



Broken or twisted carrier pin hangers

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Introduction

Schwab has designed and manufactured this Paternoster with the operator's safety in mind. Care has been taken to guard operators from moving parts or electrical components, but we cannot protect against careless mistakes or thoughtless actions. Caution and safety should be exercised when operating this or any other machine.

Operators of the Paternoster should be competent staff of the retailer who have received initial training in the operation of the machine by the supplier. Initially trained and competent staff would be responsible for training additional personnel.

In most instances, initial fault finding can be carried out by a suitably qualified tradesperson or mechanically minded handyman. However, if in doubt call Ideal and arrange a service call.

The most common fault is electrical in that the machine stops <u>responding</u> to push buttons. This has been most often caused by power surges, rewiring of power distribution, machine overloading.

Occasionally, a roll will fall off a machine. To date, this has been due to operator error. The <u>mechanical</u> section below details typical recovery action.

Electrical

Symptom: Paternoster not Moving/responding to Pushbuttons

Check the basic electrics, but first check under the machine. Is there anything under the machine that shouldn't be there, eg: pallet, roll, trolley, etc? If there is, it may be that the machine has tripped out on overload. Remove any of these obstructions before proceeding.

- Check power plug is properly seated and locked if not fix and try operating machine. If this fixes it, make sure staff know to fully lock up the plug each time. If not fixed:
- 2. Check that the mains power has not tripped out. There may have been an overload per above, an interruption or blip in power supply and this may have affected the store's main switchboard.

Locate the Paternoster switchboard and reset the 3 phase switches (there are probably 2-3 bar circuit breaker switches, one phase may have gone off). Retry machine - If not fixed,

3. Unplug machine from the wall socket so there is no power going to the machine

Look at the paternoster control box, located on the inside of the RHS frame (behind the up/down buttons)



There are 1 or 2 (depending on the model) overload trip switches on the LHS of the fuse box, marked Q1 & Q2. Check the the black switch(es) are are vertical (as shown in photo above). If not, reset switch (es).

[You will need to remove the cover of the control box to do this. If the power plug has been removed from the wall socket, this is perfectly safe to do.]

Replace cover on the control box and lock it in place at each of the corners. Plug power plug back in, turn on and try machine. If not fixed, then unplug machine as before,

4. Remove fuse box cover again



There is a fuse on the RHS – unscrew and check it is OK. If OK, put back in. Otherwise, have store electrician replace fuse. If a fuse has blown, the machine has to have drawn extra power for a reason – load unbalanced, trolley or rolls jammed under machine, something jammed in a chain, etc. Check machine carefully to make sure there are no jams anywhere before operating it again.

6. If no fault has been found so far, report to Ideal if machine is still not working.

Further checks should be done by a qualified electrician only.

If all is OK so far, check all terminals for loose connections.

New style K1 & K2 has 3 connecting bars joining the contactors – make sure these are fully in place.

Check contactors K1 and K2 for open circuit on the coils (if machine goes up or down by pushing in the black buttons on contactors manually, then likely that the coils has burnt out)

If contactors are open circuit, we will organise replacements

Mechanical

Broken or twisted carrier pin hangers

This is generally due to incorrect method of unloading a carrier pipe / product roll - see for correct <u>procedure</u>.

Replace hanger if:

- welding is cracked,
- cheeks are twisted so that cotter pin is more than 1mm inside the cheek plate,
- spigot retainer pin is missing

Roll fallen off machine

This generally due to either of 3 main causes:

- 1. A carrier pin hanger has failed most often due to it having been twisted by incorrect roll unloading see here for correct procedure,
- a carrier pin spigot locking pin was not correctly seated after refitting carrier pipe

 again see here for correct procedure. This fault will particularly cause a problem if the rolls have been placed too close together. They will bump against each other as the rolls change direction at top or bottom and a spigot may be pushed out of the carrier pin hanger
- 3. Machine has gone out of level due to a jam up and carrier pin hangers have been pulled out of the chain this is very rarely the cause as the operator would normally see what is happening and stop the machine before it got far enough out of level to cause pins to pull out of chain.

If machine is out of level then see below.

If a roll has fallen off the machine, then endeavor to remove the fallen roll from the environs of the machine. If this is possible, inspect the carrier pin hangers if they have fallen off the machine. If one is still in place on the chain and the pipe is on the floor, it should be safe to rotate the machine to access the remaining carrier pin.

Note which pin is which - on the floor or on the machine.

Inspect the pins:

If the cheeks of the cup are twisted or the locking pin is missing, then cause 1 above is most likely,

if the cheeks are straight, locking pin is present, then cause 2 above is most likely.

All remaining pins should then be inspected for damage or pins not locked:

- reseat any pins not locked.
- replace any damaged carrier pin hangers. If you have no spares, then remove enough rolls/pipes off the machine to free up hangers. It is very rare to have to take the machine out of service completely pending a service call.

In either case, operators will need to be retrained on the correct procedures. Call Ideal to discuss need for a service call. If possible email photos of the issue to Ideal to assist diagnosis.

Out of Level

The paternosters are quite robust machines. However, the roll carrier pipes can go out of level if a trolley or other obstruction has been jammed under one side of the machine. A service call is required to fix this. The machine can be safely used if the obstruction has been removed, the hangers are undamaged, and the carrier pipes are no more than 30mm out of level from one end to the other on the 4m wide machine. Permissible out of level on the 2m wide machine is 15mm.

General

Never attempt to clean, inspect or service any part of the equipment without disconnecting the incoming power source. All maintenance operations performed on this machine must be done with the power OFF at the Main Isolator to the machine and performed by qualified personnel.

The owner / site controller of the machine is responsible to ensure operators are properly trained on the Paternoster's operations and safety practices and to keep the machine properly maintained.

All machines should be serviced annually to:

- 1. Visually inspect for damage to components
- 2. Check alignment of machine and adjust if necessary
- 3. Grease chains, sprockets and carrier pins
- 4. Check and adjust chain tensions

- 5. Rotate stock on machine one hole to inspect carrier bar hangers and relubricate pins
- 6. Replace any damaged carrier bar hangers
- 7. Refit and/or replace any missing Diskus plates and pins
- 8. Touch up any damaged paint
- 9. Touch and/or paint yellow safety line in front of machine
- 10. Check condition of trolleys and repair if needed and possible minor damage only
- 11. Train available store staff in loading, unloading and operation of machine

Ideal operates an annual service program. To arrange a service outside of the normal cycle, call Ideal Rollmasters on 03 9562 9899.

Safety:

Do not wear loose clothing or jewellery while working with or around the equipment. Any ties worn should be the clip-on breakaway type.

If a person has long hair (this includes beards), it should be worn or covered in a manner that ensures that it not be caught in any moving parts of the machine.

Never allow any person to be in the vicinity of the machine who is under the influence of alcohol or any mind-altering drug.

Never stick hands, feet or any foreign object in the path of chains, sprockets, axles and carrier bars. Various pinch points exist on the machinery. Be aware of moving parts and activities around you. Always pay strict attention to all safety signs located on and around the machine. If these signs become worn, unreadable or are removed from the machine immediately contact your supervisor to have the warning signs replaced.

If any problem or dangerous situation is seen to exist or could occur, immediately turn off the operational keyed switch, remove the key and notify your supervisor.

Contacts

If you have any questions, please contact:

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