Interstore T, TS & L
Euro & Extendo Series
Elevators

Operation & Maintenance Manual

Make a Note of the Machine serial number in this box for future reference and when ordering replacement parts.

.....

Original Instructions

Please Read and follow all instructions before Operating the Machine

It is the responsibility of the operator to read and understand the contents of this manual before operating the machine for the first time.

The Operators manual must accompany the machine at all times. If the machine is resold the Operators manual must be given with the machine to the new owners.

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Safety Warnings

Identification of Warnings and Danger

All parts of the manual to do with the safety of the operator, or the safe operation of the machine, are marked with the following symbols.

Warning
This symbol identifies that a hazard exists. If proper precautions are not taken, it is highly probable that the operator (or others) could be killed or seriously injured

Caution
This symbol identifies a reminder of safety practices. Failure to observe these safety practices could result in injury to the operator (or others) and possible damage to the machine.

Information
This symbol identifies instructions that make it easier to use the machine effectively and economically

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Introduction

This handbook contains information for the following models :-

Type	Model
Swift Lift 'Interstore'	'T' Elevator
Swift Lift 'Interstore'	'TS' Elevator
Swift Lift 'Interstore'	'L' Elevator
Swift Lift 'Euro'	95X Elevator
Swift Lift 'Euro'	110X Elevator
Swift Lift 'Euro'	125X Elevator
Swift Lift 'Euro'	140X Elevator
Swift Lift 'Euro'	170X Elevator
Swift Lift 'Euro'	200X Elevator
Swift Lift 'Extendo'	900 Elevator
Swift Lift 'Extendo'	Contain-a-vator

The above machines are designed and constructed to convey and elevate cereal and root crops and other suitable materials for storage and transport in agricultural and industrial applications, this is their intended use.

Modifications or alterations to the machines are strictly forbidden , unless with the prior written consent of Terry Johnson Ltd.
Modifications made without consent could affect the safety of the machine and the Operator, and will invalidate the warranty

If the machine is used in any way contrary to its intended use, modified without prior written consent or is incorrectly or recklessly operated and/or maintained , Terry Johnson ltd will not accept any liability whatsoever for damage or injury whether direct or consequential

The methods of operation contained in this handbook must be strictly adhered to.
The content of this handbook whilst correct at the time of publication may be subject to alteration by the company at any time without notice.

Due to the bespoke nature of these machines some illustrations and text may be generalised or differ slightly to the supplied equipment . If in doubt about any instruction contact the manufacturer or your agent for clarification.

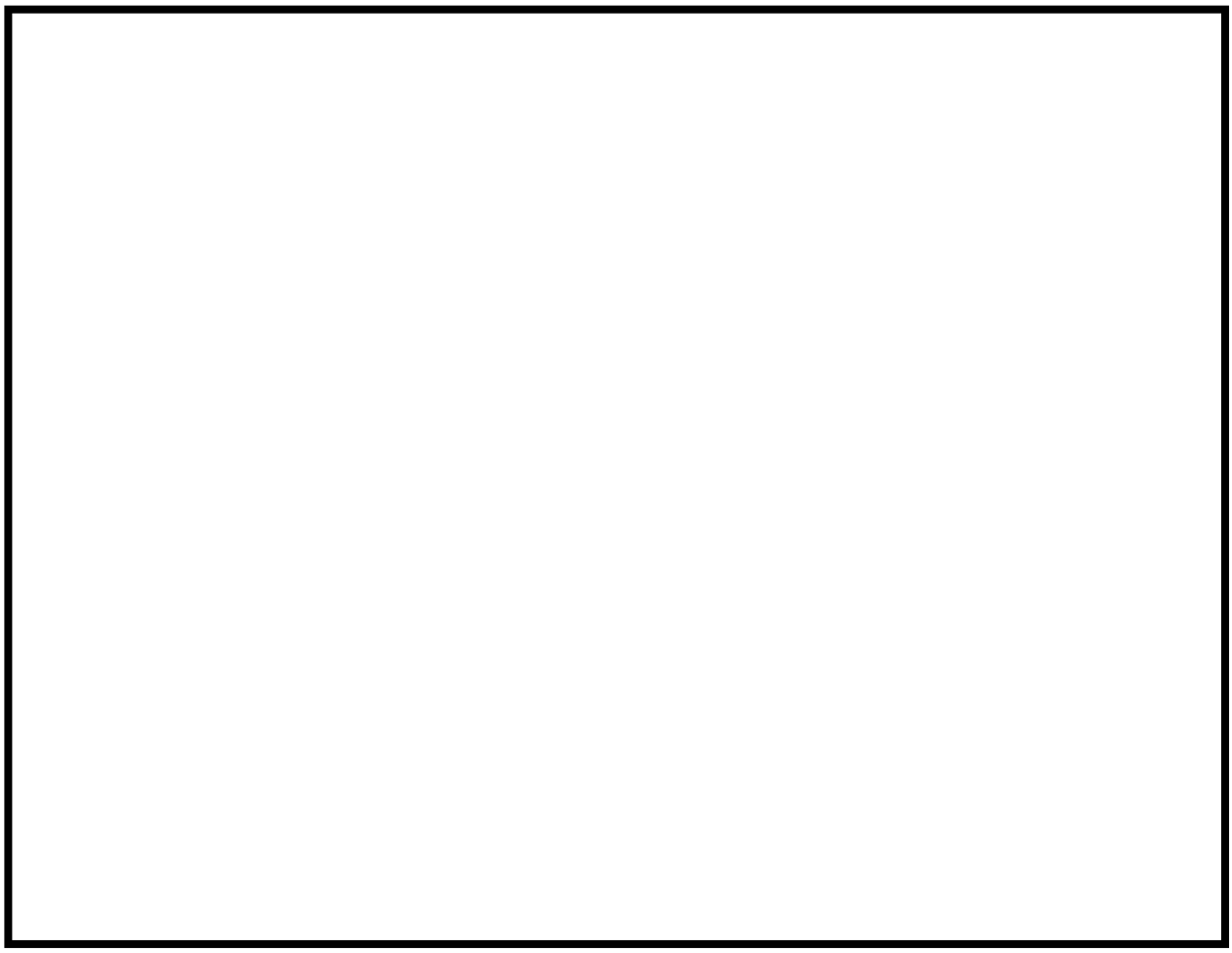
References to Left and Right contained in this handbook are seen as looking from the Lower (Intake) to the Upper (Delivery) end of the Elevator.

Manufacturer

Manufacturers Name :	Terry Johnson Ltd
Manufacturers Address :	Cranmore Lane Holbeach Lincolnshire ENGLAND PE12 7HT

Section 2: 2

Agents Details



Introduction to this Handbook

The contents of this handbook are intended as a guide to the operation & maintenance of the range of mobile elevators in the Terry Johnson Ltd range.

The general principles of operation for all models of these machines are the same . Any individual differences or additional or optional equipment will be identified and referred to separately.

Note : Because of the general nature of bespoke machinery it is inevitable that some photographs and illustrations and the accompanying text may differ slightly to the delivered machine.

This handbook is not a training manual.
It is designed as a guide to the machine's controls and working capacities and general maintenance only. It **must not** be removed from the machine and should be kept clean and in good condition. Additional copies of the handbook can be obtained from your dealer or directly from the manufacturer.

Only trained operators should use this machine. TDJ Ltd strongly recommend that anyone who is responsible for the operation and servicing of this machine be fully trained in its safe operation.
If you have any doubts about any aspects of the machine's capability or servicing procedures, you must consult your dealer.

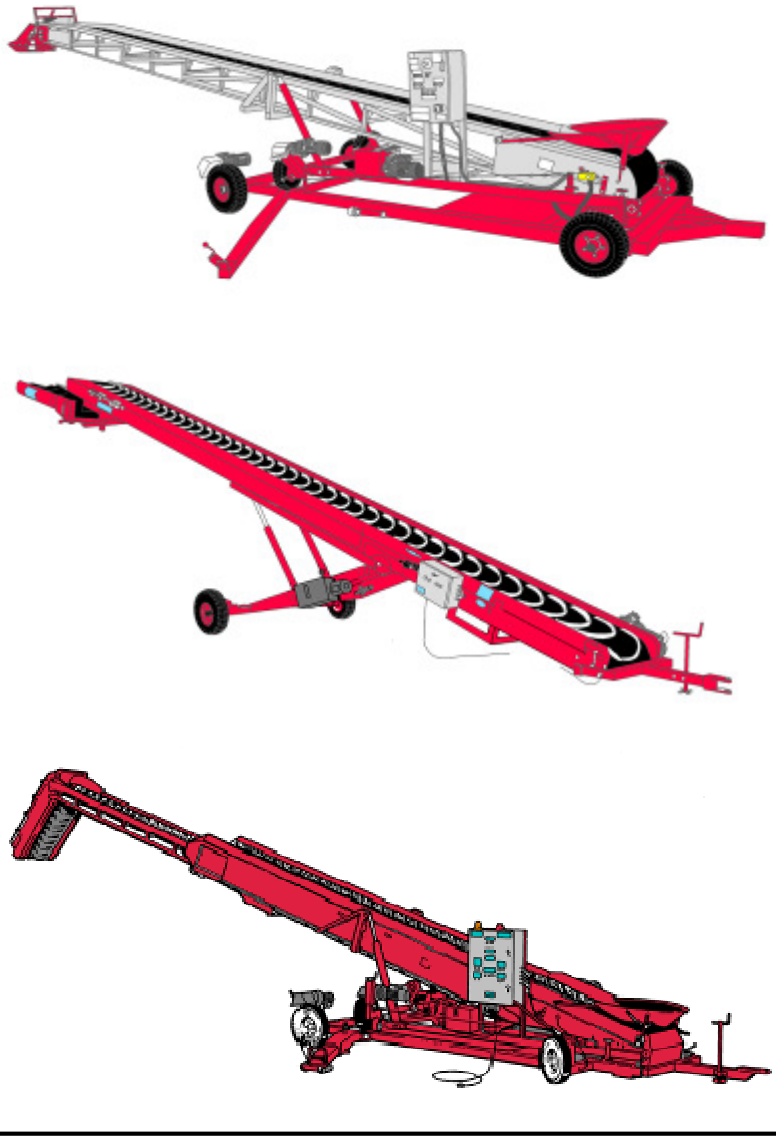
Throughout this handbook and on the machine there are safety notes. Each note starts with a single word or symbol. The meaning of these single words are explained below.

WARNING
Identifies a hazard exists. If proper precautions are not taken, it is highly probable that the operator (or others) could be killed or seriously injured.

CAUTION
Identifies a reminder of safety practices. Failure to observe these safety practices could result in injury to the operator (or others) and possible damage to the machine

In general these notes are used to indicate that the procedures being described in the Handbook must be followed to avoid serious injury or death to yourself or others. The notes are also used to protect the machine from unsafe servicing practices.
These notes do not replace safety codes, insurance requirements & local laws.
Make sure the machine has the correct equipment to comply with local regulations.
Pay particular attention to the safety notes given throughout the handbook.

It is the responsibility of the Operator to fully read all of the handbook & understand it before attempting to operate the machine.

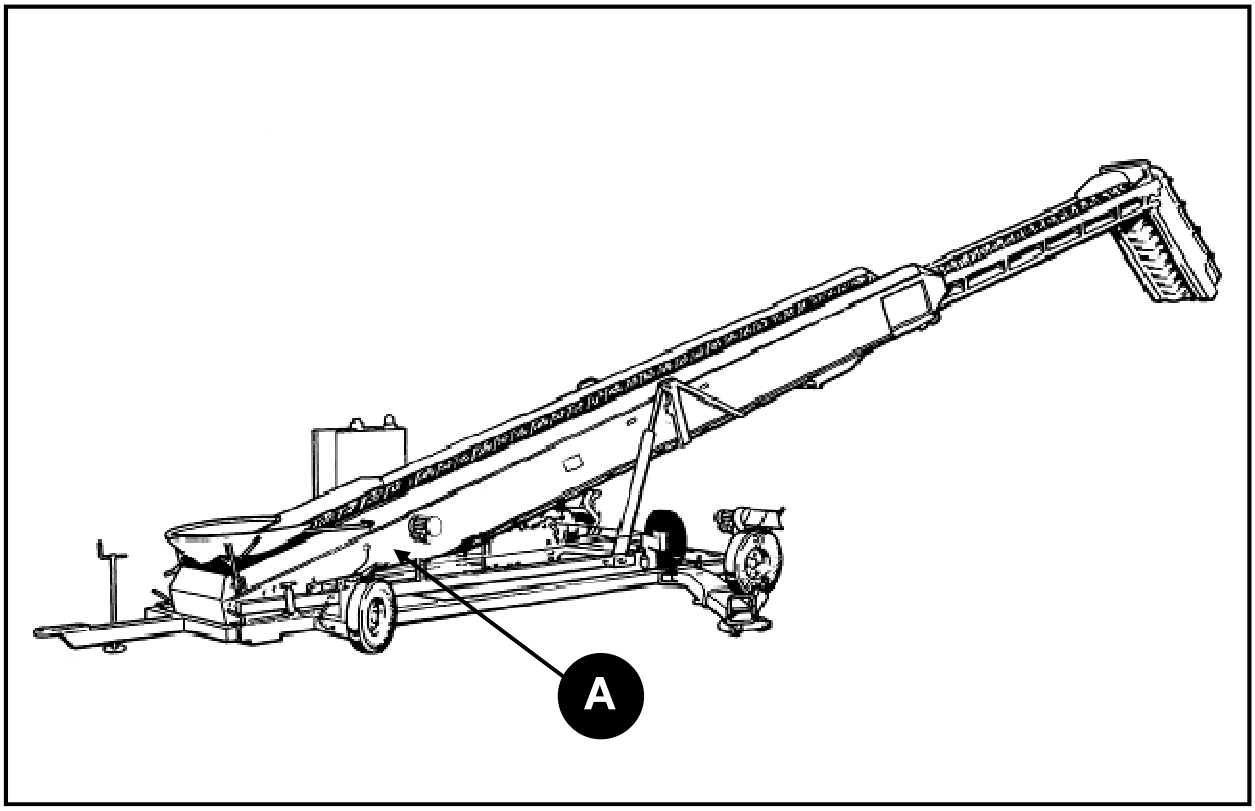


The TDJ Range of Conveyors and Elevators benefit from modern engineering and technology which improves durability and reliability.

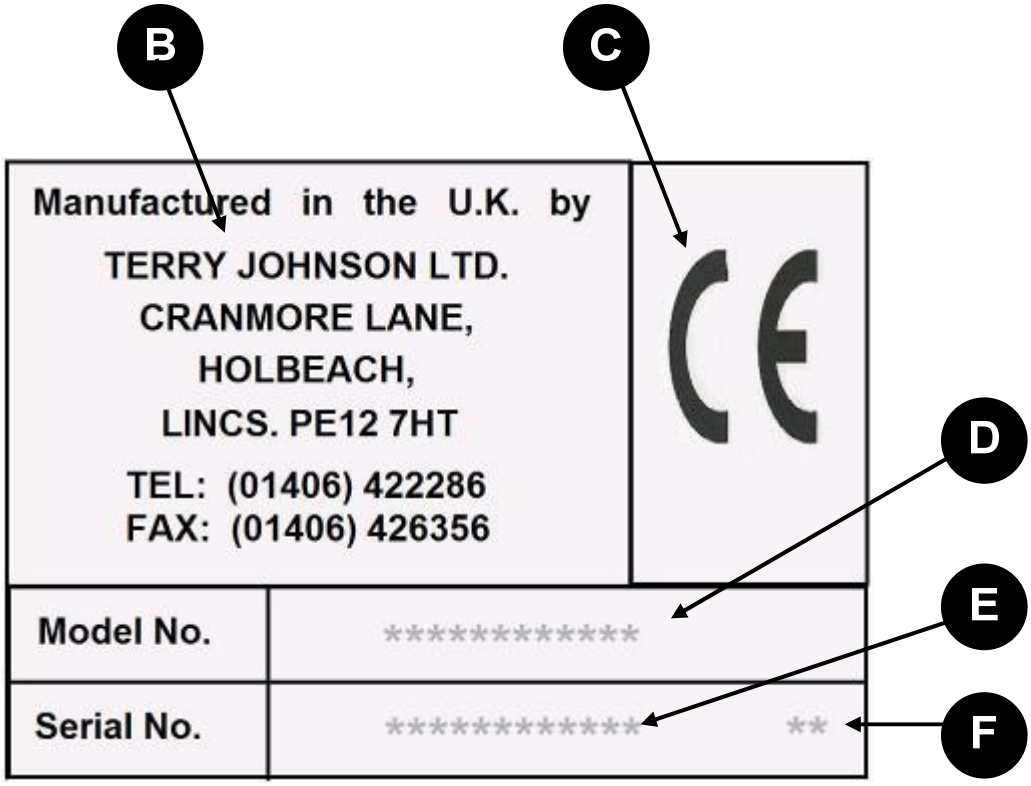
The range consists of fixed and variable length machines with Single and Three Phase electrically driven belts with the options of electric travel and slew functions. The delivery height can be easily set using manual/hydraulic or electro/Hydraulic operation lifting equipment with some models being equipped with a remote control function for the operators ease of use and safety.

Optional equipment is available for example profiled hoppers at the front end and ejection and handling devices to protect the crop at the delivery end.

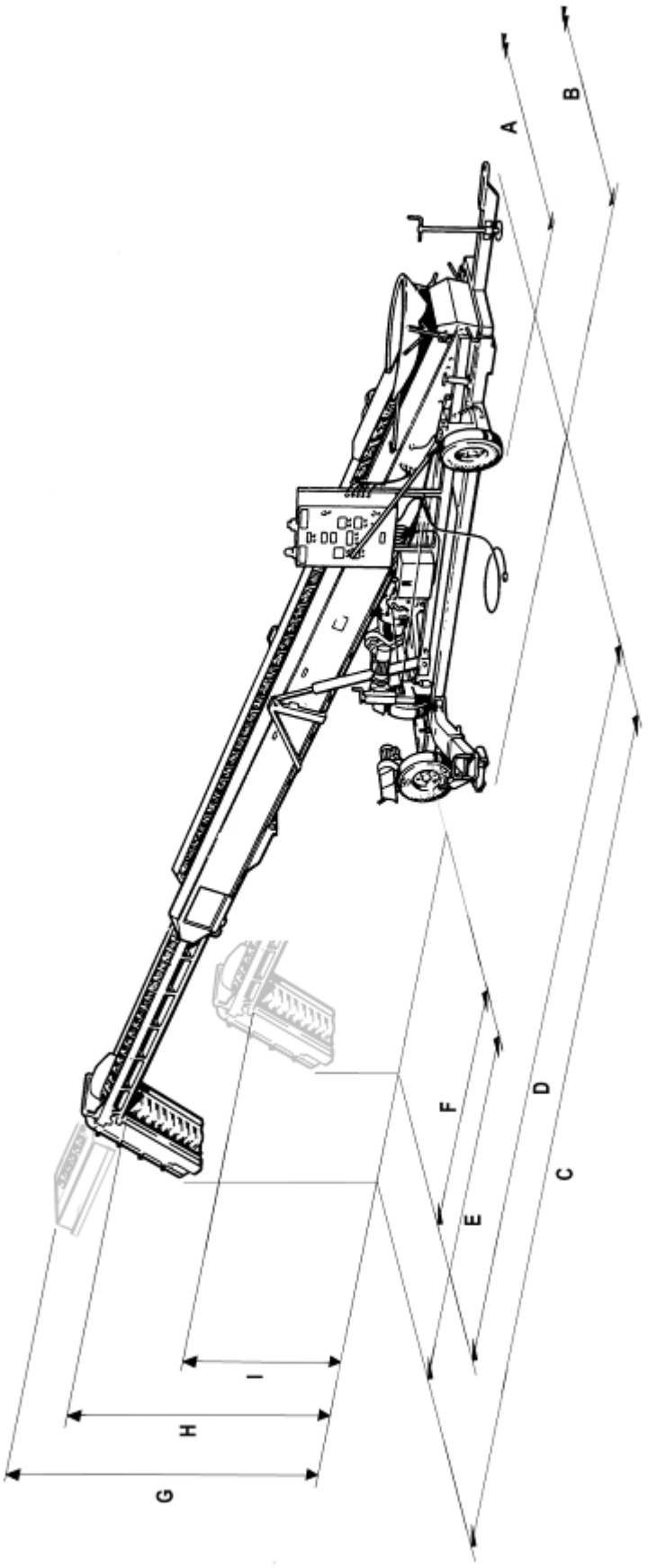
The following pages contain information about identifying your machine and dimensional information for the standard machines , for additional information and details regarding some the optional equipment , refer to the manufacturers sales literature or to your dealer.



The machines identity plate is located in all cases at **[A]** and includes statutory contact information about the manufacturer **[B] ,** The mark for the European certificate of Conformity **[C],** the model number **[D],** the unique identifying number or VIN **[E]** and the build year identifier **[F]**



Ensure that the full Model and Serial numbers are quoted when ordering spare parts.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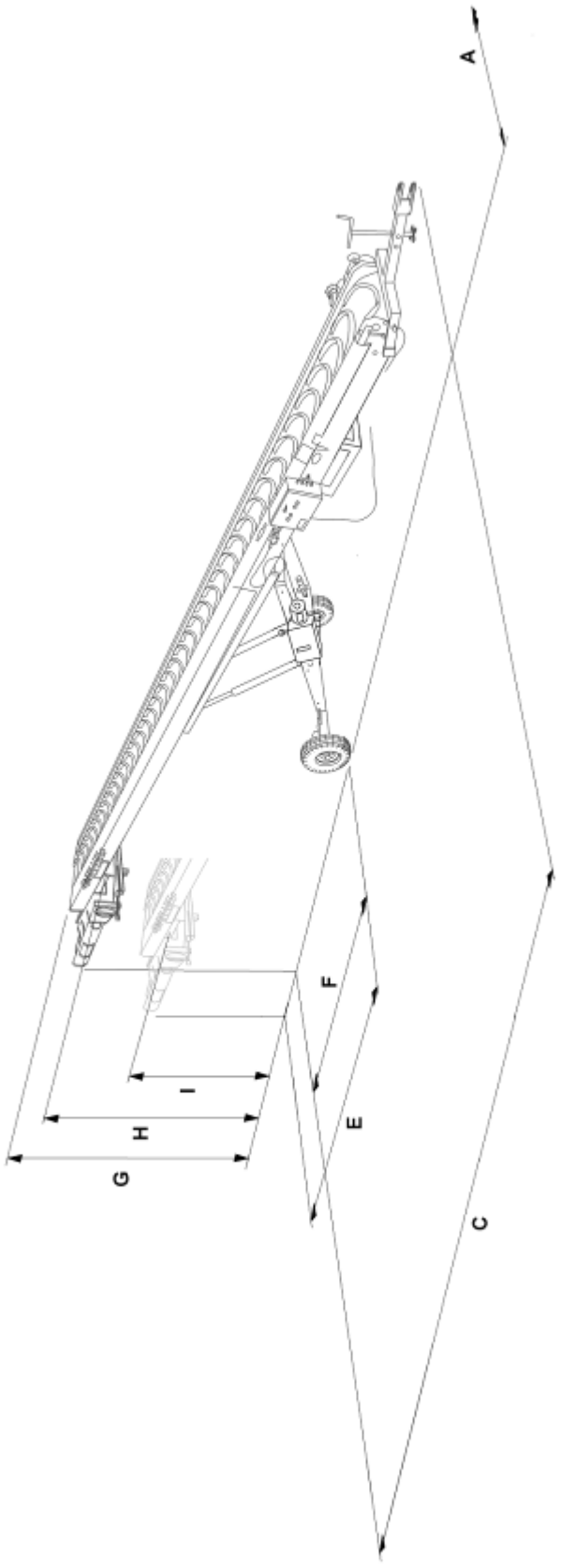
EXTENDO 600 / 900

For additional information & optional equipment refer to the manufacturers sales literature.

Ref	Description	Retracted	Extended
A	Overall Width outriggers	2.48m 8'-1 1/2"	
B	Overall Width outriggers		5.47m 18' - 1"
C	Overall length conveyor		14.9m 48'-10"
D	Overall length conveyor	9.25m 30'- 4"	
E	Reach from axle centre fully raised	4.57m 15' - 0"	8.53m 28' - 0"
F	Reach from axle centre fully lowered	5.47m 18' - 0"	9.85m 32' - 4"
G	Overall Height	4.8m 15' - 9"	6.8m 22' - 2"
H	Height under belt Head raised	4.5m 14' - 9"	6.46m 21' - 2"
I	Height under belt Head lowered	0.3m 1' - 0"	1.0m 3' - 3"
	Reach at 25^0 elevation	4.72m 15' - 6"	8.76m 28' - 9"
	Maximum Slew	11.35m 37' - 3"	16.25m 53' - 4"

EXTENDO CONTAIN-A-VATOR 600

Ref	Description	Retracted	Extended
A	Overall Width outriggers	2.48m 8'-1 1/2"	
B	Overall Width outriggers		5.47m 18' - 1"
C	Overall length conveyor		16.9m 55'-6"
D	Overall length conveyor	11.25m 36'- 10"	
E	Reach from axle centre fully raised	6.8m 22' - 4"	11.4m 37' - 5"
F	Reach from axle centre fully lowered	7.8m 25' - 6"	13.0m 42' - 8"
G	Overall Height	5.92m 19' - 5"	8.1m 26' - 7"
H	Height under belt Head raised	5.62m 18' - 5"	7.8m 25' - 7"
I	Height under belt Head lowered	4.32m 14' - 2"	6.65m 21' - 9"
	Reach at 25^0 elevation	7.4m 24' - 3"	12.3m 40' - 4"
	Maximum Slew	13.1m 43' - 0"	13.1m 43' - 0"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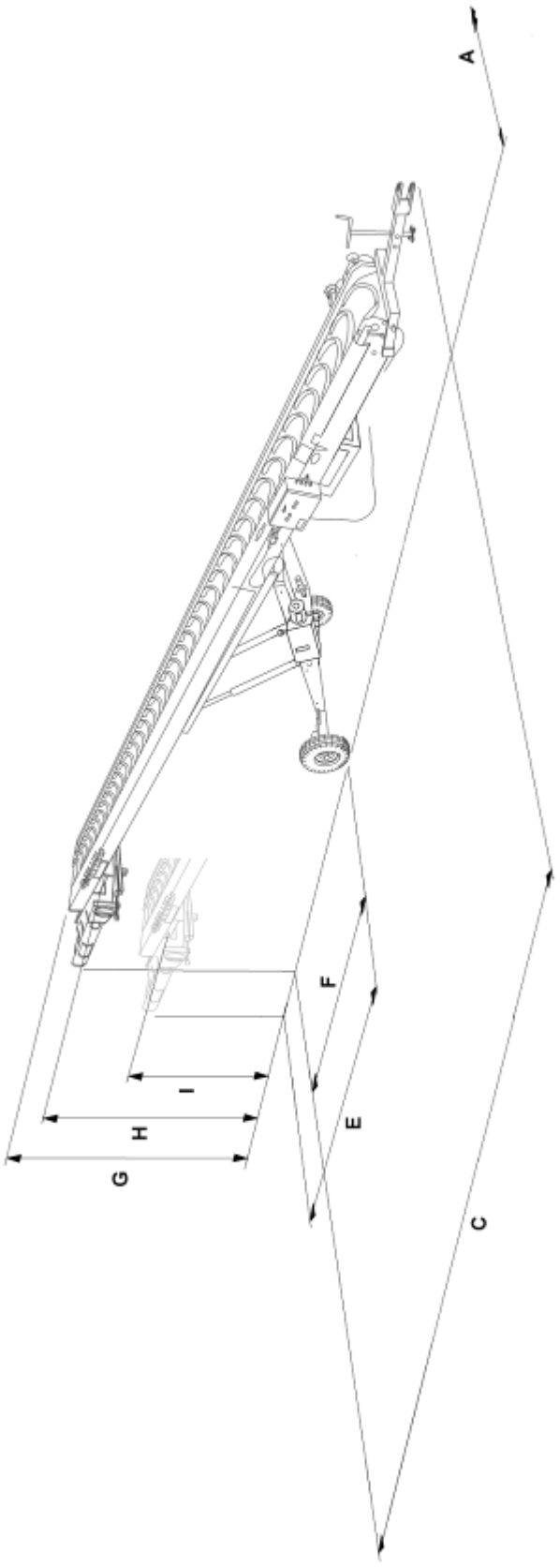
INTERSTORE L

For additional information & optional equipment refer to the manufacturers sales literature.

Ref	Description	45L	60L	75L
A	Overall Width	1.52m 5’ - 0”	1.52m 5’ - 0”	1.52m 5’ - 0”
B	N/A			
C	N/A			
D	Overall length conveyor	4.5m 14’- 9”	6.0m 19’- 8”	7.5m 14’- 9”
E	Reach from axle centre when raised at 25^0	1.88m 6’ - 2”	2.72m 9’ - 11”	3.49m 11’ - 5”
F	Reach from axle centre fully lowered	2.16m 7’ - 1”	3.2m 10’ - 6”	3.88m 12’ - 9”
G	Overall Height			
H	Height under belt Head raised	3.02m 9’ - 11”	3.97m 13’ - 0”	3.97m 13’ - 0”
I	Height under belt Head lowered	0.97m 3’ - 2”	1.02m 3’ - 4”	1.02m 3’ - 4”

INTERSTORE T

Ref	Description	100T	115T	130T
A	Overall Width	2.16m 7’ - 1”	2.16m 7’ - 1”	2.16m 7’ - 1”
B	N/A			
C	N/A			
D	Overall length conveyor	9.0m 29’- 6”	10.5m 34’- 6”	12.0m 39’- 6”
E	Reach from axle centre when raised at 25^0	4.4m 14’ - 7”	5.75m 18’ - 10”	6.65m 21’ - 10”
F	Reach from axle centre fully lowered	5.1m 16’ - 9”	6.6m 21’ - 8”	7.54m 24’ - 9”
G	Overall Height			
H	Height under belt Head raised	5.0m 16’ - 5”	5.82m 19’ - 1”	5.82m 19’ - 1”
I	Height under belt Head lowered	1.0m 3’ - 3”	1.02m 3’ - 4”	0.92m 3’ - 0”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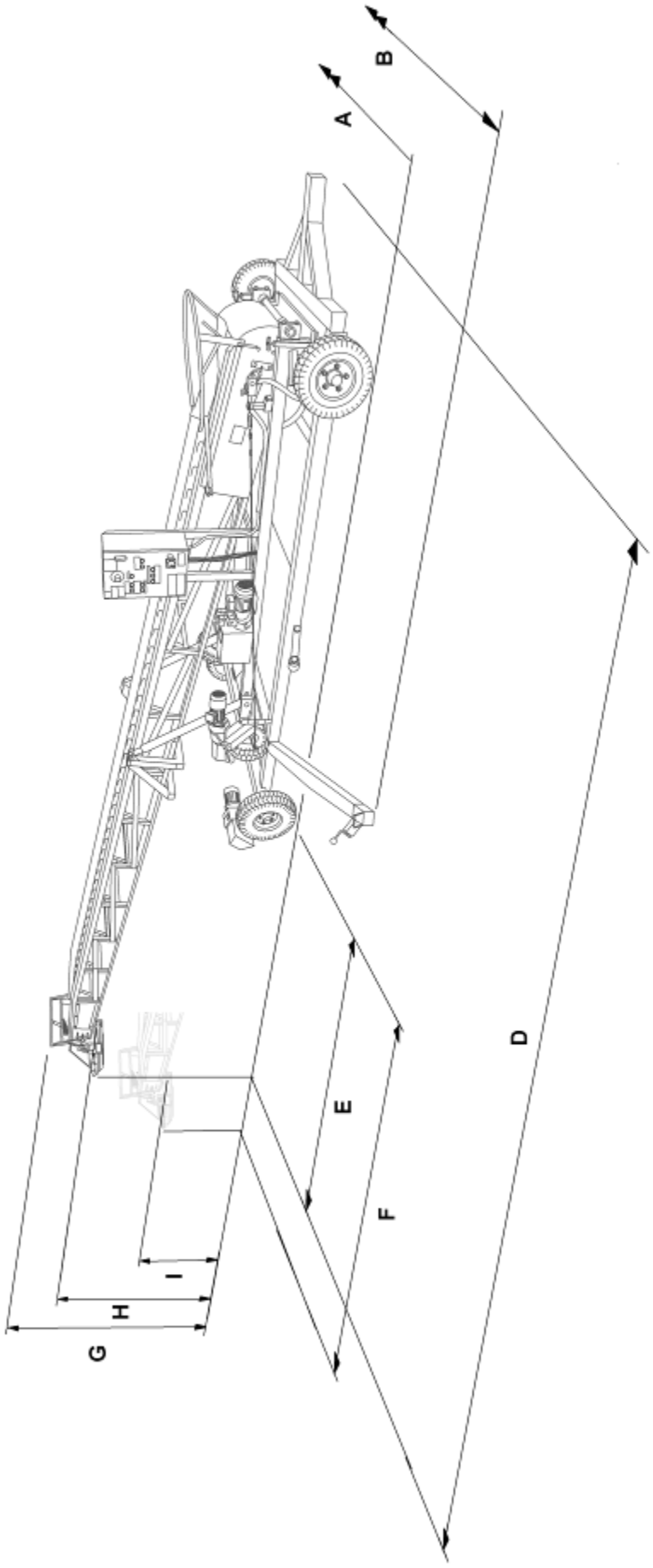
INTERSTORE TS

For additional information & optional equipment refer to the manufacturers sales literature.

Ref	Description	115TS	130TS
A	Overall Width outriggers retracted	2.48m 8'-1 1/2"	2.48m 8'-1 1/2"
B	Overall Width outriggers extended	5.47m 18' - 1''	5.47m 18' - 1''
C	N/A		
D	Overall length conveyor	10.5m 34' - 6''	12.0m 39' - 6''
E	Reach from axle centre when raised at 25^0	5.41m 17' - 9''	6.91m 22' - 8''
F	Reach from axle centre fully lowered	6.36m 20' - 10''	7.86m 25' - 10''
G	N/A		
H	Height under belt Head raised	4.75m 15'- 7''	5.41m 17' - 9''
I	Height under belt Head lowered	1.58m 5' - 2''	1.78m 5' - 10''
	Maximum Slew	12.34m 40' - 6''	14.0m 46' - 0''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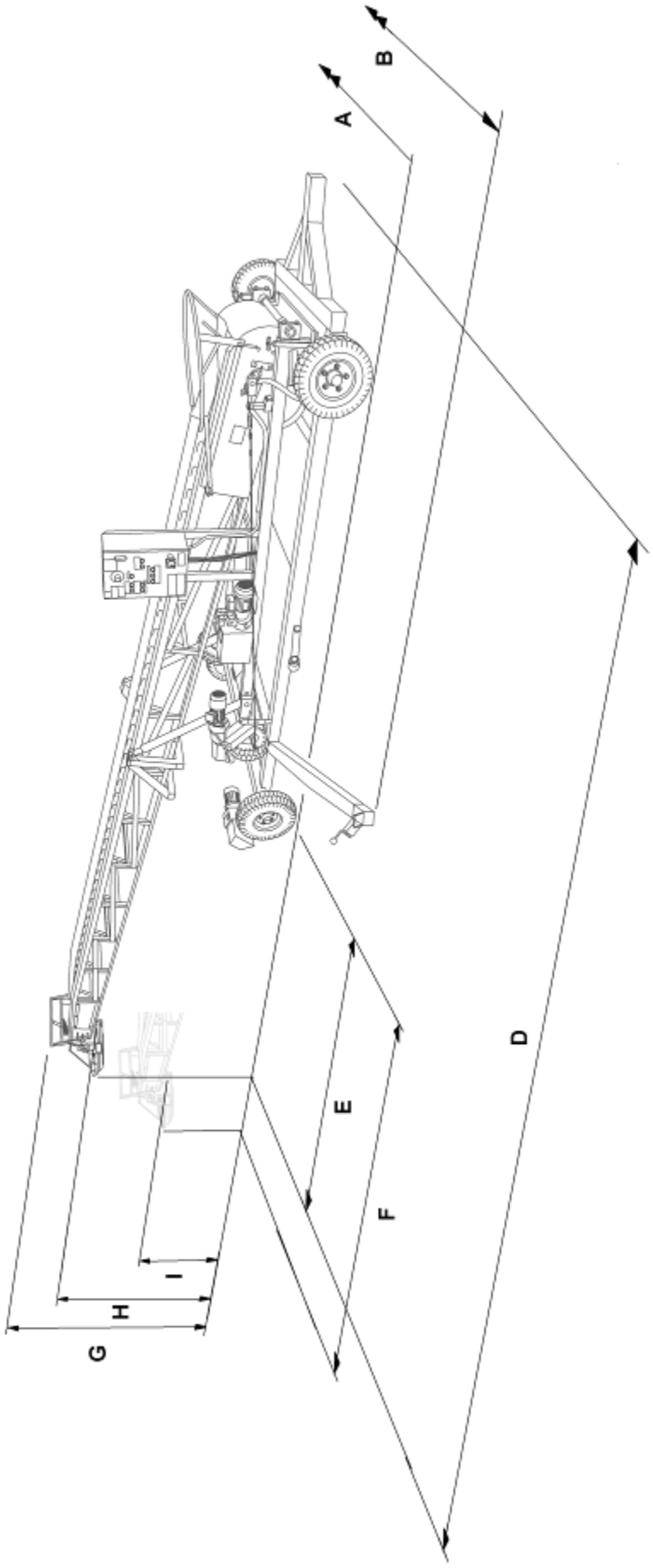
EURO X

For additional information & optional equipment refer to the manufacturers sales literature.

Ref	Description	95X	110X
A	Overall Width outriggers retracted	2.48m 8'-1 1/2"	2.48m 8'-1 1/2"
B	Overall Width outriggers extended	5.47m 18' - 1''	5.47m 18' - 1''
C	N/A		
D	Overall length conveyor	8.57m 28' - 1-1/2''	10.07m 33' - 0-1/2''
E	Reach from axle centre when raised	3.73m 12' - 3''	4.98m 16' - 4''
F	Reach from axle centre fully lowered	4.8m 15' - 9''	5.72m 18' - 9-1/2''
G	N/A		
H	Height under belt Head raised	5.1m 16' - 9''	5.15m 16' - 11''
I	Height under belt Head lowered	1.42m 4' - 8''	1.4m 4' - 7''
	Maximum Slew	8.6m 28' - 3''	10.0m 32' - 10''

EURO X

Ref	Description	125X	140X
A	Overall Width outriggers retracted	2.48m 8'-1 1/2"	2.48m 8'-1 1/2"
B	Overall Width outriggers extended	5.47m 18' - 1''	5.47m 18' - 1''
C	N/A		
D	Overall length conveyor	11.57m 37' - 11''	13.07m 42 - 10-1/2''
E	Reach from axle centre when raised	6.3m 20' - 8''	7.63m 25' - 0-1/2''
F	Reach from axle centre fully lowered	7.2m 23' - 7-1/2''	8.7m 28' - 6-1/2''
G	N/A		
H	Height under belt Head raised	5.87m 19' - 3''	6.5m 21' - 4''
I	Height under belt Head lowered	1.58m 5' - 2''	1.68m 5' - 6''
	Maximum Slew	8.6m 28' - 3''	10.0m 32' - 10''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EURO X

For additional information & optional equipment refer to the manufacturers sales literature.

Ref	Description	170X	200X
A	Overall Width outriggers retracted	N/A	N/A
B	Overall Width outriggers extended	N/A	N/A
C	N/A		
D	Overall length conveyor	16.0m 52'-6"	19.0m 62'-6"
E	Reach from axle centre when raised	9.0m 9' - 6"	12.0m 40'-0"
F	Reach from axle centre fully lowered	N/A	N/A
G	N/A	N/A	N/A
H	Height under belt when raised	N/A	N/A
I	Height under belt when lowered	N/A	N/A

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SAFETY MESSAGES

General

Specific safety messages, in the form of signs or labels, are displayed at various locations on the machine and as close as possible to hazardous areas. The information displayed on each safety sign or label is intended to warn of possible hazards to the machine operator, personnel or equipment. Any personnel involved in the operation or maintenance of this machine should be aware of the location and content of all safety signs and labels.

Safety signs and labels must be kept in a clean and legible condition. The following also applies:

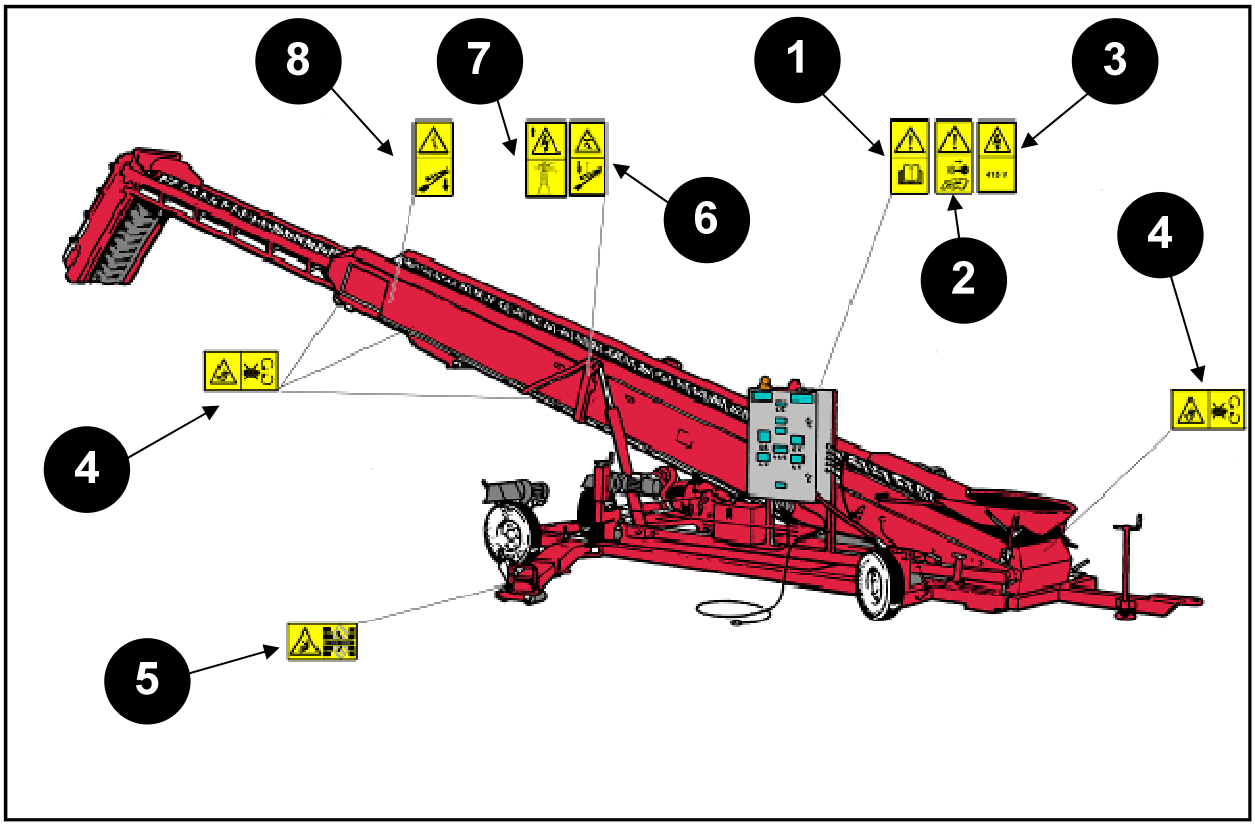
When cleaning a safety sign or label, do not use any solvent, fuel or other harsh chemicals. Use of these will loosen the adhesives that attach the signs or labels to the machine.

Replace any safety sign or label that is damaged or is not legible and cannot be cleaned.

Install a replacement safety sign or label for any that are missing.

NOTE : Replacement safety signs or labels can be obtained from your dealer or the manufacturer.

Parts or components, with a safety sign or label attached, may be replaced. In this case, a replacement safety sign or label must be attached to the part or component that has been installed.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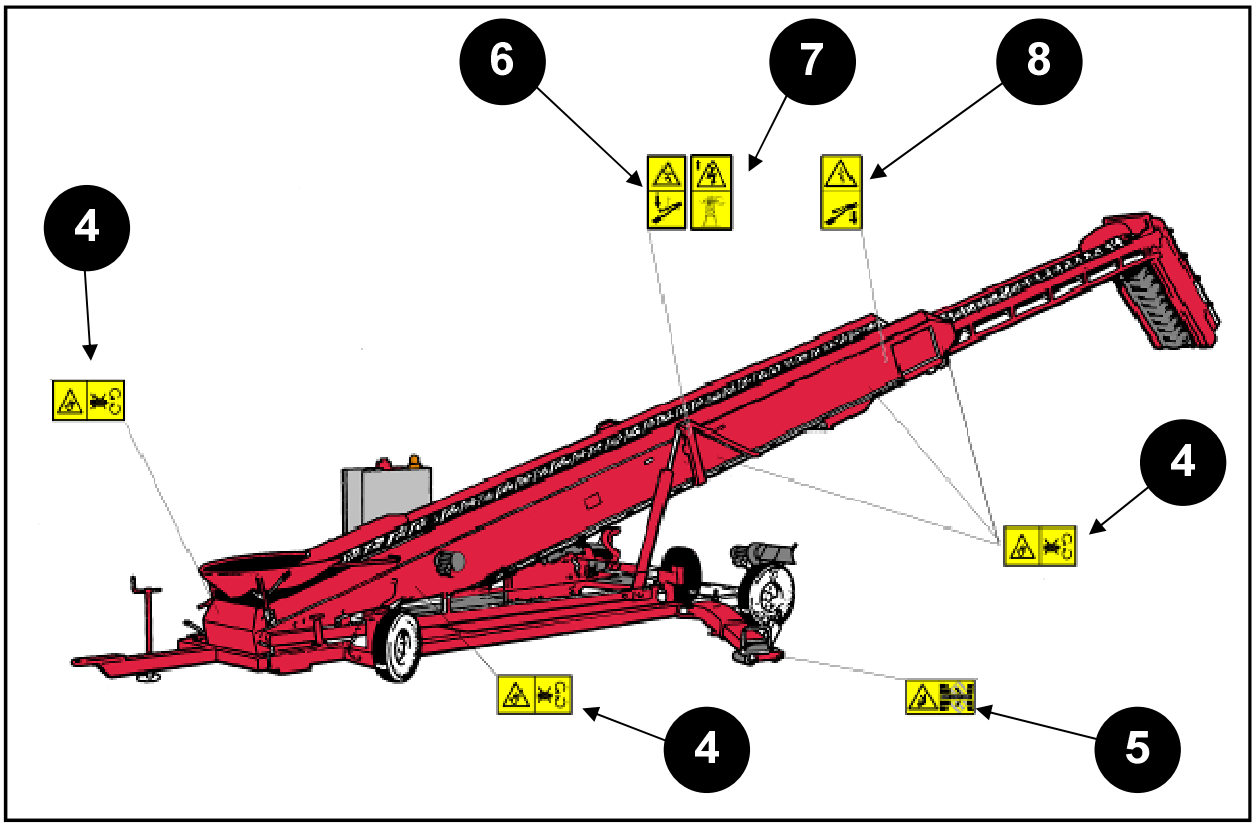
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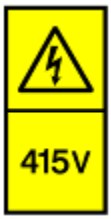
1

Refer to Operation and Maintenance Manual

2

Isolate the machine before removing panels and undertaking maintenance work

3 

High Voltage - Warns operators of electric shock hazards

4

Rotating Parts - Warns the operator of rotating parts during operation & maintenance

5

Slew Crush Area - Warns the operator of movement of the machine when slewing

6

Crush Area - Warns the operator of movement of the machine when raising & lowering

7

Overhead Live cables - Warns the operator to beware when operating in close proximity to electricity cables

8

Falling Objects - Warns the operator of the danger of falling objects when working beneath the elevator. Use suitable head protection

General Hazards

Introduction

Further warnings or cautions for hazards that may be present when operating the machine, or during maintenance of the machine, are detailed at:

Section 5 - Controls

Section 6 - Before Operation

The following Warnings and Cautions are of a general nature and are not task specific.
All personnel operating or maintaining this machine must be fully aware of these warnings.

General

WARNING

Make sure the location of high voltage power lines and buried power cables are known. Serious injury or death, by electrocution, can occur if the machine contacts these hazards.

WARNING

Do not wear loose clothing or Jewellery, which can snag on the controls or machine structure, causing personal injury.

WARNING

Make sure that all protective guards and covers are secured in place on the machine. If guards and covers are removed, a hazard to personnel will exist.

WARNING

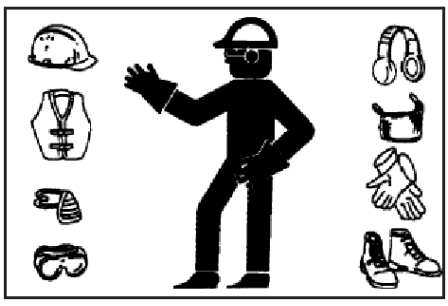
Make sure that all foreign objects and materials, such as oil, tools, debris and other items, are kept clear from equipment, walkways and steps on the machine. Failure to do this can cause personal injury.

WARNING

Make sure that all loose items, such as tools, lunch boxes and other items, which are not part of the equipment, are secured correctly before operating the machine. Failure to do this can cause personal injury.

WARNING

Always wear the correct protective equipment, including a hard hat and protective glasses, as required.



CAUTION

Machine operators must be aware of the correct hand signals and those personnel authorised to give them.

CAUTION

Operators must accept hand signals only from a single and authorised person.

CAUTION

Make sure that all fluids used during maintenance of the machine are stored in the correct containers.

CAUTION

Never store these fluids in other types, such as glass containers.

CAUTION

Make sure that all fluids are disposed of correctly and in accordance with Local Health and Safety Regulations.

CAUTION

Make sure that all cleaning fluids are used with care and that any necessary repairs are reported immediately.

CAUTION

*Unauthorised personnel must **not** be permitted to operate or maintain this machine.*

CAUTION

Make sure the size of the machine, including any load, is known. This will ensure a correct and safe clearance is maintained, when operating the machine in confined spaces or near obstacles.

General Hazards

Pressurised air and water

WARNING

If released, air or water in pressurised machine systems can cause debris or hot water to be ejected. This can cause personal injury. Care must be taken when working on pressurised machine systems.

WARNING

Operators using pressurized air or water for cleaning purposes must wear the correct protective equipment. This includes protective clothing, shoes/ boots and goggles or face shield.

WARNING

Operators using pressurised air or water for cleaning purposes must not exceed the following maximum operating pressures:

Air - 205 kPa (30 psi)
Water - 275 kPa (40 psi).

Residual hydraulic pressure

WARNING

Refer to the Service Manual before releasing hydraulic pressure. Non-operating hydraulic systems can retain residual hydraulic pressure. If released, this residual pressure can cause:

Sudden movement of the machine or machine attachments.

Disconnected hoses to whip.

Hydraulic fluid to be sprayed, causing a personal hazard through direct contact or ingestion.

.

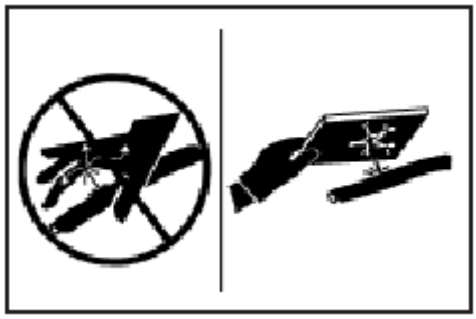
Fluid penetration

WARNING

Residual hydraulic pressure must be released before any hydraulic maintenance, disconnection or component removal is done. Refer to the Service Manual before releasing hydraulic pressure. Non-operating hydraulic systems can retain residual hydraulic pressure. If not released correctly, personal injury can occur.

WARNING

Leaking fluid, even from a pin hole leak, can penetrate the skin, causing serious injury or death. Always use cardboard or a board to check fluid leaks. If fluid penetration of the skin occurs, you must seek medical help immediately, preferably from experienced medical staff.



Fluid spillage

WARNING

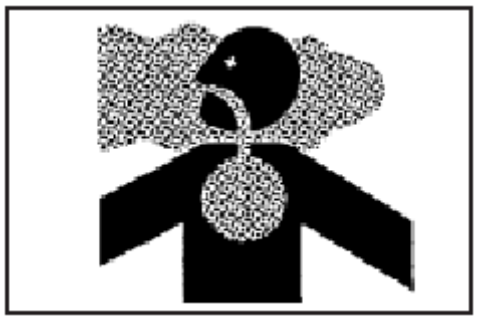
Care must be taken to avoid fluid spillage during machine maintenance, testing, adjusting and repair. Before any possible fluid spillage can occur, a suit able container must be positioned to collect the fluid.

General Hazards

Disposal of waste material

WARNING

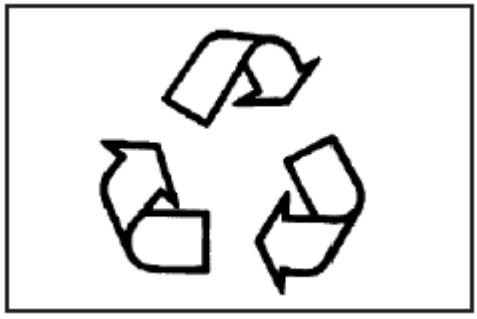
The disposal of waste materials, including potentially harmful fluids, must be in accordance with local Health and Safety Regulations.
Improper disposal procedures can be harmful to personnel and the environment.
Always use the correct and leak proof type of container for the storage of waste fluids.
Do not dispose of these fluids by pouring onto the ground, into water sources or into drains. Improper disposal procedures can be harmful to personnel and the environment.



Asbestos hazards

WARNING

Contact with asbestos must be avoided, particularly inhalation of airborne dust,which can cause serious Injury or death.
If it becomes necessary to come into contact with asbestos, you must use the guidelines that follow:
Avoid creating dust if handling debris or components that may contain asbestos, such as brake pads and bands, liner material, clutch plates and some gaskets.
Never use compressed air for cleaning purposes.
Avoid machining or brushing materials that may contain asbestos.
Before disposal, use a wet, damping down method to concentrate material dust and debris.
If possible, a vacuum cleaner fitted with a high particle air filter (HEPA), should be used to collect debris and dust.
Use exhaust ventilation on permanent machining work.
Wear an approved respirator if there is no other way to control any dust produced.
Always comply with the applicable environmental regulations for the disposal of asbestos.
Stay away from areas that may contain airborne asbestos particles.
Always comply with the applicable rules and regulations for the work place.
Use genuine Terry Johnson Ltd, Components and parts, which are supplied asbestos free.



General Hazards

Crushing or cutting prevention

Support equipment correctly before you do any work or maintenance from beneath that equipment.

Unless instructed otherwise, never attempt to do adjustments whilst the machine is moving or the engine or other power source is running.

Clearances in machine control linkages will change with control operation or machine movement. Always keep clear of controls or areas that may experience clearance changes.

Always keep clear of rotating or moving parts of the machine. Always re-install any guard or cover that has temporarily removed.

When handling cables, always wear protective gloves. Never use kinked or frayed cables.

Striking any object can cause debris chips to fly off, causing personal injury. Always wear protective glasses/goggles before striking an object and make sure that the area is clear of other personnel.

If a retaining pin is struck with force, it may be ejected and cause personal injury. Always wear protective glasses/ goggles before striking a retaining pin and make sure that the area is clear of other personnel.

Burn prevention

Some components will get hot during operation, causing a potential burn hazard to personnel. Before you do any maintenance on these parts, you must:

Always allow these parts to fully cool before you do any maintenance work.

Always release residual pressure in the air, hydraulic and lubrication systems and associated pipe lines/hoses, before you do any maintenance work.

Hot fluids and surfaces can cause personal injury. Avoid direct contact with hot fluid or surfaces.

Fire and Explosion prevention

If a Fire extinguisher is fitted , make sure It is available and in a fully charged and serviceable condition.

Make sure you are fully aware of the operating instructions for the fire extinguisher.

Inspect and service the fire extinguisher at regular intervals or in accordance with the manufacturers instructions.

All fuels, most lubricants and some coolant mixtures are flammable and if leaking onto a hot surface or electrical components, can create a fire. Fire can cause severe personal injury or death.

Do not operate the machine close a naked flame or heat source.

Always clean pipes and thoroughly with a non-flammable solvent first.

Examine all electrical wires daily and check and tighten all electrical connections. If necessary, repair loose or frayed wires before you operate the machine.

Dust produced from repairs to Non-metallic components, such as hoods or fenders, can be flammable. Always repair such components in a well ventilated area, away from naked flame and heat sources.

Leaking pipes and hoses can cause a fire. Examine all pipes, hoses and associated supports for wear, deterioration and damage and ensure hat pipe and hose clamps are secure. Make sure pipe and hose connections are correctly torqued.

Remove all flammable materials such as fuel, oil and debris from the machine. Do not allow the accumulation of flammable materials on or around the machine.

Always store fuels and lubricants in the correct and properly marked containers and away from unauthorised personnel.

General Hazards

Fire and Explosion prevention (contd)

WARNING

Always store soiled oily rags and other flammable materials in protective containers.

WARNING

Do not smoke in areas that are used for the storage of flammable materials.

WARNING

Do not operate the machine close to naked flames.

WARNING

Make sure that heat shields, installed to prevent fluids or fluid spray from igniting, are fitted correctly.

WARNING

Do not weld or flame cut any pipes or tanks that contain flammable fluids or gases. Always clean such pipes and tanks thoroughly with a non-flammable solvent first.

Pipes, tubes and hoses

WARNING

Leaks from loose or damaged pipes, tubes or hoses can cause a system failure or a fire. Examine pipes, tubes and hoses regularly, particularly for signs of damage, leaks or being loose.

WARNING

Never use bare hands to check for leaks from pipes, tubes or hoses.
Always use cardboard or a board and if necessary, torque connections to the recommended value.

CAUTION

Do not bend or strike high pressure pipes or install a bent or damaged high pressure pipe.

CAUTION

You must replace any pipe, tube or hose if:
End fittings are damaged or leaking.
Outer coverings are chafed or cut.
Wires are exposed.
Outer covering is blistered or ballooning.
Flexible portion of a hose is kinked.
Outer covers have embedded armouring.
End fittings are damaged or displaced.

CAUTION

Clamps, guards and heat shields are installed to prevent vibration, contact between components and excessive heat. Make sure that all clamps, guards and heat shields are installed correctly.

Tyre hazards

WARNING

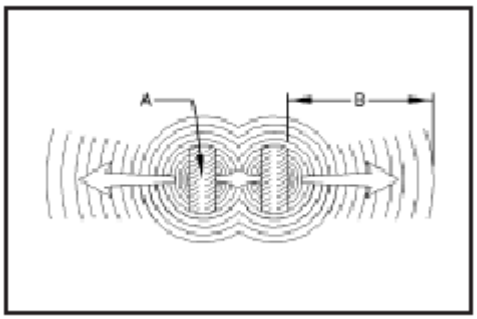
An air inflated tyre can expand and explode if excessive heat is applied through welding, heating rim compo nents, external fire or excessive use of the brakes. An exploding tyre can eject axle and wheel debris 500 m (1500 ft) or more from the vehicle, causing damage and possibly personal injury or death. All personnel must be aware of the hazards of overheating tyres.

WARNING

An over-inflated tyre can blow out or cause a rim failure. This can cause damage or personal injury. Inflation of tyres must only be done by trained personnel.

WARNING

When you inflate a tyre, you must stand behind the tyre tread and use a self-attaching inflator.



WARNING

Do not approach a warm or hot tyre. Keep the minimum distances away from the tyre and stay outside the shaded areas (refer to illustration above).

WARNING

Maintenance on tyres and rims can be hazardous. The use of incorrect procedures can result in a tyre exploding. An exploding tyre can eject axle and wheel debris 500 m (1500 ft) or more from the vehicle, causing damage and possibly personal injury or death. Maintenance on tyres and rims must be done only by trained personnel, using the correct tools and procedures. The tyre dealer or manufacturers instructions must be followed.

General Hazards

Mounting and dismounting

WARNING

You must never attempt to mount, dismount or jump from a machine that is moving.

WARNING

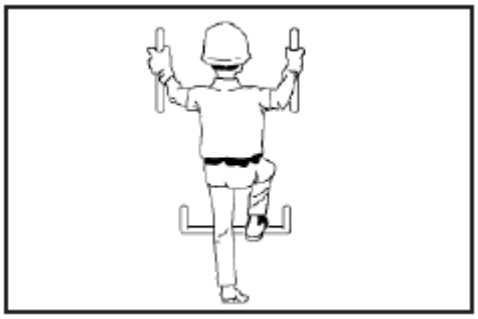
Always mount or dismount the machine at the recognised locations, which have steps and/or hand holds.
Make sure the steps and/or hand hold are clean and examined regularly.
Make any necessary repairs.

CAUTION

When you mount or dismount the machine, always keep a three -point contact with the steps and hand holds.
Three-point contact can be two feet/one hand or two hands/one foot.

CAUTION

When you mount or dismount the machine, always face the machine and never attempt to carry tools or supplies.
Tools and supplies should be raised or lowered from the machine using a hand line or other suitable method.



Before operating the machine

CAUTION

This machine must be operated only by correctly trained and authorised personnel. Certain local operating conditions may require the machine operator to obtain an operators licence or a certificate.

CAUTION

The machine operator must be fully aware of the machines capabilities and limitations. The operator must also be familiar with the local working area or site and in particular:

CAUTION

Check the area for vertical and horizontal clearances.
Check for overhead obstructions.
Check for electrical power lines and make sure the machine keeps at least 8 m (25 ft) away.

CAUTION

Check the work area or site for changes in the stability of the ground surface, back filled trenches and structural integrity of buildings, roofs etc.

CAUTION

Make sure that all protective guards and covers are correctly installed on the vehicle.

CAUTION

Make sure that if the machine is equipped with a fully working lighting system that is adequate for the working conditions, and is compliant with local or national road traffic regulations

CAUTION

Make sure that the machine reverse alarm and other warning devices are in full working order.

CAUTION

Make sure that all obstacles are cleared from the intended path or route of the machine.

CAUTION

Make sure that before the machine is moved, there are no personnel on, under or near the machine.

General Hazards

WARNING

Collision of high speed road traffic and slow moving machines can cause personal injury or death. When on a public road, use a flashing beacon and other lights according to local laws. Use a Slow Moving Vehicle (SMV) emblem displayed at the rear of the machine where this is a national requirement. Pull over to let faster traffic pass. Signal and slow down before turning off the road.

WARNING

Use warning devices (flags, SMV emblem, lights, etc.) which are approved for use by your local government agencies, when using equipment on public roads. Keep these devices clean and in good working order.

GENERAL SAFETY INSTRUCTIONS

Check that the machine is roadworthy and safe to operate every time it is put into operation!

1. Observe the current regulations regarding safety and accident prevention as well as the information in the operator's manual.

2. When using public roads observe all traffic regulations.

3. Make yourself familiar with all equipment and controls and their functions before starting work as it will be too late once you have set off.

4. Make sure that there is no one in close proximity to the machine before putting it into operation (Be especially aware of children!).

   Check that visibility is good, particularly when reversing (have someone direct you if necessary).

5. Clothing worn by the operator must be close-fitting. Avoid wearing loose fitting clothing when operating or maintaining the machine

6. Keep the machine clean to prevent fire.

7 If it is necessary to access the machine, the Engine of any towing vehicle must be switched off. The ignition key of the towing vehicle must be removed. The machine must be isolated from its power supply

9. Any safety guards must be checked regularly for wear and replaced if necessary.

10. Any safety decals that are missing must be replaced immediately.

General

1. Use only the recommended fastenings on the machine!

2. Do not exceed the maximum load on the elevator drawbar

3. Use extreme caution when coupling and uncoupling the machine from the towing vehicle to avoid risk of injury.

4. During maintenance or after use prevent the machine from rolling away by use of the parking brake or wheel chocks.

5. A risk of injury due to crushing exists in the vicinity of the Towing vehicle tow hitch! and the slewing platform (Option)

6. Couple and uncouple the machine to the towing vehicle only as specified in the instructions.

7. The performance of the towing vehicle can be influenced by the machine, ensure the towing vehicle has sufficient steering and braking capacity..

8. Make sure no one is between the machine and the towing vehicle unless both are secured and prevented from moving.

9. The travel speed must always be matched to the under wheel conditions. Avoid sudden turns and braking when driving up or down hill or across a slope.

10. Observe the maximum permissible axle loads and total weights!

11. Operate the machine only when all guards are fitted and in the correct position!

12 Ensure that the machine is stable when parked and when operated.

13. Ensure all equipment is placed in the transport position before driving on the road.

14. Always switch off the engine of the towing vehicle before carrying out troubleshooting, and for repair, maintenance and cleaning work. Remove the towing vehicle ignition key. The machine must be isolated from its power supply

15. When working under raised covers ensure that they are sufficiently supported.

16. When handling sharp-edged parts, such as bale tines, wear appropriate protection (gloves, shoes etc.).

17. Wear safety goggles when sharpening knives.

18 . Do not stand near hinged covers.

GENERAL SAFETY INSTRUCTIONS contd

HYDRAULIC SYSTEM

1. The hydraulic system is under high pressure!

2. Keep the hydraulic components clean.

3. Check hydraulic lines at regular intervals, and replace them if they are damaged

4 Any replaced hydraulic lines must meet the technical requirements of the manufacturer!

5 The machine must be switched off and isolated and the system depressurised before starting work on the hydraulic system.

6. Repair work on the hydraulic system must be carried out by approved specialised work shops only.

WHEELS AND TYRES

1. Repair work to the tyres must be carried out by qualified technicians using suitable tools.

2. When working on the wheels make sure that the elevator is secured and that wheels are chocked to prevent it from moving.

3. Check & Tighten the wheel nuts periodically

4. After replacing the wheels retighten the wheel nuts or bolts after the first 10 operating hours, then check them every 50 hours.

5. Make sure that the jack used has sufficient load capacity.

6. Avoid an excessive inflation pressure.

7. The specified tyre pressure must be maintained.

8. Stand clear of the tyre when inflating.

9. Check the pressure regularly.

10. Regularly check nuts and screws for tightness and retighten them, if necessary.

11. All mounting bolts and nuts must be tightened to the torque specified by the manufacturer.

MAINTENANCE

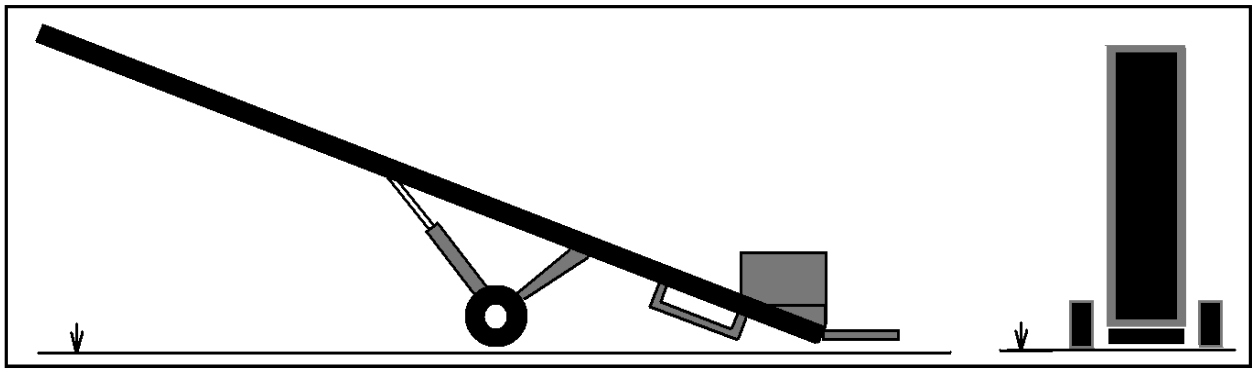
1 The machine must be switched off and isolated before carrying out any troubleshooting, and before all repair, maintenance and cleaning work.

2. Use suitable tools and wear safety gloves when replacing working parts!

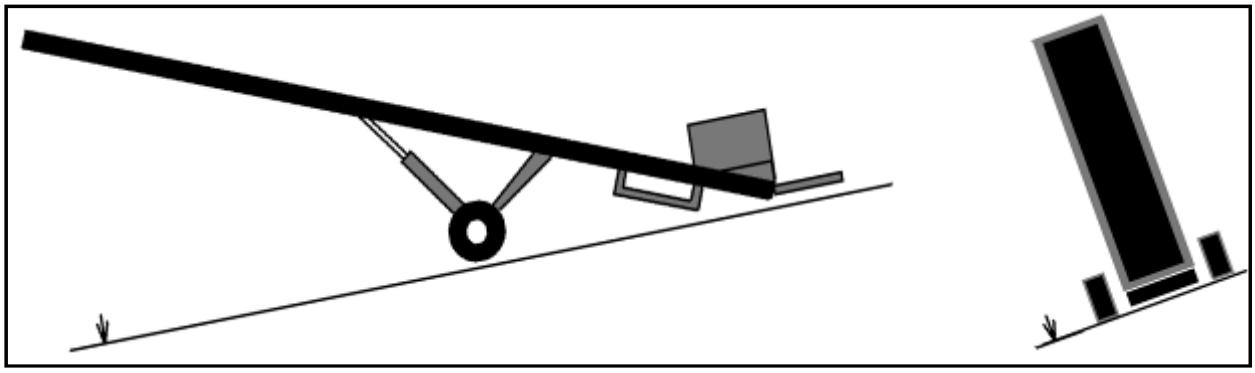
3. Always disconnect the power supply before working on the electrical system!

4. Protection devices that are subjected to wear must be checked at regular intervals and replaced as necessary.

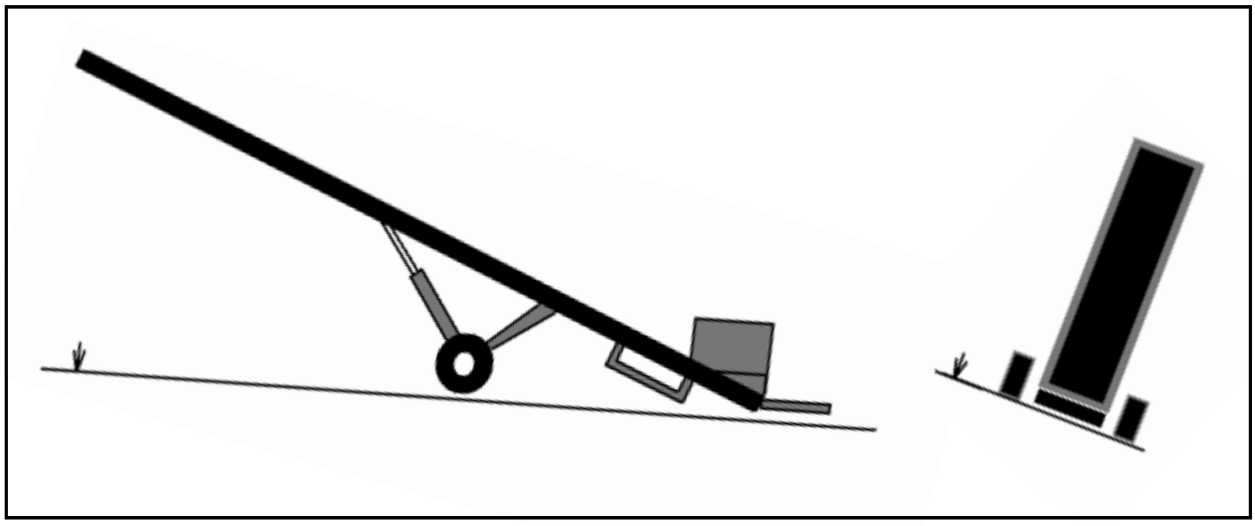
Foreseen Misuse



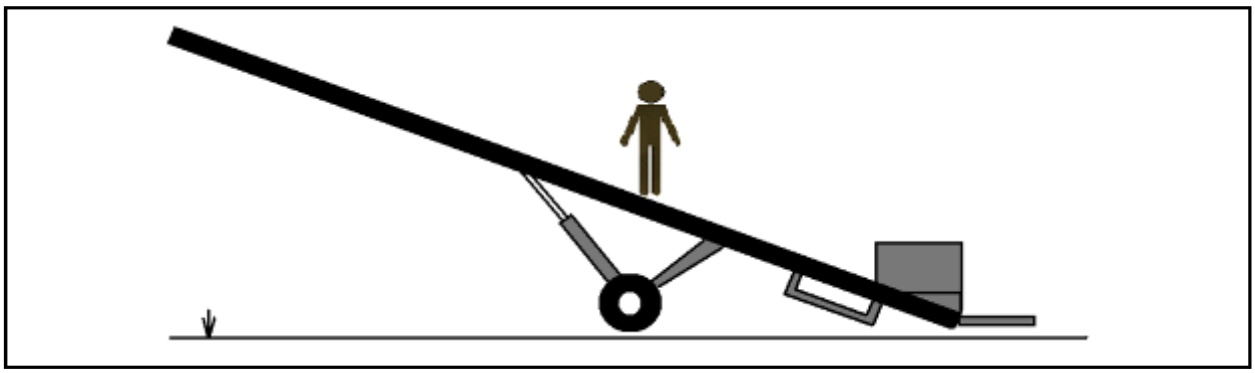
Operate on firm level ground



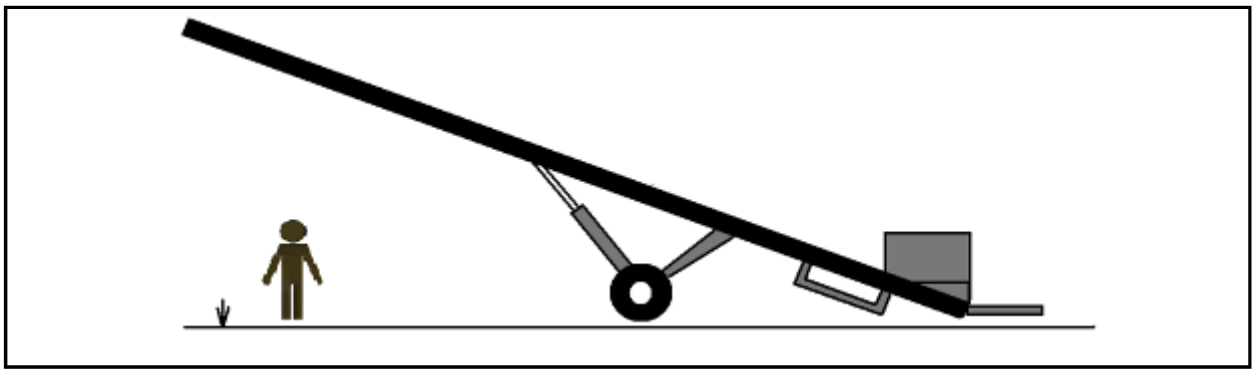
Do not exceed safe working limits for gradeability



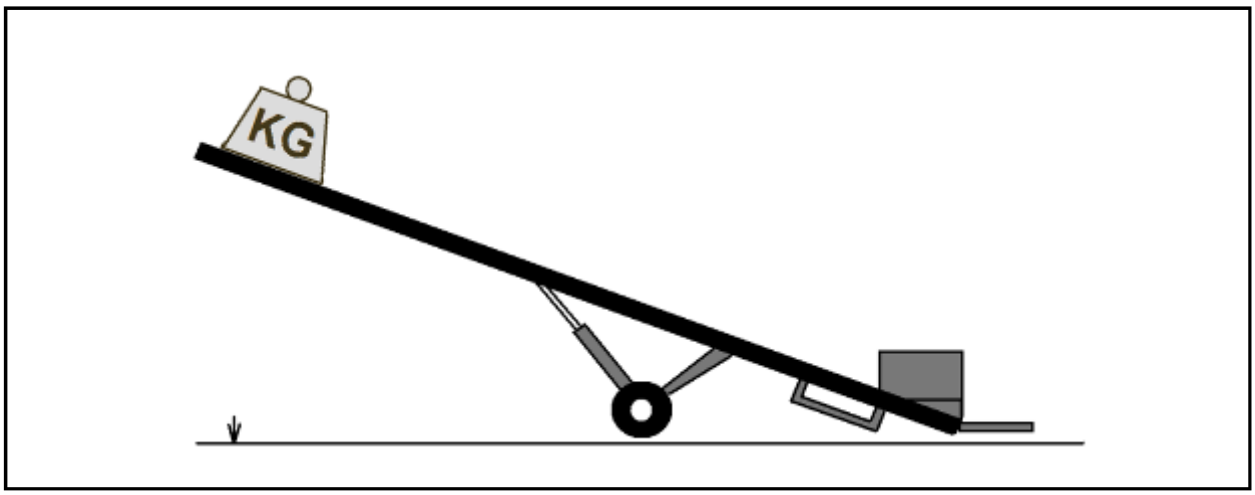
Do not exceed safe working limits for gradeability



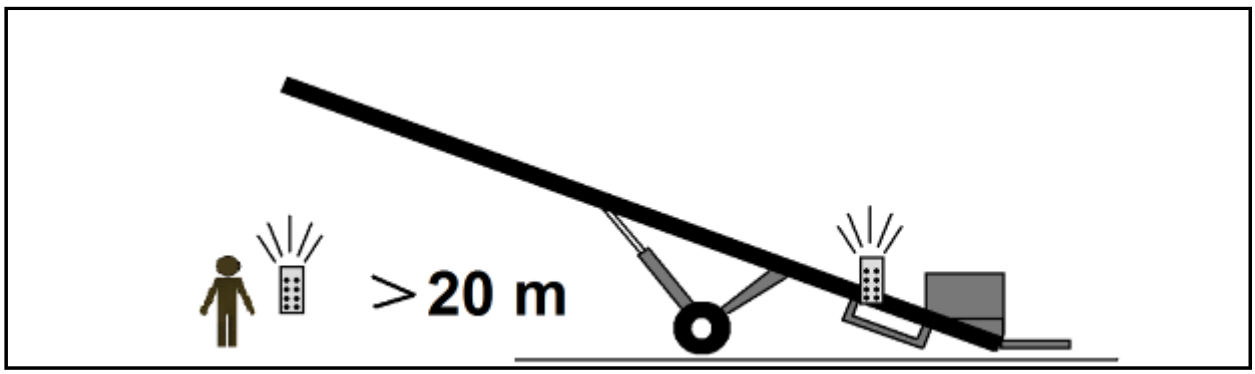
Do not ride or permit other persons to ride on the elevator



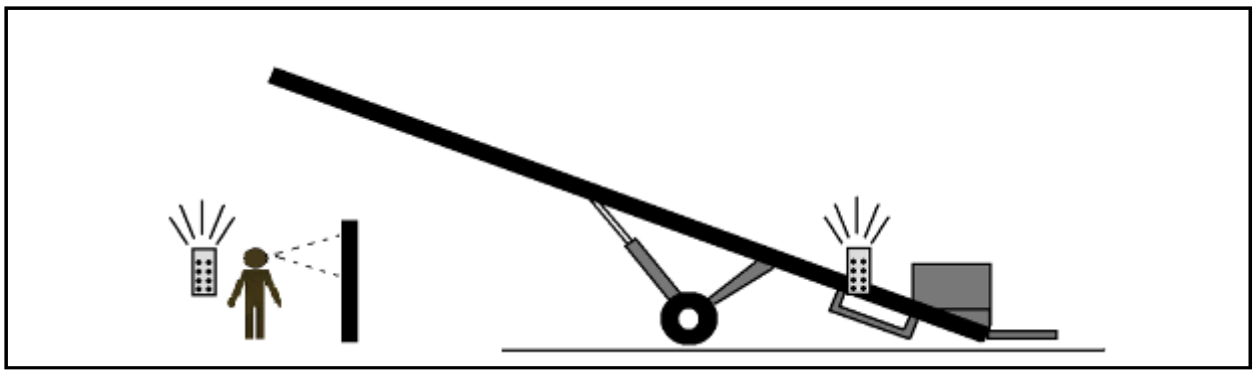
Do not work under a raised elevator



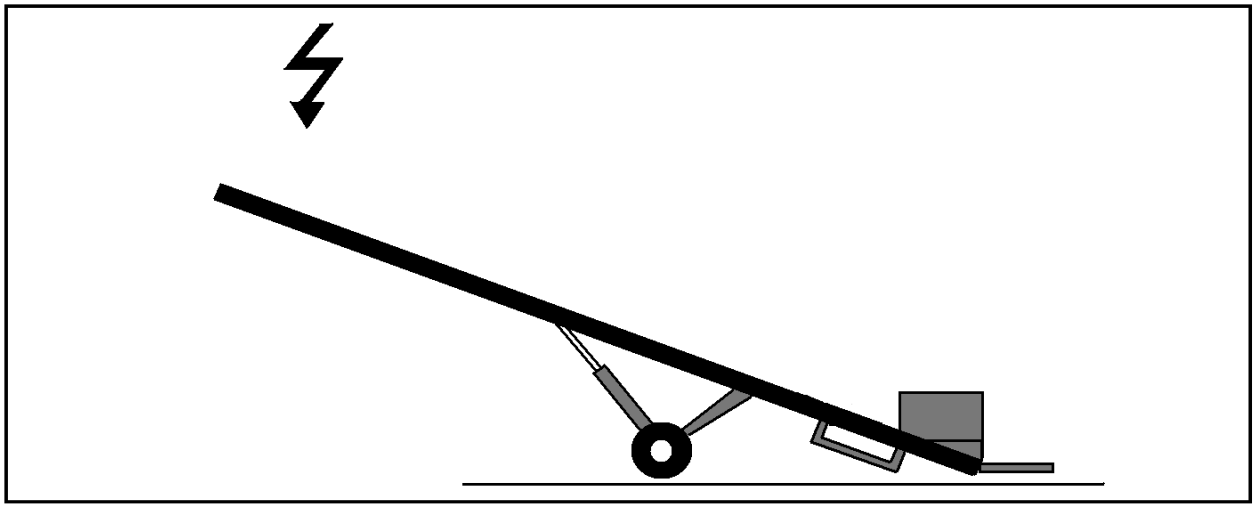
Do not overload the elevator



Do not exceed maximum operating distance for Radio Remote control



Do not operate Radio Remote control if not able to see elevator



Beware of overhead live wires

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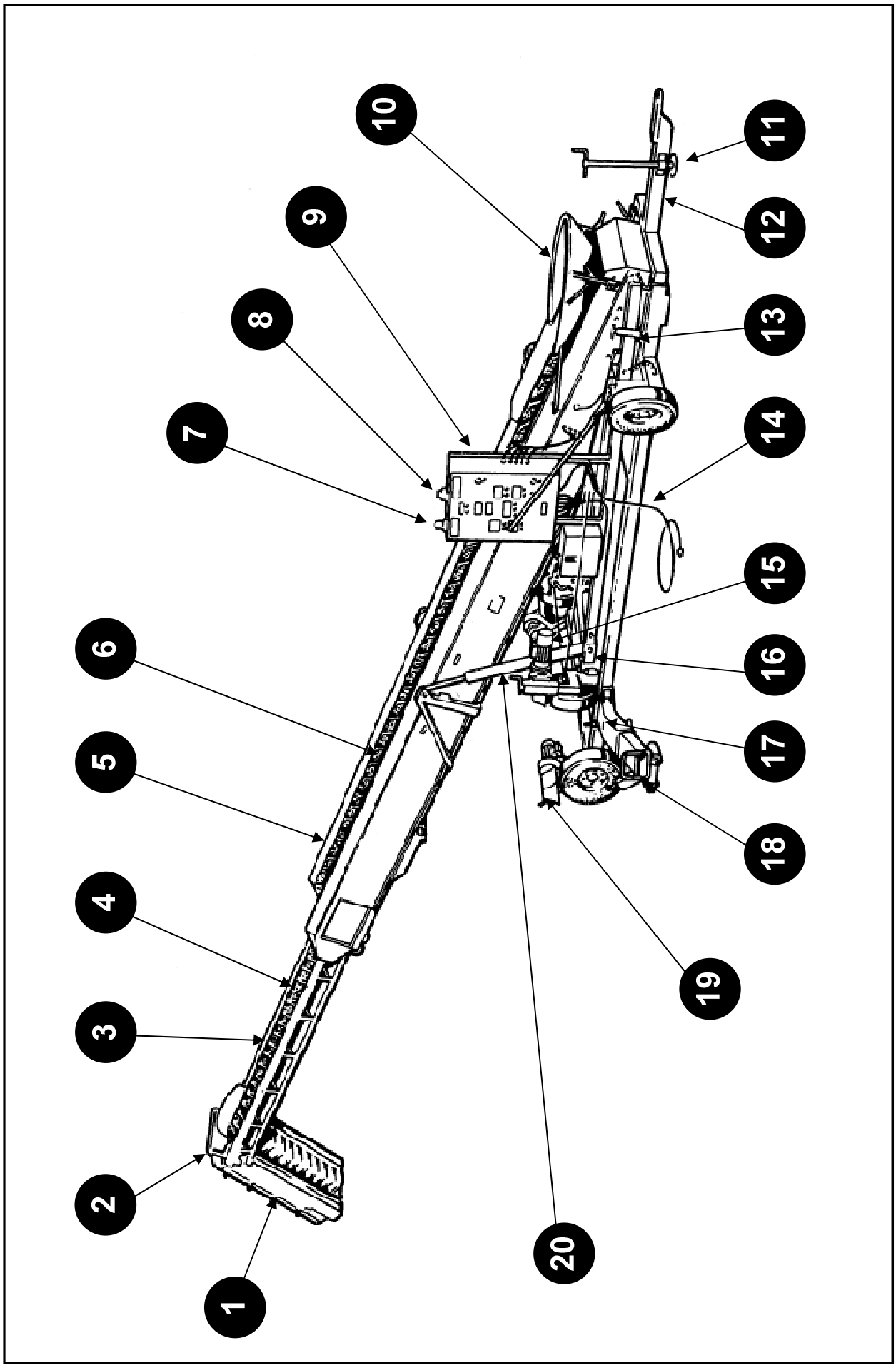
General

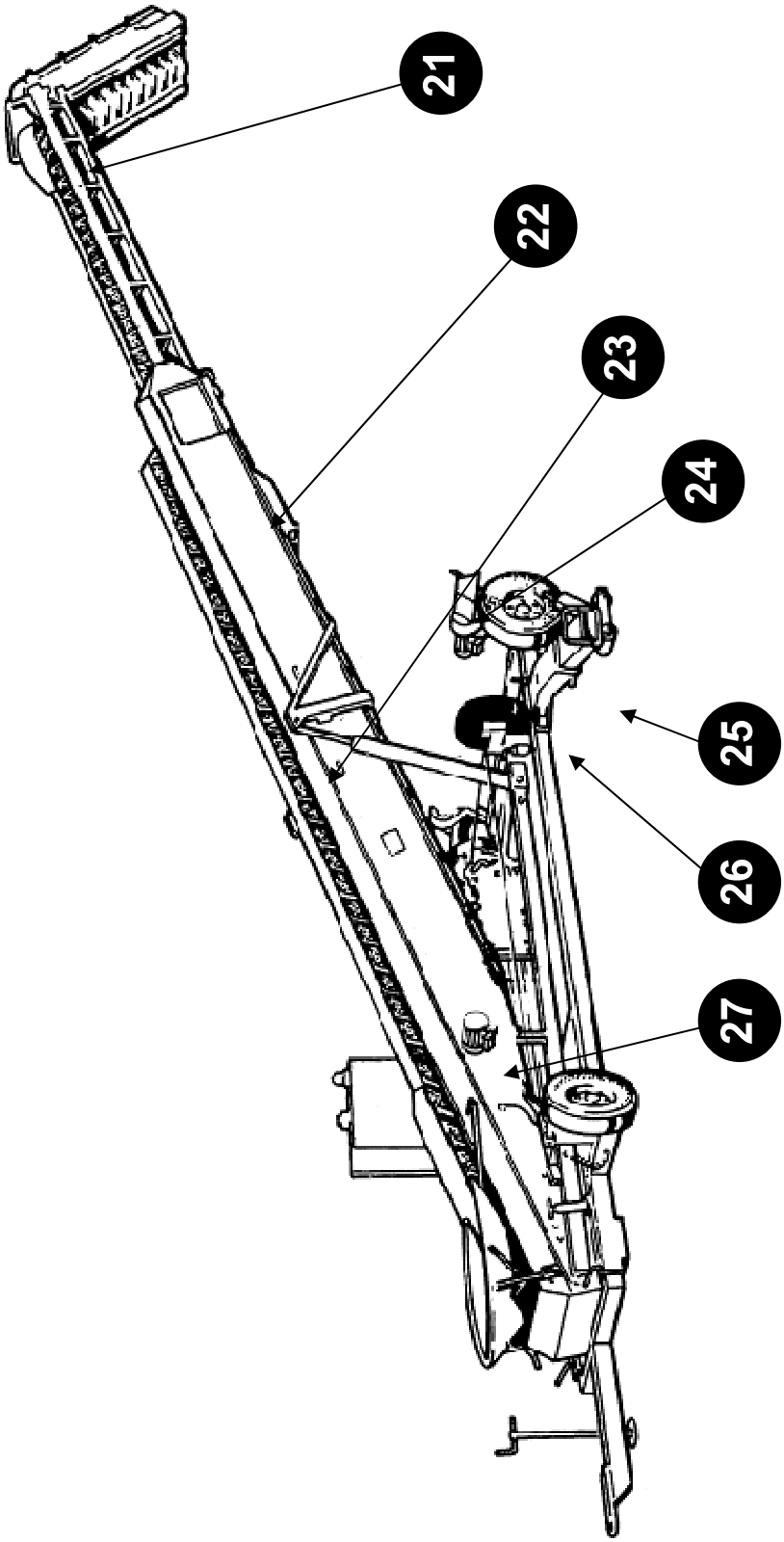
The following pages identify the layout and components of the various machines.

The components identified may be referred to in other sections of this manual.



Section 4: 2

No.	Description
1	Luffing Head
2	Safedown end descender
3	Secondary Unit
4	Secondary Belt
5	Primary Unit
6	Primary Belt
7	Aerial (Radio Remote Control Option Only)
8	Warning Light (Radio Remote Control Option Only)
9	Control Panel
10	Hopper
11	Screwjack Assembly
12	Drawbar
13	Jack Leg Cylinder (Contain-a-vator option only)
14	Power Connection cable
15	Slew Motor
16	Slew Platform
17	Slew Platform Wing (Left Side)
18	Slew Wing Extension (Left Side)
19	Power Transmission Motor (Left Side)
20	Main Lift Cylinder (Left Side)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No.	Description
21	Head Extension Cylinders
22	Secondary Drive Motor
23	Main Lift Cylinder (Right Side)
24	Power Transmission Motor (Right Side)
25	Slew Wing Extension (Right Side)
26	Slew Wing (Right Side)
27	Primary Drive Motor

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CAUTION

Check safety equipment for function and correct position.

CAUTION

Lubricate the elevator as per the Recomenadations before use

CAUTION

Check all Bolts and Nuts are tight.

CAUTION

Remove any wrappings or temporary covers for motors to avoid restrictions to cooling

CAUTION

Check the electric supply source is sufficient for the machine and that the correct plug and socket is used.

WARNING

Do not “bank up” multiple supplies from a single source

WARNING

For 3-Phase elevators ensure the rotation of the belt drive motor is correct . The upper surface of the belt should travel upwards away from the reception end (Hopper) If this is not the case see Note 1 (P5:2)

WARNING

For Single Phase elevators ensure the supply is adequate See Note 2 (P5:2)

WARNING

NOTE 1
For 3-Phase elevators ensure the rotation of the belt drive motor is correct . The upper surface of the belt should travel upwards away from the reception end (Hopper) If this is not the case it will be necessary to reverse the polarity by changing over Two phases in the plug connection.

DO NOT under any circumstances alter the connections to any of the Motors.

CAUTION

Changes to Electrical equipment should only be undertaken by a suitably qualified competent person.

WARNING

NOTE 2
For Single phase elevators ensure the supply is adequate and from a 30 Ampere Socket.

DO NOT operate from a domestic 13 or 15 Ampere Socket.

DO NOT use an extension cable unless it has at least a 30 Ampere capacity, this also includes any ancillary fittings.

CAUTION

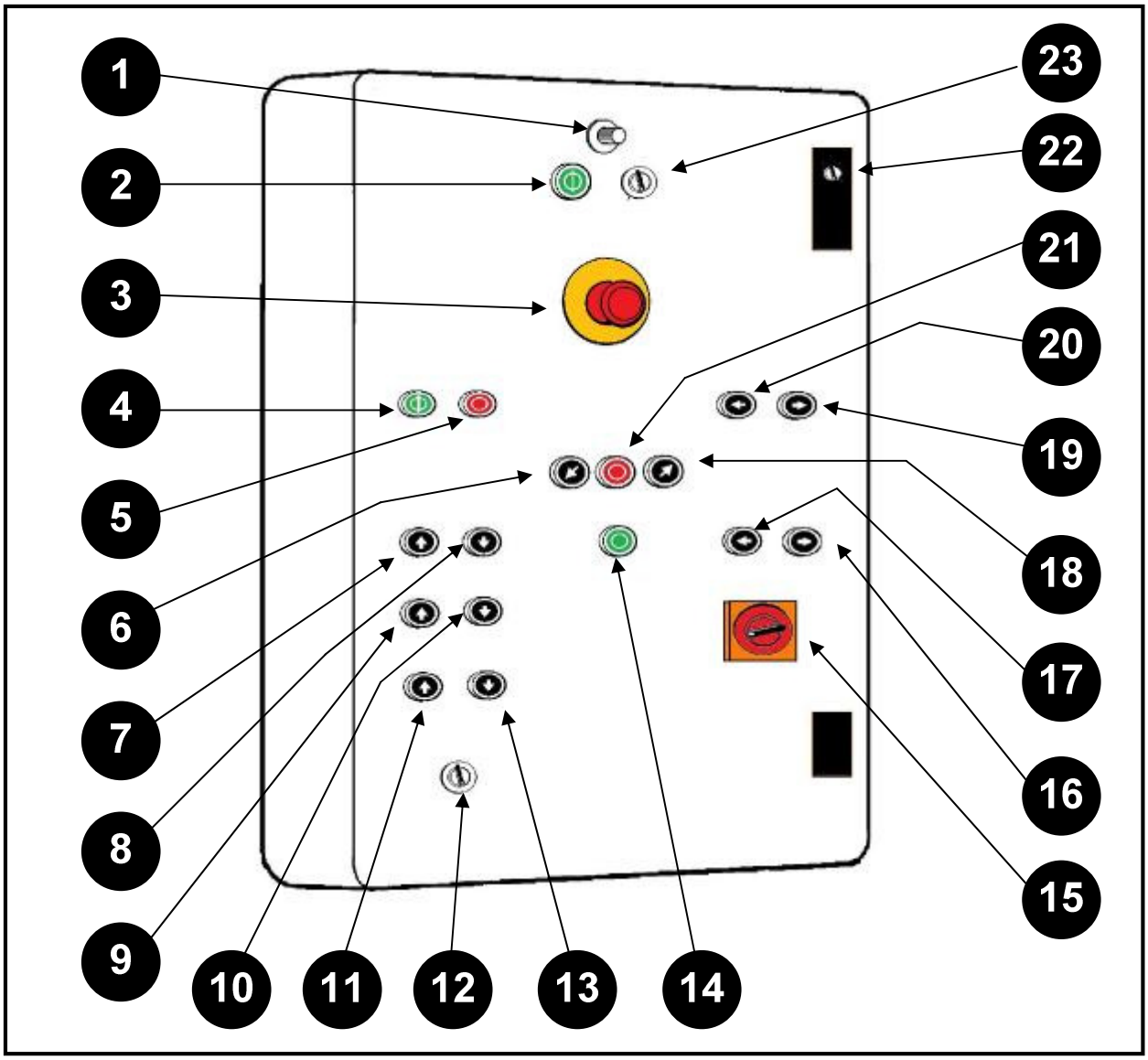
Failure to adhere to the above will result in damage to the Motors and Starter Contactors and will invalidate your warranty.

General

The following pages identify the layout of the various control panels and operating equipment for the machines .

Note! There may be some variation between the equipment on your machine and the illustrations shown .

If in any doubt, please check with your dealer or the manufacturer before operating the machine.



Main Control Panel - Extendo & Contain-A-Vator

1 Lamp - Green
Indicates the panel is receiving a signal from the radio remote control unit (Option)

2 Push Button
Push the button to energise the radio remote control (Option)

3 Emergency Stop
Push the button to disable all functions in an emergency

4 Start
Press the button to Start the belt drive motors

5 Stop
Press the button to Stop the belt drive motors

6 Slew Left
Press the button to slew the elevator body to the Left

7 Raise - Luffing Head
Bush the button to Raise the Luffing head Cylinders

8 Lower - Luffing Head
Bush the button to lower the Luffing head Cylinders

9 Raise
Bush the button to Raise the Main Lift Cylinders

10 Lower
Bush the button to Lower the Main Lift Cylinders

11 Raise
Bush the button to Raise the Jacking Leg Cylinders (Contain-a-vator Only)

12 Vega Probe
Turn the switch to activate the Vega Probe (Option)

13 Lower
Push the button to Lower the Jacking Leg Cylinders (Contain-a-vator Only)

14 Reset
Push the button to Reset the electrical controls after the machine has been isolated or an emergency stop

15 Isolator
Turn the switch to Isolate the machine from the mains electricity supply . The Isolator can only be turned ON when the panel door is secured. The Isolator must be turned to OFF before opening the panel door.

16 Forwards - Power Transmission
Push and hold the button to move the machine forwards

17 Reverse - Power Transmission
Push and hold the button to move the machine backwards

18 Slew Right
Press the button to slew the elevator body to the Right

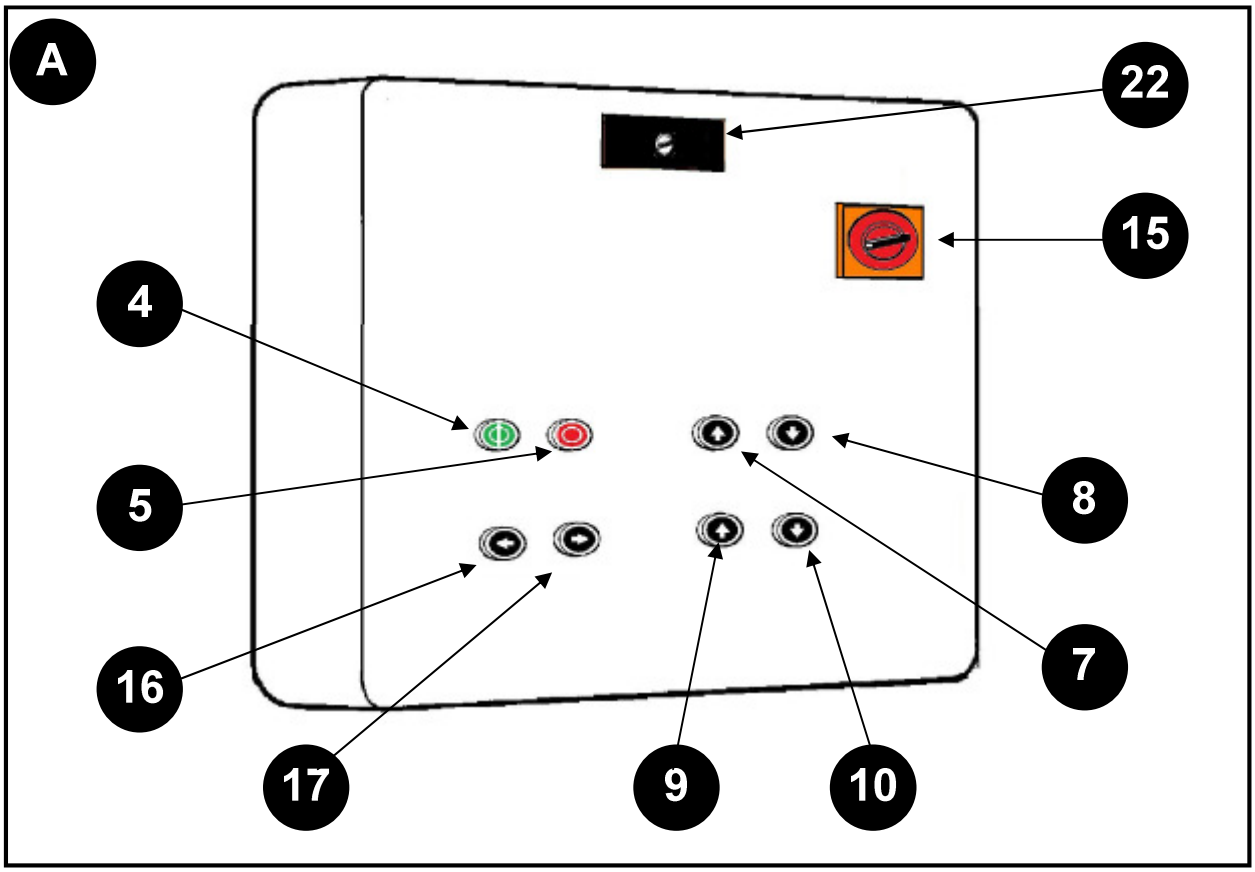
19 Retract
Push and hold the Button to retract the secondary Unit

20 Extend
Push and hold the Button to Extend the Secondary Unit

21 Slew Stop
Push Button to stop the slew function

22 Key Switch
Turn the Key to unlock the control panel **WARNING Turn off isolator before opening panel**

23 Key switch
Turn the key to energise the radio remote control functions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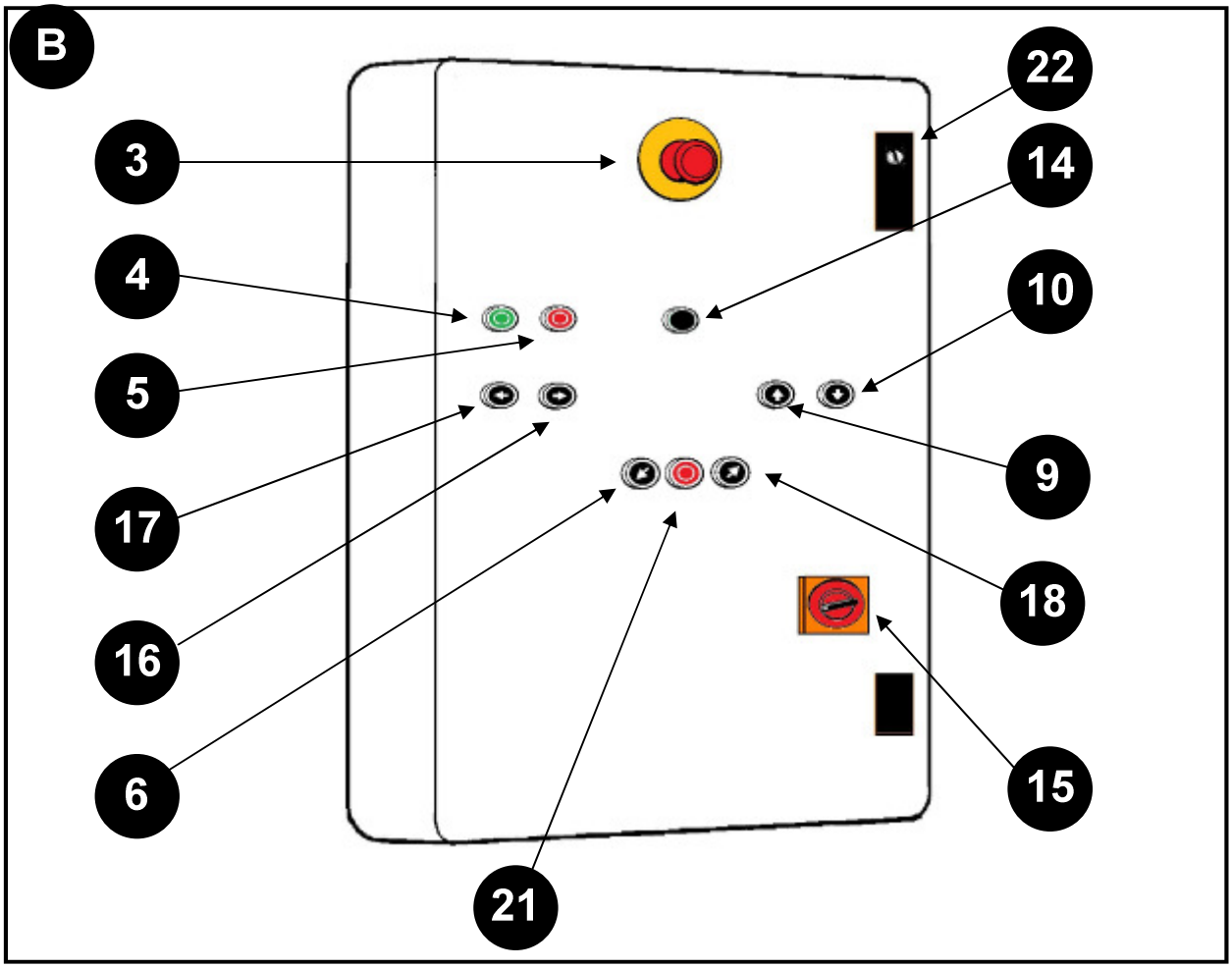
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Main Control Panel Options - Euro Models

A Euro with Luffing Head & Power Transmission
B Euro with Power Transmission and Slew function

1 Not Applicable

2 Not Applicable

3 Emergency Stop
Push the button to disable all functions in an emergency

4 Start
Press the button to Start the belt drive motors

5 Stop
Press the button to Stop the belt drive motors

6 Slew Left
Press the button to slew the elevator body to the Left

7 Raise - Luffing Head
Bush the button to Raise the Luffing head Cylinders

8 Lower - Luffing Head
Bush the button to lower the Luffing head Cylinders

9 Raise
Bush the button to Raise the Main Lift Cylinders

10 Lower
Bush the button to Lower the Main Lift Cylinders

11 Not Applicable

12 Not Applicable

13 Not Applicable

14 Reset
Push the button to Reset the electrical controls after the machine has been isolated or an emergency stop

15 Isolator
Turn the switch to Isolate the machine from the mains electricity supply . The Isolator can only be turned ON when the panel door is secured. The Isolator must be turned to OFF before opening the panel door.

16 Forwards - Power Transmission
Push and hold the button to move the machine forwards

17 Reverse - Power Transmission
Push and hold the button to move the machine backwards

18 Slew Right
Press the button to slew the elevator body to the Right

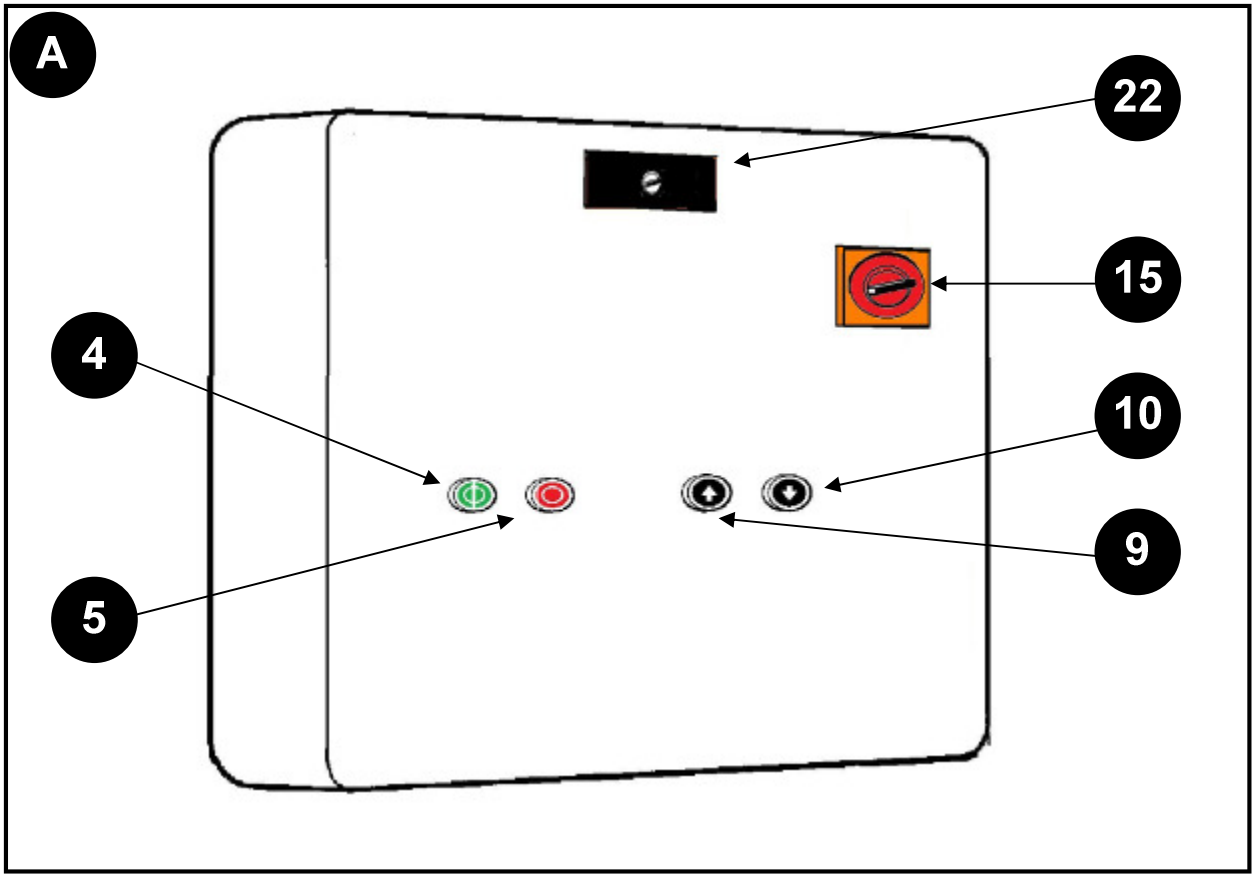
19 Not Applicable

20 Not Applicable

21 Slew Stop
Push Button to stop the slew function

22 Key Switch
Turn the Key to unlock the control panel **WARNING Turn off isolator before opening panel**

23 Not Applicable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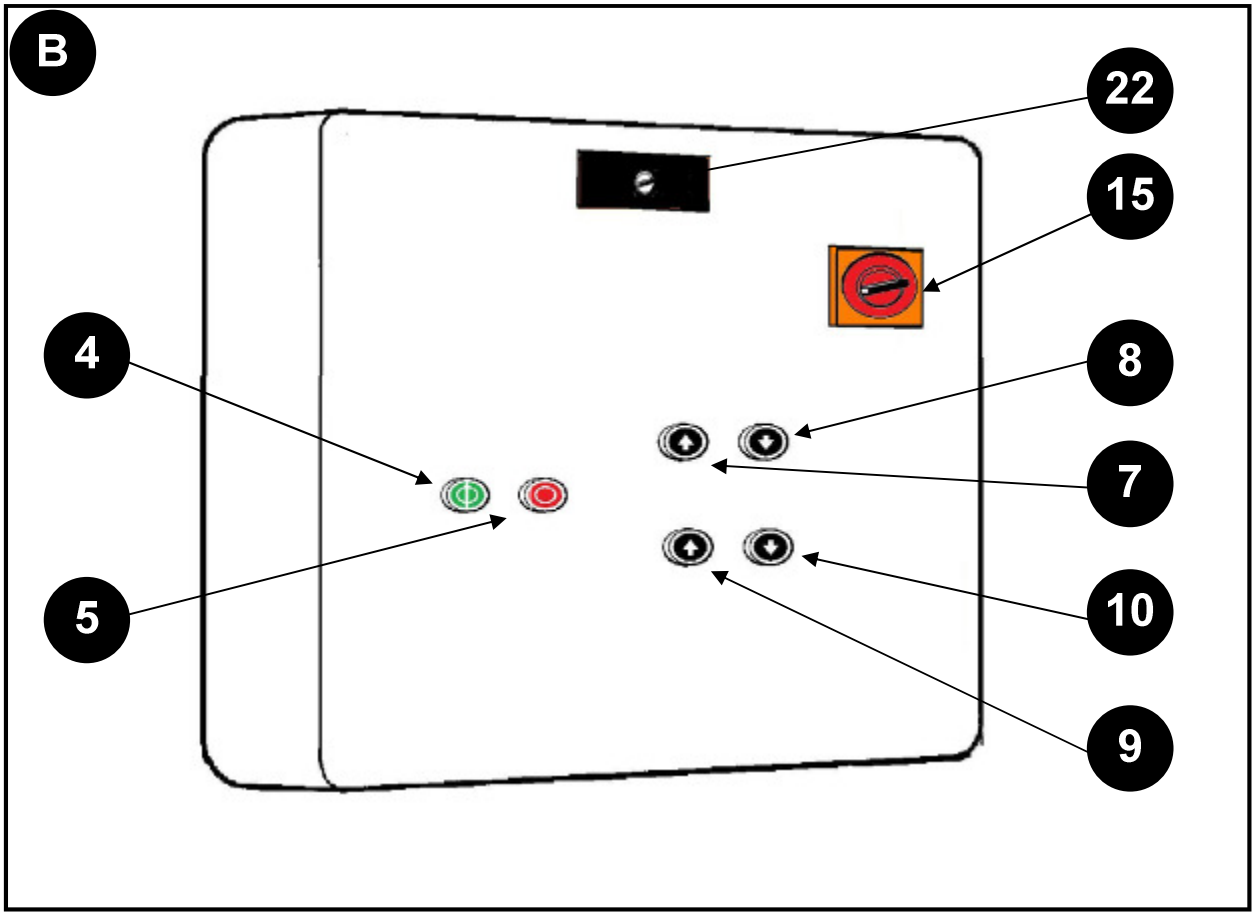
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Main Control Panel Options - Interstore Models

A Interstore with Hydraulic Lift
B Interstore with Luffing Head & Hydraulic Lift

1 Not Applicable

2 Not Applicable

3 Emergency Stop
Push the button to disable all functions in an emergency

4 Start
Press the button to Start the belt drive motors

5 Stop
Press the button to Stop the belt drive motors

6 Not Applicable

7 Raise - Luffing Head
Bush the button to Raise the Luffing head Cylinders

8 Lower - Luffing Head
Bush the button to lower the Luffing head Cylinders

9 Raise
Bush the button to Raise the Main Lift Cylinders

10 Lower
Bush the button to Lower the Main Lift Cylinders

11 Not Applicable

12 Not Applicable

13 Not Applicable

14 Not Applicable

15 Isolator
Turn the switch to Isolate the machine from the mains electricity supply . The Isolator can only be turned ON when the panel door is secured. The Isolator must be turned to OFF before opening the panel door.

16 Not Applicable

17 Not Applicable

18 Not Applicable

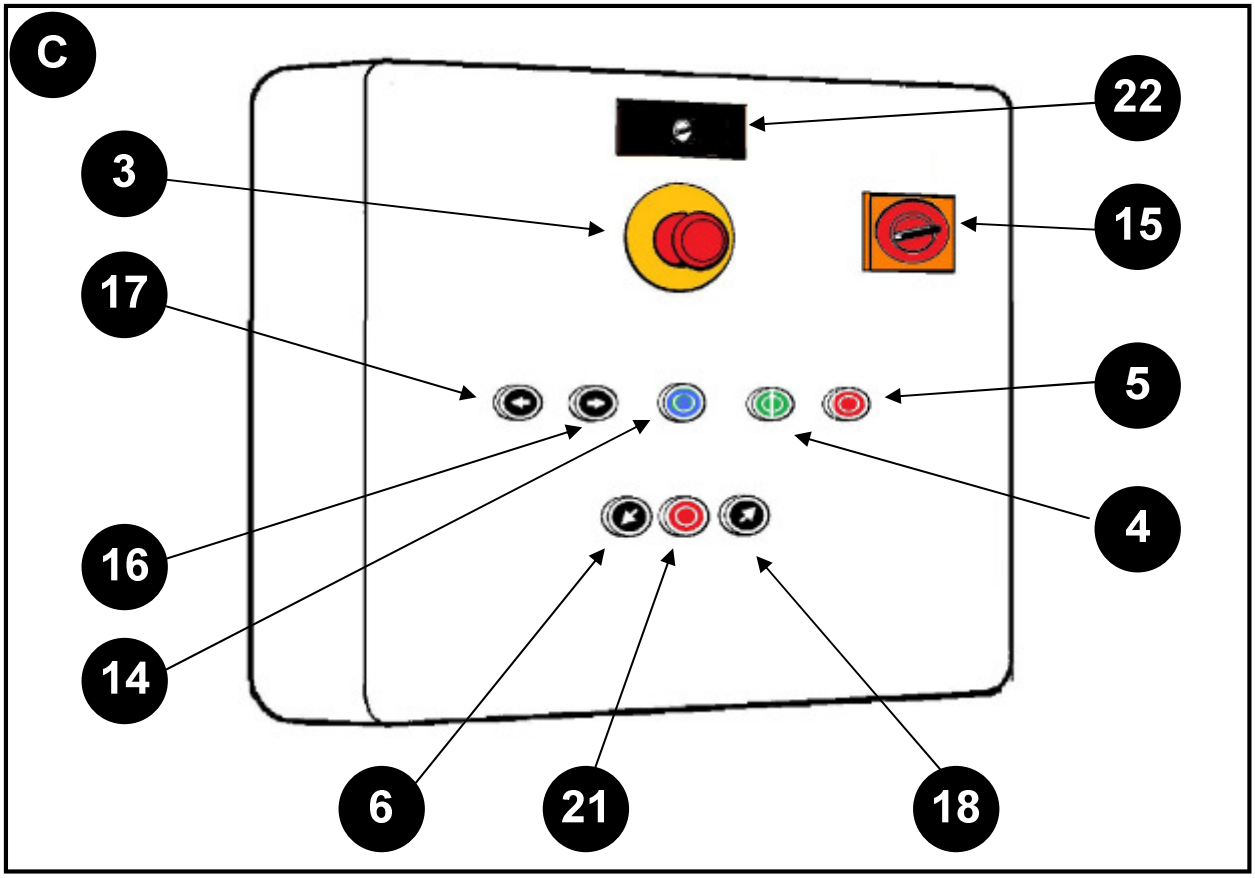
19 Not Applicable

20 Not Applicable

21 Not Applicable

22 Key Switch
Turn the Key to unlock the control panel **WARNING Turn off isolator before opening panel**

23 Not Applicable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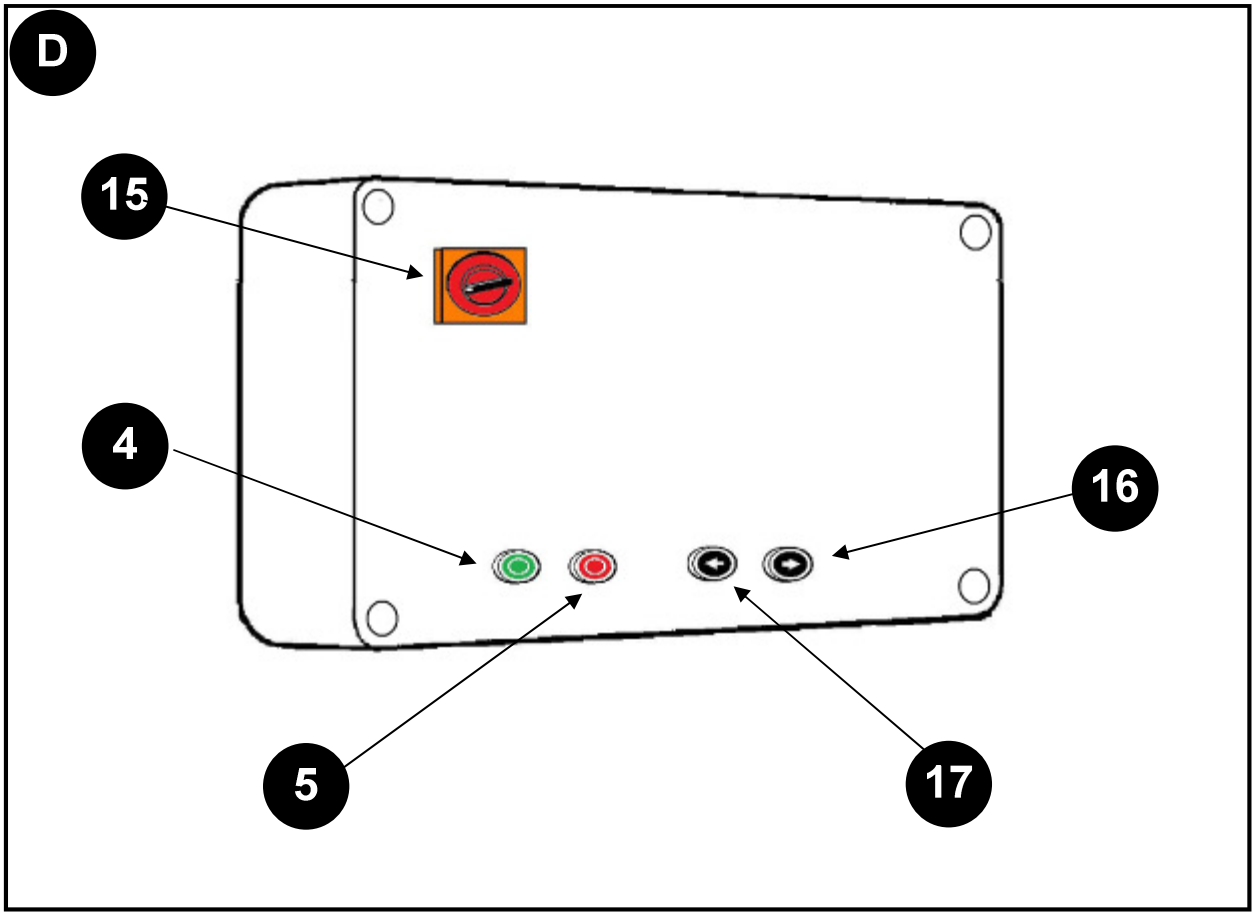
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Main Control Panel Options - Interstore Models

C Interstore with Power Transmission & Slew
D Interstore with Power Transmission

1 Not Applicable

2 Not Applicable

3 Emergency Stop
Push the button to disable all functions in an emergency

4 Start
Press the button to Start the belt drive motors

5 Stop
Press the button to Stop the belt drive motors

6 Slew Left
Press the button to slew the elevator body to the Left

7 Not Applicable

8 Not Applicable

9 Not Applicable

10 Not Applicable

11 Not Applicable

12 Not Applicable

13 Not Applicable

14 Reset
Push the button to Reset the electrical controls after the machine has been isolated or an emergency stop

15 Isolator
Turn the switch to Isolate the machine from the mains electricity supply . The Isolator can only be turned ON when the panel door is secured. The Isolator must be turned to OFF before opening the panel door.

16 Forwards - Power Transmission
Push and hold the button to move the machine forwards

17 Reverse - Power Transmission
Push and hold the button to move the machine backwards

18 Slew Right
Press the button to slew the elevator body to the Right

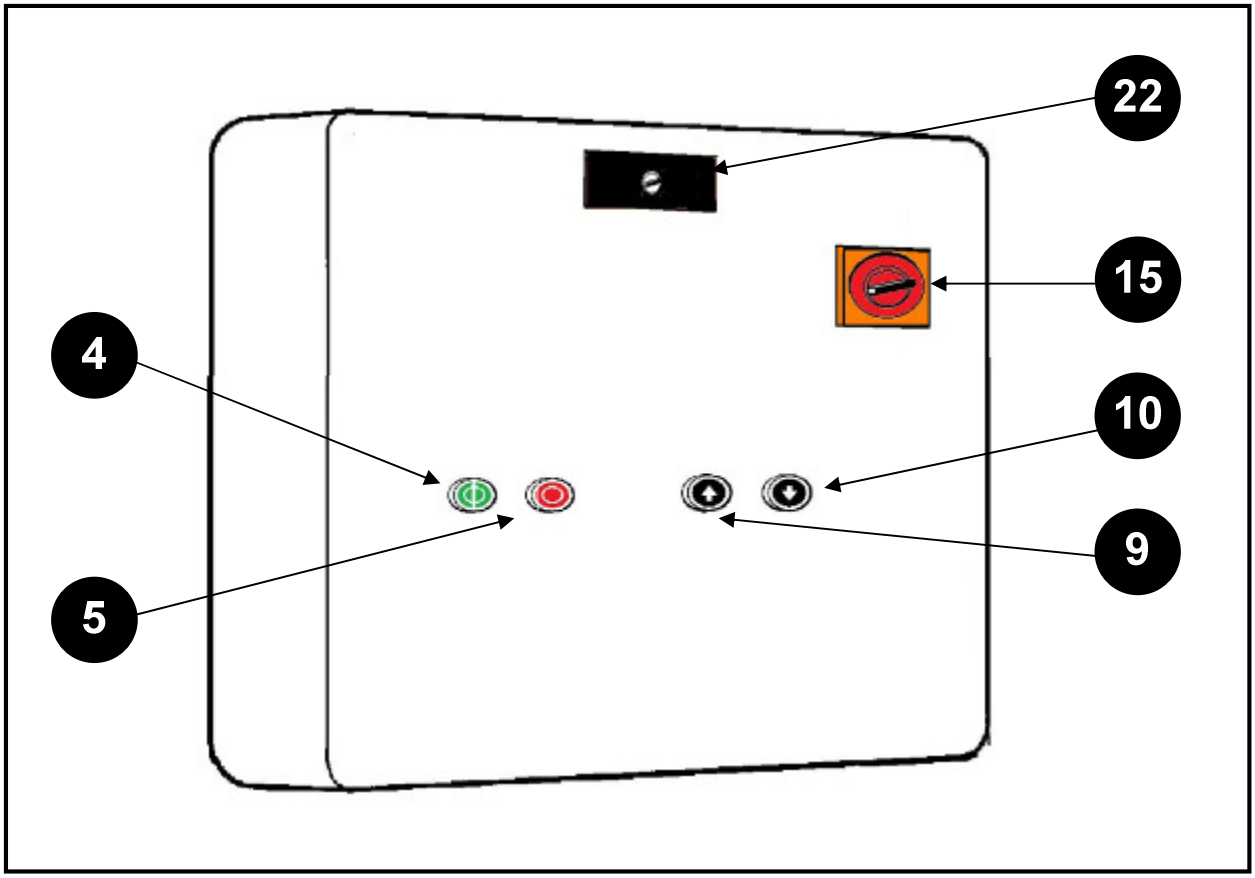
19 Not Applicable

20 Not Applicable

21 Slew Stop
Push Button to stop the slew function

22 Key Switch
Turn the Key to unlock the control panel **WARNING Turn off isolator before opening panel**

23 Not Applicable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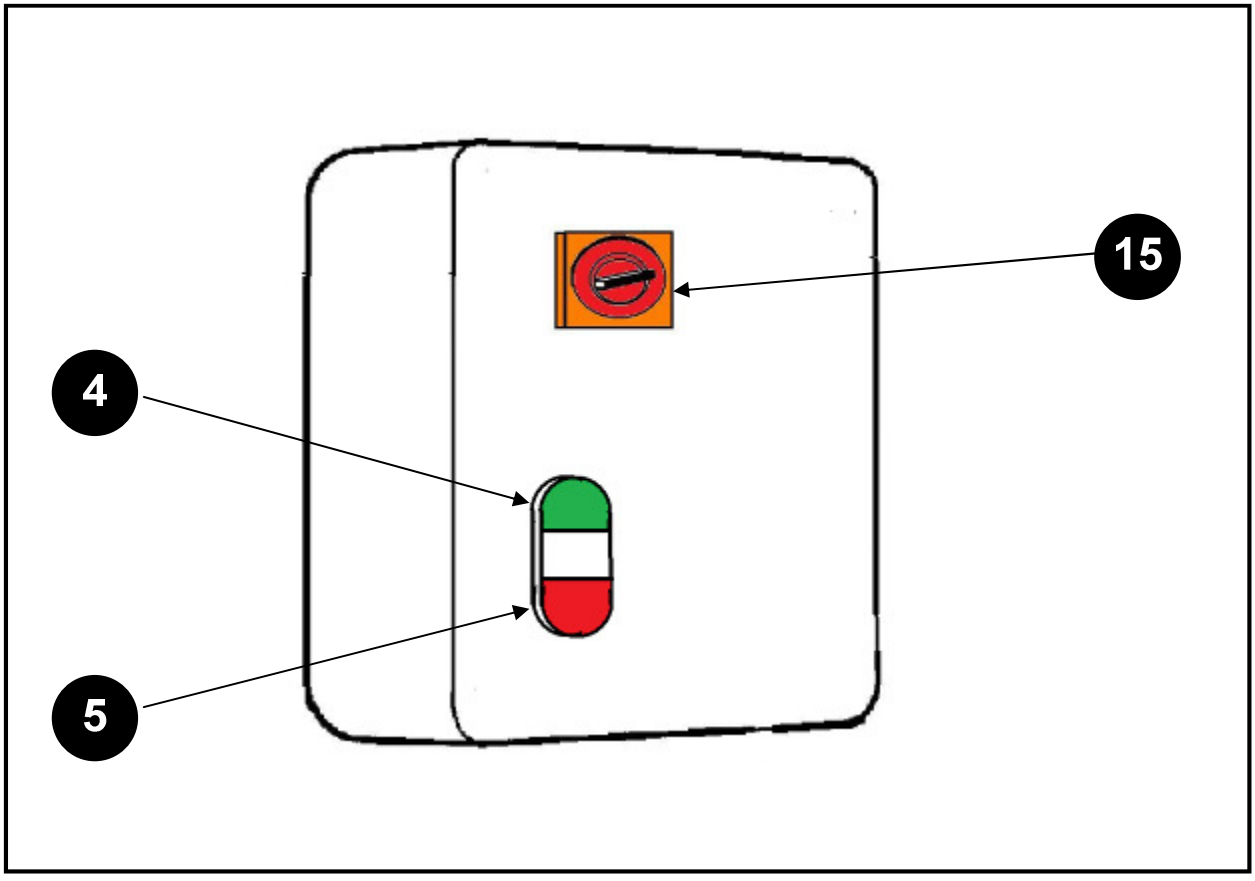
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Main Control Panel Options

A Pack House Model
B Models without Hydraulic Control

1 Not Applicable

2 Not Applicable

2 Not Applicable

4 Start
Press the button to Start the belt drive motors

5 Stop
Press the button to Stop the belt drive motors

6 Not Applicable

7 Not Applicable

8 Not Applicable

9 Raise
Bush the button to Raise the Main Lift Cylinders

10 Lower
Bush the button to Lower the Main Lift Cylinders

11 Not Applicable

12 Not Applicable

13 Not Applicable

14 Not Applicable

15 Isolator
Turn the switch to Isolate the machine from the mains electricity supply . The Isolator can only be turned ON when the panel door is secured. The Isolator must be turned to OFF before opening the panel door.

16 Not Applicable

17 Not Applicable

18 Not Applicable

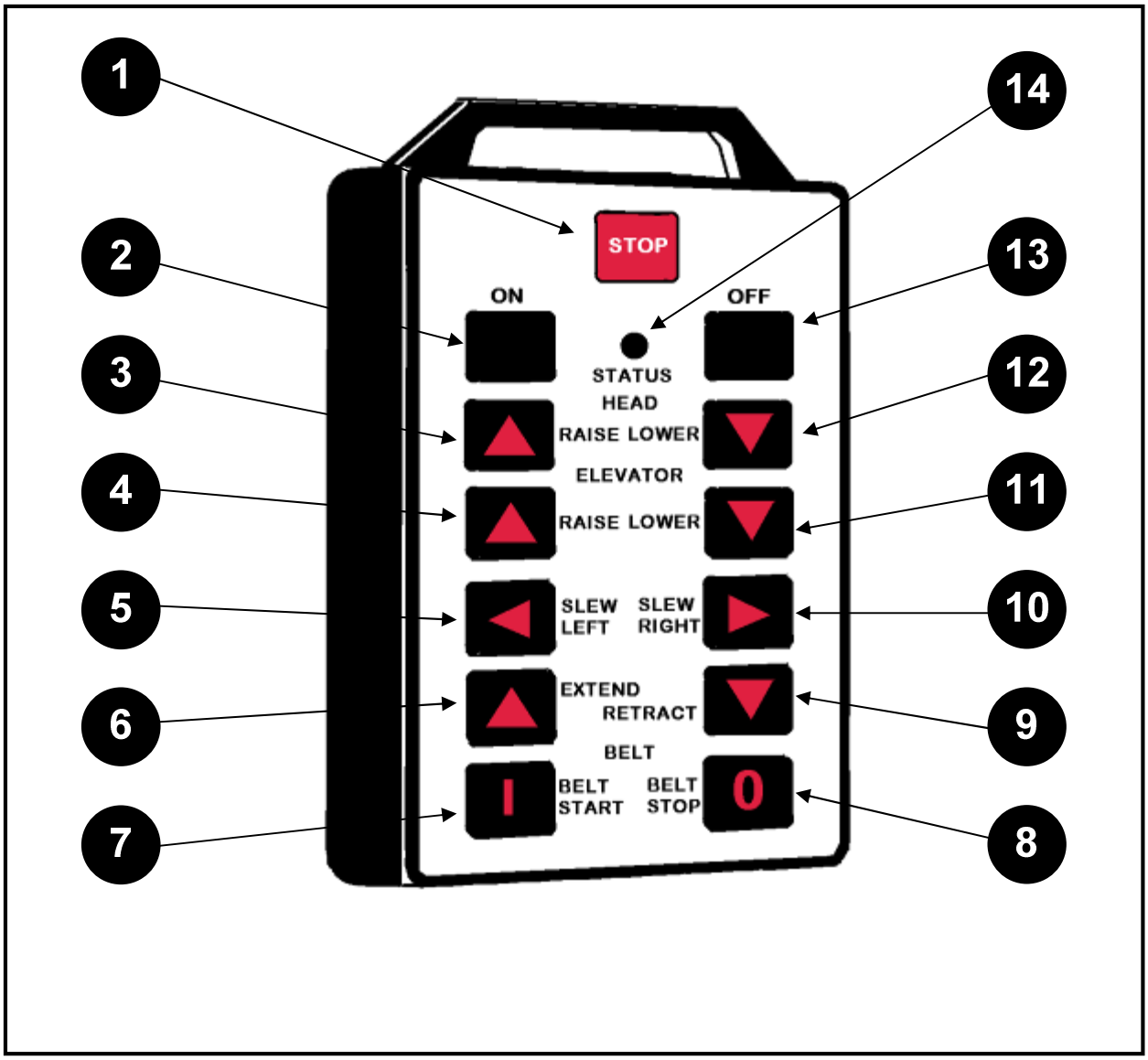
19 Not Applicable

20 Not Applicable

21 Not Applicable

22 Key Switch
Turn the Key to unlock the control panel **WARNING Turn off isolator before opening panel**

23 Not Applicable



Radio Remote Control Panel - Extendo

Radio Remote Control Panel - Extendo

1 Emergency Stop
Disables all functions when pressed in an emergency condition

2 Push Button - On
Push the button to energise the control panel

3 Push Button - Raise
Push the button to Raise the Head Unit

4 Push Button - Raise
Push the button to Raise the Elevator

5 Push Button - Slew Left
Push the button to slew the elevator to the Left

6 Push Button - Extend
Push the button to extend the elevators Secondary Unit

7 Push Button - Belt Start
Push the button to start the Belt drive motors

8 Push Button - Belt Stop
Push the button to stop the Belt drive motors

9 Push Button - Retract
Push the button to retract the elevators Secondary Unit

10 Push Button - Slew Right
Push the button to slew the elevator to the Right

11 Push Button - Lower
Push the button to Lower the Elevator

12 Push Button - Lower
Push the button to Lower the Head Unit

13 Push Button - Off
Push the button to de-energise the control panel

14 Lamp
When lit indicates the energised status of the control panel

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General

All machines are electrically powered and are either Single or Three phase dependant on the model and option supplied.

Electrical power drives the conveyor motors in all machines , and can provide power for the following dependant on machine model:

Lifting and Lowering (Electro Hydraulic)

Extension and Retraction (Electro-Mechanical)

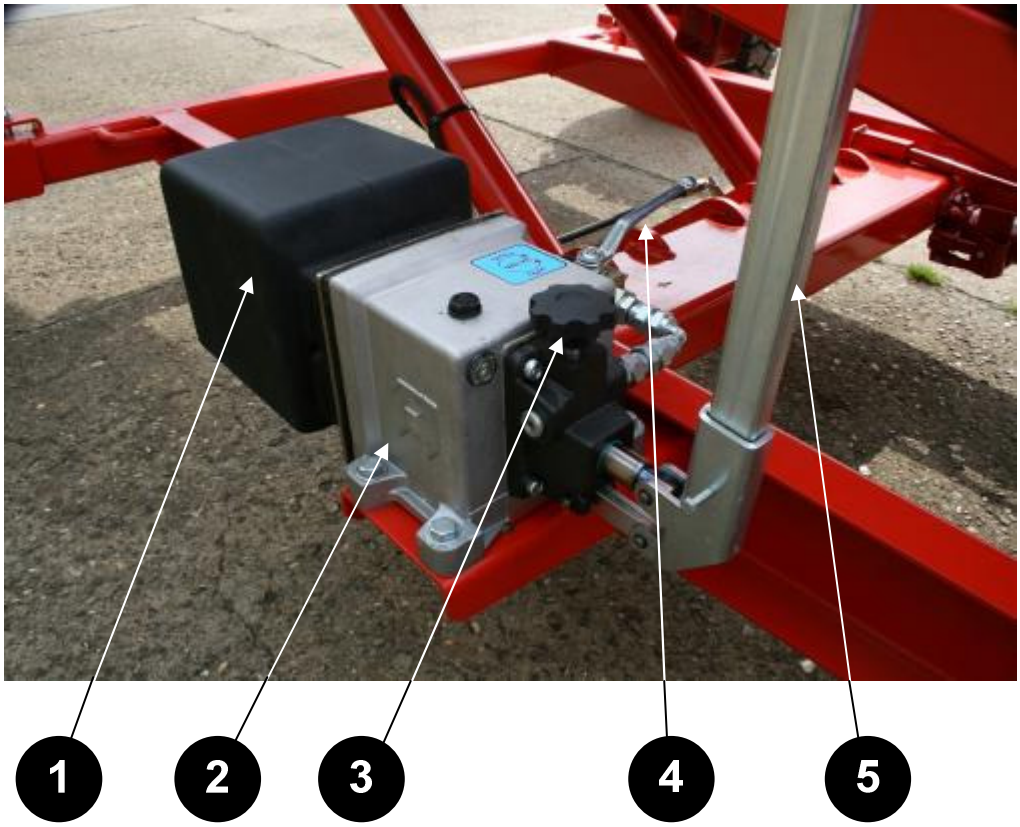
Slew (Electro-Mechanical)

Forward and Reverse Travel. (Electro-Mechanical)

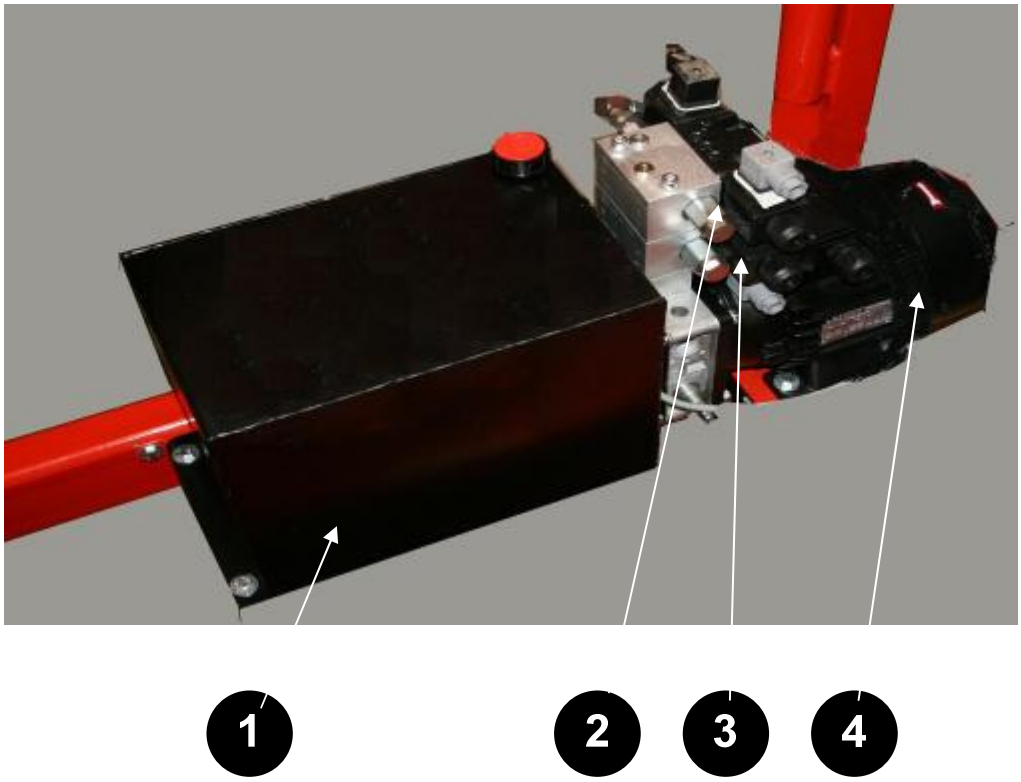
Alternatively these functions may be replaced by other solutions for example.

Lifting and Lowering may be manual only or manual-hydraulic on some machines.

Where there is a need for Operator intervention those components and functions are described in the following pages.



Manual Hydraulic - Lift



Electro Hydraulic - Lift, Slew etc

Section 6: 2

Manual Hydraulic - Lift
Interstore 45L, 60L, 75L, 100T,115T,130T
Euro 95X, 110X, 125X, 140X

1 Reservoir

2 Pump

3 Valve

4 Auxiliary Shut Off Valve

5 Operating Lever

Electro Hydraulic - Lift, Slew etc
Extendo 600, Extendo 900, Containavator 600
Interstore 100T, 115T, 130T
Euro 95X, 110X, 125X, 140X, 170X, 200X

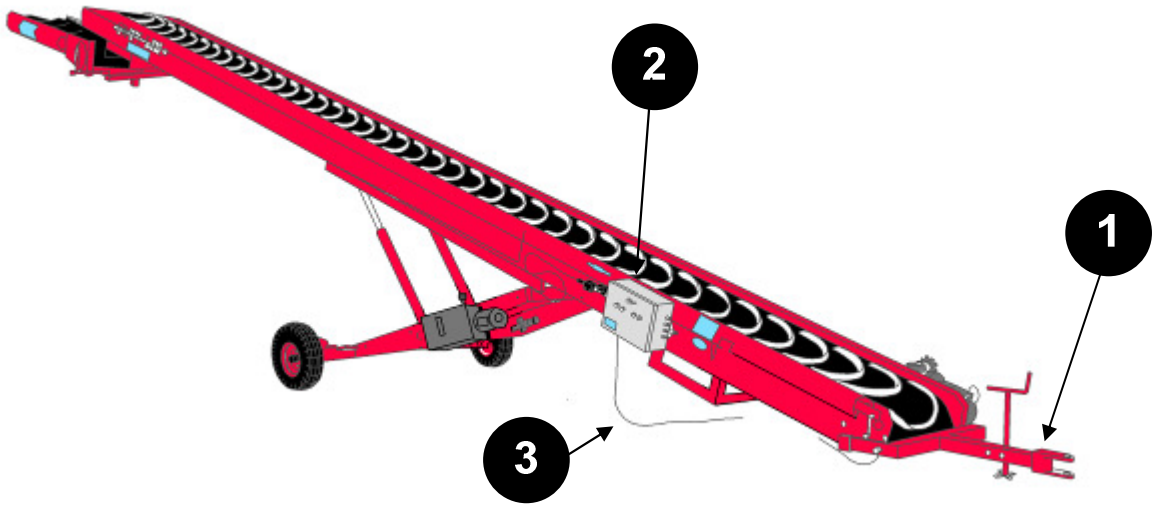
1 Reservoir

2 Valve section(s)

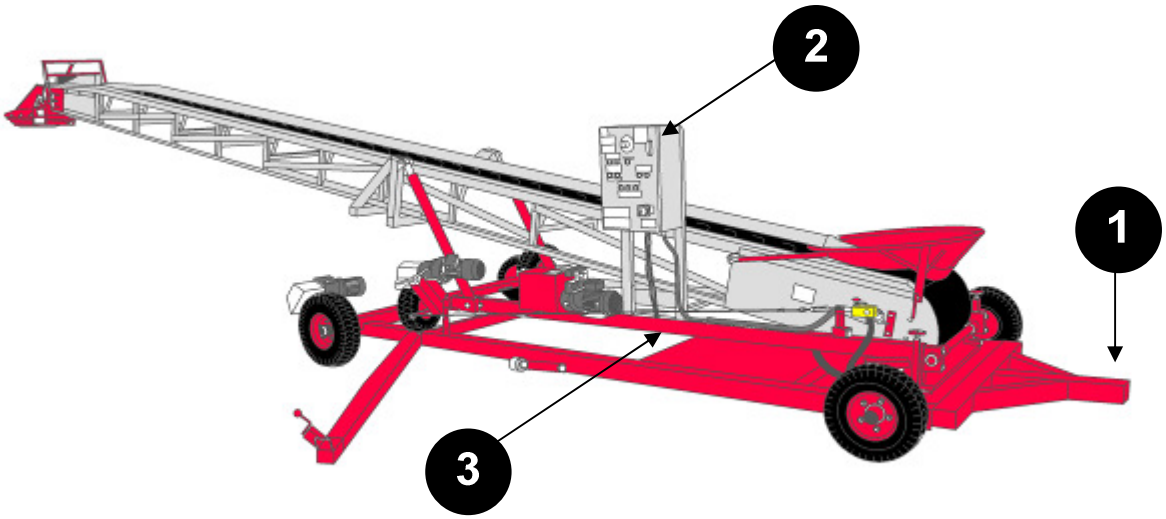
3 Solenoid

4 Motor Pump Unit

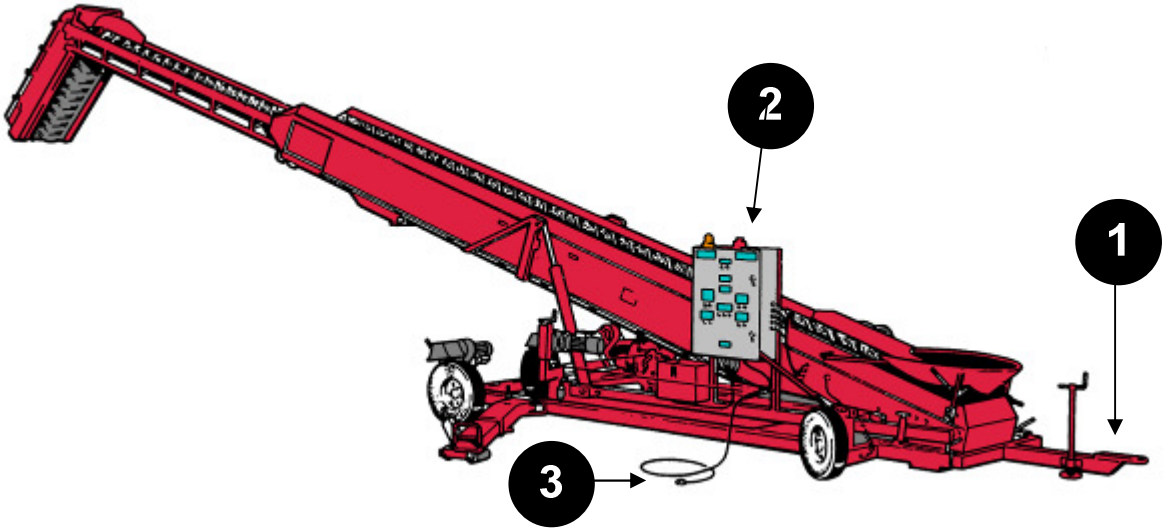
Interstore Models



Euro Models



Extendo & Contain-a-vator



Positioning

The TDJ elevator range are positioned in a number of ways . In general the machines are wheeled into position either manually or by the use of a towing vehicle .

WARNING

When working beneath the elevator structure always ensure that suitable personal protective equipment is worn IE Hard Hat etc.

WARNING

Do not work under the structure unless it is adequately supported and restrained and cannot fall on persons beneath it .

CAUTION

Be aware of potential trap areas.

On some machines the drawbar **[1]** can be removed to ease access to the reception end .

Connection

Ensure the Isolator on the main control panel **[2]** is switched **OFF ,** route the Power supply cable **[3]** to a suitable connection..

CAUTION

Check the electric supply source is sufficient for the machine and that the correct plug and socket is used.

WARNING

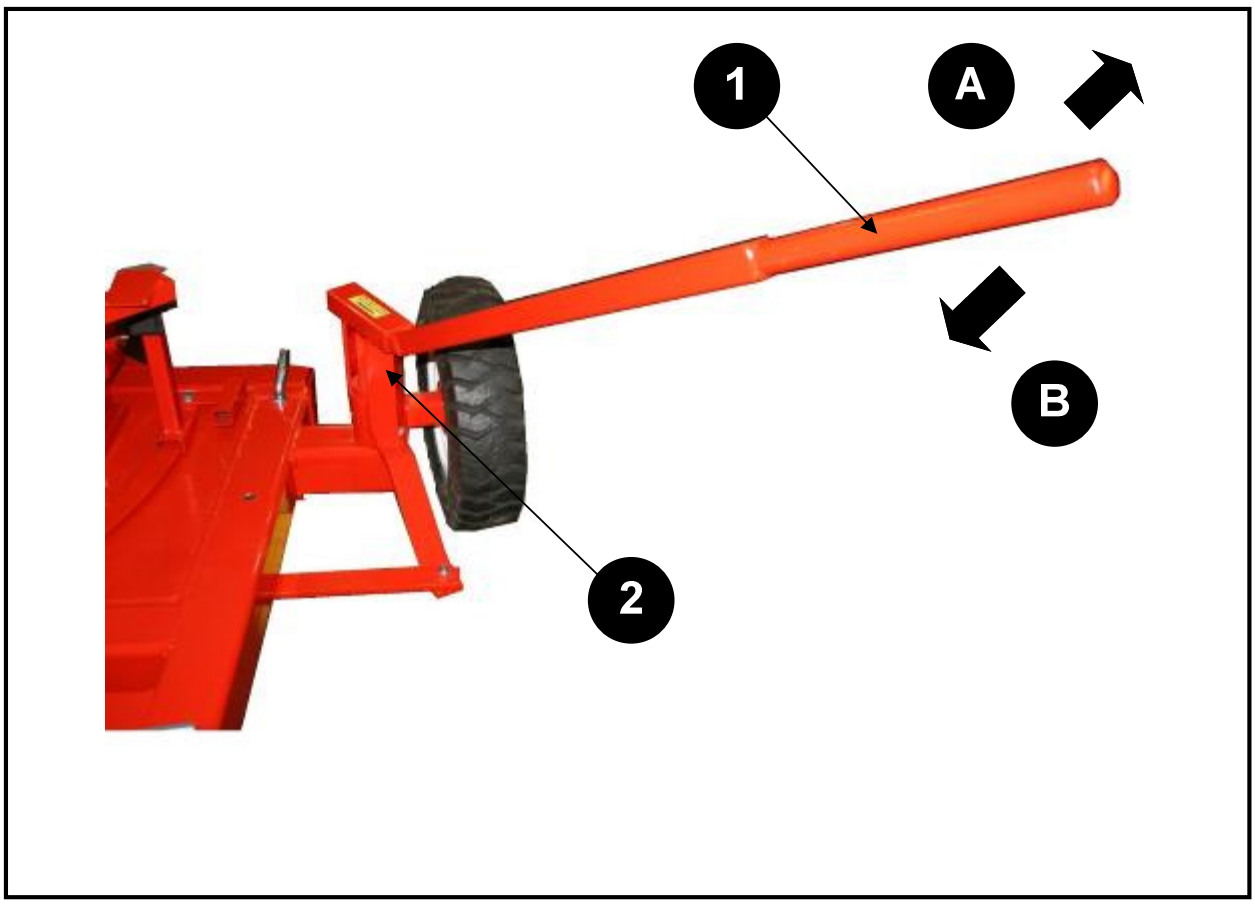
Do not “bank up” multiple supplies from a single source

WARNING

For 3-Phase elevators ensure the rotation of the belt drive motor is correct . The upper surface of the belt should travel upwards away from the reception end (Hopper) If this is not the case see Note 1 (P5:2)

WARNING

For Single Phase elevators ensure the supply is adequate See Note 2 (P5:2)



Steering

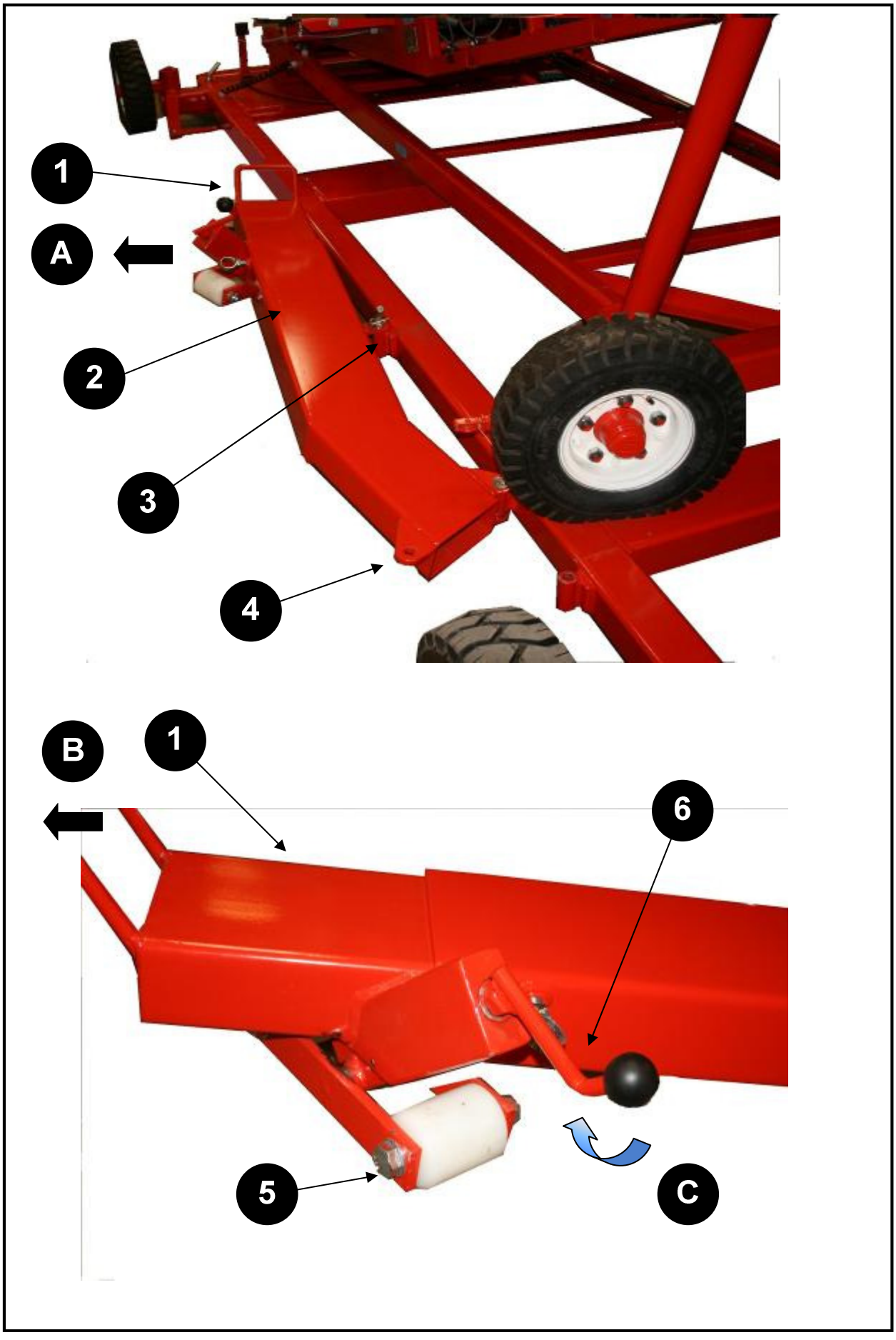
Steering

When positioning or re-positioning the elevator steering is achieved by using the manual steering handle.

The steering handle is stowed in a position adjacent to the Main control panel.

Ensure the steering handle is returned to the stowage position before using the elevator.

Remove the steering handle **[1]** and insert it into the steering hub socket **[2]**. Push the handle in direction **[A]** to steer to the left and in direction **[B]** to steer to the right.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Slew Wing Deployment

On machines which have a slew function the following procedure should be adhered to when deploying the Slew Wing extensions.

The slew wings **[2]** and extension **[1]** assemblies are stored folded against the main undercarriage of the elevator.

To deploy the wing remove Pin **[3]** and pull the wing assembly out in the direction of arrow **[A**] . When deployed re insert Pin **[3]** in hole **[4]** and through the mating point on the chassis.

Pull the handle on the end of Wing extension **[1]** in the direction of arrow **[B]** until the extension is at the desired position.

Repeat the operation for the Wing on the other side of the elevator.

When deployed level the slew track using the support casters **[5]** on each end of the Slew wing Extensions. Using the jack screw **[6]** rotate the handle in the direction of arrow **[C]** until the wing extension is adequately supported.

Ensure the elevator is locked in the centre position and the Yellow lock pin fitted before transporting or stowing the slew wings

Slew Wing Stowage

To stow the Slew wing extensions reverse the above procedure.

A
A
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ADJUSTING DELIVERY HEIGHT

Variable Pin Height (VPH) Adjustment (Machines without Hydraulic Lift)

Interstore Elevator Models 45L, 60L, and 75L

To Raise the Unit to the required delivery height, using suitable lifting equipment mechanically support the elevator frame near to the discharge end. **[A]**

WARNING

When working beneath the elevator structure always ensure that suitable personal protective equipment is worn IE Hard Hat etc.

WARNING

Do not work under the structure unless it is adequately supported and restrained and cannot fall on persons beneath it .

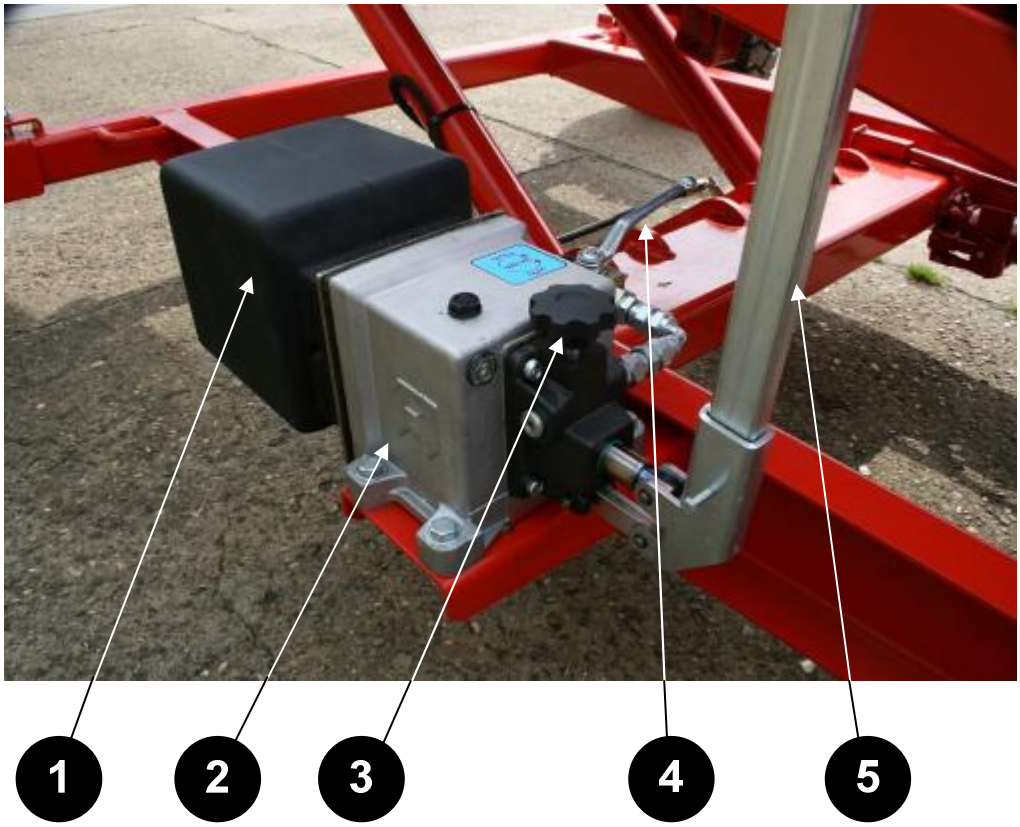
CAUTION

Be aware of potential trap areas.

Remove the Spring clip **[1]** and Pin **[3]** from the Sliding Box Link **[2]** , and raise to the desired the delivery height.

Align the holes ,re-insert the Pin **[3]** and secure with the spring clip.**[2]**

To Lower the Unit or adjust the height ,using suitable lifting equipment mechanically support the elevator frame near to the discharge end **[A]**, remove the Spring Clip **[1]** and Pin **[3]** and lower to the desired height . Re-Insert the Pin **[3]** into the sliding box link **[2]** and secure with the Spring clip **[1]**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ADJUSTING DELIVERY HEIGHT

Manual Hydraulic Height Adjustment
Interstore 45L, 60L, 75L, 100T,115T,130T
Euro 95X, 110X, 125X, 140X

To Raise the Unit to the required delivery height, close the Pump Unit Valve **[3]** by turning the hand wheel fully clockwise and turn the auxiliary shut off valve **[4]** (if fitted) to the “Open” position .

Manually operate the lever **[5]** Forwards & Backwards until the lift cylinders raise the elevator until the desired delivery height is reached.

The Auxiliary shut off valve **[4]** can be turned to the “Close” position .

WARNING

When working beneath the elevator structure always ensure that suitable personal protective equipment is worn IE Hard Hat etc.

WARNING

Do not work under the structure unless it is adequately supported and restrained and cannot fall on persons beneath it .

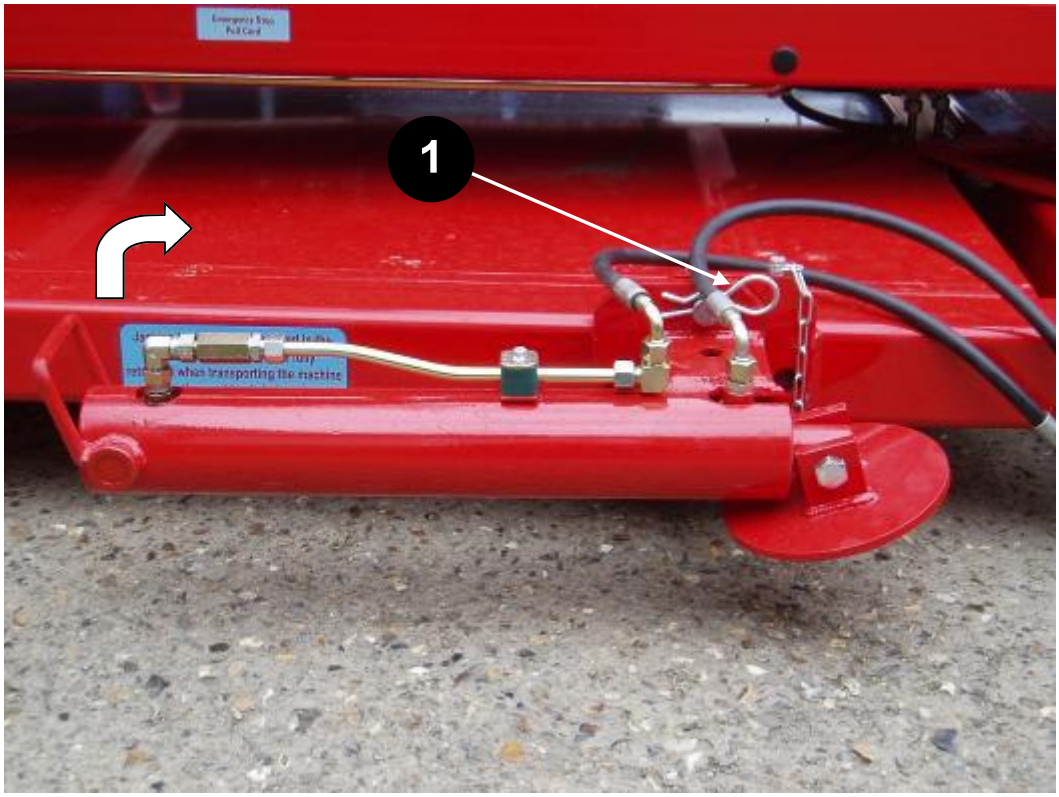
CAUTION

Be aware of potential trap areas.

To Lower the Unit to the required delivery height, turn the auxiliary shut off valve **[4]** (if fitted) to the “Open” position .

Close the Pump Unit Valve **[3]** by turning the hand wheel fully anti-clockwise , the elevator will now lower . When the desired height is reached turn the hand wheel **[3]** clockwise again until the elevator stops.

The Auxiliary shut off valve **[4]** can then be turned to the “Close” position .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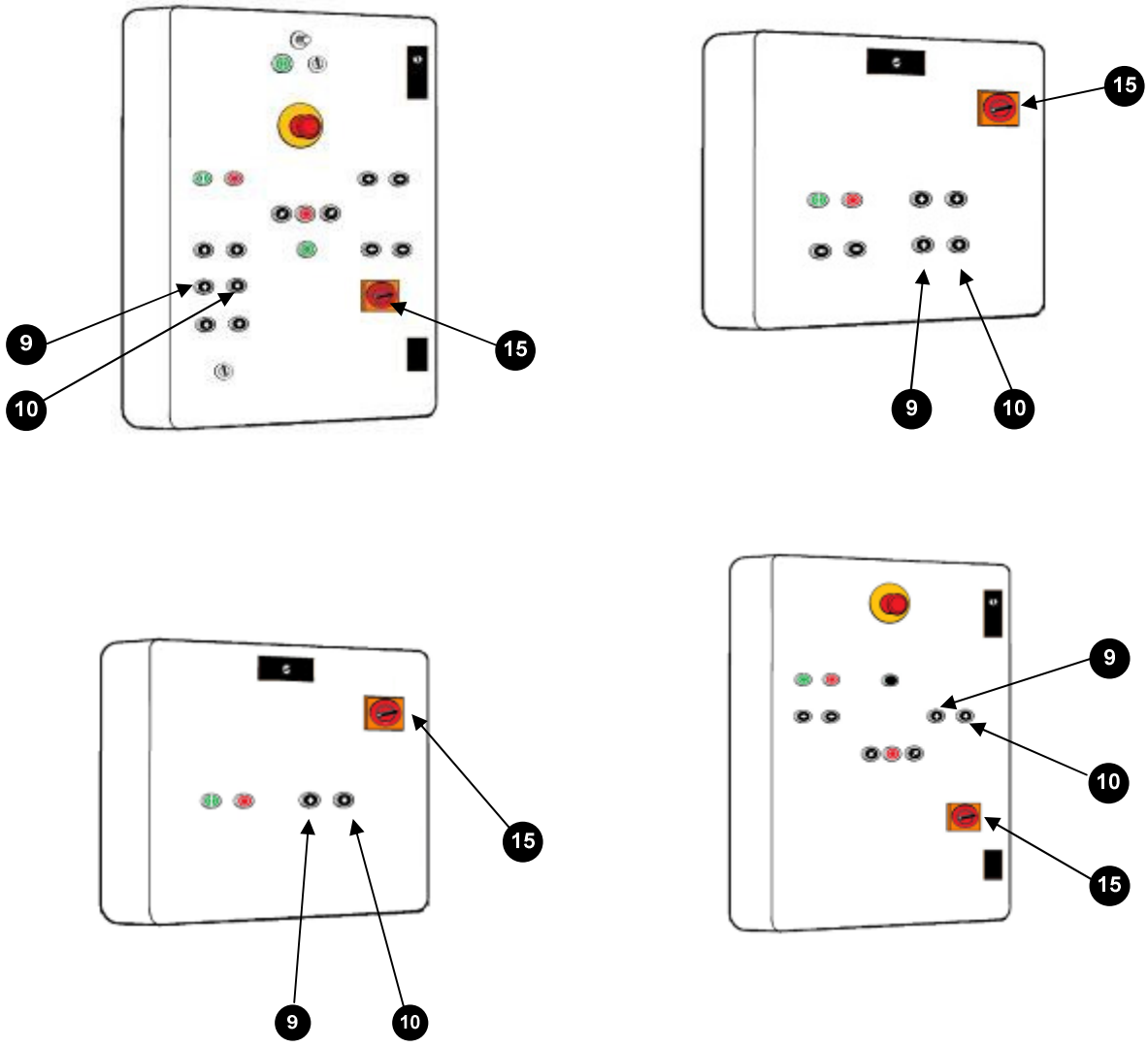
Deploying Jacking Legs (Contain-A-Vator Only)

Remove retaining clip **[1]** from the mounting plate and remove Pin **[2]**, rotate the Jack leg cylinder in the direction of the arrow until the holes align. Insert pin **[2]**, and retain with clip **[1].**

Repeat for the opposite side.

Stowing the Jacking Legs is the reverse of the above procedure.

For method of operation refer to page [7:5]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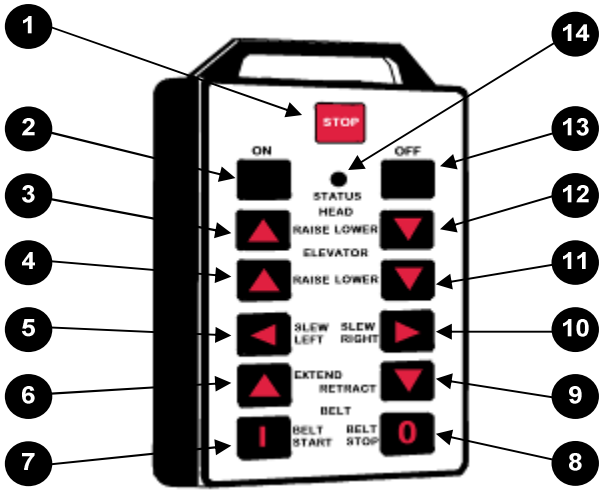
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STOP
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STATUS
HEAD
RAISE LOWER
ELEVATOR
RAISE LOWER
SLEW LEFT
SLEW RIGHT
EXTEND
RETRACT
BELT
BELT START
BELT STOP
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ADJUSTING DELIVERY HEIGHT

Electro Hydraulic Height Adjustment

Extendo 600, Extendo 900, Contain-a-vator 600
Interstore 45L, 60L, 75L, 100T,115T,130T
Euro 95X, 110X, 125X, 140X

To Raise ensure that power is on **[15]** press and hold the Raise button **[9]** on the control panel, release the button when the desired height is reached. The elevator will stop raising immediately the button is released or when the cylinders reach their end stops.

To Lower ensure that power is on **[15]** press and hold the Lower button **[10]** on the control panel, release the button when the desired height is reached. The elevator will stop lowering immediately the button is released or when the cylinders reach their end stops.

Electro Hydraulic Height Adjustment using Radio Remote Control

Ensure the Radio Remote control panel is energised **See page 7: 17**

To Raise ensure that power is on **[15]** press and hold the Raise button **[4]** on the control panel, release the button when the desired height is reached. The elevator will stop raising immediately the button is released or when the cylinders reach their end stops.

To Lower ensure that power is on **[15]** press and hold the Lower button **[12]** on the control panel, release the button when the desired height is reached. The elevator will stop lowering immediately the button is released or when the cylinders reach their end stops.

When working beneath the elevator structure always ensure that suitable personal protective equipment is worn IE Hard Hat etc.

Do not work under the structure unless it is adequately supported and restrained and cannot fall on persons beneath it .

Be aware of potential trap areas.

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Operating the Elevator

CAUTION

Check the operation of any road lighting and worklights temporary or fixed where fitted.

CAUTION

Check safety equipment for function and correct position.

CAUTION

Thoroughly lubricate the machine before operation.

CAUTION

Check all Bolts and Nuts are tight.

CAUTION

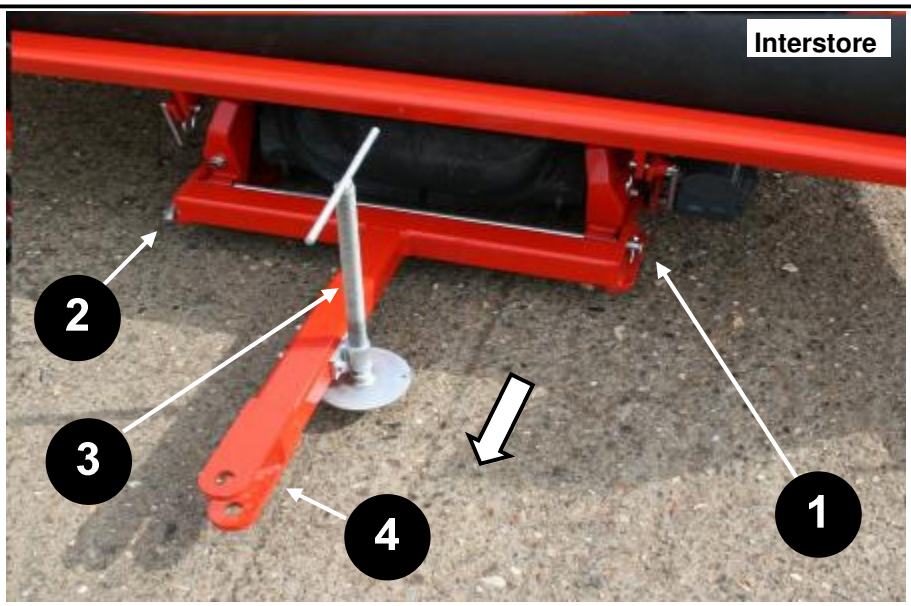
Remove any wrappings or temporary covers for motors to avoid restrictions to cooling

CAUTION

Check the electric supply source is sufficient for the machine and that the correct plug and socket is used.

General

The operation pages are provided as a guide to the safe working of the machine , failure to follow these instructions may result in injury to the operator or other personnel , and could result in damage to the machine.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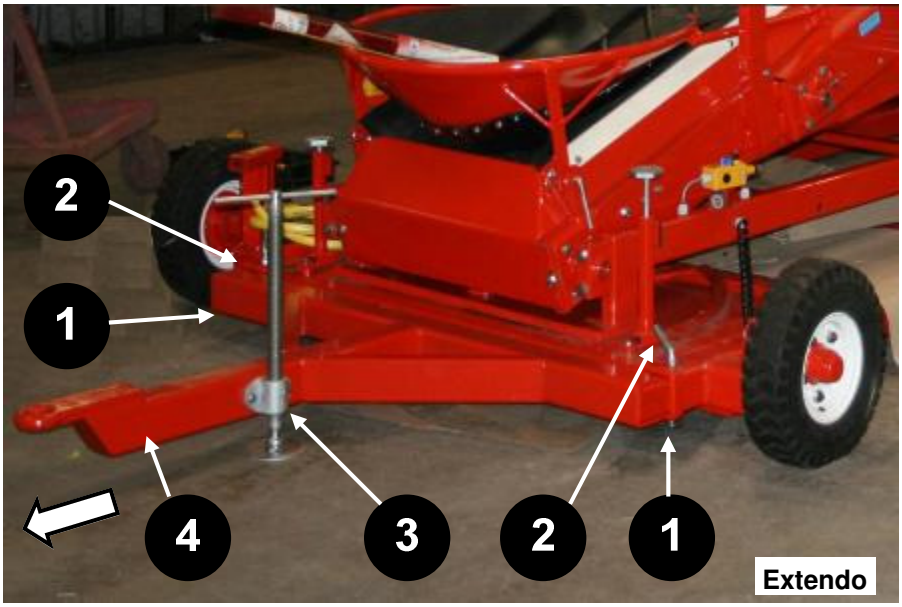
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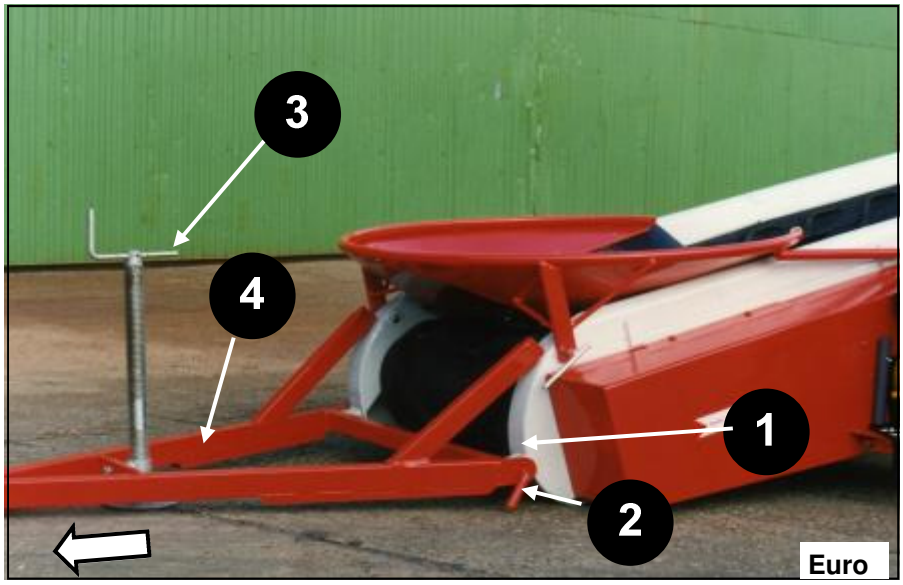
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Transporting the Elevator

Before transporting the elevator ensure the following procedures are followed.

Fitting and Removing the Drawbar

Interstore & Euro Models

Raise the Screwjack assembly **[3]** by turning the handle counter-clockwise, remove the clip **[1]** from the retaining pin **[2],** withdraw the pin and pull the drawbar **[4]** from its mounting.

Fitting is the reverse of the removal procedure.

Extendo & Contain-a-vator Models

Raise the Screwjack assembly **[3]** by turning the handle counter-clockwise, remove the Two retaining pins **[2],** and pull the drawbar **[4]** from its mounting sockets in the elevator undercarriage.

Fitting is the reverse of the removal procedure.

Before transporting

For models with a Slew function , centre the elevator and fit the Yellow locking pin.

Fully retract the extended Secondary Unit (Extendo & Contain-a-vator)

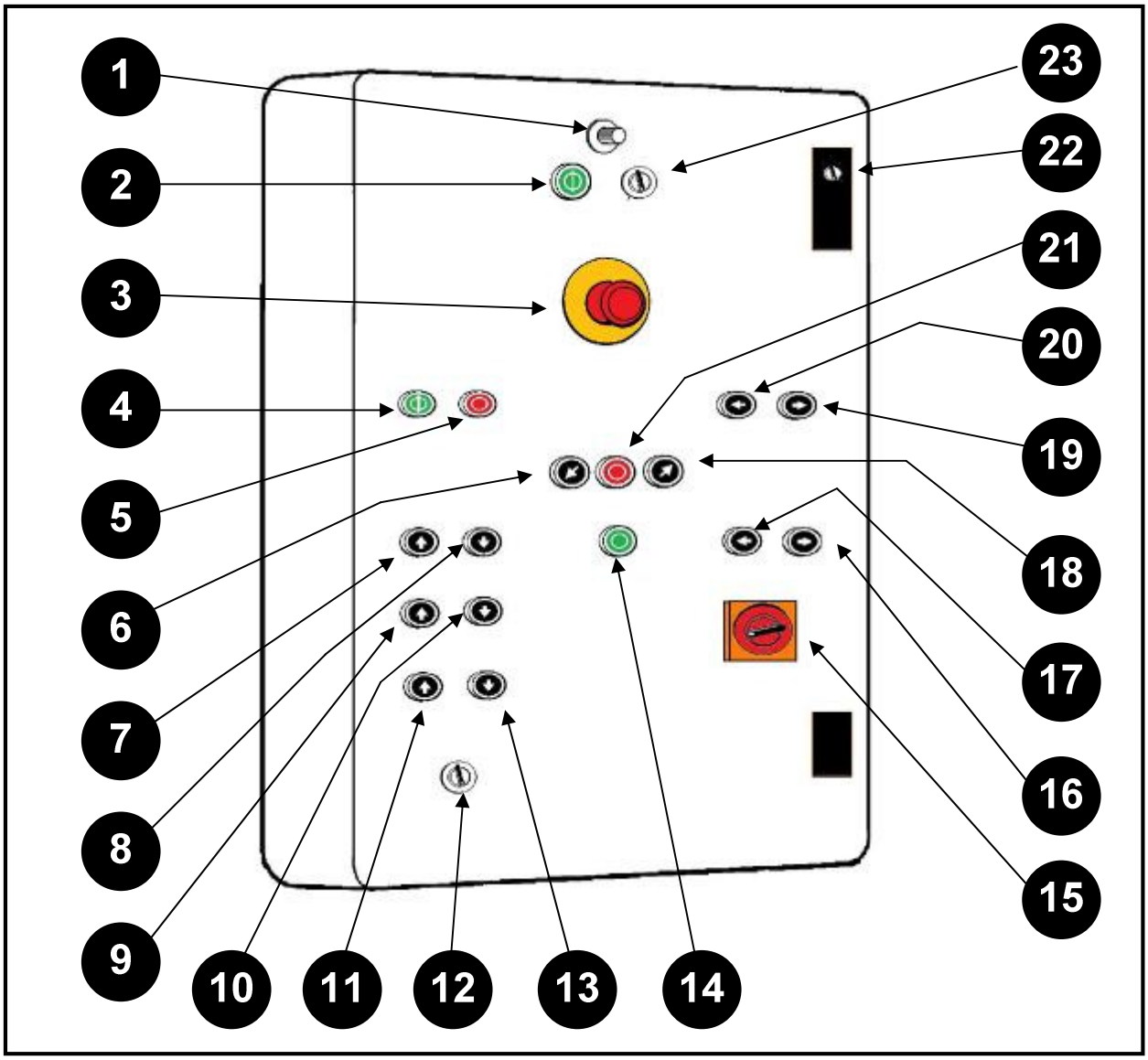
Lower the elevator to approximately to 1/5 to 1/3 of the full height and ensure the elevator is supported hydraulically.

Retract and Stow Slew Wings and Extensions (see P 6:7)

Close all Hydraulic Isolation valves

Retract Power transmission units (See P 7:6)

Maximum Towing speed is limited to 20 Mph (30 Kph) on good smooth surfaces. Reduce speed accordingly for uneven surfaces.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Extendo & Contain-A-Vator

Main Isolator

The main Isolator switch **[15]** energises all machine functions when in the “ON” position , the isolator can only be switched to “ON” when the control panel door is closed and latched.

Main Belt Drive

To start the Primary and Secondary Unit Belts, press button **[4],** when the button is pressed the Secondary Unit belt will start before the Primary Unit belt, this is normal.

When stopping the Belts press button **[5],** both the Primary and Secondary Unit belts will stop simultaneously

Before starting the Belt drive, with the isolator in the OFF position check for any obstructions and debris that may have collected on the belt. or ancillary equipment

Lifting & Lowering

Locate the Hydraulic control valve on the Power pack and turn it Counter-clockwise. Turn the diverter valve to “Main Unit”.

Press and hold button **[9]** to raise the main lift cylinders and raise the elevator to the required delivery height, when the button is released the movement will stop and the elevator will remain in position.

Press and hold button **[10]** to lower the main lift cylinders and lower the elevator, when the button is released the movement will stop and the elevator will remain in position.

Luffing Head

Press and hold button **[7]** to raise the Luffing head lift cylinders and raise the Safedown extension as required, when the button is released the movement will stop and the head will remain in position.

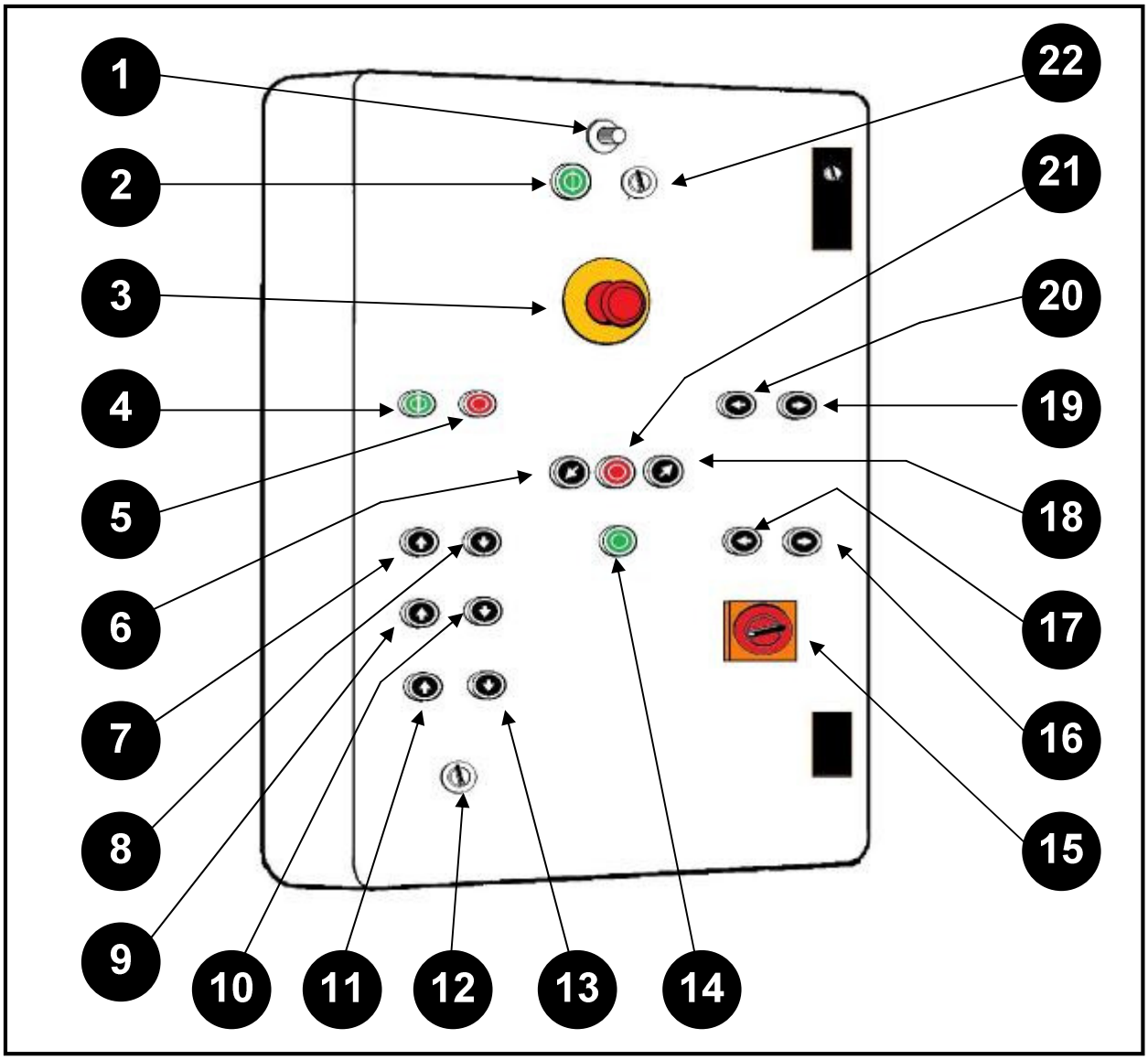
Press and hold button **[8]** to lower the Luffing head lift cylinders and lower the Safedown extension as required, when the button is released the movement will stop and the head will remain in position.

Jacking Legs (Contain-A-Vator Only)

Press and hold button **[11]** to raise the Jacking Leg cylinders to raise the reception end of the elevator, as required when the button is released the movement will stop and the jacking legs will remain in position.

Press and hold button **[13]** to lower the Jacking Leg cylinders to lower the reception end of the elevator, as required when the button is released the movement will stop and the jacking legs will remain in position.

To prevent damage when using the Jacking Legs in confined spaces, always pay special attention to the movement of the delivery end of the elevator.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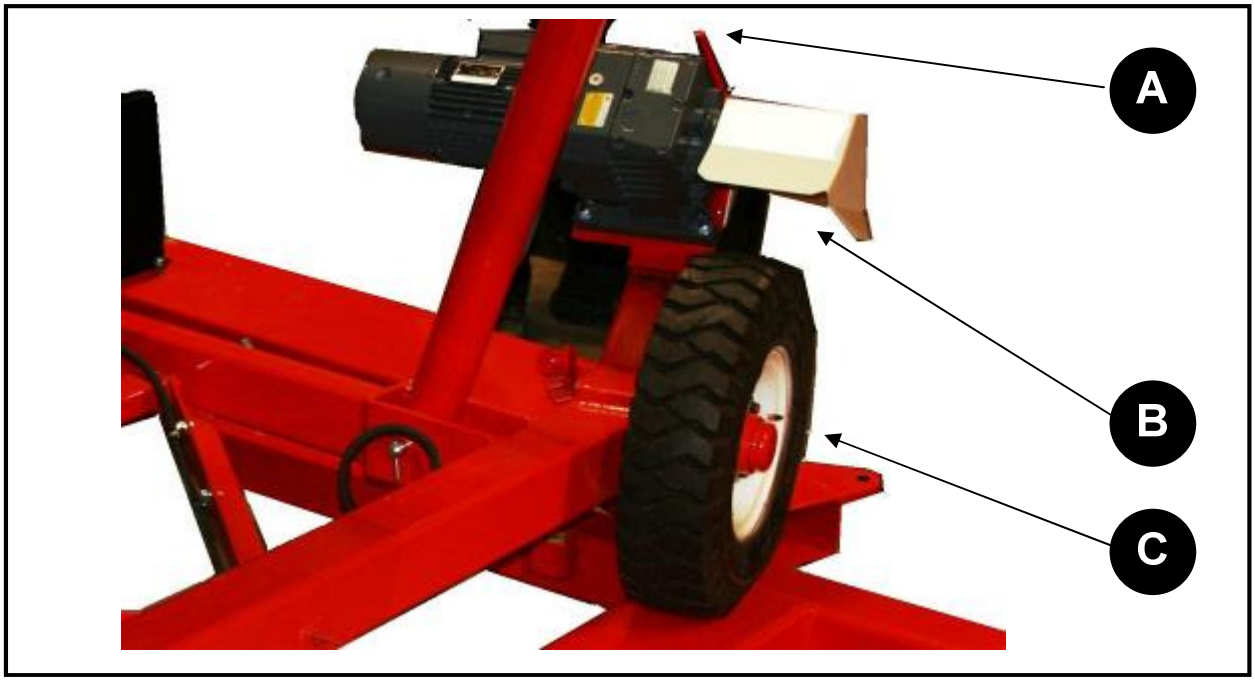
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Extendo & Contain-A-Vator

Secondary Unit Extension & Retraction

Press and Hold Button **[20]** to extend the Secondary Unit until the desired position is achieved. Releasing the button will stop the extension and maintain the position.

Before retraction of the Secondary Unit ensure the belt is running but unloaded.
Press and Hold Button **[19]** to retract the Secondary Unit until the desired position is achieved. Releasing the button will stop the retraction and maintain the position.

CAUTION

Do Not retract with the belt loaded or stationary

Slewing

Before Slewing deploy Slew Wings and disengage the Yellow Locking Pin before commencing Slewing operation.(refer to P 6:7)

Using lever **[A]** wind the Friction Slewing Drive units **[B]** so that they are in contact with the Slew frame Tyre **[C]**

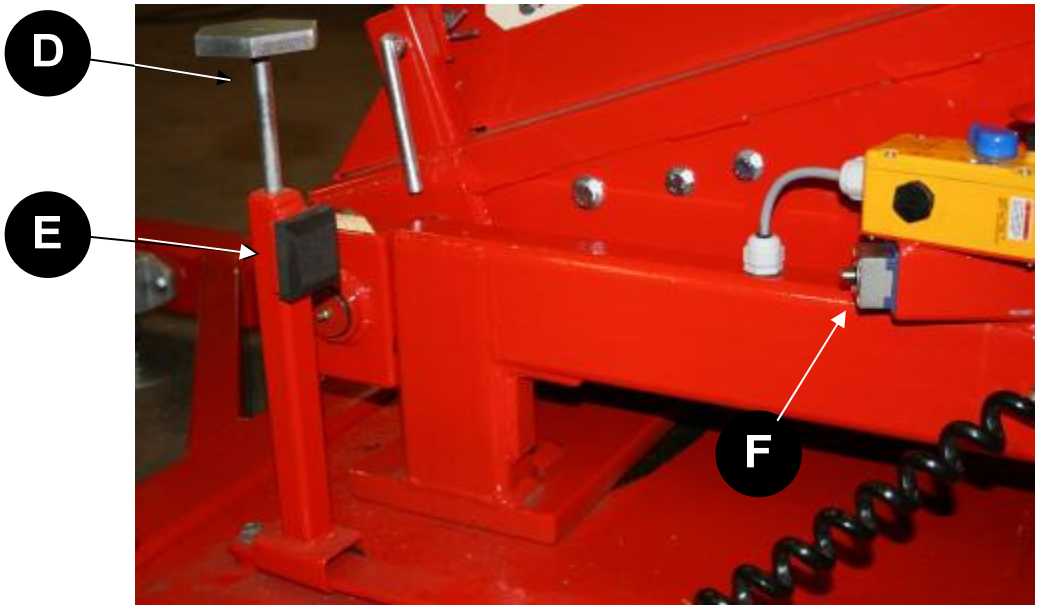
Correctly set the switch Buffers **[E]** by adjusting the handwheels **[D]** and sliding the buffers along the curved tracks to the desired position. The buffers must contact the Slew limit switches **[F]** at full slew.

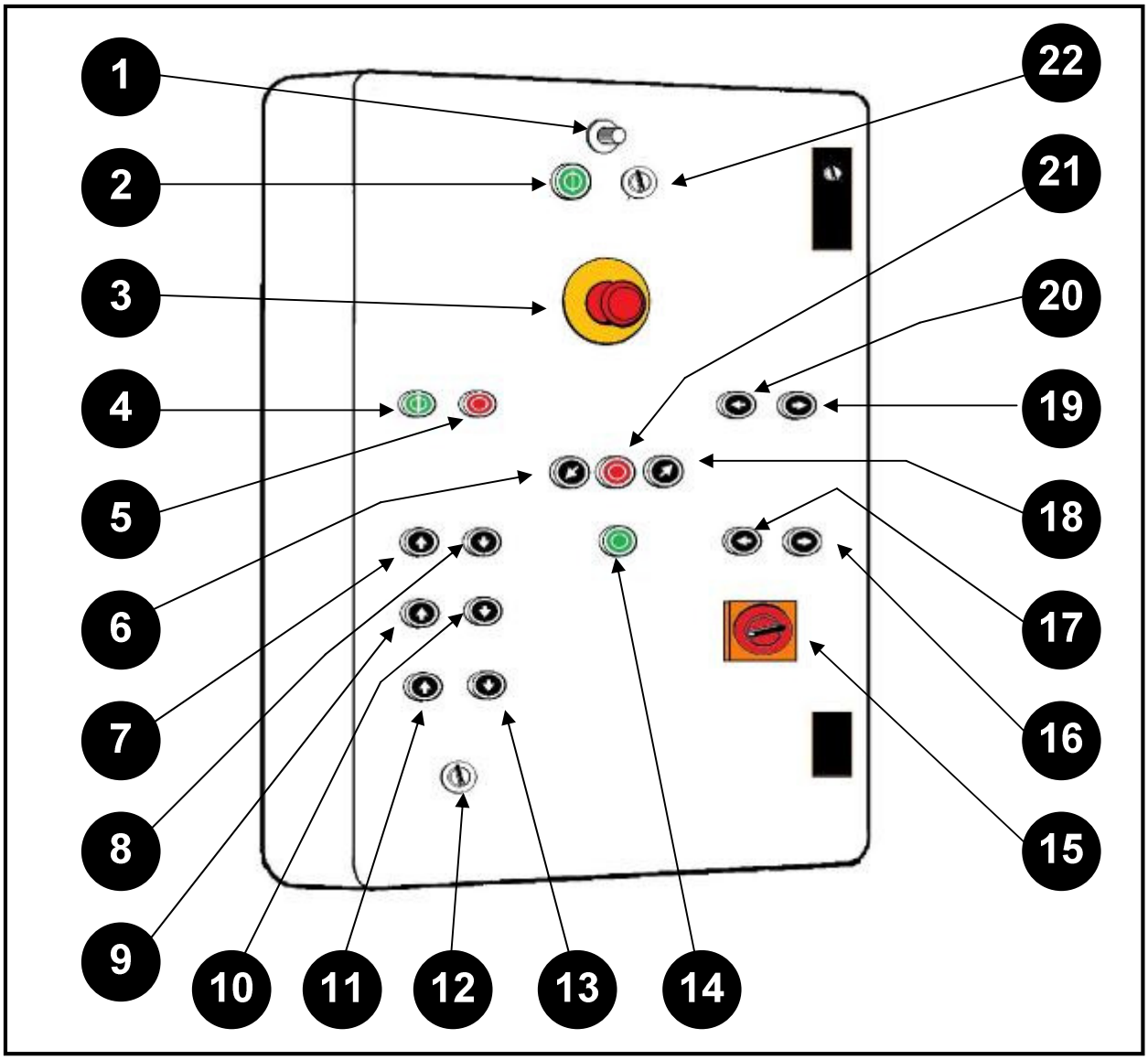
When button **[6]** Slew left or Button **[18]** Slew right is pressed the elevator will commence slewing in that direction. When the stop buffer **[E]** contacts the switch **[F]** it will pause for the preset time before reversing the slew therefore maintaining automatic side to side slew.

To stop the Slew function press button **[21],** if the machine is in pause mode (I.E. When the limit switches are being actuated) it will automatically restart after the pause preset time.

CAUTION

Slew function may restart unexpectedly

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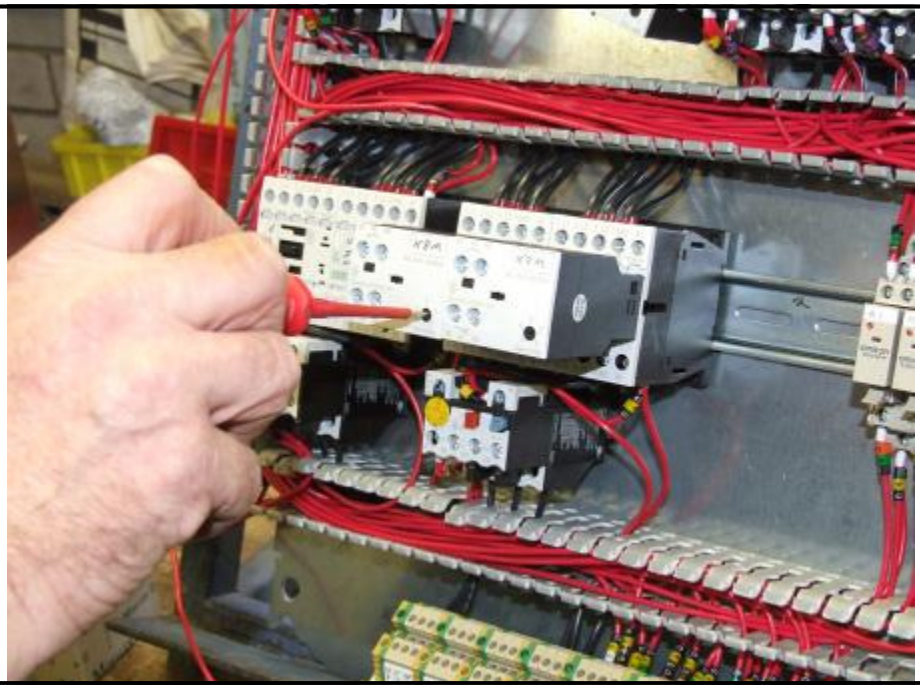
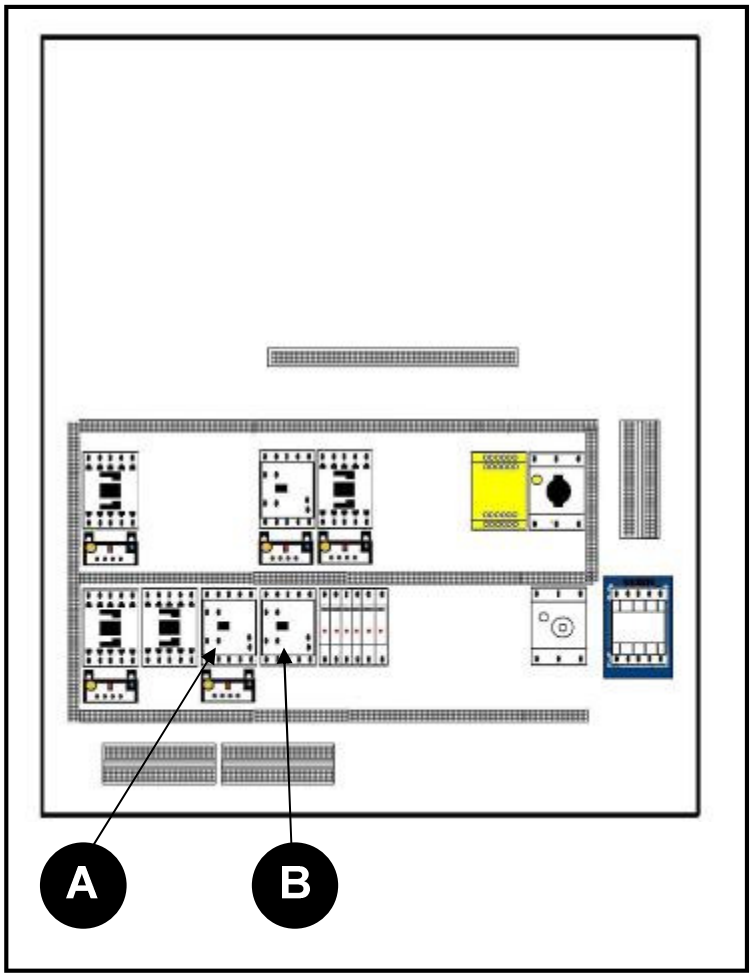


Extendo & Contain-A-Vator

Setting Slew Pause Timers

The default setting for the Pause preset timer is approximately 15 seconds.
The pause time can be adjusted to suit the application.
Turn off Isolator **[15]** and open the control panel door, the Slew Pause timer units **[A]** & **[B]** are located as shown.

The timers can be adjusted from Zero to 180 seconds as desired by inserting and turning a small flat bladed screwdriver as shown.



Operating Power transmission

Power Transmission moves the elevator in either the Forwards or Reverse direction.
Before operation ensure that the Power transmission friction drive units are engaged, (See Slew operation P 7:7 for details).
Remove the steering handle from its stowage adjacent to the control panel and insert in the steering socket , ensure the power is on. After steering replace the steering handle into its stowed position

Moving Forwards

Press and Hold Button **[16]**, the elevator will move forwards whilst the button is held down and will stop when it is released. The front wheels can be steered whilst the elevator is moving.

Moving Backwards

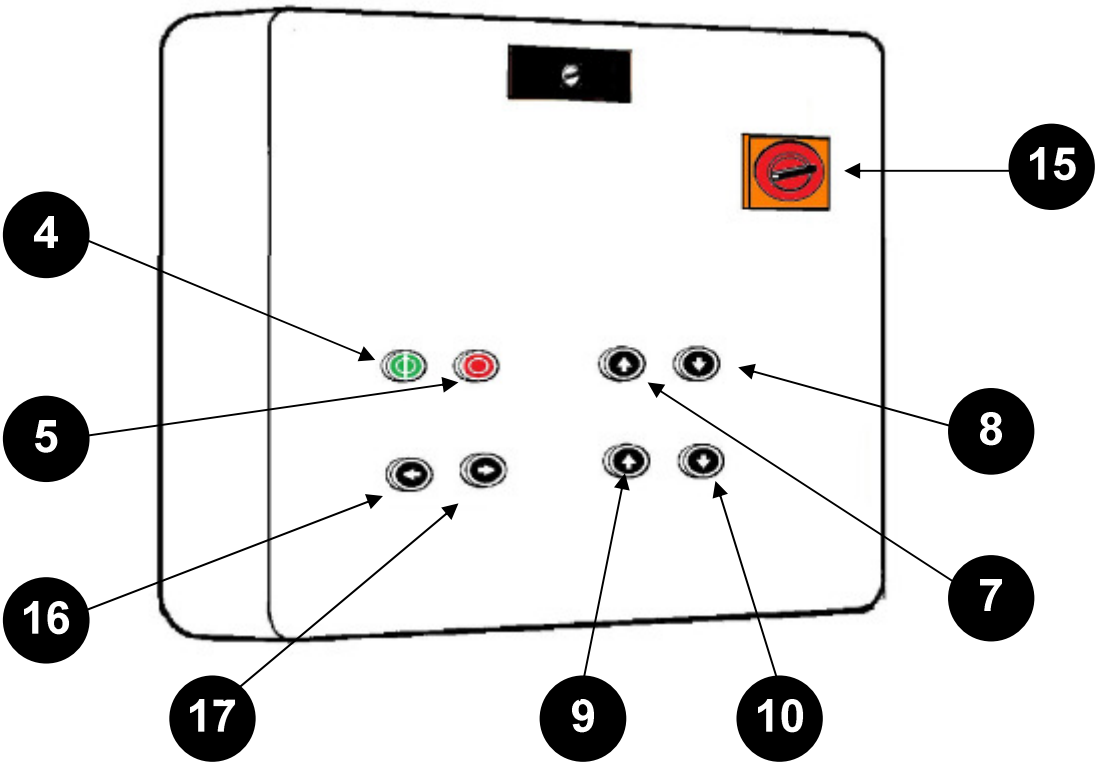
Press and Hold Button **[17]**, the elevator will move backwards whilst the button is held down and will stop when it is released. The front wheels can be steered whilst the elevator is moving.

CAUTION

Power Transmission Function may start unexpectedly.

CAUTION

When not in use the steering handle must be returned to its stowed position.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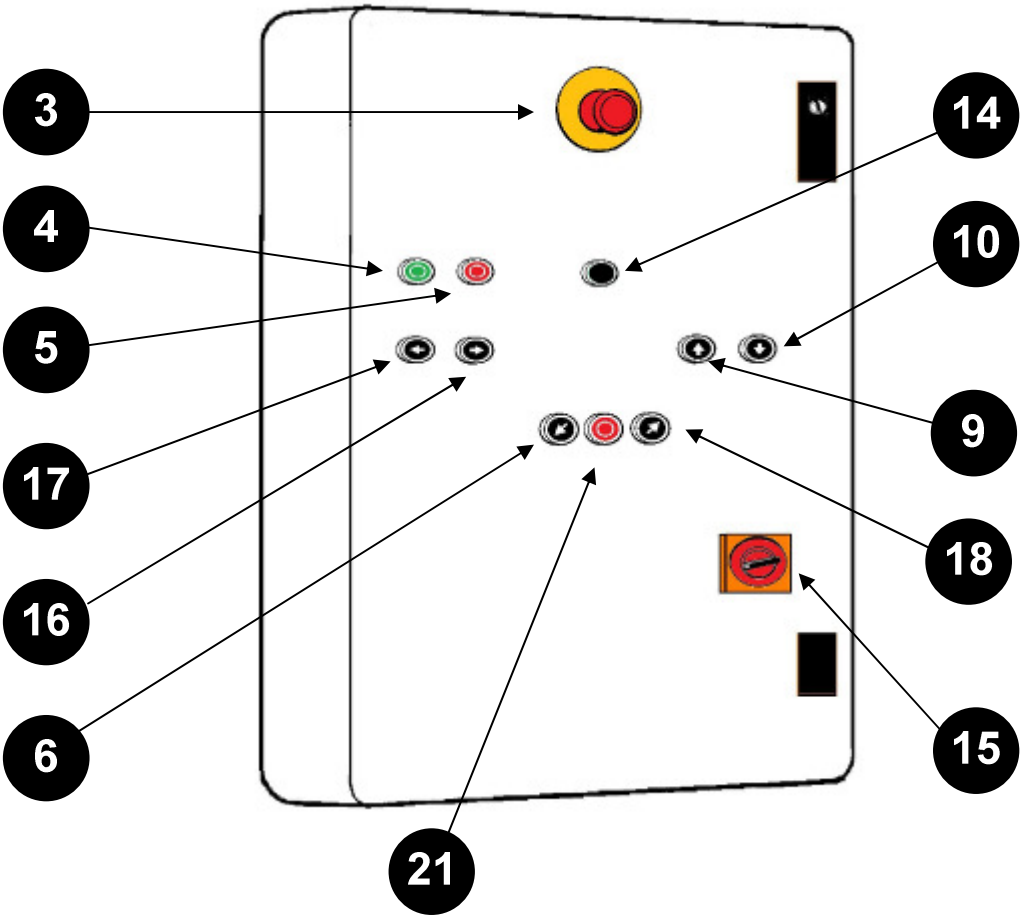
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Euro Models

Main Isolator

The main Isolator switch **[15]** energises all machine functions when in the “ON” position , the isolator can only be switched to “ON” when the control panel door is closed and latched.

Main Belt Drive

To start the Main Belt, press button **[4],** when the button is pressed the belt will start

To stop the Belt press button **[5]**

Before starting the Belt drive, with the isolator in the OFF position check for any obstructions and debris that may have collected on the belt. or ancillary equipment

Lifting & Lowering

Press and hold button **[9]** to raise the main lift cylinders and raise the elevator to the required delivery height, when the button is released the movement will stop and the elevator will remain in position.

Press and hold button **[10]** to lower the main lift cylinders and lower the elevator, when the button is released the movement will stop and the elevator will remain in position.

Luffing Head

Press and hold button **[7]** to raise the Luffing head lift cylinders and raise the Safedown extension as required, when the button is released the movement will stop and the head will remain in position.

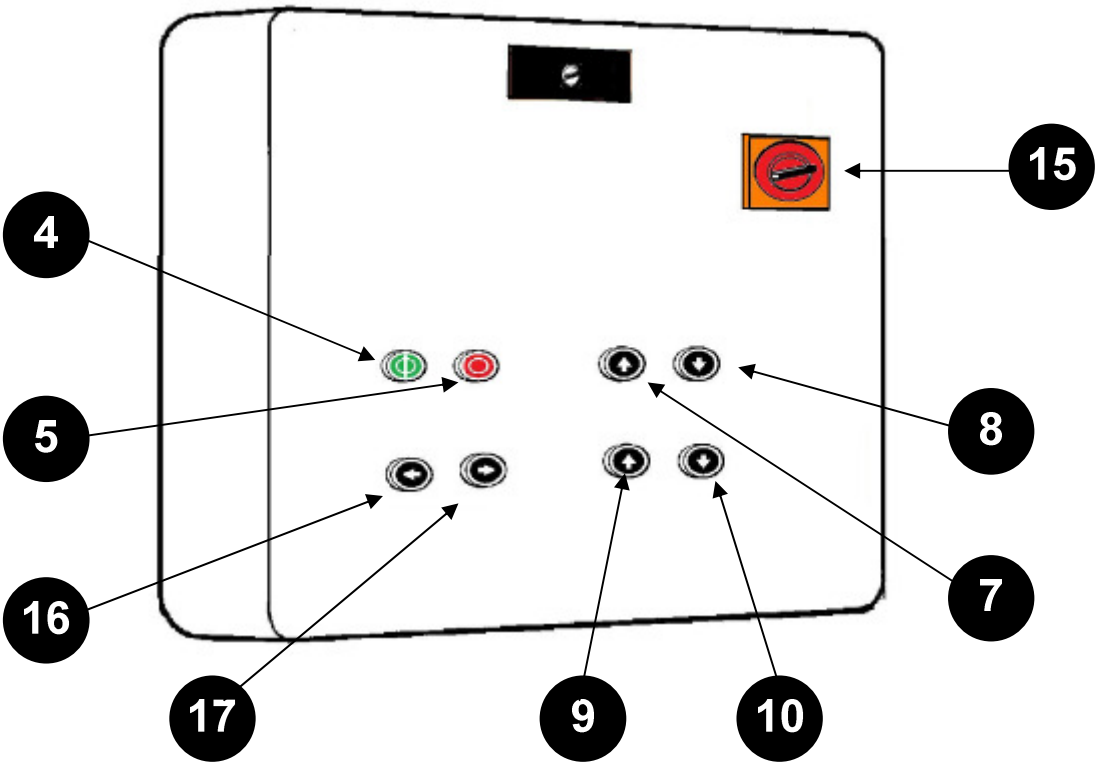
Press and hold button **[8]** to lower the Luffing head lift cylinders and lower the Safedown extension as required, when the button is released the movement will stop and the head will remain in position.

Slewing

Before Slewing deploy Slew Wings and disengage the Yellow Locking Pin before commencing Slewing operation.(refer to P 6:7)

Wind the Friction Slewing Drive units so that they are in contact with the Slew frame Tyre

When button **[6]** Slew left or Button **[18]** Slew right is pressed the elevator will commence slewing in that direction. To stop the Slew function press button **[21]**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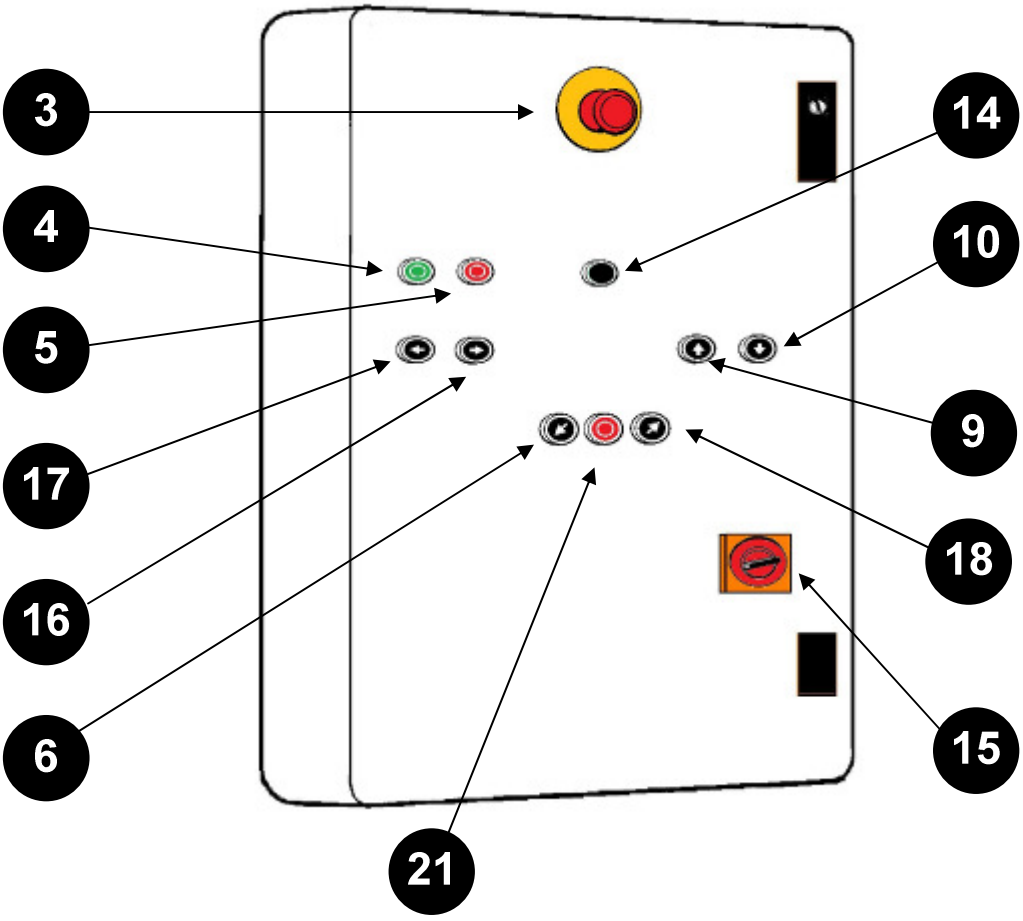
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Euro Models

Operating Power transmission

Power Transmission moves the elevator in either the Forwards or Reverse direction.
Before operation ensure that the Power transmission friction drive units are engaged, (See Slew operation P 7:7 for details).
Remove the steering handle from its stowage adjacent to the control panel and insert in the steering socket , ensure the power is on. After steering replace the steering handle into its stowed position.

Moving Forwards

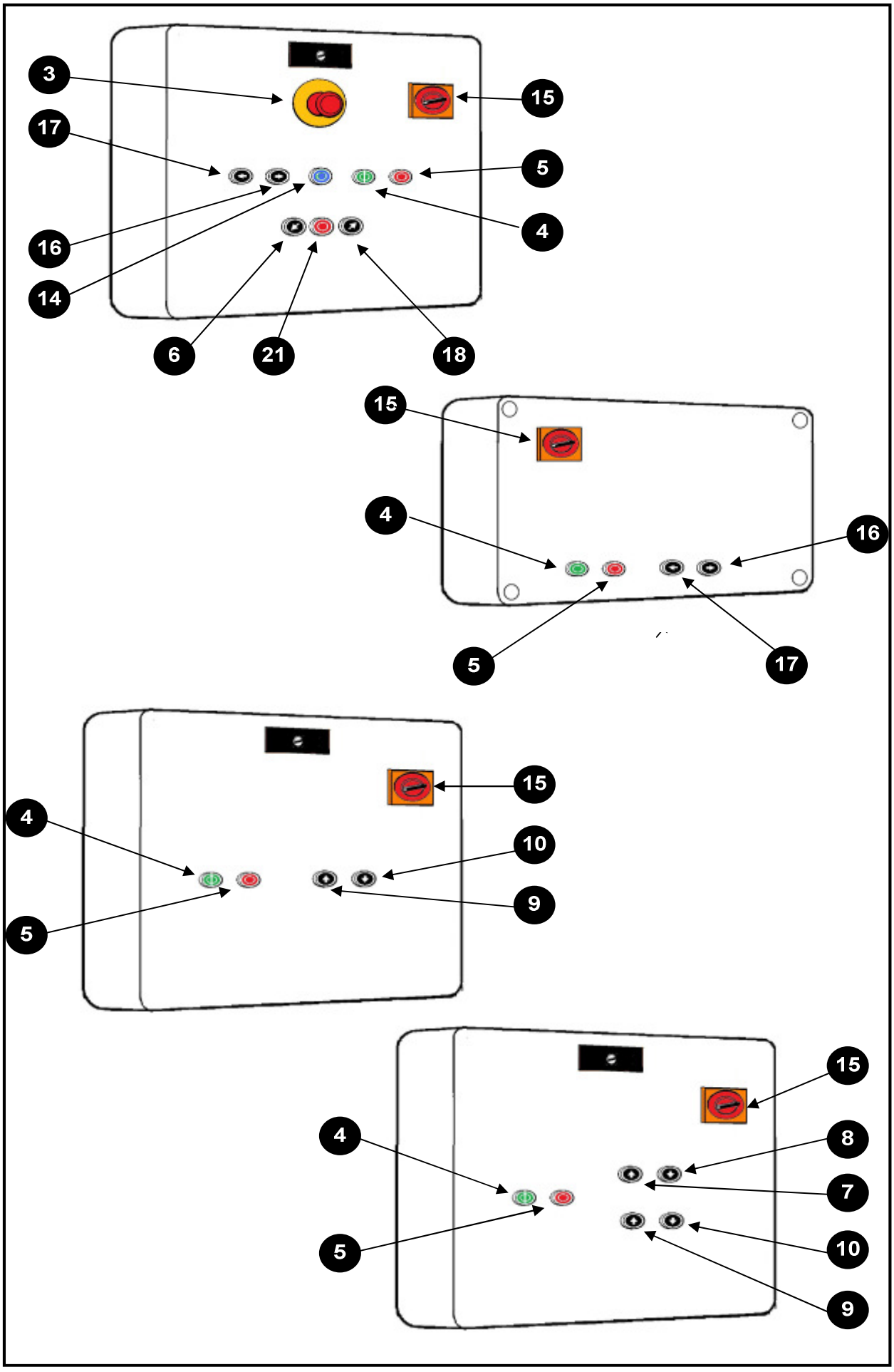
Press and Hold Button **[16]**, the elevator will move forwards whilst the button is held down and will stop when it is released. The front wheels can be steered whilst the elevator is moving.

Moving Backwards

Press and Hold Button **[17]**, the elevator will move backwards whilst the button is held down and will stop when it is released. The front wheels can be steered whilst the elevator is moving.

Power Transmission Function may start unexpectedly.

When not in use the steering handle must be returned to its stowed position.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Interstore Models

Operating Power transmission

Power Transmission moves the elevator in either the Forwards or Reverse direction.
Before operation ensure that the Power transmission friction drive units are engaged, (See Slew operation P 7:7 for details).
Remove the steering handle from its stowage adjacent to the control panel and insert in the steering socket , ensure the power is on. After steering replace the steering handle into its stowed position

Moving Forwards

Press and Hold Button **[16]**, the elevator will move forwards whilst the button is held down and will stop when it is released. The front wheels can be steered whilst the elevator is moving.

Moving Backwards

Press and Hold Button **[17]**, the elevator will move backwards whilst the button is held down and will stop when it is released. The front wheels can be steered whilst the elevator is moving.

Power Transmission Function may start unexpectedly.

When not in use the steering handle must be returned to its stowed position.

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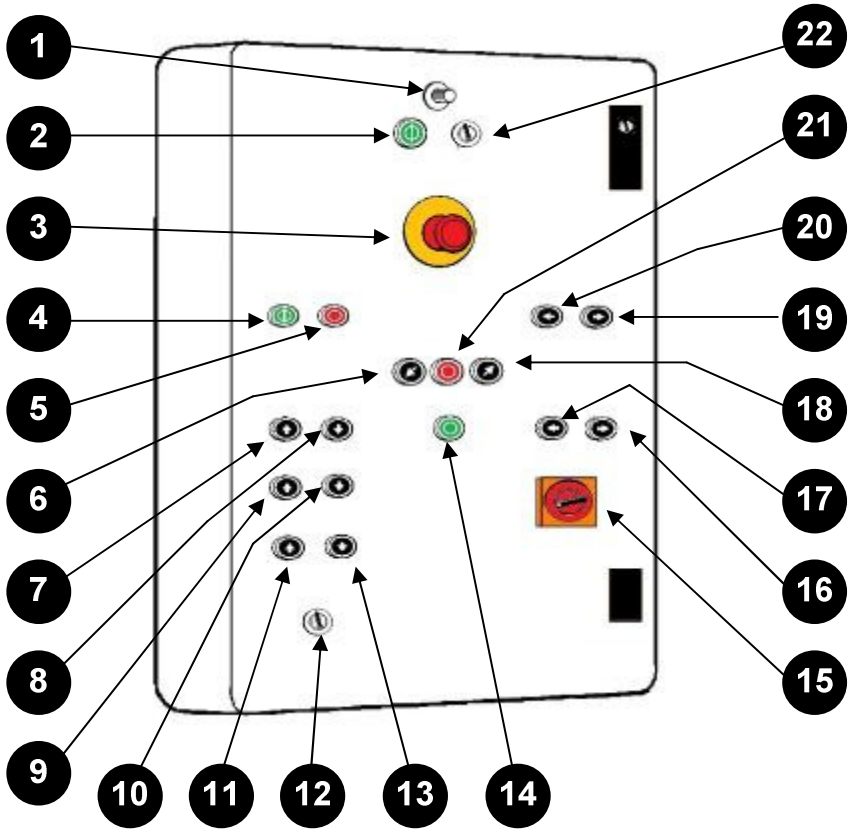
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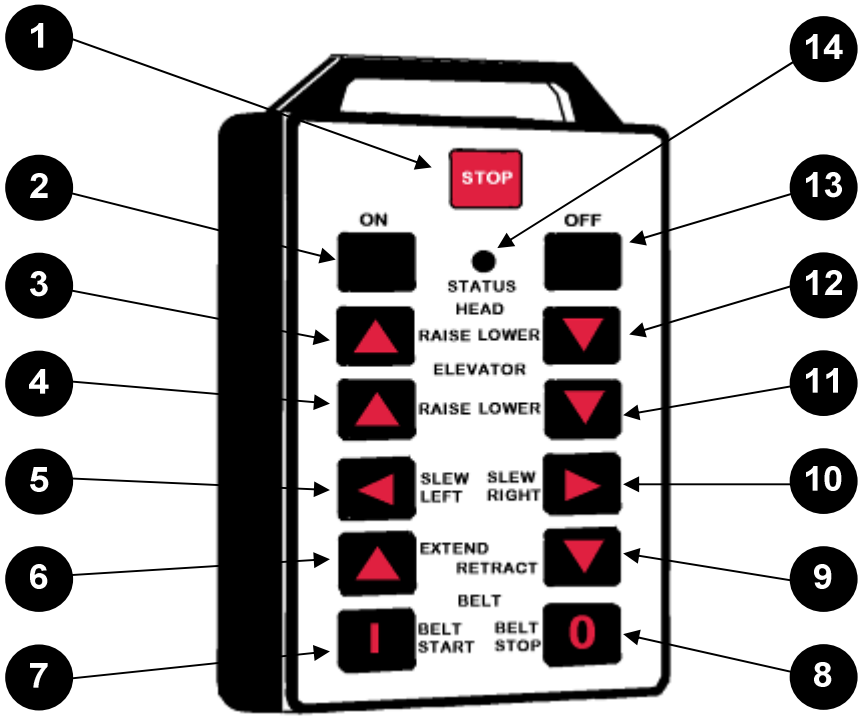
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Extendo & Contain-A-Vator Models

Operating Radio remote control

To turn on the Radio remote control , insert the key **[A 22]** and turn clockwise**.** Press button **[A 2]** , release the Key and the Beacon on the control panel will flash . Whilst flashing the beacon indicates to personnel that the machine is under the command of the remote unit and may move unexpectedly.

Only operate the machine by remote control if it is clearly visible to you. When not operating switch off and remove the key.

Do not allow personnel to operate around the machine when under remote control.

Radio remote control - Emergency Stop

The radio remote control unit has an emergency stop button **[B 1]**, when pressed all powered elevator functions will stop immediately.

To turn on the radio remote panel press button **[B 2],** the Green lamp **[A 1]** on the main control panel will light when a signal is received from the remote panel . The lamp **[B 14**] will illuminate to indicate the remote panel is switched on.

To turn off the panel press button **[B 13],** lamp **[B 14]** will extinguish.

Only one function can be operated at a time. If a button is pressed on the main control panel this will override the remote function.

Luffing Head
Press button **[B 3]** to raise the head to the required delivery height, release the button and the head will stop raising .

Press button **[B 12]** to lower the head to the required delivery height, release the button and the head will stop lowering.

Elevator Main Lift
Press button **[B 4]** to raise the elevator to the required delivery height, release the button and the elevator will stop raising .

Press button **[B 11]** to lower the elevator to the required delivery height, release the button and the elevator will stop lowering.

Slew
Press button **[B 5]** to slew the elevator to the Left or button **[B 10]** to slew the elevator to the Right, the slew will continue until the button is released or until the slew limit switch is actuated.
When the limit switch is activated the unit will pause for the preset time and then continue in automatic slew mode. To exit automatic slew mode press the opposite Slew button

Extend & Retract
Press button **[B 6]** to extend the secondary unit, release the button and the extension will stop. Press button **[B 9]** to retract the secondary unit, release the button and the retraction will stop.

Belt Drives
Press button **[B 7]** to start the Primary and Secondary unit belts. Press button **[B 8]** to stop the Primary and Secondary unit belts

Radio remote control - Safety

When the elevator is not being operated using the remote control (even for short periods) switch off the remote control unit by pressing button **[B 13],** turn the key **[A 22]** counter-clockwise and remove it from the panel. This will prevent inadvertent operation of any function from the remote unit.

Radio remote control - Reception Distance

The maximum suggested operating distance is 20 meters (66 ft) TDJ Ltd do not recommend working at greater distances as it is always necessary to keep the elevator in clear view.

Radio remote control - Care of Hand held Unit

Do not expose to excessive rain or other sources of moisture,

Protect from impact , shock or mechanical vibration.

Protect from direct heat sources , do not leave the unit in direct sunlight.

Radio remote control - Battery replacement

Use only alkaline batteries. (Do not recharge or use rechargeable batteries)

To fit replacement batteries, slide the battery compartment out from the base of the radio remote unit and remove the battery

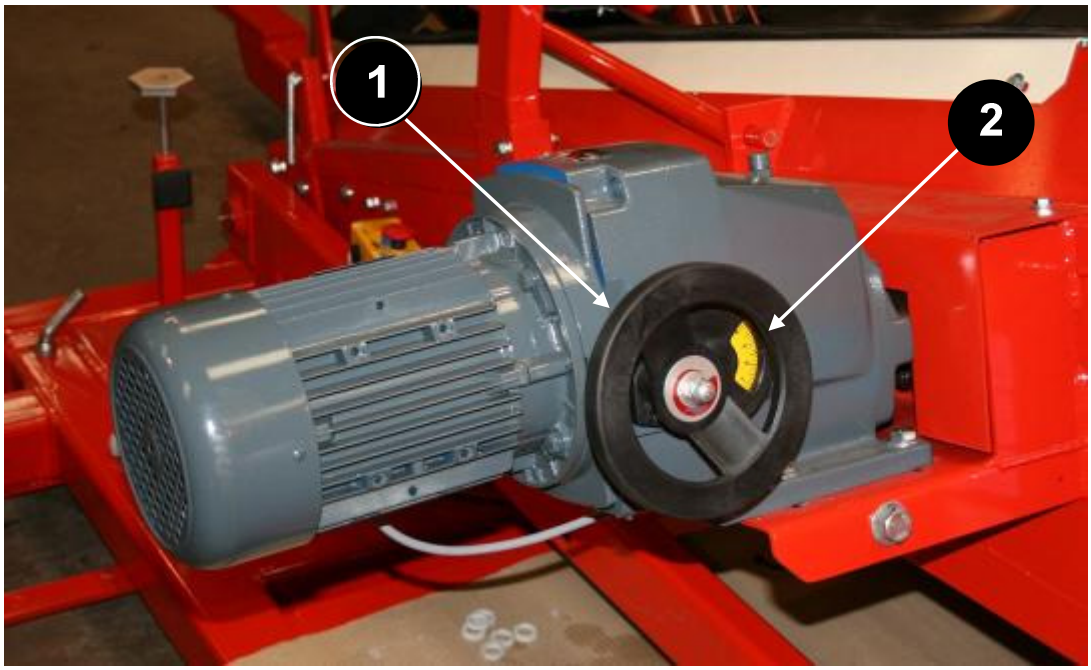
Fit the new battery ensuring the correct polarity. Battery type is 9V (PP3 or 6LR6)

When batteries weaken the green signal received indicator lamp on the main control panel will fail to respond when the unit is within the normal operating distance.

Changing Belt speeds

Variable Belt speed elevators

To adjust or vary the motor speeds, stop the motors by pressing the appropriate button on the control panel.



Turn Hand wheel **[1]** of each of the belt motor units until the desired setting is shown **[2]** Select a lower number for slower and a higher number for faster belt speeds

CAUTION

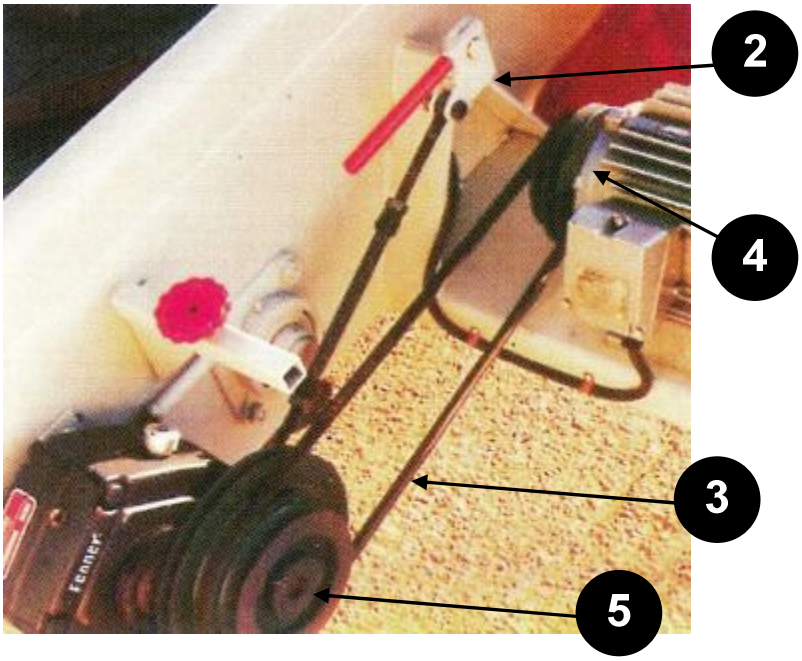
Always ensure that the Secondary Unit belt speed is at the same speed or faster than the primary unit.

Changing Belt speeds

Two & Three Speed Units

To adjust or vary the motor speeds, stop the motors by pressing the appropriate button on the control panel. Isolate the machine from the electric supply.

Remove the protective panel **[1]** to expose the drive unit ,belts and pulleys



Raise lever **[2]** to release the tension of the belt **[3]**

Adjust the speed by moving the position of the belt into the correct grooves of pulleys **[4]** and **[5]**

General

The maintenance pages are provided as a guide to the safe working of the machine , failure to follow these instructions may result in injury to the operator or other personnel , and could result in damage to the machine.

Following regular maintenance instructions will ensure optimum performance of the machine and aid trouble free operation.

Maintenance is always the responsibility of the operator.

Failures due to lack of maintenance or incorrect maintenance methods are specifically excluded from the manufacturers warranty.

CAUTION

Always isolate the machine from the power supply before undertaking maintenance procedures

CAUTION

Always ensure lubricant spillages are cleaned up before commencing operation

CAUTION

Do not undertake any maintenance or adjustments with the machine in operation.

Daily
(and before use)

Check Tyre pressures	Using a suitable gauge check the pressure of the elevator power transmission tyres and those of the slew where applicable	See Tyre pressure table P 8 : 3
Check mains cable condition	Visually check the mains supply cable for signs of chaffing or wear, ensure any damage is repaired before commencing operation.	
Check the supply socket	Visually check the mains supply plug and socket for signs of damage, ensure any damage is repaired before commencing operation.	
Check Nuts	Check the tightness of all Nuts and Bolts including wheel nuts.	
Cleaning	Ensure that material is not allowed to collect in or around the drive or return cylinders or at any point where it may interfere with the correct operation of the elevator.	

Weekly

Greasing	Grease all moving parts , Wheel Hubs, Castor swivels, bearing blocks, pivots, hydraulic cylinder pins etc	See Recommended lubricants P 8 : 3
Oil	Oil all friction surfaces , pivots, adjuster bolts, idler rollers, Variable speed drive units etc	See Recommended lubricants P 8 : 3
Check condition of belts	Visually examine the belts for signs of wear, cracking or misalignment.	
V Belt Tension	Check belts for correct tension , adjust as required	See tensioning P 8 : 8

Yearly

Hydraulic system	Change the hydraulic oil	See Recommended lubricants
Drive Chains	Check condition and re-tension	See Page 8 : 5
Reduction Gearbox	Check oil condition / Change as required	Euro Models See page 8 : 9
Belt Tension & Adjustment	Check belt is running in alignment and with correct tension	See page 8 : 9

Tyre Pressures		
Model	Tyre Size	Inflation Pressure
Interstore T & L	600 X 9	3.5 Bar (50 psi)
Interstore TS	600 X 9 & 500 X 8	6.5 Bar (90 psi)
Extendo & Contain-a-vator		6.5 Bar (90 psi)
Euro	600 X 16 750 X 16	3.5 Bar (50 psi) 3.25 Bar (47 psi)
Packhouse		4.8 Bar (70 psi)

Recommended Lubricants					
	Shell	Texaco/Chevron	Exxon/Mobil	Castrol	BP
Hydraulic System	Tellus 32	Rando HD 32	DTE 13M	Hyspin AWS 32	Energol HLP-HM32
Grease	Retinax LX2	Multifak EP2	Mobilgrease XHP222	Spheerol EPL2	Energrease LS-EP2
Lubricating Oil Reduction Gearbox	Omala 460		Mobilgear	Alpha zN	
For Ambient temperatures above 25^0 C refer to manufacturer					

Hydraulic Maintenance

Check the hydraulic oil level regularly and correct any apparent leaks immediately.

CAUTION

Ensure all trapped hydraulic pressure is released before commencing work on any part of the hydraulic system

CAUTION

Ensure when working with hydraulic components a high standard of cleanliness is maintained

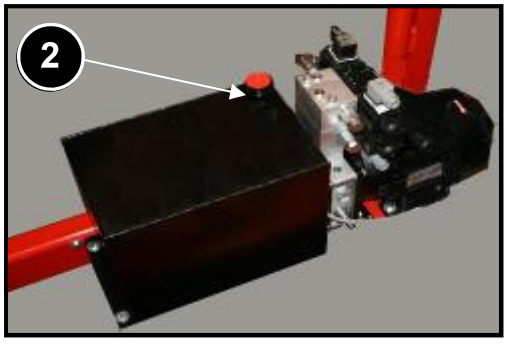
Checking hydraulic oil level

Lower the elevator fully before checking the oil level **[1]** or changing the oil.

When changing the oil, drain it into a suitable container for disposal, after draining remove the reservoir and clean . Remove and clean the suction filter (or replace as required) .
Refill the hydraulic reservoir **[2]** with clean hydraulic fluid , check the level run and test.

CAUTION

When cleaning use lint free cloths for all hydraulic components



Drive Chains Tension & adjustment

Drive chains are assembled with a preset tension when new, during initial operation these chains will nominally “relax” or “stretch” .

The resultant elongation will require adjustment to retension the chain.

WARNING

Stop the elevator and isolate from the power supply before making any adjustments

CAUTION

When working on the elevator use suitable personal protective equipment.

CAUTION

Do not allow the elevator to work with an incorrectly tensioned chains as damage will occur

When a chain is correctly tensioned a slight “up & down” deflection will be apparent in the longest unsupported span between chain drive sprockets.

Primary Section Drive (Extendo & Contain-a-vator machines)

Two chains are used from the Motor Unit via a counter shaft to the bottom cylinder.

To tension these remove the guard , loosen each of the Four bearing bolts approximately one turn and adjust the threaded rods (one inside the frame) to apply tension to the chain from the bottom cylinder.

Re Tighten the bolts

Loosen each of the belts securing the motor unit and adjust the threaded rods to tension the chain from the countershaft to the motor.

Re tighten the bolts

Secondary Section Drive (Extendo & Contain-a-vator machines)

One chain is used from the Motor Unit to the cylinder.

To tension this chain, loosen each of the Four bolts securing the Motor and adjust the threaded rod .

Re tighten the bolts

Access may be improved by the removal of the frame side guard.

Extend and Retract Drive (Extendo & Contain-a-vator machines)

Two chains are used to extend and retract the secondary section . These are located within the primary section frame on the left and right side and return over the idler sprockets situated near the transfer point .

Remove the frame side guards , loosen the two bolts either side and adjust the threaded to apply tension to the chains.

Re tighten the bolts.

Note, these chains need only to be tensioned sufficiently to remove any slack.

Chain & Sprocket adjustment (Extendo & Contain-a-vator machines)

After adjusting chains , ensure that the shafts , cylinders and motors are parallel and maintain true alignment.

All sprockets that are fitted to drive shafts are mounted on Taper-Lock bushes for realignment instructions see below.

Taper-Lock Bush Installation

Ensure that the mating tapered surfaces, bore and shaft are completely clean and free from oil or dirt.

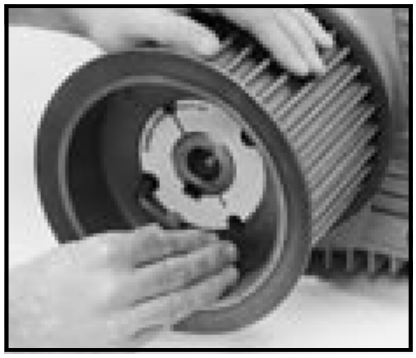
Insert the bush into the hub so that holes line up.

Sparingly oil the thread and point of the grub screws.

Place the screws loosely in the threaded holes in the hub, shown in diagram as ◎

Refer to Diag on P 8:8

Clean the shaft and fit the hub to shaft as one unit, locate in the desired position
Note ! The bush will nip the shaft first and the hub will then be slightly drawn on to the bush.



Using a hexagon wrench tighten the screws gradually and alternately to the torque shown in table below.

Where a key is not used hammer against the large end of the bush, using a block or sleeve to prevent damage. (This will ensure that the bush is seated squarely in the bore.)

The screws will now turn a little more.

Repeat this alternate hammering and screw tightening once or twice to achieve maximum grip on the shaft.

After the drive has been running under load for a short time, stop and check tightness of the screws.

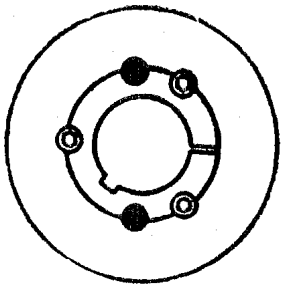
Fill empty extraction holes with grease to exclude dirt.

Torque Table

Bush size		1008	1108	1210	1610	1615	2012	2517	3020	3030	3525	3535	4030	4040	4535	4545	5040	5050
Screw tightening torque (Nm)		5.6	5.6	20	20	20	30	50	90	90	115	115	170	170	190	190	270	270
	qty	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
Screw details	size (BSW)	1/4"	1/4"	3/8"	3/8"	3/8"	7/16"	1/2"	5/8"	5/8"	1/2"	1/2"	5/8"	5/8"	3/4"	3/4"	7/8"	7/8"
	Hex. socket size (mm)	3	3	5	5	5	6	6	8	8	10	10	12	12	14	14	14	14
Large end dia. (mm)		35.0	38.0	47.5	57.0	57.0	70.0	85.5	108	108	127	127	146	146	162	162	178	178
Bush length (mm)		22.3	22.3	25.4	25.4	38.1	31.8	44.5	50.8	76.2	63.5	89.0	76.2	102	89.0	114	102	127
Approx mass (kg)		0.1	0.1	0.2	0.3	0.5	0.7	1.5	2.7	3.6	3.8	5.0	5.6	7.7	7.5	10.0	11.1	14.0

Taper-Lock Bush Removal

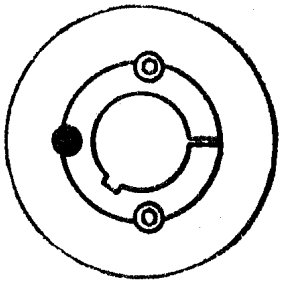
Slacken all screws by several turns, remove one or two according to number of removal holes shown ●



Insert jacking screws into the removal holes after oiling the thread and under the head of the cap

Tighten the screws alternately until the bush is loosened in hub and the assembly is free on the shaft.

Remove assembly from shaft.



V Belt checking and Tensioning

Check the condition of the belt for splitting or fraying, replace worn belts immediately.

CAUTION

Worn belts may indicate pulley mis-alignment

Check the tension of the belt with a suitable deflection meter, alternatively the belt should be able to be twisted through approximately 90 degrees at the centre point of the longest unsupported span.

To re-tension the belt, remove the covers, and adjust the threaded adjuster .

Reduction Gearbox Lubrication (Euro Models)

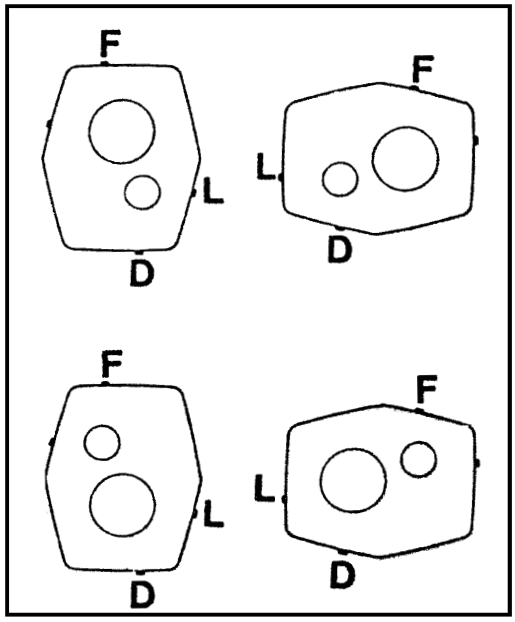
Normal operating positions are shown in the diagrams below. The reducer is supplied with Four plugs, after it has been mounted in the running position , the plugs must be located as shown for the appropriate mounting.

If the reducer is not fixed within 20^0 of one of the positions shown , the level plug cannot be accurately used to check the oil level.

To correct this , disconnect the torque arm and swing the reducer so it conforms to one of the positions shown.

Legend

F = Oil Filler and Breather
L = Oil Level Plug
D = Oil Drain Plug



Belt checking and Tensioning

Check the condition of the belt for splitting or fraying, wear or mis-alignment . A correctly maintained belt will need little maintenance throughout the life of the elevator. It is however important to ensure that belts alignment and tension are checked after a short period of operation and annually thereafter.

For Extendo and Contain-a-vator machines always adjust the primary section first.

Adjustment - Make the adjustments at the top transfer end cylinder. Loosen the each of the Four bearing bolts approximately one turn and adjust the threaded rod on each side as required to obtain the correct tension. Applying hand pressure to the returning side of the belt will indicate the correct tension , little or no movement indicates that the belt is too tight .
Re-tighten the bolts , run and test.

Re alignment - Loosen the Two bolts on the cylinder bearing by approximately One turn (opposite side to the drive sprockets) and adjust the threaded rod as required. When adjusted ensure the belt is running in the centre of the cylinder.

Re-tighten the bolts , run and test.

WARNING

Isoalte the machine from the power supply before undertaking any maintenance

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General

Certain optional equipment may be supplied with your elevator or retrospectively.

Some of this equipment my require user intervention to fit and adjust it prior to use.

This section deals with instructions relating to this equipment.

It is not possible to cover all variants and options in detail due to the bespoke nature of some of the equipment.

If your specific example is not covered please seek the advice of the manufacturer before proceeding.

CAUTION

Always isolate the machine from the power supply before undertaking maintenance procedures

CAUTION

Do not undertake any maintenance or adjustments with the machine in operation.

INTERSTORE ELEVATORS

FITMENT AND ADJUSTMENT OF HOPPERS

To fit the Hoppers, insert the two round Hopper pegs into the projecting frame lugs, lower the Hopper brackets so that the holes align with the lower frame holes (bottom front), insert the pins and secure with the spring clip provided.

Where Hoppers are fitted with skirting material to cloak the belt this may in some circumstances impede the flow to the belt. Should this occur, flow may be increased by cutting off a small amount of the skirting.

FITMENT OF TIPPING HOPPER (MODELS 'T' AND 'L' OPTION)

The Tipping Hopper is supplied with wheels and brackets. When the Hopper is fitted these can be adjusted to carry the elevator front end for mobility. The wheels can be swivelled through 90* without releasing their support by unscrewing the outer ringnuts, swivelling and re-locking. A restrictor plate is supplied for the outlet and is fitted by locating the peg into the Hopper centre hole and swinging downwards.

CASTOR WHEEL ASSEMBLY

The Castor Wheel Assembly is fitted with the two attachment bracket holes over the projecting main Elevator Frame Hoper Attachment Pin Bosses.. To fit these, loosen the clasp on the crossbar, fit the fixed bracket over the boss, slide the clasp bracket over the other boss and tighten. Fit the screw adjuster stabilizing bracket (with the two bolts) across the lower part of the Elevator Main Frame. To maintain the wheels vertical it may be necessary to adjust the threaded rod.

The Castor Wheel Assembly can be fitted with the Towbar also in position.

FITMENT OF 'SKATE' ROLLER ASSEMBLY

To attach the 'Skate' Roller Assembly, secure by bolting to the two holes provided at the front of Elevator below the Towbar fitments. This can be fitted either way round, giving two different height clearances to the Elevator.

FITMENT OF 'SLO-FLO' CUSHIONED DESCENDER

'Slo-Flo' Cushioned Descender attachment brackets are fitted on to the end of the frame – one bracket each side each secured with two bolts.

FITMENT OF RIGID GRAIN CHUTE

Grain Chute attachment brackets are fitted onto the end of the frame – one each side secured with two bolts. The 'Chute' Head can then be fitted to the brackets using a suitable pair of holes. Fit support stay ends to the two frame clasps and secure each with a bolt.

INTERSTORE ELEVATORS Contd.

FITMENT OF SWIVEL GRAIN CHUTE

Bolt both fixing brackets to the Elevator Head; attach Chute to the brackets selecting suitable holes to allow for adequate belt clearance. Fit the two tubular stays and clasp brackets, adjust to give the Chute the required angle of approximately 50* and tighten the bolts.

Attach the Hand Control to the Undercarriage frame and secure with the bolts provided. Connect the wire ropes to the Hand Control (one each side) and wind one clockwise and one anti-clockwise by three turns each. Pass the wires each side through the eyes, one fitted in the take-up slot and one midway (drill 12 mm diameter holes to accept). With the Chute central, fasten one wire each side of the pivot, keeping it taut.

To operate the Swivel Chute, pull out the latch on the Hand Control, turn and lock. Rotate lever as desired and relocate the latch.

FITMENT OF COUNTER-BALANCE WIEGHT

Where fitted, the Weight is under the main frame at the Towbar end, and secured by two clasp blocks and hook bolts.

WHEELED LIFT BAR

A wheeled lift bar can be provided for easier manual re-positioning.

To re-position the elevator , insert the peg of the wheeled lift bar into one of the Two holes at the front of the elevator towbar.. Push the lift bar handle downwards raising the elevator so that it can be manoeuvred.
Raise the bar upwards when the manoeuvre is completed and remove it.

ELEVATOR WHEEL SWIVEL (INTERSTORE T OPTION)

Locate the hydraulic Jack provided in its stowed position on the elevator sub frame. Locate the Jack “V” onto side of the axle round lifting bracket , raise the tyre clear of the ground , remove the swivel box securing pin , swivel the wheel and reinsert the pin in the desired position.

Remove the jack before operating or re-positioning the elevator.

EXTENDO , CONTAIN_A_VATOR & PACKHOUSE ELEVATORS

FITMENT AND ADJUSTMENT OF HOPPERS

To fit the Hoppers, insert the two round Hopper pegs into the projecting frame lugs, lower the Hopper brackets so that the holes align with the lower frame holes (bottom front), insert the pins and secure with the spring clip provided.

Where Hoppers are fitted with skirting material to cloak the belt this may in some circumstances impede the flow to the belt. Should this occur, flow may be increased by cutting off a small amount of the skirting.

EURO ELEVATORS

FITMENT AND ADJUSTMENT OF HOPPERS

To fit the Hoppers, insert the two round Hopper pegs into the projecting frame lugs, lower the Hopper brackets so that the holes align with the lower frame holes (bottom front). With the handles pointing upwards insert the locking pins up to the stops and turn the handles downwards to secure.

Where Hoppers are fitted with skirting material to cloak the belt this may in some circumstances impede the flow to the belt. Should this occur, flow may be increased by cutting off a small amount of the skirting.

FITMENT OF TIPPING HOPPER (MODELS 'T' AND 'L' OPTION)

The Tipping Hopper is supplied with wheels and brackets. When the Hopper is fitted these can be adjusted to carry the elevator front end for mobility. The wheels can be swivelled through 90* without releasing their support by unscrewing the outer ring nuts, swivelling and re-locking. A restrictor plate is supplied for the outlet and is fitted by locating the peg into the Hopper centre hole and swinging downwards.

CASTOR WHEEL ASSEMBLY

The Castor Wheel Assembly is fitted in place of the draw bar and is attached to the projecting drawbar fitment lugs. To maintain the wheels vertically it may be necessary to adjust the threaded rod.

FITMENT OF 'SLO-FLO' CUSHIONED DESCENDER

'Slo-Flo' Cushioned Descender attachment brackets are fitted inside the frame on each side and secured with two bolts through the take up slides.

The deflector plates can be adjusted by re-positioning the bolts using the holes provided.

FITMENT OF COUNEER-BALANCE WIEGHT

Where fitted, the Weight is under the main frame at the Towbar end, and secured by two clasp blocks and hook bolts.

Notes

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