

July 1, 2014

Administrator, NHTSA

1200 New Jersey Avenue, S.E.

Washington, D.C. 20592

JUL 11 2014

RE: Possible Safety Defect in Recreational Vehicle

I own a motor home...a 2011 Winnebago Journey Express, Model 34Y. This vehicle is equipped with a day/night dual shade system (window shades), covering the windshield, manufactured by:

MCD Innovations

410 Industrial Blvd

McKinney, TX 75069

The shade system has both a "night shade" which eliminates light even during the day, and a translucent "day shade", which you can see through, but not well enough to drive with the shade down. It is motorized, with each shade having a separate motor and switch. These are set so the shades cannot be lowered more than 15" with the ignition switch on...as a safety measure.

In early June I was travelling in my motorhome on Interstate 24 in Tennessee (returning to my home in Florida) when the day shade started dropping down below the 15" set point. First it dropped about 3", then a few minutes later another 6", and again a further 12". The switch failed to operate the shade. I felt this was a very dangerous situation, as I only had visibility through a narrow portion of the bottom of the window. Fortunately, I was able to exit the highway, pull into a gas station, and manually roll up the shade and secure it with a Velcro strip. If I had been traveling through Chattanooga or Atlanta (which I did later in the day), I would have been in deep trouble.

The customer services people at both Winnebago Industries and MCD Innovations have told me the motor operating the shade must have failed. I believe there is a design flaw...as there should be a failsafe method to avoid the shade obscuring the driver's road visibility in the event of a motor failure.

Attached are the relevant pages from the Winnebago Operator's Manual covering the powered windshield shade system.

Thank you for considering this matter.

[REDACTED]
Summerfield, FL [REDACTED]

Phone: [REDACTED]

NM

72414

SMD



American Duo Power Windshield with Dual-Range Safety Day / Night Shade System

Owner's Manual

Winnebago Edition



Power Windshield with Dual-Range Safety Feature

MCD's switch-controlled, power shade motors chosen by Winnebago include MCD's industry-leading Safety Dual-Range feature. The Dual-Range motors feature two sets of upper and lower set-limits; one set of limits with the "ignition on" and one set of limits with the "ignition off".

A typical example of the "ignition on" limits would be shade travel from 0" down from the top to around 15" down from the top. This allows the user to safely lower the shade to any position within this range, while the ignition is on, and provides the functionality of a full-width sun visor.



The "ignition off" limits would be shade travel from 0" down from the top, to flush with the dash. When the ignition is off, the user can operate the shade anywhere within the full range of motion for the shade. This safety feature prevents the shade from accidentally being lowered into the driver's line of sight while operating the vehicle.

Operating Instructions for Dual-Range Switch Motor

To use the Dual-Range switch operated shade, simply press the up or down button for the appropriate shade. The switch-operated shades require the switch to be held until the shade either reaches its limit or the desired intermediate position. The shade can be stopped at any point by simply releasing the switch.

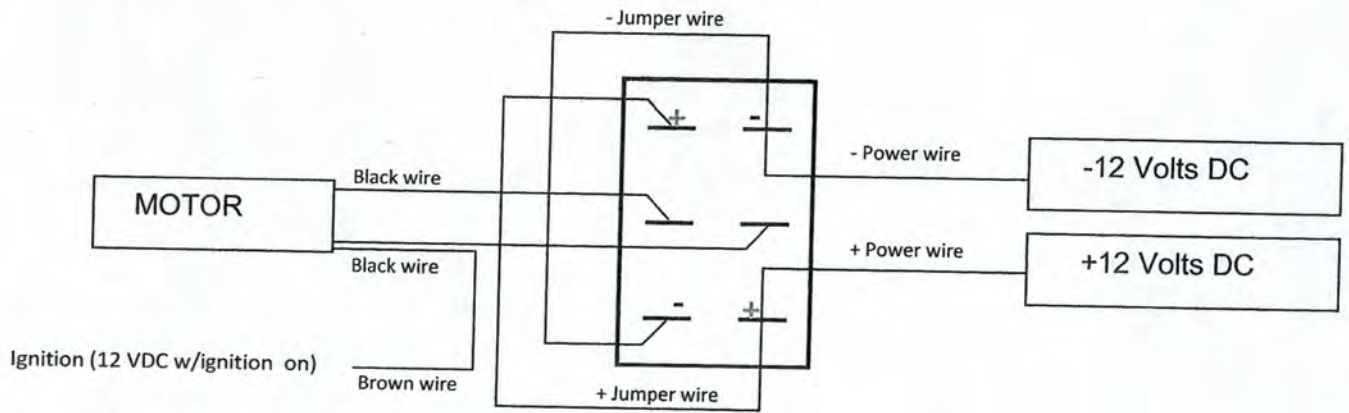
If the Ignition is On, the shade can only operate within the Ignition On range of set-limits. With the Ignition Off, the shade can operate within the entire range of set-limits. If you turn the ignition on prior to raising the shade from the lowest full range limit, the shade will still move in the up direction, but cannot be lowered below the Ignition On lower set-limit once it has been raised above this point.

Powered Shades - Switch Controlled

Motor Description and Wiring Requirements:

Power Supply: 12 VDC , 800mA

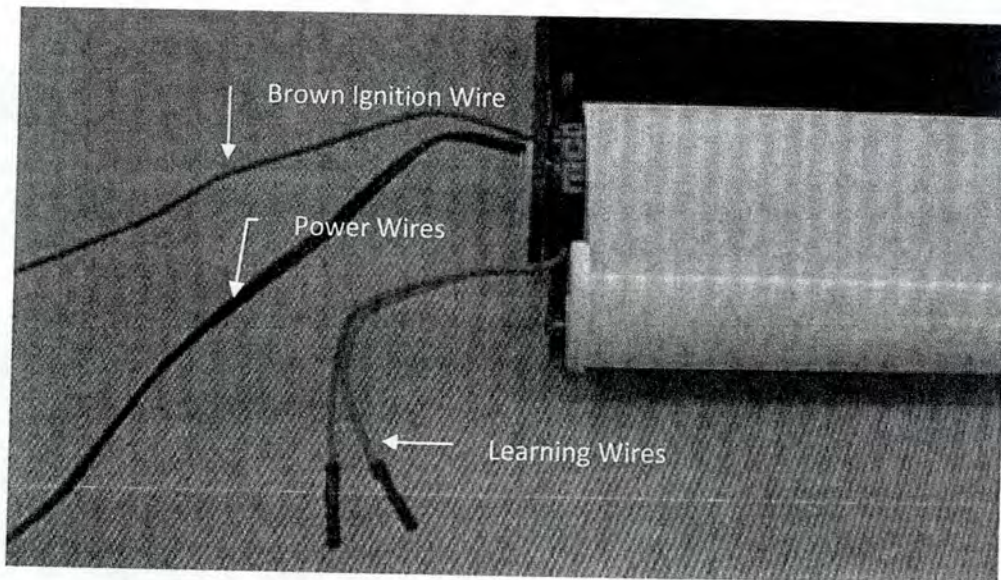
The switch-controlled motors have built-in electronics to memorize the upper and lower set limits for the shades after the initial setting in "ignition on" mode and "ignition off" mode.



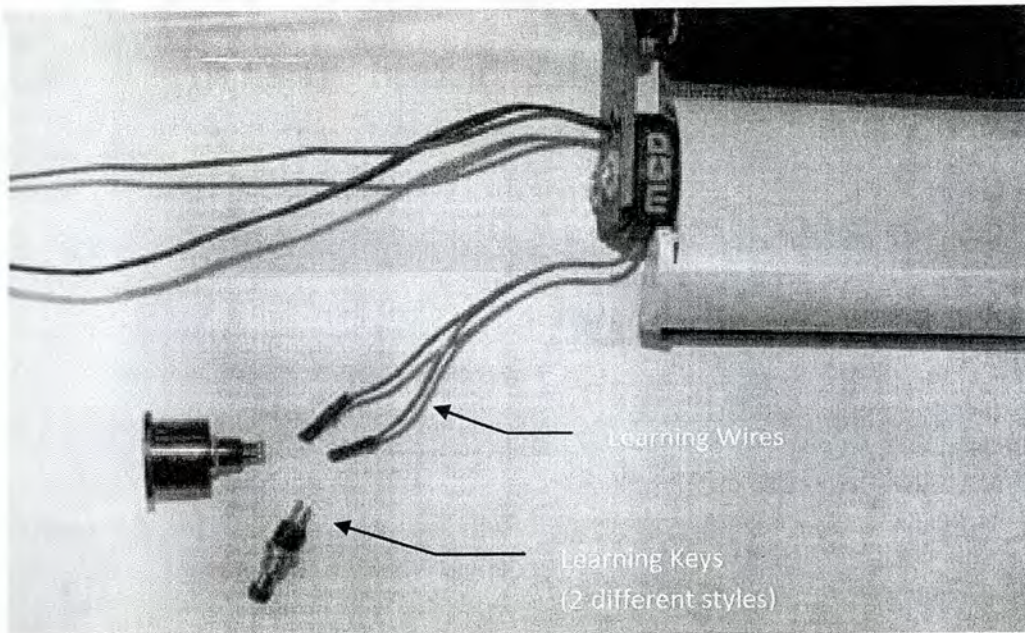
Setting Limits for Dual-Range Switch Motor

All MCD Shades utilized by Winnebago are preset at the factory for optimum performance and based upon Winnebago's specifications. No adjustments should be necessary. However, the following instructions are provided in the event adjustments are desired.

1. Locate the learning wires on the motor that you are setting the limits on. These two wires are approximately five inches long and protrude from the bottom of the motor. The wires are usually grey in color and should not be hooked up to any power source or connected to anything other than the shade motor.

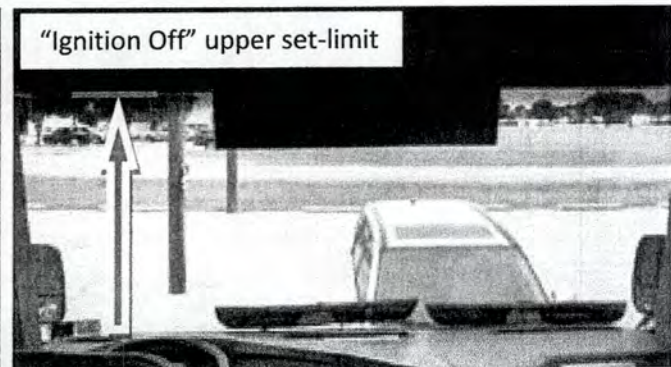
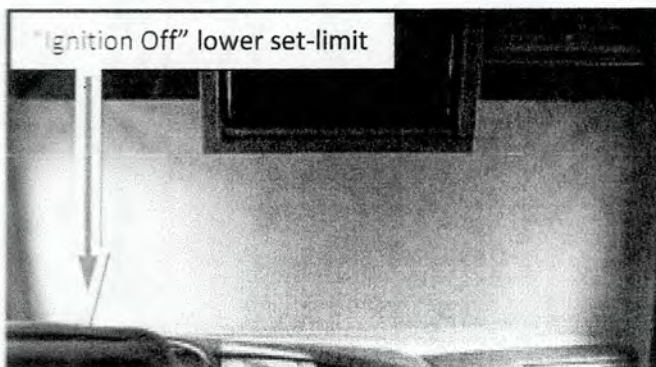
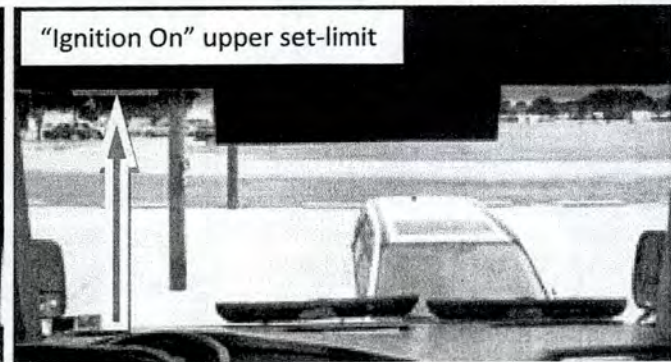
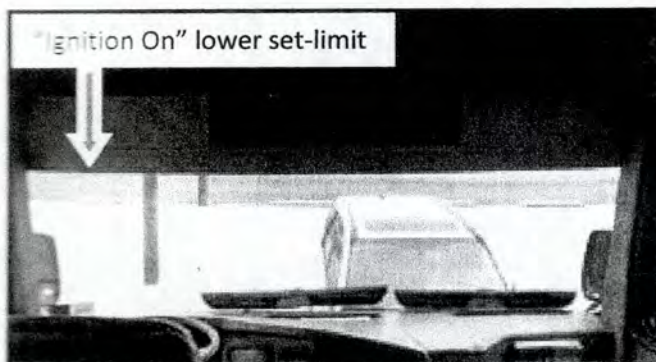


- Hook up the Learning Key to the learning wires. (There is no positive or negative direction to the learning wires; just hook it up to the supplied Learning Key, or if no Learning Key is available, the 2 learning wires can be shorted together momentarily, instead of each Learning Key button press.)



3. YOU MUST SET THE LIMITS IN THE FOLLOWING ORDER:

- "Ignition ON" LOWER Set-Limit
- "Ignition ON" UPPER Set-Limit
- "Ignition OFF" LOWER Set-Limit
- "Ignition OFF" UPPER Set-Limit



4. Turn the ignition on. Press and hold the Learning Key button. While holding this button, press and hold the Down switch. The motor will move in the down direction; continue holding both the button and the switch until the motor chirps and the shade stops. Once the motor chirps and the shade stops, release both buttons. The motor is now in the Set-Limit Learning Mode.

NOTE: If the shade is already at its lower set-limit, the shade will not move and the motor should 'chirp' within about 5 seconds. Once the motor chirps, release both buttons and it is now in Set-Limit Learning Mode.
5. Press and hold the switch in the down direction. Release the switch once the shade reaches the approximate desired "Ignition On" lower limit. This set limit should be set at a height that allows the shade to be used as a sun visor but still safely allowing a clear view of the road. (You can fine tune the set limit by following the NOTE to the right.) Once you are satisfied with the "Ignition On" lower limit, reverse the direction of the switch to the up direction. The motor will chirp, locking the lower "Ignition On" set-limit into the motor's memory, and will then begin moving in the up direction.

NOTE: Fine tune the set-limit by "bumping" the shade lower. Each quick press of the down switch will move the shade down about 1/16".

Once you release the down switch the first time, it is no longer possible to move down continuously while in the Set=Limit Learning Mode without restarting the procedure. You can only "bump" adjust the shade down.
6. Continue holding the switch in the up direction. Release the switch once the shade reaches the approximate desired upper limit. Once you are satisfied with the upper limit, reverse the direction of the switch to the down position. The motor will chirp, locking in the upper limit.
7. Both the upper and the lower "Ignition On" set limits are now set. You MUST now set the "Ignition Off" set limits. You cannot only set one set of limits; both the "Ignition On" and the "Ignition Off" set limits must be set once you enter into the Set Limit Learning Mode.
8. Turn the Ignition Off.
9. Press and hold the Learning Key button again. While holding the Learning Key button in, press and hold the Down switch. The motor will move in the down direction; continue holding both the button and the switch until the motor chirps and the shade stops. Once the motor chirps and the shade stops, release both buttons. The motor is now in the Set Limit Learning Mode.
10. Repeat steps 5 and 6 to set lower and upper limits. For proper operation of the shade, once you enter the set limit learning mode, you must set and lock in all four limits; 1) Ignition On lower limit, 2) Ignition On upper limit, 3) Ignition Off lower limit, 4) Ignition Off upper limit. Failure to lock in all four set limits will result in a shade that does not operate as you intended.

Troubleshooting Procedure for Switch Motors

NOTE: *The most typical "problem" for ALL powered shades is the loss of Set Limits. The shade motors will retain their Set Limits when the coach's power supply is kept within a normal range of 11.0 to 13.6 volts. They will also retain their Set Limits if the power supply is cut off completely from the shade motor (0 volts). However, if power is gradually drained and falls below the lower limit of 11 volts, the motors could lose their electronic Set Limits and will require reprogramming once normal power has been restored.*

1. Verify power is applied to the motor by depressing the rocker switch in the up or down position. (Voltage should be between 11.0 and 13.6 volts DC.) If the voltage is low, charge the chassis/coach batteries and retry motor operation. Voltage can be verified at the rocker switch or in the disconnect/butt splices in the motor leads. Verify positive and negative voltage for both directions from the switch.
2. If the motor fails to move, short the programming wires together (see above), and apply power to the motor with the rocker switch. The motor should move approximately six inches, stop and beep. Release the rocker switch and release the programming wires. Depress rocker switch in down direction. If the shade moves, proceed with the directions above – "Setting Limits for Dual-Range Switch Motors".
3. If the motor has power but still fails to move in either direction after following Step 2, please contact MCD for assistance. Contact information can be found on the last page of this Manual.

Care and Cleaning

Day Shade

ClearView™ Solar Screens should be vacuumed periodically to remove accumulated dust, particularly when traveling in dry, dusty climates. We recommend using your vacuum cleaner's soft upholstery brush and gently vacuuming each shade.

To clean your ClearView™ Solar Screens, you can use a sponge or a soft brush and water to remove stuck-on dust and most stains. A mild cleaning solution can be used to remove tougher stains. Rinse after cleaning by soaking a clean cloth in fresh water, ringing out any excess and wiping the areas where any cleaner was used – repeat as necessary. Use a towel behind the screen as you clean with a sponge or brush to keep splatter down.

Night Shade

Vinyl material will clean up nicely with any mild cleaning solution using a new sponge or non-colored paper towels. Rinse off cleaner by wiping down with another sponge or non-colored paper towels and fresh water after cleaning.

Limited Warranty and Out-of-Warranty Policy

MCD Statement of Limited Warranty

MCD Innovations (herein referred to as "MCD"), provides a one (1) year limited warranty against defects in materials and workmanship for all products manufactured by MCD and sold under the MCD name. MCD extends this Limited Warranty to the first retail purchaser and it applies only to the MCD products properly installed for the use intended by MCD. This Limited Warranty is not transferable. This Limited Warranty does not apply if, in the sole judgment of MCD, the product fails due to damage from shipment, handling, storage, accident, abuse or misuse, improper installation, improper operation, or if the product has been used or maintained in a manner not conforming to MCD's instructions and specifications, or has been modified in any way. Any repair or modification attempted or performed by anyone other than an MCD-approved agent under MCD's specific guidance and instruction at the time of repair will cause this Limited Warranty to become void and of no further force or effect.

This Limited Warranty does not provide benefits for or apply to conditions caused by normal product wear and tear. It also does not apply to product damage caused by vehicle accident, fire, flood, wind, rain, lightning, or other acts of God.

IN ANY EVENT, MCD'S MAXIMUM LIABILITY UNDER THIS LIMITED WARRANTY IS LIMITED TO THE ORIGINAL PRODUCT PURCHASE PRICE FROM MCD. During the warranty period, MCD will replace or repair, at our option, any defective product at no charge. A defective product shall be determined solely at our discretion. Outside of the agreed Winnebago warranty plan, installation, labor, delivery both ways, removal and reinstallation and their associated costs, tools, accessories, or components are not the responsibility of MCD. In no event shall MCD be liable for any special, indirect, incidental, or consequential damages, loss of revenues, profits, or opportunities arising out of or connected with this Limited Warranty or the MCD products, regardless of whether a claim is based on contract, tort, strict liability, or otherwise. Your sole remedy hereunder is limited to repair or replacement of the MCD product and in no event shall exceed the original MCD purchase price. You may have other rights under state law. NO PERSON OR ENTITY IS AUTHORIZED TO ALTER THIS LIMITED WARRANTY.

MCD Policy for Out-of-Warranty Products

If any MCD product appears inoperable - whether covered by our Limited Warranty or not - a product return can often be avoided with a quick phone call to one of our Customer Support Technicians at 800-804-1757, or 972-548-1850. In the unlikely event that a product return is necessary or if repair is required, and for products no longer covered by warranty, the following procedure must be followed:

1. All returns must be pre-approved with a Return Authorization (RA) number. We cannot accept shipments without a Return Authorization. An RA number can be obtained by contacting MCD Customer Support at 800-804-1757, or 972-548-1850, or info@mcdinnovations.com.
2. An MCD Customer Support Technician will troubleshoot the problem with you to determine the scope of the issue.
3. If a repair or return is necessary, MCD will gather the necessary information and provide an RA number to begin the process.
4. Returned product must be properly and securely packaged for return. MCD is not responsible for any product damage due to packaging or shipping.

5. After securely packaging the product for return, send the product to the RA fulfillment address given by MCD Customer Support. Clearly identify your RA number on the outside of the package being returned. Include all contact information with name, address, phone number, email address, RA number, and any other information requested by MCD Customer Support, inside of the package.
6. If your product is no longer covered under our Limited Warranty, or if, in MCD's sole opinion, the product needs repair due to damage, misuse, or other causes not covered under our Limited Warranty, we offer repair services for a fee. All repairs that are not covered under MCD's Limited Warranty and all related shipping expenses shall be the responsibility of the Customer. Repair prices will be discussed with the Customer prior to beginning any work.
7. Any shipment received by MCD under an RA that was issued more than 30 days prior will be refused and returned to the Customer, freight collect.

Please contact us with any questions.
800-804-1757
info@mcdinnovations.com

MCD Innovations
410 Industrial Blvd.
McKinney, TX 75069

Proudly made in the U.S.A.

MCD_OwnersManual-Winnebago-AmDuo_Windshield-r2. Sept, 09

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