
RECHARGEABLE RESIN INJECTION APPLICATOR
FMT...AKU



INSTRUCTION MANUAL



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DECLARATION OF CONFORMITY

With reference to: **Directive 2006/42/EC** on machinery, **2014/30 / EU** on electromagnetic compatibility, **2011/65 / EU** on the restriction of the use of certain hazardous substances in electrical and electronic equipment,

Manufacturer / Distributor

Tfix Polska Sp. z o.o.
Al. Krakowska 55, Sękocin Nowy
05-090 Raszyn

We declare with full responsibility that our product:

NAME: RECHARGEABLE RESIN INJECTION APPLICATOR
MODEL: FMT300AKU, FMT345AKU, FMT410AKU, FMT585AKU

It complies with the following reference documents:

NORMS: EN ISO 12100:2010, EN 62841-1:2015, EN 55014-1:2017, EN55014-2:2015,
EN 61000-3-2:2014, EN 61000-3-3:2013, PN-EN 50581:2013-03

Sękocin Nowy, 24.04.2020







Note! Before starting this device for the first time read this manual carefully and observe the safety regulations. To ensure trouble-free operation of the equipment for a long time strictly follow the maintenance instructions.

1. INITIAL INFORMATION

1.1. Contents and recipients of the manual



This technical publication is the instruction manual for the rechargeable resin injection applicator

Gun models: **FMT300AKU, FMT345AKU, FMT410AKU, FMT585AKU**

The manual refers to the "designed equipment" together with operating and technical information on the use, installation and maintenance of the device. This manual is addressed to:

- Supervisors in the place where the gun is used, gun operators.
- The personnel responsible for the gun maintenance.

The manual must be kept by the person responsible/supervisor of those performing the above-described duties in such a way that it is always available for reference and should be kept in the best possible condition.



The manufacturer reserves the right to the materials and intellectual property rights and prohibits, even partial, copying and/or disclosure of the content of the documentation without its prior permission.

1.2. Symbols

The safety instructions must be observed in order to avoid risks to the health and life of the operating and maintenance personnel, as well as to avoid disruptions to work and damage to property. The following symbols help in that.

SYMBOL

MEANING

EXPLANATIONS, TIPS, NOTES



Danger

The symbol indicates serious threats disregarding of which can cause serious health and safety risks to people.



Danger

The symbol indicates serious electrical hazards which, if disregarded, can lead to injury or death.



Warning/Note

This symbol indicates the need for warning or drawing attention to key functions/important information.

2. Equipment description

2.1 General description

The rechargeable resin injection applicator is a device that allows for quick and convenient application of building chemicals from sachets or cartridges to dedicated surfaces.

Design and operation:

- ① A frame that holds the product cartridge.
- ② Piston for forcing the compound out.
- ③ Piston rod. Moves to force the compound out.
- ④ Piston lever. Used to retract the piston to reload a new cartridge. The rod can only be moved backwards.
- ⑤ Ventilation holes. Motor cooling. Do not cover.
- ⑥ LED switch. For switching the LED on/off.
- ⑦ Lock release. Clutch enabling movement of the piston.
- ⑧ Switch/Trigger. For forcing the compound out.
- ⑨ LED light. An additional source of light.
- ⑩ Battery. 7,2V lithium-ion battery.
- ⑪ Battery release buttons. Used to remove the battery.
- ⑫ Hole for a wrist strap. Used to attach a wrist strap.
- ⑬ Switch/trigger lock. Used to switch the trigger.
- ⑭ Charging socket. To connect the charger.
- ⑮ Charger. 8.4V 1.5A
- ⑯ Battery cover.
- ⑰ Piston. (Fig. M)
- ⑱ Speed control knob. Turn the knob in a counter-clockwise direction for the maximum flow of product; Turn the knob clockwise for the minimum flow.

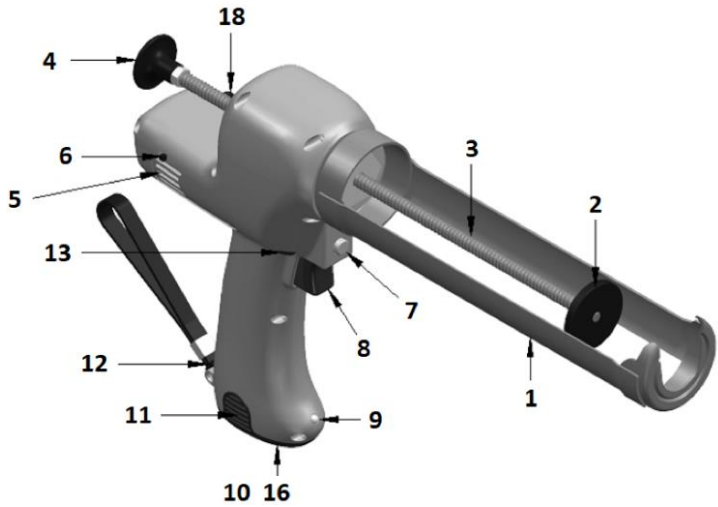
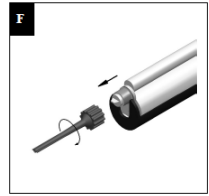
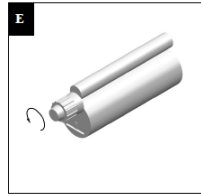
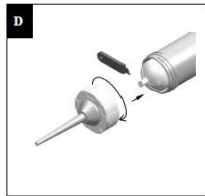
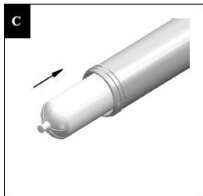
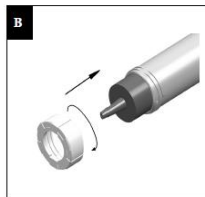
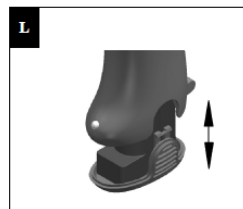
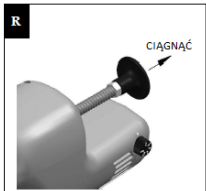
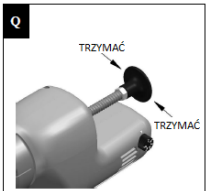
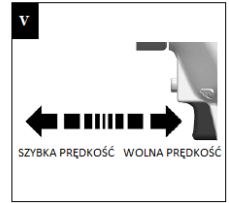
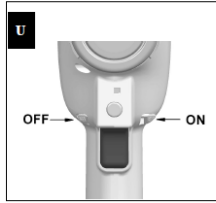
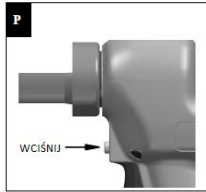
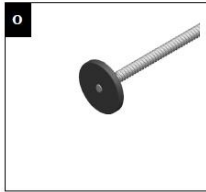
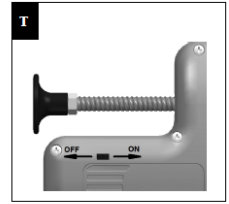
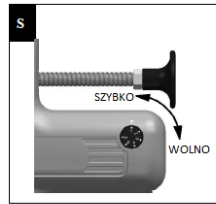
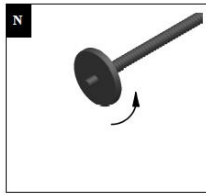
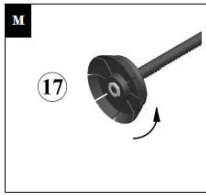


Fig. 1 Construction of the Injection Resin Applicator



BATTERY INSTALLATION (lithium-ion)





3. Intended use



The gun is intended for application of construction sealants (silicone, putty, adhesives, etc.).



WARNING! Product use for other purposes than intended is prohibited.

4. Warnings regarding unauthorised use

Unauthorised uses may pose risks to the health and safety of the operator and those in the area, as well as the risk of damage to the workplace. The activities described below are the most predictable and absolutely prohibited:



WARNING! The manufacturer is not responsible for the consequences of improper use of the device.

- **Never remove the piston from the gun;**
- The device must be used only for the purpose indicated by the manufacturer;
- Do not cover any ventilation openings;
- It is forbidden to connect the devices to the power supply in a different way than with the original equipment plugs;
- Do not work with wet gloves, use improper extension cords or damaged electrical sockets;
- It is unacceptable to install additional elements on the device, not included in its composition or equipment;
- Unauthorised modifications of the gun are not allowed;
- The operator must be in a condition suitable for safe handling of the gun;
- Do not use or allow the gun to be used with damaged, inactive and/or improperly installed safety devices;
- Do not continue to use the gun if malfunctions are detected. Stop it immediately and start only after restoring normal conditions of use;
- Do not use the device for crushing objects;
- Do not squeeze deodorants and other explosive cans;
- Do not insert body parts between moving parts of the gun;
- Do not apply products without due care;
- Do not use the device for other purposes than those for which it has been designed;
- Do not overheat the gun;
- Avoid accidental operation. Make sure the switch is in the off position before connecting;
- Do not expose the gun to weather conditions;
- Do not pull the charger's cable and do not expose it to damage;
- Do not carry out repairs that do not comply with the instructions;
- Do not use non-original spare parts or spare parts that are not recommended by the manufacturer;
- Do not commission maintenance or repair work to persons who do not have the appropriate competence;
- Do not stand on the device;
- Do not use in potentially explosive atmospheres. Do not use products that generate potentially explosive atmospheres;
- Do not use near dust and other volatile materials;
- Do not pour water on the device;
- Do not immerse the gun in solvents or acids;
- Do not use solvents and/or hydrocarbon based hydrogenated detergents, trichloroethylene, methylene chloride, etc.) to clean the gun, as they could oxidise galvanized parts causing explosive chemical reactions. Never use strongly acidic or alkaline substances for cleaning;
- Never point the gun towards yourself, other people, animals or things other than the work item.

Electrical safety

Replacement of a power cable or plug

A damaged power cable or plug can be replaced only an authorised, specialized facility. The power cable or plug should be professionally removed as waste in accordance with applicable environmental protection regulations.

Extension cord

Use an extension cord that has been approved for use and withstands the charger's power consumption (see: Technical data). Its minimum cross-section should be 1 mm². Always completely unwind the cable from the drum.

5. Residual risks



Residual risk is a risk that still exists despite the means of protection employed. When following such recommendations as:

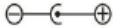

- careful reading of instructions;
- not putting of arms and legs between movable parts;
- handling the gun by persons who have read the instruction manual,
- protecting the device against access to children,

the residual risk can be minimised when using the device without endangering people and the environment. There is a residual risk in case of non-compliance with the recommendations and instructions specified.

6. Technical data

Basic technical data of the device is presented in the table below. Detailed parameters concerning the device are provided in documents included in the device documentation.

Model	Parameter	Value
FMT300AKU	Weight [kg]	1.2
FMT410AKU	Weight [kg]	1.5
FMT585AKU	Weight [kg]	1.7
FMT300AKU	Size [mm]	L393 × H224 × W70
FMT410AKU	Size [mm]	L358 × H224 × W70
FMT585AKU	Size [mm]	L413 × H224 × W96
All	Maximum current [A]	7A (NCG11) / 15A (NCG01~44)
All	Coating material	ABS or PA66 + GF30%
All	Speed of uncharged device [mm/s]	5.5 mm /sec (FMT300AKU) 4.0 mm /sec (FMT410~585AKU)
All	Maximum force [N]	4,500N ±450 (FMT300AKU) 6,000N ±600 (FMT410~585AKU)
All	Battery	DC 7.2V lithium-ion battery

Accessories	Charger
Operating temperature	-18 ~ +50°C
Input power	AC100V~240V / 50Hz~60Hz
Output power	DC8.4 V 1.5A 
Comments	Only for indoor use
Marking	

Accessories	7.2V lithium-ion battery
Charging limit, voltage, temperature	8.5V, 4.0A, 0 ~ 50°C
Recommended charging current and voltage	8.4V 1.5A

7. Assembly and adjustments



Always remove the battery/batteries before installation and adjustments.

Always turn off the gun before inserting or removing the battery

Only use chargers approved by TFix

Charging the battery

Batteries are not supplied charged. Therefore, first charge the battery before using it.

The charger indicator should light up red. After charging the battery, the indicator should turn green. Charging time is about 1 ~ 1.5 hours. Do not charge the battery in an ambient temperature below 4°C or above 40°C. The recommended charging temperature is around 24°C.

Installation of product cartridge

According to figures of AF, PR.

Replacing the tip

According to figures M-O.

8. The use of personal protective equipment

Before starting and using the gun, put on properly the recommended personal protective equipment:

- Protective gloves
- Protective goggles.

9. Operating the device



WARNING! Proper use of the gun reduces the risk of injury and increases the reliability of the machine.



It is recommended to strictly follow the instructions below:

- Always follow the instructions in the manual;
- Always observe the warnings on the device; warning labels on the device with signs to prevent accidents and must be observed at all times;
- Always make sure that the device is used in the right conditions (temperature and humidity);
- Keep your hands out of the piston and gun working area;
- Keep labels and nameplates legible;
- Turn off the gun before any repair, maintenance or replacement;
- Before any repair or additional maintenance consult a dealer or specialised personnel, as improper actions will void the warranty;
- At the time of selection and before using the product to be used with the gun, verify, on the basis of the appropriate material safety data sheet of the product, the compatibility with the work environment and the personal protection equipment used;
- During use, put on appropriate clothing and personal protective equipment, according to the instructions in the safety data sheet of the used product. The use of safety goggles and protective gloves is always recommended.

PRODUCT APPLICATION

1. Lock the trigger (Fig. U)

- Lock the trigger when the tool is not in use.
- To lock the trigger, press the "OFF" trigger lock. The gun does not work when the trigger is in the locked position

2. Battery replacement (fig. G-L) (in case it is not charged)

- Lock the trigger before removing or installing the battery.
- Press the button to pull the battery out and pull it firmly, the battery will come out of the holder. To insert the battery push it firmly into the holder until you hear the click.

3. Starting, stopping and speed control (fig. V)

- Press the trigger to start product application.
- Increase or decrease the pressure on the trigger by adjusting the speed for the right flow rate. The flow rate depends on the pressure, type of product, temperature and diameter of the nozzle.
- When using a nozzle with a smaller diameter, select a lower speed because product can leak at the back of the cartridge.
- Release the trigger to stop product application

4. Piston adjustment (fig. P-R)

- To manually set the piston rod, press the stick. Release the button. (fig. P)
- Grip the piston rod holder and pull the piston. (Fig. Q-R)

NOTE: Keep the piston clean at all times. Applying a layer of glue on it may damage the entire mechanism. In this case, the warranty will be void.

5. Loading product cartridge

- Make sure that the right product has been chosen.
- Use the trigger lock to block it.
- Trim the nozzle. Smaller hole requires more power to squeeze the product out; it may affect the battery life.
- If the product sets, install a new cartridge.
- Grip the piston rod holder and pull the rod back to allow further product application.
- After loading product cartridge, tighten the nozzle and the cover (fig. D).
- Push the piston handle forward until the piston touches the tube/cartridge.

6. Control knob (fig. S)

You can change the working speed by turning the knob. By turning the knob to the left, the speed increases from 1 lowest setting 1 to the highest 6. Start with the speed setting at least "2". When the products starts to come out, adjust the speed control for the right job.

7. Electronic overload protection

The gun is protected against overload. If too much pressure is applied, the motor will automatically stop. This prevents from damage to the gun.

If the motor is off, make sure that:

- The nozzle is trimmed/the product has not set/the piston is free from the product.

After testing, release the trigger to allow resetting the electronics. If the motor remains stationary, try another cartridge or request service.

10. Maintenance



Observe the following maintenance instructions:

- Unauthorised modifications of the product may cause the safety devices inoperable and are not permitted.
- To prevent premature wear of the device, it must be thoroughly cleaned and maintained at regular intervals.
- Properly carried out maintenance allows to extend the service life and maintain a constant level of safety.
- Do not dispose of waste generated as a result of maintenance operations into the environment. Recycle it in accordance with applicable regulations.

CLEANING AND ONGOING MAINTENANCE

All cleaning and maintenance operations should be performed only when the gun is disconnected from the power supply.

Cleaning

INTERVALS	CAUSES	DESCRIPTION
With every recharge	Residues of fresh material	Thoroughly remove material residues from each surface of the gun and dispose of in accordance with applicable law in the country of use.
Every 2 weeks	Dust, dirt and material residues	clean the entire device thoroughly
Every month	Dust or dirt	Thoroughly clean the entire gun with a clean cloth and detergent, pay attention to the handle, which should always be easy to grip.

* Intervals understood as the time of actual work .

Ongoing maintenance

INTERVALS	OPERATION	DESCRIPTION
Weekly	Lubrication inside the tube	Lubricate the inner surface of the tube with a brush

* Intervals understood as the time of actual work.

MAINTAINING THE BATTERY

The battery can be charged for 300 cycles when it is maintained and used in accordance with the instructions. A battery stored for six months without using it will self-discharge. Charge the battery every six months, even if it is not used to extend its life.

Store the battery in a cool and dry place. Do not store in places where the temperature may exceed 50°C. High temperature will overheat the battery and shorten its life. If after charging the battery life is shorter, it should be replaced.

CLEANING

Remove dust and debris from the gun slots. Keep the handle clean, dry and free from oil or grease. Cleaning can be done with soap and a damp cloth. Please note that some cleaning agents and solvents are harmful to plastics. Never use flammable cleaning agents.

11. Repairs

Repair of a damaged device may only be carried out by specially trained personnel of TFix or authorised servicemen. The repairers must adhere to the guidelines of the manufacturer. Failure to follow the instructions may result in loss of health.



WARNING! Appropriate technical qualifications or special skills are required to carry out such operations, so they may only be performed out by qualified personnel who have the relevant experience.

12. Noise

The device complies with European standards and directives in terms of noise emission. The average noise level when the operator works at a distance of 1 m does not exceed 70 dB.

13. Radiation

The device components are built in accordance with the requirements of the EMC Directive 2014/30/EU. The device does not emit any harmful electromagnetic interference and is itself resistant to such disturbances.

14. Disposal

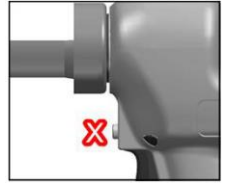


Selective waste collection. This product must not be disposed of with normal household waste. When one day you will have to replace TFix with new equipment or you no longer need it, do not dispose of it with household waste, and only return it to a specialised waste disposal company.

Thanks to the selective collection of used products and packaging, some materials can be recovered and reused. In this way, the natural environment is protected and the demand for raw materials is reduced.

Attention !!!

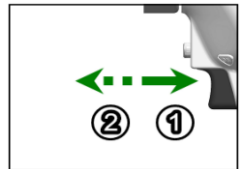
If you are unable to pull back the mechanism



set the velocity selector to position 1



Press and immediately release the trigger to activate the auto-reverse function. The action can be repeated.



15. Cooperation with the device user

The manual reflects the equipment and its technical condition at the time of putting into service. Any change in the manual will result in sending a copy of the a new manual by the manufacturer to all customers.

16. Compliance with safety requirements

Local regulations may require the return of electrical devices for general use to the seller from whom the product was purchased or to collection points.

Tfix Polska declares with full responsibility that the products:

Rechargeable Resin Injection Applicators - FMT300AKU, FMT345AKU, FMT410AKU, FMT585AKU

complies with the following standards:

- EN ISO 12100:2010 , EN 62841-1:2015, EN 55014-1:2017, EN 55014-2:2015
- EN 61000-3-2:2014 , EN 61000-3-3:2013, EN 50581:2012

The rechargeable resin injection applicator meets the requirements of the following European directives:

- Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery and amending Directive 95/16/EC (recast)/ OJ UE L157 of 09.06.2006, p. 24/Regulation of the Minister of Economy of October 21, 2008 on requirements for machines (Dz. U. No. 199 of 2008, item 1228).
- Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits.
- Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to electromagnetic compatibility.
- Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

The devices have been marked with the **CE** mark and a declaration of conformity has been issued for them due to the requirements set out in the above directives.



Tfix Polska Sp. z o.o.

Al. Krakowska 55, Sekocin Nowy

05-090 Raszyn

Poland

Tel. +48 (22) 354 67 97, e-mail: biuro@tfix.pl

www.tfix.pl

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