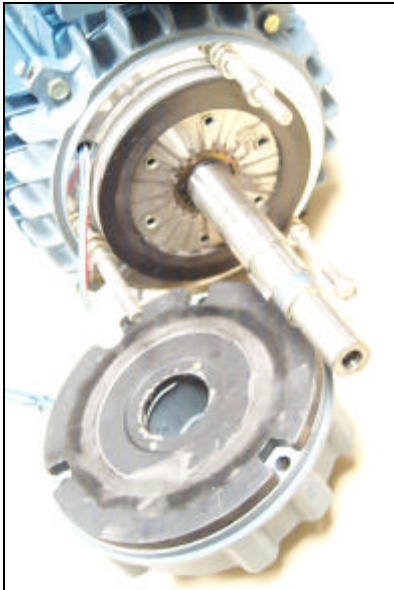


## ***General Symptoms***

*After the door has sat for a few hours, the motor will not start.*

Motor makes a hissing sound with no movement.  
Motor will not run even with the brake manually released.  
Once the motor runs, it runs fine every time after the first delay.  
Motor rests for 2 or 3 hours - it sticks again!



### ***Possible Cause***

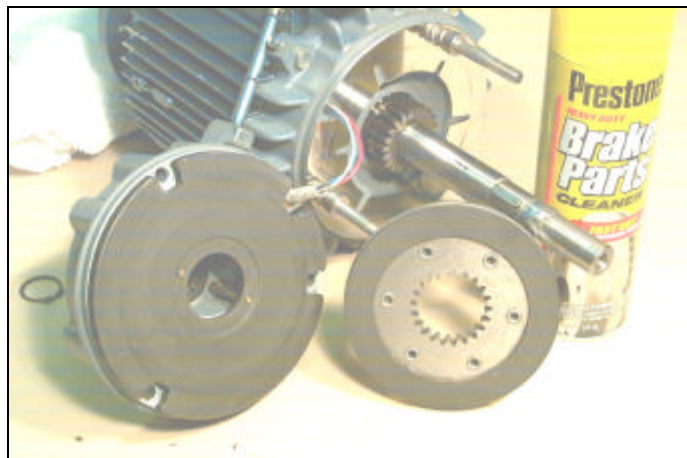
When the motors are assembled, a small amount of “never seize” is installed on the splined carrier that the brake disc mounts on. If too much lubricant is installed, it will spin on to the brake disc. The lubricant causes the brake pad to stick after it cools down.

The picture on the left shows the lubricant spreading out from the splined mounting shaft.

The fix is to clean and adjust the brake assembly.

The motor does not have to be removed from the door to do this procedure.

Cleaning and adjusting will take any where from 30 minutes to 1 hour.



# **SHROKMAN DOOR SYSTEMS & TECHNOLOGIES COMPANY**

## **Technical Data Sheet Eurodrive Brake Service Two Speed Motors**

### **Tools and Equipment Required.**

Besides a good brake cleaner, the following is a minimal list of tools needed.

Torks Bits - 25, 20, 15

Snap Ring Pliers

Channel Locks

Open End Wrench or Deep Sockets -

8mm 10mm 12mm 13mm

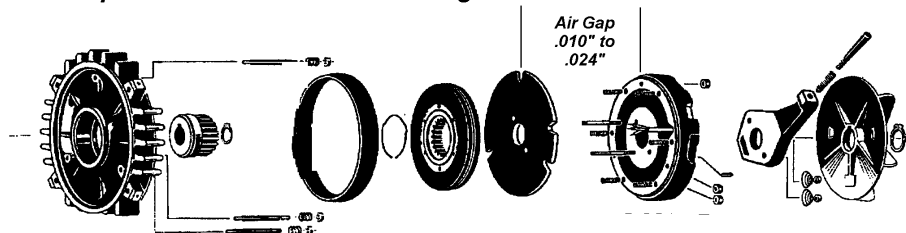
Screw Driver

The motor does not have to be removed to clean the brake.

The Megadoor must be in the fully closed position when doing this procedure.

When the adjustment is complete, thoroughly check the brake operation before running the door completely open.

***Exploded view of the BMG 02 single-disk brake.***



The above is a parts explosion of a BMG-02 brake.

Other brake sizes are similar, and may have a few more parts included. Please call for information on other sizes.

## ***Removal and Cleaning Procedure.***

***This procedure should only be done by qualified technicians,  
having experience with brake motors,  
and who are familiar with the door operation.***

***Follow all plant lock out and safety procedures.***

***Lock out the door control panel before starting.***

### Step 1.

Remove the screw holding the Megadoor Crank Arm cover, and swing it clear of the motor.

In some instances, it may be easier to completely remove the crank arm cover.

### Step 2.

Remove the cover from the electrical terminal box on the motor.

You do not need to remove any wires.



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## **Technical Data Sheet Eurodrive Brake Service Two Speed Motors**

### **Step 3**

Remove the key near the end of the motor shaft.

The cover will not come off without this removed.



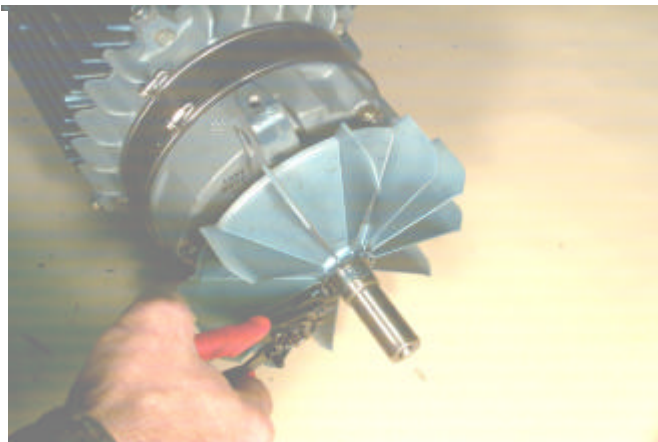
### **Step 4**

Loosen the four bolts (8mm head) holding the brake cover and remove it completely.



### **Step 5**

Remove the snap ring on the motor shaft. This ring holds the fan in position.



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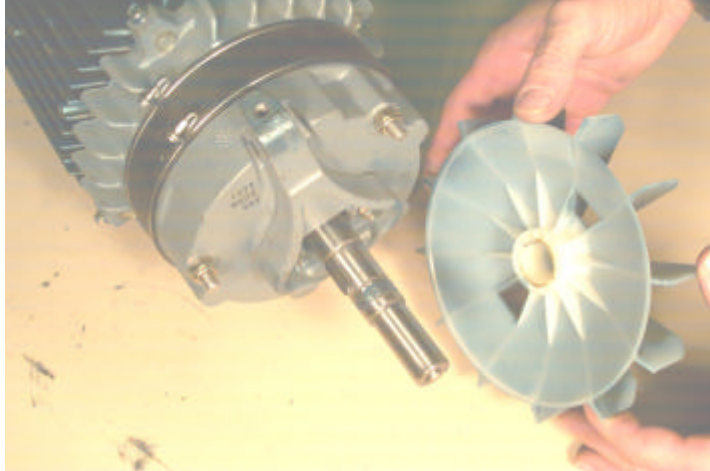
**Technical Data Sheet  
Eurodrive Brake Service  
Two Speed Motors**

**Step 6**

Remove the fan.

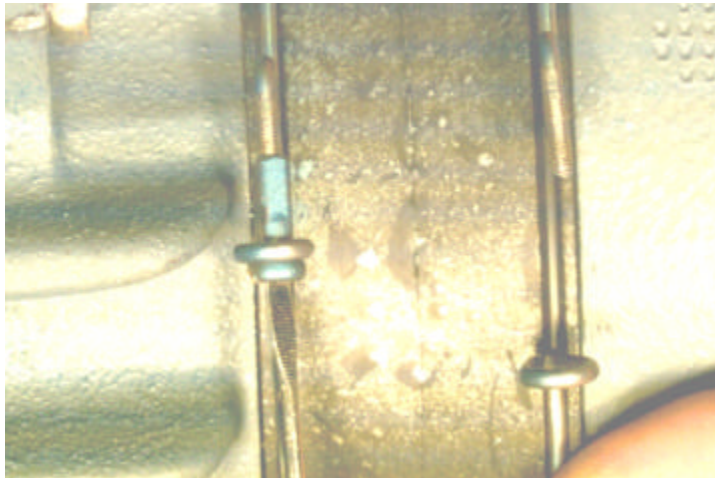
There is a small key holding it in position.

The fan "pops" off.



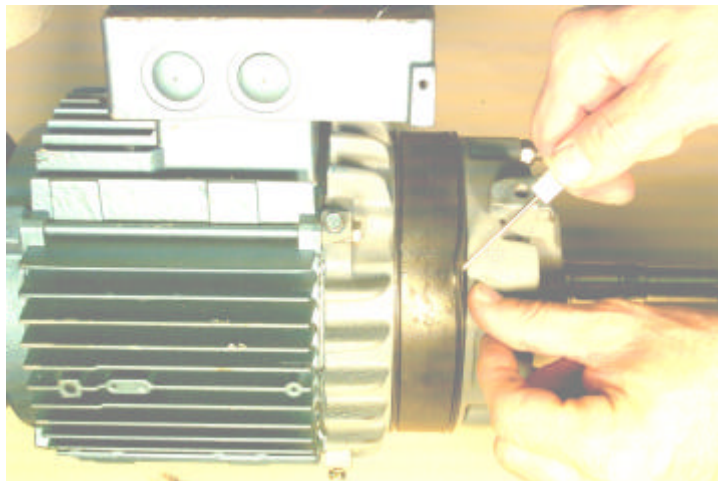
**Step 7**

Remove clamps holding rubber brake cover.



**Step 8**

Remove rubber boot.

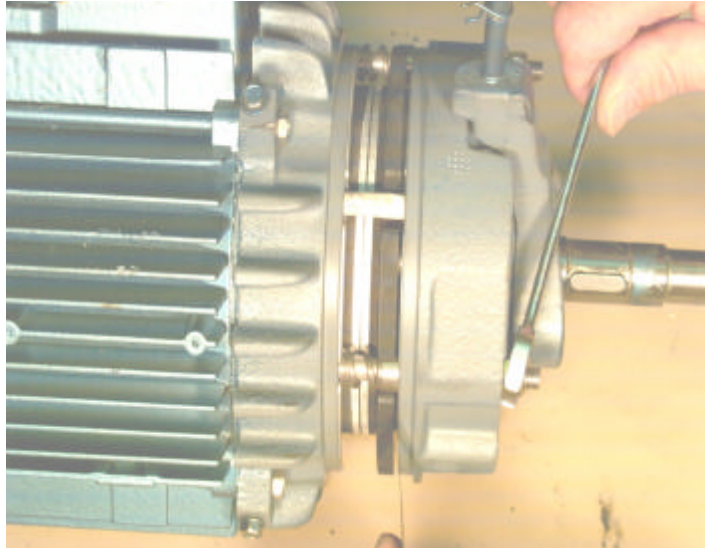


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## **Technical Data Sheet Eurodrive Brake Service Two Speed Motors**

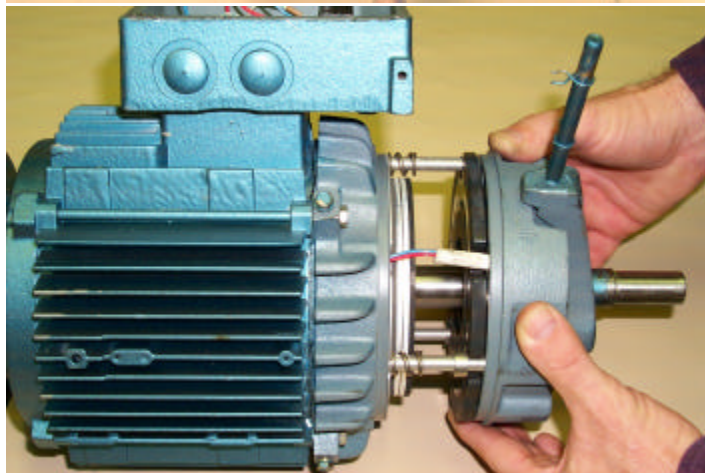
### **Step 9**

Remove the three nuts holding the brake to the back of the motor.



### **Step 10**

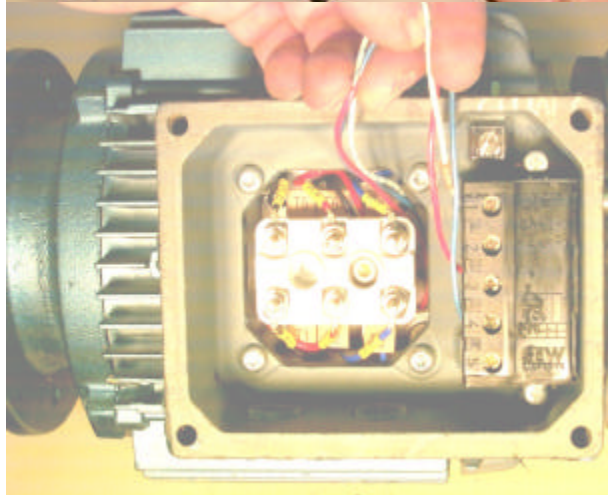
**NOTE:** If you plan on completely removing the brake from the motor, disconnect the wires inside the terminal block that run to the brake coil.



Carefully slide the brake off the mounting studs.

As you are sliding it off, guide the three coil wires through the hole in the terminal box.

***DO NOT LET THE BRAKE COIL HANG ON THE WIRES!***



# **SHROKMAN DOOR SYSTEMS & TECHNOLOGIES COMPANY**

## **Technical Data Sheet Eurodrive Brake Service Two Speed Motors**

### **STEP 11.**

Slide the brake lining off of the spline shaft.

You may need to gently pry it on two side to get it off.



### **Step 12**

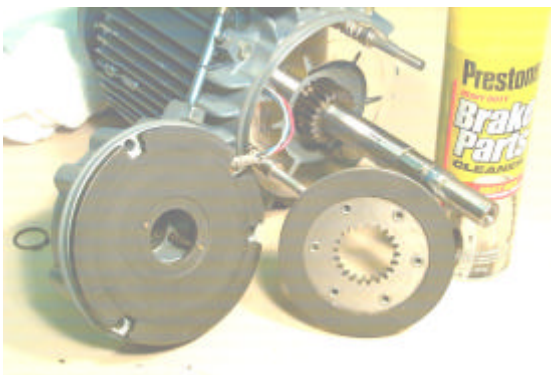
Once removed, thoroughly clean all the parts with brake cleaner.

Check all components for wear. Refer to brake specification sheet for dimensions and tolerances.

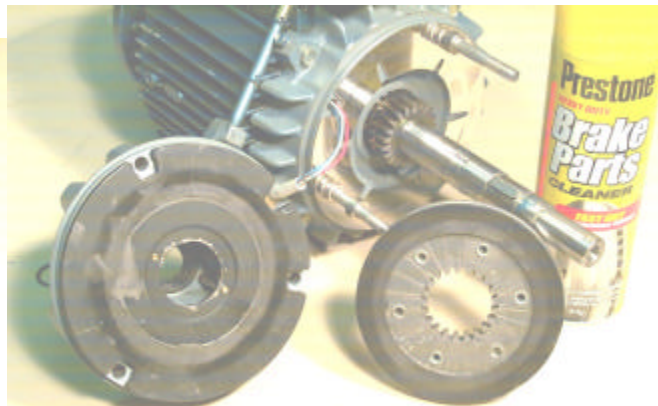
Replace damaged or worn parts.



**Dirty Brake Pad**



***Clean Brake Parts***



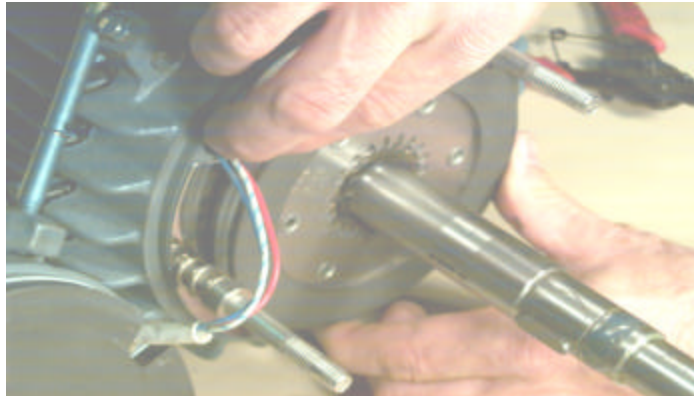
**Dirty Brake Parts - before Cleaning**

## ***Assembly***

### **Step 1**

Slide the disc back on to the clean spline shaft.

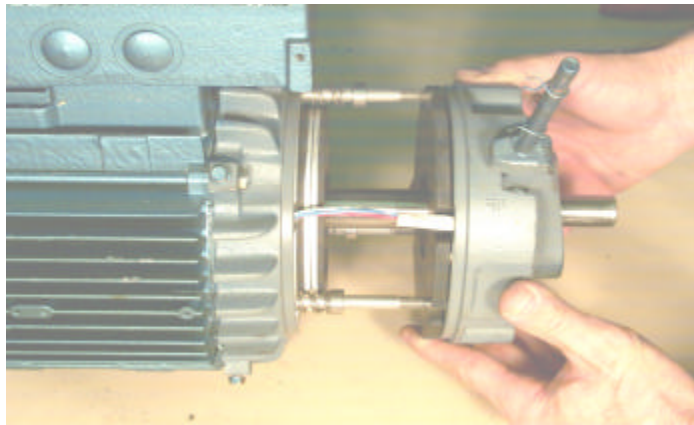
Note: the spring it toward the motor.



### **Step 2.**

Carefully put the brake coil on to the mounting studs.

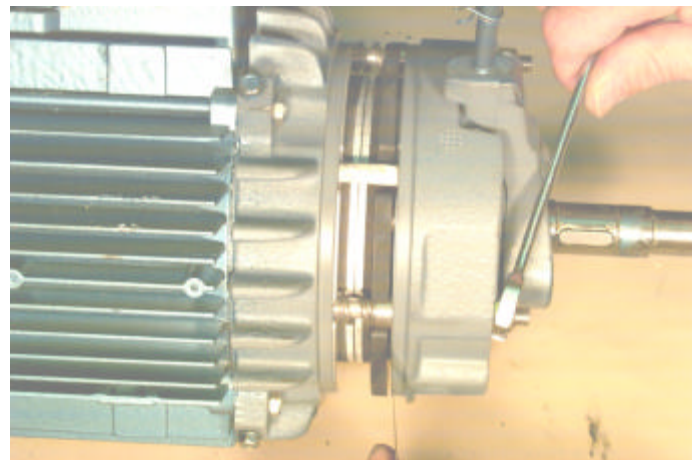
If you disconnected the wires, now is the time to feed them back through.



### **Step 3.**

Install the three nuts on the brake mounting studs.

Snug up the brake. Do not tighten at this time.

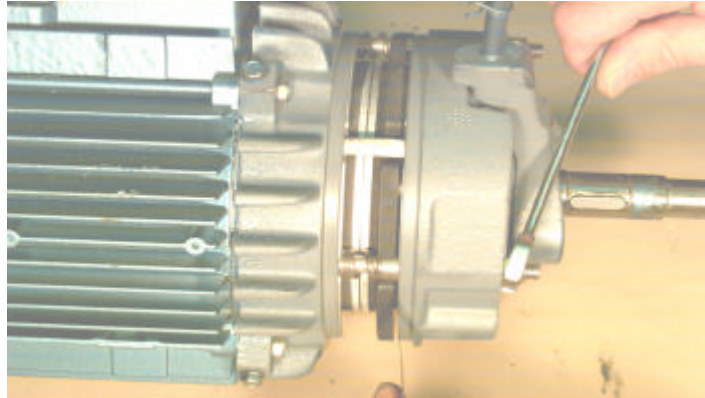


## **SHROKMAN DOOR SYSTEMS & TECHNOLOGIES COMPANY**

### **Technical Data Sheet Eurodrive Brake Service Two Speed Motors**

#### **Step 4.**

Using feeler gauges, tighten each of the three nuts so there is a clearance of 0.010" to 0.024" between the brake coil and the large pad.



#### **Step 5.**

Double check the clearances at each one of the mounting studs.



#### **Step 6.**

Insert the manual brake release pin. Manually crank the door up a few inches and release the brake. The brake should hold the door in position. Crank the door up 4 or 5 feet, and check again. If the door drifts, or doesn't close with the manual release, close fully and check the gap again.

Do not proceed until this has been checked, otherwise there could be a lot of work unnecessary work disassembling the unit later.

# **SHROKMAN DOOR SYSTEMS & TECHNOLOGIES COMPANY**

## **Technical Data Sheet Eurodrive Brake Service Two Speed Motors**

### **Step 7**

Install the brake boot and seal rings.

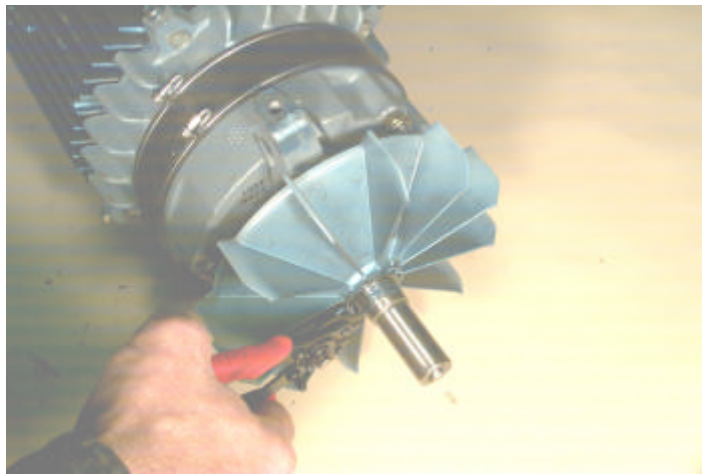


### **Step 8**

Install fan and snap ring.

Make sure the key is still on the shaft when you install the fan.

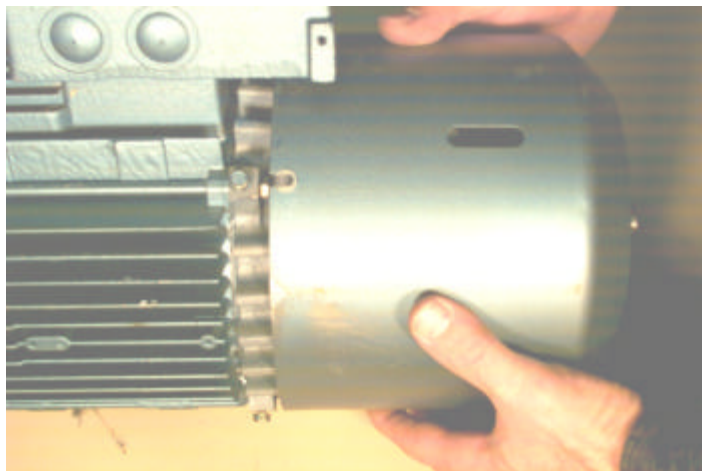
Make sure the snap ring is completely in the groove.



### **Step 9**

Slide the brake cover on to the four mounting bolts.

Check the clearance between the shaft and the cover before tightening the bolts. Note the slots allow alignment. If there is noise when the motor runs, check this alignment.



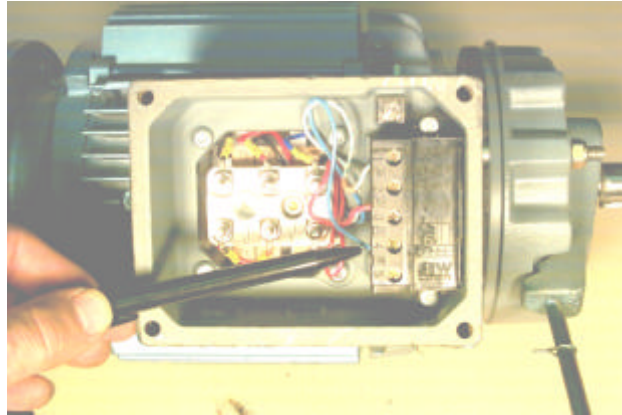
# **SHROKMAN DOOR SYSTEMS & TECHNOLOGIES COMPANY**

## **Technical Data Sheet Eurodrive Brake Service Two Speed Motors**

### Step 10

Double check all electrical terminations and connections.

White wire with a stripe connects to rectifier Terminal 1.  
Red wire connects to Terminal 3.  
Blue wire connects to Terminal 4.



### Step 11

Completely re-install all components removed from the door. Crank arm, Crank Limit Switch, Etc.

Make sure all hand crank safety devices are in operation before continuing.

***Don't run the door fully open the first time. Check it gradually.***

When starting up the system, check the brake by only raising the door a few feet. When the stop button is pressed, the door should immediately stop. There should be no downward movement.

### ***Exploded view of the BMG 02 single-disk brake.***

