

TJEP
fastening systems



TJEP ULTRA GRIP

MODEL 25/40/58

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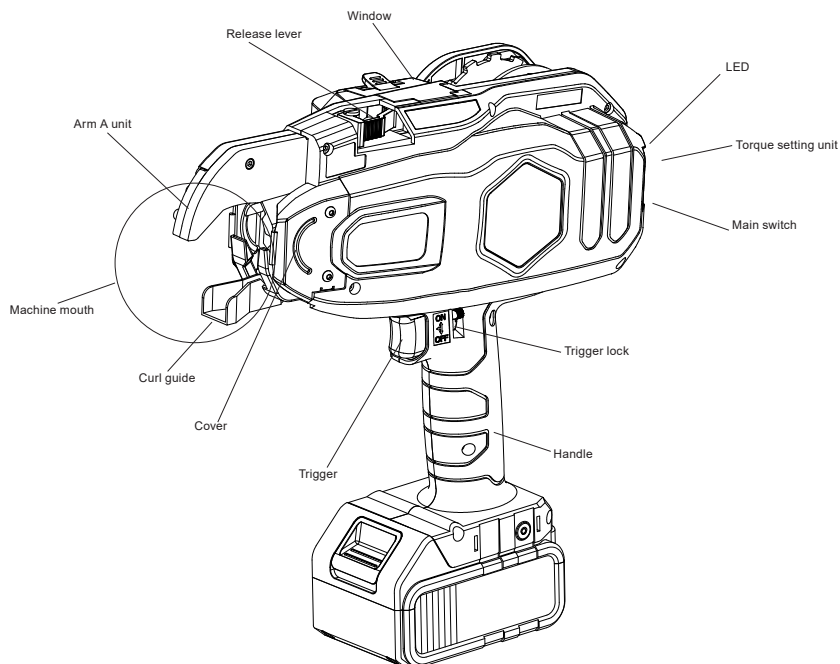
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Specifications and technical information

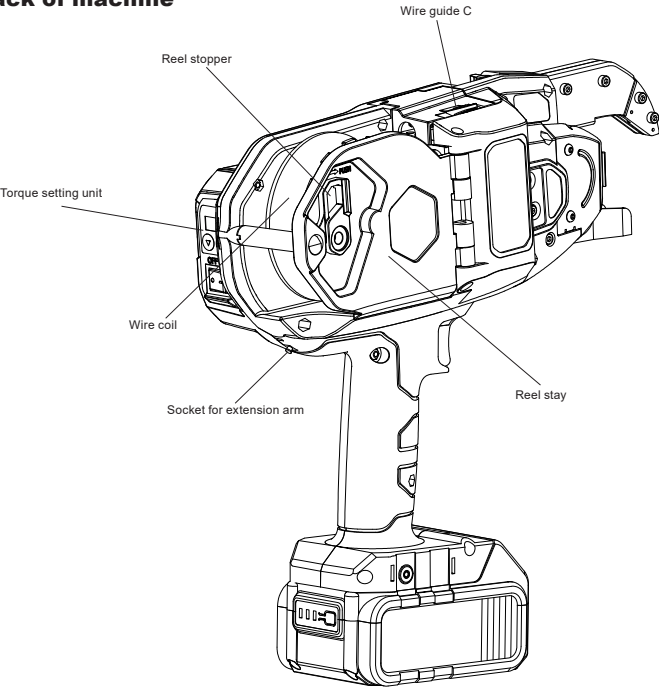


Warning: Read this user guide before use. The user guide should be kept together with the re-bar binder.

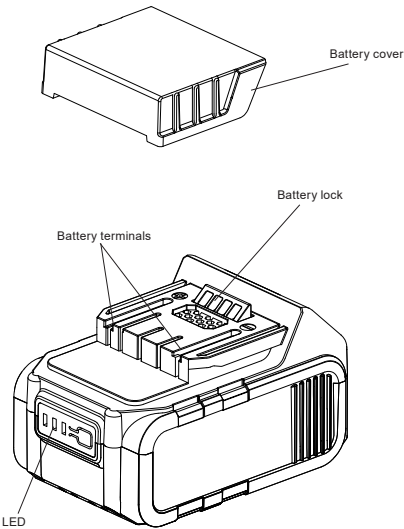
Front of the machine



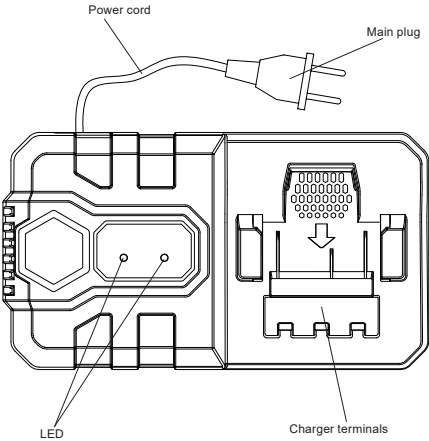
Back of machine



Battery



Charger



Machine specification

Technical info.	ULTRA GRIP 25	ULTRA GRIP 40	ULTRA GRIP 58
TJEP no.	124012	124002	124022
Weight	2.5 kg	2.6 kg	2.8 kg
Size (L×B×H)	281×109×300 mm	297×109×300 mm	312×109×310 mm
Wraps per tie	2 or 3	2 or 3	3 or 4
Workpiece thickness	8 - 25 mm	12 - 40 mm	30 - 58 mm
Ties per charge	+5.000 (3 wraps)	+4.500 (3 wraps)	+3.200 (4 wraps)
Battery	18V 4,0Ah Li-ion		
Charger	Use only approved TJEP battery charger		
Charging time	Full charge = 90 min.		

Wire specification

Model	TJEP ULTRA GRIP wire		
Diameter	0.8 mm		
Length	approx. 100 m		
Material	Galv.		
Ties per coil	ULTRA GRIP 25	ULTRA GRIP 40	ULTRA GRIP 58
2 wraps	approx. 220	approx. 160	-
3 wraps	approx. 160	approx. 120	approx. 96
4 wraps	-	-	approx. 80

Applications

Tying of re-bars used for: prefab. concrete elements, on-site concrete constructions, floors and walls.

Tying of floor heating pipes.

Safety features

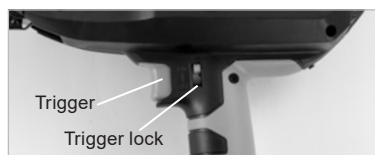
To increase safety when tying, the re-bar binder is equipped with safety features.



WARNING! Before use, make sure that the device works as intended. Otherwise, do not use the re-bar binder.

Trigger lock

The re-bar binder is equipped with a trigger lock. Lock the trigger and remove the battery when the re-bar binder is not in use.



When you start tying, release the trigger lock by pushing the lock left and upwards.

Curl guide

If you pull the trigger while the curl guide is open, the re-bar binder will make a warning sound and refuse to tie. To start tying, release the trigger and make sure that the curl guide is closed.



Battery

Durability of the battery

If the battery is fully charged, but the operating time is significantly reduced, the battery is defective and must be replaced. If the battery temperature is low (10°C or lower) the charging time will be prolonged.



WARNING! Do not use defective batteries. The re-bar binder will not work properly.

Disposal of batteries

Batteries contain substances that can be harmful to human health and the environment if they are not handled properly. Batteries are marked with the crossed trash bin. It symbolises that waste batteries must not be disposed with unsorted waste but must be collected separately.

It is important that you hand in your waste batteries to the collection points that are established. In this way, you help to ensure that the batteries are recycled in accordance with legislation and do not unnecessarily damage the environment. Your local waste authorities can inform you how to dispose and recycle this type of battery correctly.

Safety instructions



WARNING! To avoid serious injuries to persons or property, please read these safety instructions carefully and make sure you understand them.

Points of attention when using the re-bar binder

Using the re-bar binder for other purposes or other applications than described in this manual can result in serious accidents. Please make sure that you follow all instructions in the manual. People who have nothing to do on the work site, especially children, should be kept out of the work site and should not have access to this equipment.

Use appropriate protection gear.

Employer and operator must make sure that the operator uses proper eye protection when the tool is used. This protection must comply with current laws and norms.

NB: Glasses without side protection and single-sided protection screen do not provide adequate protection.

Earmuffs can be necessary.

On a lot of work sites, it can be necessary to wear earmuffs, to avoid permanent damage to the hearing. Employers and employees must make sure that proper earmuffs can be found and is used on the work site.

No children near the re-bar binder.

Do not allow spectators, especially children, near the machine while working with it.

Do not use the re-bar binder near flammable substances.

Never use the re-bar binder near any flammable substances or fumes. The fumes from these can be sucked into the engine and cause an explosion.

Do not use the re-bar binder in wet or damp environments.

If the re-bar binder is used in direct rain or water, damp environments or similar, the risk of getting an electrical shock is increased. Do not leave the re-bar binder where it can be exposed to this.

Check the parts of the re-bar binder before sliding in the battery.

Check that all screws are tightened properly. Improper tightening of screws can result in an accident or breakage. Make sure that all parts are intact. Parts will be worn out over time. Check also that no parts are damaged, defective or worn. If parts are missing or need to be repaired, contact your dealer immediately. Use only parts approved by the manufacturer.

Set the main switch in OFF position and lock the trigger when changing the battery or changing/adjusting the wire coil. Remove the battery if an error occurs and the machine cannot be used.

If the machine is left on, it may cause damage.

Keep clear of the nose, feeding gears and wire coil during use of the re-bar binder.

DO NOT hold your fingers near the nose or other moving parts as the wire and moving parts easily can cause damage.

Keep clear of the machine mouth during use of the re-bar binder.

Do not touch the wire or the machine mouth when the machine is tying. You may get caught in the wire loop and suffer serious injury.

Do not point the re-bar binder towards others during use.

People can get hurt if they are caught in the machine during use. When tying, be careful and stay clear of the moving parts.

Do not touch the trigger unless you have to.

When carrying the re-bar binder and when not tying, remember to set the main switch in OFF position, and lock the trigger. If not, you will risk activating the re-bar binder unintentionally and cause a dangerous situation.

Do not use the re-bar binder during a malfunction.

If the re-bar binder does not work correctly, set the main switch in OFF position, lock the trigger and remove the battery before checking what is wrong. If necessary, contact your dealer and have the re-bar binder repaired.

When sliding in the battery, check the following points. Do not load a wire coil in the re-bar binder if:

- There is a sound from the curl guide, even though the re-bar binder is not in use.
- The re-bar binder is warmer than usual, smells odd, or a noise is coming from the machine when not in use.

If one of the above-mentioned points occur and you continue to use the re-bar binder without correction the error, it may cause damage to the machine. If it is not possible to correct the error, contact your dealer.

Do not make any modifications to the re-bar binder.

Modifying the re-bar binder does not only reduce the function of it, but also the level of security. Do not make any modifications to the re-bar binder.

Make sure that the re-bar binder is in good condition.

To maintain the functionality and the quality from the work of the re-bar binder, maintain it properly and make sure that it is being serviced on a regular basis. Remember to keep the handle free of oil and dirt.

Use only approved batteries.

Use only the approved type of battery 18V 4.0Ah Li-ion for this re-bar binder. If using another power source, for example another type of battery, dry cell battery or a car battery, the machine can break down or burst into flames.

Charge the batteries before use.

A new battery or a battery which has not been used for a long period of time, may be discharged and has to be fully recharged before use.

Precautions for battery charging, chargers and batteries

Use only an approved charger.

Use only the approved charger which comes with the re-bar binder and batteries. The batteries cannot be recharged with other chargers – this may cause damage, overheating or fire.

Recharge the batteries with the correct voltage.

Make sure that the charger is connected to an ordinary 100-240V AC power source. Do not connect the charger to a power source with another voltage than 100-240V AC. If using another voltage than 100-240V AC will cause a malfunction and/or overheating, causing damage to the battery and charger.

Never use a booster-type transformer.

Never charge the battery in a wet or damp environment.

Charging a wet or damp battery or using a damp charger may cause an electric shock or short circuit.

Do not touch the plug or charger with a wet hand or glove.

You will risk injury from electric shock.

Do not cover or place anything on the charger during use.

The charger may become overheated and eventually catch fire.

Make sure not to place charger and battery next to a heating source or open fire.

Do not place the battery near flammable items.

Charge the battery in a well ventilated place.

Avoid placing it in direct sunlight.

Charge the battery at a temperature between +5° and +40° Celsius.

Leave the charger to rest between charges.

Keep the charger's connectors clean.

All objects on the connectors can cause electric shock or malfunction. Use the charger in a dust- and dirt-free environment.

Handle the charger cord carefully.

Do not carry the charger in the cord, and do not unplug it by pulling the cord. You will risk that the cord becomes damaged and will cause a malfunction. A damaged cord must be replaced or repaired.

Put the battery cover on the battery terminals when not in use.

This must be done to prevent a short circuit in the battery.

Make sure that the battery terminals do not touch each other. A short circuit between the terminals will overheat and damage the batteries.

How to use

Loading the wire coil.

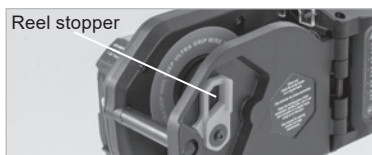


WARNING! Set the main switch in OFF position, activate the trigger lock and remove the battery.

1. Push the release lever until it is caught by the release stopper.



2. Push the reel stopper to open the reel stay.



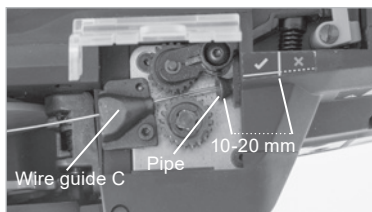
3. Insert the wire coil with the wire-end upwards and forward. Carefully close the reel stay and secure the reel stopper.



4. Release the wire and remove the rubber band.



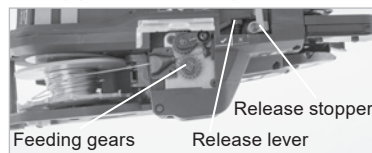
5. Insert the tip of the wire into wire guide C, through the gap of the feeding gears and all the way into the pipe. (10-20 mm)



If the window is dirty and it is difficult to determine the position of the wire guide C.

Clean the inside of the window with a soft cloth. Close the window again to prevent the ingress of foreign bodies in the machine.

6. Push the release stopper and make sure that the release lever is back in original position and that the feeding gears are clamping the wire.



7. Make sure that the wire is tight and firm. Prevent the wire from curling up behind the wire coil. This may cause a jam.



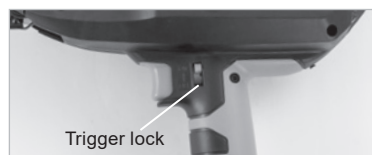
WARNING! When the main switch is set to ON, do not place your fingers near the machine mouth or other moving parts of the machine! Avoid switching the main switch repeatedly between ON and OFF. This can cause a machine breakdown. Do not touch the wire while the machine is running.



8. Slide in the battery and set the main switch to ON.



9. Release the trigger lock, before starting to tie.



10. Adjusting the wraps

By default the machine is set for 3 wraps (ULTRA GRIP 58: 4 wraps). Changing the setting to 2 wraps (ULTRA GRIP 58: 3 wraps): Turn off the machine on the main switch. Press and hold the trigger while turning on the main switch. The machine is now set for 2 wraps per tie (ULTRA GRIP 58: 3 wraps). If the machine is turned off, it will automatically be set for 3 wraps again (ULTRA GRIP 58: 4 wraps).

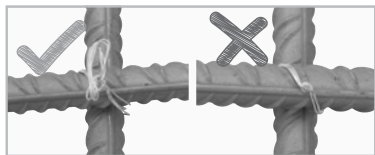


11. The torque setting unit adjusts the tension of the ties. 1. digit displays the wrap setting and 2. digit displays the torque setting. The torque can be adjusted higher (▲) or lower (▼) by means of the push buttons. We recommend:

Model	2 wraps	3 wraps	4 wraps
ULTRA GRIP 25	1-5	6-9	-
ULTRA GRIP 40	1-5	6-9	-
ULTRA GRIP 58	-	1-5	6-9

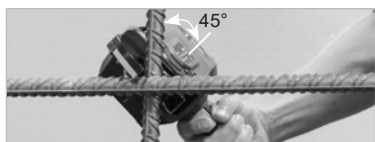


12. Perform a test tie, to check if the torque is set correctly.



Correct use

1. Place the arm A unit in a 45° angle over the re-bar cross surface and push the mouth towards the re-bar.

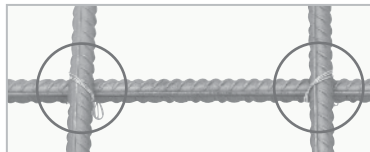


2. Place Arm A perpendicularly on top of the re-bar cross surface and with the mouth centred over the cross.



WARNING! Do not move the re-bar binder while it is tying.

3. The ties should be made in alternating directions.



4. Cross-tying.

Bend down the knot of the first tie, before you make the second tie.



How to replace the wire coil.



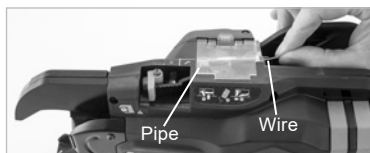
WARNING! Set the main switch to OFF position, activate the trigger lock and remove the battery.



1. Push the release lever until it is caught by the release stopper.



2. Remove the wire coil.



3. Push the reel stopper to release the reel stay and open it at the same time, and remove the wire coil.



4. Load new wire coil (refer to the instructions for loading wire coil on page 88)

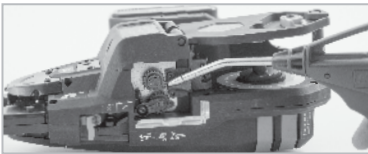
5. Battery saving function.

The machine will automatically shut down after 10 min stand-by without being used.

Maintenance

1. Clean and check the re-bar binder on a regular basis.

2. Clean the feeding gear and surrounding areas on a regular basis, to avoid dust and metal residue getting into the machine and causing problems. This can be done with an air blow gun.



3. Clean the brake gear with compressed air and apply non-acid oil.



Storage

The re-bar binder must not be stored in cold conditions. It should be kept at approx. 20°C. When the machine is not in use, it should be stored under warm and dry conditions. Keep the machine out of the reach of children.

Troubleshooting / repairs

The re-bar binder will eventually need maintenance service and replacement of worn parts due to normal wear and tear. Troubleshooting and/or repairs are only to be carried out by authorised dealers or specialists.

The re-bar binder warns about malfunctions using beep sounds. Follow the matrix on page 92 to find out what is wrong.



WARNING! If one of the problems listed on page 92 occurs, set the main switch to OFF position, before trying to solve the issue.

When the main switch is set to ON - do not place your fingers near the curl guide or other moving parts of the machine. If the problem still occurs, set the main switch to OFF and contact the dealer.

Normal Operation	Problem	Warning Sound	Cause	What to Check	Solution
Power on → The Tip Axis is initialized and the wire-cutter operates automatically.	No operation takes place.	No sound emitted.	Battery completely empty.	Confirm the battery is charged.	Perform normal charge.
			Electrode plate has been oxidized.	Take out the battery and see if the electrode has been brown.	Polish terminal part of battery pack with dry cloth, etc.
		Pl, pl, pl...	Curl guide is open.	Open/close curl guide.	Fully close curl guide.
			Binding wire has been entangled around Twist section.	Turn off power and take out the battery to confirm if binding wire has been entangled inside curl guide.	Turn off power, remove binding wire inside curl guide.
Trigger ON → Wire is sent out.	Tip Axis Initializing fails	Pl-pl-pl-pl-pl....	Battery is empty.	Confirm the battery is charged.	Perform normal charge.
		7 beeps. Pl-pl-pl-pl-pl-pl-pl-pl-pl-pl-pl-pl-pl-pl...	There is foreign substance between Magnetic plate (Pos. 326) and Route PWB unit (Pos. 325). Or bad connection of connecting wire "P" and/or "M".	Check if there is foreign substance between Magnetic plate (Pos. 326) and Route PWB unit (Pos. 325). Or check the wire "P" and/or "M" connection.	Remove the foreign substance between Magnetic plate (Pos. 326) and Route PWB unit (Pos. 325). Or replace a new connecting wire "P" and/or "M".
		1 beep	Bad connection of connecting wire "A" and/or "U". Or twisting motor is burned.	Check the wire "A" and/or "U" connection.	Reconnect or replace the wire "A" and/or "U". Or replace a new twisting motor.
		2 beeps Pl-pl, Pl-pl...	Curl guide is open.	Open/close curl guide.	Fully close curl guide.
		3 beeps Pl-pl-pl, Pl-pl-pl...	Tie-wire has run out.	Check if the Tie-wire has been run out.	Set the new tie wire.
			Wire caught inside reel.	Check if wire inside reel has been loosened and caught.	Remove fray on reel.
			A foreign object or a loop on the wire is blocking the wire guide or mouth.	Check for foreign objects or loops on the wire.	Remove the foreign objects with compressed air etc. Cut of the loop and insert the wire again.
			Poor connection on the wire guide engine or the engine is defective	Check the connections and wire guide engine.	Clean the connections. Replace if necessary the wire guide engine.
			A wire is caught in the cutter section or Wire guide A.	Check if any wire is caught.	Disassemble the cutter section and remove the caught wire.

Normal Operation	Problem	Warning Sound	Cause	What to Check	Solution
Binding wire draws a circle.	Curl is disordered and steps out of curl guide.	No sound emitted.	Wire, by hitting reinforcing bars, was repelled.	Check if wire hits reinforcing bars at binding.	Pay attention so that wire does not hit reinforcing bars at binding.
	No wire cutting takes place.	No sound emitted.	Cutter section is blocked with foreign substance or the cutting knife is worn out.	Check that all parts of the cutter section is working.	Clean the cutter unit with compressed air and replace worn out parts if necessary.
Wire is subject to cutting.	Wire gets entangled.	No sound emitted.	Wire, by hitting reinforcing bars, was repelled.	Check if wire hits reinforcing bars at binding.	Pay attention so that wire does not hit reinforcing bars at binding.
		7 beeps. Pi-pi-pi-pi-pi-pi, Pi-pi-pi-pi-pi-pi...	There is foreign substance between Magnetic plate (Pos. 326) and Route PWB unit (Pos. 325). Or bad connection of connecting wire "P" and/or "M".	Check if there is foreign substance between Magnetic plate (Pos. 326) and Route PWB unit (Pos. 325). Or bad connection of connecting wire "P" and/or "M".	Remove the foreign substance between Magnetic plate (Pos. 326) and Route PWB unit (Pos. 325). Or bad connection of connecting wire "P" and/or "M".
Wire twisting takes place.			The wire is stuck around the twister.	Check if the wire got entangled in the twister.	Remove the unwanted wire.
		4 beeps Pi-pi-pi-pi, Pi-pi-pi-pi...	Bad connection of connecting wire "A" and/or "U". Or twisting motor is burned.	Check the wire "A" and/or "U" connection.	Reconnect or replace the wire "A" and/or "U". Or replace a new twisting motor.
	Binding power is weak.	No sound emitted.	Reinforcing bars is not of designated size.	Confirm size of reinforcing bars to be bound.	Use appropriate diameter scope.
			The tool is not held correctly against the work piece or the torque setting unit has not been adjusted correctly.	Confirm how to hold the tool against the work piece.	Adjust the torque to a higher level and use the tool correctly.
	Twisting-off takes place.	No sound emitted.	Reinforcing bars is not of designated size.	Confirm size of reinforcing bars to be bound.	Use appropriate diameter scope.
	No error	Pi-pi-pi-pi-pi....	Erroneous handling such as improper application of machine.	Confirm how to apply machine to reinforcing bars.	Adjust the torque to a lower lever and insert in vertical direction, use as tilting at 45°.
		6 beeps Pi-pi-pi-pi-pi-pi, Pi-pi-pi-pi-pi-pi...	Low power remains in the battery pack. The tool is used at high temperature.	Confirm the battery is fully charged. Check the temperature at the job site.	Perform normal charge. Leave the tool and the battery pack at normal temperature in the room for some time, and then continue the operation.



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