

Electromajic Bed

1993 - 2003 Trek®
1993 - 2003 Traveler®

012

The information printed here reflects product design, fabrication, and component parts at the date of printing. The manufacturer reserves the right, at any time, to make changes in product design or material or component specifications as its sole option, without notice. This includes the substitution of components of a different brand or trade name, which will result in comparable performance. All information printed in this document is subject to change after the date of publishing.

©Copyright Monaco Coach Corporation. All rights reserved. All trademarks or registered trademarks are property of their respective holders. Brand name products of other companies mentioned in this document are not endorsed by Monaco Coach Corporation.

ELECTROMAGIC BED

Motor Replacement

Packing List:

1. 1- Somfy 540 R 2 motor
2. 1- Set of instructions
3. 24 - # 6 x 1/4" pan head screws
4. 6 = 14 - 16 gauge Blut Butt Connectors

Tools Needed:

1. Electric drill motor
2. 1/8" bit
3. Standard and Phillips screwdrivers
4. Wire strippers and crimp tool
5. Spray adhesive (**ie:3M # 77**)

General Information and Safety:

1. Make sure the path of the bed is free of foreign objects.
2. The bed is not designed for storage.
3. Travel only with all (4) upper safety lock pins in place.
4. Install all (4) lower safety lock pins before occupying bed.
5. Make sure the racks and gears are free of foreign objects.

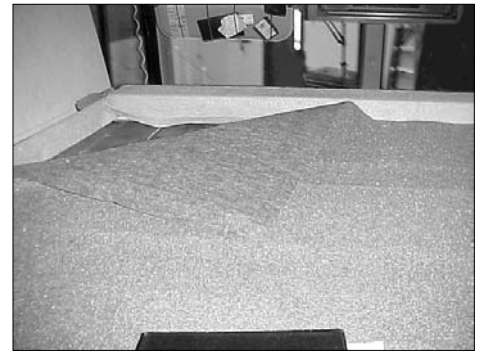
Step 1: Motor Identification - In 1998 Somfy changed the motor to the 540 R 2 style. (See pictures 8, 9 & 10.) The length of the motor tube will have to be cut when replacing the motor.

Step 2: Accessing the Motor - From 1993 until 2003 the EMB motors are located at the front of the bed. Fabric covers the motor, drive shafts and chains that move the bed. The motor is housed in the forward area toward the driver's side of the bed.

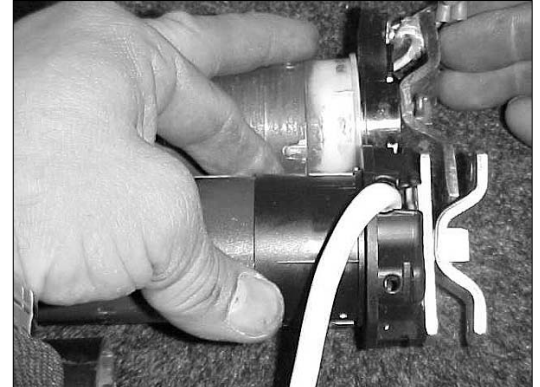
1. Remove the mattress.
2. Pull the fabric loose at the floor of the bed to expose the metal housing that covers the motor and front driveshaft.

(See picture 1.)

3. Remove the 1/8" rivets using a drill.



Picture 1



Picture 8



Picture 9



Picture 10

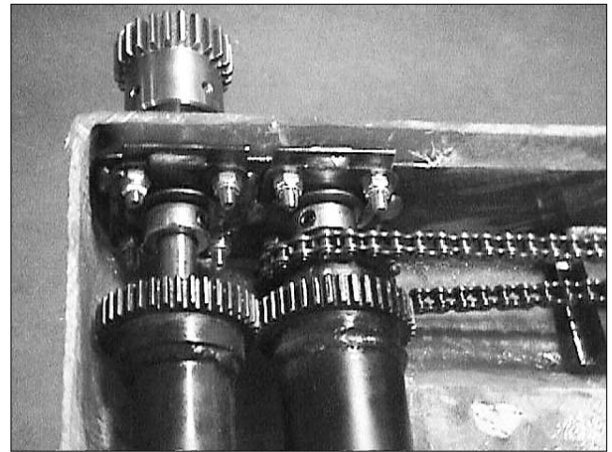
4. The motor and front driveshaft tubes are now accessible. The tube housing the motor and wires is located toward the rear driver's side. (See picture 2.)



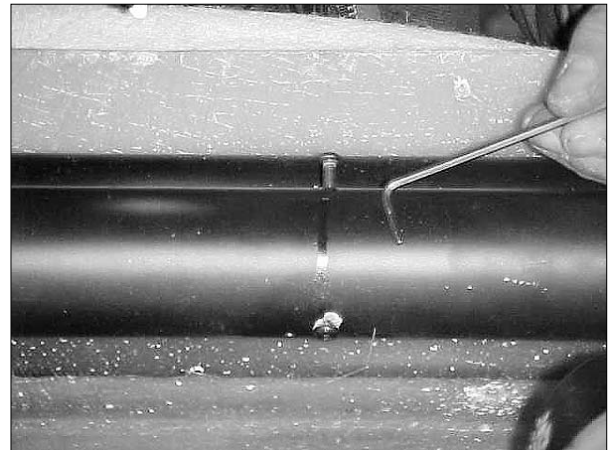
Picture 2

Step 3: Removing the Motor - The motor tube is secured to the bed at the driver's side by two standard pan head machine screws. (See picture 3.) Support bed before removing motor and drive assembly.

1. Remove screws and pull the tube up from the bed.
2. Pull the motor tube free of the drive gear and chain at the opposite end of the bed. (See picture 4.)
3. Remove the three Allen head fasteners. (See picture #5.)
4. Slide the motor away from the tube. (See pictures 6.)



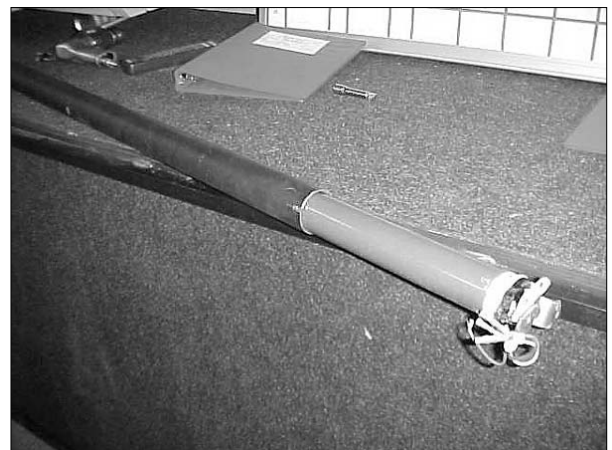
Picture 4



Picture 5



Picture 3



Picture 6

Motor Comparison:

There are three differences between the old motor and the new motor when laid side by side. The new motor is the lower one. (See picture 8.)

1. The mounting end of the motor is slightly different. More space is required between the end of the motor tube and the bed.
2. Examine the drive end of the motor. The new motor is longer than the old motor. The black cap at the end of the new motor is where the screws from picture 5 will be reinstalled. (See picture 9.)
3. The upper and lower stops on the old motor were set by turning the Allen head screws counterclockwise or clockwise. The new motor has push buttons to set the stop points. The new motor will come with a set of instructions for setting the stops. (See picture 10.)

(See picture 10.)



Picture 8



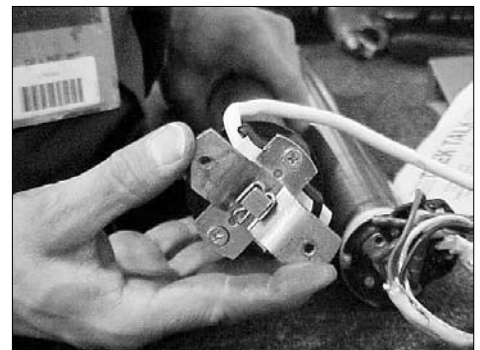
Picture 9



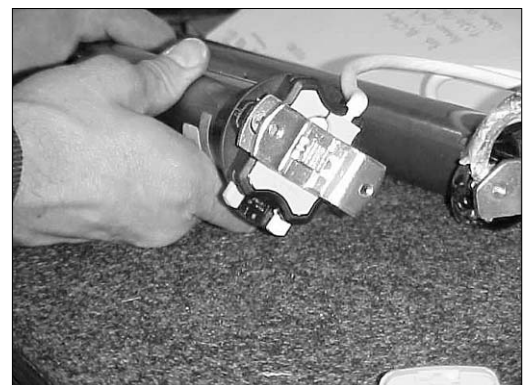
Picture 10

Step 4: Replacing the Motor - Inspect original motor bracket for signs of wear as it will be used on the new motor. (See picture 7).

1. Remove the mounting bracket from the old motor and install it on the new motor.
2. The stop buttons need to be accessible from under the bed when assembling the motor into the tube. When looking at the end of the motor, the mounting bracket will be at approximately 10 and 4 o'clock. This position places the buttons toward the bottom and the wires on the opposite side. (See picture 11.)



Picture 7

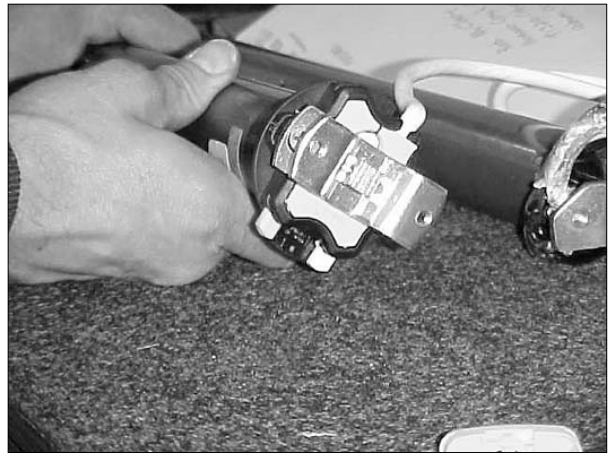


Picture 11

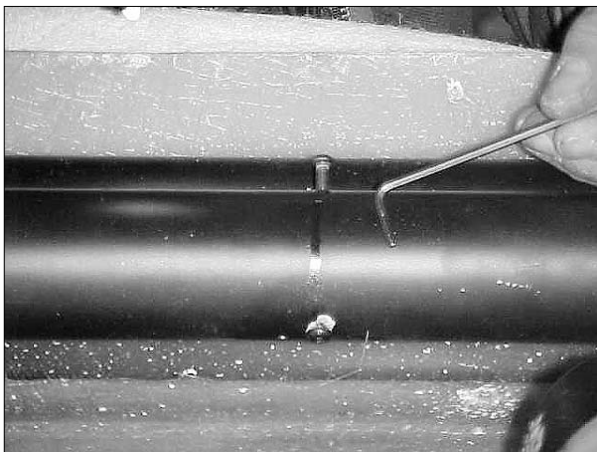
3. Before installing the new motor, approximately $\frac{1}{4}$ " will need to cut off of the mounting end of the motor tube. Located at the top side of the mounting end of the motor tube there is a notch that needs to be extended so the motor will fit into the tube.
4. Make a mark $\frac{3}{8}$ " behind the original screws that secure the motor to the tube. (See picture 5.) Pre-drill three $\frac{1}{8}$ " holes at about the same locations of the original holes.
5. Slide the motor into the tube positioning the stop buttons facing down toward the front of the bed. The mounting bracket will be at the 10 and 4 o'clock position. (See picture 11.)
6. Use three # 8 x 1" self-tapping screws to secure the motor to the tube by screwing through the pre-drilled holes into the black collar at the drive end of the new motor. (See pictures 5 & 9.)
7. A $\frac{3}{8}$ " access hole for the stop buttons will need to be drilled in the floor of the bed before the motor tube is installed. Drill hole slightly forward of the tube to align with the stop buttons. Use a screwdriver held at an angle to set the stop buttons
8. Be sure to have the mounting bracket at the proper position (picture 11) before engaging the motor tube with the drive gear and chain at the opposite end of the bed. (See picture 12.)



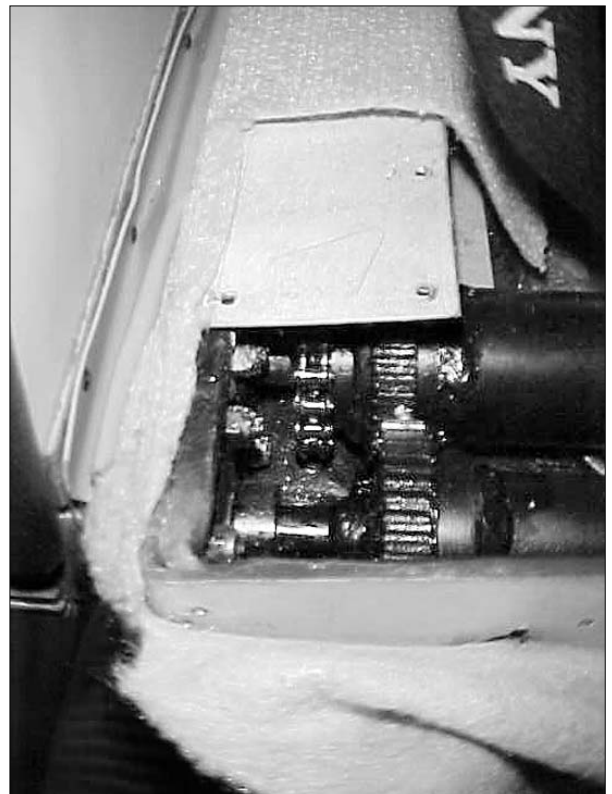
Picture 9



Picture 11



Picture 5

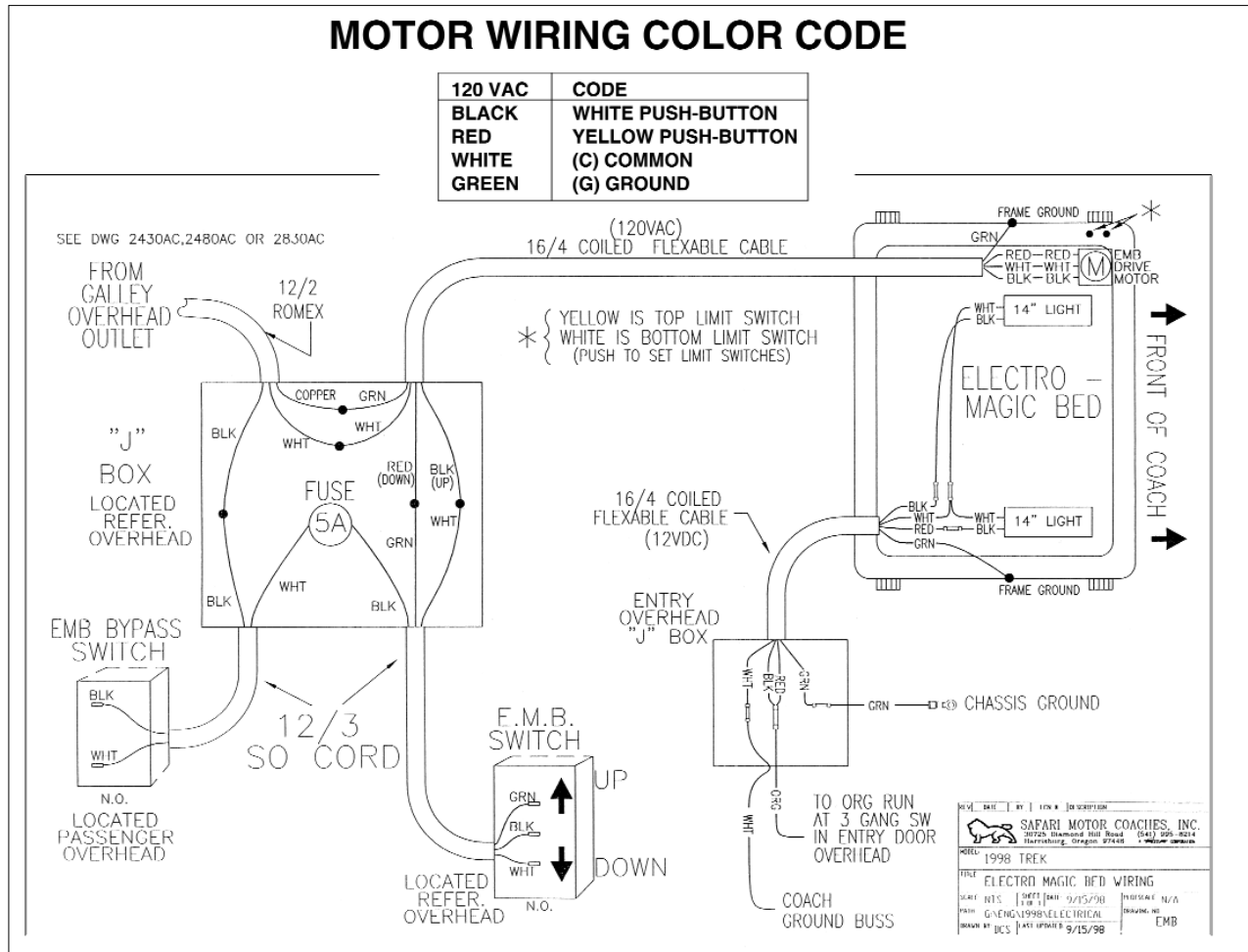


Picture 12

9. Wire up the new motor to the old pigtail harness. (See **Schematic A.**) If the coil wires come out of the bed on the driver's forward side, the J box is located in the driver's side overhead cabinet behind a false wall. If the coil wire enters at the rear of the bed from the refrigerator cabinet, then the J-Box is located in that cabinet.

Testing:

Operate the bed several times to make sure the gears run true on the racks and the stops are set correctly. Observe how the gears are interfacing with the racks. If 1/3 of the gear is engaged with the rack it is within factory specifications.



Schematic A

10. Use the switch to lower the bed until the bed is in the sleep position. Push the white button to set. Use the switch to raise the bed until it is at travel height. Push the yellow button to set.

Step 5: Leveling the Bed - If the bed did not disengage from the racks it may or may not be level. Look at the bed and it should look even and operate smoothly. After setting the travel and sleep stop positions, install the mattress.

Maintenance:

1. Check for uneven travel of the gears on the racks as the bed is operated.
2. Listen for any unusual sounds when operating the bed.
3. Lube racks with a silicone base lubricant.
4. Check gears for excess movement on the shaft.
5. Make sure racks are secure to the wall.
6. Make sure the Allen head set screws are tight on the spur gears.