

Retrozone Belimo LMB24 to Honeywell, Aprilaire, Suncourt and other brands of Dampers with a 3/8 or smaller shaft with motor removed. Above

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Instructions for LMB24-HW motor upgrade kit.

Note: This kit replaces Many Honeywell, Aprilaire, Suncourt, and other spring return motors and other motor brands where a 3/8 or smaller round or flat shaft is left on damper after the entire motor assembly is removed.

1. After removing old motor assembly, mount new shaft on original damper as illustrated in the picture. Take care to place brackets to avoid self-tapping screws from interfering with internal damper mechanisms .

2. If damper can be removed, then remove the internal spring (many springs are in the motor assembly) from inside of the damper since it is no longer needed, although it can be left in place.



3. Make sure new shaft can be rotated easily. Note with marker where the fully open and fully closed damper positions will be.
4. Note the black, rectangular push button clutch on the new Belimo LMB motor. Push clutch in and rotate motor to its fully closed position, and mount on new damper shaft after also fully closing damper. Note where anti-rotation bracket should be placed, mark position, and mount anti-rotation bracket (part with two holes). NOTE: re-bend anti-rotation bracket as needed to raise the portion that fits into motor, to insure that damper motor is generally parallel to damper body.
5. Mount LMB motor in place, with both motor and damper is closed position. Motor should be mounted "loose" where it does not bind when traveling. Test this by depressing clutch and manually rotating damper from fully open to fully closed. If any binding is felt, remount motor and or components until damper moves with no binding.
6. **VERY IMPORTANT:** Rotate damper to fully open position using manual clutch. Then, with phillips head screwdriver, move motor travel adjustment blocks to stop the motor from further travel. **DAMAGE** can occur to the damper if the powerful motor is allowed to exert full force beyond the travel range of the damper.
7. Refer to zone control specific information on your system for electrical hook-ups, However:
 - A. If you are hooking up the three wire Belimo LMB motor to a zone control panel that provides only two damper outputs for spring return dampers, go to Retrozone.com and under "technical resources" find the document "Converting a 2 wire zone control board to operate a 3 wire damper".
 - B. If your zone panel has an unused third output, simply add a third wire. Common hook-ups to the Belimo motor are:

Zone board damper outputs Belimo LMB motor terminals

M1	1
M2	
M4	2
M6	3

OR

COM	1
NO (Normally open)	2
NC (normally closed)	3

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