



MPD 67355

Atwood Mobile Products

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INTERNET: <http://www.atwoodmobile.com>**SLIDEOUT SYSTEM****ENGLISH****•Installation •Operation •Maintenance**

Effective 1/05/01

SAFETY ALERT SYMBOLS

Safety Symbols alerting you to potential personal safety hazards.
Obey all safety messages following these symbols.

**WARNING**

avoid possible
injury or death

**CAUTION**

avoid possible
injury and/or property damage

INSTALLATION**CAUTION
ROOM CAN BIND**

- The arms must be level, both horizontally and vertically, within 1/8" of each other.

ARMS AND CROSS SHAFTS**SINGLE AND DUAL "IN FRAME" SYSTEMS**

NOTE: If you dip paint your frame, install only the outer housing prior to painting.

1. Position arms no closer than four feet and no farther than twelve feet apart (FIG 1 A & B) as measured from the center-lines of both arms. (NOTE: Dimensions 1-A & 1-D are equal to each other, and define two ways of measuring centerline distances.) Driver arm must be closer to the battery.

To minimize binding, the arms **must** be perpendicular to the frame while being horizontally and vertically parallel to within 1/8" of each other with no interference from the frame, electrical runs, mechanical lanes, holding tanks, etc. To insure that the arms are horizontally parallel within 1/8", use a tape measure to determine distance between forward face of arm at both ends (FIG 1-C & D).

2. Mark location on frame face for arm penetration.
3. Cut 4" x 5" opening in the frame on the slideout room side, with size adjustments based on frame type and spacing.

CUTOUT SIZE	FIG 1-E = 4"	FIG 1-F = 5"

4. Temporarily clamp or hang arms into final position after above adjustments are made.
5. On motor end of one arm, tack weld outer housing of arm to frame.
6. At the opposite end of the arm, tack weld a face plate to the outer housing. Then tack weld the face plate to the inside face of the frame. Do the same on the outside face of the frame (FIG 2-A).
7. Fully weld face plate to frame and face plate to arm.

**CAUTION
ARM MAY NOT TELESCOPE FREELY**

- Excessive heat/weld will cause "burn through" and the outer housing and arm will not telescope freely.
- When welding the front end of arm, near the slide pad (FIG 2-B), minimize heat by stitch welding to insure outer housing temperatures do not cause distortion to the slide pad.

NOTE: All welding to be a 1/4" fillet weld # E6011 AWS welding rod 1/4" diameter. Machine amps (AC or DCRP) at 160-180 with 56 volts.

The one piece cross shaft may need to be installed prior to the second arm because of dimensional constraints due to the lateral cross members in the frame.

8. Arms must be within 1/8" parallel of each other, adjust as necessary. Repeat STEPS 5 through 7 for the second arm.
9. If you supply your own cross shaft tubing, it must meet the following requirements (FIG 8):
 - a. 1.00" +/- .02" square tube x .095" +/- .008" wall structural steel tubing for ASTM A500 grade B.
 - b. For single piece cross shafts, the cross shaft length is 6-3/4" +/- 1/8" less than the center distance between the rams (FIG 1-D).
10. Install cross shaft. Maintain a 3" diameter space envelope clearance. Insure cross shaft does not contact adjacent items.

LESS THAN 8 FEET CENTERLINE DISTANCE BETWEEN ARMS: Install the one piece cross shaft through cross frame members (FIG 1-G).

MORE THAN 8 FEET CENTERLINE DISTANCE BETWEEN ARMS: Install the cross shaft splice (FIG 1-I) between the two cross shafts, as shown in FIG 1-H. Weld cross shaft splice assembly to frame (FIG 1-I) according to weld specifications in STEP 7. Position top of cross shaft splice 9/16" +/- 1/8" lower than top of arm (FIG 1-J).

11. Connect the cross shaft by slipping the square end over the round drive shaft (FIG 5-B). Butt up to the outer housing as close as possible.
12. Raise the opposite end of cross shaft and slip the "DOUBLE D" end (FIG 3-A) over the "DOUBLE D" drive shaft (FIG 3-B).
13. Position cross shaft to allow the 1/4" screw and nut (FIG 5-C & D) to be installed at the round shaft end. Extend rams and measure the lengths. **Lengths must be within 1/8" of each other.**

If adjustment is needed - TO EXTEND THE RAM remove 1/4" screw (FIG 5-C) and turn the hex nut in the direction of the arrow (FIG 5-A). **TO RETRACT THE RAM** Turn the screw in the opposite direction of the arrow (FIG 5-A & 6-D).

Replace the screw and measure again, repeating until the lengths are within 1/8" of each other.

14. Manually retract the rams fully into the outer housings and insure the lengths of rams are within 1/8" of each other. Use a 3/4" socket to adjust either ram as needed. Turn the hex nut in the direction of the arrows shown in FIG 5-A or 6-D.
15. If the splash guard was removed or never installed, put it inside the housing and attach with fasteners provided (FIG 6 A & B).
16. Connect the rams to the floor of your slideout room per your "floor to ram" attachment method to facilitate maintenance work. This must be a bolted connection. Adjust stop screws as required (FIG 4-A) to provide proper extension/retraction seal.

If additional adjustment is required relocate stops as follows:

1. Remove mounting screw (FIG 7-A) and stop block and cap screw assembly (FIG 7-B) from ram.
2. Position cap screw (FIG 7-C) centered in the stop block.
3. Position slide out room to provide proper seal.
4. Hold stop block and cap screw assembly (FIG 7-B) so cap screw (FIG 7-C) is in contact with stop angle.
5. Mark center point for mounting screws.
6. Drill through with an "I" drill (.271" Ø).
7. Tap hole with a 5/16"- 24 tap.
8. Reinstall stop block and cap screw assembly (FIG 7-B) to ram with mounting screws at its new location.

PEDESTAL SYSTEM

Bolt pedestal to frame with four (4) 1/2" bolts or 1/2" lag screws (not supplied). Lag screws must be a minimum of 2" long. Complete installation as defined in the previous steps 15-16.

POWER RELAY CONTROL BOX - FIG 9-A & 10-A

NOTE: To protect Slideout System when not in use, connect the slideout controls through a power disconnect switch and instruct user to turn off when RV is not in use.

Install vertically in a clean dry interior area protected from moisture. The unit operates from a +12 VDC heavy duty marine or RV battery and must be supplied through a 40 AMP manual reset circuit breaker. Fasten base vertically to the mounting surface, using appropriate hardware for the surface.

MANUAL AND AUTOMATIC CONTROLS WIRE CONNECTION

1. Connect power source (+12 VDC power and ground) to relay module using #8 AWG wire with appropriate connectors. Refer to FIG 9 & 10.
2. Route the two motor wire leads to the relay module and connect with appropriate connectors.
3. Route the 8-8 wire cable to the wall switch area.

NOTE: Correct polarity must be observed as noted on the circuit board. **The unit will not function if the input power is installed in reverse polarity.**

WALL SWITCH - (MANUAL & AUTOMATIC) - FIG 9-B & 10-B

1. Cut a 1-3/4" x 2-3/4" hole in wall at desired location.
2. Connect 8-8 wire cable from power relay control box to wall switch.

OPERATION



WARNING

PERSONAL INJURY & PRODUCT DAMAGE

THIS SYSTEM HAS THE CAPACITY TO SUPPLY OVER 3,000 LB OF FORCE.

- Keep all persons away from the slideout path, both inside and outside of the RV.
- **BEFORE ACTUATING THE ROOM:**
 - make sure the unit is level.
 - clear all outside and inside obstructions from the path of the slideout.
 - put down all stabilizers on trailer.
- Keep away from the slideout arms as the room is moving.
- Always deactivate system after use to prevent involuntary (accidental) actuation of slideout.
- Once room has been completely retracted or extended, continuing to actuate system in same direction of full extension/retraction will cause unnecessary wear and tear to slideout room and actuators.

MANUAL CONTROLS

1. Activate system by pressing the **ON** button (FIG 9-C) and holding for 0.5-1.0 seconds. The LED (FIG 9-D) will illuminate to indicate system is powered.

NOTE: System has an automatic timeout feature which will deactivate system after 8 seconds of inactivity.

2. Extend room by pressing the **OUT** button (FIG 9-E). Hold down button until room is fully out.
3. Retract room by pressing the **IN** button (FIG 9-E).
4. Deactivate system by pressing the **OFF** button (FIG 9-C).

AUTOMATIC CONTROLS

1. Activate system by pushing the **ON** button to activate the system (FIG 10-C). The LED (FIG 10-D) will illuminate to indicate system is powered.

NOTE: System has an automatic timeout feature which will deactivate system after 8 seconds of inactivity.

2. Press and release the **OUT** side of the button (FIG 10-E) to extend room and the **IN** side of the button to retract room.

NOTE: The buttons on the Automatic Control are momentary and do not need to be held down during room movement. To stop room during travel, press either button.

NOTE: The low voltage disconnect feature disables the control system it when power source is not providing sufficient power.

3. Deactivate system by pressing the **OFF** button (FIG 10-C).

MANUAL OVERRIDE OPERATION

1. If **power is not available**, turn the hex nut with a 3/4" socket in the direction of arrow (FIG 5-A or 6-D) to extend room, or in the opposite direction to retract the room.

.....TROUBLESHOOTING GUIDE.....

SLIDEOUT ROOM DOES NOT OPERATE WHEN THE IN/OUT ROCKER SWITCH IS PRESSED

- Make sure ON button has been pressed.
- Press IN/OUT button in both directions to ensure the room is not fully extended or retracted.
- Check 12 V battery voltage under load. Battery voltage range should be 9-13 volts. If under 9 volts, charge or replace battery.
- While pressing the ON and IN buttons simultaneously, measure voltage at the motor with a voltmeter. If there is no voltage, the problem exists in buttons, control or wiring.
- Disconnect battery and check all wire nut splices relative to slideout system to ensure that all splices are adequate. Reconnect battery.
- Transport RV to a service center to have the slideout buttons and controller inspected.

ROOM RUNS SLOWLY (MORE THAN 45 SECONDS TO FULLY EXTEND/RETRACT ROOM)

- A. Check 12 V battery voltage. Battery voltage should be 9-13 volts. If less than 9 volts, charge or replace battery.
- B. Transport RV to a service center for inspection.

ROOM STOPS PREMATURELY

- A. Release IN/OUT button (FIG 10-E or 11-E), pause 2-3 seconds and press IN/OUT button again.
- B. Check 12 V battery voltage. Battery voltage should be 9-13 volts. If less than 9 volts, charge or replace battery.
- C. Transport RV to a service center for inspection.

REPETITIVE METALLIC SOUND

Inspect underside of trailer to look for cross shaft obstruction. If there is an obstruction, transport RV to service center for correction.

ROOM DOES NOT SEAL PROPERLY

Adjust stop screws (FIG 4-A & 7) to provide for more or less room travel to allow seals to compress 1/4"-3/4".

ROOM IS EXTENDED AND WILL NOT RETRACT

Rotate 3/4" hex drive (FIG 5-A or 6-D) in opposite direction of the arrows to manually retract the room **OR**
Disconnect wire nuts at the slideout system motor and use an auxiliary 12 VDC battery to apply voltage to the motor. If the room operates in the opposite direction, reverse the voltage.

DESCRIPTIONS FOR FIGURES FOUND ON PAGE 3

FIG 1:

- A = Center line of one arm to center line of the other arm
- B = Center line of one arm to center line of the other arm
- C = Forward face of one arm to forward face of other arm
- D = Forward face of one arm to forward face of other arm
- E = Horizontal width of hole through frame
- F = Vertical width of hole through frame
- G = Cross shaft
- H = Two piece cross shaft
- I = Cross shaft splice
- J = Distance from top of cross shaft splice to top of arm

FIG 2:

- A = Face Plate
- B = UHMW glide pad

FIG 3:

- A = Double D end of cross shaft
- B = Drive shaft of slideout arm

FIG 4:

- A = Mechanical stop on bottom of slideout arm
- B = Splash guard

FIG 5:

- A = Hex nut on drive shaft of slideout arm
- B = Square end of cross shaft
- C = 1/4" screw
- D = 1/4" nut

FIG 6:

- A = Splash guard
- B = Screw hole in splashguard
- C = Outer housing of slideout arm
- D = Hex nut on drive shaft of slideout arm

FIG 8:

- A = Forward face of one arm to forward face of other arm

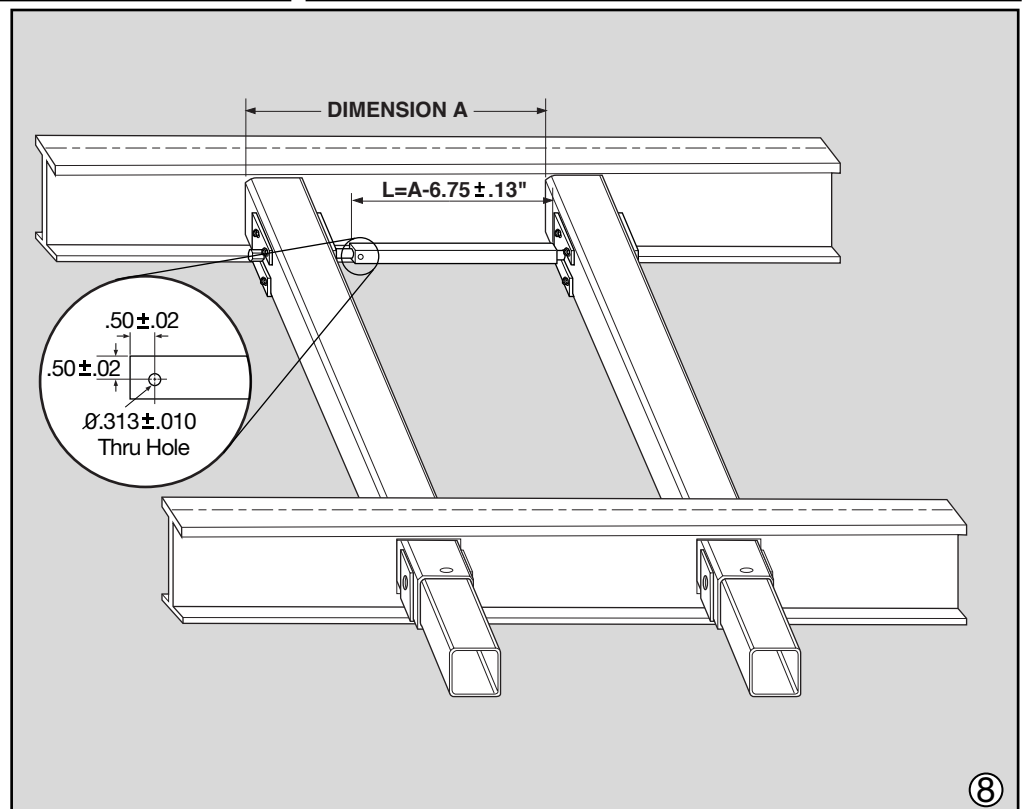
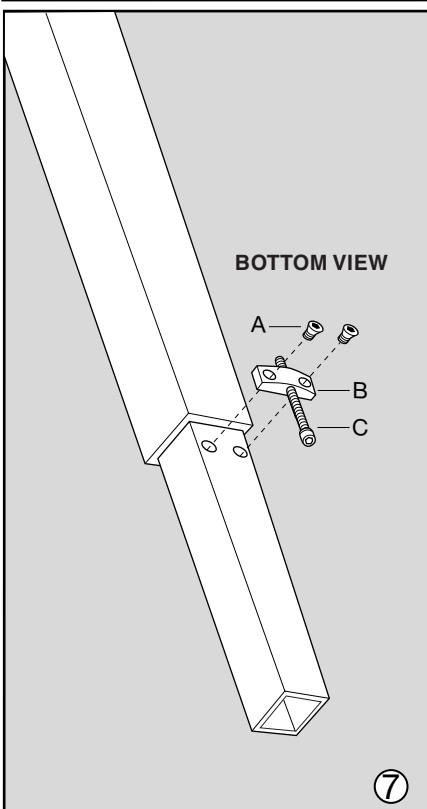
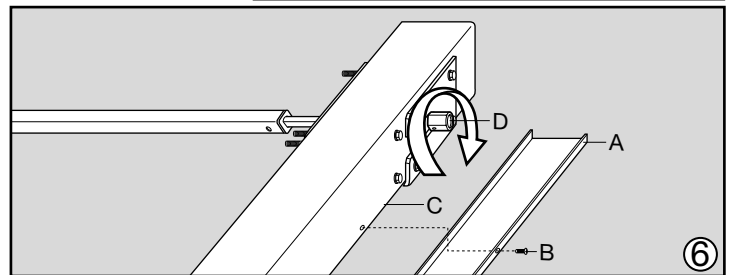
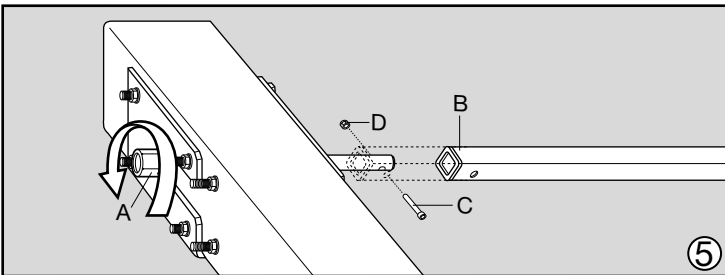
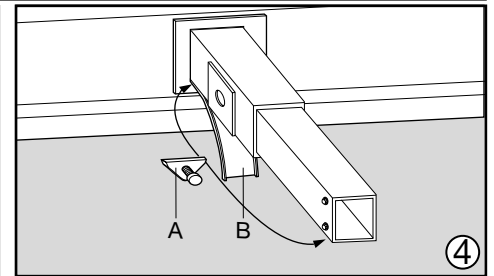
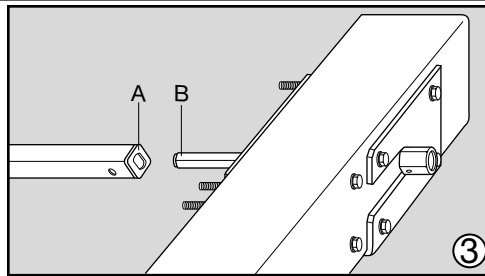
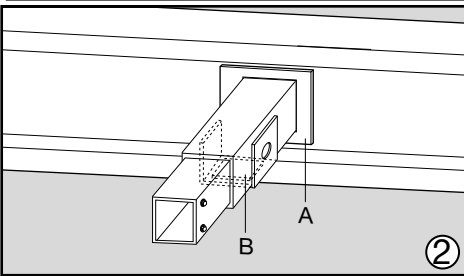
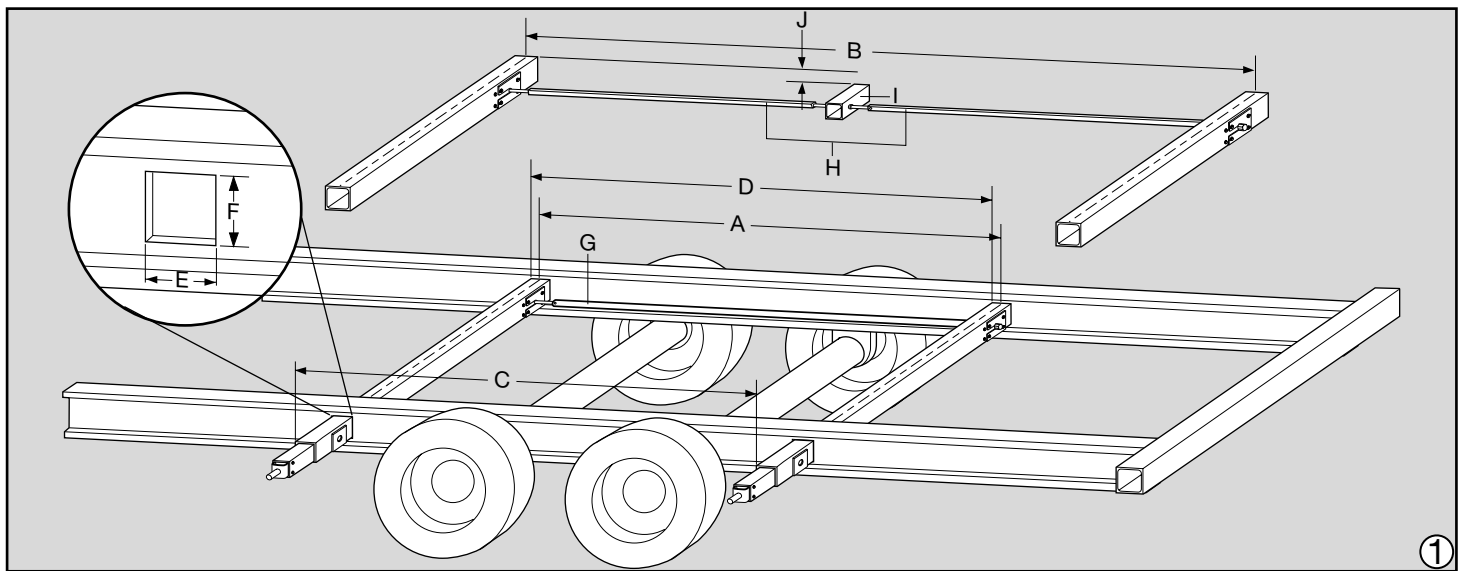
ATWOOD HARDWARE LIMITED WARRANTY

Atwood warrants to the original consumer purchaser that this product will be free of defects in material and workmanship for a period of 2 years from the date of purchase. Atwood's liability hereunder is limited to the replacement of the product, repair of the product or replacement of the product with a reconditioned product, at the discretion of the manufacturer. The warranty is void if the product has been damaged by accident, unreasonable use, neglect, tampering or other causes not arising from defects in material workmanship. The warranty extends to the original consumer purchaser of the product only and is subject to the following conditions.

1. For two (2) years commencing with the date of purchase, Atwood will provide the replacement or repair of any Hardware System and Components that are found to be defective by Atwood in material or workmanship.
2. In the event of a warranty claim, the Original Consumer must contact the Atwood Consumer Service Department, 4750 Hiawatha Drive, Rockford, Illinois 61103-1298, telephone: 815-877-5700, fax: 815-877-7469. Warranty claim service must be performed as approved by the Atwood Consumer Service Department. Warranty replacement hardware systems and components or parts will be furnished freight

prepaid. Labor cost to repair or replace will be limited to the amount of the original purchase price of the systems and components. The replaced warranty products or parts become the property of Atwood Mobile Products and must be returned to the Atwood Consumer Service Department freight prepaid, unless prior arrangements have been agreed to.

3. This limited warranty is valid only when the product is applied, installed, maintained and operated in accordance with this Atwood Installation, Maintenance and Operating Manual. Any deviation from these recommended specifications must be approved in writing by Atwood.
4. Any implied warranties are limited to the duration of this limited warranty as stated above. Atwood does not assume responsibility for consequential damage or loss, including loss of use of vehicle, loss of time, inconvenience, expense for gasoline, telephone, travel, lodging, loss or damage to personal properties, or loss of revenues. Some states do not allow limitations on how long an implied warranty lasts or limitations on consequential damages, so the above limitations may not apply to you. This limited warranty gives you specific legal rights which may vary from state to state.



MANUAL CONTROLS WIRING DIAGRAM

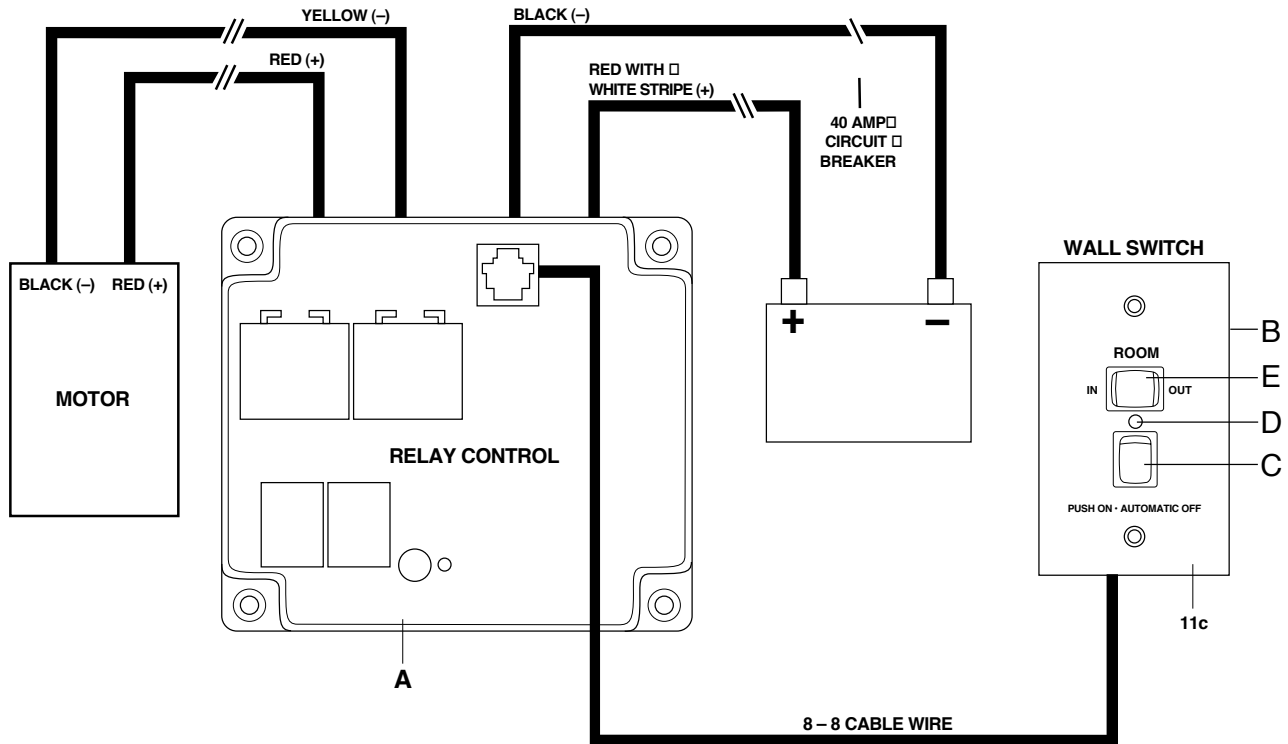


FIG. 9

AUTOMATIC CONTROLS WIRING DIAGRAM

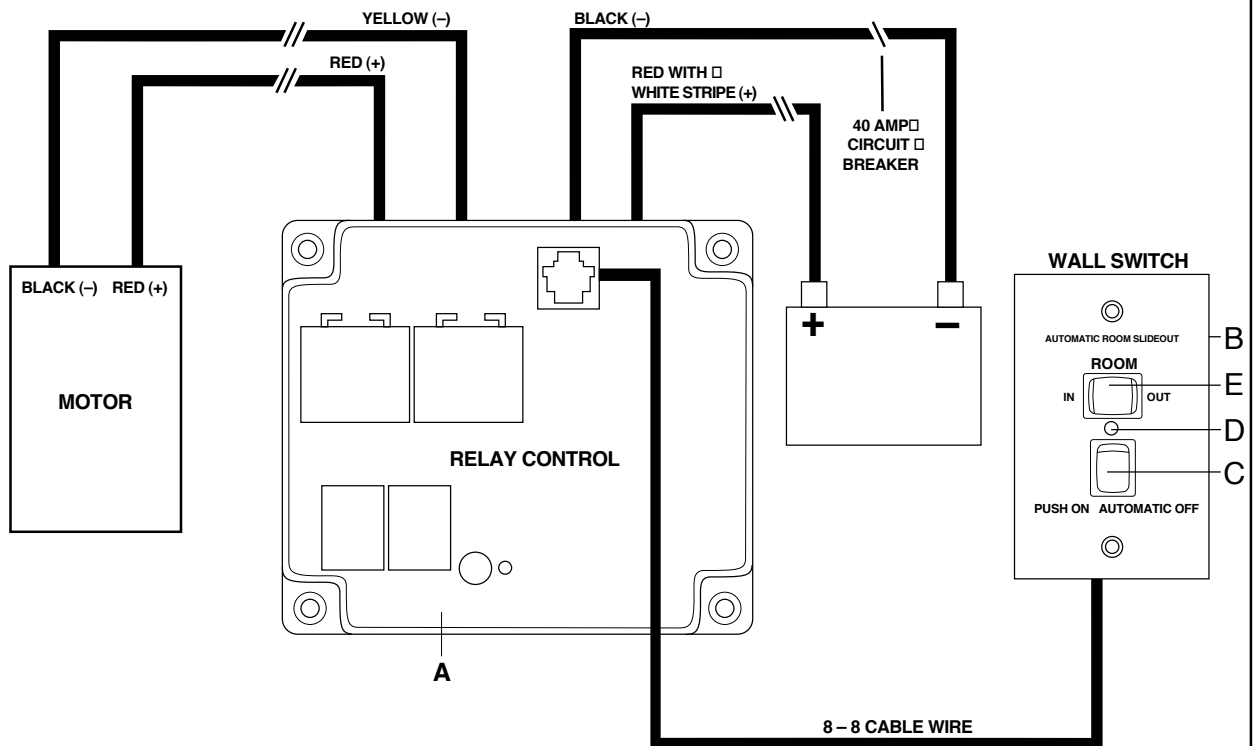


FIG. 10