COVEYA

WE KEEP YOU MOVING

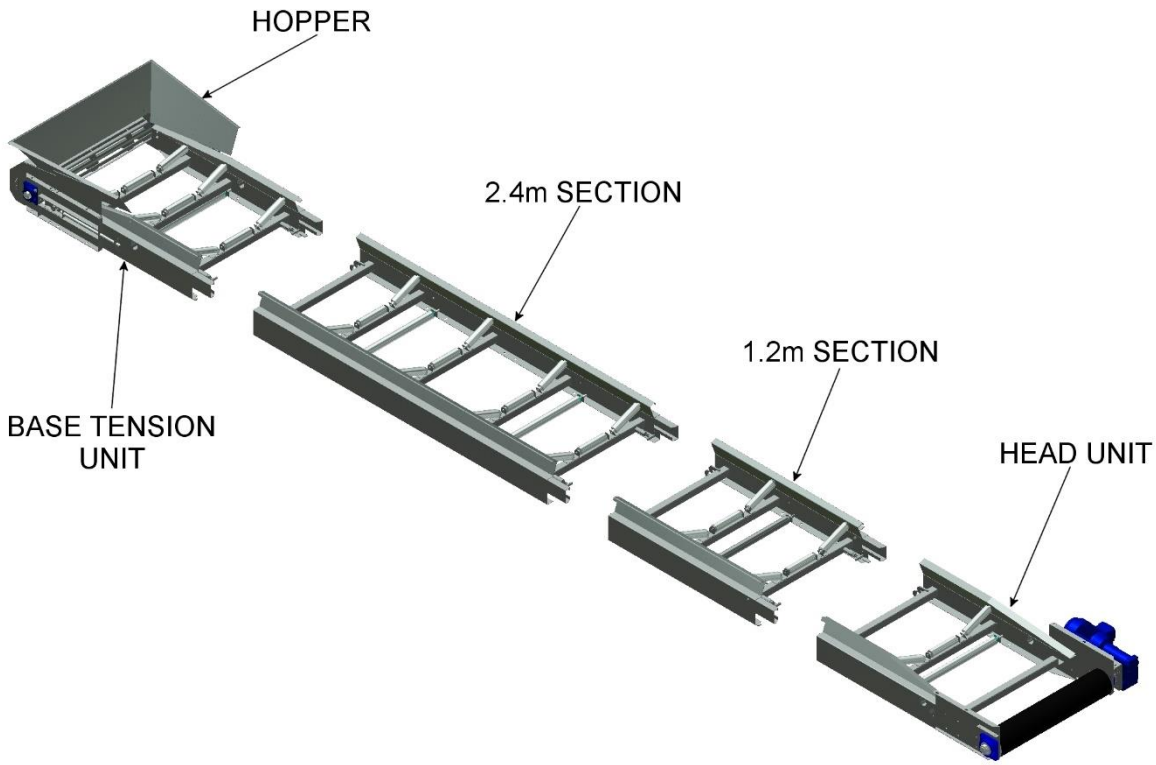
EASIKIT

900

INSTRUCTION MANUAL

EASIKIT

900



The manufacturer does not accept responsibility for any loss, damage to other equipment, injury to personnel or any other circumstance resulting from the use of our equipment. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means - electronic, mechanical, photocopying, recording or otherwise - unless the permission of the publisher has been given beforehand. © All specifications are subject to change without notice

EASIKIT 900

MODULAR BELT CONVEYOR

CONTENTS PAGE

	INTRODUCTION	**4**
1	**SAFETY INSTRUCTIONS**	**5**
2	**ENVIRONMENTAL PROTECTION**	**5**
3	**CONFORMITY**	**5**
4	**TOOLS / PPE / PARTS & PACKAGING LIST**	**6**
	4.1 Tools and Equipment Required	**6**
	4.2 Recommended PPE	**6**
	4.3 Packing List	**6**
5	**LIFTING AND SUPPORTING**	**7 - 8**
	5.1 Manual Handling	**7**
	5.2 Mechanical Handling	**7**
	5.3 Supporting in temporary Installations	**8**
	5.4 Helpful Hints	**8**
6	**ASSEMBLY**	**8 – 37**
	6.1 Assembly Procedure	**8**
	6.2 Assembly Instructions	**9 – 11**
	6.3 Return Rollers	**11**
	6.4 Fitting Belt - Clip Joint	**12 – 13**
	6.5 Fitting Belt – Vulcanised Joint	**13 – 15**
	6.6 Fitting Motor & Gearbox	**15**
	6.7 Fitting Easikit Support Stands	**16 – 23**
	6.8 Electrical Installation	**24**
	6.9 Emergency Stop Grab Wires	**25**
	6.10 Motion Sensors	**26**
	6.11 Electrical Installation - 110v Supply	**26**
	6.12 Belt Tensioning and Tracking	**27 – 29**
	6.13 Hoppers	**30**
	6.14 Top Covers	**30 – 31**
	6.15 Bottom Covers	**31**
	6.16 Side Guides	**32 – 33**
	6.17 Belt Scrapers	**34 – 38**
	6.18 Auto Grease Units	**38**
7	**EASIKIT MOBILE**	**39 – 40**
8	**EASIKIT RADIAL**	**41 – 42**
9	**EASIKIT ROUTINE MAINTENANCE**	**43 – 49**
10	**EASIKIT 900 PARTS LIST**	**50**
11	**EASIKIT 900 EXPLODED DIAGRAMS**	**51 – 56**
12	**APPENDIX – Electrical Wiring Diagrams**	**57 – 62**
12	**WARRANTY**	**63**

INTRODUCTION

This product is designed to provide years of reliable service throughout its working life.

The unique design of the **Easikit®** conveyor system is the result of 30 years of research and hands-on experience in the conveyor industry. In depth experience, attention to detail, a commitment to quality and excellent service are the foundations that have built a first-rate reputation and provided complete customer satisfaction.

Please take time to read this Instruction Manual; it will guide you step by step through installation to ensure you get the maximum performance from your conveyor.

This manual covers installation, parts required, maintenance, CE conformity and warranty conditions.

We, the manufacturers want you to achieve a high level of satisfaction with your **Easikit® Conveyor System**. If you have any comments or queries, please do not hesitate to contact us:

Coveya Ltd
St Ivel Way
Bristol, UK
BS30 8TY
+44 (0) 117 956 3131
support@coveya.co.uk

1. SAFETY INSTRUCTIONS

To use this equipment properly, you must observe the safety regulations, the assembly instructions and the operating instructions to be found in this manual. All persons who use and service the equipment have to be acquainted with this manual and must be informed about any potential hazards. Children and frail people must not use the equipment. Children should be supervised at all times if they are in the area in which the equipment is being used.

It is also imperative that you observe the accident prevention regulations in force in your area. The same applies for general rules of occupational health and safety.

The manufacturer shall not be liable for any changes made to the equipment or for any damage resulting from such changes.

Caution:

1.1. Read all instructions. Failure to follow instructions listed below may result in electric shock, fire and/or serious injury. Always isolate from electrical supply before carrying out maintenance, including changing the belt.

1.2. Do not attempt to assemble the conveyor in high winds

1.3. Prior to assembling your conveyor check components against parts list to ensure that there are no shortages, the assembly should not commence unless all items are present.

2. ENVIRONMENTAL PROTECTION

Recycle unwanted materials instead of disposing them as waste. All parts and packaging should be sorted, taken to the local recycling centre and disposed of in an environmentally safe way.

3. CONFORMITY

Easikit conforms to relevant safety standards in the country in the EU where the product is purchased. The machinery, taking into account the state of art, complies with, or is designed and constructed so far as it is possible to comply with, the relevant health and safety regulations.

4. TOOLS / PPE / PARTS & PACKING LIST

4.1 Tools and Equipment Required

- Phillips screwdriver
- Adjustable spanner
- Podium steps
- Tape measure
- Large set square
- Offset wrench or socket set
- 17mm, 19mm & 24mm sockets
- SDS Electric hammer drill
- Large ratchet strap
- Temporary support frames/trestles

4.2 Recommended PPE

- Hard hat
- Gloves
- Goggles
- Safety footwear

4.3 Parts & Packing List

- Supplied separately

5. LIFTING & SUPPORTING

5.1 Manual Handling

- Individual sections should be handled by at least 2 people
- Sections & components over 50kgs will require mechanical handling

WARNING!

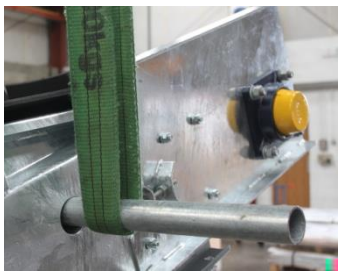
OBSERVE CORRECT LIFTING PROCEDURES AT ALL TIMES.
MIND YOUR BACK - THESE SECTIONS ARE HEAVY!

FAMILIARISE YOURSELF WITH THE WEIGHT OF EACH SECTION

Sections	Length	Width	Height	Weight
Head Unit without Motor	1500mm	1225mm	310mm	103kg
Head Unit with 3kw Motor	1500mm	1315mm	310mm	138kg
Base Tension Unit	1500mm	1020mm	285mm	111kg
1.2m Section	1350mm	925mm	285mm	52kg
2.4m Section	2550mm	925mm	285mm	96kg
Small Steel Hopper	940mm	1240mm	500mm	30kg

5.2 Mechanical Handling

- Conveyors up to 5.26m long should be lifted into place with nylon straps to poles inserted through the holes on the head and base tension units. Conveyors over 5.26m long should be lifted with at least six (6) nylon straps.



WARNING!

ENSURE THAT YOUR CONVEYOR IS CORRECTLY AND SAFELY LIFTED AT ALL TIMES. ENSURE THAT NOBODY IS UNDERNEATH
THE CONVEYOR WHEN IT IS BEING LIFTED

.

5.3 Supporting in Temporary Installations

- Recommended support method for a temporary installation is scaffolding/temporary support trestles which should be erected by a qualified person whilst the conveyor is being assembled.

WARNING!

ENSURE THAT THE CONVEYOR IS SUPPORTED SATISFACTORILY AT REGULAR INTERVALS DURING ASSEMBLY - max 3m (or 6m with stringers), AS IT WILL BE TOO HEAVY TO MANUALLY LIFT ONTO SUPPORTS WHEN COMPLETE

5.4 Helpful Hints

- The more supports there are used during assembly of your conveyor the easier it will be to assemble.
- Once your conveyor is fully assembled and operational you will find it beneficial to ensure that there is a minimum gap of 100mm between any part of the conveyor and the floor as this will help prevent material jamming on the returning belt.

6. ASSEMBLY

6.1 ASSEMBLY PROCEDURE

Your conveyor has been delivered to you on pallets. (Unless supplied ready assembled)

After opening the pallet you will have all the parts required to complete your conveyor assembly.

Before you start.....read through instructions carefully and check that all the items listed on your Parts & Packing list have been supplied. If any items are missing, contact your supplier immediately prior to assembly.

You will need assistance.....you will find that assistance of at least two other people, and appropriate mechanical handling equipment, will speed the job and make assembly easier and safer

.

Selecting your site…….choose an area that is firm, level, and capable of supporting the weight of the conveyor and product to be conveyed on the belt. In addition the base should be suitable to facilitate secure anchoring of the conveyor feet.

You will require unrestricted access to all edges of the conveyor.

WARNING!

Conveyor stands must be anchored securely at the feet to a stable base. Building anchors are not supplied as part of the kit and should be purchased separately

6.2 ASSEMBLY INSTRUCTIONS

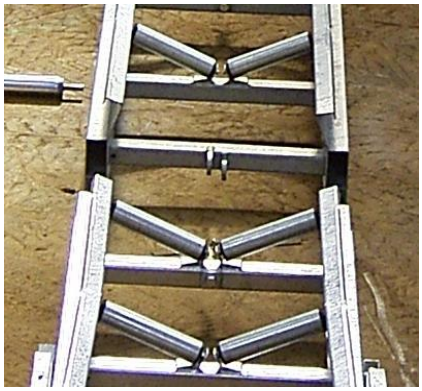
WARNING!

Ensure that the conveyor is correctly supported throughout the entire assembly procedure

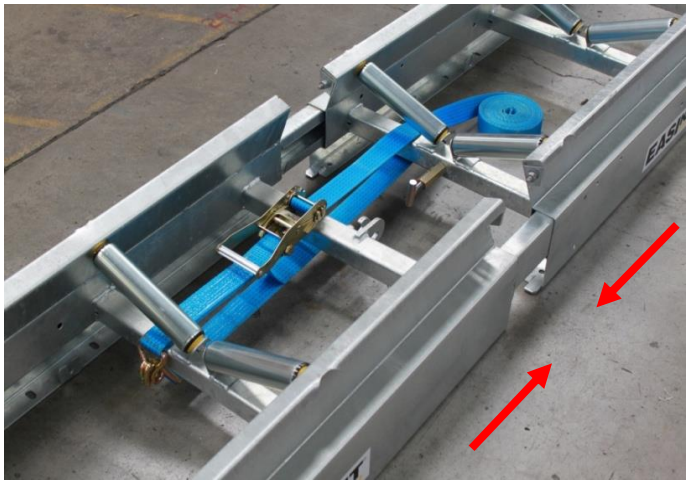
The instructions provided below are given as the recommended method of assembly using scaffolding/temporary supports. However, in some circumstances and with your own experience, you may prefer to assemble the conveyor directly onto support stands. If this is your choice of installation, please familiarise yourself with the section on fitting support stands (Section 6.7) prior to attempting to assemble the conveyor. You will require mechanical means of handling the conveyor if you intend to assemble the conveyor directly onto support stands (see Section 5 – Lifting & Supporting)

1. Position Base Tension Unit (without hopper attached) onto a flat surface or on temporary supports in approximate area of where the conveyor will be finally positioned

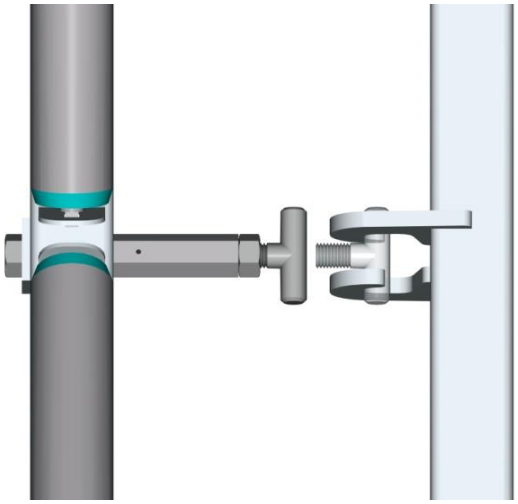
2. Offer up intermediate sections (1.2m or 2.4m sections) in line with Base Tension Unit as required, and insert outside spigots into main frame slots. (If your conveyor includes a 1.2m section in its modular length, this should be installed first nearest to the Base Tension Unit.)



3. Push or pull sections together with the use of a sash clamp or ratchet strap if required and line up T bolt toggle with hooks in the centre of the section.



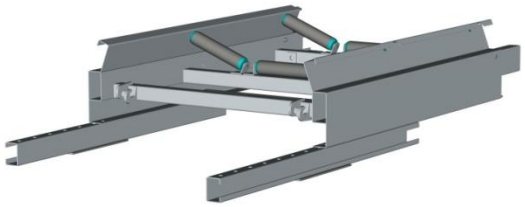
4. Adjust T bolt toggle by means of a 24mm spanner until it is located onto the hooks and then tighten back until sections are firmly together.



5. If your conveyor has been supplied with strengthening stringers you will need to start fixing them to the conveyor at this stage. These are supplied in 2.4m lengths and will need to be bolted to the underside of the conveyor frames spanning 1.2m either side of the joint. These should be fitted with the open 'C' side of the stringer facing outwards to enable access to tighten bolts.

   a) If your conveyor modular length includes a 1.2m section then two half lengths of 1.2m stringers will have been supplied as infill pieces – bolt one of these either side of the conveyor to the underside of the Base Tension Unit so that the ends are flush with the start of the 1.2m section.

b) If your conveyor only has 2.4m sections then bolt the first two stringers (one either side of the conveyor) to the underside of the Base Tension Unit so that they are overlapping the section by exactly 1.2m as shown in the picture below: -



6. Continue adding intermediate sections as described in 2, 3 and 4 above, until the desired length of your conveyor is achieved.

7. Couple Head Unit to the last intermediate section as described in 2, 3 and 4 above.

Note: Do not fit the hopper at this stage

Note: You will find it more advantageous to fit the belt next, prior to fitting the motor and gearbox

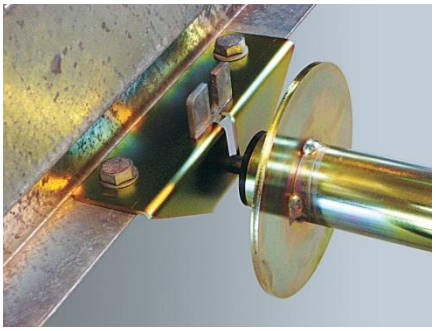
6.3 RETURN ROLLERS

STANDARD RETURN ROLLERS

These come supplied loose and will need to be fitted in the underside of the conveyor frame in the slots in the framework.

DISC RETURN ROLLERS

If your conveyor has been supplied with Disc Return Rollers they will come complete with the necessary brackets and fixings. The brackets should be fitted inside of the conveyor frame on the underside, over the standard return roller lugs in pre-drilled holes and bolted securely. If stringers are used, it will not be necessary to use the bolts. The rollers are then slotted into these brackets as shown.

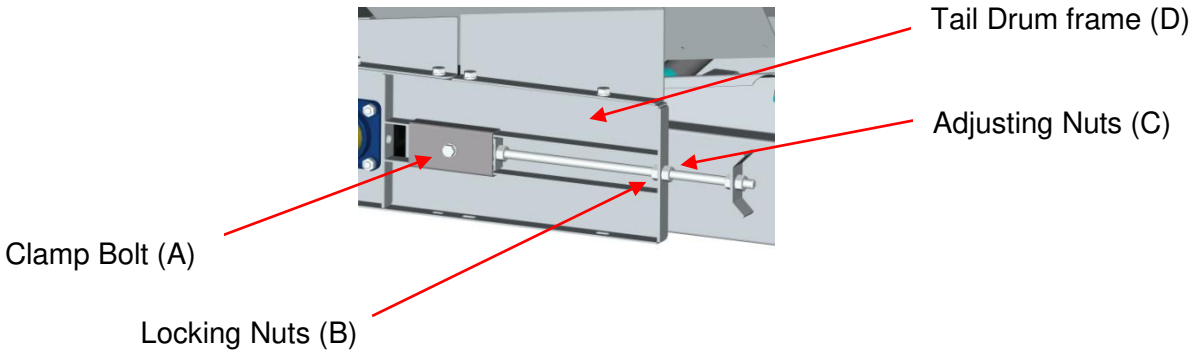


Disc Return Rollers fitted without stringers

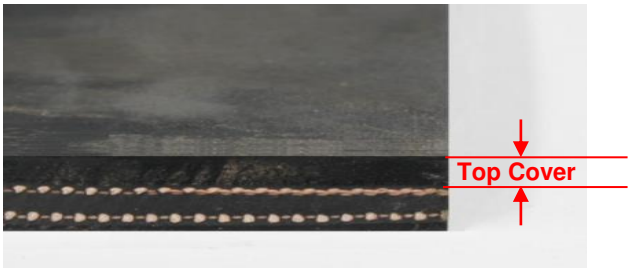
Disc Return Rollers fitted with stringers

6.4 FITTING BELT - CLIP JOINT

1. Ensure that the drum on Base Tension Unit is as far forward (towards motor end) as possible, slacken off Clamp Bolt (A), release Locking Nuts (B) and Adjusting Nuts (C) and repeat on the opposite side. Next slide the Tail Drum frame (D) along the conveyor frame to the minimum belt length position.

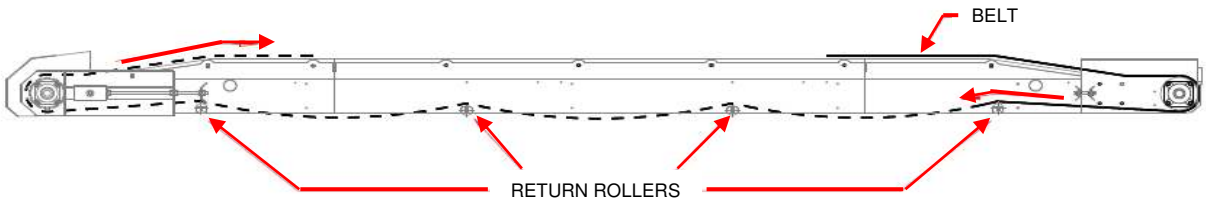


2. Ensure that the belt is the correct way up. Your belt is constructed with several layers of rubber and fabric ply. It is important that the thickest ply is facing upwards as this is the wearing surface.



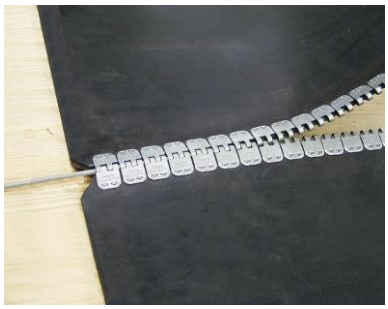
3. Feed one end of the belt into the conveyor frame over the return rollers at one end of the conveyor, ensuring that the belt is the correct way up with the wear surface facing downwards and running on the return rollers.

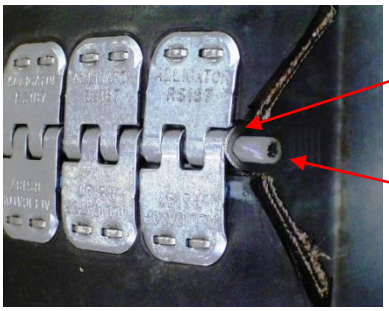
4. Pull belt over the top of the return rollers down towards the opposite end of the conveyor.



5. Pull belt around the head and tail drums and onto the top of the conveyor over the top rollers to meet the opposite end of the belt.

6. Interlock belt fasteners and insert hinge pin. Clamp the washers either end, to prevent hinge pin movement. Ensure that the ends of the hinge pin are within the width of the conveyor belt. This may need to be cut if needed.



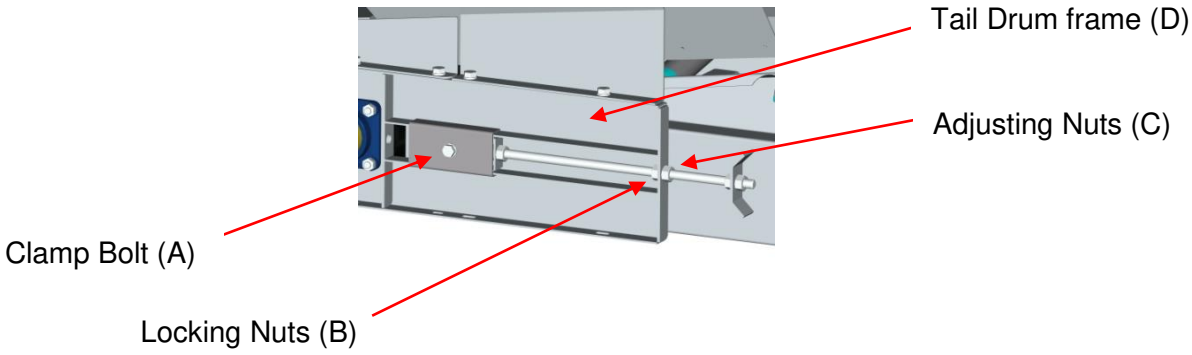


7. Make sure belt is lined up in the centre of head and tail drums. The belt should now be tensioned following the tensioning procedure as described in section 6.12.

6.5 FITTING BELT – VULCANISED JOINT

In normal circumstances it is more advantageous to fit the belt as above and vulcanise the belt joint when the conveyor is ready assembled. However, if this is not possible, the instructions below are a guide to fitting a pre-vulcanised endless belt to your conveyor after the sections have been fitted together.

1. Ensure that the drum on Base Tension Unit is as far forward (towards motor end) as possible, slacken off Clamp Bolt (A), release Locking Nuts (B) and Adjusting Nuts (C) and repeat on the opposite side. Next slide the Tail Drum frame (D) along the conveyor frame to the minimum belt length position.



2. Remove the tail drum guard on base tension unit. (Code no 39520 on EK900 Base Tension Unit exploded drawing –see page 50). This can be removed using two open ended spanners.

3. Remove all return rollers on the underside of your conveyor by lifting them out of their slotted brackets. (If a Snub Drive Head unit is supplied you will also need to remove the snubbing roller, Code 39615 on exploded drawing shown on page 52, by unbolting the bearings using two open ended spanners).

4. Roll out belt to its full length alongside of the assembled conveyor.

5. Lift one end of the belt up and loop over the tail drum of the base tension unit. This should be carried out with a minimum of two people.

6. Mechanically lift one side of the conveyor to enable the belt to be fed through under the conveyor frame and over the temporary support trestles. As the belt is being inserted, replace the return rollers in turn along the length of the conveyor to support the belt.

7. Loop the other end of the belt over the head unit drum.

Useful hint:
In some instances where access is tight or difficult, it may be advantageous to dismantle and remove the head drum from the head unit. This can be achieved by simply removing one drive drum mounting plate (code 345113/4 on EK900 Head Unit exploded drawing on page 51 or code 36152/3 on EK900 Snub Drive Head Unit on exploded drawing on page 53). The drive shaft grub screws in the bearing will need to be released on both sides and the drum removed from the head unit. Once the belt has been positioned in place, the drum can be reassembled into the head unit in reverse procedure of removal. It is important to ensure that the drum is repositioned centrally and the grub screws are tightened securely.

8. Ensure that the belt is centrally positioned on the head and tail drums and along the length of conveyor both top and underside. (If a Snub Head Unit has been supplied you will need to re-insert the snubbing roller that was removed earlier).

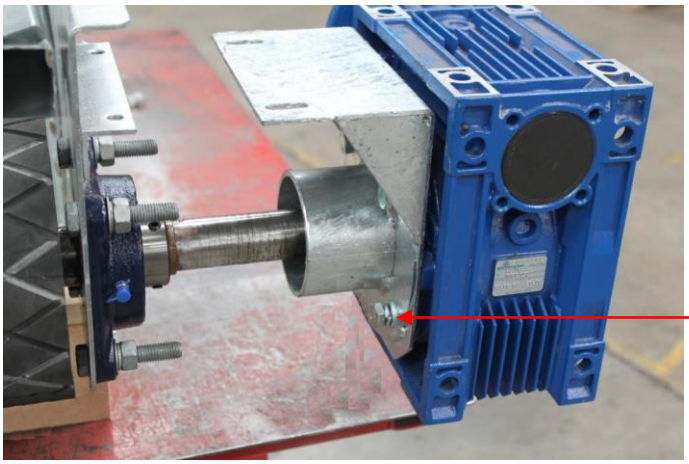
9. Replace the tail drum guard in reverse procedure to how it was removed using two open ended spanners to re-tighten the fixings.

10. The belt should now be tensioned following the tensioning procedure as described in section 6.12.

6.6 FITTING MOTOR & GEARBOX

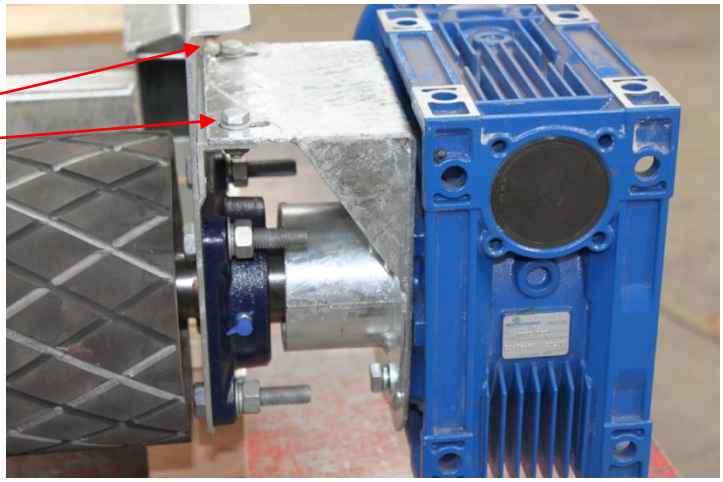
The motor can be fitted to the conveyor at this stage. Alternatively if your conveyor will be supported on stands, you may prefer to fit the motor once the conveyor installation is complete. If this is your choice, refer to Section 6.7 (Fitting Easikit Support Stands) prior to carrying out the instructions below.

Ensure that the drive shaft is clean and lubricated with a 'copper slip' type lubricant prior to fitting the motor. It is recommended to first loosely position the motor mounting bracket to the gearbox and then align the motor onto the drive shaft prior to bolting onto the mounting bracket. (N.B. The motor body should be parallel to the conveyor, do not mount it vertical). Carefully align fixing holes and secure and tighten evenly.



Loosely position the motor mounting bracket to the gearbox

Align the motor onto the drive shaft and bolt onto the mounting bracket



6.7 FITTING EASIKIT SUPPORT STANDS

There are two models of Easikit support stands available – either Heavy Duty or Medium Duty. Both are manufactured and constructed on the same design and are adjustable.

It is essential that all conveyors are adequately supported underneath feed points.

For both types of stands, it will be necessary to use mechanical means of handling whilst fitting the stands (see Section 5 – Lifting & Supporting).

Normally stands are supplied assembled and will just require fitting under the conveyor on-site. However the first part of these instructions allows for assembling the individual stand components if these have been supplied loose.

SUPPORT STAND COMPONENTS

	Part No
HD Stand 1 Foot	
Inner	500935
Outer	500936

HD Stand 1 Foot Base	
MD	30166A
HD	

Brace Fixing Bracket	
MD	500230
HD	

Adjustable Foot	
MD	500236
HD	500225

Smiley Bracket	
MD	500239
HD	30163C

	Part No
Base Plate	
MD	500235
HD	500224

Joiner	
MD	500234
HD	500223

Brace Outer	
MD	500228
HD	

Brace Inner	
MD	500229
HD	

Cross Brace – MD Stand 1		
Conveyor Type	**Part No.**	**Plate Width**
EK900	500873	865mm

Cross Brace – HD Stand 1		
Conveyor Type	**Part No.**	**Plate Width**
EK900	500610	822mm

Cross Brace – Stand 2 - 7		
Conveyor Type	**Part No.**	**Plate Width**
EK900	500242	865mm

Inner Leg		
	Part No.	**Size**
MD	500571	60 x 40 x 600mm
HD	500569	93 x 93 x 600mm
MD	500233	60 x 40 x 1200mm
HD	500222	93 x 93 x 1200mm

Outer Leg		
	Part No.	**Size**
MD	500572	67 x 47 x 515mm
HD	500570	100 x 100 x 515mm
MD	500231	67 x 47 x 1200mm
HD	500222	100 x 100 x 1200mm
MD	500232	67 x 47 x 2400mm
HD	500221	100 x 100 x 2400mm

In addition to the above components each stand includes the following fixings complete with relevant washers and nylock nuts: -

- M8 x 85mm Bolts
- M10 x 25mm Coach Bolt
- M12 x 30mm Bolts
- M12 x 100mm Bolts (MD)
- M12 x 130mm Bolts (HD)
- M16 Nuts (MD)
- M30 Nuts (HD)

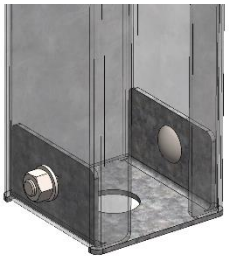
Each stand is supplied with a complete list of components to enable the stand to be assembled. Check that you have the correct parts against the packing list before proceeding.

ASSEMBLY INSTRUCTIONS

STEP 1

Fit Base Plate to Inner Leg

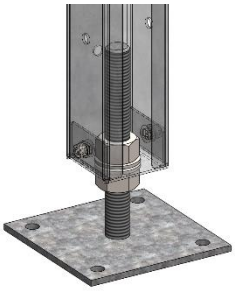
Fixings: M10 x 25 mm Coach Bolt



STEP 2

Fit Adjustable Foot to Base Plate

Fixings: MD – M16 Nut
HD – M30 Nut



STEP 3

Attach Smiley Bracket to the bottom of the conveyor & attach the Outer Leg

Fixings: M12 x 30 mm

STEP 4

If required, fit Joiner into leg

Fixings: M12 x 100 mm
M12 x 130 mm

Attach additional Outer Legs as required

STEP 5

Fit Inner Leg to bottom of support

Fixings: M12 x 100 mm
M12 x 130 mm

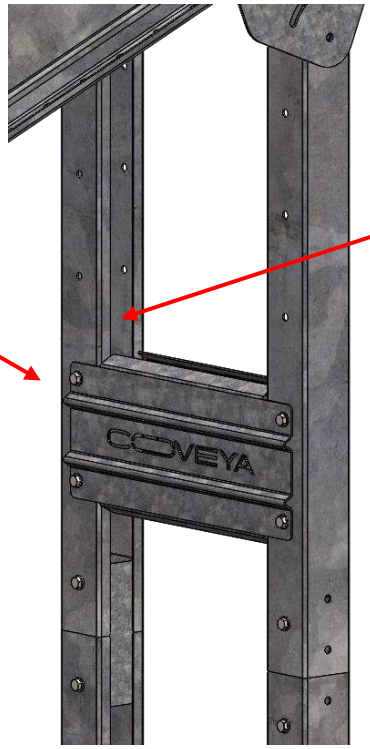
STEP 6

Repeat for other side so supports look like this:

STEP 7

Fit Cross Braces, one either side of Outer Leg

Fixings: M12 x 30 mm



If Inner Leg covers the gap then use

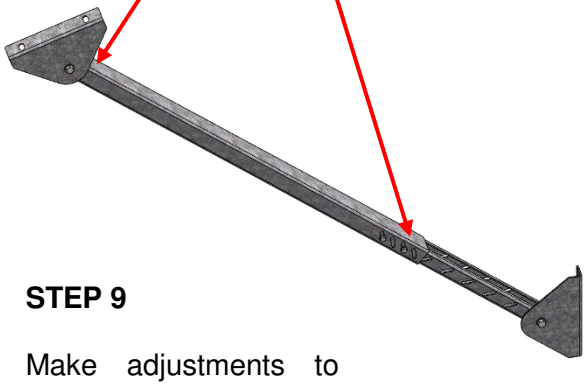
Fixings: M12 x 100 mm
M12 x 130 mm

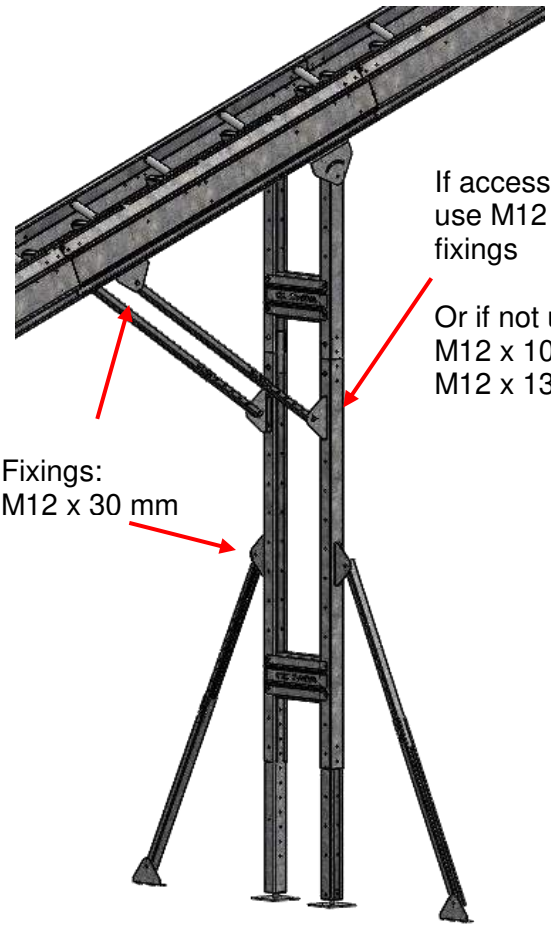
STEP 8

Assemble Brace as required.

Fixings:
M12 x 30 mm

M8 x 85 mm





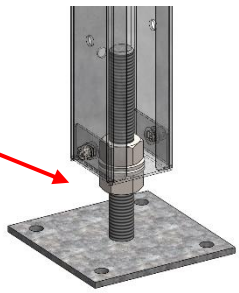
If access allows use M12 x 30mm fixings

Or if not use:
M12 x 100 mm
M12 x 130 mm

Fixings:
M12 x 30 mm

STEP 9

Make adjustments to final height of conveyor stand by adjusting the M16 (MD) or M30 (HD) nuts up or down threaded bar of the Adjustable Feet.

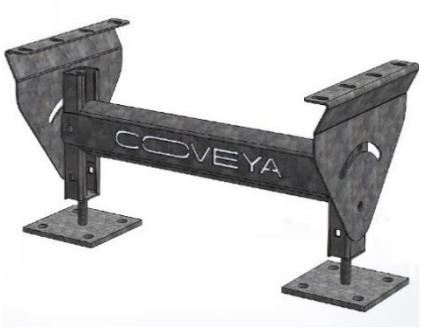


STEP 10

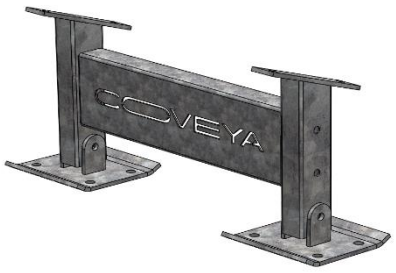
Ensure all upright stand sections are square and vertical. They can now be fixed firmly to a stable base using resin or mechanical anchoring fixings. (These will need to be obtained separately and be adequate to secure the provided weight of conveyor and anticipated loadings).

EASIKIT SUPPORT STANDS

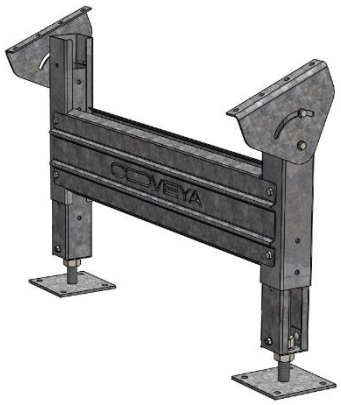
MD Stand 1 – 280 to 440mm		
PART	**DESCRIPTION**	**QTY**
500235	MD Stand Base Plate	2
500236	MD Stand - Adjustable Foot	2
500239	MD Stand Smiley Bracket	2
500873	EK900 Cross Brace – St 1	2
500875	MD Stand 1 Leg	2
FIXINGS	M10 x 25mm BZP Cup Coach Bolt	4
	M10 BZP Nylock Nut	4
	M10 BZP Washers	4
	M12 x 30mm BZP Set Bolt	12
	M12 x 100mm BZP Set Bolt	2
	M12 BZP Nylock Nut	14
	M12 BZP Washer	28
	M16 BZP Nuts	4
	M16 BZP Washers	4



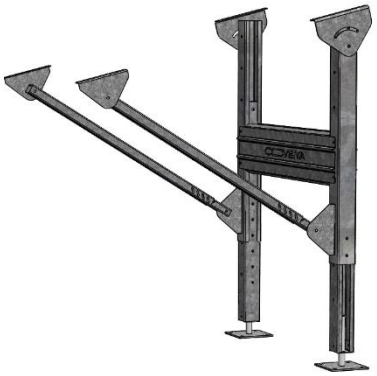
HD Stand 1 – up to 340mm		
PART	**DESCRIPTION**	**QTY**
500935	HD Stand 1 Foot (inner)	2
500936	HD Stand 1 Foot (outer)	2
30166A	HD Foot Base	2
500610	EK900 Cross Member	1
FIXINGS	M12 x 35mm BZP Bolt	4
	M12 x 90mm BZP Bolt	2
	M12 BZP Nuts	6
	M12 BZP Washers	12
	M12 BZP Spring Washers	6



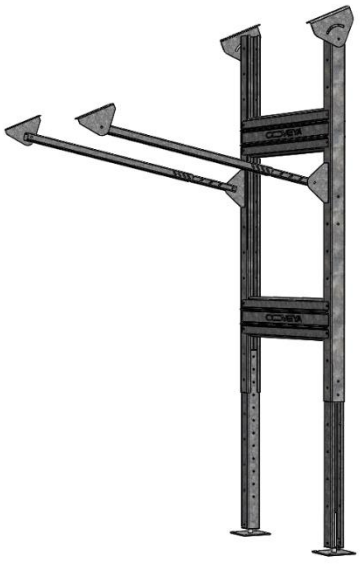
Stand 2 – 695 to 1200mm			
MD	**HD**	**DESCRIPTION**	**QTY**
500235	500224	Stand Base Plate	2
500236	500225	Stand Adjustable Foot	2
500239	30163C	Stand Smiley Bracket	2
500571	500569	Stand 600mm Inner Leg	2
500572	500570	Stand 500mm Outer Leg	2
500242		EK900 Cross Brace	2
FIXINGS		M10 x 25mm BZP Cup Coach Bolt	4
		M10 BZP Nylock Nut	4
		M10 BZP Washers	4
		M12 x 30mm BZP Set Bolt	12
		M12 x 100mm (MD) 130mm (HD) Bolt	4
		M12 BZP Nylock Nut	16
		M12 BZP Washer	32
		M16 (MD) M30 (HD) BZP Nuts	4
		M16 (MD) M30 (HD) BZP Washers	4



Stand 3 – 1450 to 2478mm			
MD	**HD**	**DESCRIPTION**	**QTY**
500235	500224	Stand Base Plate	2
500236	500225	Stand Adjustable Foot	2
500239	30163C	Stand Smiley Bracket	2
500233	500222	Stand 1200mm Inner Leg	2
500231	500220	Stand 1200mm Outer Leg	2
500242		EK900 Cross Brace	2
500228		Brace Outer	2
500229		Brace Inner	2
500230		Brace Fixing Bracket	4
FIXINGS		M8 x 85mm BZP Bolt	4
		M8 BZP Nylock Nut	4
		M8 BZP Washer	8
		M10 x 25mm BZP Cup Coach Bolt	4
		M10 BZP Nylock Nut	4
		M10 BZP Washers	4
		M12 x 30mm BZP Set Bolt	16
		M12 x 100mm (MD) 130mm (HD) Bolt	8
		M12 BZP Nylock Nut	24
		M12 BZP Washer	48
		M16 (MD) M30 (HD) BZP Nuts	4
		M16 (MD) M30 (HD) BZP Washers	4



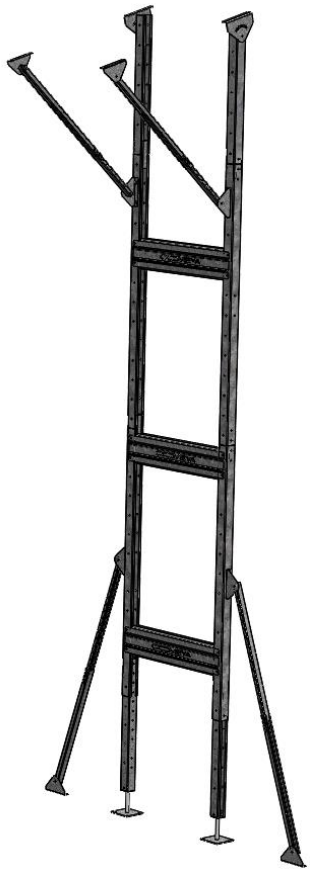
Stand 4 – 2650 to 3678mm			
MD	**HD**	**DESCRIPTION**	**QTY**
500235	500224	Stand Base Plate	2
500236	500225	Stand Adjustable Foot	2
500239	30163C	Stand Smiley Bracket	2
500233	500222	Stand 1200mm Inner Leg	2
500232	500221	Stand 2400mm Outer Leg	2
500242		EK900 Cross Brace	2
500228		Brace Outer	2
500229		Brace Inner	2
500230		Brace Fixing Bracket	4
FIXINGS		M8 x 85mm BZP Bolt	4
		M8 BZP Nylock Nut	4
		M8 BZP Washer	8
		M10 x 25mm BZP Cup Coach Bolt	4
		M10 BZP Nylock Nut	4
		M10 BZP Washers	4
		M12 x 30mm BZP Set Bolt	16
		M12 x 100mm (MD) 130mm (HD) Bolt	8
		M12 BZP Nylock Nut	24
		M12 BZP Washer	48
		M16 (MD) M30 (HD) BZP Nuts	4
		M16 (MD) M30 (HD) BZP Washers	4



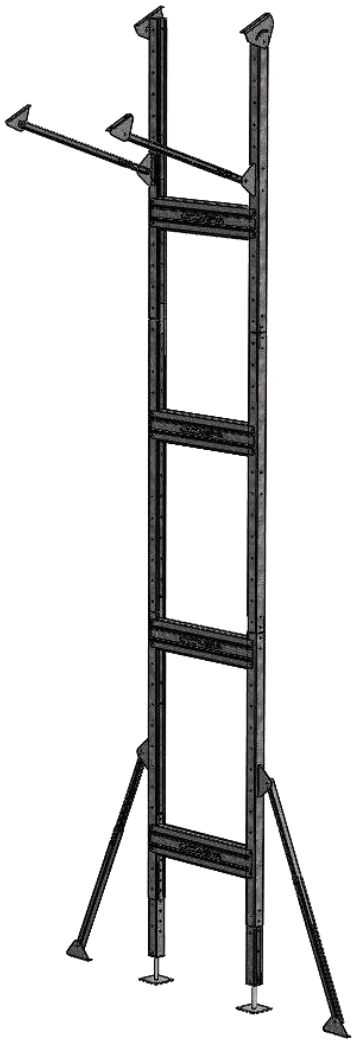
Stand 5 – 3850 to 4878mm			
MD	**HD**	**DESCRIPTION**	**QTY**
500235	500224	Stand Base Plate	2
500236	500225	Stand Adjustable Foot	2
500239	30163C	Stand Smiley Bracket	2
500233	500222	Stand 1200mm Inner Leg	2
500232	500221	Stand 2400mm Outer Leg	2
500231	500220	Stand 1200mm Outer Leg	2
500234	500223	Leg Joiner	2
500242		EK900 Cross Brace	4
500228		Brace Outer	4
500229		Brace Inner	4
500230		Brace Fixing Bracket	8
FIXINGS		M8 x 85mm BZP Bolt	8
		M8 BZP Nylock Nut	8
		M8 BZP Washer	16
		M10 x 25mm BZP Cup Coach Bolt	4
		M10 BZP Nylock Nut	4
		M10 BZP Washers	4
		M12 x 30mm BZP Set Bolt	28
		M12 x 100mm (MD) 130mm (HD) Bolt	12
		M12 BZP Nylock Nut	40
		M12 BZP Washer	80
		M16 (MD) M30 (HD) BZP Nuts	4
		M16 (MD) M30 (HD) BZP Washers	4

Stand 6– 5050 to 6078mm			
MD	**HD**	**DESCRIPTION**	**QTY**
500235	500224	Stand Base Plate	2
500236	500225	Stand Adjustable Foot	2
500239	30163C	Stand Smiley Bracket	2
500233	500222	Stand 1200mm Inner Leg	2
500232	500221	Stand 2400mm Outer Leg	4
500234	500223	Leg Joiner	4
500242		EK900 Cross Brace	6
500228		Brace Outer	4
500229		Brace Inner	4
500230		Brace Fixing Bracket	8
FIXINGS		M8 x 85mm BZP Bolt	8
		M8 BZP Nylock Nut	8
		M8 BZP Washer	16
		M10 x 25mm BZP Cup Coach Bolt	4
		M10 BZP Nylock Nut	4
		M10 BZP Washers	4
		M12 x 30mm BZP Set Bolt	36
		M12 x 100mm (MD) 130mm (HD) Bolt	12
		M12 BZP Nylock Nut	48
		M12 BZP Washer	96
		M16 (MD) M30 (HD) BZP Nuts	4
		M16 (MD) M30 (HD) BZP Washers	4

Stand 7 – 6250 to 7278mm		
HD	**DESCRIPTION**	**QTY**
500224	Stand Base Plate	2
500225	Stand Adjustable Foot	2
30163C	Stand Smiley Bracket	2
500222	Stand 1200mm Inner Leg	2
500221	Stand 2400mm Outer Leg	6
500223	Leg Joiner	4
500242	EK900 Cross Brace	6
500228	Brace Outer	4
500229	Brace Inner	4
500230	Brace Fixing Bracket	8
FIXINGS	M8 x 85mm BZP Bolt	8
	M8 BZP Nylock Nut	8
	M8 BZP Washer	16
	M10 x 25mm BZP Cup Coach Bolt	4
	M10 BZP Nylock Nut	4
	M10 BZP Washers	4
	M12 x 30mm BZP Set Bolt	40
	M12 x 130mm BZP Bolt	12
	M12 BZP Nylock Nut	52
	M12 BZP Washer	104
	M30 BZP Nuts	4
	M30 BZP Washers	4



Stand 8 – 7450 to 8478mm		
HD	**DESCRIPTION**	**QTY**
500224	Stand Base Plate	2
500225	Stand Adjustable Foot	2
30163C	Stand Smiley Bracket	2
500222	Stand 1200mm Inner Leg	2
500221	Stand 2400mm Outer Leg	6
500220	Stand 1200mm Outer Leg	2
500223	Leg Joiner	6
500242	EK900 Cross Brace	6
500228	Brace Outer	4
500229	Brace Inner	4
500230	Brace Fixing Bracket	8
FIXINGS	M8 x 85mm BZP Bolt	8
	M8 BZP Nylock Nut	8
	M8 BZP Washer	16
	M10 x 25mm BZP Cup Coach Bolt	4
	M10 BZP Nylock Nut	4
	M10 BZP Washers	4
	M12 x 30mm BZP Set Bolt	44
	M12 x 130mm BZP Bolt	20
	M12 BZP Nylock Nut	64
	M12 BZP Washer	128
	M30 BZP Nuts	4
	M30 BZP Washers	4



6.8 ELECTRICAL INSTALLATION

WARNING!

ALL ELECTRICAL WORK MUST BE CARRIED OUT BY A QUALIFIED ELECTRICIAN AND SHALL COMPLY WITH RELEVANT STANDARDS AND LEGISLATION PLEASE REFER TO WIRING DIAGRAMS ON PAGES 57 – 62 PRIOR TO COMMENCING ANY ELECTRICAL INSTALLATION

WARNING!

IT IS IMPORTANT ANY ELECTRICAL WIRING FIXINGS THAT ARE ATTACHED TO THE CONVEYOR DO NOT INTERFERE WITH THE FREE RUNNING OF THE MOVING CONVEYOR BELT

1. Prior to commencing the electrical installation the proposed source of supply should be examined to ensure that it is fit for purpose in terms of capacity, over current protection and fault current protection. The supply cable, (over 110v supply) from the point of supply to the conveyor, shall be suitable to be resistant to the environment in which the conveyor is situated (e.g. armoured construction). The rated setting of the over current protective device is determined by the current carrying capacity of the conductors to be protected.

2. Once all the conveyor sections have been assembled and the conveyor placed in its final position, the electrical wiring can commence. Control equipment shall be easily accessible and located between 0.6m and 1.9m above the service level. An upper limit of 1.7m is recommended.

3. Control equipment shall include the following as a minimum: -
   a. A supply disconnection device (isolator) shall be fitted which is capable of disconnecting the electrical equipment of the machine from the supply when required.
   b. A motor starter and contactor complete with overload protection which shall be fitted in an easily accessible location.
   c. An emergency stop system which is capable of stopping the conveyor in an emergency. Emergency stop devices shall have positive operation, be self-latching and shall be either:
      i. One or more push button operated switches which shall be installed in such a way that at least one may be reached within 10m from any accessible point of the equipment; and or
      ii. One or more pull cord operated switches arranged along the full length of the conveyor.

4. When an emergency stop device(s) has been activated and the conveyor has come to a halt, the conveyor shall remain in a stationary condition until that device has been reset and the start device has subsequently been activated.

5. All interconnecting cables shall be suitable to be resistant to the environment in which the conveyor is situated (e.g. armoured construction).

6.9 EMERGENCY STOP GRAB WIRES

These should be installed according to manufacturer's guidelines. For conveyors up to 10m, the switch should be mounted on the Tail Unit. For conveyors over 10m, a switch should be mounted on the head and the tail. The grab wire is supported down the length of the conveyor by eye bolts mounted every 1.2m.

6.10 MOTION SENSORS

These are fitted directly onto the tail drum shaft. The one end of the shaft has an M12 threaded hole. The threaded shaft on the motion sensor should be inserted into the tail shaft. The piece of rubber supplied should be bolted onto the tail drum bearing and fixed to the back of the motion sensor (as seen in the picture below). Operating instructions are supplied with the sensor.

6.11 ELECTRICAL INSTALLATION - 110V SUPPLY

STARTER BOX

These are supplied ready to use complete with a trailing emergency stop lead. The emergency stop button should be mounted in a convenient point within 10m of the moving belt. A 5KVA transformer should be used. Do not run anything else off the transformer when the conveyor is running as this will damage the equipment.

PLEASE REFER TO 110V WIRING DIAGRAM ON PAGE 61

WARNING!

1. **CAUTION: NEVER BYPASS A STARTER**
2. **DO NOT USE 16 AMP TRANSFORMER OUTLET WHEN RUNNING THE CONVEYOR AS THIS MAY DAMAGE EQUIPMENT.**
3. **PROTECT ALL ELECTRICAL EQUIPMENT FROM WATER**

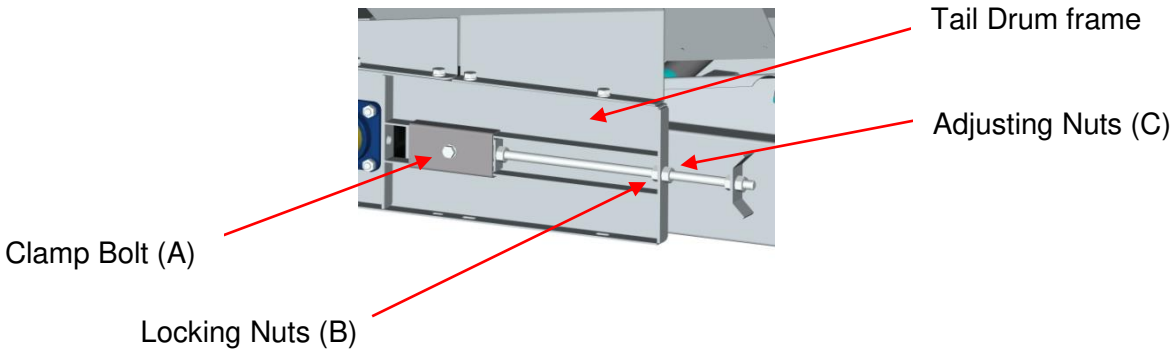
6.12 BELT TENSIONING AND TRACKING

WARNING!

ENSURE THAT NO ARTICLES OF CLOTHING COME IN CONTACT WITH THE MOVING CONVEYOR BELT AT ALL TIMES

Once the belt is in place and the motor wired, proceed as follows:

1. Slacken Clamp Bolts (A) either side of Base Tension Unit using a 19mm spanner ensuring they are loose.



2. Using a 24mm spanner release the tensioning bar Locking Nuts (B) and turn the tensioning Adjusting Nuts (C) clockwise to move the Base Tension Unit outwards away from the Head Drive drum. Continue tensioning until the belt slack between the return rollers on the underside of the conveyor has been taken up.

WARNING!

ENSURE THAT THE TENSIONING IS CARRIED OUT EVENLY ON BOTH SIDES OF THE CONVEYOR OR THE TAIL DRUM MAY JAM AND DAMAGE THE STUDS

3. Run the conveyor motor with NO load on the belt to establish that there is adequate friction on the head drum to run the conveyor belt without it slipping.

WARNING!

THE CONVEYOR MUST BE STOPPED AND ISOLATED BEFORE CONTINUING TO TENSION THE BELT

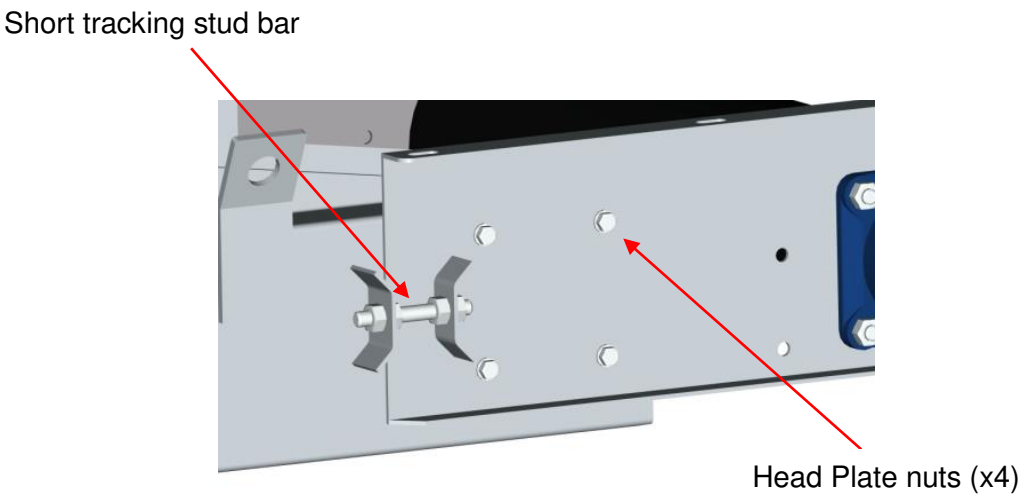
4. Continue to tension the belt as described above but in 10mm increments on each side of the conveyor until the belt no longer slips. Remember to stop and isolate the motor prior to each adjustment.

WARNING!

DO NOT OVER TENSION THE BELT

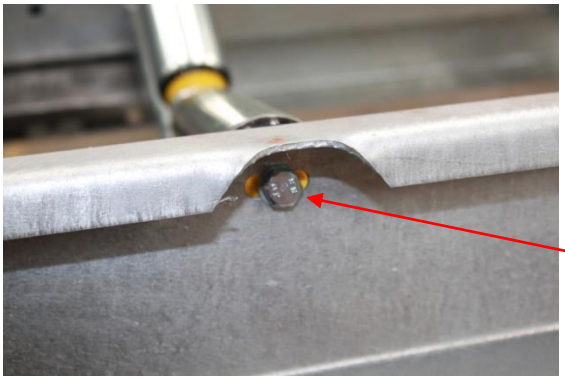
5. If the belt wanders to one side at the Base Tension Unit drum, stop and isolate the conveyor and tighten the Adjusting Nut (C) on the side that the belt is wandering towards. Re-start the conveyor and examine the belt travel again and repeat as necessary to eliminate belt wander.

6. If the belt wanders to one side at the Head Unit, stop and isolate the conveyor and loosen the four Head Plate nuts using a 13mm spanner on the side opposite to the motor and adjust the short tracking stud bar on the Head Unit using a 19mm spanner. Re-tighten nuts, re-start the conveyor and examine the belt travel again and repeat as necessary to eliminate belt wander.



7. Once it has been established that the belt is running correctly on the drums, re-tighten the Clamp Bolts (A) using a 19mm spanner either side of the Base Tension Unit.

8. On long conveyors, if the belt wanders to one side of the conveyor, stop and isolate the conveyor then loosen the bolts holding the troughing top rollers which can then be angled to the left or right to correct the belt's course. Re-tighten nuts, re-energize the conveyor and examine the belt travel again and repeat as necessary to eliminate belt wander.



9. Once the belt has been correctly tensioned and tracked, the hopper can now be bolted on. (See section 6.13)

10. If belt slips again when it is under load, firstly ensure that the conveyor has not been overloaded beyond the capacity of your conveyor, and then continue the above procedures until slipping stops.

WARNING!

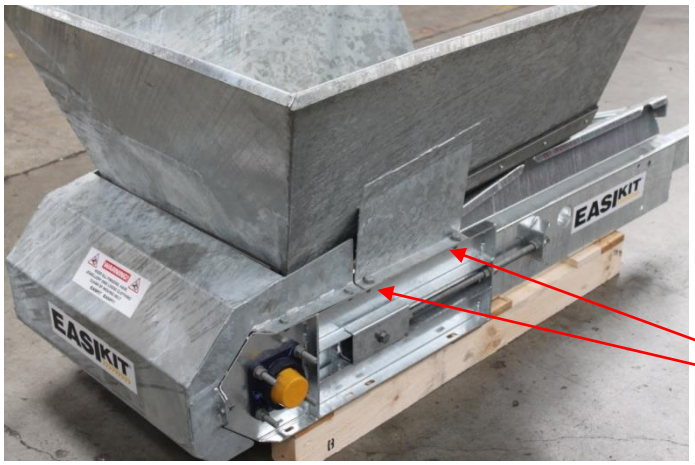
WET AND COLD WEATHER CONDITIONS CAN CREATE PROBLEMS WITH BELT SLIPPING.
VERY WET MATERIALS CAN ALSO CREATE BELT SLIPPING PROBLEMS.

WARNING!

WET AND COLD WEATHER CONDITIONS CAN CREATE PROBLEMS WITH BELT SLIPPING.
VERY WET MATERIALS CAN ALSO CREATE BELT SLIPPING PROBLEMS.

6.13 HOPPER

There are two types of hopper available known as either the Small hopper (Product code 907F) or the Medium hopper (Product code 908F). Hoppers are supplied ready assembled complete with rubber skirting. These are mounted on the Base Tension Unit of the conveyor and should be fixed in place with the fixings supplied in the pre-drilled holes on the side plates (see Part no 36213 in exploded drawing on page 51).

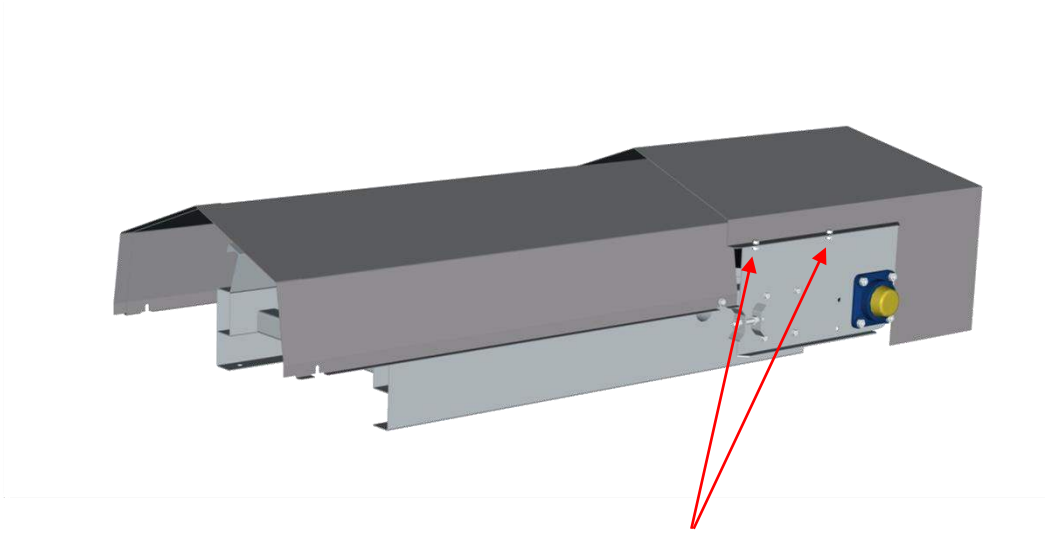


Hopper fixings

WARNING!

INCORRECT OR UNEVEN FEEDING OF MATERIAL IN THE HOPPER MAY CREATE BELT TRACKING PROBLEMS

6.14 TOP COVERS



Head cover and 1.2m cover showing location of bolts

SECTION COVERS

These are secured in place with a cup square bolt which is inserted from the inside of the conveyor frame & bolted on the outside. The cover is slotted onto these bolts and locked with a nut and washer. Begin placing the covers in front of the hopper and work up towards the head.

Bolt inserted from inside

Nuts fitted on outside

Cover slotted onto bolts

HEAD COVERS

This should be fitted once all the section covers have been secured and is fitted directly over the drive drum. This should be bolted with 4 fixings to the side plates on the discharge end of the conveyor. This cover overlaps the section covers.

6.15 BOTTOM COVERS

These are simply fitted to the underside of the cover using four M12 fixings provided.

WARNING!

WHERE BOTTOM COVERS ARE FITTED IT IS ESSENTIAL THAT THEY ARE REMOVED PERIODICALLY AND CLEANED OUT THOROUGHLY.

THIS SHOULD BE NO LONGER THAN EVERY 3 MONTHS. REGULARITY OF CLEANING WILL VARY DEPENDING ON THE NATURE OF MATERIAL BEING CONVEYED

6.16 SIDE GUIDES

See exploded diagram on Page 56.

Each set of conveyor side guides comprises of: -

a. 1 pair left and right hand Head Unit side guides
b. 1 pair left and right hand short angled side guides to interface with hopper
c. 1 pair short intermediate 1m side guide panels to connect with Head Unit side guides
d. Intermediate 1.2m side guide panels (quantity corresponding to conveyor length)
e. Upright brackets (quantity corresponding to conveyor length)
f. 1 pair Head Unit brackets
g. Rubber skirting and clamp strips (corresponding to conveyor length)
h. Nut and bolt Fixings

1. Bolt the upright brackets to the side of the conveyor frame.

2. Start at the head end of the conveyor and bolt the panels onto the upright brackets. Once the head end panels are positioned, the short 1m sections should be positioned next overlapping the previously positioned panels onto the brackets and secured.

3. Continue bolting all the remaining intermediate sections working away from the head end of the conveyor fixing each panel in turn. Finally position and fix the hopper interfacing panel into place.

4. Place the rubber skirt underneath the edge of the panels in a continuous strip running along the length of conveyor. Place a clamp strip over the rubber and bolt in place as shown at one end of the conveyor.

5. Pull the rubber strip tight over the length of conveyor and secure the remaining clamps.

WARNING!

AVOID JOINING RUBBER SKIRTS WHERE POSSIBLE. IF SKIRTS DO NEED TO BE JOINED, THEY SHOULD BE OVERLAPPED IN THE DIRECTION OF THE MOVING BELT UNDER THE CLAMP STRIPS.

6.17 BELT SCRAPERS

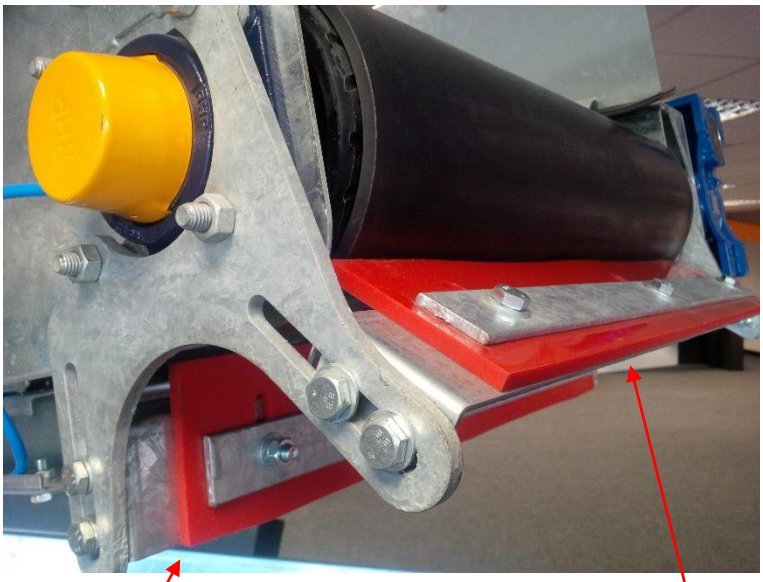
WARNING!

ISOLATE THE POWER SUPPLY TO THE CONVEYOR PRIOR TO COMMENCING EITHER SCRAPER INSTALLATION, ADJUSTING OR MAINTENANCE.

WARNING!

A REGULAR VISUAL CHECK & CLEAN OF SCRAPERS WITH NECESSARY ADJUSTMENTS IS ESSENTIAL TO ENSURE THEIR ONGOING EFFICIENT OPERATION. MAINTENANCE CHECKS SHOULD BE CARRIED OUT AS PER THE ROUTINE MAINTENANCE SECTION (See Section 9)

There are two standard Easikit scrapers available for plain belt – Primary and Secondary. Depending on your application you may require one or the other or both. Both scrapers share the same double bracket (note - your conveyor may have a single bracket if only one scraper was specified)



Secondary Scraper

Primary Scraper

PRIMARY SCRAPER

The brackets are supplied with fixings and should be mounted directly onto the head drum bearings.. The Primary Scraper frame should be bolted onto the front arm of the brackets. Polyurethene blades should be bolted on using the clamp strips provided (as shown below) and pushed up into the belt and secured tightly with adjusting bolts in the slots on either side of the side brackets. (Note: Polyurethene blades are reversible for wear purposes and it is important that from initial installation, the blades are set with the bolts in the clamping strip in the centre of the elongated hole). Do not use excessive pressure when fitting the scraper. The blade should just touch the belt.

SECONDARY SCRAPER

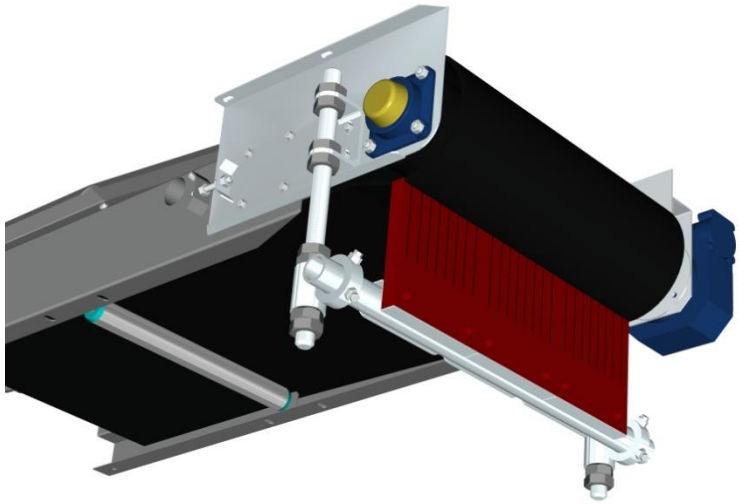
These are supplied ready assembled with fixings and should be bolted directly onto the rear arm of the double bracket. The scraper should be installed with the clamping strip and bolts facing into the direction of the moving belt to enable material to have a free fall (as shown on picture below). The polyurethene blade should be pushed up into the belt and secured with adjusting bolts in the slots on either side of the side brackets. (Note: Polyurethene blades are reversible for wear purposes and it is important that from initial installation, the blades are set with the bolts in the clamping strip in the centre of the elongated hole). Do not use excessive pressure when fitting the scraper. The blade should just touch the belt.

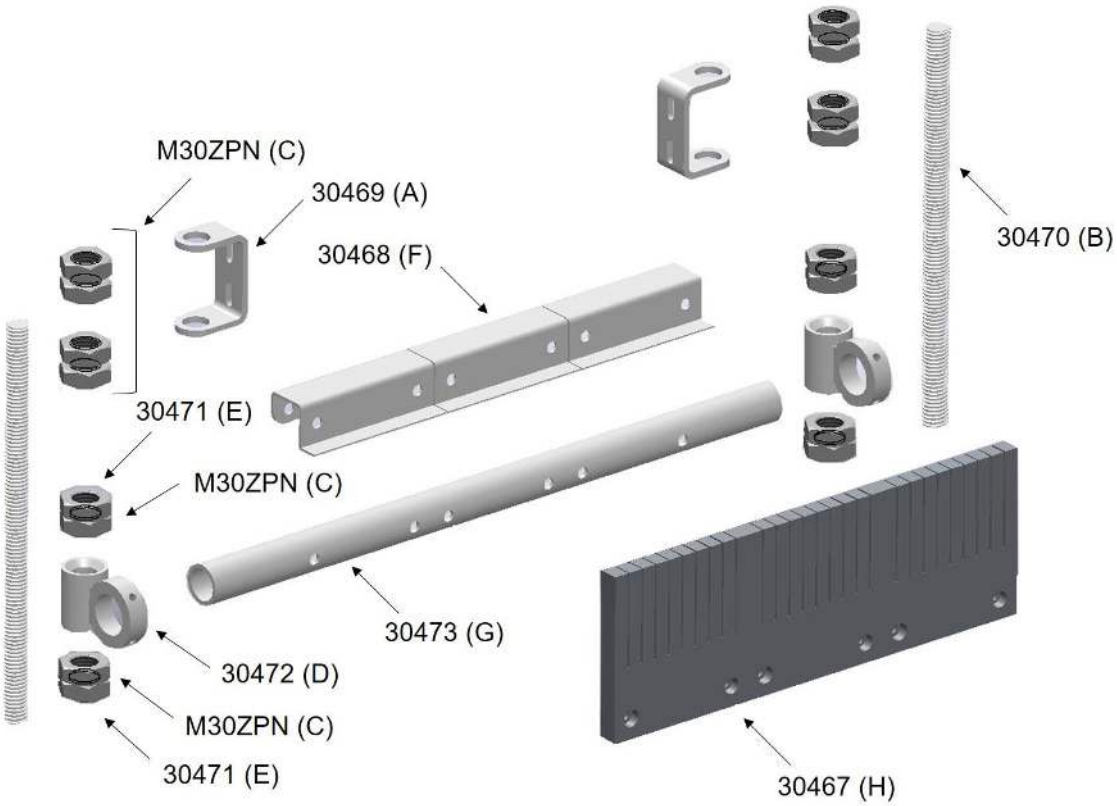
FINGER SCRAPER

These are heavy duty scrapers supplied for cleaning chevron belt or for plain belt if required. There are 3 types of scraper available.

a. **FLAT BELT SCRAPER** 5 finger blades with carbide inserts for use on all materials
b. **CHEVRON BELT SCRAPER** 7 finger blade with stainless steel tips.
c. **CHEVRON BELT SCRAPER** 7 finger blade with 'V' tips.

Both types of scraper are fitted and adjusted in the same way.





1. Mount the finger scraper adjusting brackets (A) on either side of the head unit side plates in the pre-drilled holes immediately behind the head drum with the fixings supplied.

2. Insert threaded stud bars (B) through the adjusting brackets (A) inserting 2 locking nuts (C) inside the bracket and 2 locking nuts outside of the bracket as shown. (Do not tighten at this stage)

3. Slide the finger scraper coupling bracket (D) onto each end of the round mounting tube as shown

4. Wind a tapered nut (E) onto each stud bar (B) approximately half way up the bar with the taper pointing downwards. Now mount the coupling brackets complete with mounting tube onto the stud bars and a wind on another taper nut onto each stud bar with the taper pointing upwards as shown.

5. Mount the appropriate number of finger blade mountings (F) onto the mounting tube (G) and insert appropriate finger scrapers (H) and secure with fixings provided as shown.

6. The blades should be pushed up into the belt and all loose nuts should now be tightened sufficiently to hold the scraper in place.

7. The scraper can now be adjusted to its final position and all nuts tightened securely. It is important that the blades are set leaning slightly forward by about 10 degrees into the moving belt.

WARNING!

DO NOT SET FINGER SCRAPER BLADES PERPINDICULAR TO BELT.

THESE SHOULD BE SET LEANING SLIGHTLY FORWARD INTO THE MOVING BELT AT APPROXIMATELY 10 DEGREES

6.18 AUTO GREASE UNITS

Auto Grease Units are supplied one per each bearing as purchased. These will need to be mounted near the bearing with the mounting bracket provided (maximum distance recommended 300mm).

1. The brackets will need to be mounted by means of drilling and securing with a self-tapping screw (note: if fixing Grease Units onto the side of the conveyor frame ensure fixing screw does not interfere with the moving belt).

2. The grease nipple on the bearing should now be removed. Next insert the tube coupling supplied into the bearing housing.

3. Next familiarise yourself with the operating instructions supplied with the grease canister.

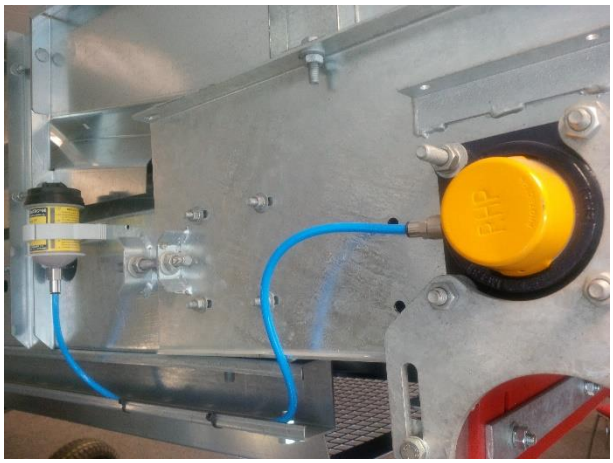
4. Fit the other hose coupling to the grease canister.

5. The grease canister should now be inserted into the mounting bracket.

6. Measure and cut to length the appropriate length of tube required from the grease canister to the bearing ensuring that it will be free from kinks and vibrational wear. Insert tube into couplings.

7. The tubes are usually supplied pre-primed with grease – if they are not prime the tube as necessary.

8. Set the grease unit according to the manufacturer's instructions supplied with the unit.



7. EASIKIT MOBILE

The EASIKIT MOBILE is usually supplied fully assembled.

If the Mobile has been supplied unassembled, the assembly of the conveyor will need to be carried out in accordance with section 6 of this manual. Assembly of the undercarriage and connection to the conveyor will need to be carried out in accordance with its own instruction procedure supplied with the undercarriage.

Installation and moving of the conveyor must be carried out adhering to a relevant lifting plan by competent and experienced personnel.

WARNING!

THE CONVEYOR SHOULD BE POSITIONED ON A STABLE AND LEVEL BASE. IT IS THE RESPONSIBILITY OF THE OPERATOR TO ANCHOR THE CONVEYOR AS NECESSARY

If the conveyor has not been supplied pre-wired the motor will need to be wired in accordance with Section 6.8 Electrical Installation.

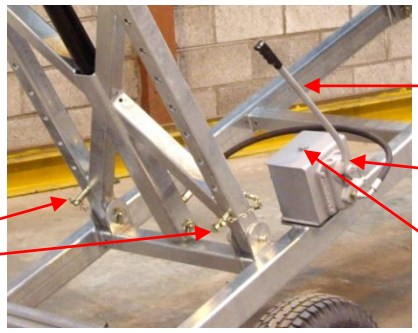
The hydraulic elevation mechanism is supplied pre-assembled complete with hydraulic oil and appropriate safety valve.

Once the wiring installation has been safely completed the belt will need to be tracked (and tensioned if required) as described in Section 6.12 as this is not always pre-set in the factory.

7.1 ELEVATION PROCEDURE

1. Once the conveyor has been positioned, ensure that there is nothing that will obstruct the free elevation of the conveyor.

2. Operate hydraulic hand pump to relieve pressure off of the telescopic strut safety linch pins and remove as shown.



3. Continue pumping the hydraulic hand pump until the required height is achieved and re-insert and secure the safety linch pins.

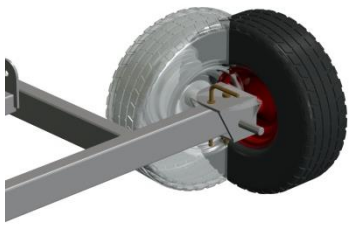
4. Release pressure from the hydraulic ram using the release valve on the pump (as shown) so that the conveyor weight is being supported by the safety linch pins.

5. To lower the conveyor, follow the above procedure in reverse.

7.2 RADIAL WHEEL TURNING OPERATION

1. Ensure the conveyor is on a level surface and remove the R clip and inner retaining pin from the pneumatic wheel hinged bracket as shown.

2. Insert slewing handle provided over the swiveling spigot and manoeuvre wheel position as shown.



3. Re-insert retaining pin and R clip and follow the same procedure for slewing the opposite wheel.

8. EASIKIT RADIAL

The EASIKIT RADIAL is usually supplied fully assembled,

If the Radial has been supplied unassembled, the assembly of the conveyor will need to be carried out in accordance with section 6 of this manual. Assembly of the undercarriage and connection to the conveyor will need to be carried out in accordance with its own instruction procedure supplied with the undercarriage.

Installation and moving of the conveyor must be carried out adhering to a relevant lifting plan by competent and experienced personnel.

WARNING!

THE CONVEYOR SHOULD BE POSITIONED ON A STABLE AND LEVEL BASE. ENSURE THAT THE CONVEYOR WHEELS CAN RADIAL FREELY WITHOUT ANY OBSTRUCTION

If the conveyor has not been supplied pre-wired the motor will need to be wired in accordance with Section 6.8 Electrical Installation.

The hydraulic elevation mechanism is supplied pre-assembled complete with hydraulic oil and appropriate safety valve.

Once the wiring installation has been safely completed the belt will need to be tracked (and tensioned if required) as described in Section 6.12 as this is not always pre-set in the factory.

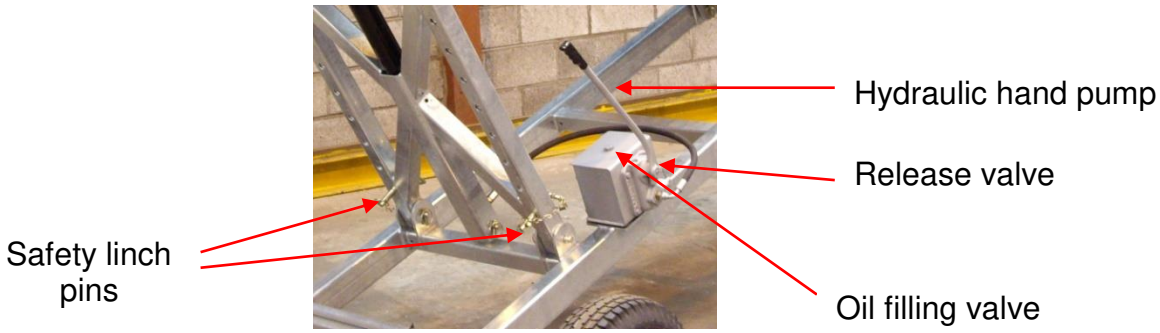
8.1 INSTALLATION PROCEDURE

Once the conveyor has been positioned, the slewing anchor will need to be secured to a firm base and bolted with appropriate fixings to correspond to the base structure. This should be carried out using resin or mechanical anchoring fixings. (These will need to be obtained separately and be adequate to secure the provided weight of conveyor and anticipated loadings)

8.2 ELEVATION PROCEDURE

1. Once the conveyor has been positioned, ensure that there is nothing that will obstruct the free elevation of the conveyor.

2. Operate hydraulic hand pump to relieve pressure off of the telescopic strut safety linch pins and remove as shown.



3. Continue pumping the hydraulic hand pump until the required height is achieved and re-insert and secure the safety linch pins.

4. Release pressure from the hydraulic ram using the release valve on the pump (as shown) so that the conveyor weight is being supported by the safety linch pins.

5. To lower the conveyor, follow the above procedure in reverse.

8.3 SLEWING RING

The slewing ring bearing is secured to the Radial mounting frame and plate with M16 Lindaptor clamps. (see diagram page 55). As part of ongoing maintenance the tightness of the securing bolts should be periodically checked using a torque wrench and tightened to a torque of 147Nm. The ring will require greasing as required.

Regularity of maintenance will depend on usage but it is recommended the Lindaptor tightness is checked at intervals of no longer than 6 months.
(See Section 9.23 – Routine Maintenance)

The slewing ring bearing has a permissible axial loadng of 1500kg.

9. EASIKIT ROUTINE MAINTENANCE

WARNING!
ISOLATE CONVEYOR BEFORE COMMENCING MAINTENANCE

ROUTINE MAINTENANCE CHECKS

Routine maintenance checks are very important in maintaining the full useful working life of your Easikit conveyor. A regular maintenance program paying due attention to all the components itemised in this Routine Maintenance section will reduce the likelihood of break-down and costly downtime. Frequency of checks will depend on conveyor usage i.e. material being handled, hours worked per day etc. Checks are recommended at regular intervals depending on the amount of working hours that the conveyor is being used for.

A main feature in extending the life of your conveyor is thorough cleaning at regular intervals to prevent material build-up particularly around the feed and discharge points (good house-keeping is essential).

THERE ARE REGULAR MAINTENANCE CHECKS THAT MUST BE CARRIED OUT: -

1. **EVERY WEEK (or 60 hours)**
2. **EVERY MONTH (or 250 hours)**
3. **EVERY 3 MONTHS (or 750 hours)**
4. **ANNUALLY (or 3000 hours)**

WARNING!
DOWN TIME COSTS MONEY,
LOOK AFTER YOUR EASIKIT CONVEYOR!

ROUTINE MAINTENANCE CHECK LIST

9.1 MATERIAL HANDLING

It is very important to ensure that your conveyor is operating within its capacity. If you are in doubt as to the capacity, please consult your conveyor supplier. Overflowing and excessive quantities of material on the belt will lead to material build up in unnecessary areas that will in turn cause damage to your conveyor.

9.2 MATERIAL FEED POINTS

Inspect the feed points of the conveyor and ensure that material is feeding correctly onto the belt and that there is no over flow or spillage onto the surrounding area. Any material build up will create a hazard which will develop into a potential for conveyor failure and cause subsequent down time.

9.3 RUBBER BELT

Rubber belt and belt joints are classed as 'wear' items and not covered under the manufacturer's warranty. Regular inspection of the belt, joints and tracking will help prevent any unnecessary damage to these items and to the conveyor framework. Particular attention will need to be given to metal clip joints (where supplied) as wear to the underside of the joint will not readily be noticeable from a surface visual inspection.

9.4 BELT SCRAPERS

A regular visual inspection & clean of scrapers with necessary adjustments is essential to ensure their ongoing efficient operation. Maintenance checks should be carried out as per the routine maintenance schedule on page 49. The blades are wear items and not covered by the manufacturer's warranty. Where standard Easikit primary & secondary scrapers have been supplied, the blades are reversible and can be turned around to maximise usage.

9.5 ROLLERS

Intermediate top troughing rollers and return rollers will need to be inspected regularly for free rotation and any excessive wear. These have sealed for life bearings and will need to be kept free from any material build up. Do not use thin spray lubricants (i.e. WD-40) as these will wash out the pre-greased bearings. If external lubrication is needed, this should be done with a spray lubricant grease (avoid any contact with the rubber belt).

9.6 HEAD UNIT

The Head Unit should be checked as per the maintenance schedule and visually assessed to ensure that the drum is functioning correctly and that the lagging is not excessively worn. The Head Drum and its mountings should be secure and in alignment with the conveyor, and the motor mounting bracket secure to both conveyor frame and gearbox. An inspection should be carried out to the inside of the side mounting plates to ensure that the belt has not been running out of alignment causing the edge of the moving belt to rub and wear the plates.

9.7 TAIL UNIT

The Tail Unit should be checked as per the maintenance schedule and visually assessed to ensure that it is functioning correctly and that the drum is clean with no excessive build-up of material around the drum and that it is running in the bearings correctly. This can be accessed by removing the tail drum guard (and the hopper if possible). Ensure that the tensioning stud bars each side are clean and operational and that the side clamps are tightly secured. The tensioning stud bars will benefit from a periodic light greasing with a multipurpose grease.

9.8 TOGGLE & JOINT CHECK

All conveyor section connecting toggles & bolts should be checked periodically as per the maintenance schedule. This will involve manually lifting of the conveyor belt and visually and mechanically checking that they are secure and tight.

9.9 MOTOR & ELECTRICS

Carry out a regular visual check to ensure there are no obvious signs of wear or damage to the motor and supply cables. Any wear or damage in these areas should be reported immediately to a competent electrician to carry out further investigation and any necessary repair work.

9.10 GEARBOX UNITS

All gearboxes supplied are maintenance free as they are lubricated for life at the factory and the oil should not require changing. Visually inspect for damage.

9.11 BEARINGS

All external bearings need to be inspected for any excessive wear and that they are secure to the conveyor frame and in clean condition. All these bearings will need grease lubrication regularly. The manufacturer's recommended lubricant is a high quality lithium based grease of 2-3 consistency. They will need to be checked as per the maintenance schedule.

WARNING!

DO NOT OVERGREASE BEARINGS

9.12 TOP COVERS

It is important that all top covers have been fitted as per Section 6.14 and should be checked periodically as indicated in the maintenance schedule. The top covers should be removed when cleaning the conveyor. Whilst the covers are removed, they should be inspected thoroughly for any damage that may have occurred to both the covers and fixings. It is important that all fixings are securely tightened after refitting the covers.

9.13 BOTTOM COVERS

It is important that all bottom covers have been fitted as per section 6.15 and should be checked periodically as indicated in the maintenance schedule. Remove the bottom covers following Section 6.15 in reverse order; you may not need to remove them completely as it is possible to remove only two bolts and hinge the covers down on the two remaining bolts at the opposite end. Ensure that all built up material is removed from the return belt area, paying particular attention to the return rollers that support the return belt. Ensure that the cage nuts are in good working order and inspect the covers thoroughly for any damage that may have occurred and then re-fit the covers back into position in the reverse order. It is important that all fixings are securely tightened after refitting the covers.

9.14 BELT TRACKING

Belt tracking should be visually checked at both ends of the conveyor to ensure that the belt is running in the centre of the drums and not running to one side more than the other. You may need to remove any objects that obstruct your visual inspection. If the belt is running out of alignment follow the belt tracking procedure as set out in Section 6.12.

9.15 BELT TENSIONING

To check the belt tension on you conveyor, first make sure that there is no load on the belt. Ensure that you are situated in a safe position prior to starting the conveyor to inspect the belt running and that you are able to visually see the head drive drum on start-up of the conveyor. On start-up, first check that there is no belt slippage on the drum. If the belt is not slipping, then repeat this check with the belt running under its normal working load. Should you experience any slipping of the belt at the drive drum, then increase the tension at the tail drum end by following the tracking and tensioning procedure as set out in Section 6.12

9.16 HOPPER

Inspect regularly as per the maintenance schedule to ensure that there is no material build up in the hopper and its surrounding area. Check thoroughly that there is no damage to the hopper. Clean and remove material as necessary. Check hopper rubbers for wear or damage and replace if required. (These are classed as ‘wear’ items and not covered by the manufacturer’s warranty). Ensure all fixings are secure and tightened.

9.17 SIDE GUIDES

Side Guides need to be inspected periodically as per the maintenance schedule to ensure that they are fixed securely and that they are not damaged. These should be inspected to make sure that the side skirting that interfaces with the belt is not damaged and ensure that it is still sitting on top of the moving belt. This must be in its correct position as shown in Section 6.16.4. Ensure that all side guides are free from material build up around the support brackets and feed points etc. (Rubber skirts are classed as ‘wear’ items and not covered under the manufacturer’s warranty).

9.18 SUPPORT STANDS

All support stands should be checked periodically that all fixings are tight and secure. Inspect all supports for any damage. Replace any damaged parts as necessary. Ensure that nothing detrimental has been added to the support structure causing extra weight loadings since the conveyor was originally specified.

9.19 AUTO GREASE UNITS

If Auto Grease Units are fitted to your conveyor, these will need to be checked as per the maintenance schedule. It is important to familiarise yourself how much grease the unit is using between your inspections and ensure there will be sufficient grease to cover the conveyor running hours before your next check. If there is insufficient grease left, these should be changed and fitted as per Section 6.18. Replacement cartridges can be obtained from your conveyor supplier.

9.20 MOTION SENSORS

If a Motion Sensor has been supplied with your conveyor this will need to be regularly inspected as per the Maintenance schedule.

a) VISUAL INSPECTION - Check visually that the unit is performing mechanically and ensure that all fixings are secure and the unit is not damaged.

b) MANUAL INSPECTION - To check manual operation of the sensor, the belt tension will need to be released (follow Section 6.12 in reverse order) until the belt and the drive drum begins to slip and that belt movement has stopped. This should then activate the Sensor to shut down the electrical supply to the motor that will in turn isolate the power supply to the conveyor. Re-tension the belt as set out in Section 6.12. A competent electrician will also need to inspect the unit to ensure that it is still functioning with the electrical controls.

9.21 EMERGENCY GRAB WIRES & STOP STATIONS

All Emergency Stop devices must be regularly checked as per the Maintenance Schedule to ensure they are functioning correctly. (i.e. activate and ensure the conveyor stops). All stop units and cabling should be checked visually for damage and that all fixings are secure. Any maintenance work required should be carried out by a qualified electrician.

9.22 MOBILE CONVEYORS

It is important that all linch pins are inspected to ensure they are correctly positioned and the safety retaining pins are secure. Pneumatic tyres should be inspected regularly for damage, wear and that they are inflated with sufficient pressure as indicated on the tyre wall. Inspect hydraulics as per Section 9.24.

9.23 RADIAL CONVEYORS

Ensure the conveyor is operating correctly in its radial action and that the radial track line is clear and free from debris etc. It is important that all linch pins are inspected to ensure they are correctly positioned and the safety retaining pins are secure. Remove wheel covers and inspect wheel mounting shafts and bearings for any damage and wear. Drive shaft bearings should be greased. The manufacturer's recommended lubricant is a high quality lithium based grease of 2-3 consistency. Ensure motor mounting bracket is secure and replace covers and secure fixings. Inspect hydraulics as per Section 9.24. Radial slewing anchor bearings will need to be greased when required. Tightness of Lindaptor fixings should be regularly checked as per Section 8.3. Ensure ground fixing anchors are still secure and tight. Visually inspect electrical wiring and connections for any signs of damage. Any electrical maintenance work required should be carried out by a qualified electrician.

9.24 MOBILE & RADIAL HYDRAULICS

Visually check that there are no leakages or damage at hose connections, along the hose length and the ram. Check safety linch pins are correctly inserted and retained. Try and elevate the conveyor to its maximum position as per Sections 7 & 8. If the conveyor will not reach this position, it is an indication that there is insufficient hydraulic oil in the system. Next lower the conveyor to its lowest position, ensuring that the hydraulic ram is in its closed position. Proceed to add oil to the hydraulic pump as necessary.

9.25 CONVEYOR WASHDOWN

Periodic washing and cleaning of your conveyor will be necessary to maintain its efficient operation. The manufacturers recommend the use of a high power water jet or similar (e.g. steam cleaner). Correct PPE should be worn when carrying out washing etc. Prior to undertaking any washing, the environment the conveyor is situated in should be considered and that no damage of surrounding items is likely to occur. Ensure there is adequate drainage prior to washing. Excessive material should be disposed of in a manner that will not cause damage to the environment. It will be necessary to remove conveyor covers to give access to the belt area (see Sections 9.12 & 9.13). Ideally the belt tension should be released allowing the belt to be raised to gain access to the inside of the conveyor frame. Particular attention and thorough washing will be required around the head and tail drum areas.

WARNING!

ENSURE ALL COVERS & GUARDS HAVE BEEN REPLACED PRIOR TO RE-STARTING YOUR CONVEYOR AND THAT ALL FIXINGS ARE TIGHT & SECURE.

9.26 DOCUMENTATION

All maintenance should be documented accordingly in the separate Service Schedule.

EASIKIT ROUTINE MAINTENANCE SCHEDULE

Item	Maintenance check	Frequency			
		Weekly	Monthly	3 Monthly	Annual
		or 60 hours	or 250 hours	or 750 hours	or 3000 hours
9.1	Material Handling			✓	✓
9.2	Material Feed Points	✓	✓	✓	✓
9.3	Rubber Belt	✓	✓	✓	✓
9.4	Belt Scrapers	✓	✓	✓	✓
9.5	Rollers		✓	✓	✓
9.6	Head Unit			✓	✓
9.7	Tail Unit			✓	✓
9.8	Toggle & Joint Check			✓	✓
9.9	Motor & Electrics	✓	✓	✓	✓
9.10	Gearbox Units				✓
9.11	Bearings			✓	✓
9.12	Top Covers			✓	✓
9.13	Bottom Covers		✓	✓	✓
9.14	Belt Tracking	✓	✓	✓	✓
9.15	Belt Tensioning			✓	✓
9.16	Hopper			✓	✓
9.17	Side Guides			✓	✓
9.18	Support Stands				✓
9.19	Auto Grease Units			✓	✓
9.20	Motion Sensor - Visual	✓	✓	✓	✓
	Motion Sensor - Manual			✓	✓
9.21	Emergency Grab Wires			✓	✓
9.22	Mobile			✓	✓
9.23	Radial			✓	✓
9.24	Mobile & Radial Hydraulics			✓	✓
9.25	Conveyor Wash-down				✓
9.26	Documentation		✓	✓	✓

Contact your supplier for replacement parts.

ROUTINE MAINTENANCE CONTRACTS

Service contracts are available. Contact your supplier for details

WARRANTY

See Warranty on Page 62. It is important that the Maintenance Schedule is adhered to in order to validate the manufacturer's warranty.

10. EASIKIT 900 PARTS LIST

EASIKIT 900 HEAD UNIT	
ITEM NO.	**DESCRIPTION**
39101	Head unit frame
39106	Drive roller
345114	Head plate
345113	Head plate
36107	Motor bracket
39612	Return roller
39613	Top roller
39100-Y1	Tracking stud
SF40	Head bearing
36550	Primary side brackets
39551	Secondary scraper frame
39552	Blade clamp
39553	Blade clamp angle
39554	Primary scraper frame
39555	Polyurethane blade
39560	Head top cover

EASIKIT 900 SNUB HEAD UNIT	
ITEM NO.	**DESCRIPTION**
39101	Head unit frame
39151	Snub drive roller
36152	Snub head plate
36153	Snub head plate
39160	Snub motor bracket
39612	Return roller
39613	Top roller
39616	Snub roller
SFT30	Snub roller bearing
39100-Y1	Tracking stud
MSF50	Snub head bearing
39553	Blade clamp
39555	Polyurethene blade
39557	Snub primary scraper frame

EASIKIT 900 BASE TENSION UNIT	
ITEM NO.	**DESCRIPTION**
39201	Tail unit frame
39210	Finger guard
39212	Tail drum

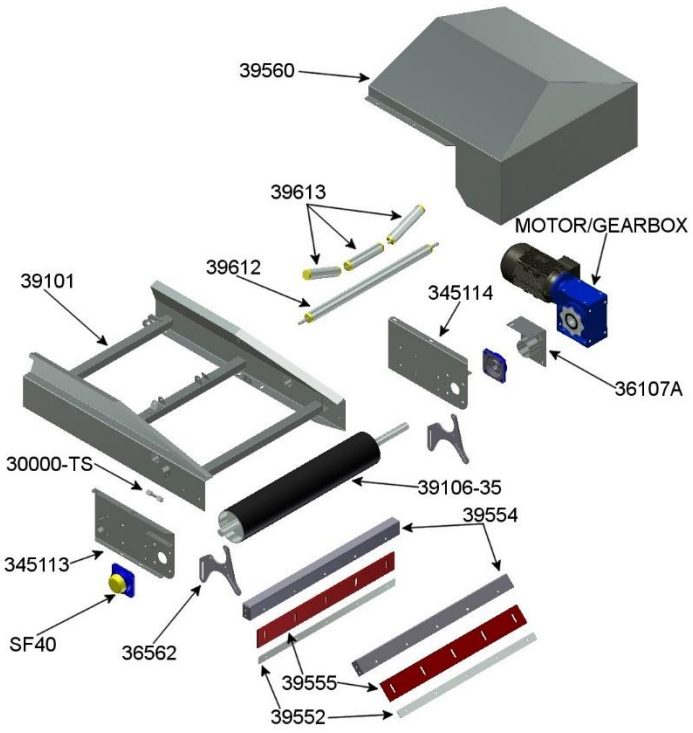
EASIKIT 900 TAIL UNIT (cont'd)	
ITEM NO.	**DESCRIPTION**
39213	Tail bracket
39612	Return roller
39613	Top cover
36604	Toggle boss
36605	Toggle tee
MSF30	Tail bearing
36200-Y2	Tensioning stud
39500	Hopper frame
39514	Back rubber
36512	Back rubber clamp
36511	Side rubber clamp
36513	Side rubber
39520	Tail guard
36619	Toggle bolt
36209	Tail clamp

EASIKIT 900 1.2m (4ft) SECTION	
ITEM NO.	**DESCRIPTION**
39301	1.2m (4ft) section frame
39612	Return Roller
39613	Top Roller
36604	Toggle boss
36605	Toggle tee
36619	Toggle bolt
39532	1.2m top cover

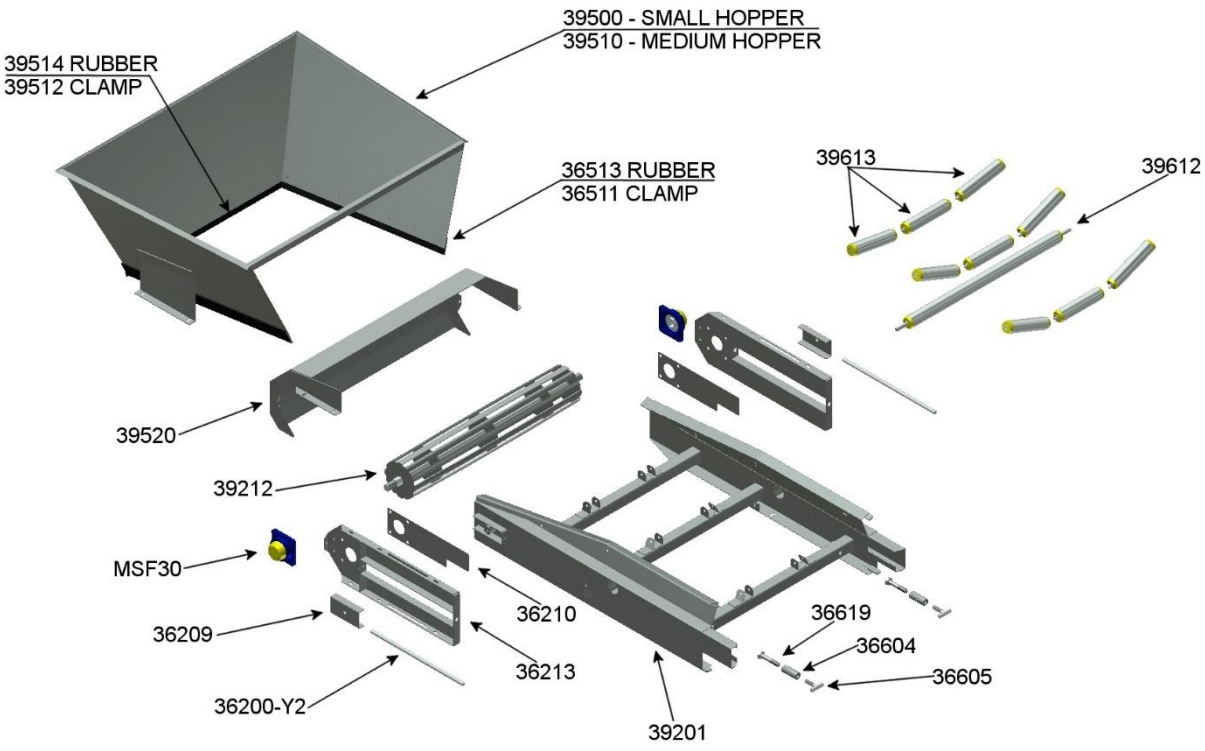
EASIKIT 900 1.2m (4ft) SECTION	
ITEM NO.	**DESCRIPTION**
39401	2.4m (8ft) section frame
39612	Return Roller
39613	Top Roller
36604	Toggle boss
36605	Toggle tee
36619	Toggle bolt
39572	Mesh underguard
30165	Underguard bracket
30157	2.4m stringer
30158	1.2m stringer
39401	2.4m (8ft) section frame

11. EASIKIT 900 EXPLODED DIAGRAMS

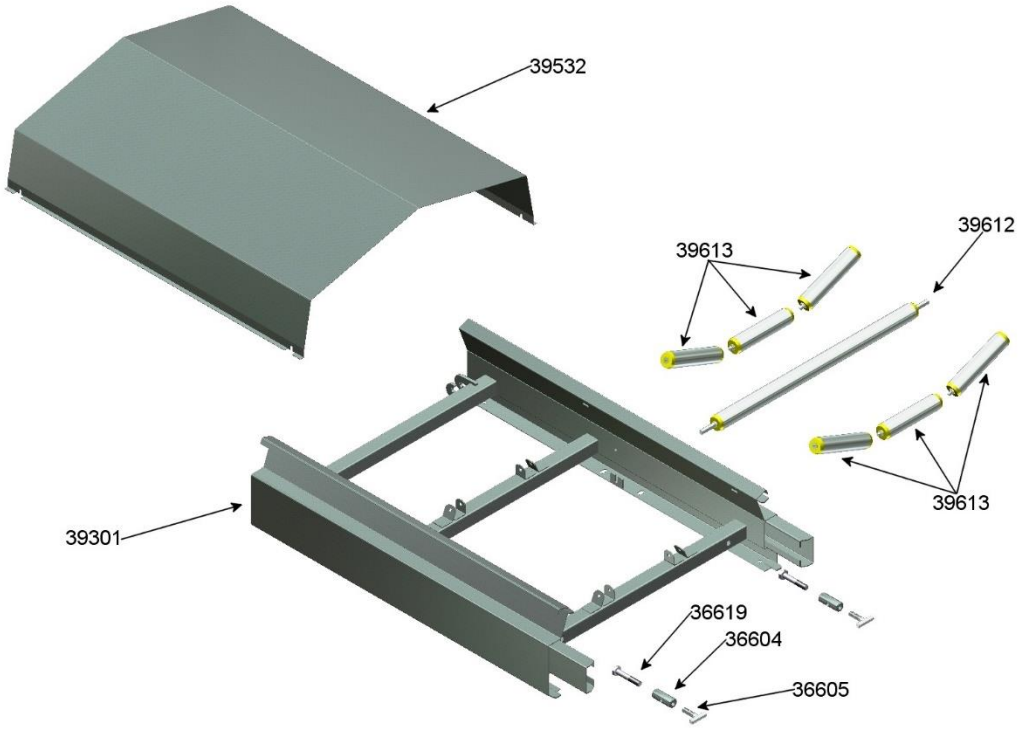
901: HEAD DRIVE UNIT



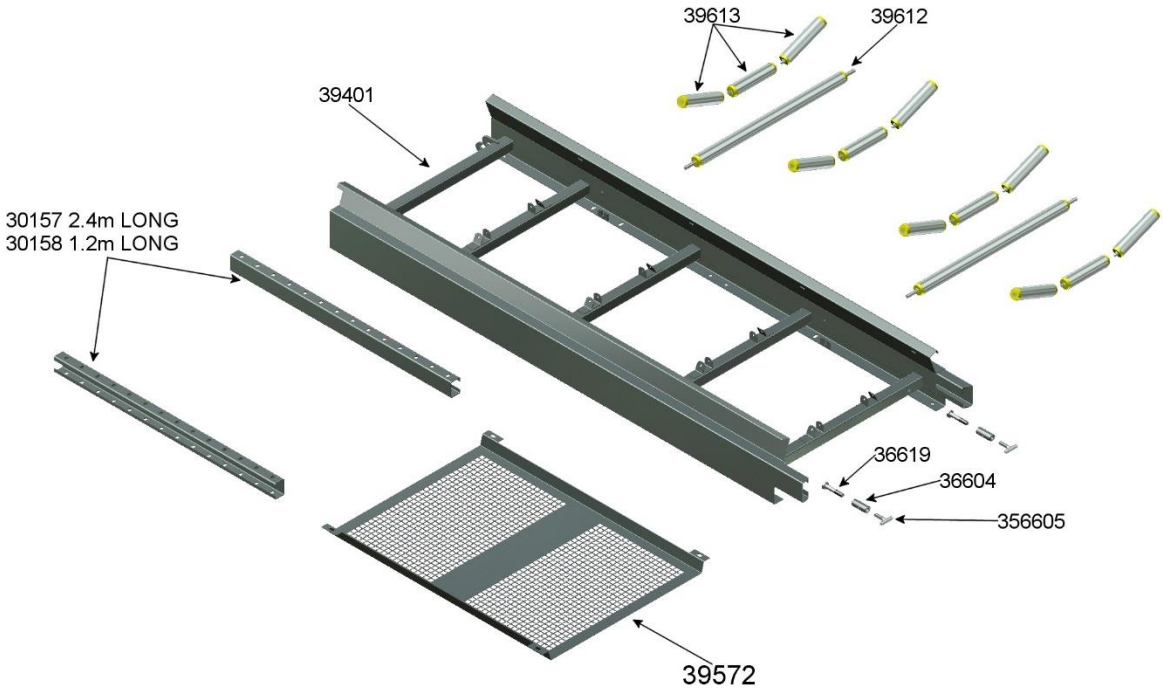
902: BASE TENSION UNIT (TAIL)



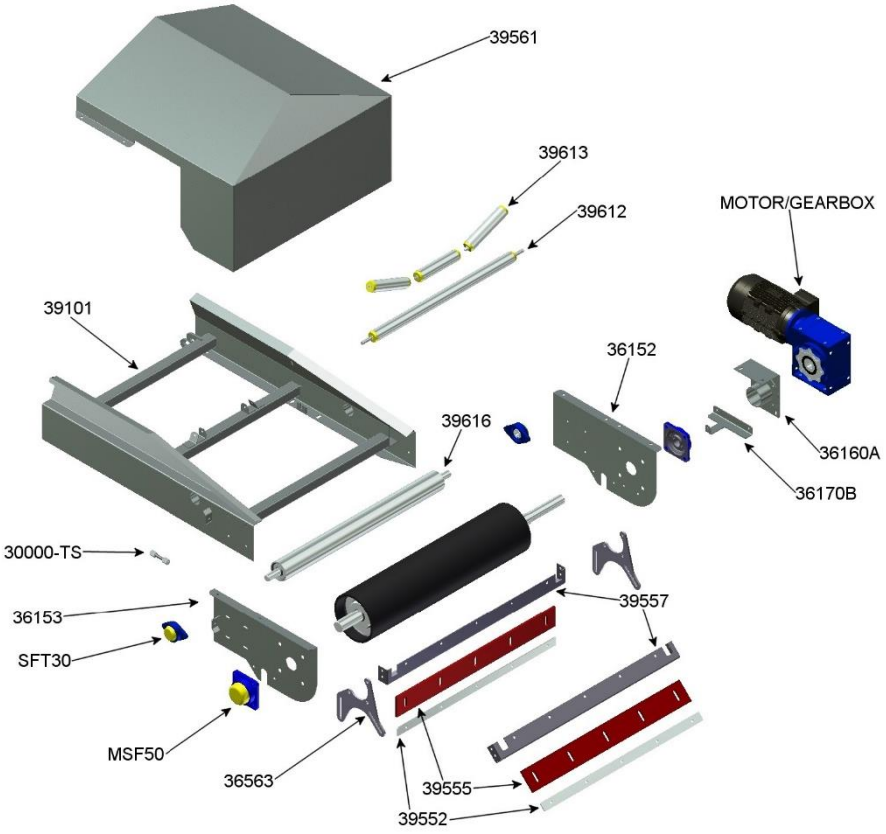
903: 1.2m SECTION



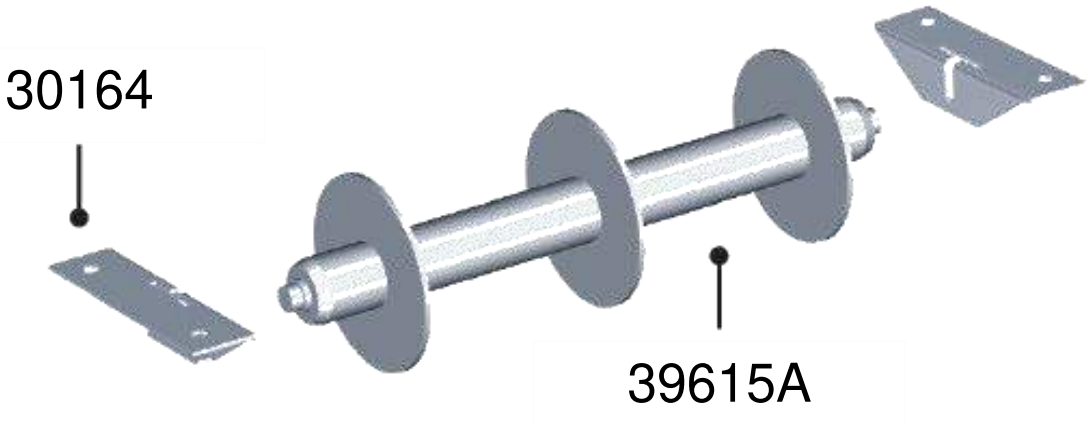
904: 2.4m SECTION



905: SNUB DRIVE UNIT



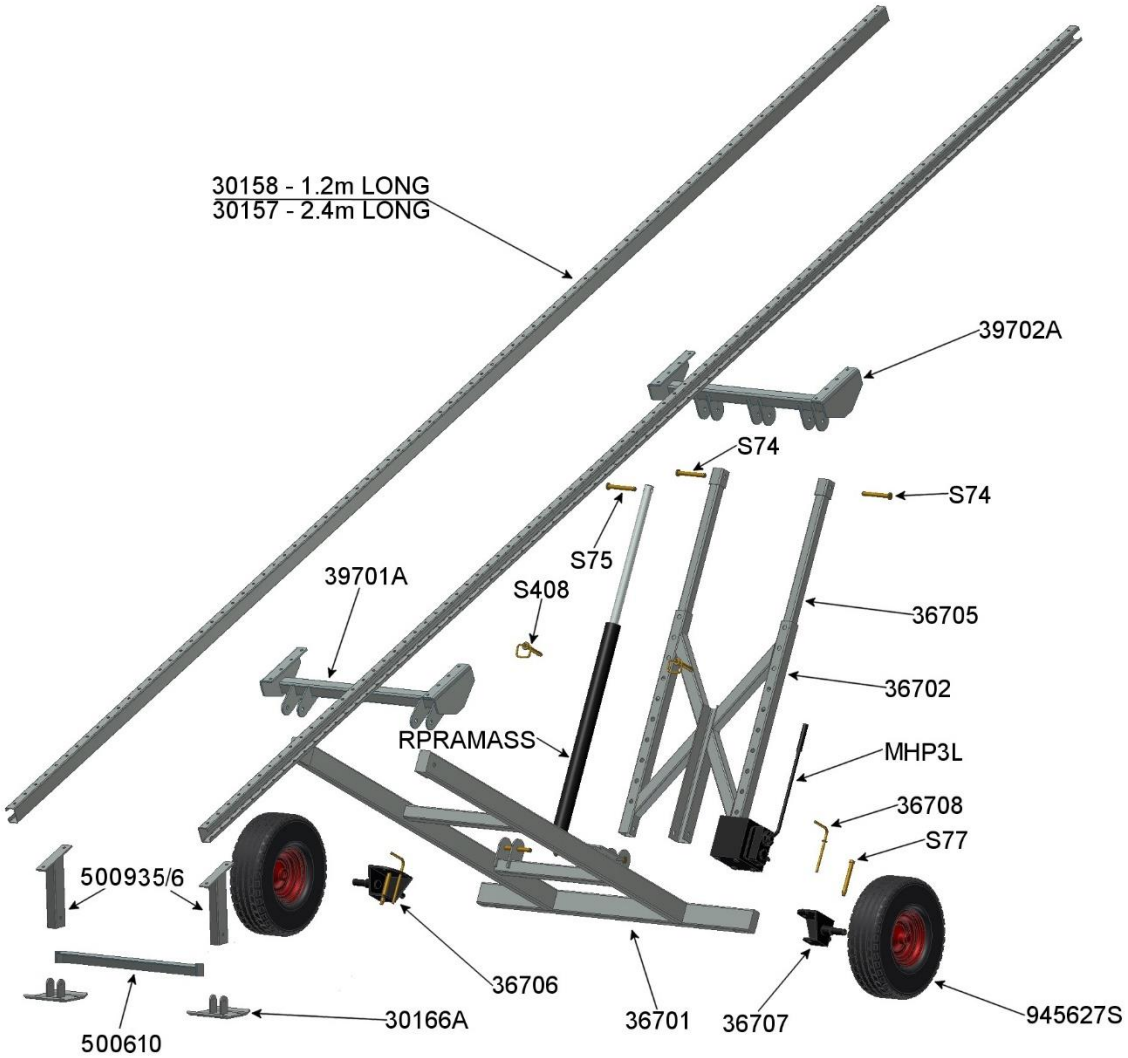
955: DISC RETURN ROLLERS & BRACKETS



EASIKIT MOBILE

EK900 MOBILE				
ITEM NO.	**DESCRIPTION**		**ITEM NO.**	**DESCRIPTION**
36701	Sub Frame		S6	Mobile 'Pear' Linch Pins
36702	Height Adjuster		S74	Mobile Medium Link Pin
39701A	EK900 Sub Frame Bracket		S75	Mobile Short Link Pin
39702A	EK900 Ram Bracket		S77	Mobile Long Link Pin
36705	Telescopic Arms		RPRAMASS	Mobile Hydraulic Ram
36706	Wheel Shaft LH		500935	Heavy Duty Foot (inner)
36707	Wheel Shaft RH		500936	Heavy Duty Foot (outer)
36708	Slewing Bracket Pin		500610	Foot Cross Member
MHP3L	Heavy Duty Pump		30166A	Foot Mounting Plate
9456927S	Wheel		30157	2.4m Stringer
S408	D-Handle Pins		30158	1.2m Stringer

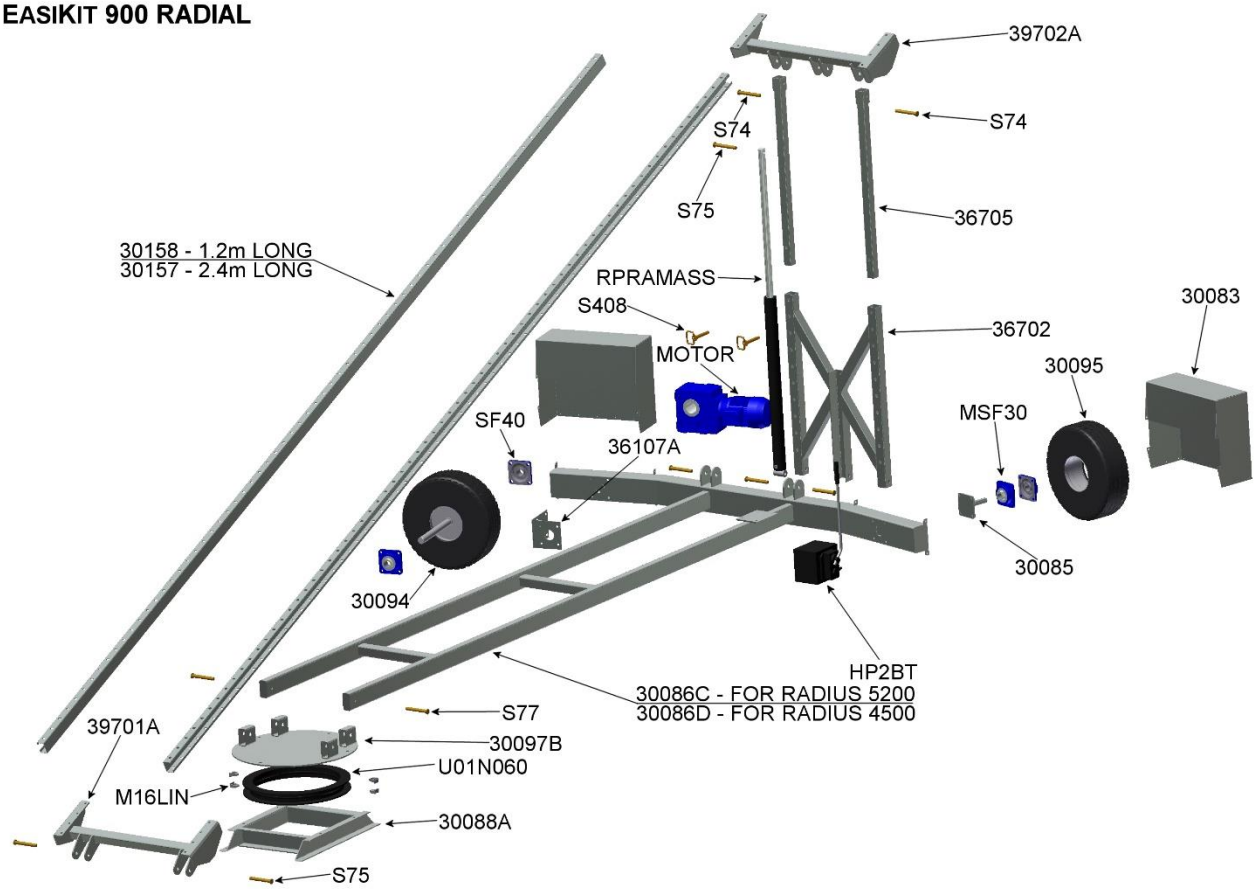
EASIKIT 900 MOBILE



EASIKIT RADIAL

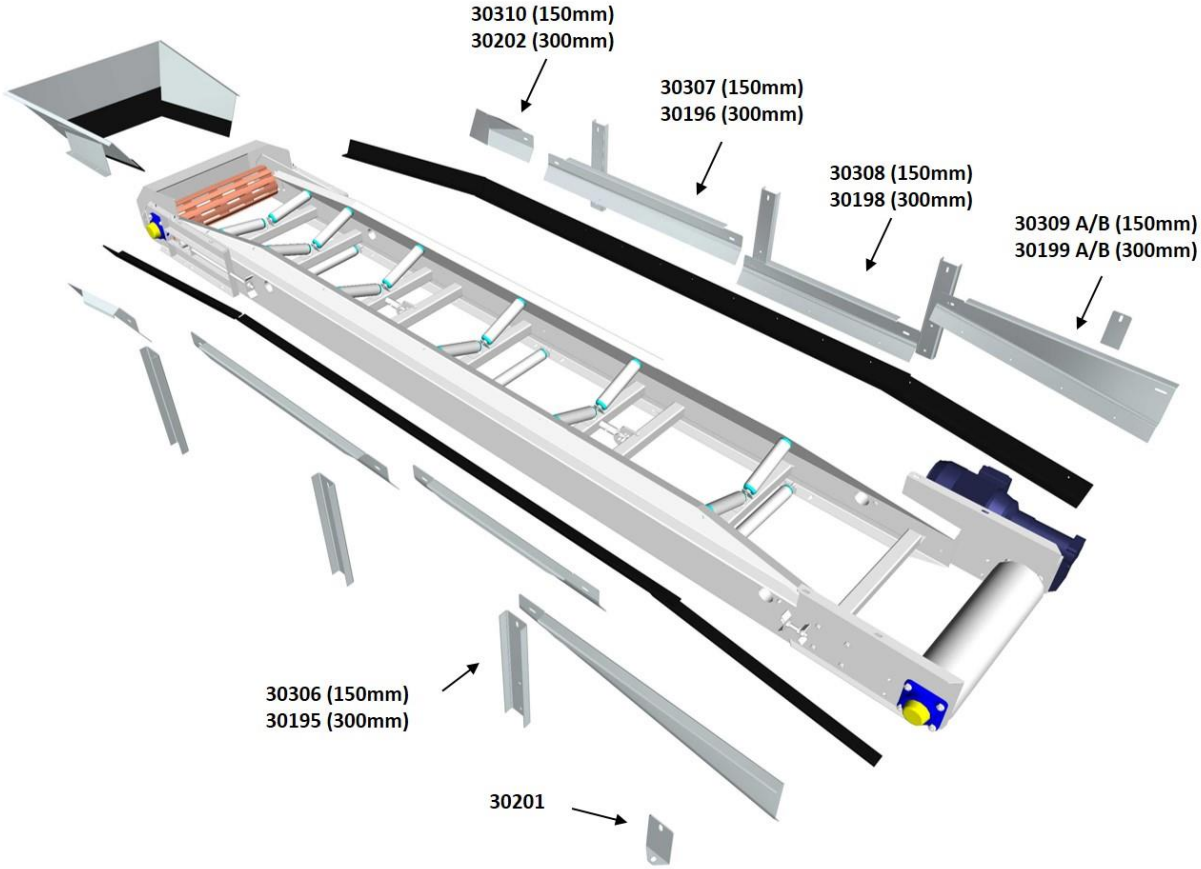
EK900 RADIAL – Radius 4.5m and 5.2m				
ITEM NO	**DESCRIPTION**		**ITEM NO**	**DESCRIPTION**
30086C	Sub Frame - Radius 5.2m		36705	Telescopic Arms
30086D	Sub Frame - Radius 4.2m		MSF30	Drive Shaft Bearing
30085	Idler Wheel Shaft		SF40	Idler Shaft Bearing
30088A	Radial Mounting Frame		S408	D - Handle Pin
30097B	Radial Mounting Plate		36107A	Motor Mounting Bracket
39701A	EK900 Sub Frame Bracket		S6	EK Mobile 'Pear' Linch Pins
39702A	EK900 Ram Bracket		S74	Mobile Medium Link Pin
30083	Wheel Cover		S75	Mobile Short Link Pin
30094	Drive Wheel		S77	Mobile Long Link Pin
30095	Idler Wheel		30157	2.4m Stringer
UOIN060	Slewing Ring		30158	1.2m Stringer
RPRAMASS	Mobile Hydraulic Ram		30159	Joint Plate
36702	Height Adjuster		M16LIN	M16 Lindaptor

EASIKIT 900 RADIAL



EASIKIT SIDE GUIDES

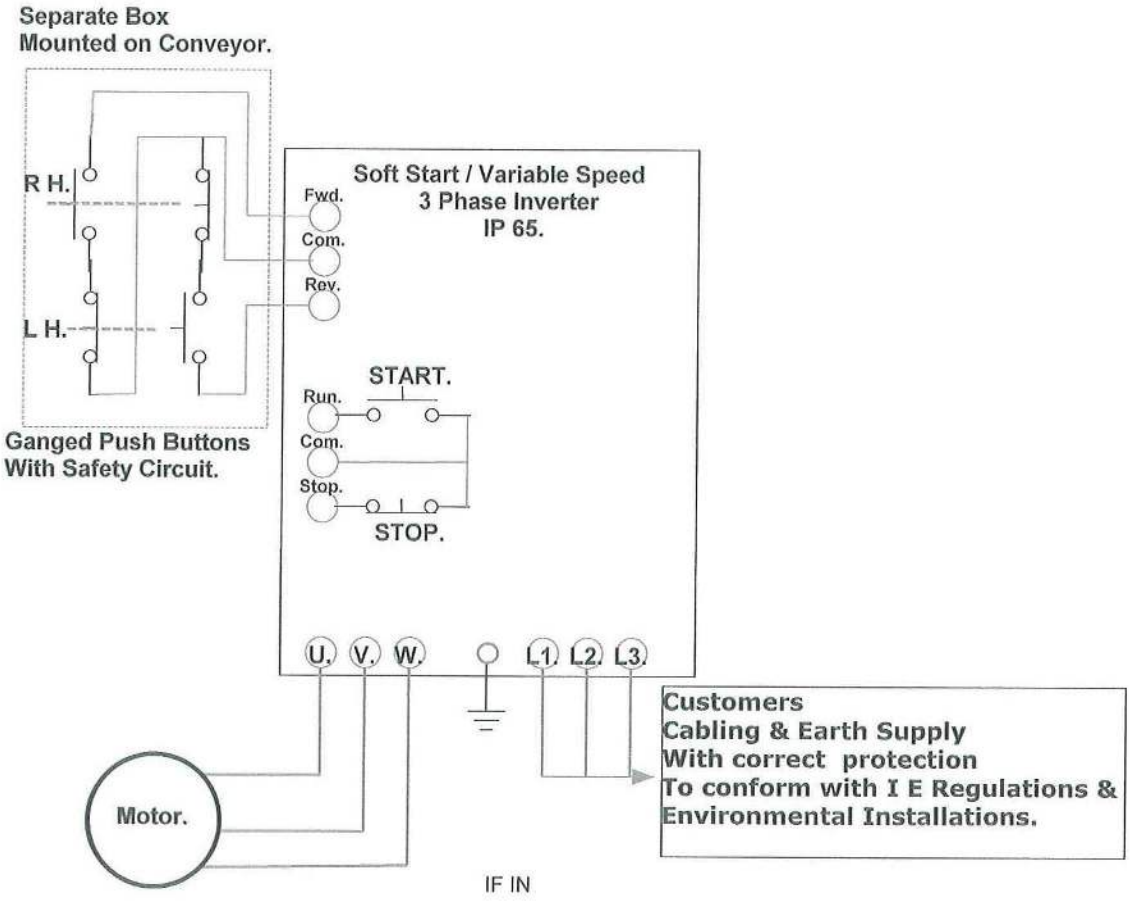
SIDE GUIDES			
150mm	**300mm**	**DESCRIPTION**	**CLAMP STRIPS**
30306	30195	Mounting Bracket	n/a
30307	30196	Side Panel	30336
30308	30198	Short Side Panel	30503
30309 A/B	30199 A/B	Head Panel	30503
30201	30201	Head Panel Bracket	n/a
30310 A/B	30202 A/B	Medium Hopper Side Panels	30340
30310 C/D	30202 C/D	Small Hopper Side Panels	30300



12. APPENDIX
ELECTRICAL WIRING DIAGRAMS

DIAGRAM No: 1a

Radial Drive
3 Phase 415v Inverter Wiring
To Comply with PELV
BS EN 60204 – 1 : 2006+A1 : 2009

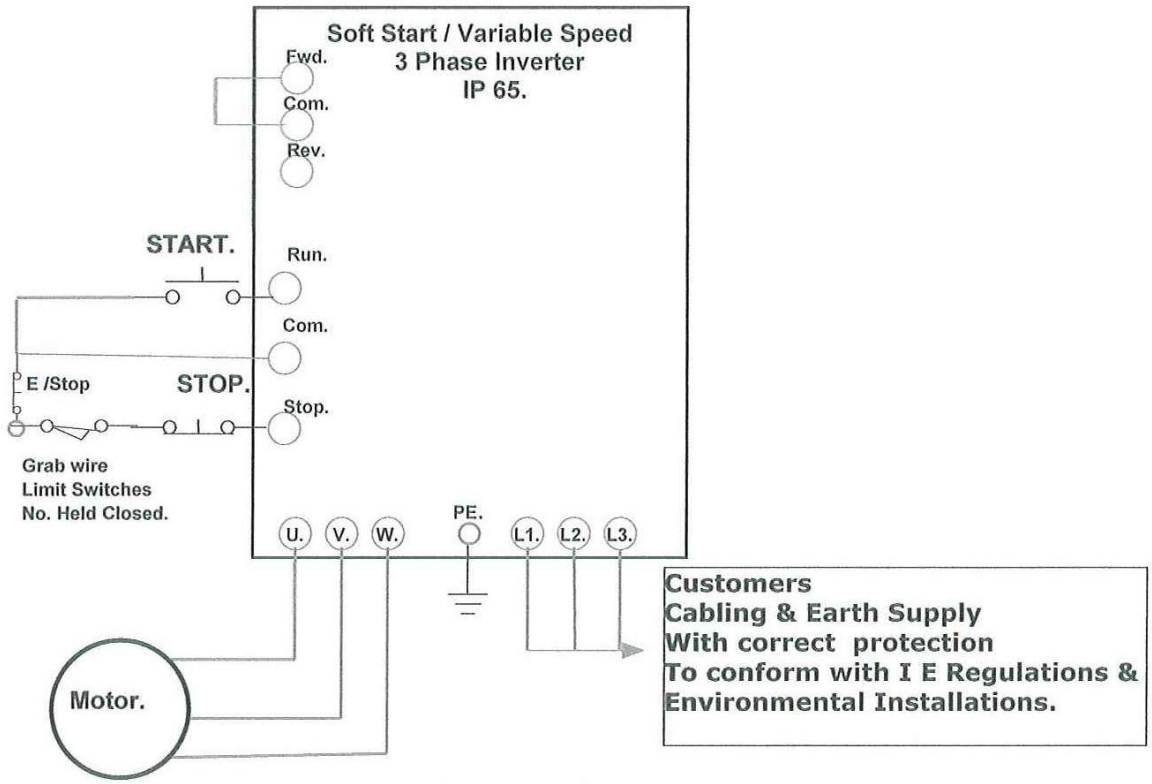


IF IN DOUBT ASK

Council of European Directives: The products in the publication conform to relevant EEC Directives and EN Standards. Installation and use of such products must be carried out by competent, properly trained personnel, complying with any Instructions supplied by Your Supplier. Liability for improper incorporation, assembly, use, processing, storing or handling of goods remains the sole responsibility of the individual or company carrying out such work. This publication is for information purposes only. Whilst every care has been taken in the preparation of this leaflet, no liability is accepted for any consequence of its use. No licence to use any patent should be assumed. All dimensions are approximate only and subject to change without notice, as are other technical features resulting from continual development and improvement.

DIAGRAM No: 1b

3 Phase Inverter 415v. Standard Circuit
With Grab wires & E / Stops
To Comply with PELV
BS EN 60204 – 1 : 2006+A1 : 2009



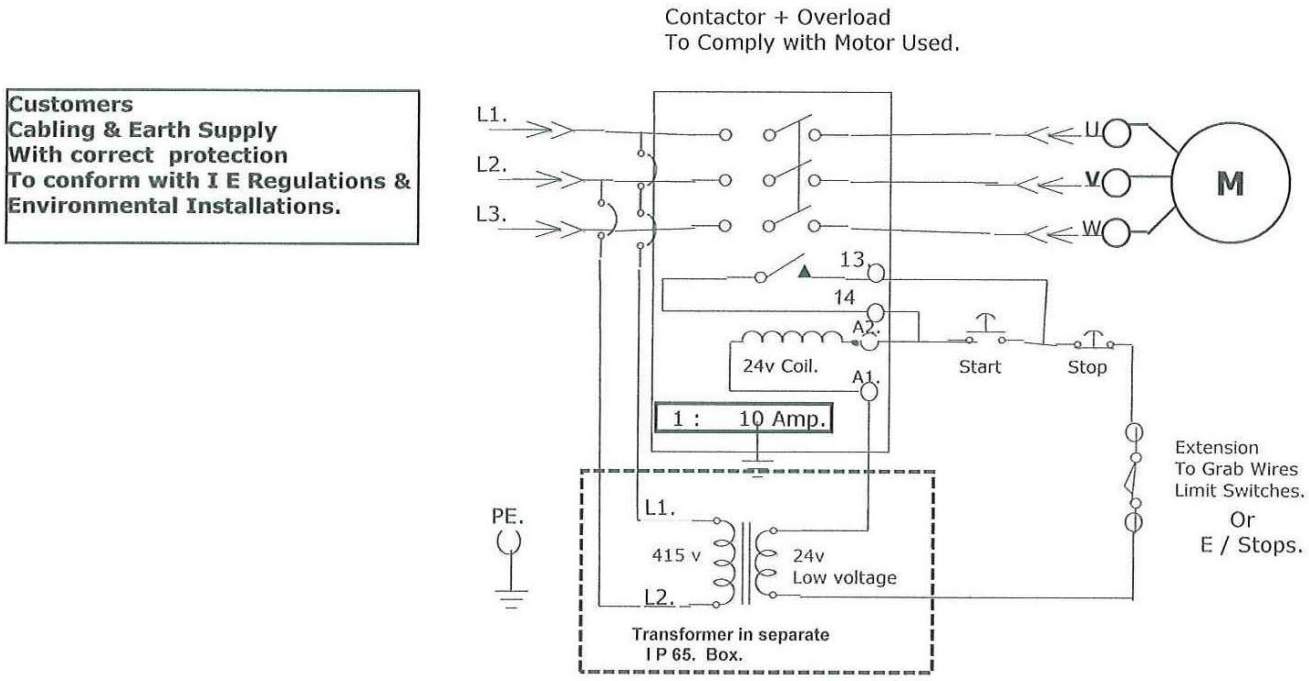
IF IN DOUBT ASK

Council of European Directives: The products in the publication conform to relevant EEC Directives and EN Standards. Installation and use of such products must be carried out by competent, properly trained personnel, complying with any Instructions supplied by Your Supplier. Liability for improper incorporation, assembly, use, processing, storing or handling of goods remains the sole responsibility of the individual or company carrying out such work. This publication is for information purposes only. Whilst every care has been taken in the preparation of this leaflet, no liability is accepted for any consequence of its use. No licence to use any patent should be assumed. All dimensions are approximate only and subject to change without notice, as are other technical features resulting from continual development and improvement.

DIAGRAM No: 2a

D O L Starter Modification to Low voltage initiation

3 Phase Inverter 415v. DOL Motor Starter
Low voltage Coil Supply 24v
To Comply with PELV
BS EN 60204 – 1 : 2006+A1 : 2009



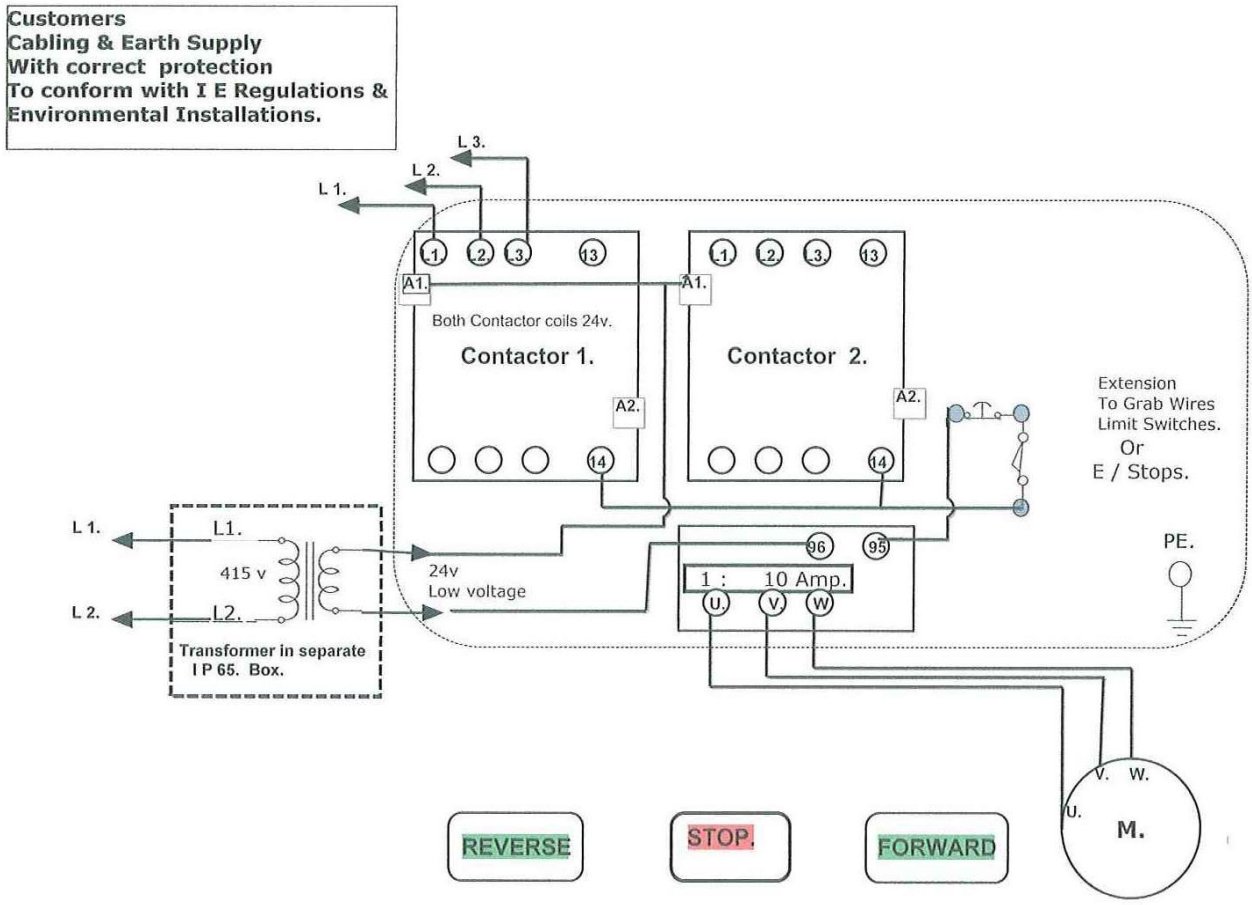
IF IN DOUBT ASK

Council of European Directives: The products in the publication conform to relevant EEC Directives and EN Standards. Installation and use of such products must be carried out by competent, properly trained personnel, complying with any Instructions supplied by Your Supplier. Liability for improper incorporation, assembly, use, processing, storing or handling of goods remains the sole responsibility of the individual or company carrying out such work. This publication is for information purposes only. Whilst every care has been taken in the preparation of this leaflet, no liability is accepted for any consequence of its use. No licence to use any patent should be assumed. All dimensions are approximate only and subject to change without notice, as are other technical features resulting from continual development and improvement.

DIAGRAM No: 2b

D O L Starter Forward & Reverse Modification to Low voltage Initiation

3 Phase Inverter 415v. DOL Motor Starter
Low voltage Coil & Supply 24v
To Comply with PELV
BS EN 60204 – 1 : 2006+A1 : 2009

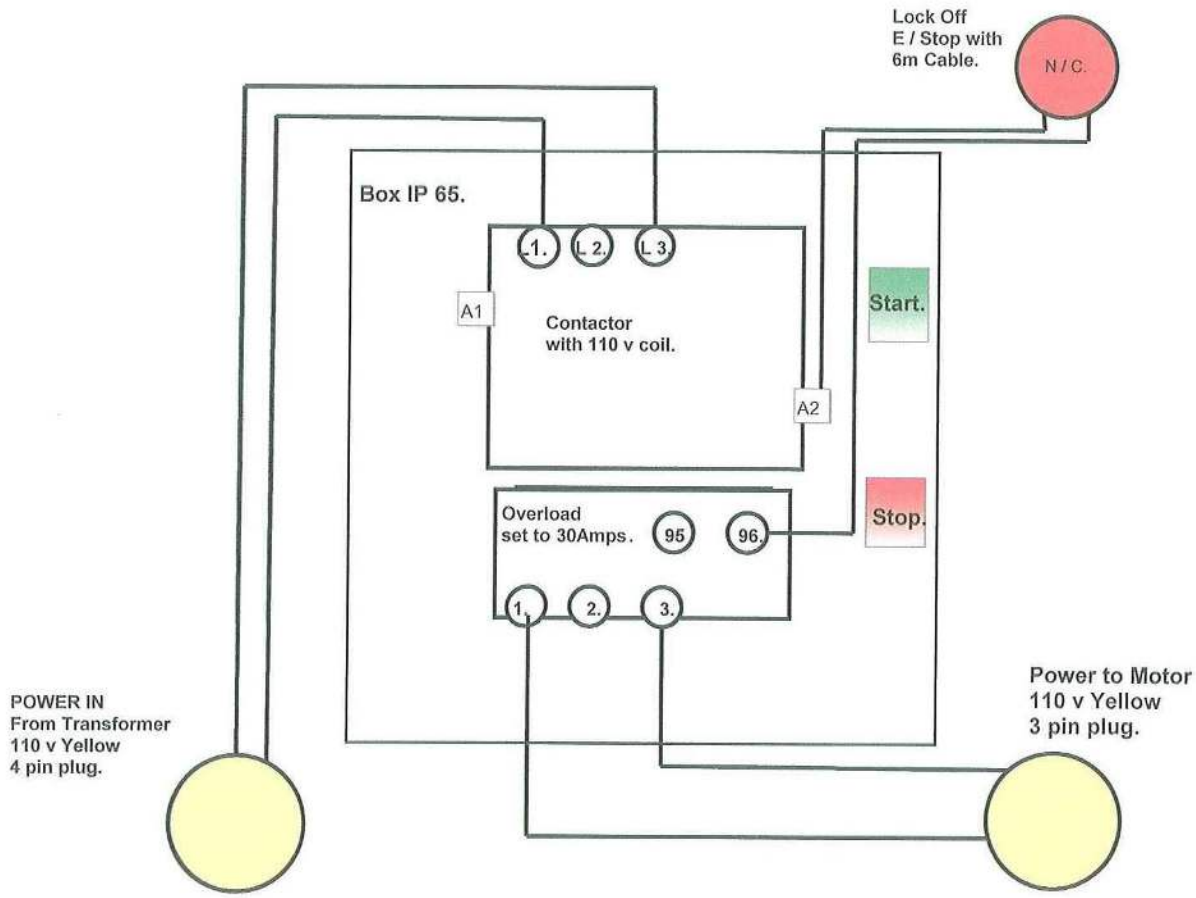


IF IN DOUBT ASK

Council of European Directives: The products in the publication conform to relevant EEC Directives and EN Standards. Installation and use of such products must be carried out by competent, properly trained personnel, complying with any Instructions supplied by Your Supplier. Liability for improper incorporation, assembly, use, processing, storing or handling of goods remains the sole responsibility of the individual or company carrying out such work. This publication is for information purposes only. Whilst every care has been taken in the preparation of this leaflet, no liability is accepted for any consequence of its use. No licence to use any patent should be assumed. All dimensions are approximate only and subject to change without notice, as are other technical features resulting from continual development and improvement.

DIAGRAM No: 3

110v Starter Box
To Comply with PELV
BS EN 60204 – 1 : 2006+A1 : 2009

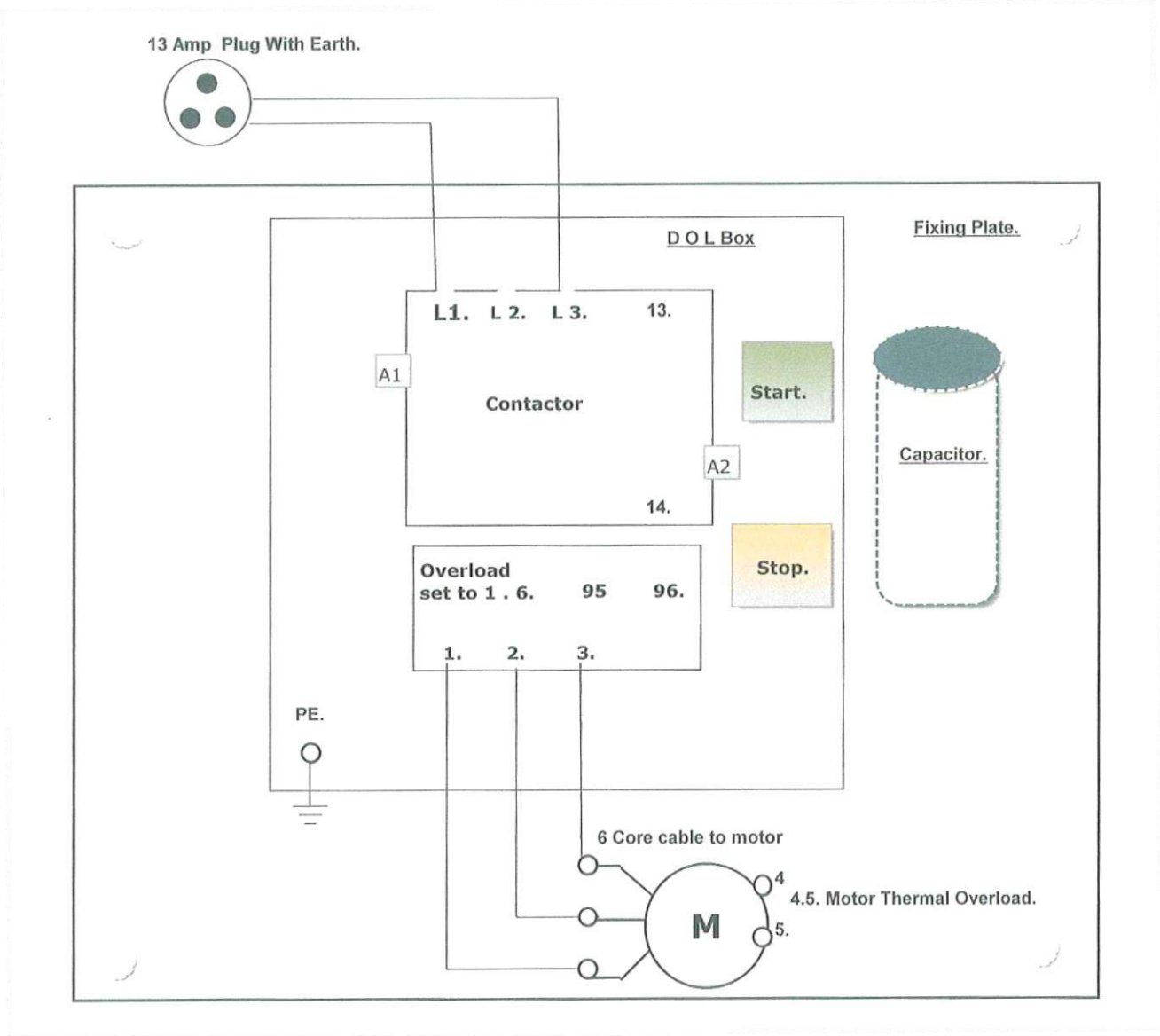


IF IN DOUBT ASK

Council of European Directives: The products in the publication conform to relevant EEC Directives and EN Standards. Installation and use of such products must be carried out by competent, properly trained personnel, complying with any Instructions supplied by Your Supplier. Liability for improper incorporation, assembly, use, processing, storing or handling of goods remains the sole responsibility of the individual or company carrying out such work. This publication is for information purposes only. Whilst every care has been taken in the preparation of this leaflet, no liability is accepted for any consequence of its use. No licence to use any patent should be assumed. All dimensions are approximate only and subject to change without notice, as are other technical features resulting from continual development and improvement.

DIAGRAM No: 4

240v Starter Box
For Easibelt
Code 1374
BS EN 60204 – 1 : 2006+A1 : 2009



IF IN DOUBT ASK

Council of European Directives: The products in the publication conform to relevant EEC Directives and EN Standards. Installation and use of such products must be carried out by competent, properly trained personnel, complying with any Instructions supplied by Your Supplier. Liability for improper incorporation, assembly, use, processing, storing or handling of goods remains the sole responsibility of the individual or company carrying out such work. This publication is for information purposes only. Whilst every care has been taken in the preparation of this leaflet, no liability is accepted for any consequence of its use. No licence to use any patent should be assumed. All dimensions are approximate only and subject to change without notice, as are other technical features resulting from continual development and improvement.

WARRANTY

The manufacturer will correct, free of charge, any defects in material or workmanship for a period of 12 months, from date of purchase, subject to the terms and conditions stated below.

TERMS AND CONDITIONS OF WARRANTY

The manufacturer will repair or replace, free of charge, any mechanical or electrical components supplied in conjunction with any conveyors or other equipment carrying a warranty supplied either by the manufacturer or an appointed agent and located within the United Kingdom, or repair or replace any parts thereof which are shown to the satisfaction of the manufacturer to be defective due to faulty materials or workmanship within twelve months from the date of purchase, provided the faulty part(s) are returned, complete and carriage paid, either to the manufacturer or an appointed agent. Any parts removed will become the property of the manufacturer.

This warranty is valid subject to the operator providing proof to the conveyor supplier (if requested) that the recommended Maintenance schedule shown within the Easikit Instruction Manual has been adhered to.

THIS WARRANTY SHALL NOT COVER ANY FAULT OR DEFECT CAUSED BY:

1. Incorrect installation or operation arising from failure to observe the instructions of the manufacturer or its agents e.g. inadequately rated power source or incorrect voltage or power cables.
2. Physical damage, however it was caused.
3. Repairs or alterations carried out by third parties other than the manufacturer or an authorized agent.

THE FOLLOWING ITEMS ARE EXCLUDED FROM THE WARRANTY:

1. Fair wear and tear
2. Rubber and PVC skirting

This warranty shall not apply to nor cover any other claims whatsoever. It will, in particular, (without limiting the generality of the foregoing), not cover any claims for conversion or modification or for the cost of repairs carried out by any third party without the prior consent of the manufacturer.

Before free service is given under this warranty the purchaser must provide to manufacturer's satisfaction, proof of date of purchase of the conveyor and quote the serial number(s). If replacement parts are fitted then the original period of warranty will not be extended.