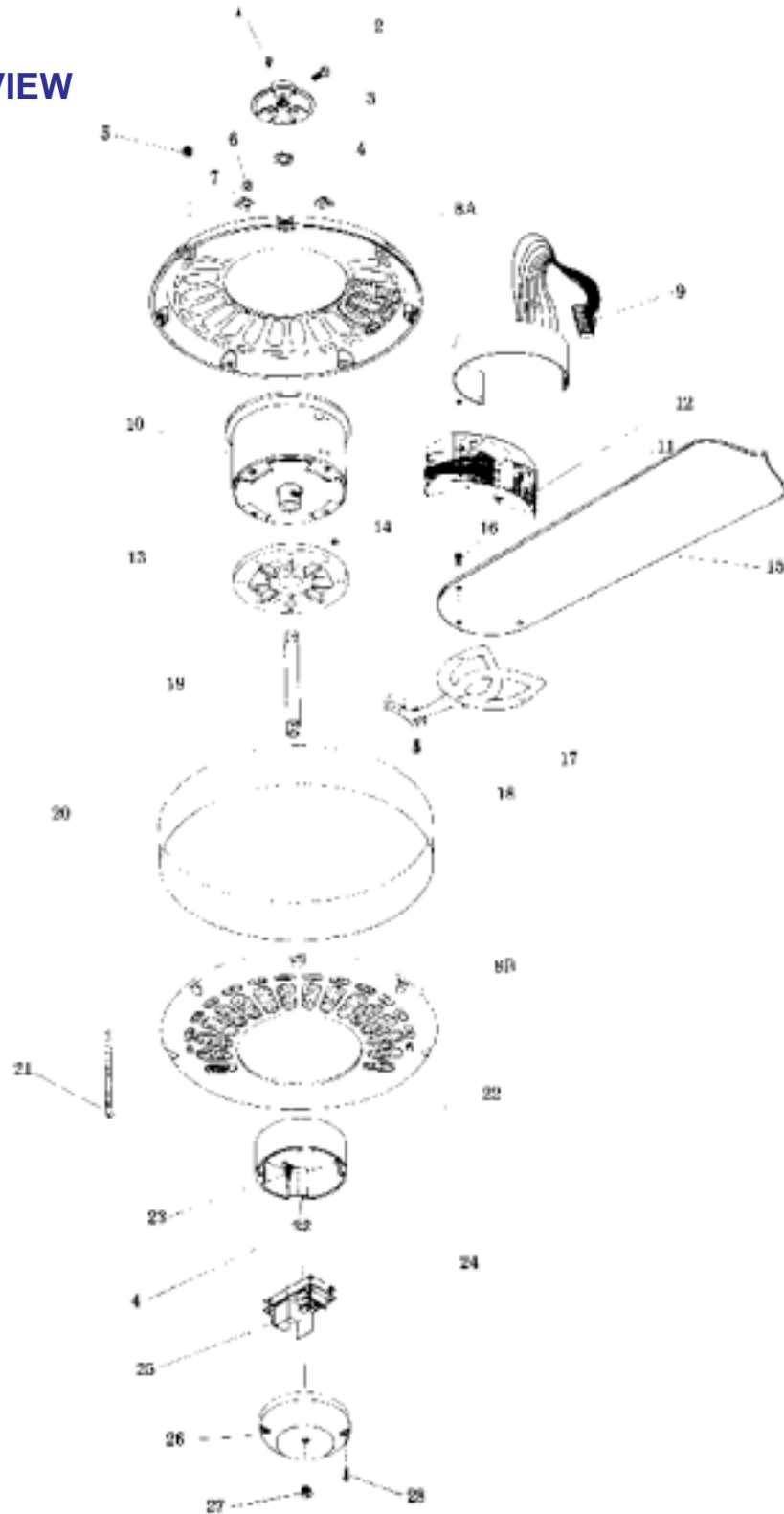
**Connector**



**The wire has lifted out of the connector, and is NOT making electrical continuity.**



**INTELI-TOUCH  
RMM-I EXPLODED PARTS VIEW**





### INTELI-TOUCH RMM-I PARTS LIST

1.	9961210	10-24 x 7/16" Hex Head Screw w/Washer	3 per Fan
2.	9953030	1/4-20 x 3/4" Hex Head Slotted Bolt	1 per Fan
3.	1908030	Top Support	1 per Fan
4.	9964100	#4 Lock Washer for Shaft	2 per Fan
5.	9957010	10-24 Acorn Nut	
6.	9957090	8-32 Acorn Nut	4 per Fan
7.	0055230	Hold-down Tabs	4 per Fan
8a.*		Top Casting Assembly	1 per Fan
8b.*		Bottom Casting Assembly	1 per Fan
9.		BFR (Bidirectional Flow Regulator)	1 per Fan
10.	0002030	K-55 Motor	1 per Fan
11.	1954260	RMM Support	1 per Fan
12.		RMM (Recognition & Memory Module)	1 per Fan
13.	0007070	Slumber Rubber Flywheel	1 per Fan
14.	9965010	1/4-20 x 1/4" Allen Set Screw	1 per Fan
15.		Blades (4 or 5 per Fan)	
16.	9961020	10-24 x 7/16" Pan Head Screw	12 per Fan
17.*		Blade Holder (4 or 5 per Fan)	
18.	9962010	12-24 x 7/16" Filister Head Screw	8 per Fan
19.†		Center Shaft	1 per Fan
20.*		Band	1 per Fan
21.*		10-24 Thru Bolt	
22.*	191214	Switch Housing (Inteli-Touch)	1 per Fan
23.	1954290	LDM Board Standoffs	4 per Fan
24.	1944020	LDM Fiber Insulator	1 per Fan
25.		LDM (Light Drive Module)	1 per Fan
26.*		Switch Housing Cap	1 per Fan
27.	9955020	1/8" Male Plug	1 per Fan
28.	9960060	8-32 x 3/8" Round Head Brass Screw	2 per Fan

\* Plated Finish—Specify finish when ordering.

† See Table