

NEWMAR CORPORATION WARRANTY DEPARTMENT

TECHNICAL SERVICE BULLETIN

DATE ISSUED	MODEL YEAR(S) AFFECTED	TSB #
7/6/2015	2014/2015	418

BRAND

Bay Star Sport	<input checked="" type="checkbox"/>	Ventana	<input type="checkbox"/>	Essex	<input checked="" type="checkbox"/>
Bay Star	<input checked="" type="checkbox"/>	Dutch Star	<input type="checkbox"/>	King Aire	<input checked="" type="checkbox"/>
Canyon Star	<input checked="" type="checkbox"/>	Mountain Aire	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>
Ventana LE	<input type="checkbox"/>	London Aire	<input checked="" type="checkbox"/>		

DESCRIPTION

Units affected: Certain Newmar units are equipped with Automotion shades. Attached is information you will need. This will apply when replacing the (old) 5 wire shade motors or changing complete shade when existing (old) shade is 5 wire and new shade motors are 3 wire.

RECOMMENDED ACTION

Read attached instructions .

Note: Instructions are unit specific, Verify you are working with the instructions that apply to the coach you are working on.

Note: The Addendum attached are only for shades or shade motors labeled 4271. The addendum does not apply to shades and motors labeled as 4271-2

Note: When installing the new 3 wire shades or motors you will need a Programmer. Instructions for the Programmer are included.

Flat rate code: TSB 418

Programmer part: # 023768 = \$17.00

Labor Time for 4271 motor replacements: 1.5 hours per shade, additional time needs pre-approved.

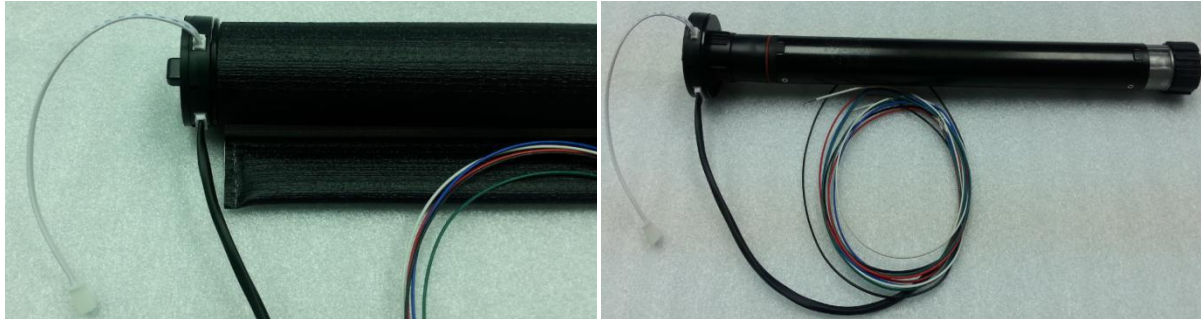
Labor Time for 4271-2 motor replacements: 1.0 hour per shade, additional time needs pre-approved

Please read this bulletin in its entirety prior to beginning any diagnosis or repairs.

Motorized shade replacement:

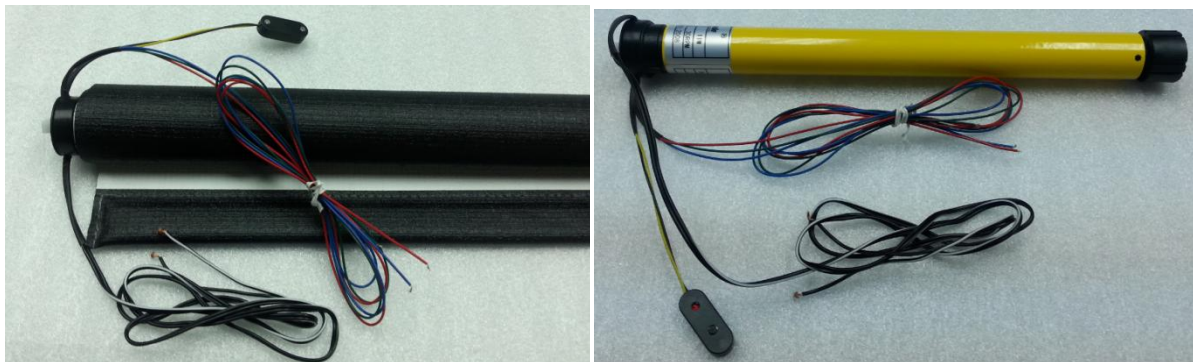
- **2014/2015 Bay Star and Canyon Star**

STEP 1: Identify the motor on the shade



Picture: new motor

If your shade has already been installed with the new motor, skip STEP 2 and move to STEP 3



Picture: old motor

If shade is installed with an old motor, it will need to be replaced with the new motor/shade. Once replaced, go to STEP 2

Wires at New Ignition Lock Motor

- | | |
|-------|------------|
| Blue | > Up |
| Green | > Down |
| Red | > Ignition |

NOTE: AMS new Motor 4271-2 is designed for three wires.

IMPORTANT: Be sure to cap/cover supply (coach) power and ground wires to prevent possibility of electrical short.

STEP 2: Rewire Shade/Visor momentary switch



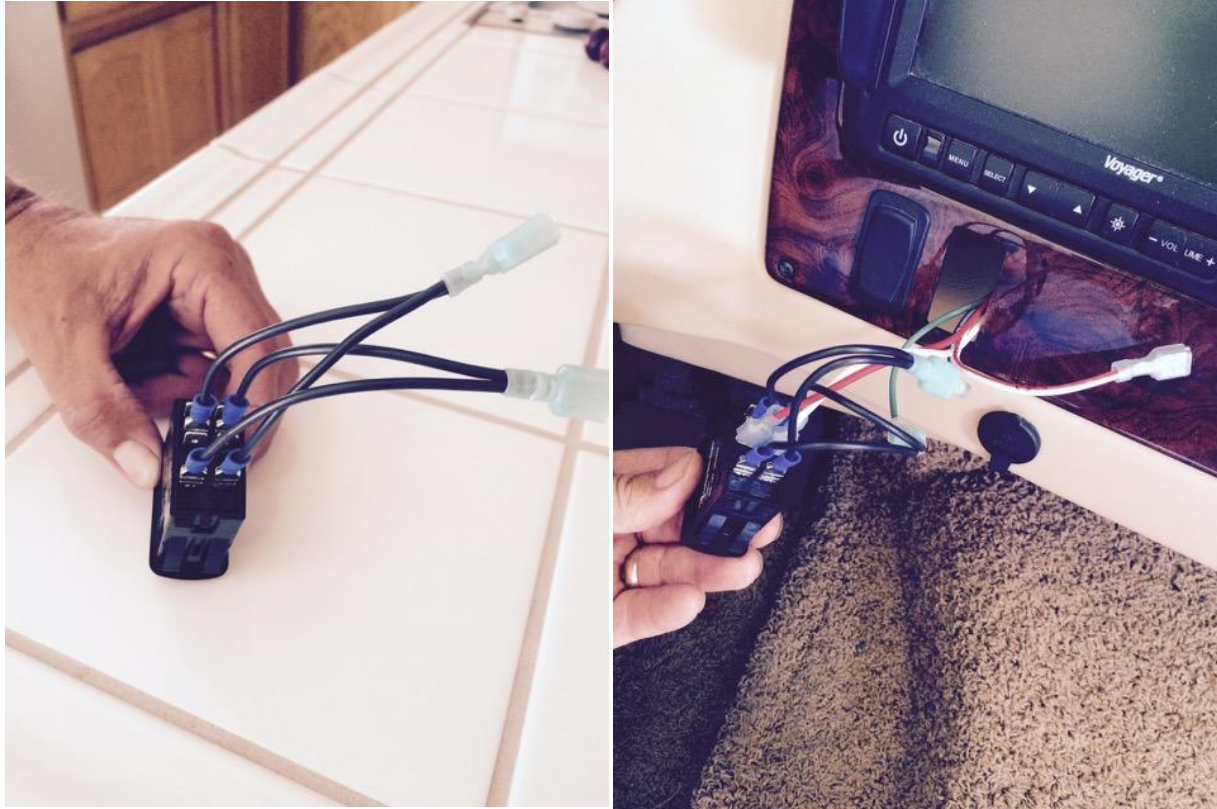
Picture: Visor/Shade momentary switch

Here is the wiring instruction:

ASSEMBLE TWO 4" JUMPER WIRES FOR EACH SWITCH USING 16 GA. WIRE. INSTALL A PIGGYBACK QUICK-SLIDE TERMINAL ON PINS 4 AND 8 OF THE SWITCH. INSTALL ONE OF THE JUMPERS FROM PIN 4 (ON THE PIGGYBACK TERMINAL) TO PIN 5. INSTALL THE OTHER JUMPER FROM PIN 8 (ON THE PIGGYBACK TERMINAL) TO PIN 1. CONNECT THE +12V WIRE FROM THE DASH HARNESS TO PIN 2 AND THE GROUND WIRE TO PIN 6. CONNECT THE UP WIRE TO PIN 4 (ON THE PIGGYBACK TERMINAL) AND THE DOWN WIRE TO PIN 8 (ON THE PIGGYBACK TERMINAL).

Also you can do the wiring as below:

ASSEMBLE TWO 4" JUMPER WIRES FOR EACH SWITCH USING 16 GA. WIRE. INSTALL A PIGGYBACK QUICK-SLIDE TERMINAL ON PINS 4 AND 8 OF THE SWITCH. INSTALL ONE OF THE JUMPERS FROM PIN 4 (ON THE PIGGYBACK TERMINAL) TO PIN 6. INSTALL THE OTHER JUMPER FROM PIN 8 (ON THE PIGGYBACK TERMINAL) TO PIN 2. CONNECT THE +12V WIRE FROM THE DASH HARNESS TO PIN 1 AND THE GROUND WIRE TO PIN 5. CONNECT THE UP WIRE TO PIN 4 (ON THE PIGGYBACK TERMINAL) AND THE DOWN WIRE TO PIN 8 (ON THE PIGGYBACK TERMINAL).

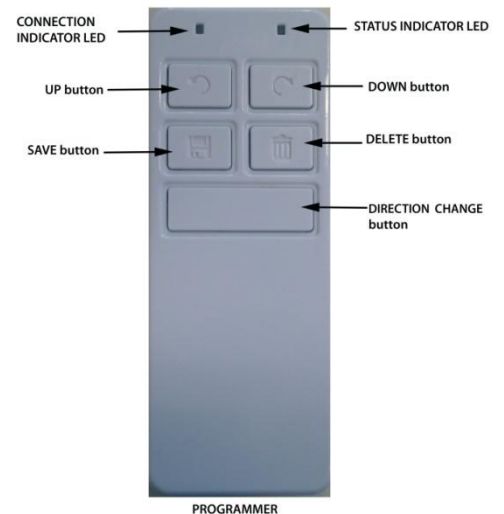


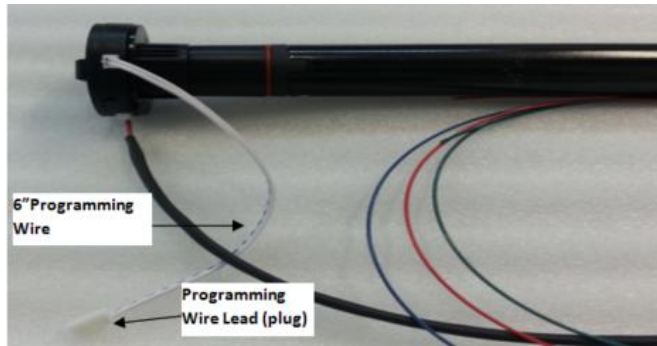
STEP 3: Programming Instruction Ignition-Lock Motor AMS 4271-2

NOTE: Make sure ignition is in the off position prior to programming motor.

Shades with ignition-lock motor AMS 4271 requires a separate programmer with programming cable to set the shade limits.

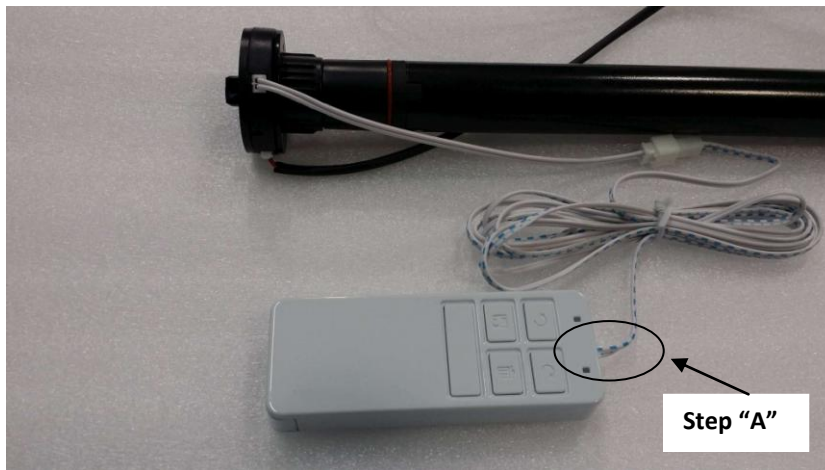
This feature enables any authorized service dealer at a later date to easily set different upper, lower or intermediate shade limits by simply connecting the programmer to the short programming wire that always stays on each motor and follow the below instructions. There are no other tools required.



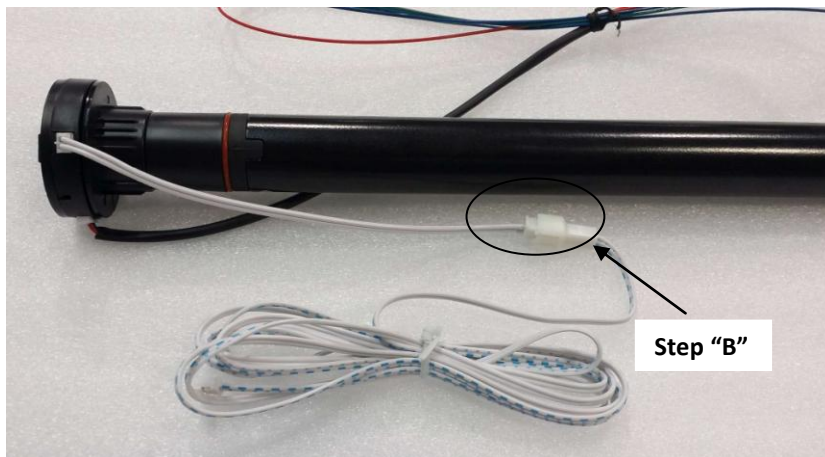


To set all the end limits of your shade, please carefully follow the below instructions and start by connecting the programmer to the motor as per Steps A and B below.

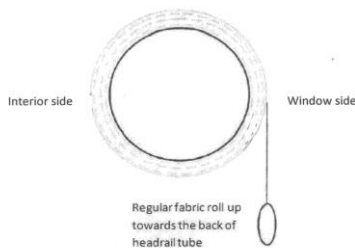
Step A: Make sure that the long programming cable is properly plugged into the hand held programmer.





Step B: Connect the larger lead (plug) of the long program cable to the short program wire on the motor side, as shown.





Important Note: Limit setting instructions in this manual are shown for standard fabric roll up, i.e. with fabric rolling towards the window side, as illustrated below:



Standard roll-up


The “DOWN” movement of the shade will be indicated with  and the “UP” movement with .

Front roll-up


However, some shades may be front roll up, i.e. the fabric rolls towards the interior rather than the window side and the shade movement will be reversed with the “DOWN” movement being  and the “UP” movement being .


NOTE: In order to set end limits of your shade you will need to ensure that there is power to the motor. To activate power to the motor, depress and hold the switch of the shade you are about to program. Once power is established to the motor continue setting limits as outlined below.


1. Clearing of Existing Limit Settings

Press the “” (DELETE) button until the “STATUS INDICATOR LED” light is on; this will remove all the existing programs and the motor can now be re-programmed.

2. Setting of Upper Limit


First lower the shade 10” to 15” by pressing the “” (DOWN) button.


Next press the “” (UP) button until the shade reaches desired position and release the button.

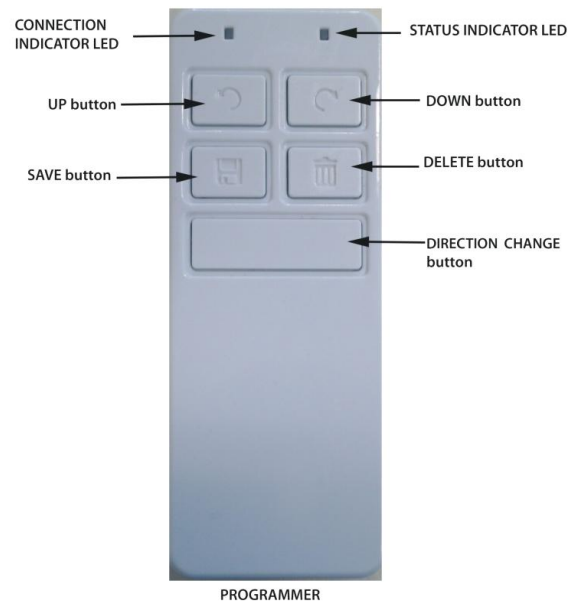
Press the “” (SAVE) button until the “STATUS INDICATOR LED” light is on - upper limit is set.

NOTE: Pressing the down or up button a second time will increase the motor speed, press again and the motor speed will slow down for precise limit position setting.

3. Setting of Lower Limit



Press the “” (DOWN) button until the shade reaches desired position and release the button.

Press the “” (SAVE) button until the “STATUS INDICATOR LED” light is on - lower limit is set.



4. Setting of Intermediate Stop (Ignition Switch Limit)

(This additional limit is a safety stop to prevent the shade from moving any lower if the ignition switch is turned on. The shade can only be moved into its full down position when the ignition switch is turned off)

With the shade being in the closed position, press the “” (UP) button until the shade reaches the desired safety position (which will adequately provide sun protection while driving but will not hinder a clear view of the road) and release the button. Press the “” (SAVE) button until the “STATUS INDICATOR LED” light is on – intermediate limit is set.

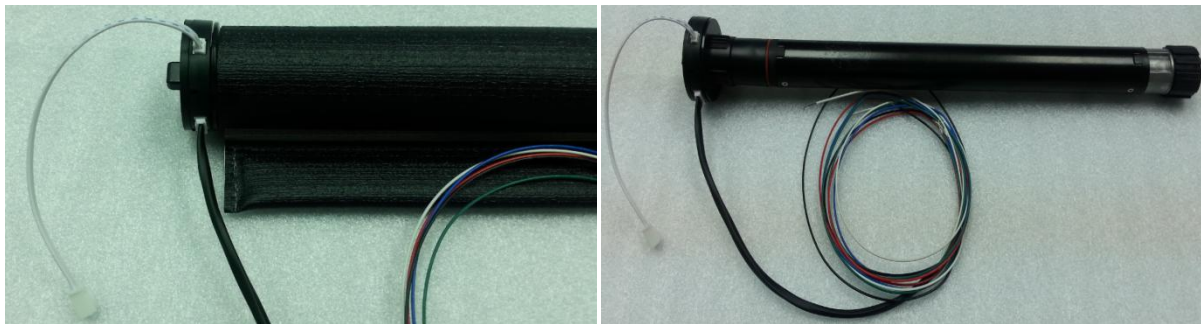
The programming is now complete and the “PROGRAMMER” can be disconnected from the short motor program wire.

Test shade using momentary shade/visor switch for proper programming with and without ignition in the “on” position.

Motorized shade replacement:

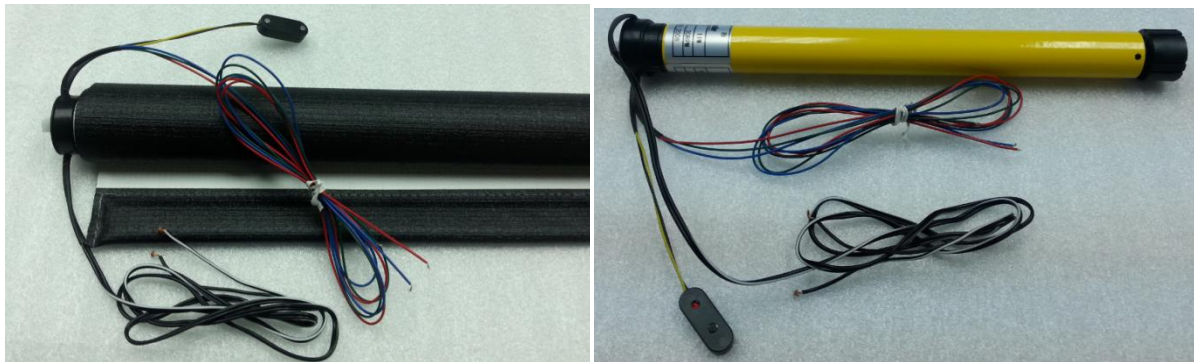
- 2014/2015 MADP (Mountain Aire Diesel Pusher) & LADP (London Aire Diesel Pusher)
- 2014 EXDP (Essex Diesel Pusher) & KADP (King Aire Diesel Pusher)

STEP 1: Identify the motor on the shade



Picture: new motor

If your shade has already been installed with the new motor, skip STEP 2 and move to STEP 3



Picture: old motor

If shade is installed with an old motor, it will need to be replaced with the new motor/shade. Once replaced, go to STEP 2.

Wires at New Ignition Lock Motor

- | | |
|-------|------------|
| Blue | > Up |
| Green | > Down |
| Red | > Ignition |

NOTE: AMS new Motor (4271-2) is designed for three wires.

IMPORTANT: Be sure to cap/cover supply(coach) power and ground wires to prevent possibility of electrical short.

STEP 2: Removing the overhead control panel

NOTE: If you are replacing the windshield visor/shade only, you will not need to do this step and can move on to STEP 5.



Picture: Front control panel

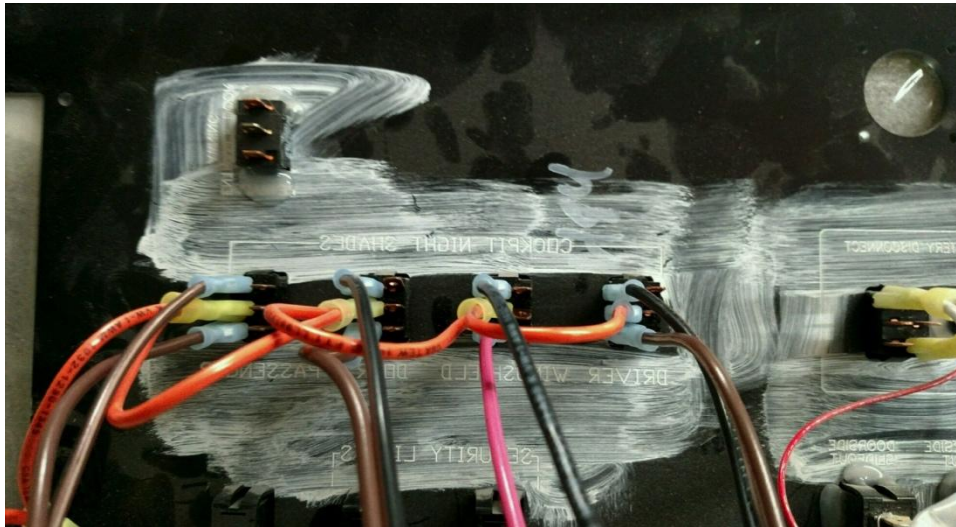
Remove screws and pull out overhead control panel to get access to the back of visor/shade switches. Locate the 12ga white ground wire that is up in cabinet behind the control panel. This is the only 12ga white ground wire in the cabinet.



Picture: 12ga white ground wire

You need to splice into this ground wire by using a scotch lock, bell cap, or butt connector then run your ground over to the visor switches.

NOTE: Do not splice into any slideout switch wiring.



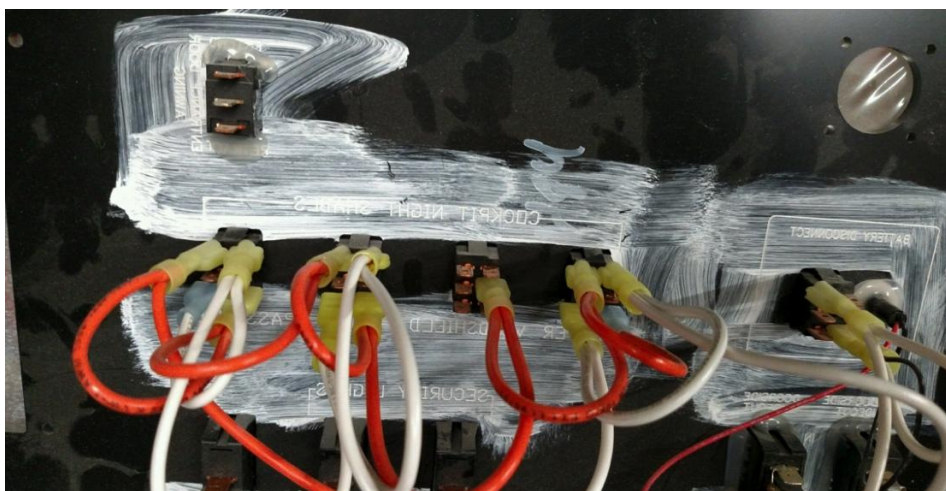
Picture: Back of the old control panel (before wiring)

Remove the existing wiring from the back of the applicable visor switches. (Mark wires that come from the shades and go to each switch so there is no mix up with the shade control wires)

Take new white ground wire and go to the back of the applicable visor switch to the top right pin on the switch. Daisy chain the ground wire from this point down to the lower left bottom pin on switch and repeat this process to any other applicable switches. (Note: Skip the windshield visor/shade switch).

Change location of the positive wires on the switch along with daisy chaining them as well. This will be coming off the orange wires to the switch. Some of the existing wire can be used to the switches or make new jumpers. Go from the top left post on the switch to the bottom right and repeat across for all applicable switches.

NOTE: You will not need to do this on the windshield switch. You will only need to jump to the center right pin on it.



Picture: Control panel with jumper wiring to all switches except windshield.

Reinstall the shade control switch wires coming from each shade. They now should go on the left/right center pins on all switches except for the windshield switch, this should go on the top/bottom right side pins in line with the jumper that installed on center right pin.



Picture: Control panel with complete wiring

STEP 3: Rewire visor/shade momentary switch

NOTE: Skip this step for the 2015 Mountain Aire and 2015 London Aire only, go to Step 4.

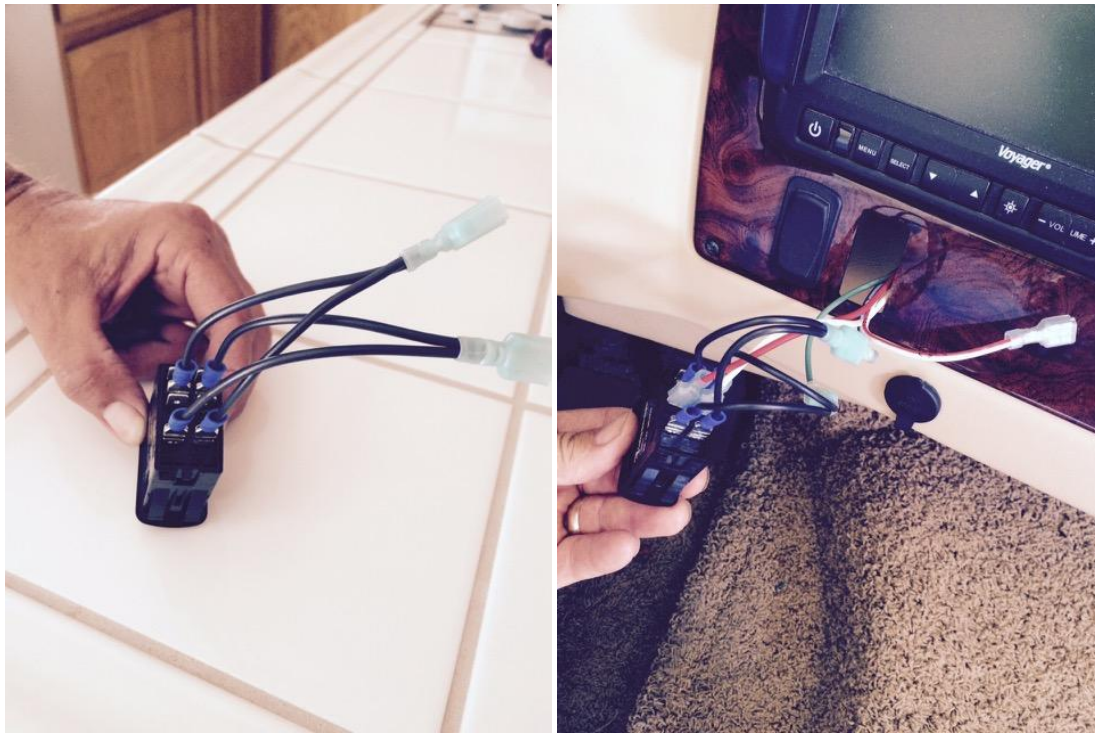
Remove driver's shifter panel console or center console switch panel to access the back of the switches.



Picture: Visor/Shade momentary switch

Here is the wiring linstruction:

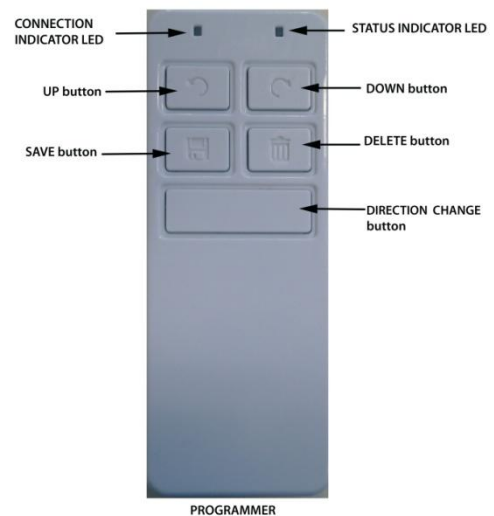
ASSEMBLE TWO 4" JUMPER WIRES FOR EACH SWITCH USING 16 GA. WIRE. INSTALL A PIGGYBACK QUICK-SLIDE TERMINAL ON PINS 4 AND 8 OF THE SWITCH. INSTALL ONE OF THE JUMPERS FROM PIN 4 (ON THE PIGGYBACK TERMINAL) TO PIN 6. INSTALL THE OTHER JUMPER FROM PIN 8 (ON THE PIGGYBACK TERMINAL) TO PIN 2. CONNECT THE +12V WIRE FROM THE DASH HARNESS TO PIN 1 AND THE GROUND WIRE TO PIN 5. CONNECT THE UP WIRE TO PIN 4 (ON THE PIGGYBACK TERMINAL) AND THE DOWN WIRE TO PIN 8 (ON THE PIGGYBACK TERMINAL).

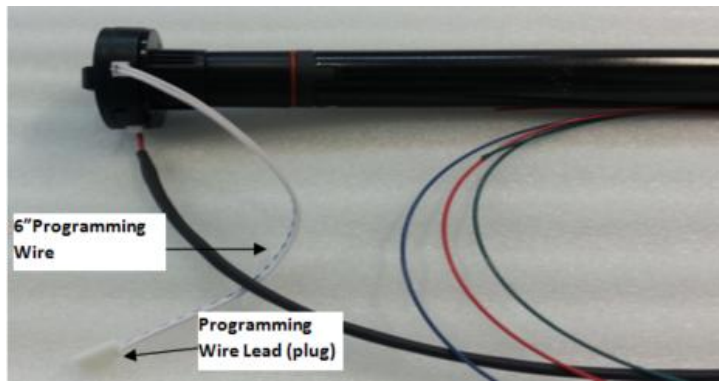


STEP 4: Programming Instruction Ignition-Lock Motor AMS 4271-2

NOTE: Make sure ignition is in the off position prior to programming motor.

Shades with ignition-lock motor AMS 4271-2 requires a separate programmer with programming cable to set the shade limits. This feature enables any authorized service dealer at a later date to easily set different upper, lower or intermediate shade limits by simply connecting the programmer to the short programming wire that always stays on each motor and follow the below instructions. There are no other tools required.



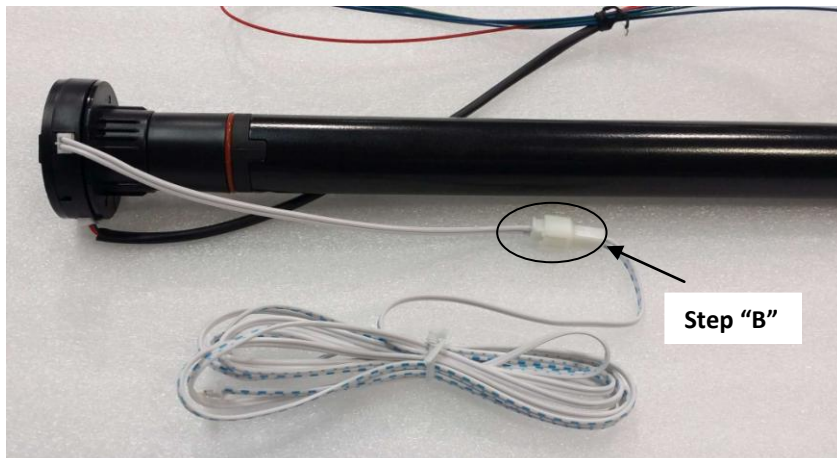


To set all the end limits of your shade, please carefully follow the below instructions and start by connecting the programmer to the motor as per Steps A and B below.

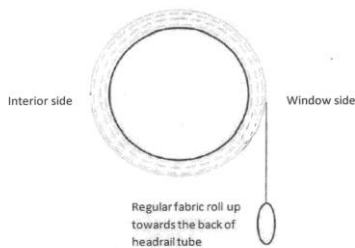
Step A: Make sure that the long programming cable is properly plugged into the hand held programmer.





Step B: Connect the larger lead (plug) of the long program cable to the short program wire on the motor side, as shown.





Important Note: Limit setting instructions in this manual are shown for standard fabric roll up, i.e. with fabric rolling towards the window side, as illustrated below:



Standard roll-up


The “DOWN” movement of the shade will be indicated with  and the “UP” movement with .

Front roll-up


However, some shades may be front roll up, i.e. the fabric rolls towards the interior rather than the window side and the shade movement will be reversed with the “DOWN” movement being  and the “UP” movement being .


NOTE: In order to set end limits of your shade you will need to ensure that there is power to the motor. To activate power to the motor, depress and hold the switch of the shade you are about to program. Once power is established to the motor continue setting limits as outlined below.


1. Clearing of Existing Limit Settings

Press the “” (DELETE) button until the “STATUS INDICATOR LED” light is on; this will remove all the existing programs and the motor can now be re-programmed.

2. Setting of Upper Limit

First lower the shade 10” to 15” by pressing the “” (DOWN) button.


Next press the “” (UP) button until the shade reaches desired position and release the button.

Press the “” (SAVE) button until the “STATUS INDICATOR LED” light is on - upper limit is set.

NOTE: Pressing the down or up button a second time will increase the motor speed, press again and the motor speed will slow down for precise limit position setting.


3. Setting of Lower Limit


Press the “” (DOWN) button until the shade reaches desired position and release the button.

Press the “” (SAVE) button until the “STATUS INDICATOR LED” light is on - lower limit is set.

4. Setting of Intermediate Stop (Ignition Switch Limit)

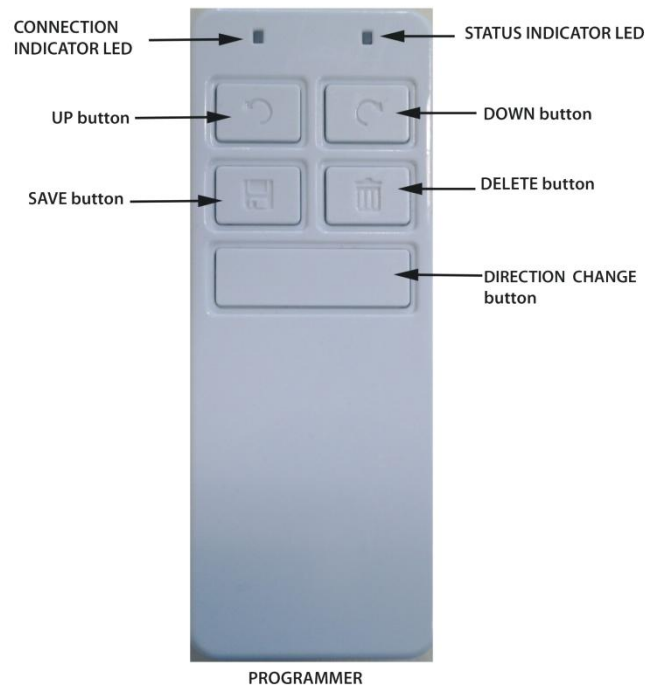
(This additional limit is a safety stop to prevent the shade from moving any lower if the ignition switch is turned on. The shade can only be moved into its full down position when the ignition switch is turned off)

With the shade being in the closed position,
press the “”(UP) button until the shade reaches
the desired safety position (which will adequately
provide sun protection while driving but will not hinder
a clear view of the road) and release the button.

Press the “”(SAVE) button until the
“STATUS INDICATOR LED” light is on – intermediate limit is set.

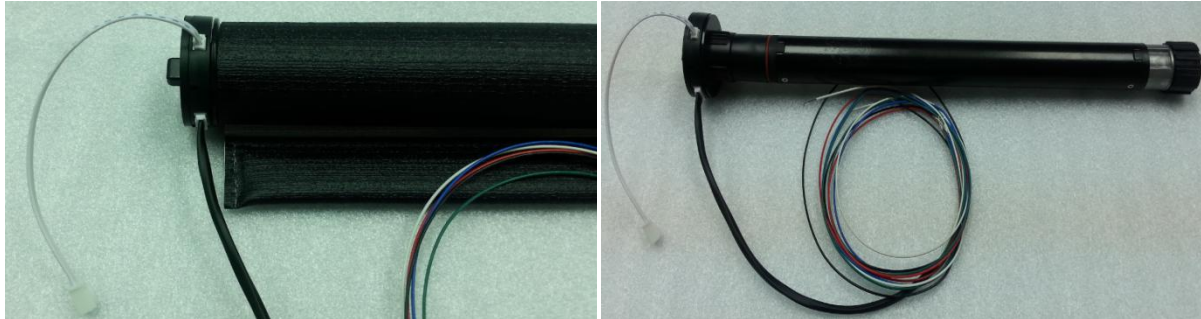
The programming is now complete and the “PROGRAMMER” can be disconnected from the short motor
program wire.

Test shade using momentary shade/visor switch for proper programming with and without ignition in
the “on” position.

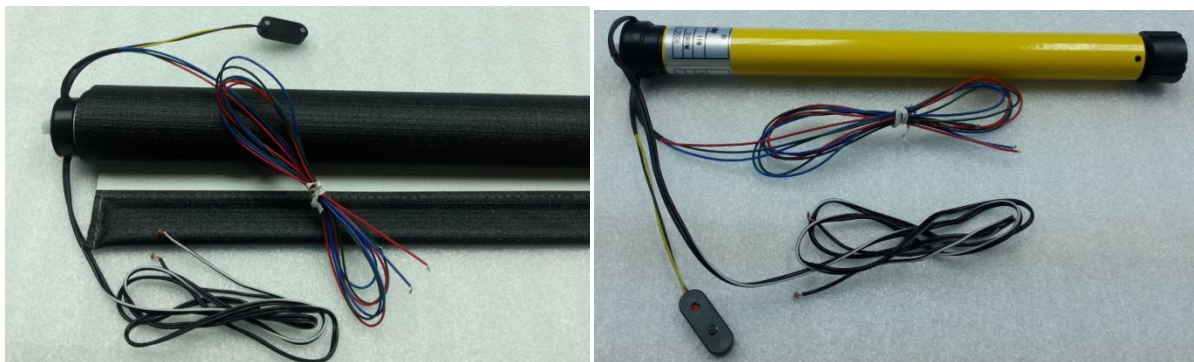


Motorized shade replacement 2015 King Air Diesel Pusher & Essex Diesel Pusher

STEP 1: Identify the motor on the shade



Picture: new motor



Picture: old motor

If shade is installed with an old motor, it will need to be replaced with the new motor/shade. Once replaced, go to STEP 2.

Wires at New Ignition Lock Motor

- Blue > Up
- Green > Down
- Red > Ignition

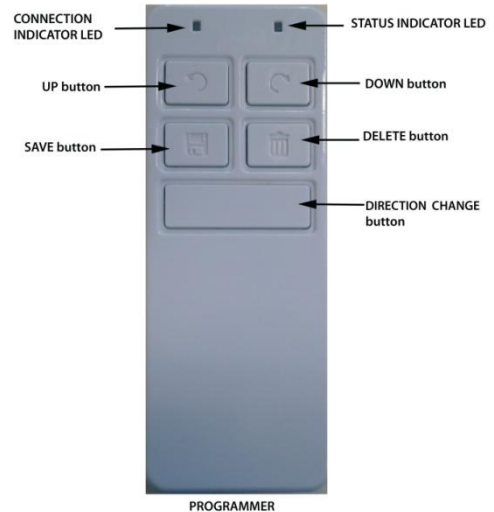
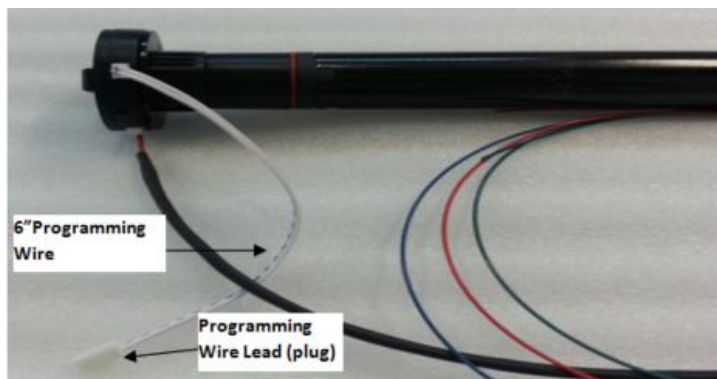
NOTE: AMS new Motor(4271-2) is designed for three wires.

IMPORTANT: Be sure to cap/cover supply(coach) power and ground wires to prevent possibility of electrical short.

STEP 2: Programming Instruction Ignition-Lock Motor AMS 4271-2

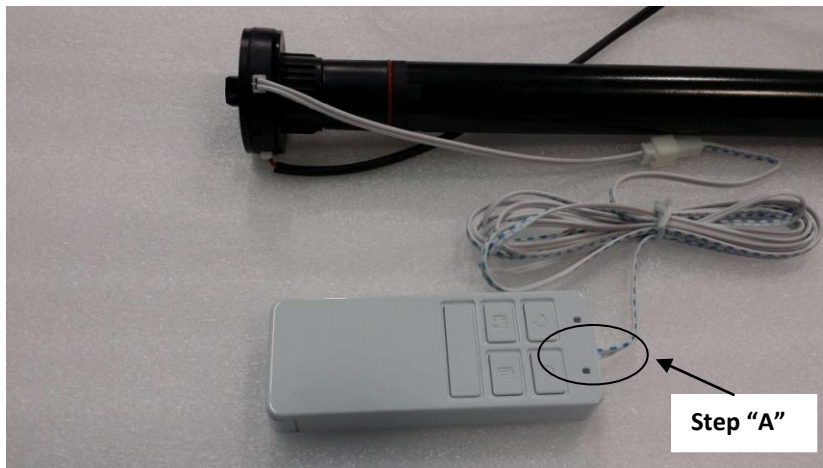
NOTE: Make sure ignition is in the off position prior to programming motor.

Shades with ignition-lock motor AMS 4271 requires a separate programmer with programming cable to set the shade limits. This feature enables any authorized service dealer at a later date to easily set different upper, lower or intermediate shade limits by simply connecting the programmer to the short programming wire that always stays on each motor and follow the below instructions. There are no other tools required.

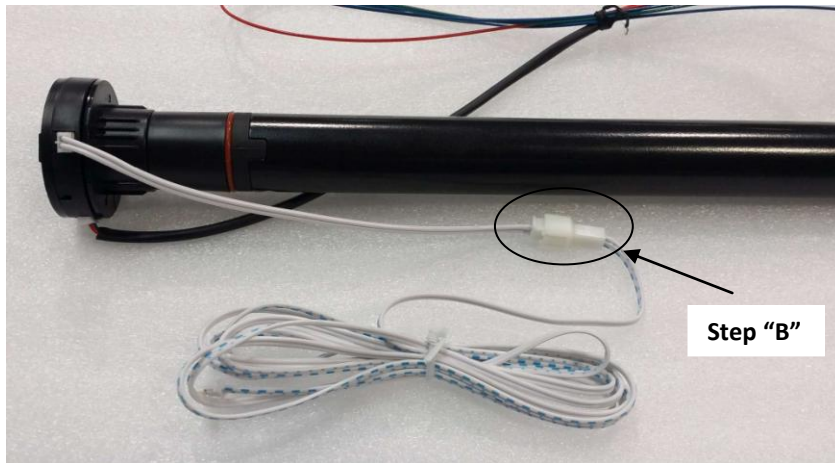


To set all the end limits of your shade, please carefully follow the below instructions and start by connecting the programmer to the motor as per Steps A and B below.

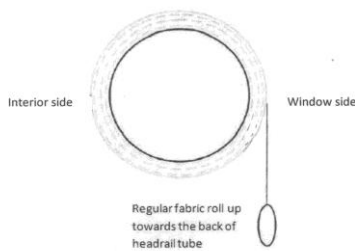
Step A: Make sure that the long programming cable is properly plugged into the hand held programmer.



Step B: Connect the larger lead (plug) of the long program cable to the short program wire on the motor side, as shown.



Important Note: Limit setting instructions in this manual are shown for standard fabric roll up, i.e. with fabric rolling towards the window side, as illustrated below:



Standard roll-up

The “DOWN” movement of the shade will be indicated with ⤴ and the “UP” movement with ⤵.

Front roll-up

However, some shades may be front roll up, i.e. the fabric rolls towards the interior rather than the window side and the shade movement will be reversed with the “DOWN” movement being ⤵ and the “UP” movement being ⤴.

NOTE: In order to set end limits of your shade you will need to ensure that there is power to the motor. To activate power to the motor, depress and hold the control momentary switch in the up position of the shade you are about to program. Once power is established to the motor continue setting limits as outlined below. When working on unit with KIB shade module be aware the KIB board may time out while programming the shade causing the shade to lose power, make sure to use the fast motor speed noted in the instructions below while setting limits.

1. Clearing of Existing Limit Settings

Press the “🗑️” (DELETE) button until the “STATUS INDICATOR LED” light is on; this will remove all the existing programs and the motor can now be re-programmed.

2. Setting of Upper Limit

First lower the shade 10” to 15” by pressing the “⤴” (DOWN) button.

Next press the “↶” (UP) button until the shade reaches desired position and release the button.

Press the “💾” (SAVE) button until the “STATUS INDICATOR LED” light is on - upper limit is set.

NOTE: Pressing the down or up button a second time will increase the motor speed, press again and the motor speed will slow down for precise limit position setting.

3. Setting of Lower Limit

Press the “↷” (DOWN) button until the shade reaches desired position and release the button.

Press the “💾” (SAVE) button until the “STATUS INDICATOR LED” light is on - lower limit is set.

NOTE: After lower limit is set, immediately press down position of momentary control switch.

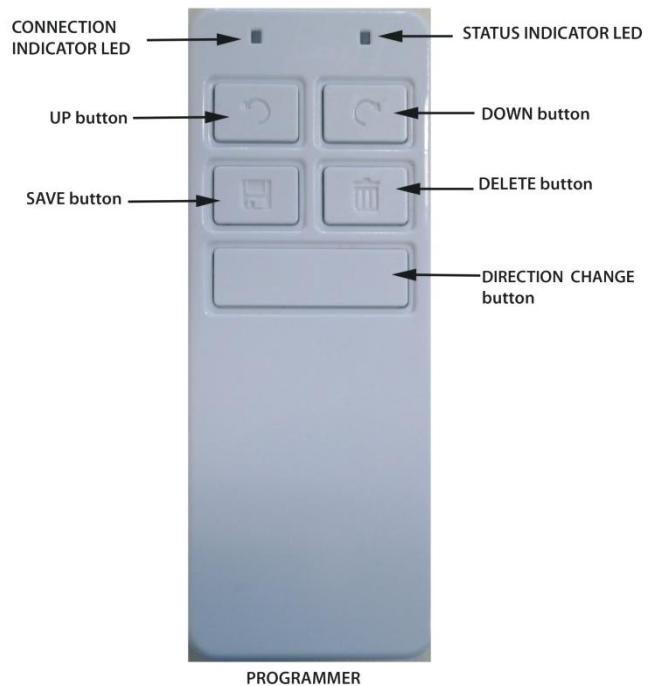
4. Setting of Intermediate Stop (Ignition Switch Limit)

(This additional limit is a safety stop to prevent the shade from moving any lower if the ignition switch is turned on. The shade can only be moved into its full down position when the ignition switch is turned off)

With the shade being in the closed position, press the “↶” (UP) button until the shade reaches the desired safety position (which will adequately provide sun protection while driving but will not hinder a clear view of the road) and release the button. Press the “💾” (SAVE) button until the “STATUS INDICATOR LED” light is on – intermediate limit is set.

The programming is now complete and the “PROGRAMMER” can be disconnected from the short motor program wire.

Test shade using momentary shade/visor switch for proper programming with and without ignition in the “on” position.





ADDENDUM TO MOTORIZED SHADE REPLACEMENT FOR 2014 and 2015 BAY STAR & CANYON STAR

NOTE: Should your replacement shade NOT have AutoMotion Shade motor part number 4271-2 the following procedure applies. (4271-2 motor identified by sticker located on the lower backside of night shade)

INSTALLATION OF RELAY:



Picture: A-Pillars

Part A- Remove Driver side windshield A-Pillar to get access to the wiring that goes to the shade(s).

Part B- Install one relay using the following instructions:
First locate a common ground (white wire) that comes from the A- Pillar. Splice a wire into this using a scotch lock, bell cap, or butt connector and take your wire to the 85 pin on the relay.

Locate the ignition feed wire that goes to the windshield blackout shade which is (black) and cut that wire in half. Take the feed coming from the coach and connect two wires to it using a butt connector or bell cap and run one to the 86 pin and the other to the 87 pin on the relay.

Run one wire out of the relay off the 30 pin and connect it to the (black) wire you cut earlier that is still loose that goes to the shade.

NOTE: If you order & use Newmar relay part #12707, the relay comes with relay socket. Hook up wires as follows: White – Ground; Brown/Orange connect together and hook black wire(ignition) as stated in Part B; Red – to red wires from shade motor(s).



Picture: Relay

Go to step 3 (Programming Motor Instructions) of Bay Star/Canyon Star motorized shade replacement.

ADDENDUM TO MOTORIZED SHADE REPLACEMENT FOR 2014 and 2015 KING AIR, ESSEX, LONDON AIR, & MOUNTAIN AIR

NOTE: Should your replacement shade NOT have AutoMotion Shade motor part number 4271-2 the following procedure applies. (4271-2 motor identified by sticker located on the lower backside of night shade)

INSTALLATION OF RELAY AND DIODE(s):



Picture: A-Pillars

Part A- Remove Driver side and/or Passenger side windshield A-Pillars to get access to the wiring that goes to the applicable shade(s).

Part B- Install both of the relays along with the diodes, one relay on the driver's side for the driver's window night visor and one on the passenger side for the passenger window and entry door visors.

First locate a common ground (white wire) that comes from the A- Pillar. Splice a wire into this using a scotch lock, bell cap, or butt connector and take your wire to the 85 pin on the relay.

Locate the ignition feed wire that goes to the drivers blackout shade which is (pink/green) and cut that wire in half. Take the feed coming from the coach and connect two wires to it using a butt connector or bell cap and run one to the 86 pin and the other to the 87 pin on the relay.

Run one wire out of the relay off the 30 pin and connect it to the (pink/green) wire you cut earlier that is still loose that goes to the shade.

NOTE: If you order and install Newmar relay part #12707, this comes with a relay socket. Hook up wiring as follows: White – Ground; Brown/Orange connect together to 12V ignition signal; Red to red from shade motors.

Repeat this step to the passenger side installing a diode inline per each (pink/green) wire that goes to the shade.

NOTE: Diodes need to be installed in the same direction.

NOTE: If installing front shade w/ 4271 motors and the sideshades w/ 4271-2 motors only 1 relay will be needed.



Picture: Relay

If replacing 2014/2015 MADP & LADP, 2014 EXDP & KADP go to step 4 of motorized shade replacement- programming instructions. If replacing 2015 King Air/Essex, go to Step 2 motorized shades replacement to program shades.