#### **Trouble Shooting**

- A. Slide out runs a short distance then shuts off premature.
  - 1. Check rollers that are mounted to the bottom of slide out floor for any obstruction.
  - 2. We recommend that the coach be plugged into shore power before operation of slide out. A battery that isn't fully charged may not run a slide out by itself. Slide out motors need a full 12v to operate properly.
  - 3. If problem occurs when bringing slide out in, make sure it is not catching on the awning cover.
  - 4. Diagnosing a control box problem. If a slide out runs but shuts off prematurely one can increase the tension adjuster. The tension adjuster is a white screw in a brown case on the bottom of the slide out controller box. Clockwise increases and counter-clockwise decreases. Using a very small screwdriver will prevent damage to the control box. Make adjustments only in very small increments until slide out runs as it should. Too much tension will buckle the trim on slide out. If the adjustment screw is 'maxed' out and slide out continues to have problem, the control box needs to be changed. On March 21, 1995 all units, both motorized and towable, with the drop floor or standard slide outs, were produced using the same style of control box. New style control boxes for the rack and pinion slide outs are inter-changeable with some slight modifications. See page 15-7.

#### B. Slide out doesn't run at all.

- 1. When slide out button is activated does red light on button light up? If not, check the fuse to see if it has been blown. Make certain coach has 110 power. A slide out needs the full 12v to operate properly.
- 2. 1997 and 1998 K-2, London Aire and Kountry Aire Diesel Pusher Units Only have a safety devise that requires the driver's seat to be in the forward position before the slide out will operate.
- 3. Check to see if you have 12v power to the control box. The green wire should have 12v and the green/yellow wire must have 12v for the slide out to operate. If there is power going to the control box, then check for power at the slide out motor when the switch is activated. If there is no power to the motor from the control box, change the control box. If there is power to the motor, but the motor will not activate, check the slide out motor, and if the motor activates, but the slide out doesn't move, make sure that the transtorque bushing isn't slipping, see step 4.
- 4. With 12v established to the control box, unhook the motor wire plug from the controller. There are two wires in this plug. Then see if the red light on the slide out button lights up when activated. If the light doesn't work, either the slide out control box or switch is defective. More than likely, it will be the control box that is defective. Defective slide out buttons are rare. Refer to page 15-5 for instructions on slide out button installation.
- 5. If the slide out causes blown fuses when activated, a continuity inspection of the slide out motor wires is necessary. Disconnect the motor wire plug from the control box. Disconnect both wires by the slide out motor. Temporarily connect the wires from the coach together. If you have a two motor slide out system, do this on both motors. Check the continuity by using the slide out control plug, connecting the Motor Wire 1 to the Motor

- Wire 2 and also from the frame to Motor Wire 1. There should be no continuity from the frame to the Motor Wire 1.
- 6. If the slide out button is activated and the motor runs but the room doesn't move, or only moves at times, the transtorque bushing might be loose. Torque the bushing to 115#. If the problem persists take the motor loose and score the motor shaft with 80 grit sand paper and reinstall. Never oil transtorque bushing or motor shaft.
- 7. If the motor activates but doesn't drive the shaft and transtorque bushing isn't slipping, the motor needs to be replaced. See page 15-3 for motor replacement. On two motor slide out systems, there are replacement gears available to rebuild these motors if they strip their gears. There are no replacement gears for center-mounted motors.

#### C. Slide Out Adjustment.

1. When a slide out needs to be equalized to match the sidewall of the coach, a number of steps need to be taken. First, if you have a fifth wheel, check to see if it is a center motor slide out drive system or a two motor slide out system. Some 1998 fifth wheel units still use the older style, two motor system. See Step A for the center motor systems and Step B for the two motor systems.

#### a. - Center Motor Slide Out

Run the slide out within two feet of the in position. Loosen the transtorque bushing by the motor and the transtorque bushing in the shaft assembly. When loosening each bushing, break it loose in two stages. The transtorque bushing has right hand threads. Break it loose once and continue to turn until it tightens. Then break it loose a second time. Measure the sidewall of the coach to the slide out. When both sides measure the same re-torque both bushings 145#.

#### b. - Two Motor Slide Out

Run the slide out within two feet of the in position. Loosen the transtorque bushing in the center of the shaft assembly and the transtorque bushing by the motor on the side you are adjusting. When loosening each bushing, break it loose in two stages. The transtorque bushing has right hand threads. Break it loose once and continue to turn until it tightens. Then break it loose a second time. Be sure to re-torque both bushings to 125#.

- 2. Adjusting the slide out from side to side. Loosen the nut directly behind the slide out tube (there is one on each tube) and any brackets that hold the slide out skirt on, if any. Slide out will then slide from side to side, tighten nuts when in the proper place.
- 3. There are adjustment bolts provided on each slide out assembly. These can be used to raise or lower the entire slide out or one end only. These bolts are on both side of each actuating tube. Please note that you will need to loosen the center nut before moving the slide out up. However, certain cautions need be taken when doing this adjustment. When adjusting the slide out up, do not raise it so high that the trim on the slide out hits the trim on the coach. When adjusting the slide out down, do not lower it so low that the slide out motor can not take the slide out in as far as it is required for a proper seal. This adjustment changes how the slide out fits in the opening of the coach and also how it seals. This adjustment affects the seal of the standard slide out 'in' or 'out'. The effect of this adjustment on the drop floor slide out is on the seal when the slide out is in the 'in' position. There is a tube saddle adjustment for the slide outs to adjust how well they seal in the 'out' position.

- 4. The tube saddle does only one thing, it adjusts the seal inside the top of the slide out in the out position <u>only</u>. Do this adjustment with the slide out room fully extended. Please note that all adjustments on slide outs have to be carefully considered. Be aware that some adjustments may affect the fit of the slide out room requiring more adjustments to be made.
- 5. If the slide out runs in too tight, either extended or retracted, there are stop rods along the inside of each actuating arm. Each rod is threaded. When shortening the distance of the stop rod between the coach and the end of the actuating arm will stop the slide out farther from the trim in the extended position. To cause the slide out to stop sooner in the retracted position, adjust the two nuts that are locked together out towards the end of the actuating arm. Loosen these and move them in towards the coach and re-lock them. Adjusting in the reverse order will have the opposite effect.

#### D. Manual Operation of the Slide Out.

- a. Center Motor Slide Out Loosen the transtorque bushing by the motor. Five or six people can then retract the slide out by pushing.
- b. Two Motor Slide Out Loosen the transtorque bushing by both motors. Five or six people can then retract the slide out by pushing.
- c. Please note, it is not possible to wrench the drop floor slide out up the incline, however five or six people pushing can get it up the incline. After it is up the incline one person can wrench it in.

#### E. Slide Out Motor Replacement.

- 1. Center Motor Slide Out Replacement On center motor slide out assemblies, the one-inch drive shaft goes through the slide out motor. Disassembly of the shaft will be necessary to remove the motor. The slide out motor can be taken off of the shaft in one direction only
  - a. Before starting the disassembly of the shaft, a jack must be placed under the slide out to take all of the weight off of the drive wheel.
  - b. Remove all shafts and the drive wheel between the motor and the actuating arm.
  - c. Loosen the transtorque bushing and the four mounting screws that hold the slide out motor. Disconnect the 12v power supply. The motor will now slide off of the shaft.
  - d. When installing the motor, torque the bushing to 145#. Re-install the remaining drive assembly in the reverse order from which it was removed.

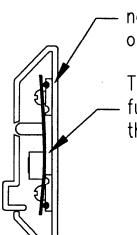
#### 2. Two Motor Slide Out Replacement -

- a. Loosen the transtorque bushing.
- b. Disconnect the 12v power supply.
- c. Remove the four mounting screws.
- d. When installing the new motor, it is very important to reposition all of the rubber washers as they were before.
- e. Torque the bushing to 125#.
- 3. In our 2000 London Aire series, a Bison motor was used.

#### **General Slide Out Information**

- 1. Transtorque bushing is torqued at 125 #s on 3/4" shaft and 145#s on 1" shaft.
- 2. The two motor slide out system uses a different motor than the center motor slide out system. On the motor there is a tag that states the rpm's. The two motor slide out requires a motor with 1.8 rpm's.
- 3. Slide outs have a 20 amp fuse for the motor operation. It is located in the house fuse panel.
- 4. Carpeting can be changed in a coach without removing the slide out if you follow this procedure.
  - a. Run slide out to the fully extended position
  - b. On the outside, run a wooden 2x6 the length of the slide out, under the floor of the slide out and jack the slide out up with two (or three, if possible) bottle jacks or floor jacks until the top of the slide out touches the slide out bulb seal, stopping before damage occurs to the roof or the seal. This will give you room to remove and replace the carpet under the slide out.
  - c. Cautiously lift the roller incline ramps. Make sure the replacement carpet is under these ramps. Using a hamper and a block of wood, lower the incline to the carpet, make sure of offset for the slide out rollers to cross over.
- 5. Water leaks on a non-drop floor slide out.
  - a. Rain water sometimes runs down the side wall of the slide out into the trim track
    - i. Completely extend the slide out.
    - ii. Remove screw cover on the bottom trim up to the unit sidewall. Apply sealant under screw cover on trim track. Reinstall screw cover.

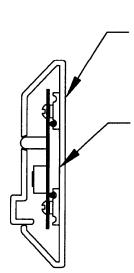
# Incorrect



Wires should not be in the outer holes.

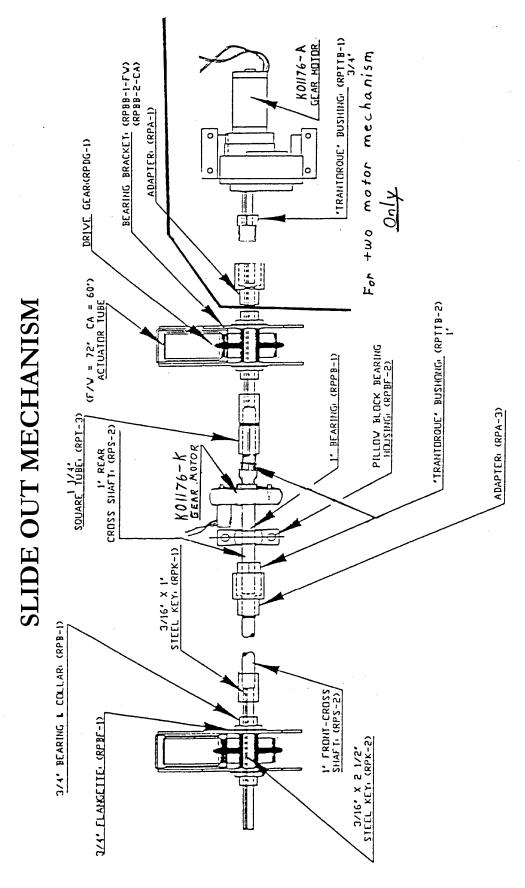
The switch won't function properly with the switch plate bent inward.

# Correct



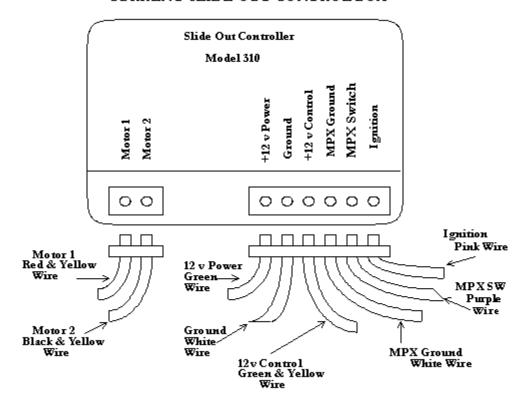
Wires must be in the inner holes.

The switch plate will flex outward slightly.
This is normal.



### Slide Out Control Module Replacement Procedure

#### CURRENT SLIDE OUT CONTROL BOX

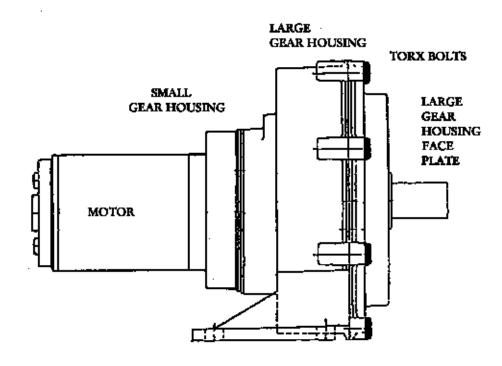


The following steps are for replacing the old style control module labeled "Slide Out Room Controller-Low Current" with the Model 310, Part #25481 controller.

- 1. Connect the white ground wire to the MPX white ground wire.
- 2. Connect the green 12v power to the green and yellow 12v control.
- 3. If installing the control module on a towable unit, the pink ignition wire will not be used.

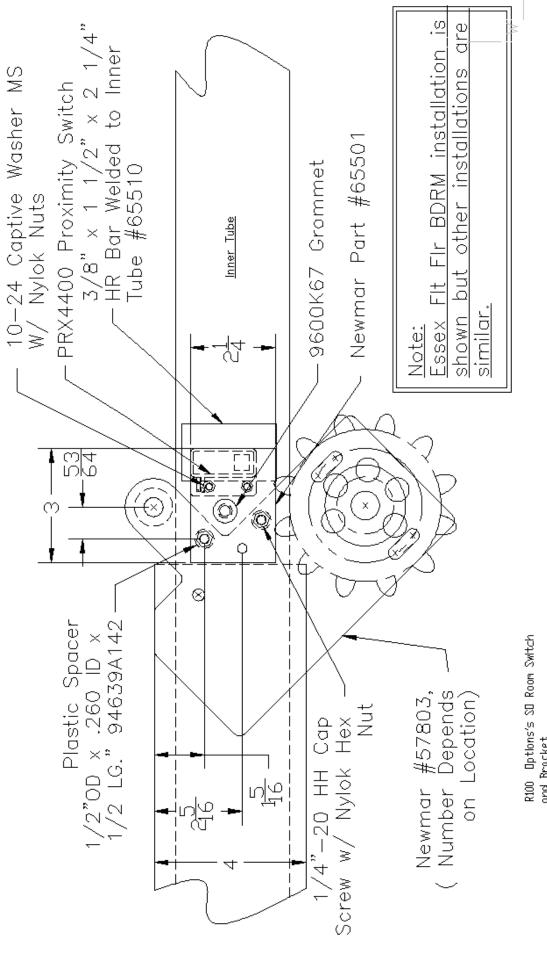
Note: The older 'Barker' controller can not be replaced with the rack and pinion controller. You will need a 'Barker' controller.

### Slide Out Motor Gear Replacement



- 1. Remove the eight torx bolts from the large gear housing faceplate. Remove the faceplate. When removing the faceplate, make note of the location of all of the spacer washers on the gear shafts to be reused when assembling.
- 2. Clean all of the grease and metal shavings off the gears and gear housing.
- 3. Remove the six torx bolts fastening the large gear housing to the small gear housing. Remove the large gear housing, again, noting the location of all spacer washers on the gear shafts.
- 4. Remove all gears, cleaning grease off the gears and the housing.
- 5. Replace the original gears with the replacement gear provided with the gear replacement kit. Apply bearing grease liberally to all gears.
- 6. Before attaching the small gear housing to the large gear housing, check that all spacer washers are in the proper place. Use the replacement gasket between the gear housings. Use Loc-Tite when installing the torx bolts.
- 7. Install all of the spacer washers as before with the new gear from the replacement gear kit in the large gear housing. Apply grease liberally to the gears. Install the large gear housing faceplate with the new gasket included in the kit. Again, use Loc-Tite on all torx bolts.
- 8. The A (1.8) motor requires the A, Part # 01252, replacement gear. The B (2.0) motor requires the B, Part # 01251, replacement gear.
- 9. All C motors are replaced with a B motor.

Note: An A and B motor cannot be used on the same slide out.



R100 Options's SO Room Switch and Bracket