

A3M

INSTRUCTIONS FOR USING THE A3M V2.0 TYING MACHINE:



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GENERAL PRESENTATION



BEFORE USING YOUR MACHINE FOR THE FIRST TIME

Please read these instructions carefully before using the machine.

We strongly recommend that you ask for assistance from your retailer, who is authorised to give you all the advice you need to use the machine properly and achieve a good output.

It will take a day's use to acquire a sound knowledge of how to operate the machine.

Charge the battery for at least 3 hours before starting your first day's work.
(See chapter P9 battery recharge).

Disconnect the machine from its battery for all operations apart from tying.

Always keep your hands well away from the tying head when the machine is in operation.

We strongly recommend that, for safety and practical reasons, you use the case provided for carrying the machine and the battery in the workplace.

CARRYING THE MACHINE



Attach the belt 01 around your waist.

Place the battery on your stomach side.



In wet weather, the battery belt must be worn under waterproof clothing to keep the battery unit dry.

SWITCHING ON



The tying head should be in the working position before switching on.

CORRECT

INCORRECT



Connect the battery exit cable 01 to the machine supply cable 02.



The machine is switched on.

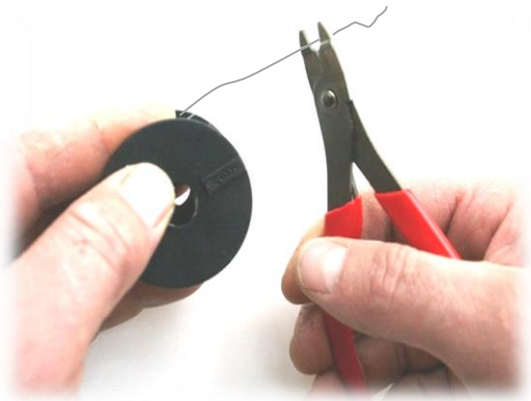
Short pressure on the switch 03 will control only the wire cutting function (zone 04).

Sustained pressure will launch the complete tying cycle (See chapter “Making a tie”).

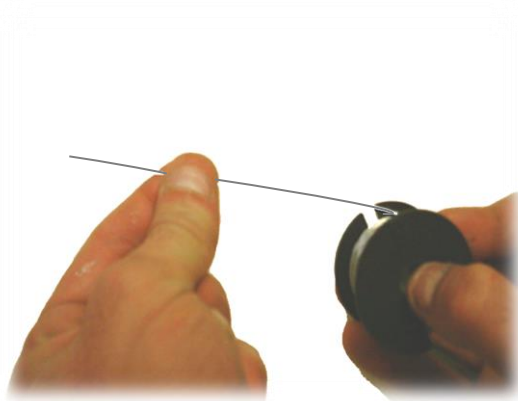
LOADING THE REEL

The wire needs to be prepared to make it easier to feed through the machine.

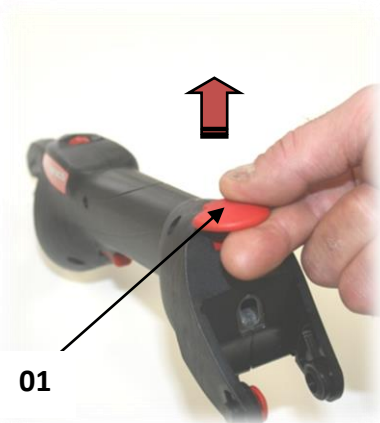
Cut the end to obtain a wire with no bends in it.



Smoothe the wire for at least 40 cm.



Clip the lever 01 upwards.



Clip the reel on to the machine between cheeks 01 and 02.

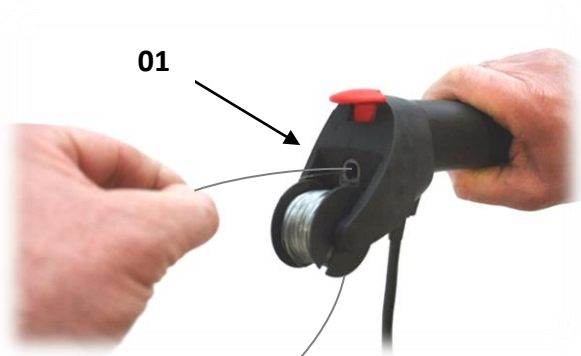


Insert the wire into hole 01.

If you come up against an obstacle during insertion, move the wire gently backwards and forwards and/or press once or twice the control switch to pivot the tying head and to keep the wire moving through the machine.

Keep on feeding the wire through until it emerges from the tying head 01.

⚠ IF THE WIRE STILL DOESN'T COME OUT: we recommend that you disconnect the tying head (See chapter "Operating problems" P16), check that the wire isn't stuck and try to insert it with the head removed.



Unclip the brake system lever 01.

At the start of each reel, check that the wire is properly rolled and doesn't stick between cheeks 02 and 03.

Switch the machine on and press briefly on the control switch to cut the excess wire.

You can now start tying operations.



REMOVING THE REEL

REEL WITH REMAINING WIRE

Clip lever 01 upwards to allow the wire free movement through the passage. Pull the reel to unclip it from the machine.



EMPTY REEL

Pull directly on the reel to unclip it from the machine. Carry out a visual check on wire exit 01 to ensure that there is no wire remaining in the machine.



After the last tying operation it is possible that some wire may remain stuck in the tying head:

- If it does not prevent you from loading another reel, carry on working. It will come out during tying, usually without a problem.
- If it does prevent you from feeding a new wire through, disconnect the head and remove the remaining wire by hand (See chapter "Solving operating problems").

USER GUIDE

GENERAL POINTS ON TYING METHODS.

See attached sheet:
“APPROPRIATE TYING METHODS P18”

MAKING A TIE (the machine should be switched on).

Hold the end of the branch and the trellising wire firmly in your free hand and bring the A3M V2 closer.

Firmly place the branch + the trellising wire inside the tying head.



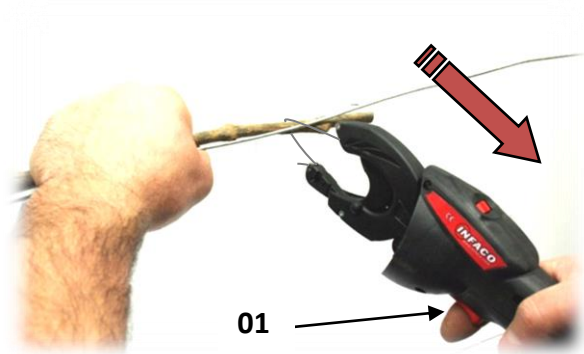
Position the tying head just before the last node on the branch.



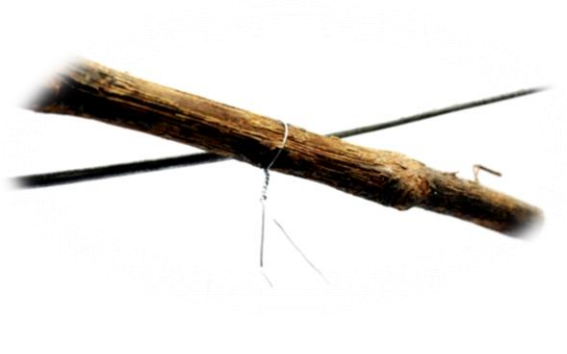
Go right up to the abutment to ensure that the arm closes fully and attaches the wire correctly.

Move the machine back firmly to release the tying head: the wire then wraps round the branch. Press control switch 01 to complete the tie.

The tie holds the branch on the trellising wire.



The knot is made more or less tight depending on how far you pull back the machine: See next chapter.



TIGHTENING THE KNOT

Position 1 = tight knot.

Position 2 = loose knot.

Pull the machine back approximately 1 to 2 cm, then press the control switch.

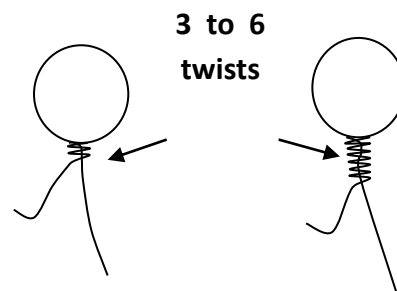
Pull the machine back approximately 3 to 4 cm, then press the control switch.



ADJUSTING THE NUMBER OF TURNS.

To vary the number of turns, move the wheel 01 to the right or left.

The number of twists increases the holding power of the tie.



Adjustments vary from 3 to 6 turns.

The standard knot adjustment is 4 twists.

Ask your retailer to help you choose the best compromise to suit your region, the type of wire you are using and the tying method.

RECHARGING THE BATTERY

The battery has sufficient autonomy to complete between 7000 and 8000 ties.

If you are thinking of doing more than 8000 ties a day, we advise you to:

1. Either recharge the battery for at least an hour during your lunch break to achieve extra autonomy of approximately 3000 ties.
2. Or buy the 2-battery option.

N.B. a few minutes before your battery is completely discharged, the A3M V2 may lose speed or no longer cut the wire.



Disconnect connector 03 on the A3M V2 from the battery (connector 02).

Connect plug 04 on the charger to the 230 V 50 Hz supply in a well-ventilated room free of inflammable products and sources of ignition.

Connect connector 01 on the charger to connector 02 on the battery.

The charger starts to work automatically as soon as the battery is connected. Indicator light 05 remains lit throughout charging. It starts flashing when your battery is fully charged. If the indicator light on your charger does not light up, leave your battery connected and, at the same time, disconnect the plug (230 V) from your charger and re-connect it until the orange indicator lights light up.

For information, it takes about 5 hours to charge up the battery belt.

Do not leave your battery on charge for more than 15 hours.

When the battery is charged, disconnect the charger to avoid damage caused by a possible power surge in your electricity supply.

Using a charger or battery other than those made by us is strictly prohibited as there is a risk of breakdown or accident; such use will cancel the manufacturer's guarantee.

It is essential to recharge the battery at least every three months during the off-season.

Safety instructions for batteries:

When on charge, the battery should be placed in a room, open to the air, out of its carrying case.

The room temperature should be between 10° C and 25° C and should not be damp.

The battery should not be covered or close to a heat source.

Never try to open it for any reason whatsoever.

Never place it in contact with water.

Check that it is clean and dry before putting it on charge.

Environmental protection instructions:

Batteries known under the abbreviation NiCd contain Cadmium; those known under the abbreviation NiMh contain Metal hydride.

Worn or faulty batteries must be recycled in compliance with directive 91/157/EEC.

Do not throw the battery out with the household rubbish; do not throw it into flames or water.

Do not open the battery/ machine.

Drop the battery/ machine off with an INFACO approved retailer.

The A3M charger should only be used with the A3M batteries provided for the purpose.

It is formally prohibited to use the A3M charger to recharge a non-rechargeable battery. This would lead to serious damage.

DAILY MAINTENANCE

Lubricate at least twice a day, in the morning before you start work and at midday, on the lubrication points shown below:



The following tasks should be carried out with the machine disconnected.

LUBRICATE TO RESTRICT WEAR

Spray the end of the head on the blade side.



Spray the end of the head on the wire-pinching side.



Spray inside the head.



Spray beneath the metal ring.



LUBRICATE TO MAKE YOUR WORK EASIER

Spray the point of contact between the reel and the left cheek.



Spray the point of contact between the reel and the right cheek.



Spray directly on to the wire on the reel, once or twice per reel, to help the wire to slide more easily as it moves round the reel.

We strongly recommend doing this when the wire becomes unpleasantly difficult to pull on during the typing operation.



ANNUAL MAINTENANCE

During the off-season, recharge your battery at least once every two months and store your machine in a dry place at a temperature of between 10° C and 25° C maximum.

We strongly recommend that you carry out our suggested servicing routine every year. This will allow you to start off the following season comfortably and in complete safety.

OPERATING PROBLEMS



Unless stated to the contrary, these tasks should be carried out with the machine disconnected.

THE LOOP NO LONGER FORMS AROUND THE BRANCH DURING THE TYING OPERATION

A piece of wire may be stuck in the wire pincher 01.

To release it, press pin 02 in the circular orifice with your fingernail or using the supplied pliers.

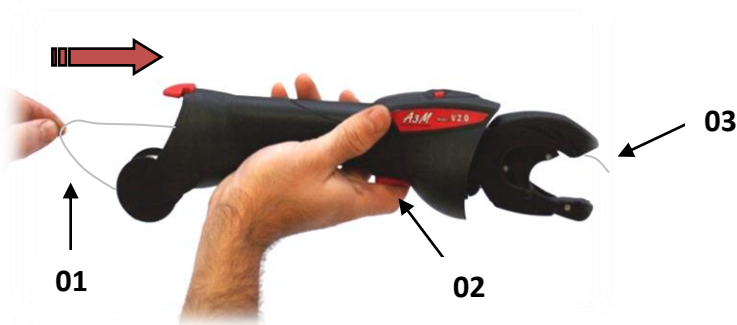


The wire may be bent at exit 01: **(no need to disconnect the machine)** simply go through the cycle empty or run the knife only and resume the tying action.



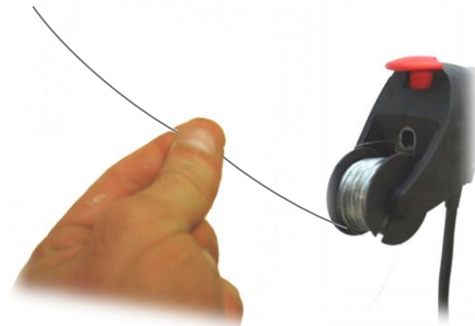
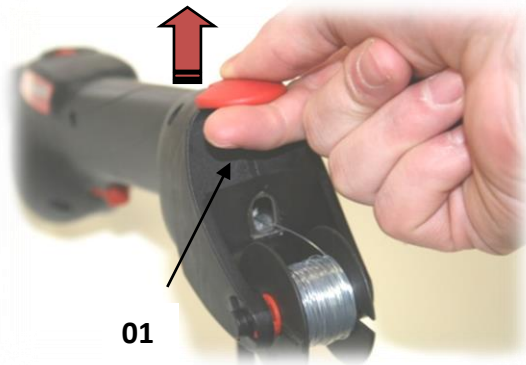
THE WIRE HAS RETREATED INSIDE THE MACHINE

Try first of all to take hold of the wire at the back of the machine (area 01) and push it forwards. If the wire emerges (area 03) switch the machine back on and press control switch 02 to carry out a short cut, then resume tying operations.



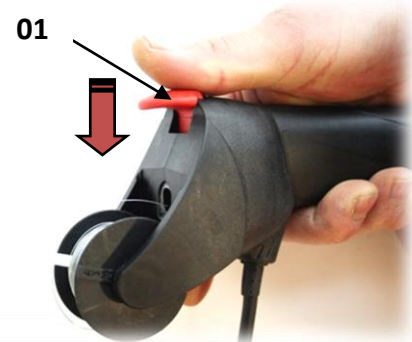
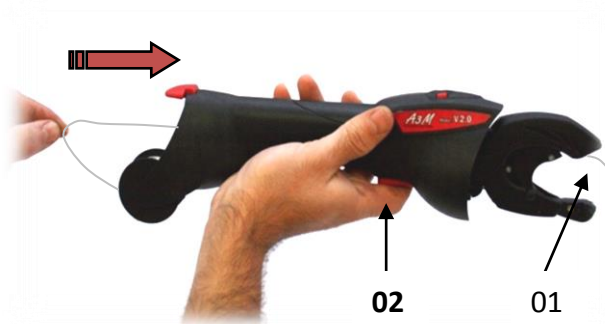
If the wire does not emerge, unclip lever 01 and pull it right out of the machine.

Remove the wire; it may be jammed because of a bend, in which case you will need to pull firmly to remove it. Then straighten the wire so that it threads smoothly through the machine.



Thread the wire through until it emerges (area 01). Switch the machine back on and press control switch 02 to carry out a short cut .

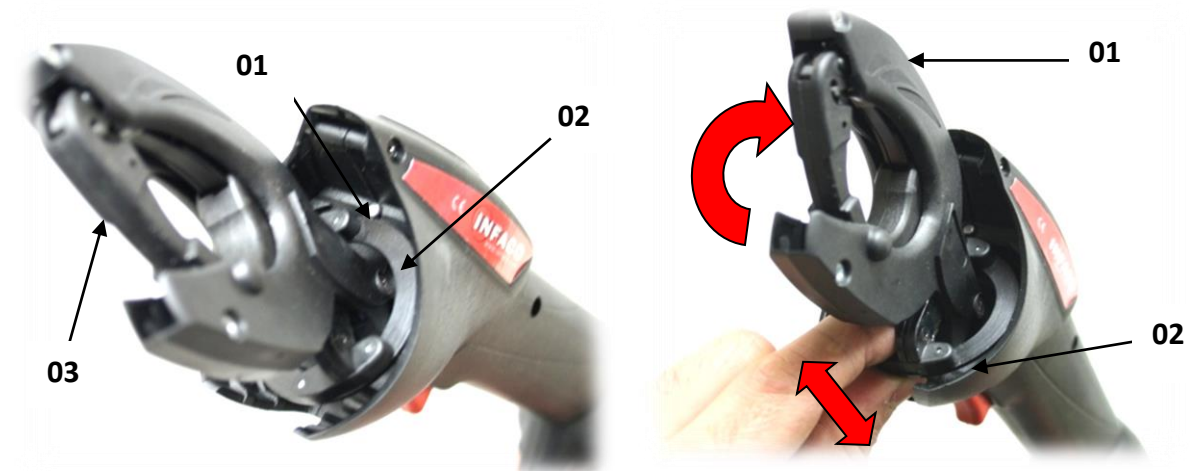
Unclip lever 01 and resume tying operations .



THE TYING HEAD IS STUCK, THE MACHINE NO LONGER OPERATES

Push rod 01, which hits against ring 02 when the wire is cut, sometimes goes out of its trajectory and become stuck on the outer edge of ring 02. The arm 03 often remains locked and can't open completely. **Do not try to force arm 03 open as you may damage the mechanism.**

Bring tying head 01 in to a central working position, following the arrow below. Then take hold of ring 02 and move it forwards and backwards until the push rod returns to its position beneath ring 02.



It is normal for the tying head 01 to resist and make you force it to bring it back into its operating position.

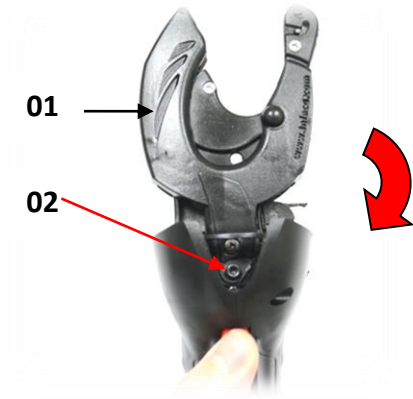
Ring 02 is released when the push rod has returned to its initial position. The arm 03 must be fully open. Check that the tying head can turn freely again. You can then switch the machine back on and resume tying operations.



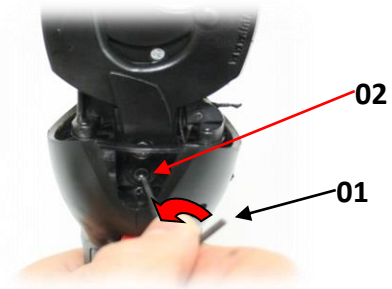
AT THE END OF THE REEL, SOME WIRE IS STUCK IN THE TYING HEAD

Pivot tying head 01 90° to gain access to screw 02.

Use key 01 to loosen screw 02 by approximately 4 or 5 turns.

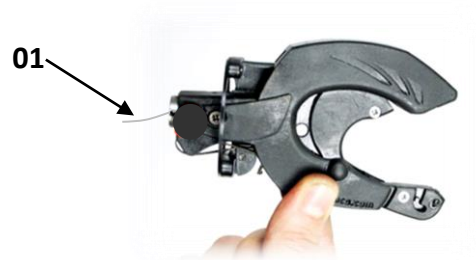
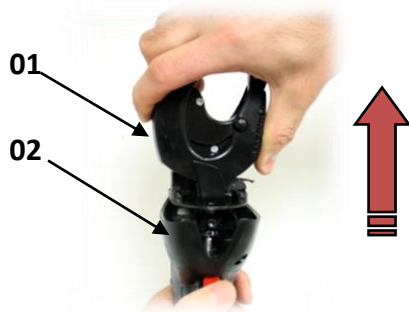


To avoid the risk of losing screw 02, we recommend that you do not unscrew it completely.



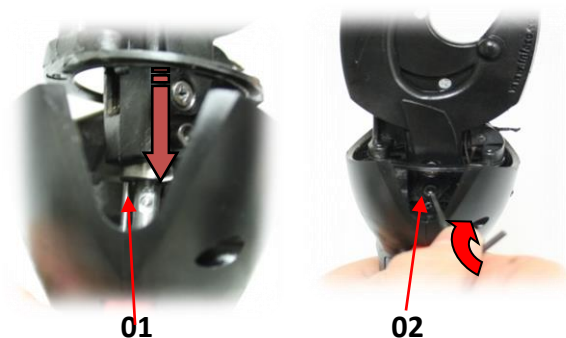
Take hold of tying head 01 and pull it to remove it from the body 02 of the machine.

Once you have disconnected the tying head, remove the end-of-reel wire 01 from the tying head. You can also take the opportunity to insert the new wire, as it will be easier to thread through.



Before you put the head back on, we recommend lubricating the shaft with guide pin 01.

Put the tying head back on, positioning guide pin 01 opposite its housing. Then tighten screw 02 to complete the operation.





SAFETY INSTRUCTIONS



Disconnect the machine from its battery for all operations apart from tying

DO NOT LEAVE THE TYING MACHINE SWITCHED ON DURING TRANSPORT.

The tying machine must be disconnected from its battery for the following operations:



- When you are putting on or removing the battery belt.
- For all repair or maintenance jobs on the tying machine.

When the machine is in operation, always remember to keep your hands away from the tying head.

Never leave your battery on charge for more than 15 hours.

Do not work with the tying machine if you are tired or if you don't feel well.

Wear non-skid shoes.

Do not leave the machine within the reach of children or visitors.



Do not use the machine if there is a risk of fire or explosion, e.g. the presence of inflammable liquids or gases.

Never carry the charger by its cable. Keep the cable away from heat, oil and cutting edges.



Never place the charger in contact with water.

Never use the machine at night or in poor light without setting up extra lighting.




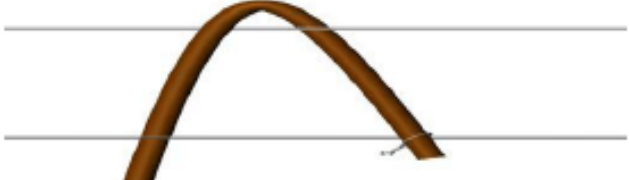

This machine does not cause vibrations or jerks.

Do not leave the machine on the ground and do not leave it exposed to bad weather.

When using the machine, keep both feet firmly on the ground and stay as well balanced as possible.

If the supply cable on your charger is damaged, have it changed by the INFACO factory or an approved A3M retailer.

Tying method and appropriate wire





Tying method	Number of ties	Ø wire	Sketch	
Branch wound with lifting wire	1 or 2	0,40 or 0,46 or 0,50		If
Branch wound without lifting wire	minimum 2	0,50		N wo *No
Branch unwound with lifting wire	minimum 2	0,50		F ess g re
Branch unwound without lifting wire	Not recommended, not guaranteed to hold.			
Branch bowed with or without lifting wire	1 or 2	0,50		Th tie
"Cordon de Roya" with lifting wire	2	0,50		A
"Cordon de Roya" without lifting wire	Not recommended, not guaranteed to hold.			

*N.B. growth should be taken inside the lifter wires as early as possible, mainly for very windy departments

The number of twists varies between 3 and 5 for all tying methods.

For further information or guaranteed holding for another trellising method,

Tying method and appropriate wire

	Observations
	<p>If the branch is wound all the way to its tip, the 0.40 tie may be used in regions that are not too windy, as long as the wires are lifted quite early.</p> <p>*For regions where there is a risk of strong winds, use only 0.50.</p>
	<p>N.B. for vines with no lifter, the tie can only be guaranteed to hold if the branch is wound all the way to its tip and attached with 2 ties at an interval of approximately 3 to 5 cm.</p> <p>*Not recommended for regions where there is a risk of strong winds, not guaranteed to hold.</p>
	<p>For short branches, 2 x 0.50 ties at the end of the branch. For long branches, it is essential to place 1 x 0.50 tie loosely at the start of the branch (to allow the branch to grow) and 1 x 0.50 tie attached tightly at the end of the branch. *Not recommended for regions where there is a risk of strong winds, not guaranteed to hold.</p>
	Not recommended, not guaranteed to hold.
	<p>The tie on the end of the branch must be tight, as there is not a bud after the tie. If a tie is added at the beginning of the branch, this should not be tightened to allow the wood to grow properly.</p>
	<p>Attach to the ends (with no buds after the tie). Contact us for advice about young vines.</p>
	Not recommended, not guaranteed to hold.

only

GUARANTEE CONDITIONS

A3M machines are guaranteed for one year against all faults and manufacturing defects.

The guarantee is not valid unless the guarantee card has been duly filled in and returned to the address printed on it.

If the guarantee card has not been returned at the time of the guarantee request, the ex-works departure date will be used to determine the guarantee period.

INFACO may not be held liable for any machines sold by distributors more than a year after they have left the factory.

This guarantee covers normal usage of the machine and does not cover:

- damage caused by poor maintenance or a lack of maintenance,
- damage caused by incorrect usage,
- damage caused by normal wear and tear,
- machines that have been dismantled by unauthorised repairers,
- outside agents (fire, flood, lightning, etc...),
- impacts and their consequences,
- machines for which the guarantee card has not been returned at the time of purchase,
- machines used with a battery or charger other than an A3M brand.

In no circumstances will the guarantee give rise to compensation for the fact that the machine is immobilised while it is being repaired. Repair or replacement during the guarantee period does not give the right to an extension or renewal of the initial guarantee.

The guarantee covers factory labour costs (on the condition that the machine has always been serviced) but does not necessarily apply to retailer labour costs.

The guarantee on the machine will no longer be valid if the machine has been worked on by anyone other than an approved A3M agent.

We strongly recommend that, in the event of a breakdown, users of A3M equipment should contact the retailer who sold the machine or our after-sales department on (925) 371-0796

To avoid disputes, please note the following procedure:

- for equipment covered by the guarantee, please send it to us carriage paid and we will return it at our expense,
- for equipment not covered by the guarantee, but which has been serviced during the previous off-season, please send it to us carriage paid and we will return it at our expense,
- for equipment not covered by the guarantee, and which has not been serviced during the previous off-season, please send it to us carriage paid and we will return it at your expense, cash on delivery. We will send you an estimate if the cost of the repair is more than 80 € ex-VAT.

We offer a servicing package for an inclusive fee at the end of each season.

You may choose to extend your guarantee over the first 2 seasons. N.B. to take advantage of the guarantee extension over the first 2 seasons:

- you must opt for the servicing package from the end of the first season (servicing carried out between April and late July).

If the service is not carried out during the first season after you have purchased your machine, the guarantee extension will be cancelled.

SPECIFICATIONS

Manufacturer: **INFACO S.A.S. - 81140 CAHUZAC-SUR-VÈRE (FRANCE)**

Type: **A3M v2.0**

Machine weight: **690 g**

Battery weight: **655 g**

Wiring and battery belt weight: **890 g**

Tie capacity: **maximum 28 mm**

Machine power: **120 W**

Charger model: **A369C**

Charger power: **65 W**

Battery voltage: **12 Volts**

Primary charger voltage: **230 Volts 50 Hz**

Secondary charger voltage: **12 Volts**

Attacheuse A3MV2 Fonctionnement à vide	
Valeur d'émission sonore déclarée conformément à la NF EN 60745-1:2009	
Niveau de pression acoustique pondéré A	72 dB(A)
au poste de travail, LpA	
Incertitude, KpA	3 dB(A)

Attacheuse A3MV2 Fonctionnement à vide	
Valeur d'émission vibratoire déclarée conformément à l'EN 12096	
Valeur mesurée d'émission vibratoire, aH	5,3 m/s ²
Incertitude, K	1,5 m/s ²
Valeurs déterminées conformément à la NF EN 60745-2-15:2009	

These specifications are given for guidance only. They are in no circumstances contractually binding and may be modified for the purpose of improving the product without prior notice.

Patented equipment.

A3M

RETAILER SECTION

The retailer should keep this section

Name: First name:

Company name:

Full address:
.....

Postcode: Town:

Telephone: Fax: Mobile:

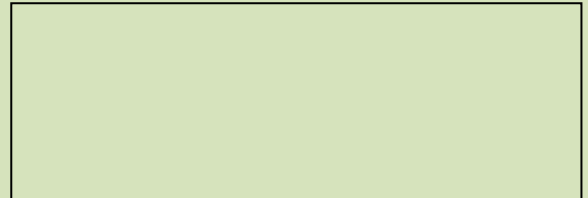
E-mail:

Serial no.: Purchase date: / /

Comments:
.....

CUSTOMER SIGNATURE:

RETAILER STAMP:



not correctly filled in and not sent in time may not be taken into consideration

A3M

RETURN THIS COUPON TO INFACO AS SOON AS YOU HAVE PURCHASED THE MACHINE

RETURN this form IMMEDIATELY, duly filled in in CAPITAL LETTERS to ensure full guarantee cover.

Name: First name:

Company name:

Full address:
.....

Postcode: Town:

Telephone: Fax: Mobile:


E-mail:

Serial no.: Purchase date: / /

Comments:
.....

CUSTOMER SIGNATURE:

RETAILER STAMP:



Any coupon not correctly filled in and not sent in time may not be taken into consideration

Serial no.:

RETAILER

To be kept
by the retailer
for the INFACO
customer file

A3M

Electric tying machine



INFACO-USA, INC.
2356 RESEARCH DRIVE
LIVERMORE, CA 94550 USA
Office: (925) 371-0796
contact@infaco-usa.com
<http://www.infaco-usa.com>

A3M

DÉCLARATION DE CONFORMITÉ CE DECLARATION OF CONFORMITY (CE)

INFACO s.a.s. déclare que le matériel neuf désigné ci-après :
INFACO S.A.S. declares that the new equipment designated below:

Attacheuse électrique
Tying machine

de marque : - brand name: **INFACO** - modèle : - model: **A3Mv2**

N° de série : - Serial no :

Année de fabrication : - Year of manufacture:

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est conforme aux dispositifs des directives :
complies with the provisions of the directives for:

- "Machines" (directive 2006/42/CEE).
"appliances" (directive 2006/42/CEE)

- "Emissions sonores machines utilisées en extérieur" directive 2000/14/CE (arrêté du 18 mars 2002) modifiée par la 2005/88/CE (arrêté du 22 mai 2006).
Directive 2000/14/EC « on the noise emission by equipment for use outdoors » (order of 18 march 2002) modified by the directive 2005/88/EC (order of 22 may 2006).

Attacheuse électrique – Tying machine A3Mv2	
Niveau de pression acoustique pondéré A au poste de travail, LpA <i>Sound pressure level, LpA</i>	72 dB(A)

- "Chargeurs électriques" (directive 2004/108/CEE) et aux réglementations nationales les transposant.
"electric chargers" (directive 2004/108/CEE) and with national legislation adapting them.

- La personne autorisée à constituer le dossier technique au sein d'INFACO est M.ALVAREZ Grégory.
The person authorized to compile the technical file within the company INFACO is Mr. Gregory ALVAREZ.

L'appareil est également conforme aux dispositions des directives européennes suivantes :

The equipment also complies with the provisions of the following European directives:

NF EN 61000-3-2	NF EN 61000-4-5	NF EN 550014-2
NF EN 61000-4-2	NF EN 61000-4-6	NF EN 55022
NF EN 61000-4-3	NF EN 61000-4-11	NF EN 55011
NF EN 61000-4-4	NF EN 55014-1	

Fait à : *Signed in* : CAHUZAC SUR VÈRE

Le : *Date*: 28/08/2013

M. DELMAS Daniel, PDG de la Société INFACO
INFACO Managing Director

Signature : *Signature*:

INFACO s'engage à fournir aux autorités nationales les informations pertinentes concernant la machine. *INFACO undertakes to provide national authorities with all relevant information*

