PTM Innovations

T•FOLD
FAST GARMENT FOLDING

T•FOLD
FAST GARMENT FOLDING

USER GUIDE

T•FOLD Rev1.0 1/18/2022

ptminnovations.com

Important Notices

For Users in Europe

IMPORTANT:

This is a Class A product approved for industrial environments. In some environments this product may cause radio interference in which case you may be required to take measures to re-locate this product.

For Users in the United States

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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About this Manual

A. Purpose and Target Readers

This manual explains the preparations and procedures for operating the PPS T•FOLD.

This manual assumes that the reader / operator is familiar with computers and the basics of network operation and configuration.

This manual is designed to assist the end user in the use, maintenance and general troubleshooting of the PPS T•FOLD. Before using the PPS T•FOLD you are required to read and fully understand the contents and directions in this manual.

B. Manual Configuration

Section		*Contents*
1	Safety Instructions	Explains types of warnings, cautions and warnings labelled on the folder and contained within this document. for both the operators of the T•FOLD and maintenance personnel.
2	Product Overview	Explains the features, part names, and functions of the T•FOLD.
3	Initial Setup and Basic Operations	Explains the procedures for the initial setup & basic operations of the T•FOLD.
5	Care & Maintenance	Explains daily and other periodical maintenance procedures required to be undertaken in order to keep the T•FOLD at optimal running condition.
6	Troubleshooting	Explains troubles that may occur when using the T•FOLD and how to solve them.

C. Manual Notation

The following symbols are used in this manual for easier understanding of the information.

Symbol	*Meaning*
WARNING	Must be followed carefully to avoid death or serious bodily injury or catastrophic damage to your equipment.
CAUTION	Must be observed to avoid slight or moderate bodily injury or damage to your equipment.
NOTE	Contains important information and useful tips on the operation of the product
TIP	Indicates useful tips for operating or understanding the equipment or getting the best performance from your equipment.
☞	Indicates reference pages in this manual

Follow all warning instructions and symbols marked on this product. These additional cautionary symbols may also be used throughout this manual and represent the following:

Symbol	*Meaning / examples*
	Pay attention when handling the machine, follow instructions carefully for safe use of the machine:  Static Sensitive · Caution · Flammable · Explodable · Electric Shock · Heated Surface · Moving Object · Pinched Fingers
	The symbol indicates actions that are prohibited. Follow these instructions carefully to avoid actions that may put a person or persons in immediate danger:  Prohibited · No fire / flame · Do not touch · Keep away from wet areas · Do not dissassemble · Do not allow to get wet · Do not touch with wet hands
	This symbol indicates actions or activities that must be performed. Follow these instructions carefully to carry out these essential tasks:  Instructions · Unplug · Ground / Earth

D. Document Change History

This version of the document replaces and obsoletes all previous versions. The following table describes the most recent changes:

Revision Date	*Summary of changes*
April 2021	Initial Release
June 2021	Updated V1.0 Release

TABLE of CONTENTS

1. Safety Instructions

1.1 Introduction

This chapter explains the meaning of safety terms for personnel who install, operate, or maintain this equipment, important safety instructions, and the warning labels attached to the equipment.

WARNING

Make sure to follow all instructions and warnings on the equipment and in this manual when installing, operating, or maintaining the equipment.

1.2 Warnings, Cautions and Notes

Safety terms in this manual and the contents of warning labels attached to the T•FOLD are categorized into the following three types depending on the degree of risk (or the scale of accident).

Read the following explanations carefully and follow the instructions in this manual.

Symbol	*Meaning*
WARNING	Must be followed carefully to avoid death or serious bodily injury or catastrophic damage to your equipment.
CAUTION	Must be observed to avoid slight or moderate bodily injury or damage to your equipment.
NOTE	Contains important information and useful tips on the operation of the product

1.3 Electrical Safety

WARNING

This Product must be operated by the power source as indicated on the product's data plate. Consult your local power company to check if your power source meets the requirements.

WARNING

Connect this product to a protective earth circuit.

This product is supplied with a plug that has a protective earth pin. The plug fits only into an earthed electrical outlet. This is a safety feature. If the plug doesn't fit to the outlet, contact an electrician to replace the outlet to avoid risk of electric shock. Never use an earthed adaptor plug to connect the product to the electrical outlet that has no earth connection terminal.

Plug the power cord directly into a grounded electrical outlet. To prevent overheating and fire, do not use an extension cord, a multi-plug adaptor or a multiple connector. Consult your local electrician to check if an outlet is grounded.

Connect this product to a branch circuit or an outlet that has larger capacity than the rated ampere and voltage of this product. Refer to the data plate on the rear panel of this product for it's rated ampere and voltage.

Never touch the power cord with wet hands. It may cause electric shock.

Keep the plug connection free of dust and other contaminants. Dust, damp and other contaminants may cause a minute electrical current in a connector, which may in turn generate heat and possible cause a fire accident.

To avoid the risk of electric shock and fire accident, only use the power cord supplied with this product.

Do not damage or modify the power cord. Damage or tampering may generate head and eventually cause electric shock or a fire accident.

If the power cord is damaged or insulated wires are exposed, replace the power cord. Do not use a damaged or un-insulated cord to avoid the risk of electric shock and a fire accident.

Do not operate the T•FOLD if it has been contaminated by foreign substances or liquid spills as doing so may result in electrical shock or fire. Immediately turn off the power switch, disconnect the power plug from the electric socket, and contact your authorized PPS Dealer.

Do not insert or drop metal or objects which are easily combustible through the openings such as the ventilation hole of your T•FOLD. Doing so may result in electrical shock or fire.

Do not place the T•FOLD in humid and/or dusty areas. Doing so may result in electrical shock or fire.

Replace the fuse (located in fuse socket, near on/off switch at rear of T•FOLD) only with a 4Ampere "slow blow" fuse (4A, 250VAC/ 120VAC, 5mm x 20mm, Type T)

CAUTION

When cleaning this product, or replacing consumable parts, always switch the product off, and unplug it, prior to doing so. Access to a live machine interior my cause electric shock.

Do not unplug or re-connect this product with the power switch on. Plugging and unplugging a live connector may deform the plug and generate heat, and eventually cause a fire accident.

Pay attention to the following when handling the power cable:

- Do not do anything forcefully (e.g. pull, bend, twist, knot) on the power cable
- Do not place heavy objects on the power cable
- Do not route the power cable near heat sources

Once a month, switch off this product and check if

- The power cord is plugged firmly into the electrical outlet
- The plug is not excessively hot, rusted or bent
- The plug and electrical outlet are free of dust; and
- The power cord is not cracked or otherwise deteriorated in any way

1.4 Machine Handling Safety Instructions

General safety instructions that must be observed when installing or moving the equipment are explained below.

WARNING

Do not locate this product where people might step on or trip over the power cord. Friction or excessive pressure may generate heat and eventually cause electric shock or a fire accident

Do not place the T•FOLD in the following areas. Doing so may result in the T•FOLD tipping or falling over and causing serious injury.
Unstable or loose surfaces
Angled surfaces
Areas subject to vibration by other equipment

Do not stand on or place heavy objects on your T•FOLD. Doing so may result in the T•FOLD tipping or falling over and causing injury.

Do not cover the ventilation holes of this product with cloth, such as a blanket or table cloth whilst the T•FOLD is switched on. Doing so could obstruct ventilation and cause fire.

CAUTION

This product weighs 50Kg. This product should always be lifted / carried / moved by a team of two or more persons to avoid mishandling or injury

Ensure all packing materials are removed from the product before lifting from it's crate. If the product is lifted with materials attached, it may slip from the hands and be damaged.

Ensure that the T•FOLD is always kept in a horizontal position, even whilst it is being lifted or moved.

When lifting this product, do so at the main body of the product with two people – lift points are indicated by arrows below.

FIGURE 1-1 T•FOLD LIFT POINTS

Keep the product away from direct heat sources such as radiators, and out of sunlight to prevent overheating and any risk of fire.

Locate this product in a well-ventilated area. Do not obstruct ventilation openings of the product.
Allow suitable clearance for machine dimensions below for ventilation and access to the power plug, and for loading of media:

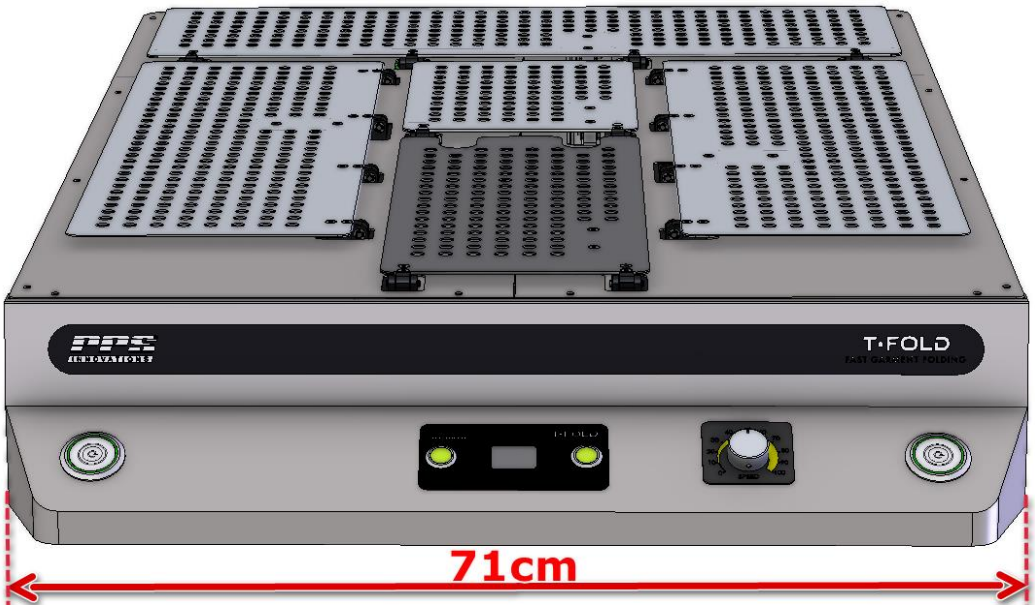


FIGURE 1-2 T•FOLD WIDTH

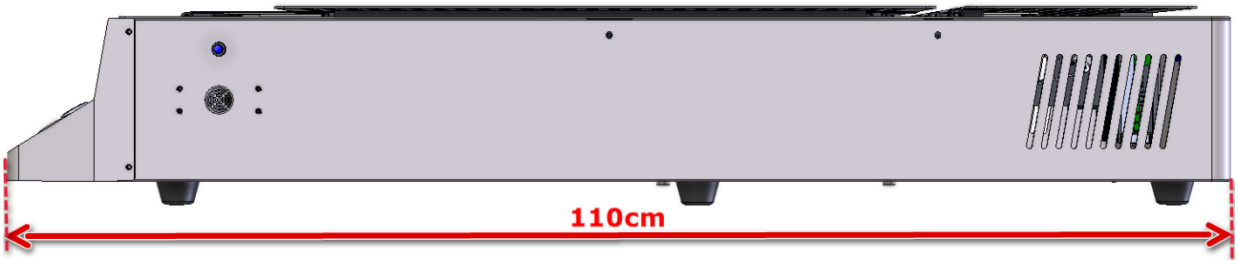


FIGURE 1-3 T- T•FOLD LENGTH

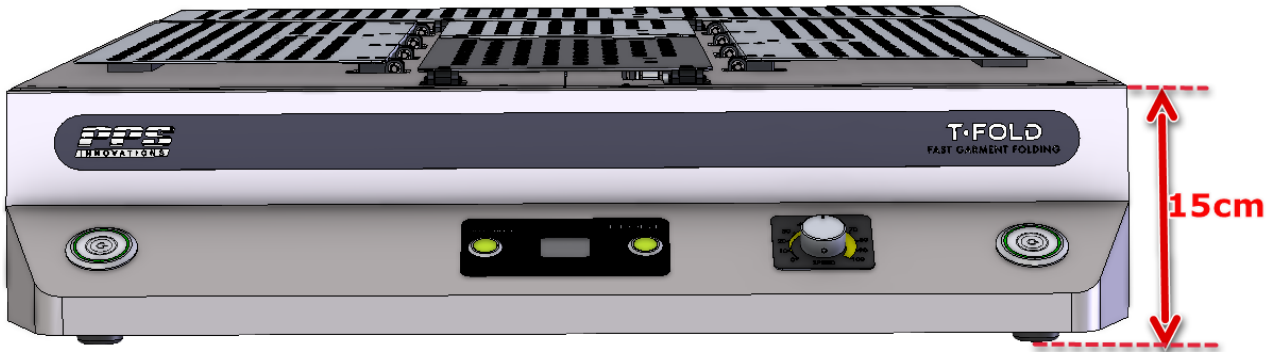


FIGURE 1-4 T•FOLD HEIGHT

General safety instructions that must be observed when operating the equipment are explained below.

WARNING

The operator's product maintenance procedures are described in the customer documentation supplied with this product. Do not carry out any maintenance procedures not described in the documentation.

This product features safety design to not allow operators to access hazardous areas of the product. These hazardous areas are shielded from users / operators by covers or protectors which will require tools to remove. Never remove these covers or protectors in order to prevent electric shock or other injury.

To avoid the risk of electric shock and fire accident, switch off and unplug the product promptly in the following conditions, then contact your local PPS representative:

- The product emits smoke or its surface is unusually hot
- The product emits unusual noise or odour
- The power cord is cracked or otherwise deteriorated
- A circuit breaker, fuse or any other safety device becomes activated during operation of this product
- Any liquid is spilled into the product
- The product is soaked in water
- Any part of the product is damaged

Do not insert any object into slots or openings of this product
Do not put any of the following items on the product:

- Containers containing liquid, such as water glasses, coffee cups etc.
- Metal objects such as staples or clips
- Heavy objects

If liquid is spilled over or metal objects slip into the product, it may cause electric shock or a fire accident.

Switch off and unplug the product before cleaning to prevent any risk of injury. Clean using a damp cloth. Do not use liquid or aerosol cleaners.

CAUTION

Always follow all warning instructions marked on or supplied with this product.
To avoid the risk of burn injuries and electric shock, never touch areas marked with "High Temperature" or High Voltage marks.

Ensure that the room in which the product is being operated is well ventilated, especially during extended operation or mass printing. The office air environment may be affected with odours (such as ozone) in a poorly ventilated room. Provide adequate ventilation to ensure a comfortable and safe operating environment.

Do not use strong solvents such as thinners, benzene or alcohol on the T•FOLD. These products may damage the paint on the T•FOLD.

Ensure loose clothing and hair is kept clear of moving parts when the product is in operation to prevent possible risk of injury.

Always operate this product in an environment meeting the following specifications to avoid damage to the product:

- Temperature: 18 to 30˚C (64 to 86˚F)
- Humidity: 20 to 80% RH*

Operate this product in an environment meeting the following specifications to minimize print quality issues:

- Temperature: 18 to 25˚C (64 to 77˚F)
- Humidity: 40 to 60% RH*

If the product is left in a low temperature environment, and then the room is rapidly warmed, dew condensation may form inside the product and cause irregularities in printing. Allow sufficient time for such condensation to evaporate in the warmer environment before operating the product.

* Without condensation

Be careful to ensure that fingers are not caught in the opening when lifting and closing the top cover of the T•FOLD.

If you need to operate the T•FOLD with the cover removed for maintenance or repair, be careful not to get injured by any moving parts.

Assembling and disssembling of the T•FOLD are possible only for the parts for which disassembling procedures are shown in this manual. Do not dissassemble any frame parts or parts that disassembling procedures are not shown in this manual. Doing so may cause trouble that connot be resetored, as the T•FOLD is orriginally assembled in the factory with a high accuracy.

Ensure sufficient space around the T•FOLD when performing maintenance work.

Maintenance must be done by two or more persons for the following work:

- When disassembling or reassembling the product.
- When packing the T•FOLD for transportation

1.5 Warning Label Types and Meanings

The handling, attachment locations, and types of warning labels are explained below.

Warning labels are attached to areas where care should be taken. Read and understand the positions and contents thoroughly before maintenance operation.

1.5.1 Handling the Warning Labels

Make sure to note the following when handling the warning labels.

NOTE

Make sure that all warning labels can be recognized. If text or illustrations cannot be seen clearly, clean or replace the label.

When cleaning warning labels, use a cloth with water or neutral detergent. Do not use any solvent or gasoline products.

If a warning label is damaged, lost, or cannot be recognized, replace the label.

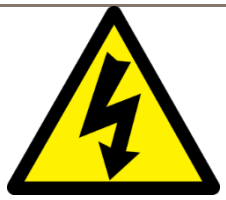
Ref	*Warning Label*	*Warning Label Type*
A		Using this area as a lift point will cause damage to the T•FOLD.
B		Do not touch anything in this area unless instructed.
C		Dangerous voltages present in this area.
D		Fingers may be trapped and ripped off in this area.

TABLE 2-1 WARNING LABEL TYPE

1.5.2 Locations of Warning Labels

The locations of warning labels are shown below.

Ref	*Warning Label Type*
A	Using this area as a lift point will cause damage to the T•FOLD.
B	Do not touch anything in this area unless instructed.
C	Dangerous voltages present in this area.
D	Fingers may be trapped and ripped off in this area.

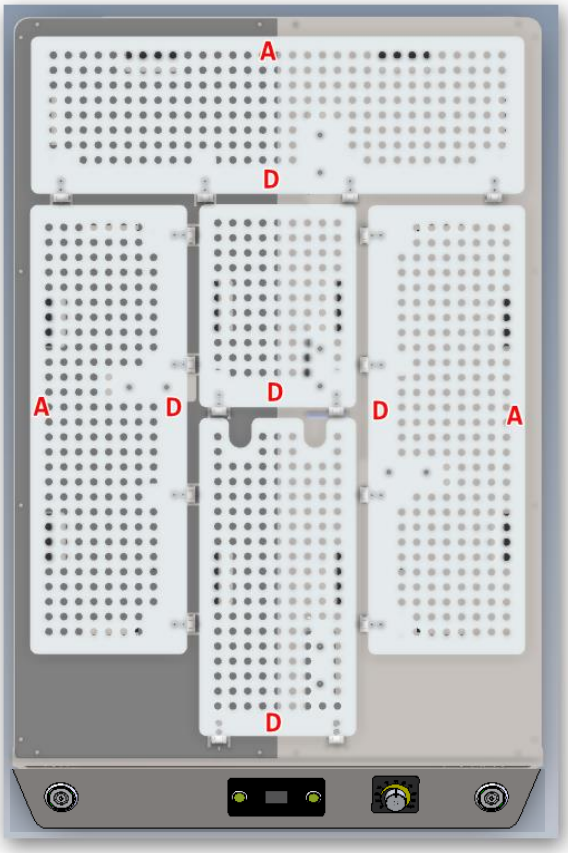


FIGURE 1-5 T-FOLDER WARNING LABELS TOP VIEW

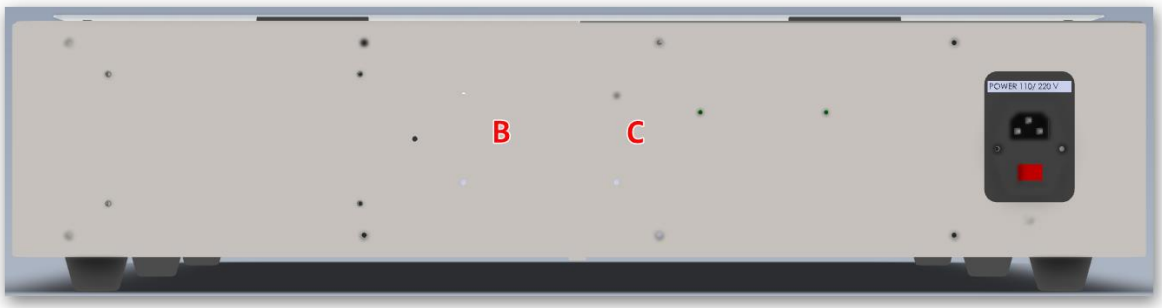


FIGURE 1-6 T-FOLDER WARNING LABELS REAR VIEW

2.Product Overview

2.1 Introduction

This chapter explains the features, part names, and functions of the T•FOLD.

2.2 Features

The features of the T•FOLD are explained below.

2.2.1 High Folding and Bagging Speed

PPS T•FOLD can fold/bag up to 360 shirts per hour with the same consistency from start to finish. Folding speed: 6 sec./cycle. Bagging speed: 4 sec. average.

PPS T•FOLD folds garments up to size XXL, including short and long sleeve shirts, hoodies, and kids' garments.

2.2.2 Operation Efficiency Improvement

PPS T•FOLD incorporates an auto air inflation for bags and operates in 2 operation modes- auto hold and auto bag.

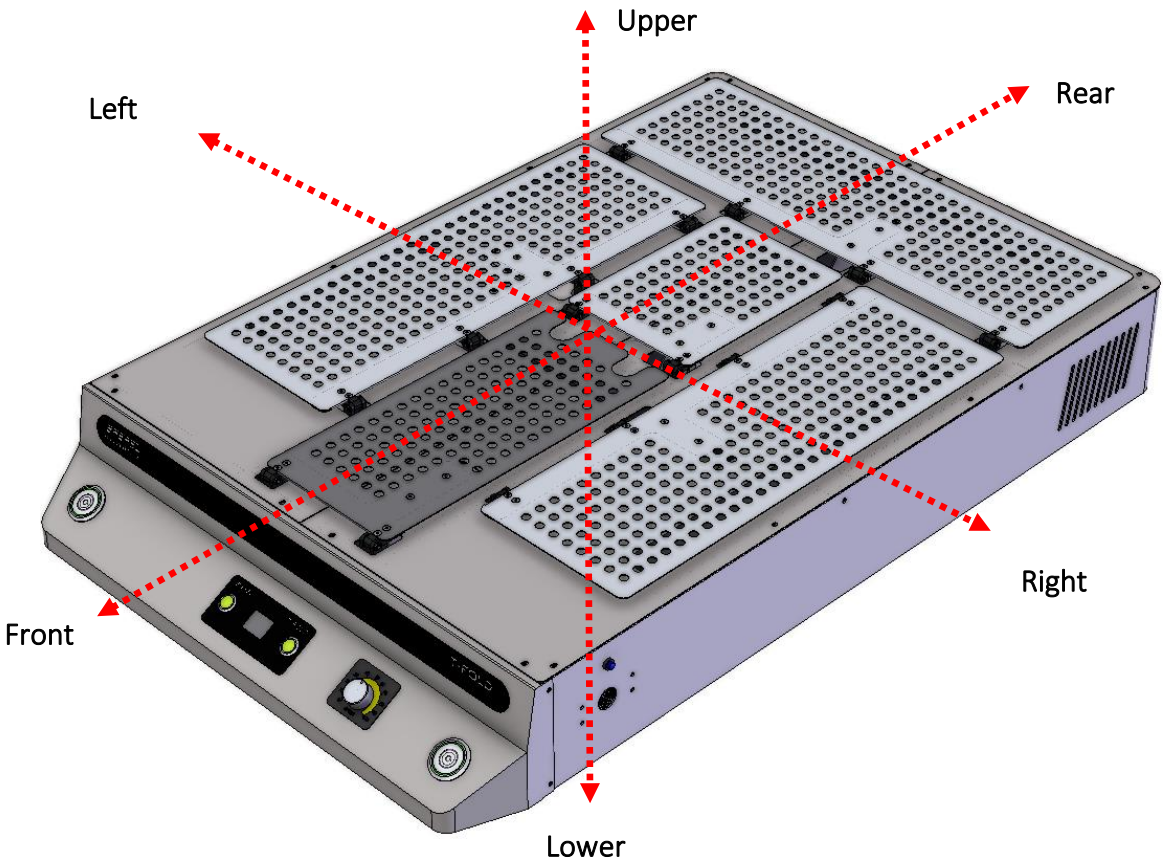
2.2.3 Operability Improvement

Designed as a bench top, auto folder incorporates easy bagging into the operation, sits conveniently in a small footprint, and is ALL electric – no air compressor is required.

2.3 Part Names and Functions

T•FOLD part names and functions are explained in this section.

For the directions described in this document, refer to the following orientation figure:



2.3.1 Front Section

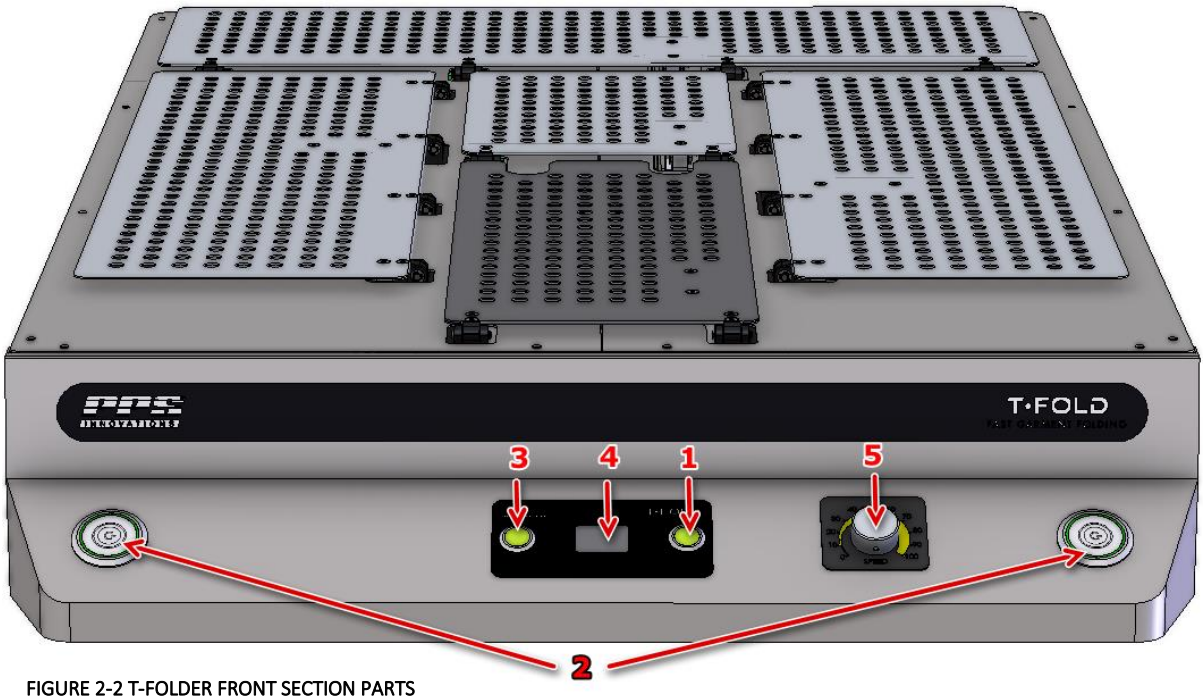


FIGURE 2-2 T-FOLDER FRONT SECTION PARTS

Part #	*Name*	*Function*
1	Power Button	This button turns T•FOLD On/Off and resets errors. Press firmly and hold for 2 secs to engage.
2	Start buttons	These buttons pressed together start the folding process.
3	Mode button	This button is used to select the operation mode
4	LCD	LCD displays the operation mode/ error message
5	Speed Control	The Speed control is used to select folding speed

TABLE 2-1 T-FOLDER FRONT SECTION PART FUNCTION

2.3.1.1 Combination of buttons

This section describes the functions available when several buttons are pressed at the same time.

Part #	Name	Function
2 2	Start button Start button	If two start buttons pressed together the T•FOLD is starting folding process.

TABLE 2-2 COMBINATION OF BUTTONS FUNCTION

2.3.2 Rear Section

FIGURE 2-3 T-FOLDER REAR SECTION PARTS

Name	*Function*
Mains Switch	This button supplies to and removes mains power from the T•FOLD
AC mains power inlet	For inserting the mains power cable plug
Power bay cover	For access to power supply

TABLE 2-3 T-FOLDER REAR SECTION PARTS FUNCTION

2.3.3 Upper Section

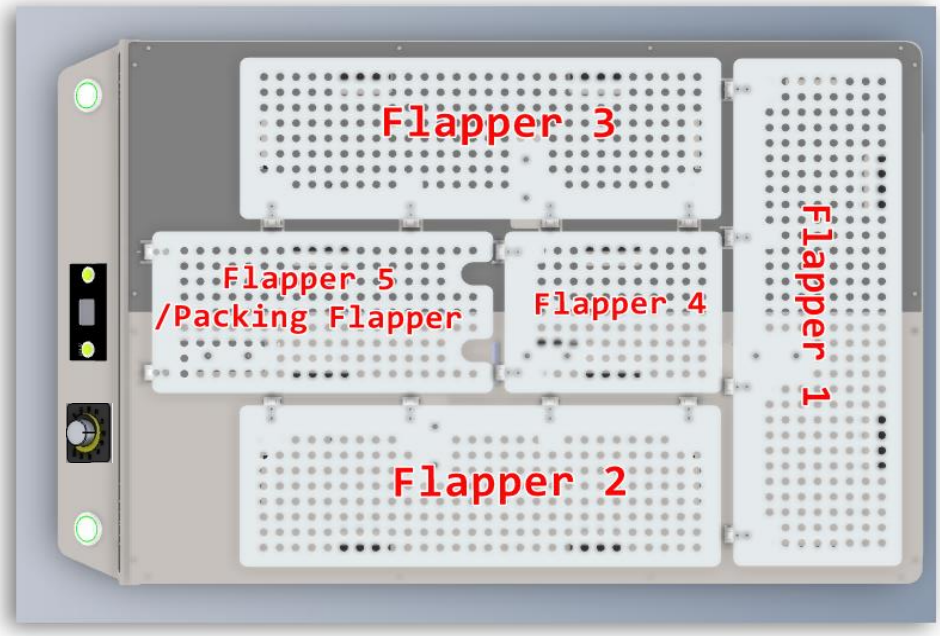


FIGURE 2-4 T-FOLDER UPPER SECTION PARTS

Name	*Function*
Flapper 1	Used for folding garments
Flapper 2	Used for folding garments
Flapper 3	Used for folding garments
Flapper 4	Used for folding garments
Flapper 5 (Packing Flapper)	Used for packing/ bagging garments

TABLE 2-4 T-FOLDER UPPER SECTION PARTS FUNCTION

2.3.4 Right Section

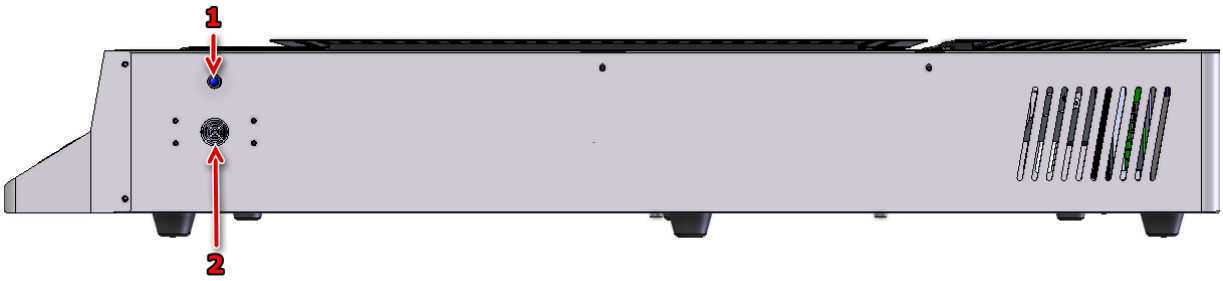


FIGURE 2-5 T-FOLDER RIGHT SECTION PARTS

Part #	*Name*	*Function*
1	Fan ON/OFF Button	This button switches fan on/off
2	Fan	The fan is used for inflating bags in bagging mode

TABLE 2-5 T-FOLDER RIGHT SECTION PARTS FUNCTION

2.3.5 Operation Panel

The operation panel (LCD, Keys & Speed Control) is used to set operational conditions, display the status of the T•FOLD, and set other functions. The names and functions of the operation keys are explained below.

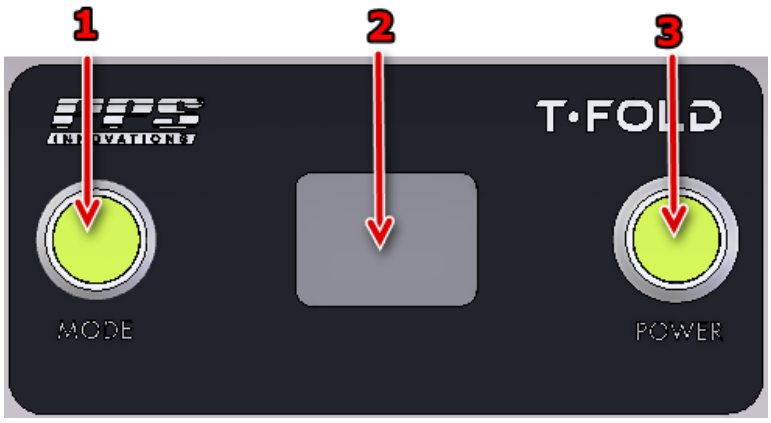


FIGURE 2-6 OPERATION PANEL

2.3.5.1 Operation Keys

NOTE

If the T•FOLD is in "sleep" mode (the LCD display will be dimmed), pressing the Mode key once will "wake" the T•FOLD to Ready status.

Part No.	*Name*	*Description*
1	MODE key	- Changes the LCD monitor display to setup mode status. Selects the item in Menu
2	LCD Display	This monitor displays the operation status and error messages of the T•FOLD.
3	POWER key	- Turns T•FOLD On/Off and resets errors.

TABLE 2-6 OPERATION KEYS FUNCTIONS

2.3.5.2 Status Messages

This section describes the meaning of messages displayed on the LCD panel. The messages are status messages. For error messages, see page 40.

Message	Description
WAITING TO FOLD	The T•FOLD is ready to fold.
ACTIVE	The T•FOLD is folding garment.
PACKING	The T•FOLDs' Flapper 5 is in up position.

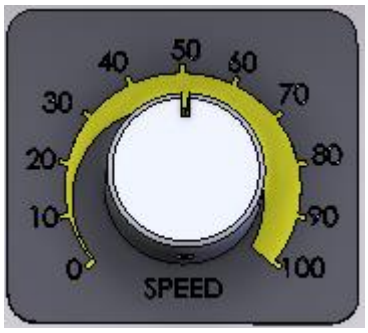
TABLE 2-7 MESSAGE & DESCRIPTION

2.3.6 Speed Control

The Speed Control is used to set folding speed ranged from 0 to 100. Recommended speed range is 70-90. For heavy/large garments, the speed can be increased accordingly.

NOTE

Speed can only be set up for Folding Mode (Mode1). This function is not available for Packing mode (Mode 2)



3.Initial Setup & Basic Operations

3.1 Introduction

This chapter provides information on the initial setup and basic operation of the PPS T•FOLD.

It is highly recommended that the initial setup of the T•FOLD be performed by a PPS trained & authorized technician. Damage caused by incorrect setup will not be warrantied.

Initial setup should be undertaken in the following order:

1. Position the T•FOLD ☞ *3.3 "Choosing a Place for the T•FOLD" p.29.*
2. Remove packing materials ☞ *3.4.1 "Removal of Shipping Tape" p.31.*
3. Load garment for folding ☞ *3.5.4 "Preparing & Loading Garments for " p.34.*

3.2 Before you Get Started

3.2.1 Get to Know your PPS T•FOLD

Starting a new business or adding to your existing product line with the PPS T•FOLD™ is a very exciting, and potentially very profitable time. Don't get too carried away though, allow plenty of time to become familiar with your T•FOLD and to learn not only the basics, but also the variables that can impact on your finished product.

These variables include garment types, fabric types, your operating environment and garment preparation. Thoroughly read this manual, ask questions of your PPS Technician or Distributor, talk to other users (see various internet forums). Be realistic about deadlines when accepting orders and allow yourself sufficient time to complete the order.

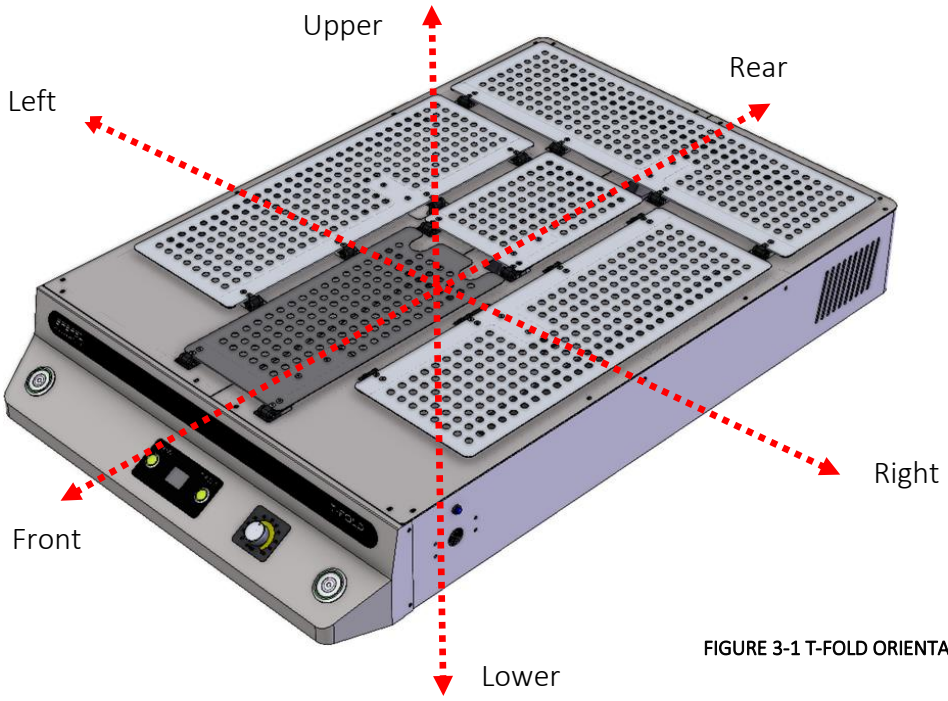


FIGURE 3-1 T-FOLD ORIENTATION

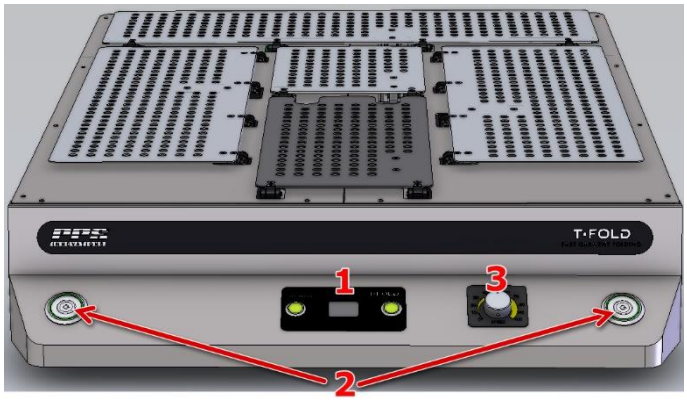


FIGURE 3-2 T-FOLD FRONT SECTION PARTS

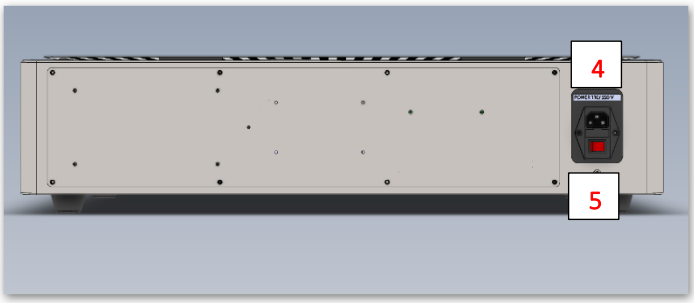


FIGURE 3-3 T-FOLD REAR SECTION PARTS

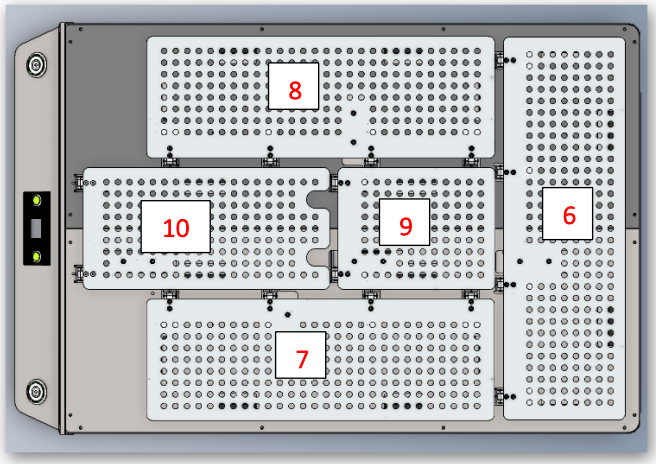


FIGURE 3-4 T-FOLD UPPER SECTION PARTS

FIGURE 3-5 T-FOLD RIGHT SECTION PARTS

Number	*Part Name*
1	Operation Panel
2	Start Buttons
3	Speed Control
4	AC mains power inlet
5	Mains switch
6-10	Flappers
11	Fan switch button
12	Fan

TABLE 3-1 T-FOLD PARTS NAMES

3.3 Choosing a Place for the T•FOLD

WARNING

Do not place the T•FOLD in a location under the following conditions. Doing so may cause the product to fall over, become damaged, or cause serious injury:

- Unstable or shaky surfaces.
- Slippery, slanted or angled surfaces.
- Locations that are subject to vibration from other products.

Do not stand, or lean, on the T•FOLD or place any objects on it. Doing so may cause it to fall over, become damaged, or cause injury.

Do not cover any ventilation holes or slots of the T•FOLD with anything at all. Doing so could prevent the T•FOLD from ventilating and cause fire.

Keep the T•FOLD away from damp, humid or dusty areas. Failure to do so may result in electrical shock or fire.

3.3.1 Installation Environment Requirements

Choose a place for T•FOLD installation following the requirements of the table below.

Installation space		1.5m^2 or more, 1.3m or more is required for the length	
Floor loading capability		Up to 3000Pa (450kgf/m2) or more	
Electrical specifications	Voltage	AC 100 V - 120 V ± 10% or AC 200 V - 240 V ± 10% (NOT auto-switching)	
	Frequency	50/60Hz ± 1Hz	
	Capacity	Up to 4A or more	
Environmental conditions		*Temperature*	*Humidity*
	Operation environment	18º C (64F) to 30ºC (86F)	20% to 80%, with no condensation
	Printing accuracy range	18ºC (64F) to 25ºC (77F)	40% to 60%, with no condensation
	Rate of change	2ºC per hour or less	5% per hour or less

TABLE 3-2 INSTALLATION ENVIRONMENT REQUIREMENTS

NOTE

Avoid the following temperature and humidity conditions. Otherwise, printed images may appear differently from what you expect and machine operation may be erratic or incorrect.

- Places where sudden changes in temperature or humidity are expected, even if the condition is within the range specified within this document.
- Places where direct sunlight or excessive lighting conditions are expected.
- Places where air conditioners blow directly.

Impression Technology strongly recommends that the T•FOLD should be installed where air conditioning airflow, humidity and temperature can be adjusted easily.

3.3.2 Required Space

Install the T•FOLD on a flat surface that meets the following conditions:

- The load bearing surface will fully support the full weight of the T•FOLD (and/or stand) plus 100%.
- The load bearing surface has an angular difference from level by no more than 2 degrees.
- The load bearing surface is textured and firm enough to be considered a non-slip, hard surface.
- The load bearing surface will fully support lateral forces in all directions in excess of 100kg. PPS T•FOLD dimensions provided below.

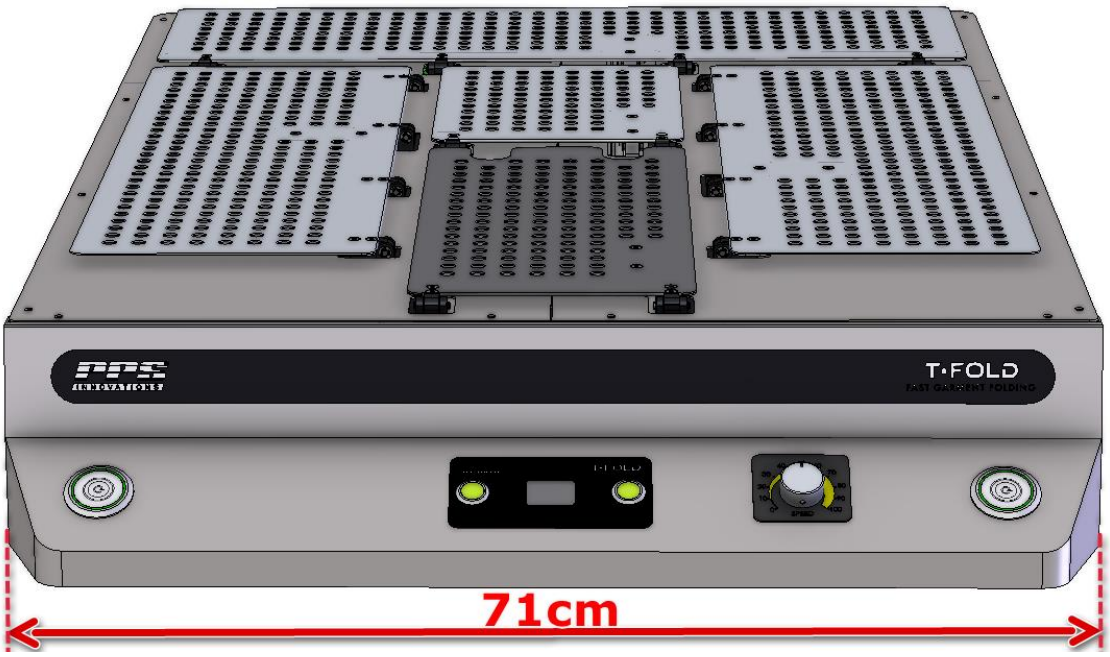


FIGURE 3-6 T-FOLD WIDTH

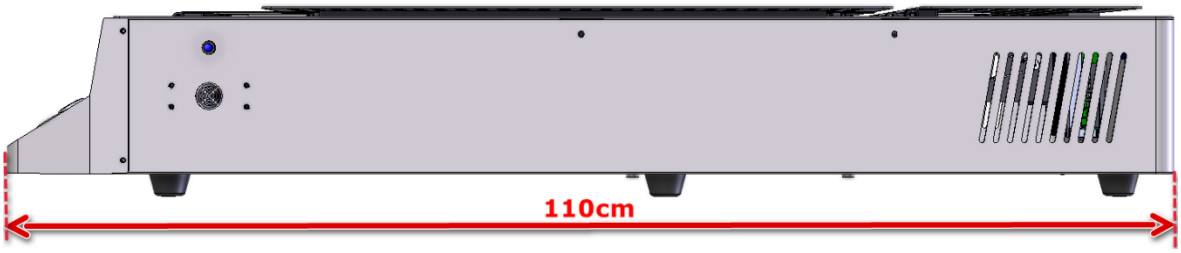


FIGURE 3-9 T-FOLD LENGTH

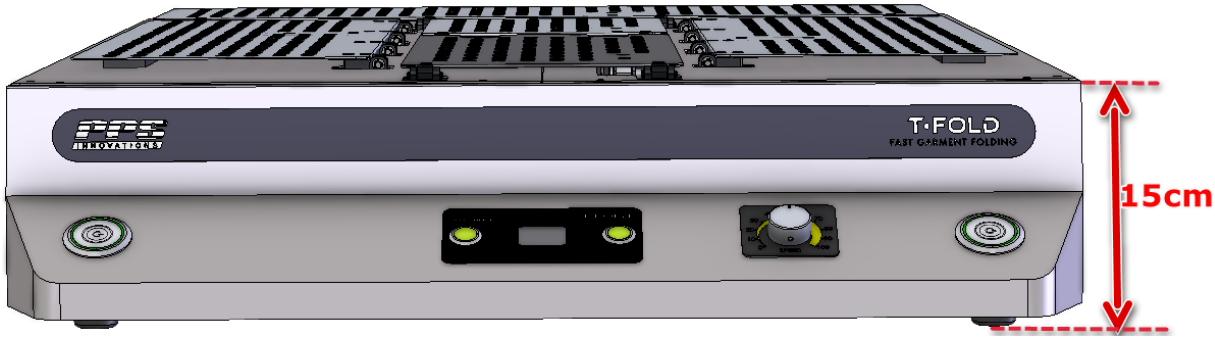


FIGURE 3-8 T-FOLD HEIGHT

3.4 Initial Setup

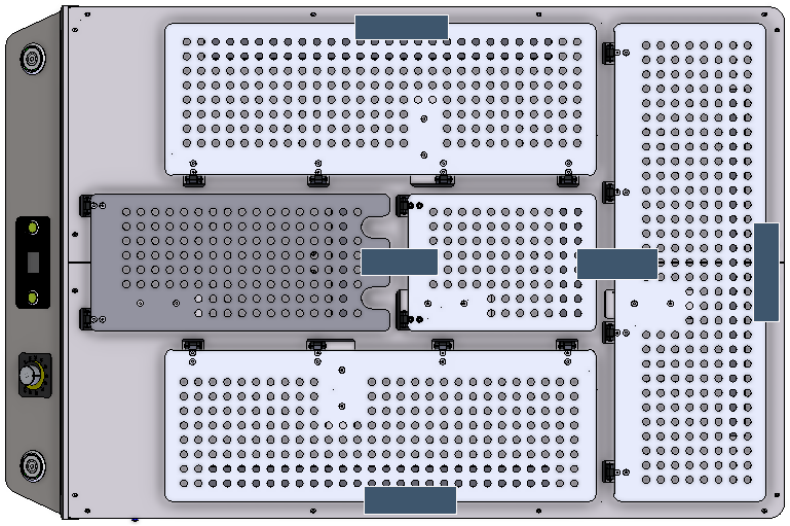
Once your T•FOLD has been removed from the crate and positioned as per *Section 3.3 " Choosing a Place for the T•FOLD" p.26*, use the following directions to prepare the T•FOLD for operation.

3.4.1 Removal of Shipping Tape

NOTE

No tools are required for this procedure.

1. Remove any tape from the T•FOLD's flappers. Standard shipping tape locations indicated by



2. Visually inspect area exposed by removal of top cover for any other shipping tape / materials, and carefully remove if found.
3. Visually inspect remainder of T•FOLD for any other shipping tape / materials, and carefully remove if found.

CAUTION

Failure to remove all shipping tape before powering up the T•FOLD may result in catastrophic damage to the T•FOLD drive mechanism.

3.5 Basic Operations

Some basic T•FOLD operations are described here as they are referred to in the Initial Setup instructions.

Pay attention to the following when handling the power cable:

- Do not do anything forcefully (e.g. pull, bend, twist) on the power cable
- Do not place heavy objects on the power cable
- Do not route the power cable near heat sources

3.5.1 Switching the T•FOLD ON

1. Plug the supplied mains cord into the socket at the rear of the T•FOLD and switch the power switch at T•FOLD socket to the "ON" position.

CAUTION

Failure to remove the shipping tape before powering up the T•FOLD may result in catastrophic damage to the T•FOLD drive mechanism.

2. Plug the other end of the power cord into the wall socket and turn ON.

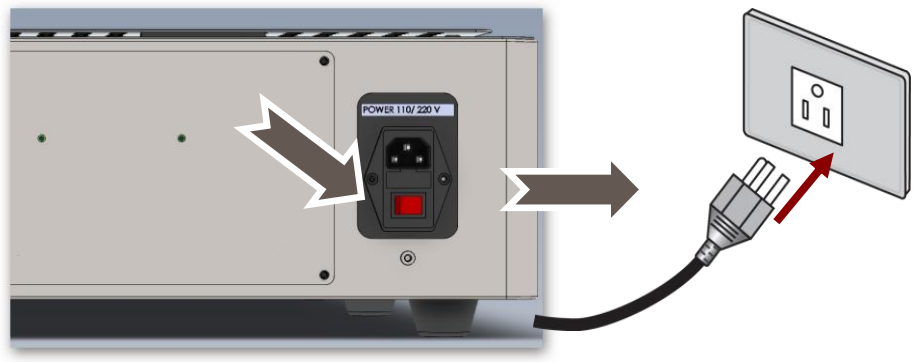


FIGURE 3-9 SWITCHING T-FOLD ON

3. Press the power button on the operation panel.
4. The T•FOLD will begin initializing, this process will take approximately 10 seconds, after which the LCD on the operation panel will display “Waiting to FOLD”.

FIGURE 3-10 THE WAITING TO FOLD NOTIFICATION ON THE LCD

CAUTION

Do not attempt to operate the T•FOLD until Waiting to FOLD is displayed on the LCD screen.

3.5.2 Switching the T•FOLD OFF

1. Press the power button on the operation panel and hold it for 2 sec. to turn T•FOLD off.
2. Turn the power switch at the rear of the T•FOLD to the off position.
3. Unplug the power cord from the rear of the T•FOLD and from the wall socket.

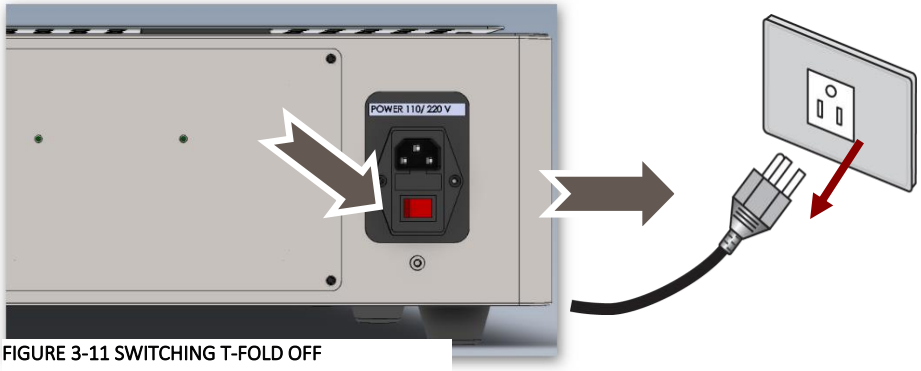


FIGURE 3-11 SWITCHING T-FOLD OFF

NOTE

During normal non-operational periods such as overnight and during weekends it is recommended that the T•FOLD is NOT switched off

CAUTION

Do not attempt to operate the T•FOLD during the shutdown process.

3.5.3 Operation Panel Operation

This section gives an overview of the PPS T•FOLD Operation Panel modes.

Waiting to FOLD

When the T•FOLD is in Waiting to Fold Mode, it is ready for operation.

Waiting to PACK

In Waiting to Pack Mode, the T•FOLD lifts the Flapper #5, it is ready for operation.

Active

In Active mode T•FOLD is starting folding operation.

3.5.4 Preparing & Loading Garments for Folding

1. Ensure that the T•FOLD in the horizontal plane. Any adjustments to the levels should be made to the T•FOLD so that the level is relevant to the loading area of the T•FOLD.

⚠ CAUTION

A level is critical to achieving good fold results. Always handle the T•FOLD with care as dropping the T•FOLD may cause damage rendering it unusable.

2. Load the garment on the T•FOLD surface front side down. Make sure it placed in the middle of the T•FOLD top. A t-shirt's collar should be placed in 4-6 cm further from the flapper 2/ 3 edge line. Refer fig. 3-13

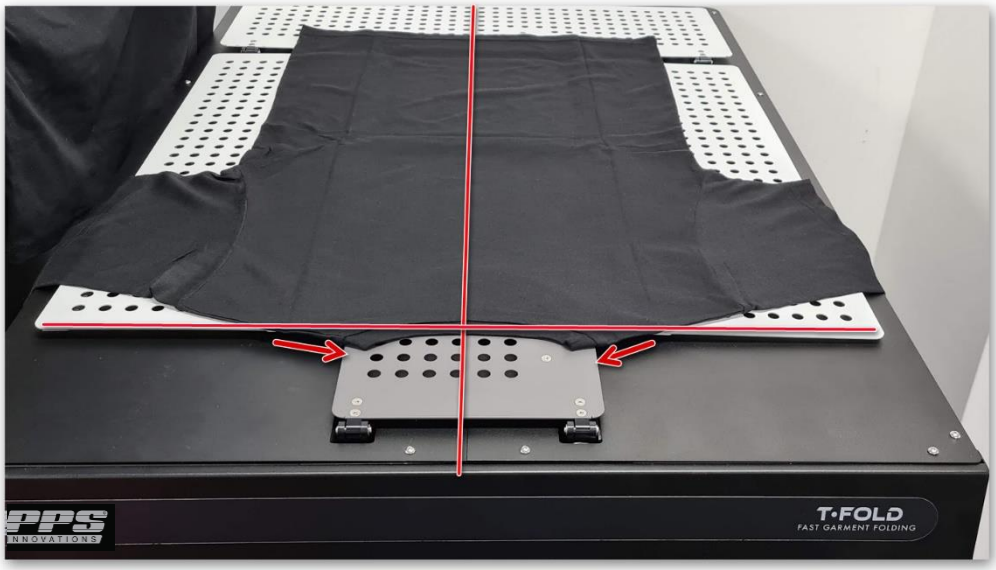
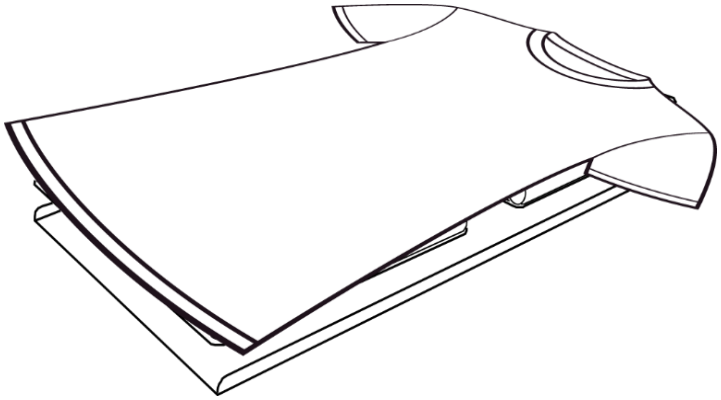


FIGURE 3-13 POSITIONING THE GARMENT ON T-FOLD

⚠ CAUTION

If you need to pretreat the fabric with spray or by other means, be sure not to use the spray within 5 meters of the T•FOLD as air-borne adhesive may make its way into the T•FOLD and cause damage to the drive or other working parts.

3. Gently pull the fabric straight and remove all wrinkles, do not distort the fabric. Ensure that the surface is flat and smooth.



4. Garment Folding Process

4.1 Introduction

Folding the textile items with the PPS T•FOLD™ is a very simple process involving five easy steps:

1. Load a T-shirt or other textile item onto the T•FOLD.
2. Set up your preferred mode (folding/ packing).
3. Press the Go buttons.

Once you are comfortable with the basic operations of your PPS T•FOLD™, you are ready to proceed!

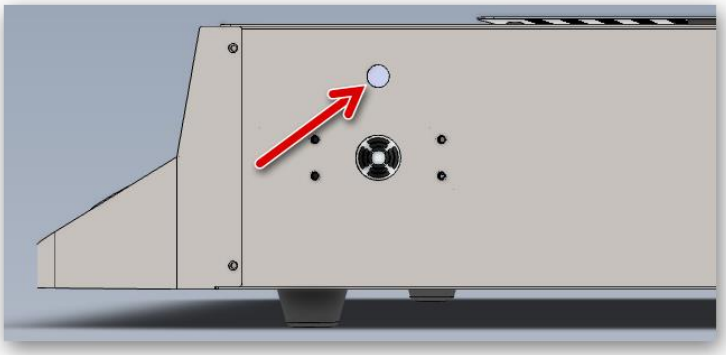
4.2 Loading Garment onto the T•FOLD

1. Put the garment onto the T•FOLD. ☞ *3.5.4 Preparing & Loading Garments for Folding, p 34.*
2. Flatten / smooth out the garment.

4.3 Setting a Preferred Mode

1. Press the Mode key on the operation panel to setup the desired mode: Mode1 - Folding, Mode 2 -Packing. The mode status will appear on the LCD - Waiting to FOLD or Waiting to PACK.

2. Use the button on the right side of the T•FOLD to activate or disactivate fan depending on your needs. The fan button is engaged by default setting.



4.4 Starting a Folding Job

For safety reason PPS T•FOLD operates with 2 Go buttons pressed at the same time, it helps to prevent fingers trapping in the flappers. Press the left hand Go button first and hold it, then press the right hand Go button to initialize the folding process.

4.5 Folding the Garment

1. When folding process is on the LCD is displaying the “Active” message.
2. The moving direction of flappers 1-4 are shown on the fig. 4-1.

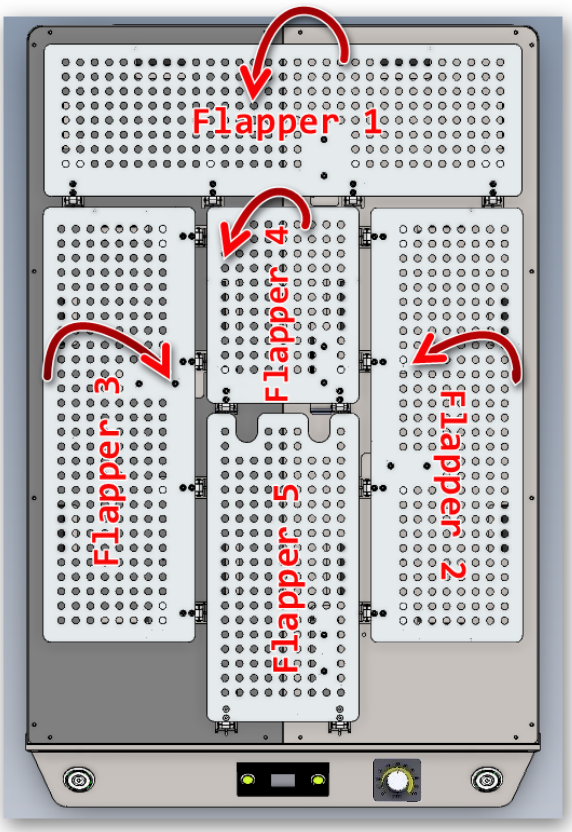


FIGURE 4-1 PPS T-FOLD FLAPPERS MOVING DIRECTIONS

3. The flappers move in sequential order, refer fig. 4.2- 4.4 for schematic folding process.

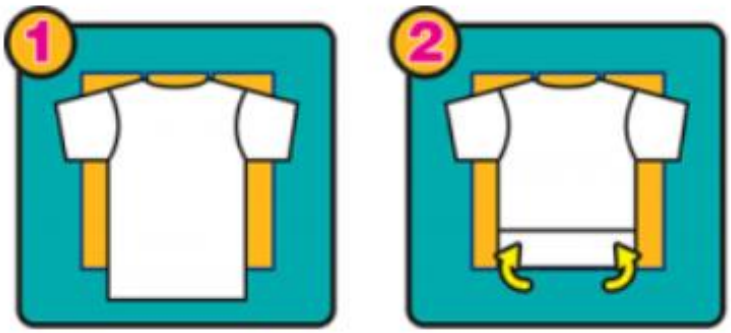


FIGURE 4-2 INITIAL POSITIONING AND FLAPPER 1 MOVING DIRECTION

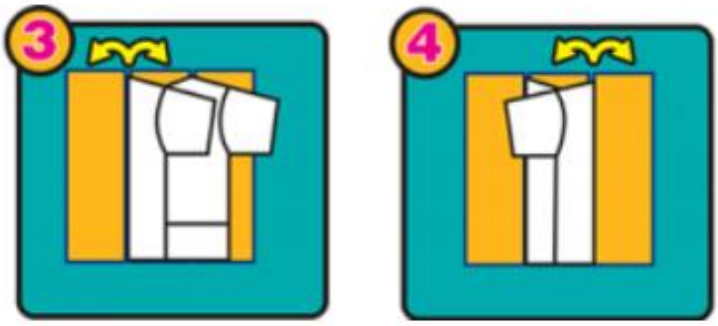


FIGURE 4-3 FLAPPER 2 AND FLAPPER 3 MOVING DIRECTION

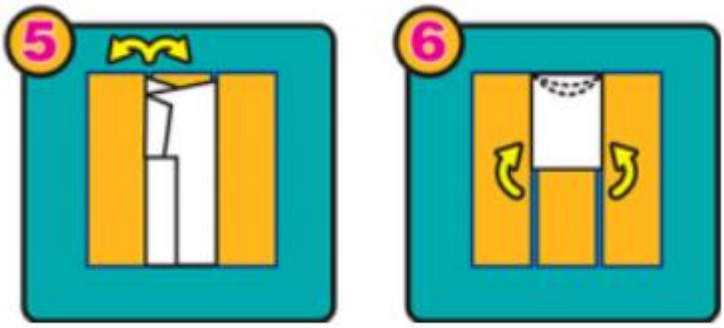


FIGURE 4-4 FLAPPER 2 AND FLAPPER 4 MOVING DIRECTION

4.6 Checking Fold Quality

Fold quality is a very important component of the garment folding process. You can visually check the fold quality and adjust the initial garment positioning accordingly to get the desired result ☞ *3.5.4 "Preparing & Loading Garments for Folding", p.34.*

5. General Care & Maintenance

5.1 Introduction

Whilst your PPS T•FOLD™ is built with many standard components of, it shares the ease of general care and maintenance. Your PPS T•FOLD will be operating under potential exposure to pretreatment sprays and lint from garments. As such, it is important that you take a few minutes each day to properly maintain your PPS T•FOLD™ – this will ensure that it runs in optimal condition.

5.2 Cleaning the Flappers at the end of production

NOTE

No tools are required for this procedure. Use protective gloves to avoid stained fingers. Use recommended cleaning fluid or distilled or purified water. The microfiber cloth will be required for this process.

1. Wipe all flappers surfaces with microfiber cloth moistened with distilled or purified water, or approved Cleaning Solution.
2. Gently lift Flappers 1, 2 and 3 and wipe the sponge under them.

⚠ CAUTION

Do not lift the flappers 4 and 5 - it will lead to damage of flappers' 4, 5 moving mechanisms.

6.Troubleshooting

6.1 Introduction

This chapter provides information on possible causes of machine errors/faults and recovery actions.

If the machine is malfunctioning an error message is displayed on the T•FOLD LCD.

If cause of errors/faults and recovery actions are not found in this chapter, or the machine cannot restore to normal status, please contact the distributor from whom you purchased the product or our customer support center.

6.2 Troubleshooting with Error Messages

This section describes the messages displayed in normal operation and upon an error occurrence as well as how to correct the error.

The available messages are as follows.

Priority	*Message type*	*Contents*	*Reference*
1	Operation status	Displayed when the machine is operating normally.	☞ *6.2.1 "Operation Messages" p.40*
2	Error Messages	Displayed when an abnormal condition occurs during normal operation.	☞ *6.2.2 "Error Messages" p.41*

TABLE 6-1 MESSAGE TYPE

6.2.1 Operation Messages

This section describes the message content, check items, and recovery actions for normal operation messages.

No.	*Message*	*Event/ Symptom*	*Action*	*Reference*
1	WAITING TO FOLD	T•FOLD is in folding mode	1.If T•FOLD does not respond within a reasonable period of time, turn T•FOLD off and then back on again. 2.Contact your authorized PPS Dealer or technician	☞ *3.5.2 "Switching the T•FOLD OFF" p.33* ☞ 3.5.1 "Switching the T•FOLD ON" p.32

2	ACTIVE	The T•FOLD is processing	1. If T•FOLD does not respond within a reasonable period of time (and no actual fold job is executing), turn T•FOLD off and then back on again. 2. Contact your authorized PPS Dealer or technician	☞ *3.5.2 "Switching the T•FOLD OFF" p.33* ☞ *3.5.1 "Switching the T•FOLD ON" p.32*
3	WAITING TO PACK	T•FOLD is in packing mode	1. If T•FOLD does not respond within a reasonable period of time, turn T•FOLD off and then back on again. 2. Contact your authorized PPS Dealer or technician	☞ *3.5.2 "Switching the T•FOLD OFF" p.33* ☞ *3.5.1 "Switching the T•FOLD ON" p.32*

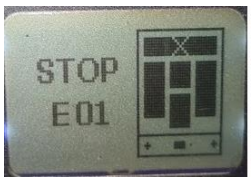
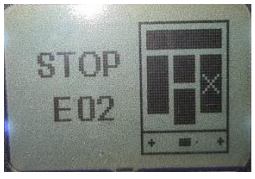
TABLE 6-2 OPERATION MESSAGE AND RECOVERY

6.2.2 Error Messages

This section describes the contents of error codes as well as the check items and recovery actions. These messages are displayed when an abnormal condition occurs while the machine is running.

Upon an occurrence of an error message, the machine stops its operation at the same time.

In some instances, the error may be cancelled by removing the error causes. After that, the machine will restart its operation.

ERROR MESSAGE	*INFO*	*RECOVERY ACTION*	*Reference*
	Flapper 1 fault	1. Turn machine OFF. Turn it ON again and check if the same message appears. 2. Check the Movement Mechanism for foreign objects	☞ *3.5.2 "Switching the T•FOLD OFF" p.33* ☞ *3.5.1 "Switching the T•FOLD ON" p.32* ☞ *6.5 Maintaining the Movement Mechanism of Flappers 1, 2 and 3 p.40*
	Flapper 2 fault	1. Turn machine OFF. Turn it ON again and check if the same message appears. 2. Check the Movement Mechanism for foreign objects	☞ *3.5.2 "Switching the T•FOLD OFF" p.33* ☞ *3.5.1 "Switching the T•FOLD ON" p.32* ☞ *6.5 Maintaining the Movement Mechanism of Flappers 1, 2 and 3 p.40*

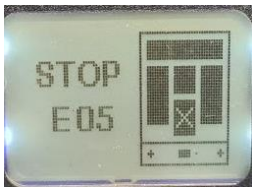
ERROR MESSAGE	INFO	RECOVERY ACTION	Reference
	Flapper 3 fault	1. Turn machine OFF. Turn it ON again and check if the same message appears. 2. Check the Movement Mechanism for foreign objects	☞ *3.5.2 "Switching the T•FOLD OFF" p.33* ☞ *3.5.1 "Switching the T•FOLD ON" p.32* ☞ *6.5 Maintaining the Movement Mechanism of Flappers 1, 2 and 3 p.40*
	Flapper 4 fault	Turn machine OFF. Turn it ON again and check if the same message appears.	☞ *3.5.2 "Switching the T•FOLD OFF" p.33* ☞ *3.5.1 "Switching the T•FOLD ON" p.32*
	Flapper 5 fault	Turn machine OFF. Turn it ON again and check if the same message appears.	☞ *3.5.2 "Switching the T•FOLD OFF" p.33* ☞ *3.5.1 "Switching the T•FOLD ON" p.32*

TABLE 6-3 ERROR MESSAGE AND RECOVERY

6.2.3 Maintaining the Movement Mechanism of Flappers 1, 2 and 3

⚠ CAUTION

Do not perform this procedure for flappers 4 and 5 - it will lead to damage of flappers' 4, 5 moving mechanism.

The Movement Mechanism includes Drive Belt, Pulley & Roller which can collect dust & lint in their "teeth". An excessive build up can cause the moving mechanism to "stuck" during folding.

The Drive Belt & Gear are driven by the Motor, and in turn drive the Flapper itself up & down during the folding process. These components are located is directly under the Flapper, refer fig. 5-1

FIGURE 6-1 FLAPPER MOVEMENT MECHANISM

1. Gently lift Flappers 1, 2 and 3 and visually check drive belt for any obstacles that can potentially affect the flappers moving. Refer fig. 5-2

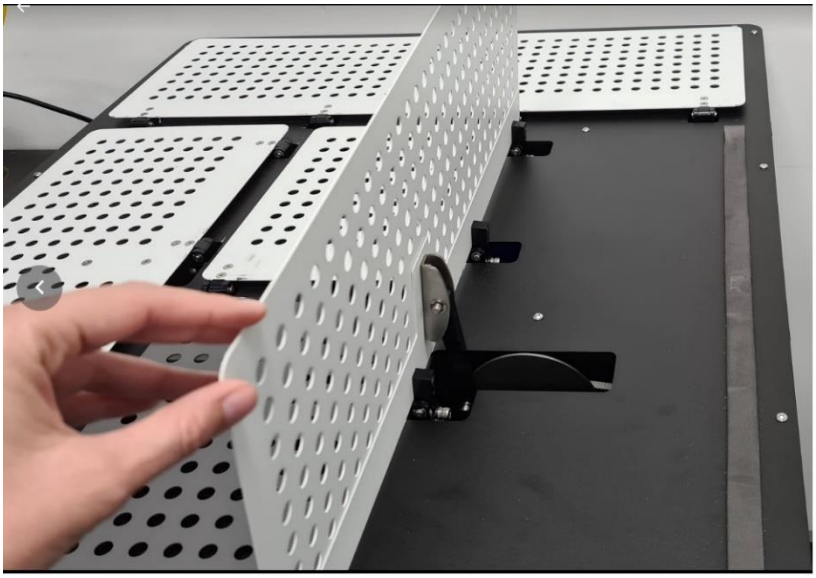


FIGURE 6-2 CHECKING MOVING MECHANISM FOR FOREIGN OBJECTS

2. If you noticed some foreign objects in the Movement Mechanism, use a small brush or mini-vacuum cleaner to clean the teeth of the Drive Belt and the Drive Gear (take care not to dislocate or damage the Drive Belt or Gear in doing this).

⚠ CAUTION

Perform the cleaning procedure of the Drive Belt or Gear only in case of a foreign object prevents the mechanism to freely move. The brushing should be proceeding with caution as it can cause the drive belt dislocation from rollers.

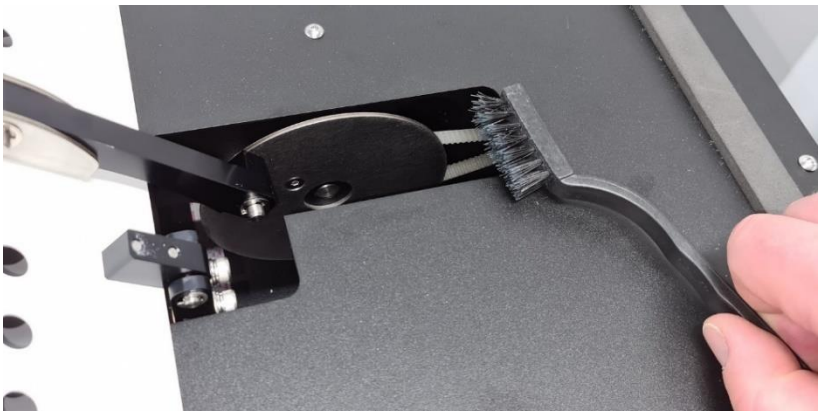


FIGURE 6-3 THE MOVING MECHANISM CLEANING