AC Reciprocator

Column

Manual P/N 768 627 C
– English –

Keep for Future Reference

NORDSON (UK) LTD. • STOCKPORT

CE

Order number
P/N = Order number for Nordson products

Declaration of Conformity
98/37/EC
73/23/EEC

We,

Nordson (U.K.) Limited

of

Ashurst Drive, Cheadle Heath, Stockport, Cheshire, SK3 0RY, United Kingdom

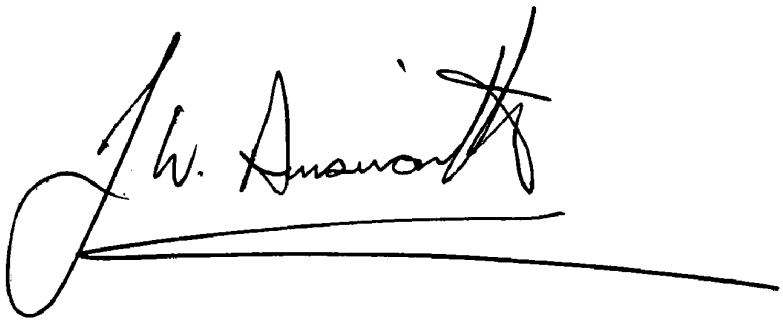
declare that under our sole responsibility for supply/manufacture of the product(s)

Product Name	AC Reciprocator Column
Model Number(s)	766802, 766803, 766804 and 766805
Product Options	All

to which this declaration relates, is in conformity with the following standards and other normative documents

Safety	BS EN 60204–1:1993 "Safety of Machinery – Electrical equipment of machines" EN 60335:Part 1:1988 "Safety of household and similar electrical appliances" BS EN 292:1991 "Safety of machinery – Basic concepts, general principles for design"

following the provisions of 98/37/EC and 73/23/EEC Directives



Jim Ainsworth
General Manager

Nordson (U.K.) Ltd., 5th February 2001

NB ref EN45014 (BS7514)

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Congratulations on the Purchase of Your Nordson Product

Nordson equipment is engineered and manufactured in accordance with strict specifications, using high quality components and state–of–the–art technologies that assure reliable, long–term performance. Your product was thoroughly tested for proper operation prior to shipment.

Before unpacking and installing your new equipment, please read this manual. It is your guide to safe installation, productive operation and effective maintenance. We recommend that you keep the manual available for future reference.

Your Safety is Important to Nordson

Carefully read the *Safety* section. Your product is designed for safe operation when used according to the published instructions. Potential hazards exist when operating instructions are not followed.

Manufacturer of Equipment

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For a list of local Nordson organisations, see *Nordson International*.

Nordson International

Europe

Country		Phone	Fax
Austria		43-1-707 5521	43-1-707 5517
Belgium		31-13-511 8700	31-13-511 3995
Czech Republic		4205-4159 2411	4205-4124 4971
Denmark	*Hot Melt*	45-43-66 0123	45-43-64 1101
	Finishing	45-43-66 1133	45-43-66 1123
Finland		358-9-530 8080	358-9-530 80850
France		33-1-6412 1400	33-1-6412 1401
Germany	*Erkrath*	49-211-92050	49-211-254 658
	Lüneburg	49-4131-8940	49-4131-894 149
	Düsseldorf - Nordson UV	49-211-3613 169	49-211-3613 527
Italy		39-02-904 691	39-02-9078 2485
Netherlands		31-13-511 8700	31-13-511 3995
Norway	*Hot Melt*	47-23 03 6160	47-22 68 3636
	Finishing	47-22-65 6100	47-22-65 8858
Poland		48-22-836 4495	48-22-836 7042
Portugal		351-22-961 9400	351-22-961 9409
Russia		7-812-11 86 263	7-812-11 86 263
Slovak Republic		4205-4159 2411	4205-4124 4971
Spain		34-96-313 2090	34-96-313 2244
Sweden	*Hot Melt*	46-40-680 1700	46-40-932 882
	Finishing	46 (0) 303 66950	46 (0) 303 66959
Switzerland		41-61-411 3838	41-61-411 3818
United Kingdom	*Hot Melt*	44-1844-26 4500	44-1844-21 5358
	Finishing	44-161-495 4200	44-161-428 6716
	Nordson UV	44-1753-558 000	44-1753-558 100

Distributors in Eastern & Southern Europe

DED, Germany	49-211-92050	49-211-254 658

Outside Europe / Hors d'Europe / Fuera de Europa

- For your nearest Nordson office outside Europe, contact the Nordson offices below for detailed information.
- Pour toutes informations sur représentations de Nordson dans votre pays, veuillez contacter l'un de bureaux ci-dessous.
- Para obtener la dirección de la oficina correspondiente, por favor diríjase a unas de las oficinas principales que siguen abajo.

Contact Nordson		Phone	Fax
Africa / Middle East			
DED, Germany		49-211-92050	49-211-254 658
Asia / Australia / Latin America			
Pacific South Division, USA		1-440-988-9411	1-440-985-3710
Japan			
Japan		81-3-5762 2700	81-3-5762 2701
North America			
Canada		1-905-475 6730	1-905-475 8821
USA	*Hot Melt*	1-770-497 3400	1-770-497 3500
	Finishing	1-440-988 9411	1-440-985 1417
	Nordson UV	1-440-985 4592	1-440-985 4593

Section 1

Safety

Section 1
Safety

1. Introduction

Read and follow these safety instructions. Task and equipment specific warnings, cautions, and instructions are included in equipment documentation where appropriate.

Make sure all equipment documentation, including these instructions, is accessible to all persons operating or servicing equipment.

2. Qualified Personnel

Equipment owners are responsible for making sure that Nordson equipment is installed, operated, and serviced by qualified personnel. Qualified personnel are those employees or contractors who are trained to safely perform their assigned tasks. They are familiar with all relevant safety rules and regulations and are physically capable of performing their assigned tasks.

3. Intended Use

Use of Nordson equipment in ways other than those described in the documentation supplied with the equipment may result in injury to persons or damage to property.

Some examples of unintended use of equipment include

- using incompatible materials
- making unauthorized modifications
- removing or bypassing safety guards or interlocks
- using incompatible or damaged parts
- using unapproved auxiliary equipment
- operating equipment in excess of maximum ratings

4. Regulations and Approvals

Make sure all equipment is rated and approved for the environment in which it is used. Any approvals obtained for Nordson equipment will be voided if instructions for installation, operation, and service are not followed.

5. Personal Safety

To prevent injury follow these instructions.

- Do not operate or service equipment unless you are qualified.
- Do not operate equipment unless safety guards, doors, or covers are intact and automatic interlocks are operating properly. Do not bypass or disarm any safety devices.
- Keep clear of moving equipment. Before adjusting or servicing any moving equipment, shut off the power supply and wait until the equipment comes to a complete stop. Lock out power and secure the equipment to prevent unexpected movement.
- Relieve (bleed off) hydraulic and pneumatic pressure before adjusting or servicing pressurized systems or components. Disconnect, lock out, and tag switches before servicing electrical equipment.
- While operating manual electrostatic spray guns, make sure you are grounded. Wear electrically conductive gloves or a grounding strap connected to the gun handle or other true earth ground. Do not wear or carry metallic objects such as jewelry or tools.
- If you receive even a slight electrical shock, shut down all electrical or electrostatic equipment immediately. Do not restart the equipment until the problem has been identified and corrected.
- Obtain and read Material Safety Data Sheets (MSDS) for all materials used. Follow the manufacturer's instructions for safe handling and use of materials, and use recommended personal protection devices.
- To prevent injury, be aware of less-obvious dangers in the workplace that often cannot be completely eliminated, such as hot surfaces, sharp edges, energized electrical circuits, and moving parts that cannot be enclosed or otherwise guarded for practical reasons.

6. Fire Safety

To avoid a fire or explosion, follow these instructions.

- Ground all conductive equipment in the spray area. Check equipment and workpiece grounding devices regularly. Resistance to ground must not exceed one mega–ohm.
- Shut down all equipment immediately if you notice static sparking or arcing. Do not restart the equipment until the cause has been identified and corrected.
- Do not smoke, weld, grind, or use open flames where flammable materials are being used or stored.
- Provide adequate ventilation to prevent dangerous concentrations of volatile materials or vapors. Refer to local codes or your material MSDS for guidance.
- Do not disconnect live electrical circuits while working with flammable materials. Shut off power at a disconnect switch first to prevent sparking.
- Know where emergency stop buttons, shutoff valves, and fire extinguishers are located. If a fire starts in a spray booth, immediately shut off the spray system and exhaust fans.
- Shut off electrostatic power and ground the charging system before adjusting, cleaning, or repairing electrostatic equipment.
- Clean, maintain, test, and repair equipment according to the instructions in your equipment documentation.
- Use only replacement parts that are designed for use with original equipment. Contact your Nordson representative for parts information and advice.

7. Action in the Event of a Malfunction

If a system or any equipment in a system malfunctions, shut off the system immediately and perform the following steps:

- Disconnect and lock out electrical power. Close pneumatic shutoff valves and relieve pressures.
- Identify the reason for the malfunction and correct it before restarting the equipment.

8. Disposal

Dispose of equipment and materials used in operation and servicing according to local codes.

Section 2

Description

Section 2
Description

1. Intended Use

The Nordson *AC Reciprocator Column* is intended for use in the moving of powder spray guns over a workpiece. The column is located outside a powder spray booth.

Control of the motion of the column is by Nordson controller P/N 765152.

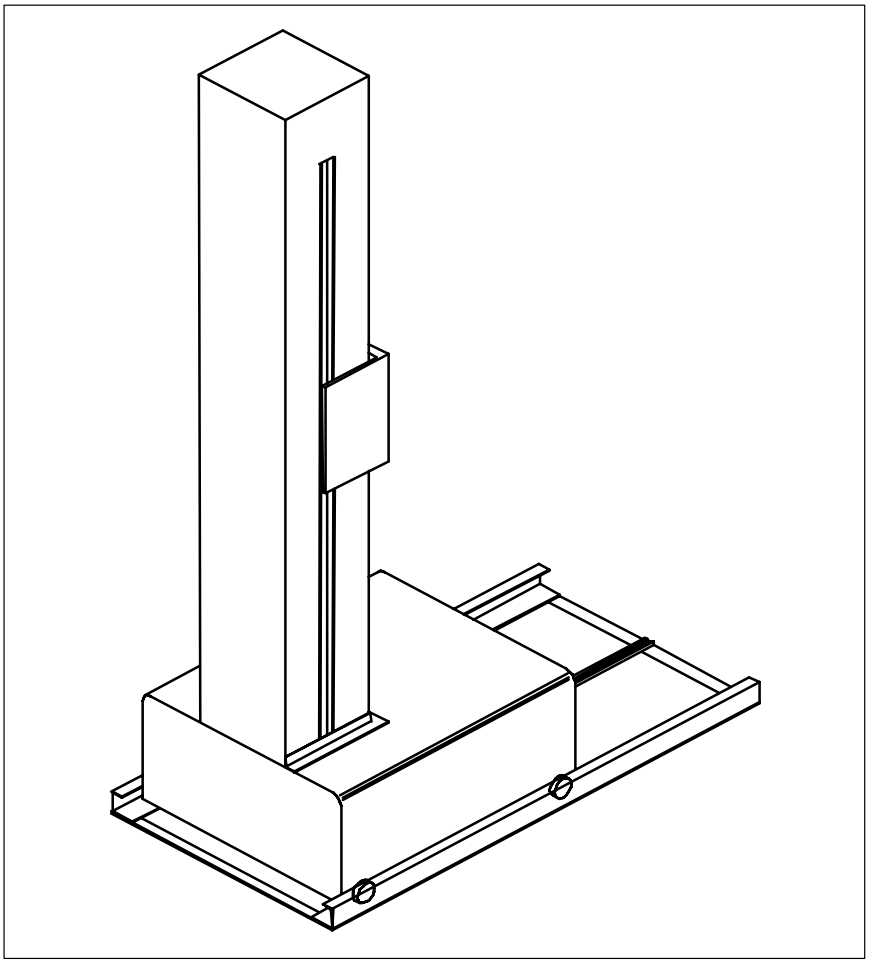


Fig. 2-1

2. Features

The Reciprocator Column can be supplied with various stroke lengths. Standard lengths are 1.0, 1.5, 2.0 and 2.5 metres. Other lengths are by special order.

The Reciprocator consists of a carriage that runs on a vertical column, the carriage is moved by a AC motor that drives the carriage through a reduction gearbox and chain drive.

Position of the carriage is monitored with a potentiometer, this information is sent to the controller and used to change the direction of carriage travel at the limits of the stroke.

The carriage has an array of mounting holes to allow the fixing of powder spray guns in various arrangements.

There are no operator controls on or within the Reciprocator, other than a safety stop/start isolator switch.

Section 3

Installation

Section 3
Installation

WARNING: Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.

1. Transport

Transport the unit so as to avoid damage. Do not throw the unit. Use suitable packaging materials and sturdy cartons. See *Specifications* section for dimensions and weight.

Protect the unit from exposure to humidity, dust and vibrations.

2. Unpacking

Carefully unpack the unit to avoid damaging it. Check for damage caused during transport.

Save packing materials for possible later use. Otherwise recycle or dispose of properly according to local regulations.

3. Removing

Switch off the mains supply, then disconnect all electrical connections from the unit.

4. Storage

Pack the unit in suitable packing materials and sturdy cartons. Protect from humidity, dust and large temperature fluctuations (condensation).

5. Disposal

Dispose of properly according to local regulations.

6. Setting Up the Unit

WARNING: Allow only qualified personnel to perform the installation. Observe safety instructions.

1. The Reciprocator gearbox is filled with synthetic oil which is good for the life of the gearbox.

2. In order to correctly orientate the Reciprocator during transit the carriage plate has been mounted in reverse. Remove 8 bolts and re–fit the carriage plate to the front of the Reciprocator.

3. The Reciprocator can be supplied in two mounting formats Guide rails (standard) or Castors (special option). For Reciprocators supplied with guide rails follow the next series of instructions, for Reciprocators supplied with castors at the appropriate part move the machine to the correct location.

4. Place the guide rails on the floor, in line with the gun slot openings.

5. Slide the Reciprocator wheels into the guide rail slots.

CAUTION: It may be necessary for two persons to be available to complete the above.

6. Align the Reciprocator with the gun slots and attach the gunbars to the carriage.

NOTE: It is good practice to keep the gunbars as short as possible to reduce gun bar shake.

7. Refer to the appropriate controller manual for instructions. Move the carriage slowly and check that the gunbars do not come into contact with the booth openings. Adjust the controller according to the information in the appropriate manual.

8. Fit the powder spray guns to the gunbars.

9. Attach any powder hoses and cables to the guns and support them from the support bar at the rear of the column.

NOTE: Ensure there are no sharp bends in the hoses or cables, as this will cause premature failure.

10. Run the hoses and cables back to their supply points ensuring that they are protected from sharp bend, sharp objects and areas of heavy personnel traffic.

11. On completion of the electrical installation secure the guide rails to the floor.

7. Electrical

WARNING: Allow only qualified personnel to perform electrical connections. Observe the safety instructions.

1. Connect the Reciprocator to the controller using the cable provided, route the cable to avoid sharp corners, bends and areas of heavy personnel traffic.

Section 4

Operation

Section 4
Operation

WARNING: Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.

1. Daily Operation

WARNING: The Reciprocator can move at high speeds and with large forces. Before switching ON/OFF set the speed controls to minimum and ensure that the area is clear of personnel. Failure to observe this may result in personal injury. The machine may be disabled during servicing, by removing the interconnecting cable at the base of the machine.

Refer to the appropriate controller manual for start up and shut down procedures.

Section 5

Maintenance

Section 5
Maintenance

WARNING: Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.

WARNING: Breathing in certain airborne dusts (including finishing powders) may be hazardous to health. Ask the powder manufacturer for a Material Safety Data Sheet (MSDS) for information. Use appropriate respiratory protection.

WARNING: Before commencing any work on the column operate the isolator and disconnect the cable connecting the column to the controller.

1. Daily Maintenance

- Check gun bars, clamps and carriage tightness, adjust if necessary.
- Clean any powder from the Reciprocator covers.
- Inspect slot seal brushes for damage.
- Listen for any excessive noise, investigate cause and rectify at earliest opportunity.

2. After First Month or 500 Hours

- Check carriage rollers, the column covers must be removed for this.
- Tension the chain.
- Check pillow blocks, taper lock bushes, nuts, bolts and all fixings for tightness.

NOTE: The gearbox is filled with synthetic oil and is sealed for life.

3. Every Six Months or 3000 Hours

- As per the first 500 hours.
- Inspect all parts for wear and replace as necessary.
- Grease pillow blocks.
- Inspect the gearbox if the seals are worn or leaking, replace gearbox.

4. Positioning Assembly

WARNING: Before commencing this procedure stop the reciprocator at the centre of its maximum stroke +20 mm / –20 mm and secure carriage to prevent movement, then disconnect from mains by removing cable.

Disassembly

NOTE: The following procedure may not be applicable, it is possible to replace the potentiometer gearbox assembly without removing the main gearbox and motor.

1. Remove all panels and covers and lay the Reciprocator down, this enables access to the motor and gearbox.
2. Disconnect the cable from the motor. (None standard heavy–duty specials may be wired directly into the motor terminals, make a note of the numbers and location of each wire.)
3. Remove the potentiometer wires from the main input connector, note the colours and position of the wires.
4. Remove the lower chain draw bolts and remove the chain from around the gearbox sprocket.
5. Remove the gearbox and motor entirely and place onto a workbench to allow easy access to the potentiometer gearbox assembly.
6. Remove potentiometer gearbox assembly from main gearbox.

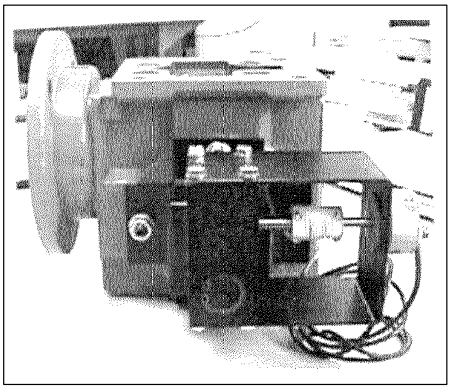


Fig. 5-1

Inspect all parts for damage and renew any suspect or defective parts.

Assembly

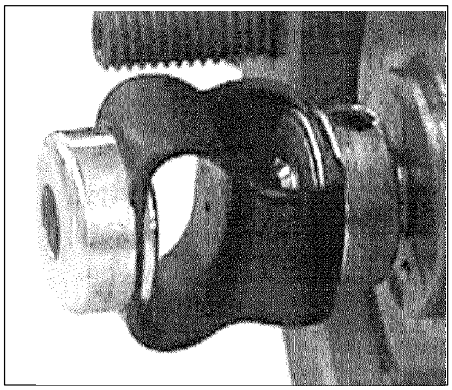


Fig. 5-2

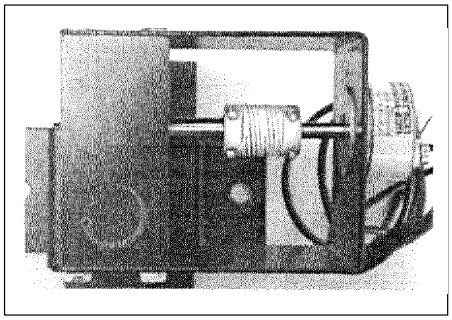


Fig. 5-3

1. To fit the new potentiometer gearbox assembly first check if a new spigot is required on the main gearbox, if so re–tap thread to ensure a good fit and secure spigot with Locktite 270.

2. Remove the flexible coupling from the new potentiometer assembly and fit to spigot. (Care should be taken not to over–tighten grub screws because the thread could be stripped.)

3. Fit the new potentiometer gearbox assembly to the main gearbox ensuring the alignment is such that the grub screw is accessible.

4. Fit the potentiometer to the assembly.

5. Re–fit the gearbox assembly to the column base plate and ensure that the chain is run over the gearbox sprocket. Align sprocket with the centre of the column and tighten bolts.

6. Re–fit the motor to the gearbox (If it has been removed), do not use washers with the securing bolts.

7. Re–tension the draw bolts to take the slack out of the chain.

8. Connect the wires from the potentiometer to the main input connector.

   Terminal – 5 = Black
   Terminal – 6 = Yellow
   Terminal – 7 = Red

9. Reconnect the electrical cable to the controller.

4. Positioning Assembly
(contd.)

Potentiometer Setting Preferred Method

1. Centralize the carriage on its stroke and set the traverse speeds to zero. (Ensure unit is switched on but in the stop position).

2. Connect a D.C. voltmeter, 20 volt range between pins 5 (Black) and 6 (Yellow) of the main input connector.

3. Release the screws holding the potentiometer in place and carefully turn the potentiometer until the voltage reads 5 volts.

NOTE: Zero volts represent the top of the column and +10 volt represents the bottom of the column.

4. Tighten the potentiometer fixing screws and check voltage measurement. Adjust again if necessary.

5. Reset the stroke limits following the instructions in the appropriate controller manual.

Potentiometer Setting Non–preferred Method

CAUTION: Avoid using analogue meters on high resistance scales as the currents produced during resistance measurement may damage the potentiometer. Where this is not possible reduce the time taken to make measurements.

1. Position the carriage in the middle of its stroke.

2. Disconnect the power lead from the reciprocator.

3. Slacken the screws fixing the potentiometer.

4. Connect a resistance meter (20k Ω. Range) across the rear of the potentiometer, wires yellow and red. Rotate the potentiometer body to obtain an initial reading of 3k Ω.

5. Connect a resistance meter (20k Ω. Range) across the rear of the potentiometer, wires yellow and black. Rotate the potentiometer body to obtain an initial reading of 3k Ω.

6. Average out the readings obtained in 4 and 5 to find the resistive mid point of the potentiometer by repeated fine adjustment of the potentiometer body and resistance measurement. With some patience you should be able to obtain a measurement ± 100 Ohms @ black and red wire with reference to yellow (potentiometer wiper).

7. Tighten the potentiometer clamping screws.
8. Re–check resistance reading.
9. Re–set the top and bottom limits in the control panel using the procedure in the appropriate manual.

5. Carriage Rollers

Each of the eight rollers may be replaced individually. This should only be done when the rollers show signs of wear.

WARNING: The rollers and column do not require lubrication by oil or grease. The rollers are made of a self–lubricating material. Application of oil or grease may cause premature wear.

WARNING: The carriage is heavy and should be clamped in place when working on it. Ensure that the isolator has been operated at the base of the column to disconnect the electrical supplies before working on the machine.

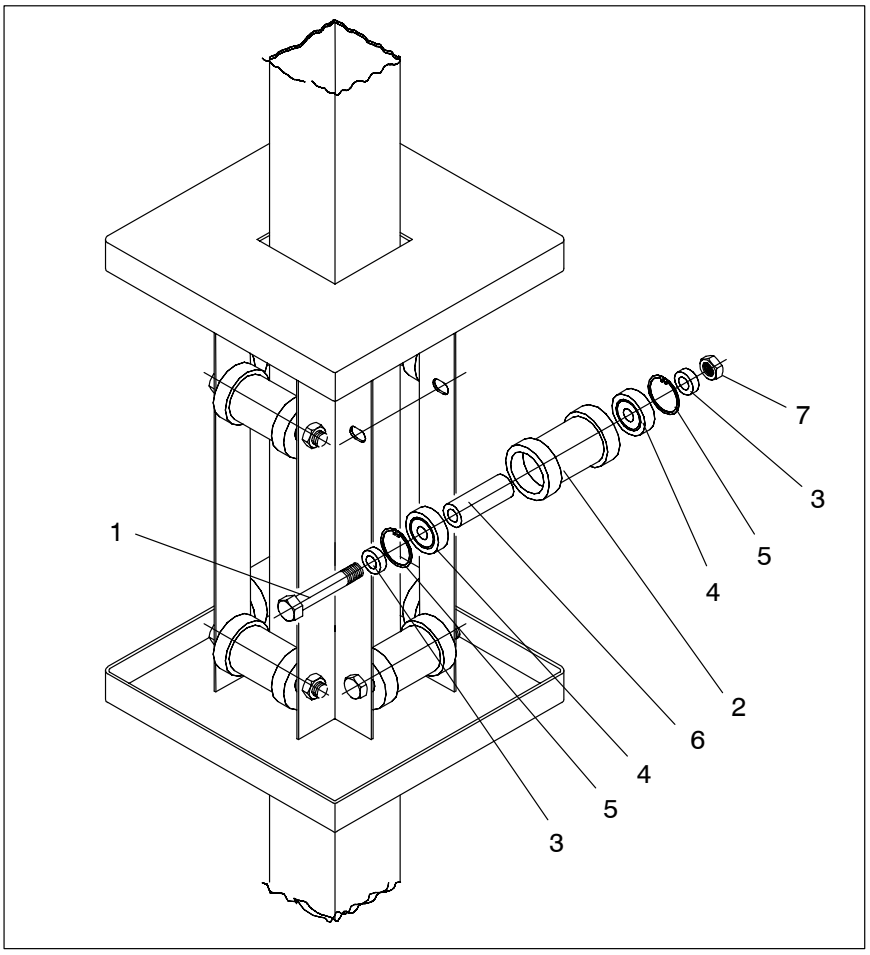


Fig. 5-4

Disassembly

1. Remove the column covers.
2. Remove the bolt (1) that passes through the roller (2) and nut (7).
3. Remove the roller (2), place the spacers (3) on one side for later assembly.
4. Release the bearings (4) in each end of the roller by removing the circlips (5). Remove the spacer (6) from inside the roller (2).

Inspect all the parts for damage and wear and replace as necessary.

Assembly

1. Place the long spacer (6) inside the roller (2).
2. Fit the bearings (4) to each end of the roller (2) and secure using circlips (5).
3. Fit the roller (2) into the carriage ensuring the short spacers (3) are fitted between the bearings (4) and the carriage.
4. Fit the bolt (1) and nut (7) then tighten to the point where the roller (2) will just move in the carriage frame.
5. Position the carriage so that the column runs centrally through the carriage.
6. Tighten the bolt (1) fully (6 kgm or 46 ftlb) on two adjacent sides of the carriage.
7. Using a lever between the centre part of the roller and the carriage to maintain pressure on the roller fully tighten each of the remaining bolts. The rollers should be set to contact the column with slight pressure. The roller when correctly set should offer little resistance to turning by hand. This ensures no free play and reduced wear.

NOTE: Recheck the roller clearance after approx. 40 hours running. Adjust as necessary.

8. Replace the covers and check for correct operation.

6. Chain, Column and Top Assembly

WARNING: Replacement of the chain requires the Reciprocator to be removed from the guide rails and laid horizontally. A minimum of two persons is required to complete this task as the machine is heavy.

Disassembly

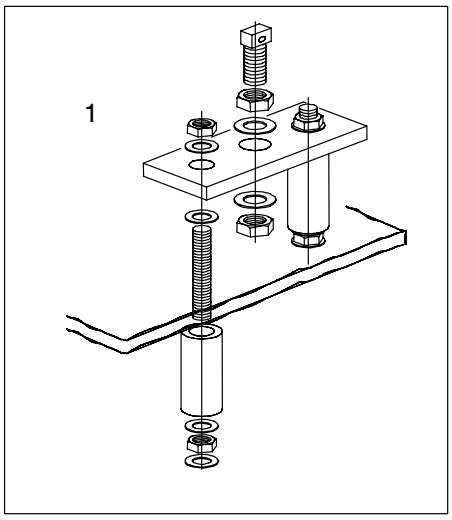


Fig. 5-5

1. Remove the column covers.
2. Clamp the carriage to avoid movement when the chain tension is released.
3. Release the tension on the chain using the adjusters (1) at the top and bottom of the carriage.
4. Ensuring the carriage is clamped in place, remove the lower adjustment screw.
5. Carefully release the clamp holding the carriage in place and allow the carriage to move towards the top of column.
6. Remove the top adjustment screw.

NOTE: There may still be some tension in the chain due to the weight of the chain. Ensure the chain does not fall down the centre of the column.

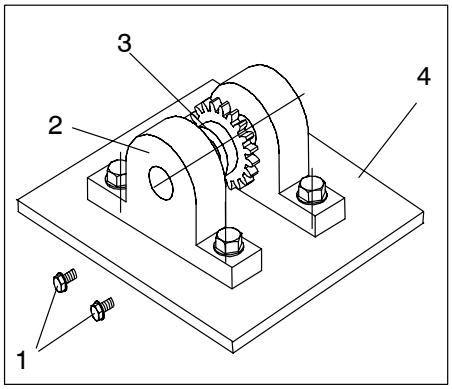


Fig. 5-6

7. Remove the top assembly, by releasing the four fixing screws (1) under the plate holding the top plate to the column.
8. The pillow blocks (2), shaft and sprocket (3) can now be removed from the top plate (4).

WARNING: The chain is covered with light grease and hands should be protected.

9. Remove the adjustment screws from the chain by releasing the split links.

Inspect all parts for damage, renew any suspect parts.

Assembly

NOTE: As a rough guide to chain tensioning, with the carriage at the top or bottom of its stroke, with moderate pressure applied to the centre of the chain, it should just be able to contact the column.

1. Assemble the top plate assembly and fit to the top of the column using the six fixing screws. Align the pillow blocks so that the chain runs down the centre of the column. Also ensure that the pillow blocks are square to the column.

2. Fit the top chain adjuster to the chain using a split link. Attach the adjuster to the top of the carriage feed the chain over the top sprocket.

3. Set carriage at mid stroke ± 20mm.

4. Fit the bottom chain adjuster to the chain using a split link. Attach the adjuster to the bottom of the carriage feeding the chain over the bottom sprocket.

5. Check the alignment of the top sprocket.

6. Tension the chain using the adjusters, the tension should be such that the maximum deflection of a chain at its centre point does not exceed 10 mm. Adjust the top tensioner, leaving full adjustment on the bottom. This will aid service adjustment via the access panel in the cover.

7. Adjust the positioning assembly as previously described (Section *Maintenance*)

8. Refit the covers and the gun bars.

NOTE: Check the tension on the chain after 40 hours running.

7. Motor and Gearbox Replacement

WARNING: Replacement of the motor and/or gearbox requires the Gunmover to be removed from the guide rails and laid horizontally. A minimum of two persons is required to complete this task as the machine is heavy.

CAUTION: Over tensioning of the chain can cause serious damage to the gearbox, bearings, output shaft and excessive sprocket and chain wear.

Disassembly

Remove the column covers.

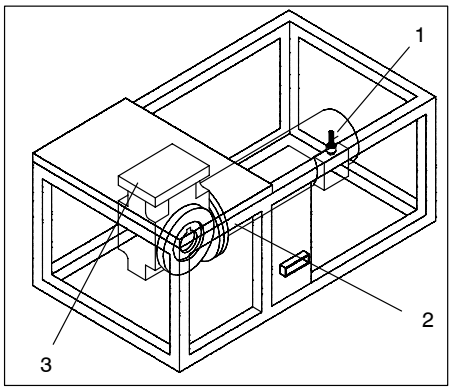


Fig. 5-7

1. Clamp the carriage to avoid movement when the chain tension is released.
2. Release the tension on the chain using the adjusters at the top and bottom of the carriage.
3. Ensuring the carriage is clamped in place, remove the lower adjustment screw.
4. Remove the motor wiring (1), where necessary identify each wire to ensure correct replacement.
5. Remove the bolts (2) holding the motor to the gearbox.
6. Separate the motor and gearbox. (Inspect coupling bush for wear and retain for re–assembly).
7. Remove the positioning assembly (refer to chapter *Positioning Assembly* in this section).
8. Remove the gearbox by releasing the bolts (3) fixing it to the column base–plate.

At this point each component should be inspected and any damaged components replaced.

NOTE: The gearbox is a 'sealed for life' type and does not require the addition of further oil.

Assembly

1. Fit the gearbox to the column base–plate ensuring that the sprocket is aligned centrally with the column.
2. Fit the motor to the gearbox, ensure the motor terminal box is located on the top side nearest the isolator switch.
3. Refit the wiring to the motor.
4. Fit the chain to the sprocket and adjust the tension as described previously.
5. Refit the positioning assembly (refer to chapter *Positioning Assembly* in this section).
6. Fit the covers and secure all fixings.

Section 6

Troubleshooting

Section 6
Troubleshooting

WARNING: Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.

1. Important Hints for Troubleshooting

The following tables provide general information for the troubleshooting of basic problems. Sometimes more detailed information, circuit diagrams or measuring devices are also needed for troubleshooting.

It must be noted that a fault can occur for several reasons. It is advisable to check all possible causes for a given fault. Obvious causes of malfunction such as broken wires, missing fasteners etc., should be noted during visual inspections and corrected immediately.

The Unit does not contain any user serviceable parts, approved parts available from Nordson must replace any parts that fail.

WARNING: Before commencing any work on the column operate the isolator and disconnect the cable connecting the column to the controller.

2. Troubleshooting

Refer to the appropriate controller manual for troubleshooting details.

Problem	Possible Cause	Corrective Action
Carriage fails to move	Interconnecting cable not fitted	Fit Cable
	Carriage Jammed	Switch off and check for free operation
	Chain broken or off sprockets	Check chain
	Speed set to zero	Adjust speed control
	Reciprocator Limit PCA failed	Replace PCA
Gun Bounce	Gun bars too long	Shorten or brace gun bars
	Reversal too fierce	Consult Nordson

2. Troubleshooting (contd.)

Problem	Possible Cause	Corrective Action
No movement or drives in only one direction	Column potentiometer faulty or incorrectly set	Check reset or replace as necessary
	Drive belt broken	Replace drive belt in column
	Failure of limit circuits	Check operation of circuits manually using door mounted limit controls. Replace Reciprocator Limit PCA
Erratic Motion	Loose Carriage	Check, replace or adjust carriage wheels
	Loose drive sprocket	Check, replace or adjust sprocket
	Slack chain	Adjust chain tension
	Worn gearbox	Check, replace gearbox
	Drive incorrectly set	Refer to Nordson

Section 7

Parts

Section 7
Parts

1. Introduction

To order parts, call the Nordson Customer Service Center or your local Nordson representative. Use the parts list, and the accompanying illustration, to describe and locate parts correctly.

Using the Illustrated Parts List

Numbers in the Item column correspond to numbers that identify parts in illustrations following each parts list. The code NS (not shown) indicates that a listed part is not illustrated. A dash (—) is used when the part number applies to all parts in the illustration.

The number in the Part column is the Nordson Corporation part number. A series of dashes in this column (- - - - - -) means the part cannot be ordered separately.

The Description column gives the part name, as well as its dimensions and other characteristics when appropriate. Indentions show the relationships between assemblies, subassemblies, and parts.

Item	Part	Description	Quantity	Note
—	000 0000	Assembly	1	
1	000 000	• Subassembly	2	A
2	000 000	• • Part	1	

- If you order the assembly, items 1 and 2 will be included.
- If you order item 1, item 2 will be included.
- If you order item 2, you will receive item 2 only.

The number in the Quantity column is the quantity required per unit, assembly, or subassembly. The code AR (As Required) is used if the part number is a bulk item ordered in quantities or if the quantity per assembly depends on the product version or model.

Letters in the Note column refer to notes at the end of each parts list. Notes contain important information about usage and ordering. Special attention should be given to notes.

2. Parts List

Most of the gunmover parts are common to all sizes. Where this is not so it is shown in the following parts list.

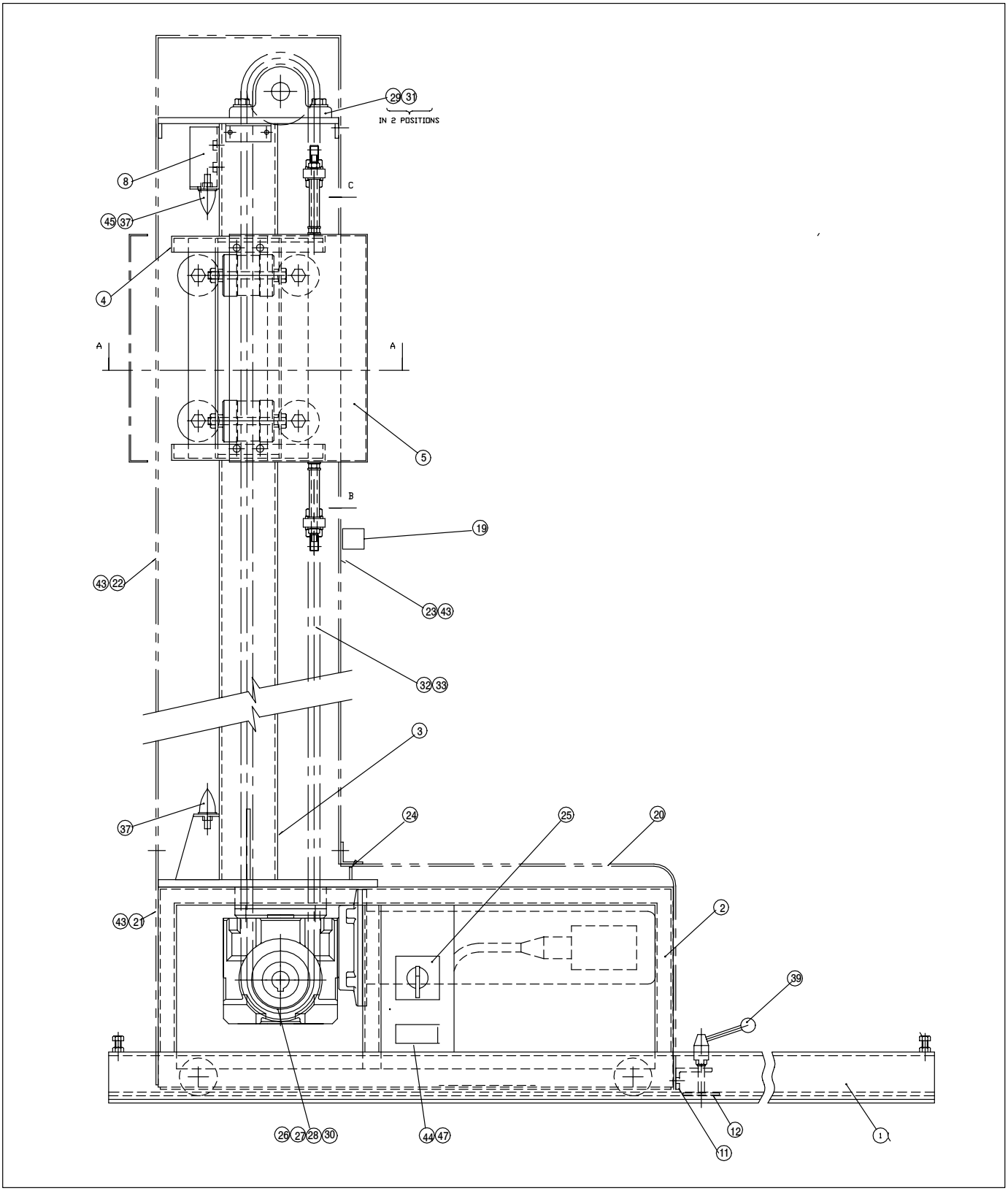


Fig. 7-1 Side Elevation

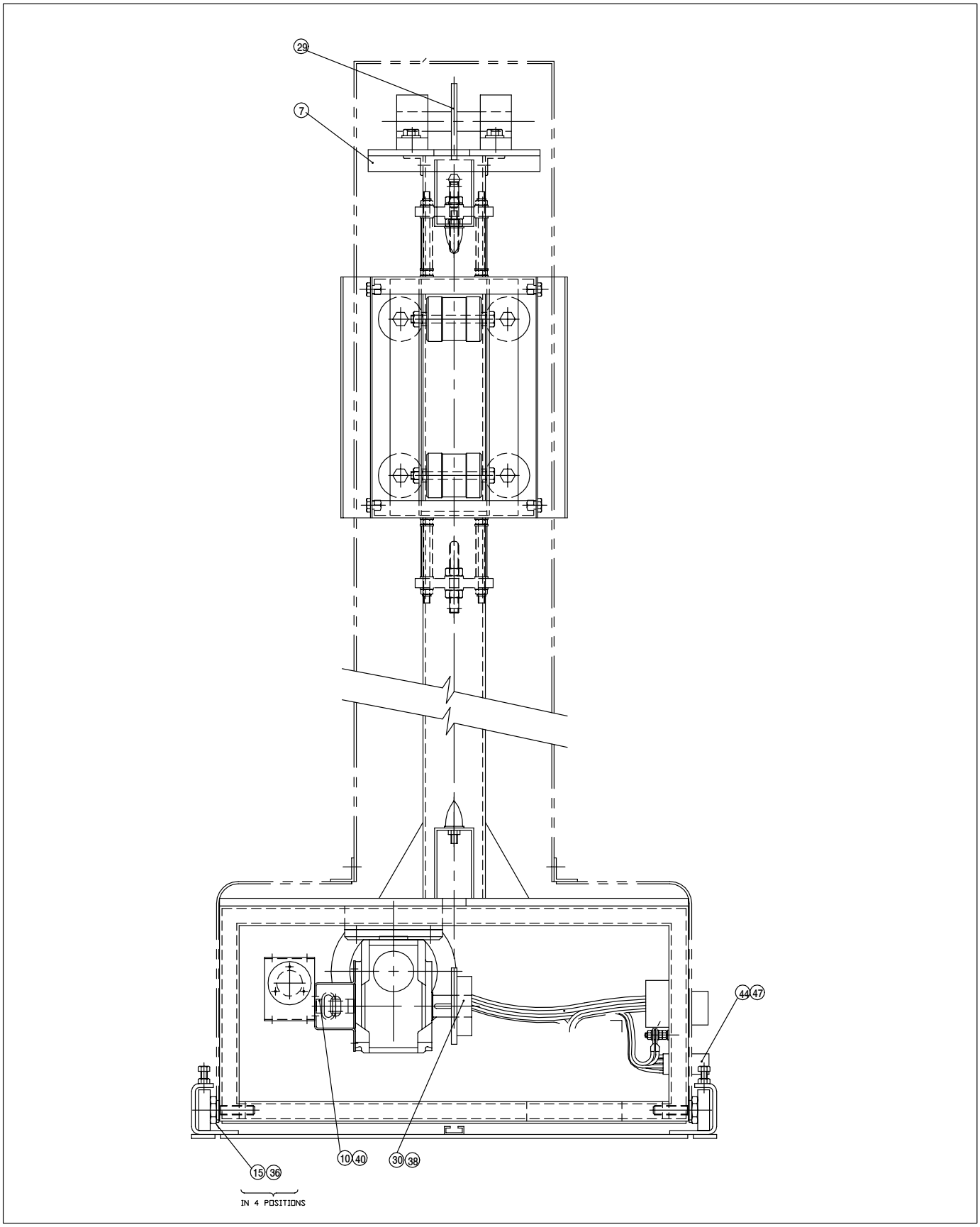
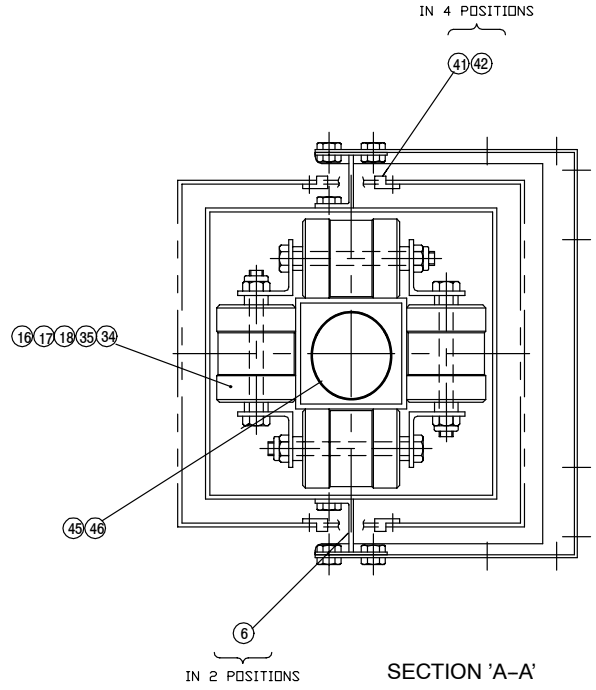
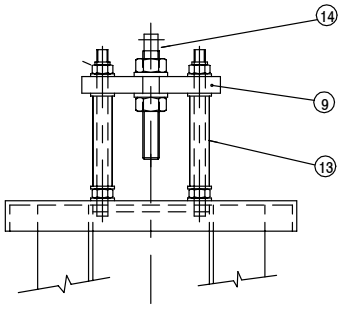


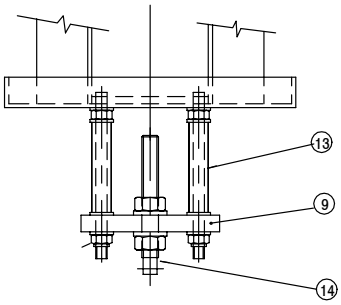
Fig. 7-2 Front Elevation



SECTION 'A–A'



VIEW ON ARROW 'C'



VIEW ON ARROW 'B'

Fig. 7-3 Top Elevation

Item	Part	Description	Quantity	Note
–	766 802	AC Gun mover column 1.0M stroke	1	
–	766 803	AC Gun mover column 1.5M stroke	1	
–	766 804	AC Gun mover column 2.0M stroke	1	
–	766 805	AC Gun mover column 2.5M stroke	1	
1	767 327	• Rails	1	
2	765 001	• Base frame	1	
3	765 002	• Column & Base plate 1.0M	1	A
	765 003	• Column & Base plate 1.5M	1	B
	765 004	• Column & Base plate 2.0M	1	C
	765 005	• Column & Base plate 2.5M	1	D
4	765 006	• Carriage	1	
5	765 026	• Carriage plate	1	
6	765 027	• Carriage mount	2	
7	765 007	• Top plate	1	
8	765 029	• Buffer mount	1	
9	765 028	• Saddle	2	
10	765 160	• Potentiometer Gearbox 2.0/2.5M	1	
	765 161	• Potentiometer Gearbox 1.0/1.5M	1	
11	767 317	• Catch Bracket	1	
12	767 325	• Clamp Plate	1	
13	765 030	• Spacer, Tube, Recip. Carriage	4	
14	765 031	• Draw Bolt (Simplex)	2	
15	767 316	• Wheel Hub	4	
16	767 310	• Roller	8	
17	767 312	• Spacer, Short, Carriage Roller	16	
18	767 311	• Spacer, Long, Carriage Roller	8	
19	767 118	• Hose Support Bar	1	

NOTE A: Used only on gunmover 766 802
B: Used only on gunmover 766 803
C: Used only on gunmover 766 804
D: Used only on gunmover 766 805
AR: As Required
NS: Not Shown

Continued on next page

Item	Part	Description	Quantity	Note
20	765 008	• Base Frame Cover	1	
21	765 009	• Rear Cover	1	
22	765 010	• Front column cover 1.0M	1	
	765 012	• Front column cover 1.5M	1	
	765 014	• Front column cover 2.0M	1	
	765 016	• Front column cover 2.5M	1	
23	765 011	• Rear column cover 1.0M	1	
	765 013	• Rear column cover 1.5M	1	
	765 015	• Rear column cover 2.0M	1	
	765 017	• Rear column cover 2.5M	1	
24	767 203	• Edge Strip	540 mm	
25	765 058	• Isolator Switch	1	
26	765 171	• Gearbox 25:1	1	
27	765 172	• Motor	1	
28	766 814	• Reduction bush 24–19 mm	1	
29	765 000	• Top Sprocket and Shaft (Simplex)	1	
30	766 816	• Bottom Sprocket 23T ∅28 T/Lock Bush (Simplex)	1	
31	765 032	• Pillow block	2	
32	766 930	• Chain set 1.0M (Simplex)	12ft	A
		• Chain set 1.5M (Simplex)	15ft	B
		• Chain set 2.0M (Simplex)	18ft	C
		• Chain set 2.5M (Simplex)	22ft	D
33	765 038	• Connecting link (Simplex)	2	
34	767 313	• Bearing, roller	16	
35	767 314	• Circlip	16	
36	767 315	• Bearing, wheel	4	
37	765 036	• Buffer	2	
38	766 817	• Bush, Taper lock 28mm Bore Keyed 8mm	1	

NOTE A: Used only on gunmover 766 802
B: Used only on gunmover 766 803
C: Used only on gunmover 766 804
D: Used only on gunmover 766 805
AR: As Required
NS: Not Shown

Continued on next page

Item	Part	Description	Quantity	Note
39	767 321	• Tension lever	1	
40	765 054	• Potentiometer	1	
41	765 065	• Slot brush 1.0M	4	A
	765 066	• Slot brush 1.5M	4	B
	765 067	• Slot brush 2.0M	4	C
	765 069	• Slot brush 2.5M	4	D
42	769 502	• M3.5 Rivscrews	AR	
43	769 500	• M6 Clip	10	
44	769 025	• Socket Housing	1	
45	766 845	• Counterbalance Weight	1	
46	766 841	• Counterbalance Wear Sleeve 1.0m	1	
	766 842	• Counterbalance Wear Sleeve 1.5m	1	
	766 843	• Counterbalance Wear Sleeve 2.0m	1	
	766 844	• Counterbalance Wear Sleeve 2.5m	1	
47	769 027	• Connector, Insert, 10 way	1	
NS	767 112	• Carriage clamp	8	
	769 743	• M8 x 60 Hex hd bolt	8	
	984 529	• Speed–nut	3	
	136 418	• Nameplate	1	
	769 922	• Serial plate	2	
	765 056	• Interconnecting Cable 6m	1	

NOTE A: Used only on gunmover 766 802
B: Used only on gunmover 766 803
C: Used only on gunmover 766 804
D: Used only on gunmover 766 805
AR: As Required
NS: Not Shown

Continued on next page

Section 8

Specifications

Section 8
Specifications

1. Mechanical

Height (mm)	2181 (1.0M) 2681 (1.5M) 3181 (2.0M) 3681 (2.5M)
Width (mm)	672
Depth (mm)	705
Weight (kg)	195 (1.0M) 205 (1.5M) 215 (2.0M) 225 (2.5M)

2. Noise

Less than 70 db(A). Measured at a distance of 1m from the surface of the unit and at a height of 1.6 m.

3. Operation

Max Working Load (kg)	40
Traverse speed (m/s)	0 – 0.6
Max ambient temp (˚C)	32
Min stroke length (mm)	500

4. Dimensions

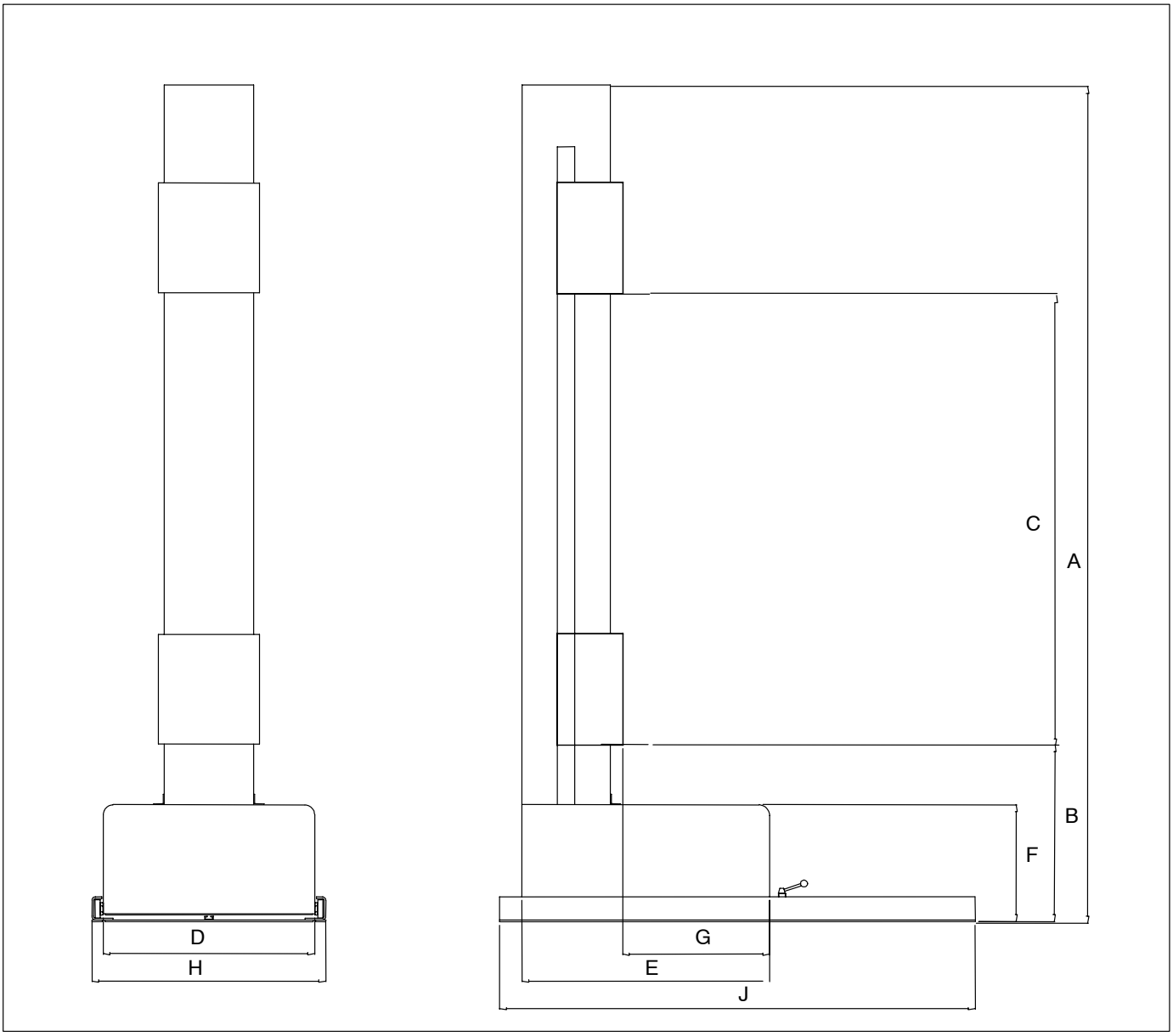


Fig. 8-1

P/N	A	B	C	D	E	F	G	H	J
766 802	2181	455	1150	600	705	328	422	672	1300
766 803	2681	455	1650	600	705	328	422	672	1300
766 804	3181	455	2150	600	705	328	422	672	1300
766 805	3681	455	2650	600	705	328	422	672	1300

5. Electrical Schematic

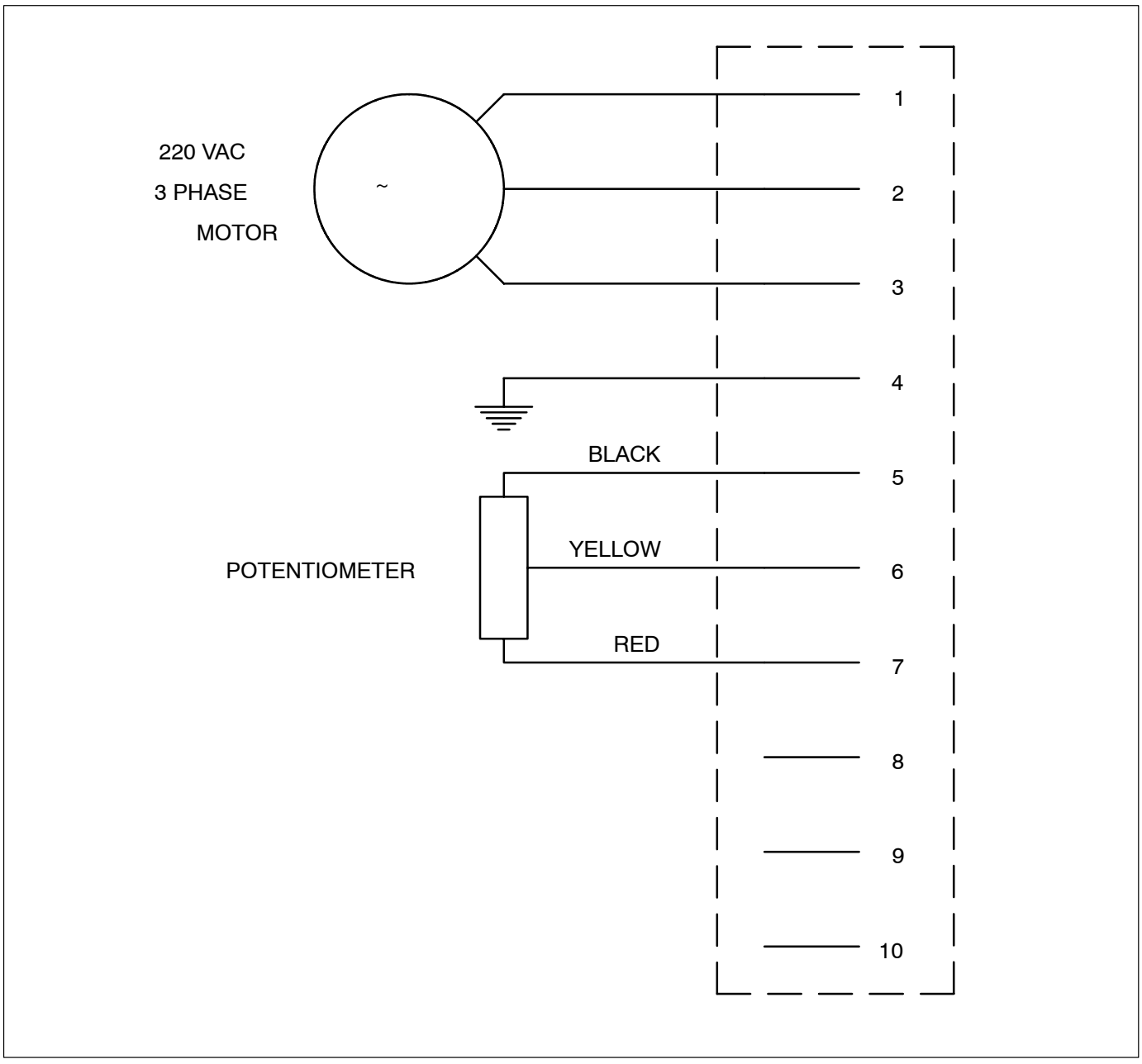


Fig. 8-2