

UF-2000 Horizontal to Incline Conveyor™

(Model UF-2000)



Operation Manual, Version 2

 **Advanced
Poly-Packaging, Inc.**

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Acknowledgments

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Warranty period is 12 months or 1,000,000 cycles whichever comes first. The warranty commences on the date of delivery of the equipment to the Purchaser. APPI warrants to the Purchaser that the equipment is free from defects in workmanship or material under normal use and service. During the warranty period, APPI agrees to repair or replace, at its sole option, without charge to Purchaser, any defective component part of the equipment. To obtain service, Purchaser must return the equipment or component to APPI or an authorized APPI distributor or service representative in an adequate container for shipping. Any shipping charges, insurance, or other fees must be paid by Purchaser and all risk for the equipment shall remain with Purchaser until such time as APPI takes receipt of the equipment. Upon receipt, APPI, the authorized distributor or service representative will promptly repair or replace the defective component and then return the equipment or component to Purchaser, shipping charges, insurance, and additional fees prepaid. APPI may use reconditioned or like new parts or units, at its sole option, when repairing any component or equipment. Repaired products shall carry the same amount of outstanding warranty as from original purchase. Any claim under the warranty must include a dated proof of delivery. In any event, APPI's liability for defective components or equipment is limited to repairing or replacing the components. This warranty is contingent upon proper use of the equipment by Purchaser and does not cover: expendable component part such as thermocouple wire, heater cartridge, rollers, bushings, and the like; or if damage is due to accident, unusual physical, electrical or electromechanical stress, neglect, misuse, failure of electric power, water damage (from airlines), improper environmental conditions, transportation, tampering with or altering of the equipment, packaging of corrosive or contaminating products or other products damaging to components, and equipment or components not owned or in the possession of original Purchaser. APPI will not be liable for loss of production, profits, lost savings, special, incidental, consequential, indirect, or other similar damages arising from breach of warranty, breach of contract, negligence, or their legal action even if APPI or its agent has been advised of the possibility of such damages or for any claim brought against the Purchaser by another party. This warranty allocates risks of equipment failure between Purchaser and APPI. APPI's pricing reflects this allocation of risk and the limitations of liability contained in this warranty. The warranty set forth above is in lieu of all other express warranties, whether oral or written. The agents, employees, distributors, and dealers of APPI are not authorized to make modifications to this warranty, or additional warranties binding on APPI. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by APPI and should not be relied upon. Warranty on equipment is considered void when outstanding balances become delinquent (over 30 days late - 60 days after ship date). Equipment Integration to other Equipment: APPI assumes no responsibility for the integration of its products to other products or within a system unless APPI performs the integration, testing and provides the results of the tests to the purchaser in writing. Furthermore, APPI assumes no responsibility for bag sizing whether suggested or recommended.

Table of Contents

Chapter 1: Introduction	4
<hr/>	
1.1 Introduction.....	5
1.2 Available Options	5
1.3 Using this Manual - Typographical Conventions	6
1.4 Contact Information	6
1.5 Warranty Registration.....	8
Chapter 2: Safety, Getting Started, Maintenance	10
<hr/>	
2.1 Safety Procedures.....	11
2.2 Installation Procedures.....	12
2.3 Main Components.....	13
2.4 Belt Replacement Instructions	14
2.5 Belt Tension Adjustment	20
2.6 Drive Chain Lubrication	20
Chapter 3: Parts and Drawings	22
<hr/>	
3.1 Parts List	23
3.2 Incline Conveyor Assembly.....	25
3.3 Horizontal Conveyor Assembly.....	26
3.4 Conveyor Belt, Side Rails, and Belt Pans.....	27
3.5 Motor Assembly & Hopper Assembly	28
3.6 Frame Assembly and Control Box.....	29
3.7 E-STOP Assembly (Option)	30
3.8 E-STOP Schematic (Option).....	32
3.9 Notes	33

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Chapter 1:Introduction

Introduction

Available Options

Using this Manual - Typographical Conventions

Contact Information

Warranty Registration

1.1 Introduction

Now that you have decided to upgrade your packaging facilities with the UF-2000 Horizontal to Incline Conveyor from Advanced Poly-Packaging, Inc., we thank you for selecting our equipment, materials, and service. The UF-2000 Conveyor uses an aluminum extrusion frame construction and quality components to provide reliable service. The ease of operation and practical features will allow the Conveyor to be a valuable tool in your production line, and with proper maintenance you will receive many years of satisfaction.

When contacting APPI for technical questions or spare part orders, please contact the APPI Service Department with your serial number which is located on a silver APPI plate located on a side rail.

1.2 Available Options

UF-2000 Conveyors are configurable with regard to drive, control methodology, belt color, width, and length. Optional features for the UF-2000 include:

- DF-20 Diverting Funnel
- Discharge and/or Infeed Trays
- Fixed or variable speed control
- Higher or Lower Siderails
- E-STOP (Standard for CE applications)
- Conveyor control by Bagger System
- Cleated or Flat Belt (no cleats)

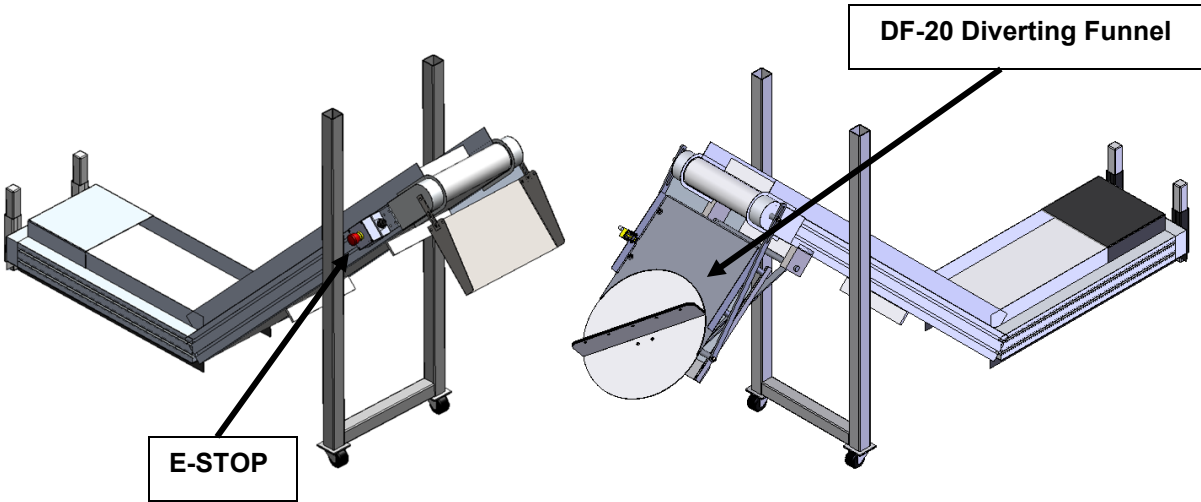


Figure 1- 1

1.3 Using this Manual - Typographical Conventions

The following manual conventions are frequently used to assist in understanding important information, alerting the operator of potentially dangerous or damaging practices, and the normal functions of the UF-2000 Incline Conveyor™.

text Normal text

<ENTER>Used to show Touch Screen keys

Italics Used for emphasis

Note: Identifies important information.

CAUTION: Warning messages - To avoid physical harm, damage to equipment or damage to the product. Be sure to read these messages carefully.

1.4 Contact Information

To better serve your bagging needs, call **(330) 785-4000** or toll free **1-(800) 754-4403** for convenient service solutions, Monday through Thursday, 9:00 AM to 5:30 PM EST, or Friday 9:00 AM to 5:00 PM EST. For technical assistance with current machinery, ask for **Service**. To order spare parts for your system, ask for **Parts**. To order auxiliary equipment for your current system, ask for **Machine Sales**. To place an order for bags, ask for **Bag Sales**.

You may also contact any of these departments by email:

Reach Service at Service@advancedpoly.com

Reach Parts at Parts@advancedpoly.com

Reach Machine Sales at MachineSales@advancedpoly.com

Reach Bag Sales at Bagsales@advancedpoly.com

For general inquires: Sales@advancedpoly.com

Or visit us online at www.advancedpoly.com

In order to provide the best service possible, please have model and serial number ready.

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1.5 Warranty Registration

This section must be completed and returned to Advanced Poly-Packaging, Inc. to register the UF-2000 for Warranty Protection.

Serial Number:

(Serial Number located on the back panel)

Company Name and Address

Contact Name(s) / Title(s) / Phone Number

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Please mail or fax this page to:

Service Manager
Advanced Poly-Packaging, Inc.
1331 Emmitt Road
Akron, OH 44306
USA

Fax # (USA) 330-785-4010

Or email the information above to: service@advancedpoly.com

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Chapter 2: Safety, Getting Started, Maintenance

Safety Procedures

Installation Procedures

Main Components

Belt Replacement Instructions

Belt Tension Adjustment

2.1 Safety Procedures

The equipment has been designed with features to reduce the possibility of injury. Despite safety precautions, operators may receive lacerations or other injuries if coming in contact with moving components. Please carefully read the following precautions to operate the equipment properly and avoid injury.

No special Personal Protective Equipment (PPE), such as eye protection or gloves, is required to operate the equipment. However, the characteristics of the products being packaged, or the method of loading the products may cause situations where PPE is required.

Please carefully read the following precautions to operate the equipment properly and avoid injury:

- The Conveyor is equipped with a starter switch or an optional variable speed drive control.
- Although the moving parts of the UF-2000 conveyor are fully enclosed for safety, it is recommended to avoid wearing loose, baggy clothing, jewelry, or neckties near the moving belt.
- Operators should keep fingers and / or long hair away from the moving belt or any moving parts.
- This Conveyor is designed to transport lightweight material, and therefore it should not be used to transport or support heavy objects. Do not walk or lean on the Conveyor.
- The Conveyor should not be operated if damaged.
- Accumulated dust or dirt should be removed from the Conveyor.
- The power cord should be replaced immediately if worn, cut, or damaged in any way.
- All bearings are greased for their service life and require no additional lubrication.
- Do not operate the Conveyor without safety guards in place.
- Do not modify the electrical plug provided with the Conveyor.
- Do not allow the Drive Motor to get wet.
- Clean the Conveyor Belt daily or as necessary, including the belt area under side rails.

2.2 Installation Procedures

Upon receiving your new conveyor, please check for the following:

- Damaged shipping package
- Obvious signs of damage to conveyor
- Loose fasteners
- Missing components

Once you have successfully inspected the equipment, you can begin the installation process. The UF-2000 Conveyor is designed to be installed easily.

Before operating the conveyor, ensure that there are no stray pieces of packaging that could get jammed in the belt or drive mechanism.

Use care when rolling the Conveyor on casters.

Prior to plugging in the unit, check that there are no hands or tools on the conveyor and set the Main Power Switch to the “OFF” position.

2.3 Main Components

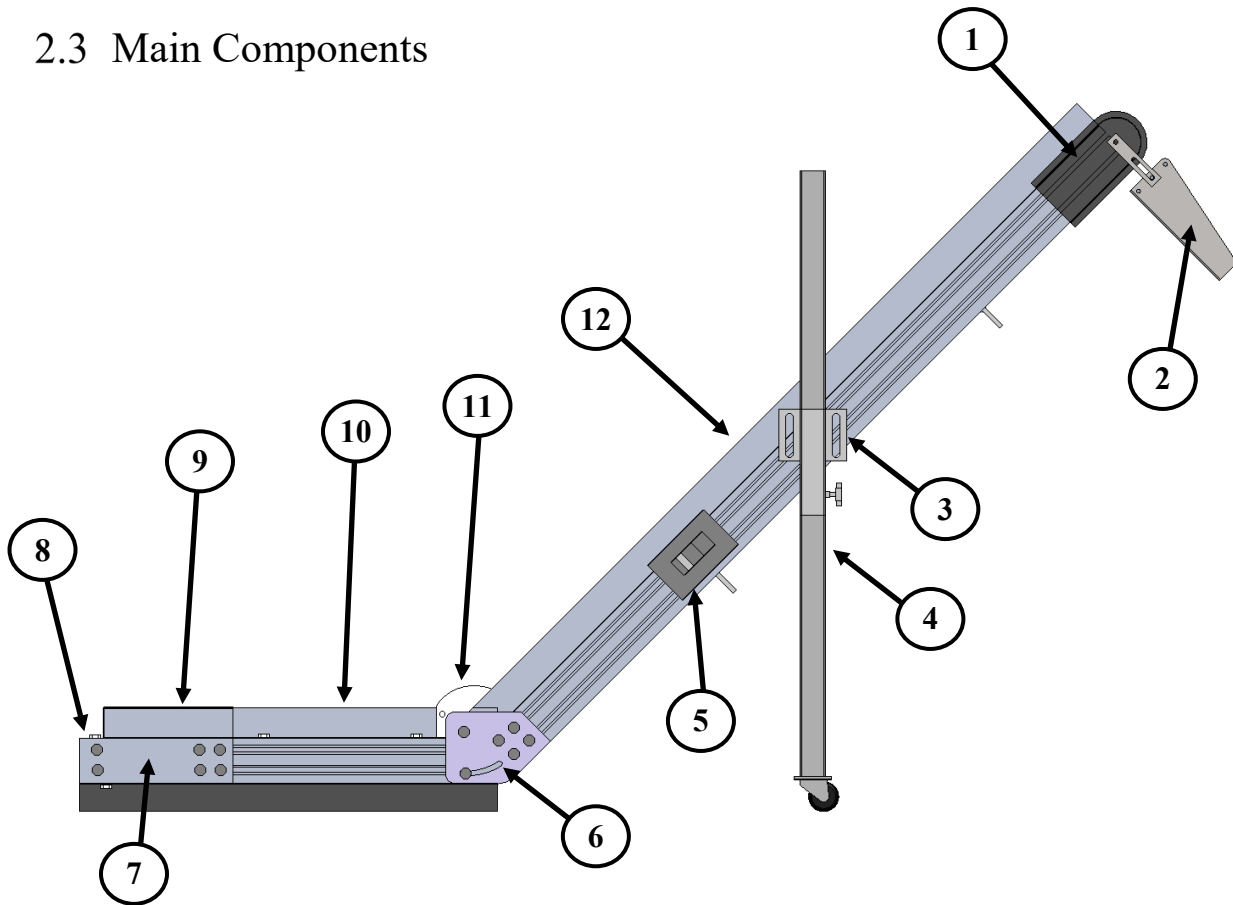


Figure 2- 1

ITEM NO	DESCRIPTION
1	End Cap Guard
2	Discharge Chute
3	Leg Bracket Assembly
4	Tubular Leg
5	Main Power Switch
6	Pivot Plate
7	Side Plate
8	End Frame
9	Motor Cover
10	Frame Horizontal Section
11	Pivot Cover Plate
12	Frame Incline Section

2.4 Belt Replacement Instructions

To Remove Belt:

Remove the screws attaching Motor Cover Plate to the End Frame, and slide Motor Cover Plate out (Figure 2- 2).

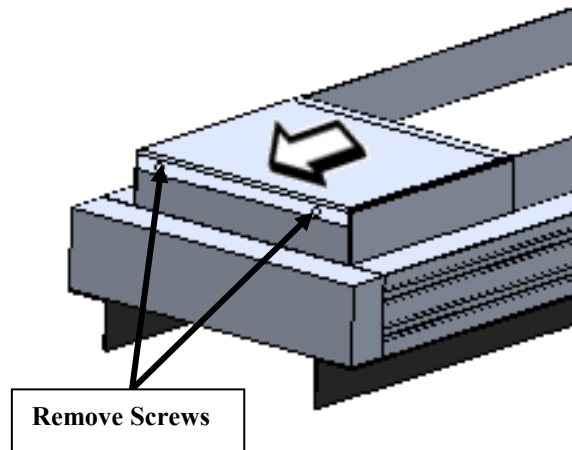


Figure 2- 2

Remove bolts attaching the End Rails to the End Frame (Figure 2- 3).

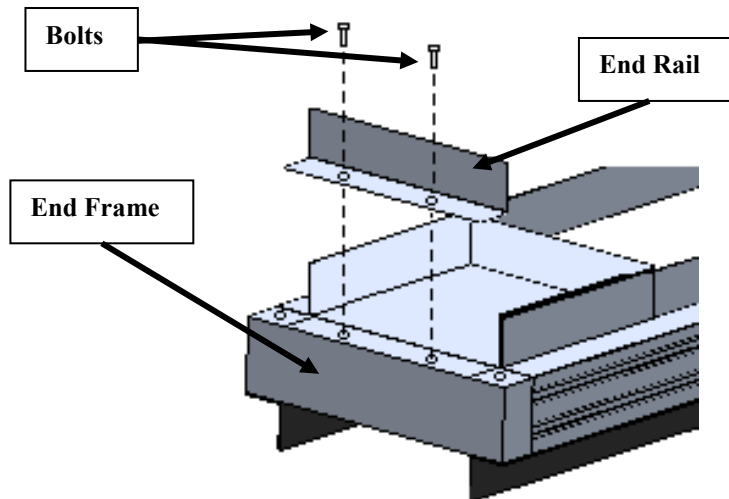


Figure 2- 3

Remove the Flat Head Machine Screw from the Pivot Wheel Cover on each side (Figure 2- 4).
Note: There are washers underneath.

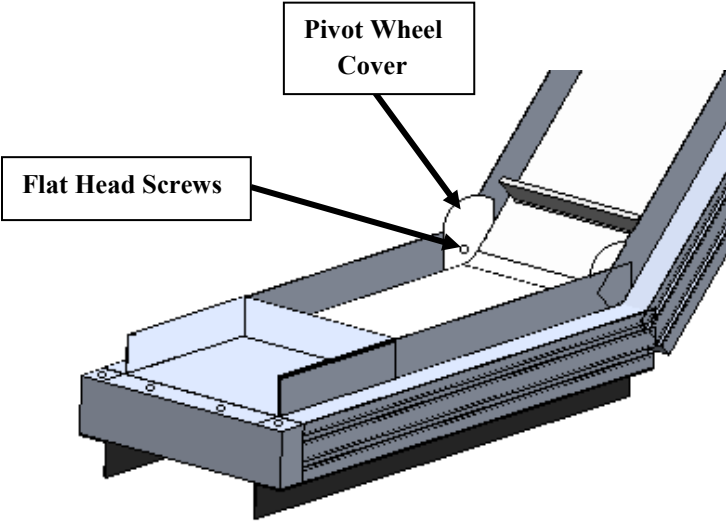


Figure 2- 4

Remove End Cap Guard from non-drive side of Conveyor (Figure 2- 5).

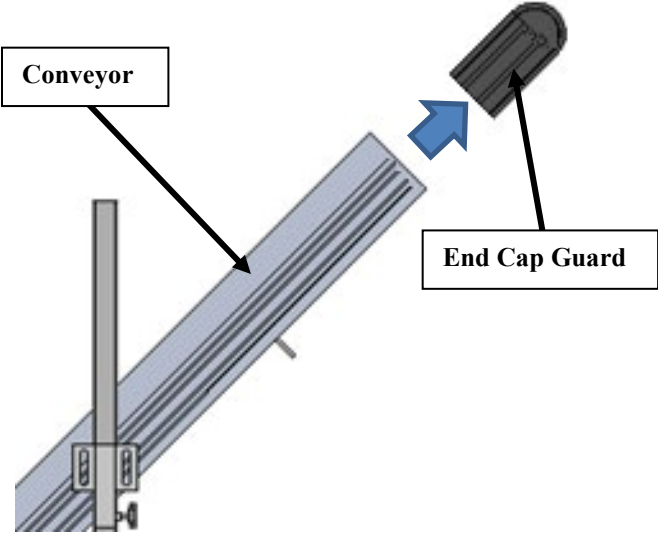


Figure 2- 5

Remove bolts on each side of Side Rails and slide Rail Assembly off rear of Conveyor (Figure 2- 6).

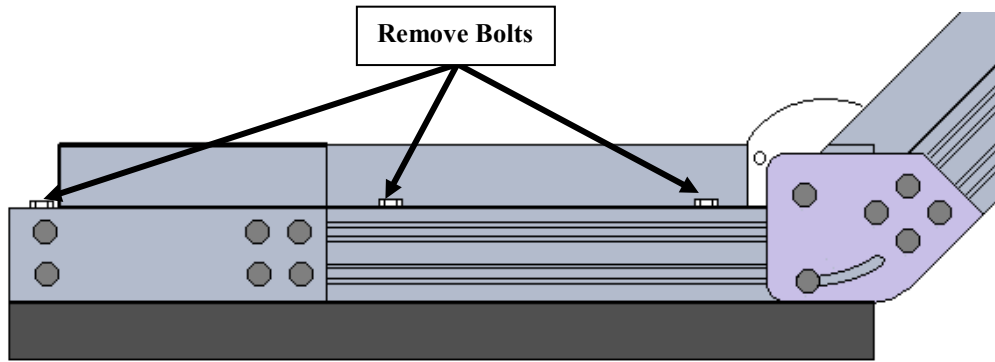


Figure 2- 6

Remove the bolts from the curved slots on Pivot Plates on each side of Conveyor to allow the Conveyor angle to be adjusted (Figure 2- 7).

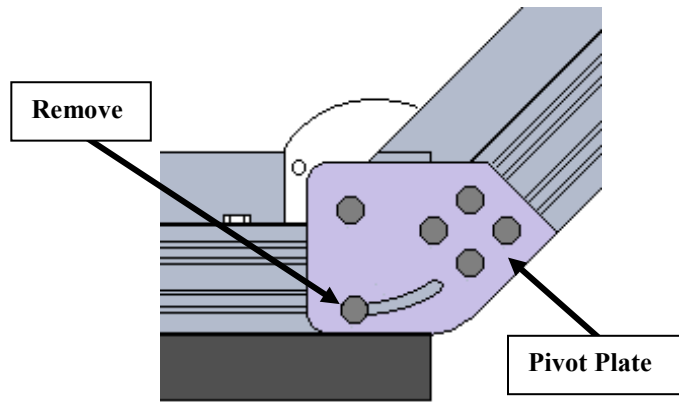


Figure 2- 7

Lay the Conveyor on its side with the drive side facing down (Figure 2- 8).

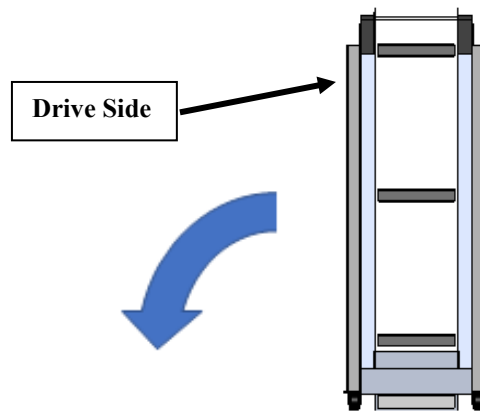


Figure 2- 8

Remove the Upper Leg from the Leg Bracket Assembly (Figure 2- 9).

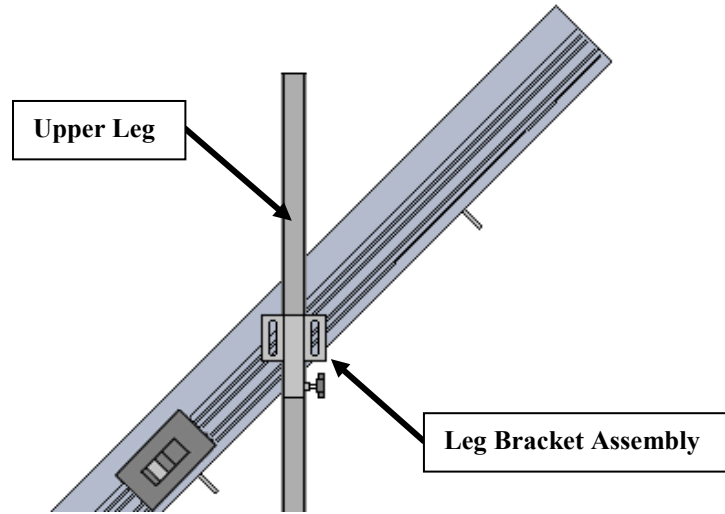


Figure 2- 9

Remove the two (2) bolts from the end of the Side Plate and one (1) bolt from bottom of the Side Plate that secure it to the Motor Plate (Figure 2- 10).

Mark the location of the Side Plate on the Frame and loosen the four (4) remaining bolts.

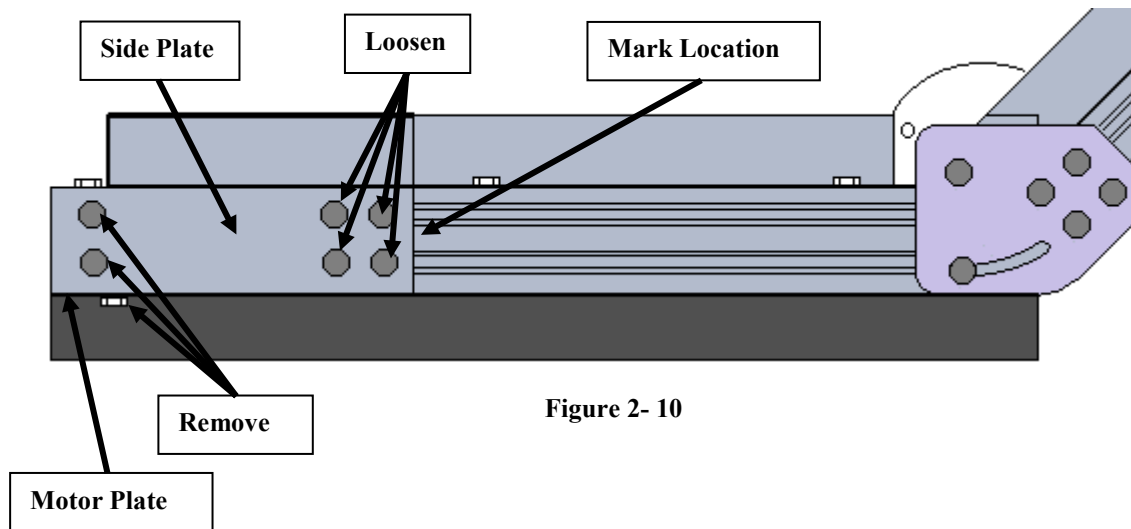


Figure 2- 10

Slide the Side Plate toward the center of the Conveyor.

Beginning from underneath and then over the Pivot Assembly, slide the Belt up and off the Conveyor.

To Install Belt:

Slide the replacement belt onto the Conveyor over the Pivot and Leg Bracket Assemblies, and under the Pivot Rollers, making sure that the “V” guide on the bottom of the belt is in the grooves on the rollers (Figure 2- 11).

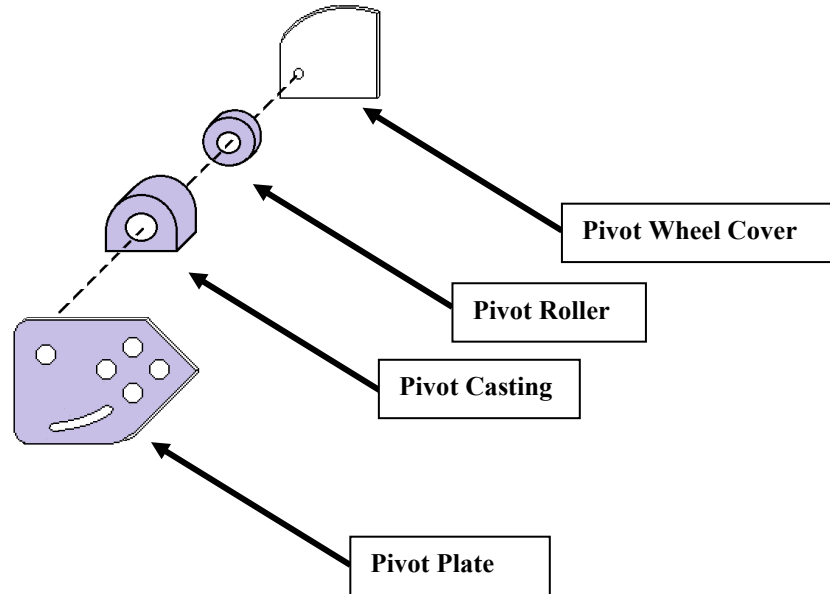


Figure 2- 11

Slide the Side Plate towards rear of the Conveyor to the previously marked location and tighten the four (4) bolts on the Side Plate (Figure 2- 12).

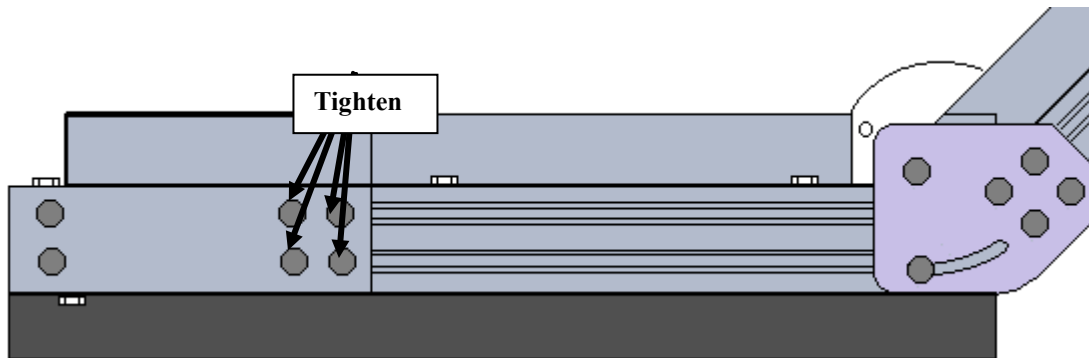


Figure 2- 12

Reinstall the bolt in bottom of Side Plate, fastening it to the End Frame.

Install the Tubular Leg into the Leg Bracket and stand Conveyor back in normal position.

Reinstall the bolts in curved slots on the Pivot Plates and lock Conveyor at the desired angle.

Slide Rail Assembly back onto Conveyor. Reinstall the Flat Head Machine Screws to secure the Pivot Wheel Covers to the Pivot Roller Assemblies, replacing the washers between Pivot Wheel Covers and Pivot Shaft (Figure 2- 13).

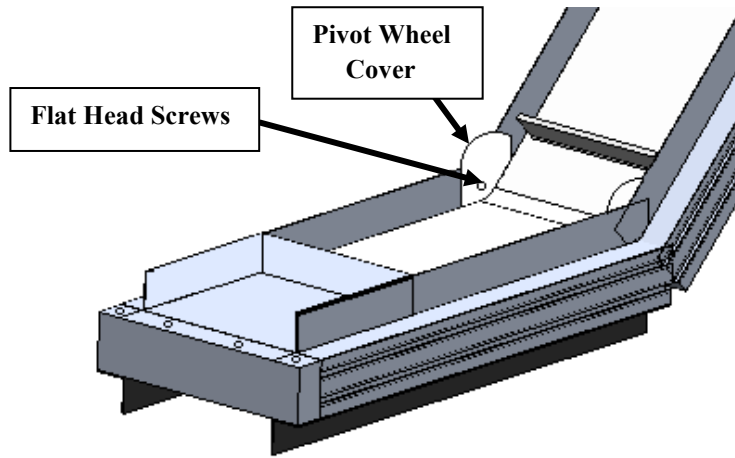


Figure 2- 13

Tighten the bolts on the Side Rails. Reinstall and tighten Side Rail end bolts and bolts securing the End Rail to the Frame.

Install End Cap Guard (Figure 2- 14).

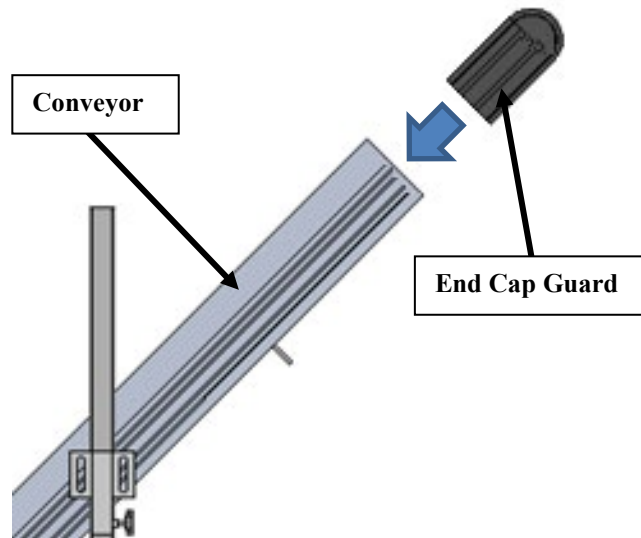


Figure 2- 14

Note: Ensure that proper belt tension is maintained by the springs in the Incline Frame Section and the Roller Support Shafts by occasionally applying light grease on the shafts.

Check that the Conveyor Belt is supported by the edges of the frame lip on the Incline Section. The Belt should be above, not below, the lip.

2.5 Belt Tension Adjustment

The UF-2000 Incline Conveyor maintains belt tension by means of spring-loaded support assemblies. The original factory conveyor settings will provide the correct belt tension if the operating angle is maintained between 30° and 45° degrees. If the operating angle is required to be between 45° and 60°, then it will be necessary to remove the Spring Stop Screws from the inside of the Incline Frame Section (Figure 2- 15).

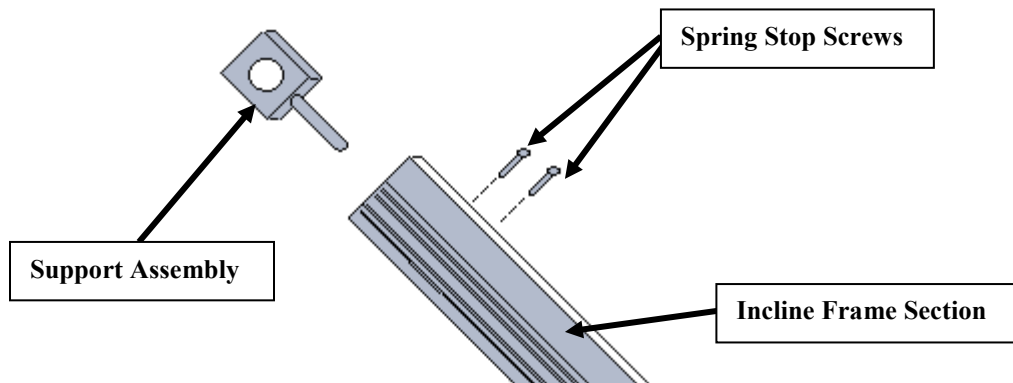


Figure 2- 15

Note: The Support Assemblies on longer models of the UF-2000 Horizontal to Incline Conveyor are equipped with threaded shafts and adjusting nuts. These should be adjusted so there is an equal distance from end of the Incline Frame Section to the center of the shaft on both sides of the Conveyor.

Note: It is important to examine and lubricate the Support Assemblies on a regular basis to ensure that the parts move freely in response to the spring pressure.

2.6 Drive Chain Lubrication

The Drive Chain should be greased monthly at the indicated location (Figure 2- 16).

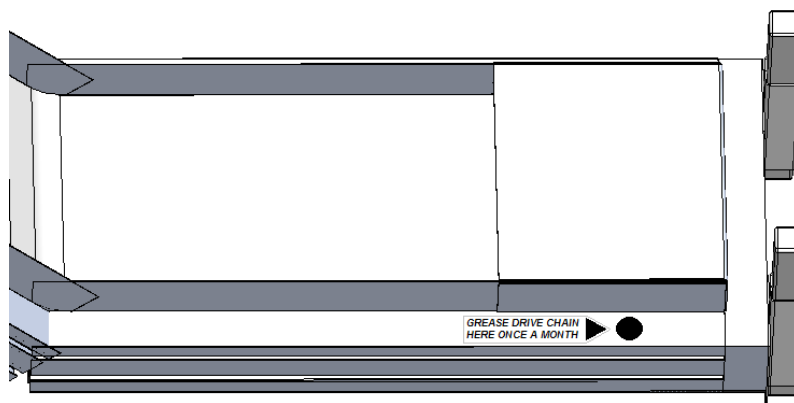


Figure 2- 16

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Chapter 3: Parts and Drawings

Parts List

Incline Conveyor Assembly

Horizontal Conveyor Assembly

Conveyor Belt, Side Rails, and Belt Pans

Motor Assembly & Hopper Assembly

Frame Assembly and Control Box

E-STOP Assembly

E-STOP Schematic

Notes

3.1 Parts List

Note: When ordering parts, always reference the Key Number along with the Part Description and Conveyor Serial Number.

KEY	DESCRIPTION	QTY.
01	FRAME HORIZONTAL SECTION	2
02	FRAME INCLINE SECTION	2
03	CROSSTIE	4 (min.)
04	CONNECTOR ANGLE	8 (min.)
05	FREE ROLL ASSY.	1
07	FREE ROLL SHAFT	1
09	DRIVE ROLL SHAFT	1
11	THREADED ROLLER SUPPORT ASSEMBLY	1
13	BUSHING	4
14a	BELT PAN (HORIZONTAL SECTION)	1 (min.)
14b	BELT PAN (INCLINE SECTION)	1 (min.)
15	SPRING STOP SCREW	4
16	CONVEYOR BELT	1
17a	SIDE RAIL (HORIZONTAL SECTION)	2
17b	SIDE RAIL (INCLINE SECTION)	2
18	END CAP GUARD	2
21	STARTER SWITCH	1
22	STARTER SWITCH HEATER	1
27	MOTOR ASSEMBLY	1
28	DRIVE CHAIN	1
29	SPROCKET	1
32	LINE CORD	1
33	STRAIN RELIEF BUSHING	1
36	LEG BRACKET ASSEMBLY	2
39	LEG TUBE	2
40	CASTER	2
40a	CASTER	2 (min.)
41	END CAP	2
42	KNOB	2
43	HANDLE	2
61	DRIVE SIDE PLATE	1
62	SIDE PLATE	1
63	FREE ROLL SUPPORT ASSEMBLY	2
64	IDLER ROLLER TUBE	2
65	ROLL END BEARING	4

66	IDLER ROLL SHAFT	1
67	END RAIL	1
68	END FRAME	1
69	MOTOR MOUNTING PLATE	1
70	HOPPER FLAPPER	1
71	HOPPER SIDES	2
72	HOPPER END	1
73	PIVOT ROLLER	2
74	PIVOT CASTING	2
75	PIVOT PLATE	2
76	PIVOT SHAFT	2
77	HORIZONTAL SECTION BASE TUBE	2
78	TAKE UP SPRINGS	2
80	KNOB	8
81	PIVOT WHEEL COVER	2
82	HINGE	1
83	DRIVE ROLL ASSY.	1
85	LEG TIE	1
108	CHAIN GUARD (S)	1
109	CHAIN GUARD (L)	1

3.2 Incline Conveyor Assembly

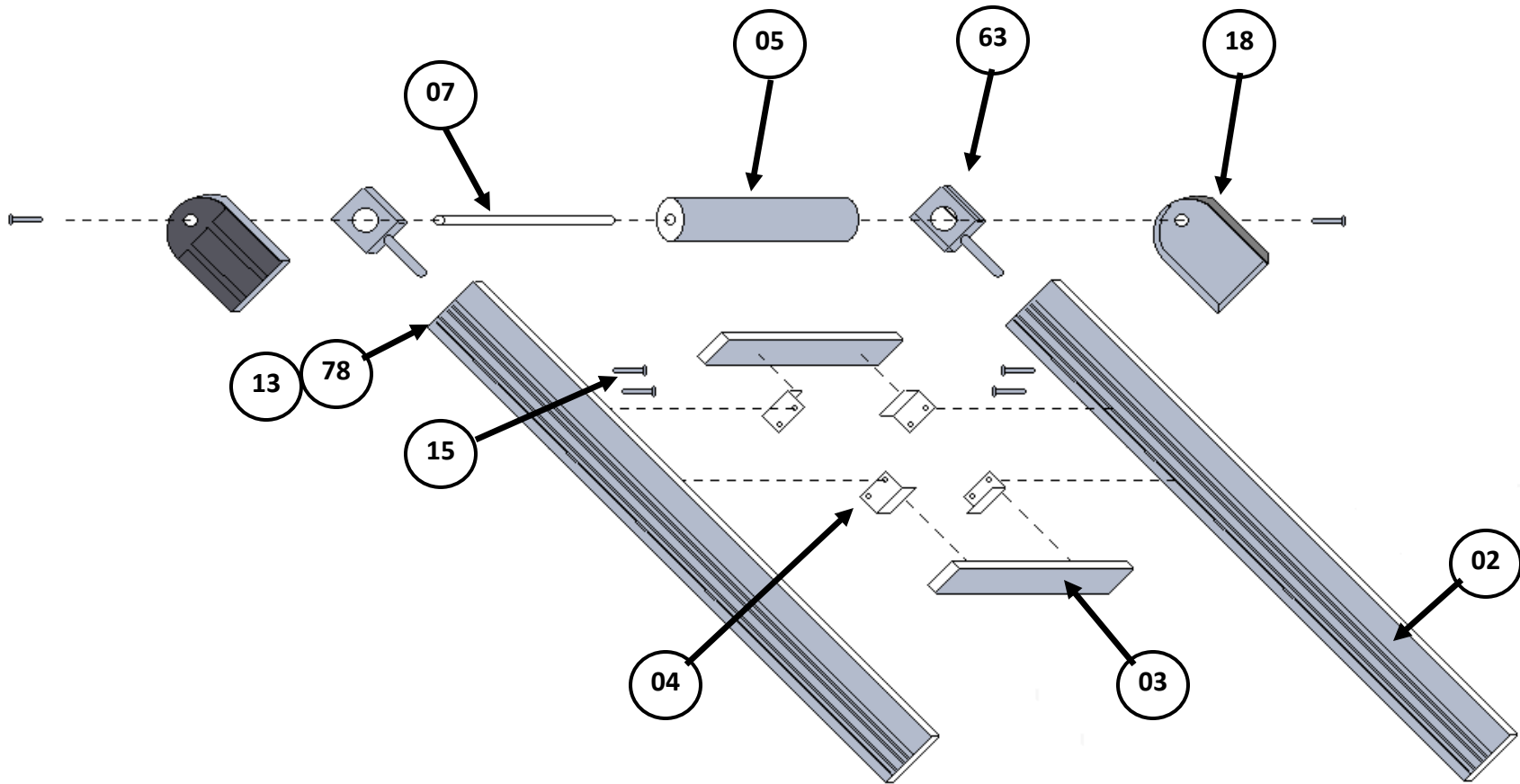


Figure 3- 1

3.3 Horizontal Conveyor Assembly

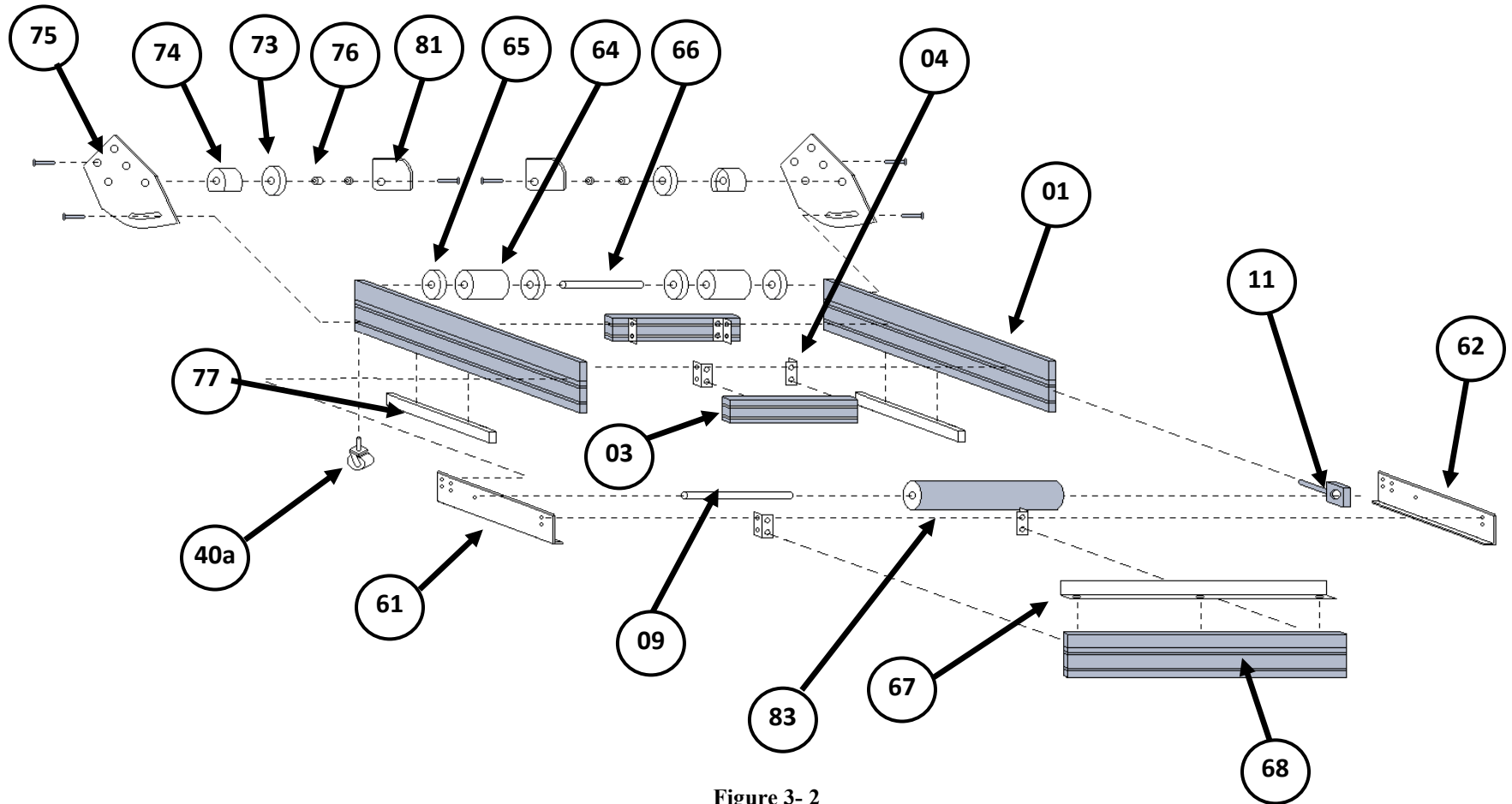


Figure 3- 2

3.4 Conveyor Belt, Side Rails, and Belt Pans

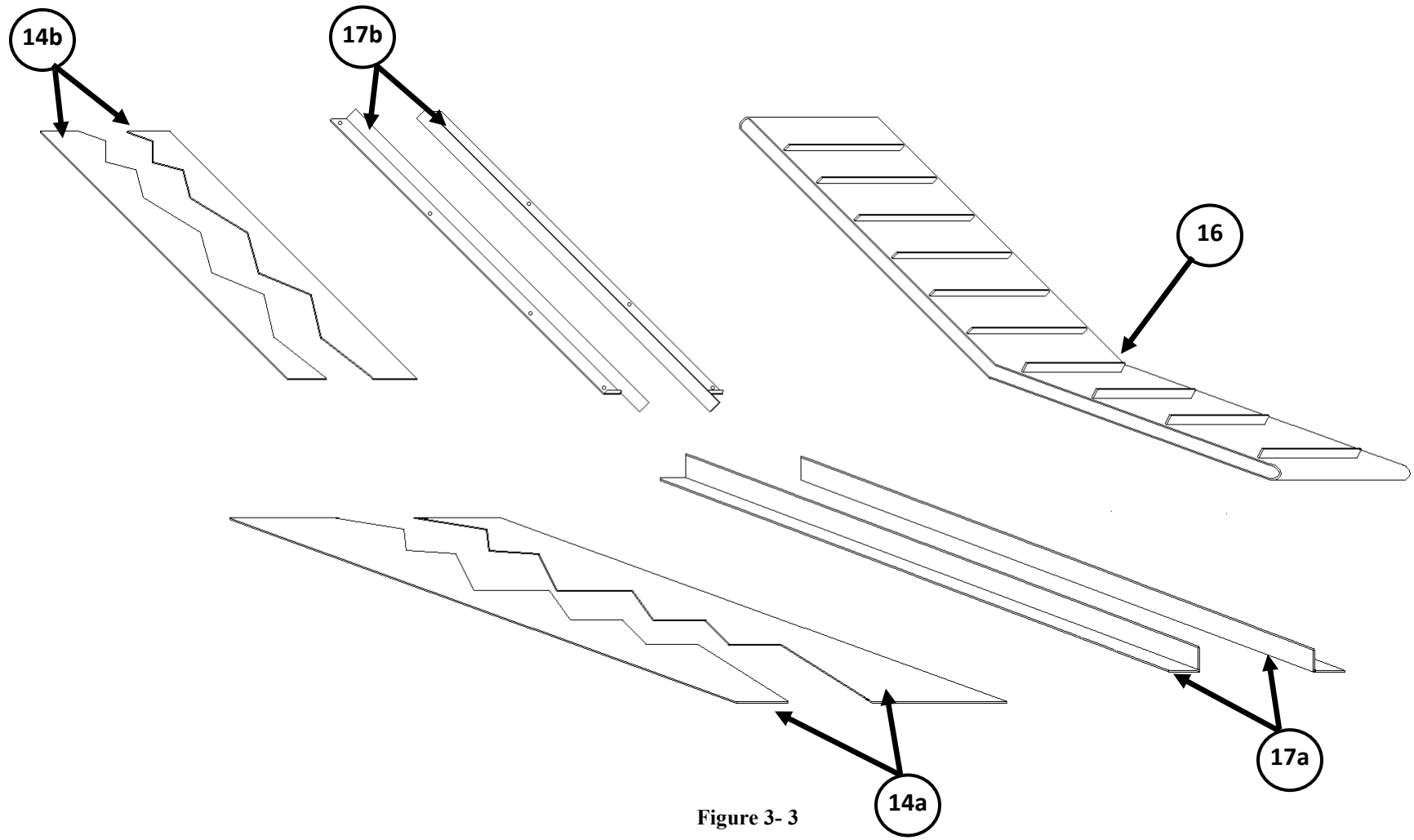


Figure 3- 3

3.5 Motor Assembly & Hopper Assembly

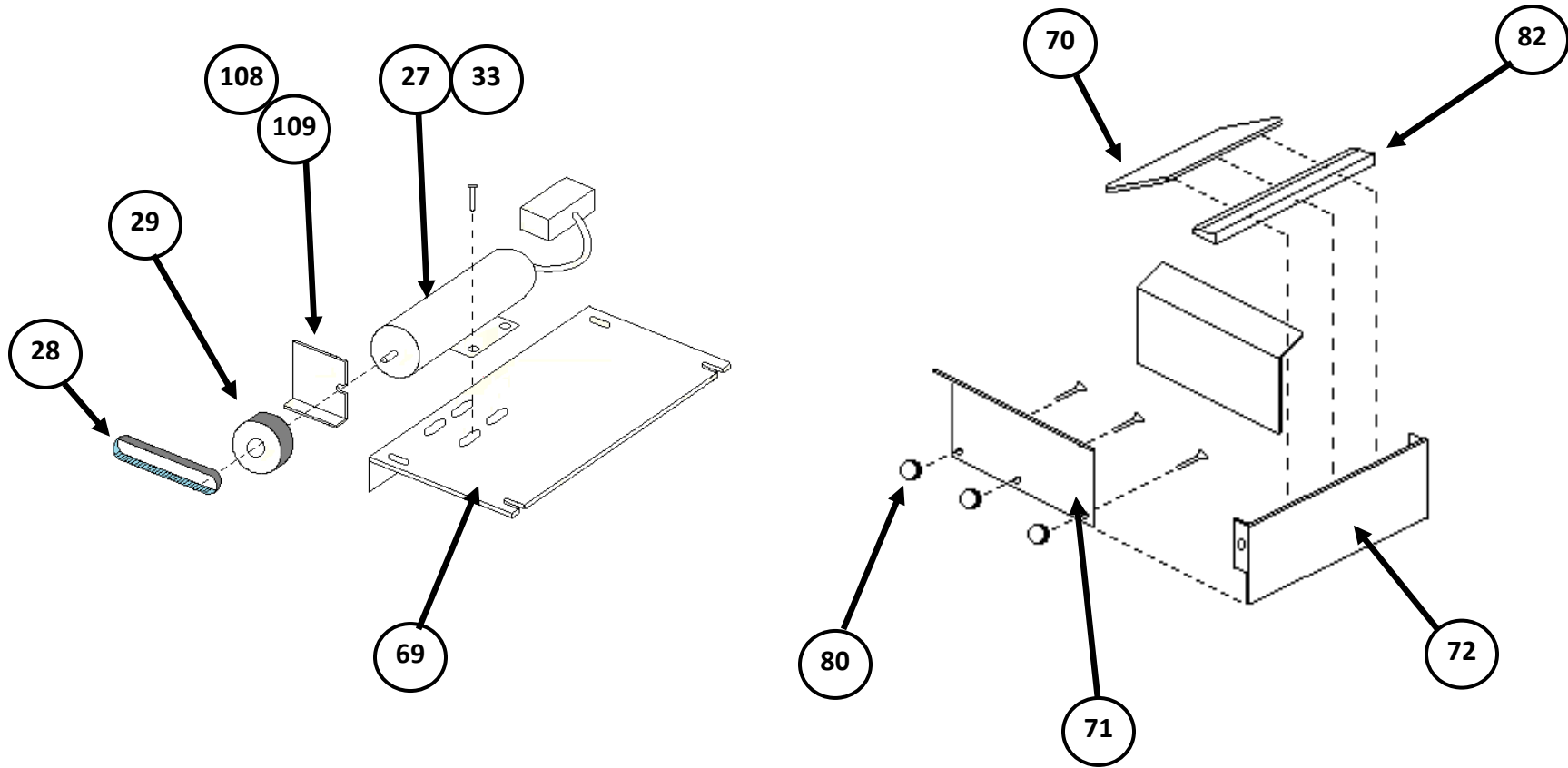


Figure 3- 4

3.6 Frame Assembly and Control Box

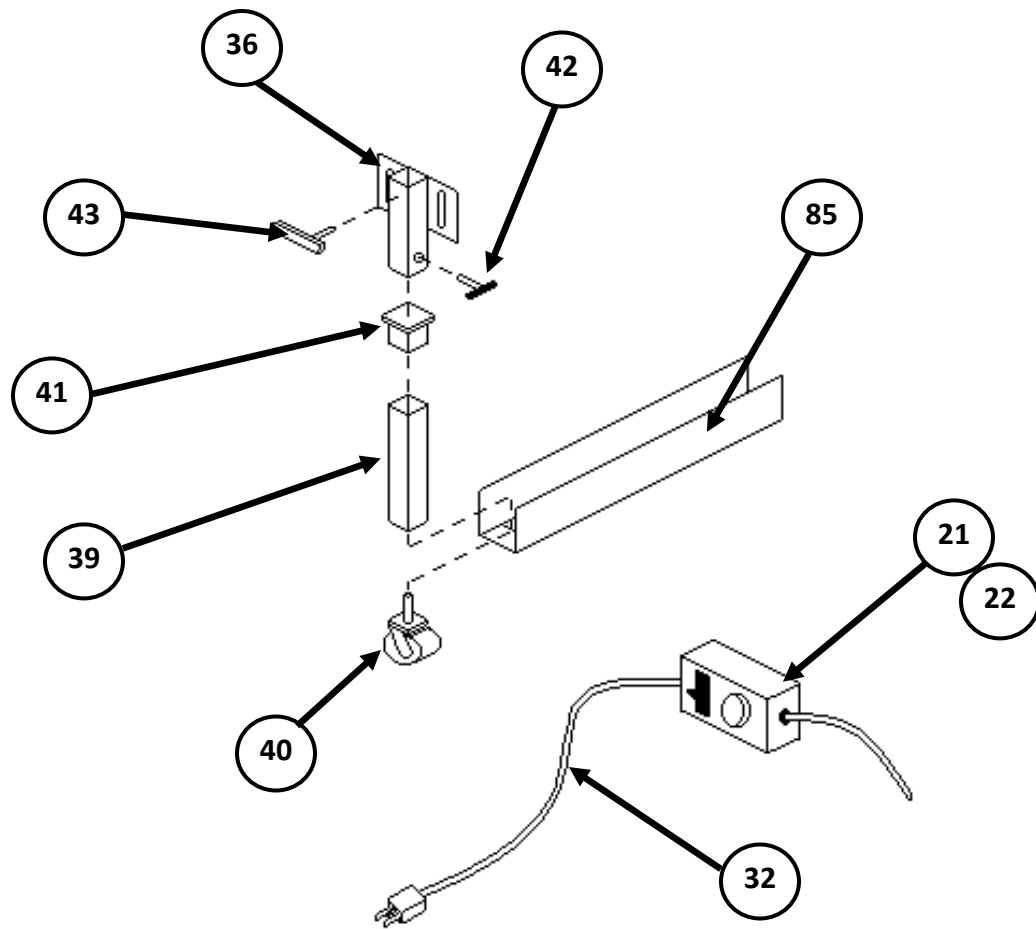


Figure 3- 5

3.7 E-STOP Assembly (Option)

TO-UF2-ES10

ITEM NO.	QTY.	PART NO	DESCRIPTION
1	1	TP-225128	METAL ENCLOSURE
2	1	TP-112242	STRAIN RELIEF
3	1	TP-112243	BLACK LOCKNUT
4	1	TP-215016	E-STOP BUTTON
5	1	TP-215017	E-STOP SWITCH
6	1	TP-UF2-ES10-001	E-STOP MOUNT PLATE
7	1	TP-213339	CABLE, 5-CONDUCTOR (NOT SHOWN)

E-STOP Assembly (Option)

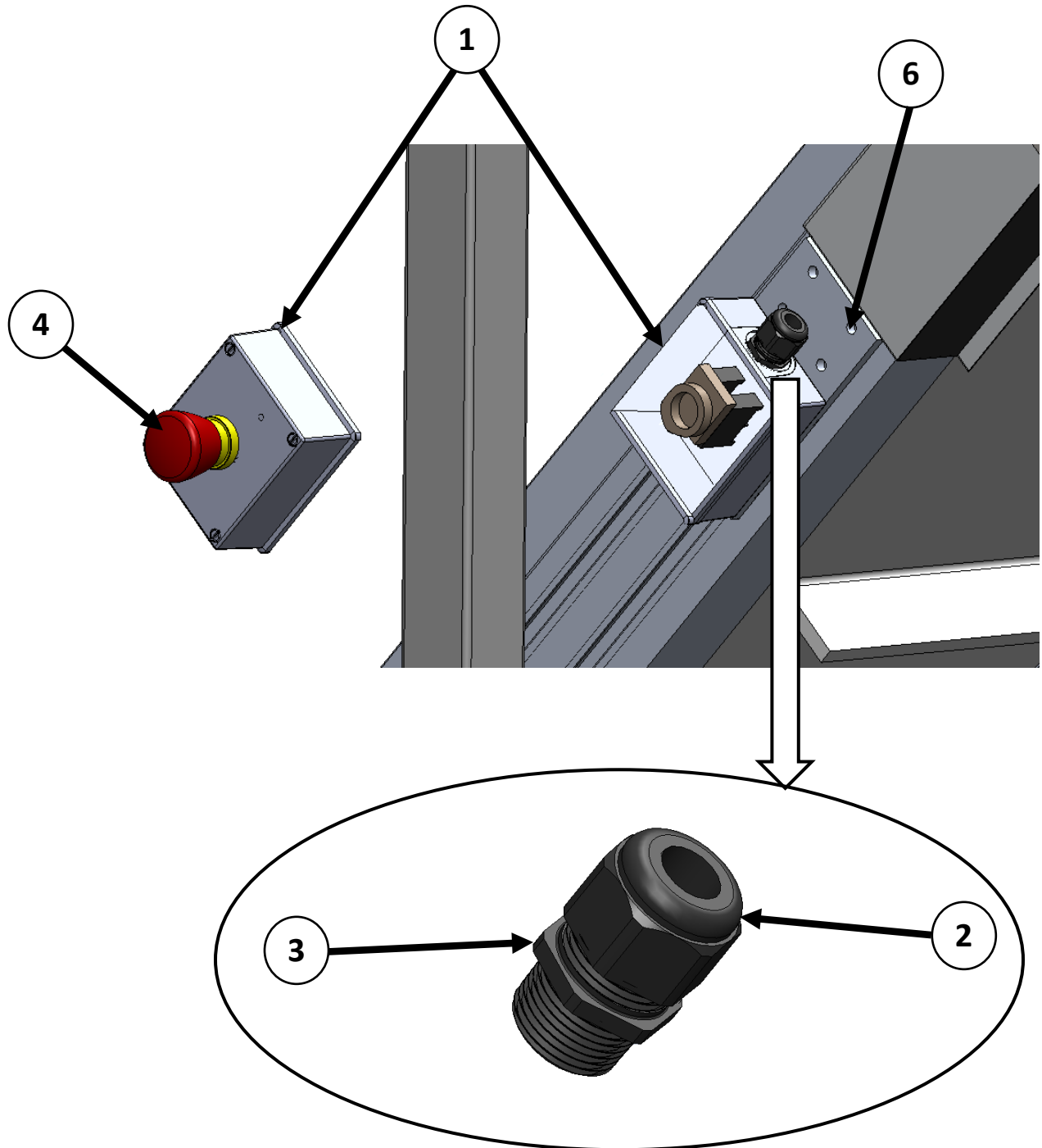


Figure 3- 6

3.8 E-STOP Schematic (Option)

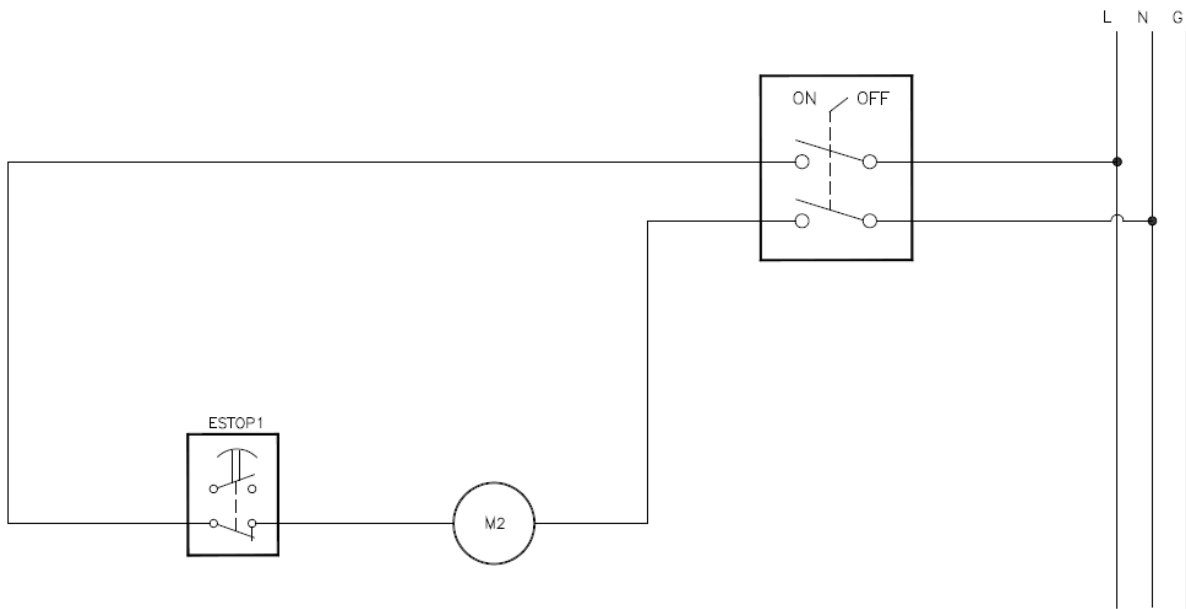


Figure 3- 7

