

AxiChrom wheel kits

Instructions

Original instructions





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1 Introduction

Purpose of this document

This document describes information that is supplementary to the instructions provided in *AxiChrom 300-1600 columns Operating Instructions (29065430)* and in *AxiChrom 300-1600 columns User Manual (29099939)*.

This document only describes how to install and use a wheel kit on an AxiChrom $^{\text{TM}}$ column. For more information about AxiChrom columns please refer to the user documentation provided with your column.



WARNING

Before installing, operating or maintaining AxiChrom columns, all users must read and understand the entire contents of AxiChrom 300-1600 columns Operating Instructions (29065430) to become aware of the hazards involved.

Scope

This document describes how to fit wheel kits to various sizes of AxiChrom columns so that the columns can be moved, either using the trolley handle provided with the wheel kit or by using moving equipment such as a MasterMover $^{\text{TM}}$ or PowerAttack $^{\text{TM}}$ connected to an attachment coupling fitted to the wheel kit.

For information about moving equipment alternatives that can be used with an AxiChrom wheel kit, but which must be ordered separately from the respective supplier, refer to the AxiChrom product pages on the Cytiva website.

2 General precautions when moving columns

This section provides general safety information that must be observed when moving AxiChrom 300-1600 columns.



WARNING

Columns in swing-out or any kind of maintenance mode must not be moved. This may cause personal injury or damage to the column.



WARNING

Make sure that the wheels are immobilized when fitting a wheel kit, so that the column cannot begin to roll away.



WARNING

Make sure never to place any body part between the column stand and a wheel kit. Always use the handle to hold a trolley when fitting it under the column stand.



WARNING

Maintain a safe distance when moving the column. Make sure that no person is near the column when the column is in motion, other than the personnel required to perform lifting and moving procedures.



CAUTION

To avoid accidental collisions, use caution when moving columns equipped with wheels by hand. Two or more people may be required to move the column safely.



NOTICE

To avoid damage to the wheels and possible tipping when the column is moved, make sure that the wheels of the wheel kit do not run into or over objects (for example doorway thresholds or tubing).



NOTICE

The wheels must be removed and the column must be leveled properly before the column is used.



NOTICE

While transporting a 300-600 column, do not pull the handle upward, as the trolley knob may fall out of its position. Lifting the handle will not work as a brake.

3 AxiChrom 300-600 wheel kit

Introduction

This section describes how to fit a wheel kit for use with AxiChrom 300-600 columns.

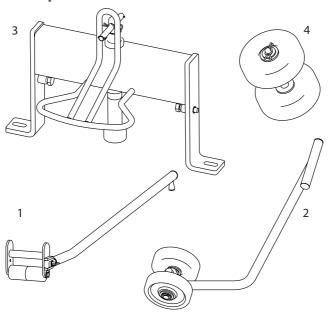
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3.1 AxiChrom 300-600 wheel kit components

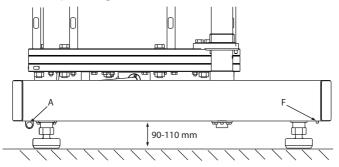
The following image illustrates the main components of the AxiChrom 300-600 column wheel kit.

Wheel kit components



Part	Function
1	Lever
2	Trolley
3	Trolley bar
4	Rear wheels

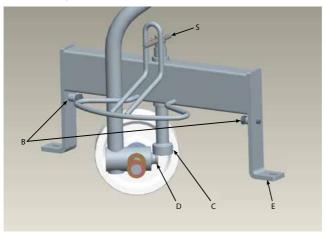
Wheel and trolley fittings



Part	Function
Α	Holes for fitting rear wheels
F	Pins for locating trolley bar

Note: To be able to fit or remove the wheels of an AxiChrom 300-600 column wheel kit, the distance between the floor and the column stand must be in the range 90-110 mm.

Trolley and trolley bar



Part	Function
В	Bolts
С	Height adjusting screw

Part	Function
D	Trolley knob
E	Slots
S	Safety pin

3.2 Fitting an AxiChrom 300-600 wheel kit

To be able to use the jack to assemble/disassemble the trolleys and fit or remove an AxiChrom 300-600 column wheel kit the following requirements must be met.

- The distance between the floor and the column stand must be between 90-110 mm for AxiChrom 300-600 columns.
- There must be adequate free surrounding space to be able to move the column (for dimension information refer to AxiChrom 300-1600 columns Operating Instructions (29065430)).

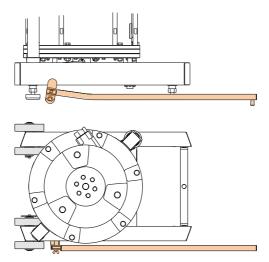


NOTICE

Do not perform any type of maintenance work on a column when it is fitted with a wheel kit. Maintenance work may only be carried out on AxiChrom columns when they are stably supported by the column feet under the column stand.

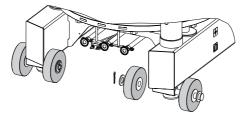
Tip: If you intend to move the column back to the same position after it has been moved, mark the position of the column feet on the floor before beginning to fit the wheel kit. This will allow the column to be returned to exactly the position after moving, without the need to level the column again.

1 Place the lever close to one of the rear feet and lift the column by lowering the lever arm. Screw the foot pads in completely.



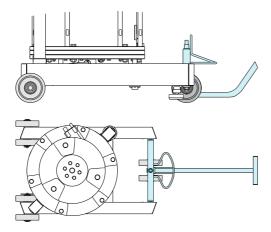
If needed for work in restricted spaces, the lever can be mirrored by changing the attachment of the lever arm.

2 Fit the rear wheels in the hole in the column stand (**A**, *Wheel and trolley fittings, on page 8*). Ensure that the washer and safety pin are correctly placed, to secure the rear wheels.



- 3 Lower the column by lifting the lever arm. Ensure that the column stands firmly on the wheels before removing the lever.
- 4 Fit the second pair of rear wheels on the other rear foot by repeating steps 1 to 3 above.

Attach the trolley bar to the front of the column stand. Make sure that the pins underneath the stand (**F**, *Wheel and trolley fittings, on page 8* are properly fitted into the slots **E** of the trolley bar (*Trolley and trolley bar, on page 8*), before tightening the bolts **B** to the column stand.



- 6 Place the trolley knob **D** (*Trolley and trolley bar, on page 8*) vertically under the adjusting screw **C**, and adjust the height adjusting screw so it rests on the trolley knob.
- 7 When the height adjusting screw is adjusted, secure it with the safety pin **S**.
- 8 Lift the front of the column by lowering the handle on the trolley. Turn the trolley so it faces forward.
- 9 Make sure that the column rests fully on the wheels. Screw the foot pads in completely.

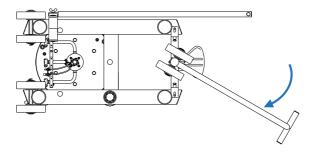
The column can now be moved.

3.3 Removing an AxiChrom 300-600 wheel kit

When the column has been rolled into position at the intended location, remove the wheel kit from the column as described below.

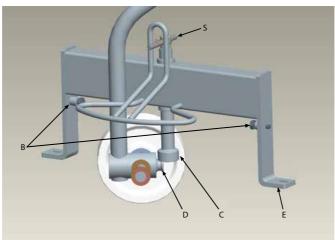
Step Action

- 1 Adjust all feet until they have the same distance between the floor and stand, 90 to 110 mm.
- 2 Turn the trolley to one of the sides as the following image shows.



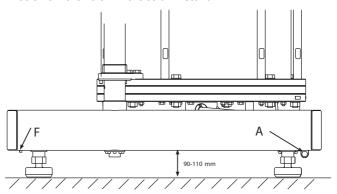
Lower the front of the column, by raising the handle on the trolley. The handle should now stand vertically.

If necessary, remove the safety pin and loosen the height adjusting screw to be able to relieve the weight from the trolley knob **D**. Remove the trolley.



4 Unscrew the bolts **B** and remove the trolley bar from the front of the column stand.

- Place the lever close to one of the rear feet and wheels, and lift the column by lowering the lever arm. If needed in narrow spaces, the lever can be mirrored by changing the attachment of the lever arm.
- 6 Remove the washer and safety pin from the wheels, and disassemble the wheels from the hole **A** in the column stand.



- 7 Lower the column by lifting the lever arm. Remove the lever.
- 8 Repeat steps 4 to 6 on the other rear foot.
- 9 Make sure that the column stands firmly on all feet.
- 10 Make sure that the column is level before it is taken into operation.

4 AxiChrom 800-1000 wheel kit

Introduction

This section describes how to fit a wheel kit for use with AxiChrom 800-1000 columns.

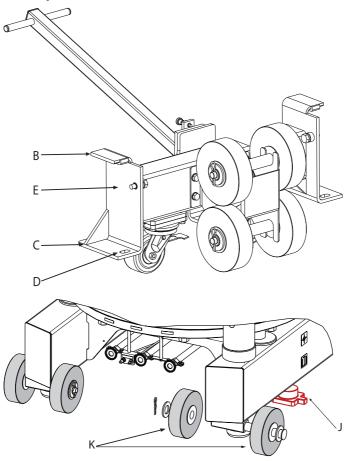
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4.1 AxiChrom 800-1000 wheel kit components

The following images illustrate the main components of the AxiChrom 800-1000 column wheel kit.

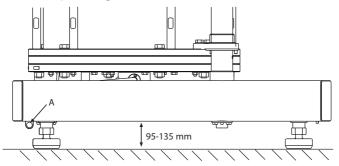
Wheel kit components



Part	Function
В	Trolley bar top
С	Lower part
D	Slot

Part	Function
Е	Screw
J	Jack
K	Rear wheels

Wheel and trolley fittings



Part	Function
Α	Holes for fitting rear wheels

Note:

To be able to fit or remove the wheels of an AxiChrom 800-1000 column wheel kit, the distance between the floor and the column stand must be in the range 95-135 mm.

4.2 Fitting an AxiChrom 800-1000 wheel kit

To be able to use the jack to assemble/disassemble the trolleys and fit or remove an AxiChrom 800-1000 column wheel kit the following requirements must be met.

- The distance between the floor and the column stand must be between 95-135 mm for AxiChrom 800-1000 columns.
- There must be adequate free surrounding space to be able to move the column (for dimension information refer to AxiChrom 300-1600 columns Operating Instructions (29065430)).



NOTICE

Do not perform any type of maintenance work on a column when it is fitted with a wheel kit. Maintenance work may only be carried out on AxiChrom columns when they are stably supported by the column feet under the column stand.

Tip:

If you intend to move the column back to the same position after it has been moved, mark the position of the column feet on the floor before beginning to fit the wheel kit. This will allow the column to be returned to exactly the position after moving, without the need to level the column again.

Note:

The distance between the floor and the column stand is 122 mm when the wheels are assembled.

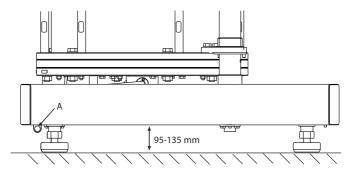
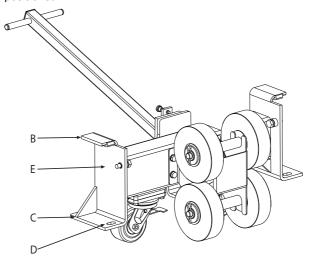


Figure 4.1:

Step Action

Mount the wheels (2) on the underside of the wheel kit beam. Mount the trolley handle.

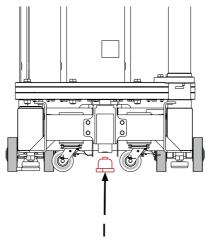
Use the handle on the trolley bar to steer it in between the front feet of the column. The top **B** of the trolley bar should hang on the column stand when positioned.



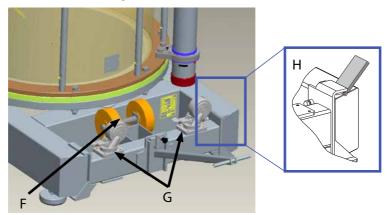
Part	Function
В	Trolley bar top
С	Lower part
D	Slot
Е	Screw

3 Remove the rear wheels from the wheel kit frame.

Place the jack under the frame at position \mathbf{I} , and use the jack to lever the front of the column so that the wheel kit can be assembled and tightened using a 16 mm wrench underneath the trolley bar \mathbf{G} .

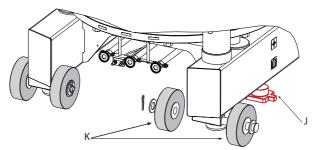


4 Place the bracket between the column stand and the trolley bar, as illustrated in insert image **H**.



Steer the wheel kit with the trolley handle and lift up until part ${\bf C}$ reaches the lower surface of the column stand. Make sure that the pin underneath the stand fits inside the slot ${\bf D}$ of the trolley bar, then tighten the screw ${\bf E}$ in the image in step 1. Make sure that both screws ${\bf E}$ are in the correct position.

- 5 Remove the handle from the trolley bar. The handle is only a help when putting the trolley bar into position and should not be used when moving the column.
- 6 Lower the column front again and remove the jack. The column should now stand on the front wheels of the trolley bar, and the front feet should not touch the ground. Both wheels should be locked facing the direction of the frame legs before continuing to the next step.
- 7 Place the jack **J** under the frame at the reinforced pad towards the rear wheel and lift.



- 8 Fit the rear wheels **K** in the hole **A** in the column stand (see *Fig. 4.1, on page 18*). Make sure that the washer and safety pin are correctly placed, to secure the rear wheels.
- 9 Lower the column again and remove the jack. Make sure that the front feet do not touch the ground.
- 10 Fit the second pair of rear wheels on the other side of the column by repeating steps 7 to 9.
- 11 Ensure that the column rests fully on the wheels.

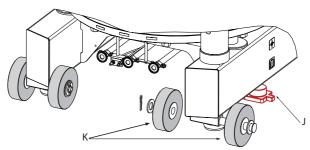
The column can now be moved using a MasterMover or PowerAttack connected to the appropriate connection fitting, respectively, on the front of the trolley bar.

4.3 Removing an AxiChrom 800-1000 wheel kit

When the column has been rolled into position at the intended location, remove the wheel kit from the column as described below.

Step Action

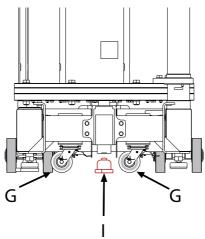
- 1 Adjust all feet until they have the same distance between the floor and the column stand, within the interval 95-135 mm.
- Place the jack J under the frame at the reinforced pad towards the rear wheel and lift.



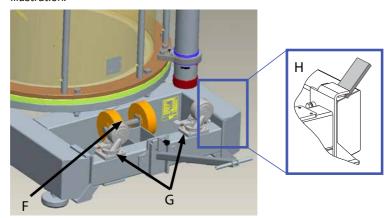
Lever the back of the column using the jack.

- 3 Remove the rear wheels **K** from the hole on the column stand.
- 4 Lower the column again and remove the jack.
- 5 Remove the second pair of rear wheels on the other side of the column by repeating steps 1 to 4.

Place the jack at position I in the figure. Use the jack to lever the front of the column so that the wheel kit can be removed from underneath the trolley bar G. Lower the column front again and remove the jack. The column should now stand on its front feet.

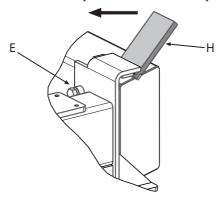


7 Fit the trolley bar wheels in the trolley bar storage positions, as shown in the illustration.



- 8 Fit the rear wheels in the trolley bar storage positions **F**.
- 9 Attach the handle to the trolley bar.

Unscrew the screw **E** on one of the trolley bar sides and insert the bracket **H** between the trolley bar and the column stand. Use the bracket to carefully lower the trolley bar down until the trolley bar rests on the column stand.



- 11 Repeat step 10 to release the other side of the trolley bar.
- 12 Use the handle to retract the trolley bar from the column stand.
- 13 Make sure that the column stands firmly on all feet.
- 14 Make sure that the column is level before it is taken into operation.

5 AxiChrom 1200-1600 wheel kit

Introduction

This section describes how to fit a wheel kit for use with AxiChrom 1200-1600 columns.

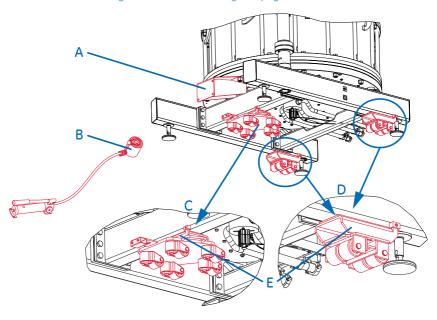
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5.1 AxiChrom 1200-1600 wheel kit components

Wheel kit components

The following image illustrates the main components of the AxiChrom 1200-1600 column wheel kit (product ordering number 29090400), as well as the moving arm attachment fitting, which has a different product ordering number according to the column size, see *Moving arm attachment fittings*, on page 28 below.



Part	Function
А	Column moving arm attachment fitting, see <i>Moving arm attachment fittings, on page 28</i>
В	Jack
С	Front trolley
D	Rear trolleys (two units)
E	Spacer blocks and rubber protection mats for front and back trolleys

Note: The moving equipment to be attached to the moving arm attachment fitting (see Moving arm attachment fittings, on page 28) to move the column must be purchased separately from the respective manufacturer.

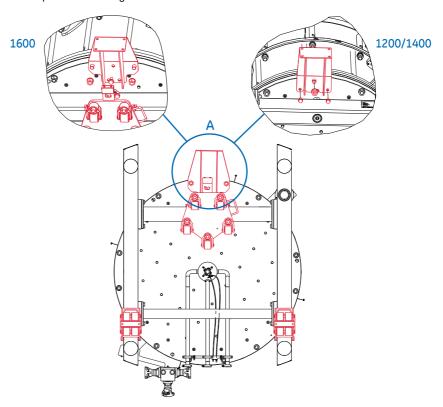
- If a PowerAttack is to be used to move the column a PowerAttack attachment adapter plate must be fitted to the moving arm attachment fitting on the column. The attachment plate can be ordered as a separate accessory from Cytiva (product ordering number 29096272). The PowerAttack must be ordered directly from the supplier.
- If a MasterMover is to be used to move the column the appropriate
 MasterMover attachment coupling for fitting to the moving arm
 attachment fitting and the MasterMover itself must be ordered directly
 from the supplier.

For information about suitable moving equipment and attachment couplings for the various AxiChrom column sizes, see the AxiChrom product pages on the Cytiva website.

Moving arm attachment fittings

A moving arm attachment fitting is screwed to the underside of the column and is used as the point of attachment for the arm of the moving equipment used to move the column. The moving arm attachment fitting required is column size dependant and is therefore not included as part of wheel kit 29090400, but must be ordered separately.

- The moving arm attachment fitting used with AxiChrom 1600 columns has product ordering number 29091014.
- the moving arm attachment fitting used with AxiChrom 1200 and 1400 columns has product ordering number 29091373.



5.2 Fitting an AxiChrom 1200-1600 wheel kit

To be able to use the jack to assemble/disassemble the trolleys and fit or remove an AxiChrom 1200-1600 wheel kit the following requirements must be met.

 The distance between the floor and the column stand must be between 160-180 mm for AxiChrom 1200-1600 columns.

Tip: Spacer blocks of a suitable material can be used if the column stand is not the required distance from the floor.

 There must be adequate free surrounding space to be able to move the column (for dimension information refer to AxiChrom 300-1600 columns Operating Instructions (29065430)).



NOTICE

Do not perform any type of maintenance work on a column when it is fitted with a wheel kit. Maintenance work may only be carried out on AxiChrom columns when they are stably supported by the column feet under the column stand.

Tip:

If you intend to move the column back to the same position after it has been moved, mark the position of the column feet on the floor before beginning to fit the wheel kit. This will allow the column to be returned to exactly the position after moving, without the need to level the column again.

1

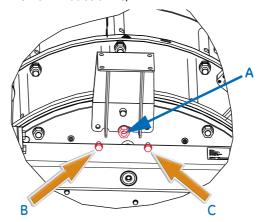
Bolt the appropriate moving arm attachment fitting to the underside of the front of the column.



NOTICE

Wrap PTFE around the threads of the attachment hitch fastening bolts before use.

- To fit the moving arm attachment fitting to AxiChrom 1200 and 1400 columns:
 - a. Remove the nut from one column flange bolt (A).
 - b. Attach the moving arm attachment fitting by screwing it to the bottom backing plate with the two attachment bolts provided with the moving arm attachment fitting (B and C), as shown in the illustration.
 - c. Screw the column flange bolt (A) back into place and tighten to the correct torque (180 Nm for AxiChrom 1200 columns, or 300 Nm for AxiChrom 1400 columns).



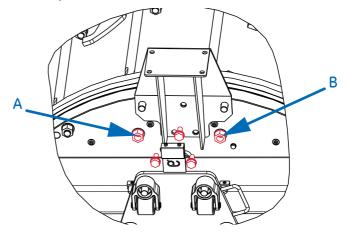
d. Tighten the attachment bolts to a torque of 100 Nm.



NOTICE

After moving the column using a wheel kit, make sure that the flange bolt nut is refitted and tightened to the correct torque before the column is taken into operation again.

- To fit the column attachment hitch to AxiChrom 1600 columns:
 - a. Remove the nuts from two of the column flange bolts (A and B).
 - b. Attach the moving arm attachment fitting by screwing it to the bottom backing plate with the three attachment bolts provided with the moving arm attachment fitting, as shown in the illustration.
 - c. Screw the column flange bolts back into place and tighten to the correct torque (300 Nm for AxiChrom 1600 columns).



d. Tighten the attachment bolts to a torque of 150 Nm.



NOTICE

After moving the column using a wheel kit, make sure that the flange bolt nuts are refitted and tightened to the correct torque before the column is taken into operation again.

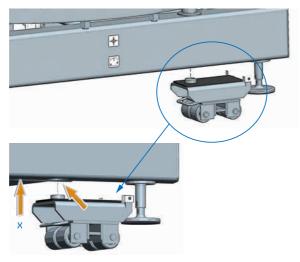
2 Fit the appropriate moving equipment adapter attachment coupling to the attachment hitch fitting on the column. Make sure that all attachment bolts are securely tightened.

3 Slot the tabs of the front and rear trolley spacer blocks into the corresponding slots in the top of each wheel trolley unit to assemble each wheel trolley, as shown in the images below.

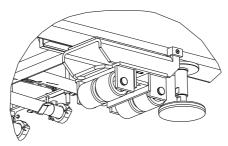


4 Move one rear wheel trolley into position at one side of the column stand, and then place the jack under the column stand close to the wheel trolley (position X in the illustration indicates a suitable jack position).

Use the jack to raise the column stand until there is sufficient clearance to move the rear wheel trolley under the column stand. Make sure that the raised mounting socket on top of the wheel trolley is aligned with the corresponding recess (safety pin mounting position) in the column stand.



5 Use the jack to lower the column stand onto the wheel trolley. Make sure that the mounting socket on the wheel trolley fully enters the corresponding recess in the column stand and the raised tabs cradle each side of the column stand.



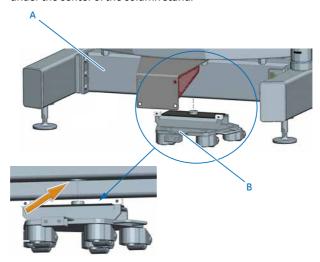
- Remove the jack, and then repeat steps 4 and 5 to fit the second rear trolley under the opposite side of the column stand.
- 7 Make sure that the column is securely supported on both rear trolley units, and place blocks in front of the wheels of the rear trolleys so that the wheels cannot begin to roll while the front trolley is being fitted.



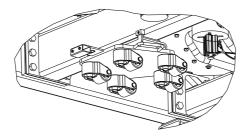
WARNING

Make sure that the wheels are immobilized when fitting a wheel kit, so that the column cannot begin to roll away.

8 Place the jack under the front crossbeam (A) of the column stand, about 300 mm to one side of the recessed safety pin mounting position in the center of the crossbeam, so that there will be space to fit the front wheel trolley unit (B) under the center of the column stand.



- 9 Use the jack to lift the front of the column until the front trolley and spacer unit can be placed under the front beam of the column stand. Make sure that the mounting socket on the wheel trolley is aligned with the recess position in the crossbeam.
- 10 Lower the column onto the front trolley and remove the jack.



Connect a MasterMover or a PowerAttack mover to the appropriate adapter coupling fitted to the moving attachment hitch on the column. Remove the blocks used to immobilize the wheels of the rear trolley units and move the column by rolling over a level, even and unobstructed floor surface.



WARNING

Maintain a safe distance when moving the column.

Make sure that no person is near the column when the column is in motion, other than the personnel required to perform lifting and moving procedures.



NOTICE

Make sure that there is a minimum distance of 20 mm between the floor and the column feet before starting to move the column.

Refer to the third party documentation provided with the MasterMover or PowerAttack for instructions on how the moving equipment should be used.

5.3 Removing an AxiChrom 1200-1600 wheel kit

When the column has been rolled into position at the intended location, remove the wheel kit from the column as described below.

Step Action

- 1 Make sure that the wheels of the AxiChrom 1200-1600 wheel kit are immobilized, so that the column cannot begin to roll unexpectedly, before disconnecting the moving equipment from the attachment hitch connection.
- If the column has been moved to a new location, measure the distance between the column feet and the floor. Adjust the feet as necessary so that all of the column feet are the same distance from the floor.



NOTICE

Do not adjust the feet of AxiChrom 1200-1600 columns out from the column stand more than 220 mm from the base of the column stand to the floor.

- 3 Place the jack under the front crossbeam of the column stand, immediately to one side of the front trolley.
- 4 Use the jack to lift the front of the column until it is no longer supported by the front trolley and spacer unit, and then remove the front trolley and spacer unit.
- 5 Lower the column until it is supported on the column feet at the front of the column, as well as on the two rear wheel trolleys.
- 6 Place the jack under the column stand, immediately in front of one of the rear wheel trolleys.
- 7 Use the jack to raise the column until it is just high enough from the floor for the rear trolley beside the jack to be removed.
- 8 Remove the rear trolley located beside the jack, and then lower the column onto the column foot at that side of the column. Remove the jack.
- 9 Place the jack under the column stand, immediately in front of the remaining rear wheel trolley.
- 10 Use the jack to raise the column until it is just high enough off the floor for the remaining rear trolley to be removed.

Step	Action
11	Remove the remaining rear wheel trolley, and then lower the column onto all four column feet. Remove the jack.
12	Make sure that the column stands firmly on all feet.
13	Remove the moving arm and moving arm attachment fitting from the column if desired. $^{\rm 1}$
	Note:
	When bolts are removed and replaced, make sure to rewrap bolt threads with PTFE tape, and check that bolts are retightened to the correct torque before the column is taken into operation.
14	Make sure that the column is level before it is taken into operation.

This step is optional. The moving arm can be left attached to the column if it is likely that the column will be moved again.



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