

Diagnostics

McLaren Doors Diagnostics – Door difficult to operate / cables come off

McLaren Doors is engineered to operate with ease. Ideally, the McLaren Doors should rise slowly and be easy to pull down. This diagnostic guide details some common things that could cause a door to be difficult to open and/or close.

WARNING: A roll up door is a heavy moving object and has a spring under tension. McLaren Doors should only be installed or serviced by a qualified door technician to ensure a quality installation and to avoid risk of injury. McLaren Doors will not be responsible for any loss, damage or injury resulting from improper installation or servicing of the door.

For further assistance please contact McLaren Doors toll free: 1-877-263-9153

1. Spring Winds

Problem Symptoms: Door goes up acceptably or quickly but is difficult to pull down or the door closes easily but is difficult to open. If these are your symptoms, first check the spring winds before looking at the other steps below.

The first thing to check is the number of spring winds. When the McLaren Doors is in the open position, the spring should have 3 to 4 winds. If not, adjust the spring to 3 to 4 winds.

If the spring winds appear to be correct and the door is still difficult to operate, do not add additional spring winds to over compensate for other installation issues. You need to identify and solve these issues first by checking the steps below.

2. Tracks must be parallel and the proper distance apart throughout

Problem Symptoms: Difficult to open in both directions. Panels might shift / decal misalignment.

Panels / Decals shifting: If the tracks are too wide apart relative to the panel length, decals could misalign or in severe cases the door may be difficult to operate or even jam causing cables to come off. If the tracks are too far apart but remain parallel throughout you should be able to use our snap on roller spacer clips to shim the door, which will prevent the panels from shifting.

The door is difficult to operate in both directions: If the tracks are too tight relative to the door panel size, the door will be difficult to operate. There are two checks for this:

- a) Check the black side straps which link the rollers together to ensure the rollers are not jammed outwards against the tracks. See the box below
- b) For most McLaren Doors, the measurement across the outside of tracks should be panel length + 3.5" throughout. Check this in several places in the vertical track, radius and horizontal track.

In some cases where special engineering has been built into the door such as certain types of insulated trailers, this measurement may be slightly less.

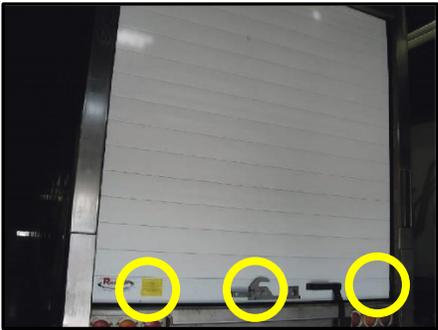
Correct	
	<p>This is the best method to check for an installed door:</p> <p>You should be able to place a finger on the black side straps where the roller goes through them and be able to wiggle them side to side, (no more than 1/8").</p> <p>Important: Check both ends of the panels and in several places; Between the Vertical tracks, and with the door open. between the tracks in the Radius and between the horizontal tracks. Often we find the tracks narrow in the radius.</p> <p>If they are tight this will be a source of friction causing the door to operate less than optimally. This should be adjusted. First try an adjustable load bar to see if you can push the tracks out. If that doesn't work, contact McLaren Doors and we will be able to provide you with additional suggestions.</p>

3. Door is not level across the sill and/or the Top panel is pushed out

Problem Symptoms:

1. Door not level: Door difficult to open in both directions. Door does not seal well across the sill.
2. Top panel pushed out: Door difficult close for the last few inches and may be difficult to open for the first few inches. Door could bump against the operator or drums when first opening.
 - I. Door not level at the bottom: Ensure the door is level across the sill when closed. If not, the door will be on an angle which causes friction in the tracks.
 - II. Top panel pushed out / Top seal not adequate: Ensure the top roller brackets are adjusted properly. The top panel should be straight up and down and in alignment with the rest of the door. You should have a good seal. If the top panel is leaning out, this will make the door difficult to operate when closing for the last few inches and similarly, difficult to open for the first few inches. It may also make it difficult to latch down the door.

Correct



Door is level.

Bottom seal is making good contact across the sill. If it is not, it will cause the door to go up at an angle, creating friction

Top panels should be aligned straight up and down with the rest of the door panels and the top seal is making good contact.

If not the top roller brackets require adjustment; move them down to tighten the seal or if the panels are pushing outwards making the door difficult to close, move the brackets up. See picture below for more details.

Wrong



Door is not level – high on one side. To correct: Close the door and gently loosen the cable drum on the high side until the door is level. Re-tighten the fasteners securely.

Correct



For most doors the top of the silver bracket will be + / - ¼” from the top of the door. The top roller brackets should be secure and parallel with the tracks, in from the panel edge by ¼”.

- If the door is leaning out on the outside, the brackets are too tight and should be loosened by moving them up slightly.
- If door is leaning in or you do not have a good seal across the top, move the bracket down slightly to tighten.

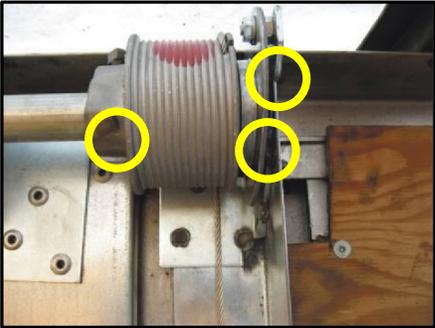
Testing the New Top Roller Bracket

There are basically 3 locations for the back plate with relationship to the top seal. The most common is flush against the bottom edge of the top seal.

4. Operator shaft or cable drums not turning freely – causes friction

Problem Symptoms: Door is difficult to open and close in both directions. Cables could easily come off.

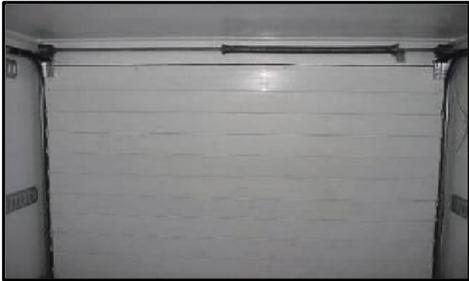
If the operator shaft is not turning freely this will cause friction restricting door operation and cause cables to come off. Check the items noted below:

Correct	
	<p>End of the shaft must not be in contact with the metal side angle. Space between end of the shaft and the vertical track side angle is visible through the gap.</p> <p>If the shaft is contacting the vertical track angle and not turning freely it will make the door difficult to operate and / or it will cause cables to come off frequently.</p> <p>Ensure the shaft is centred looking through the gap on both sides. If it is still making contact you may need to adjust the shaft length. Make sure you have first tried to centre the shaft before you cut. If the shaft is cut too short it will dislodge causing damage to the door and potentially injury.</p> <p>Ensure cable drums turn freely and are not contacting the roof or header. Cable drums in contact with the header or roof limit their ability to turn freely. This will interfere with door operation and will cause cables to come off.</p> <p>Cable drums must be pushed fully to the outside, riding against the bearing, to secure the shaft in place. Fasteners securely tightened. The fasteners should be turned one revolution after making contact with the shaft surface. If they are not secure, the cables can come off the drums.</p>
Wrong	
	<p>Picture shows the shaft contacting the angle. You should not see the shaft in this gap. This would cause friction impeding door operation and possibly causing you to add spring winds to over compensate. This will also cause cables to dislodge.</p>

5. Ensure the operator shaft is straight

Problem Symptoms:

1. Door is difficult to open and close in both directions.
2. Door bumps the operator when first opened (also see section 8 below).

Correct	
	<p>If the shaft is not level this will cause torque on the operator and may make the door more difficult to operate plus it will cause premature wear on the operator.</p> <p>The location of the centre shaft bracket is usually the cause. If the bracket is too low it may also cause the door to bump against the operator when first opening it.</p> <p>To correct this you need to relocate the shaft bracket so it is aligned between the end brackets.</p> <p>If none of the above, then the top panel could be too high. In this case, call McLaren Doors for assistance.</p>

6. Ensure there is no roller interference in the track

Problem Symptoms:

1. Door clicking or railroading sound when operating.
2. In severe cases the rollers or top roller brackets may get stuck on the obstruction causing cables to come off.

Fasteners; weld slag or misaligned track joints could interfere with the door operation and could cause cables to come off. Most likely you will be able to hear it; a clicking or railroad sound as the door is being operated.

Check to ensure that:

- There are no fasteners or weld in the track interfering with the door rollers
- Track joints are smooth

Correct	Wrong	Wrong
	 <p data-bbox="646 646 987 758">Obstructions in the tracks which interfere with the rollers such as fasteners with large heads or in this picture, weld slag</p>	 <p data-bbox="1060 646 1338 674">Tracks not joined properly</p>

7. Spring is bunched

Problem Symptoms: Door becomes increasingly difficult to close as it nears the bottom / and could be very noisy.

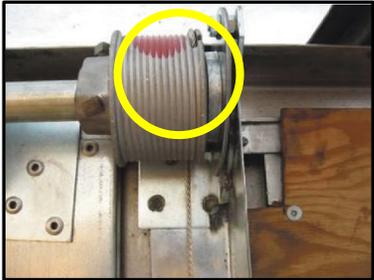
Ensure the spring is straight when closed. If it is not, it will need to be adjusted. Refer to our spring winding instructions available on our website, www.mclarendoors.com – installation section or contact us toll free at 1-877-263-9153

Correct	Wrong
	

8. Top of door contacts the operator or the drums when opening

This may be caused by:

1. Top Roller brackets adjusted too tightly pushing the top panel outwards – see #3 above
2. Operator shaft not straight – see # 5 above
3. Door is too tall for the opening height
 - Close the door and compare the height of the door to the bottom of the header. They should be the same.
 - For 2" reefer doors where the inside header is > 6", the door is ¼" taller than the opening height.
 - If the door is too tall it can easily be adjusted without removing the door. Contact McLaren Doors for details
4. End shaft brackets are not properly located or the track is too short. A lot of space between the top of the end bearing bracket and the roof can be the problem. Check this as follows:

Correct	
	<p>Checking the height of the end shaft brackets:</p> <p>Measure from the bottom of the vertical track to the top of the bearing bracket, (shown at the left).</p> <p>That measurement should be 6" or more greater than the opening height</p> <p>If you believe this needs to be adjusted contact McLaren Doors to discuss the optimal solution</p>

9. Cables come off

Cables do not normally come off. If they do, the following are the typical problem areas to check:

- 1) Door has been hit / impacted
- 2) Cable drums / operator shaft not turning freely or cable drums fasteners not secure – see # 4
- 3) Interference in the tracks – see #6
- 4) Door sticking in the tracks or door is severely too loose in the tracks – see #2
- 5) Top roller brackets loose / not properly aligned – see # 3
- 6) Interference between the Cable u-bolt rubbing against the inside of the side seal

Summary

We have tried to accumulate the most frequent issues that have been created during door installations. If your specific issue is not covered in this section, please call us at 877-263-9153 or email us at ghart@mclarendoors.com for further assistance.