

SAFETY PRECAUTIONS

PAX-VF

PAR-VF

HAR-VF



Foreword

This user's manual describes about the correct using method and instructions for use of this product. Please use this machine after understanding the contents of the manual.

This manual may contain discrepancies in detailed specifications as compared with the actual production model. If you have any questions about this manual, consult your TAJIMA distributor.

We believe that "MACHINE SETUP INSTRUCTIONS" are useful to deepen your knowledge about this product. Please also read those booklets.

Regarding how to handle the products related, refer to the user's manual exclusive for them included in the manual CD.

Tokai Industrial Sewing Machine Co., Ltd.

SAFETY PRECAUTIONS

To prevent any harm or damage to the person who use this product or other person, we describe items that must be surely followed as below.



Indicates that there is a lot of danger of death or serious injuries [*1] if handled by mistake.




Indicates that there is a likelihood of death or serious injuries [*1] if handled by mistake.




Indicates a potentially hazardous situation which may result in minor or moderate injury [*2] or property damage if handled by mistake.

*1: A condition caused by electric shock, injury, fracture of a bone, etc., that leads to aftereffects, or an injury that necessitates hospitalization or visits to a hospital over a long period.

*2: An injury that does not necessitate hospitalization or visit to a hospital over a long period.

 : Prohibited items

 : Items that may cause electric shock if not observed


 : Items that must be followed carefully to ensure safe operation
















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1. Warning and caution





1-1. WARNING

WARNING




-  This machine is designed for industrial use. Use this machine for hole-making, sewing, or embroidery of semi- or finished leather or textile products and similar materials.^[1] Do not use this machine for other purposes in principle.
-  Do not stand on the machine.
-  Do not use a device such as a cellular phone that generates microwave near the control circuits of the power supply box, the operation panel box, etc. Microwave may cause malfunctioning of the machine.
-  Do not detach covers for the shaft and the pulley. Also, do not run the machine without the covers.
-  Do not bring your hands or anything else close to the needle during operation. Failure to observe this may result in injury due to being pierced by the needle or the perforator needle.
-  Do not bring your hands or face close to moving parts during operation. Especially, vicinities of frame, needle, rotary hook, take-up lever, pulley, and speed reduction box are dangerous. (PAX-VF, HAR-VF)
-  Do not bring your hands or face close to moving parts during operation. Especially, vicinities of frame, perforator needle, pulley, and speed reduction box are dangerous. (PAR-VF)
-  Read this book thoroughly and understand the contents of operation certainly. Then, operate the machine.
-  Wear proper clothes and tidy up yourself so that you can smoothly perform the operation.
-  A single operator should operate the machine in principle. If plural operators are working together, make sure that no one is working near the moving units of the machine before starting the machine.
-  Use the machine under the environment where access can be supervised so that unauthorized person does not operate the machine. Supervise children so that they do not access to the machine.
-  Only the persons who are sufficiently trained for the operation must operate the machine.
-  The rear of the machine is not a working area. If you have to move to the rear of the machine, make sure to turn OFF the main switch.
-  Stop the machine before threading into the needle and checking the finish of hole-making, sewing, or embroidery.
-  Stop the machine before checking the finish of hole-making. (PAR-VF)

[1] The PAR-VF provides only the hole-making function. The HAR-VF provides only the embroidery and sewing functions.

 **WARNING**

-  Do not damage, modify or heat the power or other cables. Do not exert undue force to them, either. Otherwise the cables will be damaged causing fire and electric shock.
-  Insert the power cable plug fully. If a metallic part etc. touches an electrode in the plug, it may cause fire and/or electric shock.
-  Keep away electrical units from water and chemicals. Entry or splashing of them into electrical units leads to short circuits, causing fire, electric shock and other troubles. If water or other chemicals enter the unit, turn OFF the power switch, shut OFF the primary power of the machine and contact your local distributor.
-  Before opening the electrical boxes, be sure to turn OFF the power switch of the machine and shut OFF the primary power. If not, it may cause electric shock.

1-2. CAUTION **CAUTION**

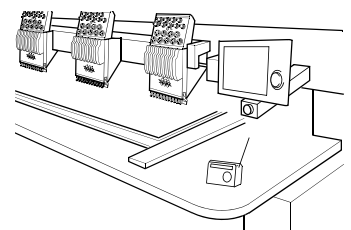
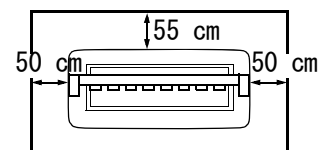
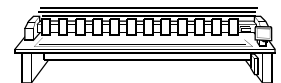
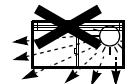
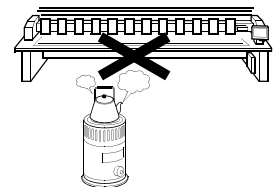
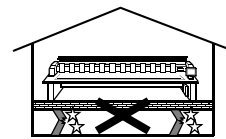
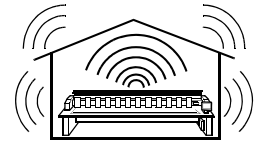
-  Use the machine with about 70% of the maximum speed as "Operation for total fitting" for about one week after installing this machine. By performing operation for total fitting, life of the machine will become longer, which will be useful to avoid unexpected troubles.
-  Do not use bent needles or needles that are not suitable for the material. (PAX-VF, HAR-VF)
After the completion of work, shut off the power supply switch of the machine and also the primary power supply switch of power distributor panel.
-  Do not put things on the machine table.

! CAUTION

- !** Control the operation noise in the environment.
This machine is designed to reduce noise during operation. To improve the sound insulation performance in a factory still more, use the interior finish materials which show high sound insulating performance for the walls, ceiling, and floor of the factory.
- !** Install the machine on a sturdy floor.
The floor structure must be strong enough to bear the machine weight (indicated on the spec. plate).
- !** Avoid dust and moisture.
Since dust and moisture lead to dirt and rust on the machine, use the machine in an environment of facility of air conditioner, and clean the working place periodically. Use caution not to expose the machine to direct wind from the air conditioner so that sewing threads do not become disheveled.

Humidity:
30 to 95% RH (relative humidity) without condensation

Ambient temperature:
5 to 40°C (during operation), -10 to 60°C (during storage)
- !** Avoid direct sunlight.
If the machine is exposed to direct sunlight over an extended period of time, the machine body may be discolored or deformed. Put curtains or shades to prevent the machine from direct sunlight.
- !** Provide enough space for maintenance.
Taking account of workability when maintaining and inspecting the machine, provide working area of 50 cm or more to right and left, and 55 cm or more to rear directions for the machine against obstacles such as walls.
- !** Pay attention to interference of radio wave.
Although the machine is designed not to affect radio wave interference to other equipments, there could be cases where it causes interference depending on operation environment and type of other equipment. If such problems arise, install the equipment with a space from the machine as big as possible.





2. How to use each part

2-1. Power switch

When turning ON the power, set the power switch to "ON". When turning OFF the power, set this switch to "OFF". If the emergency stop switch is pressed or the power is shut off during operation, the power switch will be positioned at the middle.

When Signal Tower is equipped(→p.6)

CAUTION

-  To turn ON the power again, wait for 30 seconds or more. The system sometimes may not start up normally.
-  Do not turn ON the machine power with the USB memory connected to the operation panel. The system sometimes may not start up.



Middle position between ON and OFF



To cancel, turn "OFF" once, then turn "ON".

(*1)
About symbolic signage of the power supply switch

- "| " Power switch : ON
- "O " Power switch : OFF

To lock the power switch, use the padlock.



Padlock
(Commercial item)

There are also following types depending on the spec.

ON (*1)



OFF (*1)



Middle position between ON and OFF



(*1)
About symbolic signage of the power supply switch

"|" Power switch : ON

"O" Power switch : OFF

To cancel, turn "OFF" once, then turn "ON".


To lock the power switch, use the padlock.



Padlock
(Commercial item)

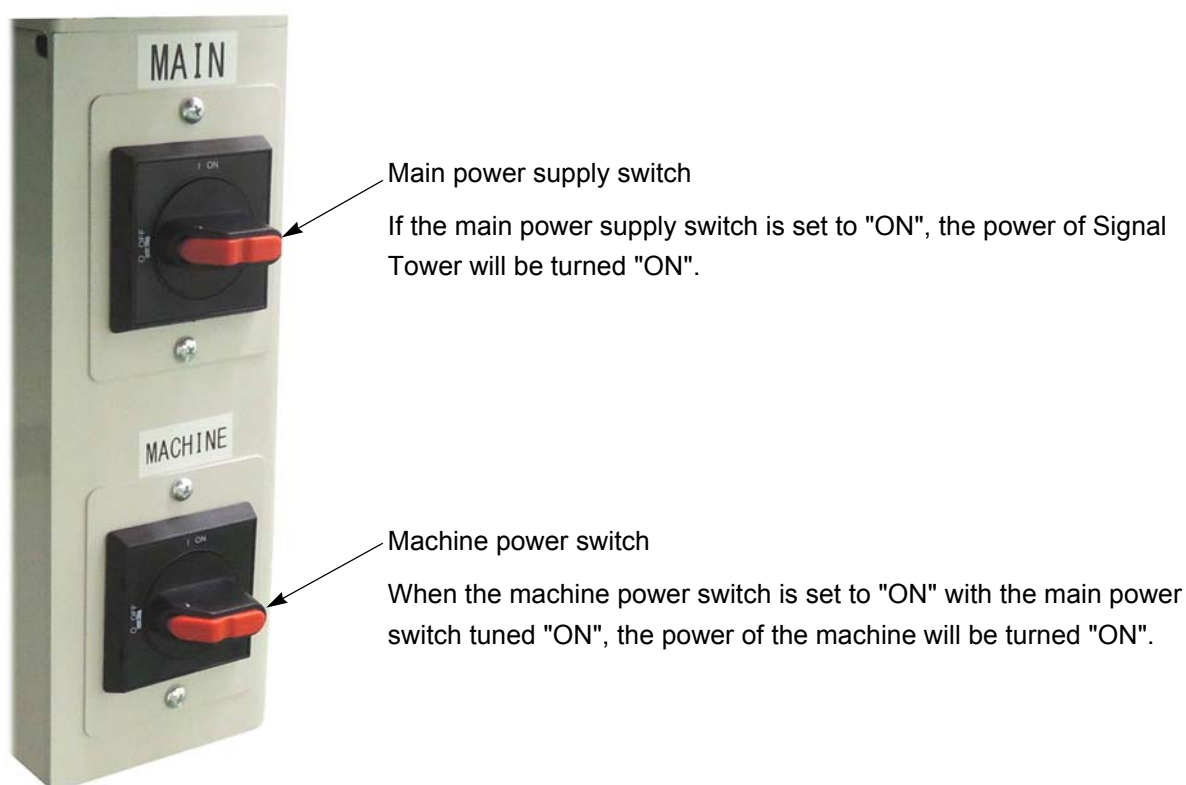
[When Signal Tower is equipped]

WARNING

-  To perform cleaning, lubrication and greasing, be sure to turn OFF the main power switch. You may sustain severe injuries due to being entangled by moving machine.

When Signal Tower is equipped, twin type power supply switch can be selected.

Twin type power supply switch



(1) How to turn ON the power

1. Set the main power supply switch to "ON".
2. Set the machine power supply switch to "ON".

(2) How to turn OFF the power

1. Set the machine power supply switch to "OFF".
2. Set the main power supply switch to "OFF".


2-2. Emergency stop switch

The emergency stop switch is equipped as a measure for safety. There are following two types depending on the model. Pressing this switch during operation will turn OFF the power and stop the machine. At this time, the power switch will be switched to the middle position.



[How to resume]

CAUTION

 When performing this operation, do not put your hands, etc. on the table. Moving the frame could injure you.

(1) Turn the switch to the right. The lock will be released.

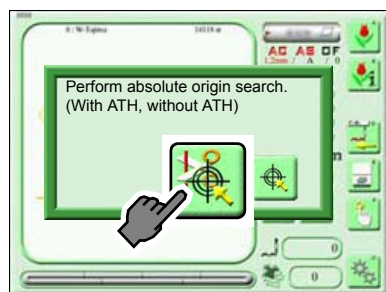


- (2) The power switch is set to "Middle position". Turn "OFF" → "ON" the power switch. At this moment, wait for 30 seconds or more.



In the case of twin type power supply switch, the main power of the machine will be turned OFF, and the machine power switch will be at "Middle position".

- (3) After the electricity is connected and the power starts up, press either one of following two icons according to sewing condition. Pressing icon will move the frame.



The frame will be moved after thread trimming.



The frame will be moved without thread trimming.

- (4) After Frame Travel, the frame may move forward by some stitches from the original position. Check the frame position, then restart sewing after performing Frame Back.

[When the power is shut off in the middle of embroidery]

When the power is shut off due to cause like the power failure, restart sewing according to the following procedure.


CAUTION

 When performing this operation, do not put your hands, etc. on the table. Moving the frame could injure you.

- (1) After the electricity is connected and the power starts up, press icon G. Code No.2E3 will be reset.



- (2) Press either one of following two icons according to sewing condition. Pressing icon will move the frame.



The frame will be moved after thread trimming.



The frame will be moved without thread trimming.

- (3) After Frame Travel, the frame may move forward by some stitches from the original position. Check the frame position, then restart sewing after performing Frame Back.

2-3. Bar switch

 **CAUTION**

- !** Before starting the machine, pay enough attention to the surrounding safety. Moving needle bar and/or frame could injure you.

**(1)** During stop


Move the bar switch to the right and release it immediately.	Operation starts.
Move the bar switch to the right and hold it at that position.	The machine will work slowly. When released, the machine will run normally.
[H head (PAX-VF, HAR-VF)] Move the bar switch to the left and release it. (up to 10 stitches)	The head with thread breakage will move its presser foot to FB position and perform Frame Back by one stitch unit. The head without thread breakage will move its presser foot to the retractable position and perform Frame Back or Frame Forward by one stitch unit. Frame Back: This function makes the frame move to the direction which stitches return with the needle bar stopped. Frame Forward: This function makes the frame move to the direction which stitches advance with the needle bar stopped.
[P head] Move the bar switch to the left and release it. (up to 10 stitches)	Frame Back or Frame Forward will be performed by one stitch unit in the state that the presser foot is at the retractable position.


<p>Move the bar switch to the left and hold it at that position. (11 stitches or more)</p>	<p>The machine will continue Frame Back/Frame Forward. Even if you release it, the machine will not stop.</p> <p>Frame feed amount can be selected among 1, 3 and 5 stitches.</p> <p>Moving it to the left again will cause the machine to stop FB/FF.</p>
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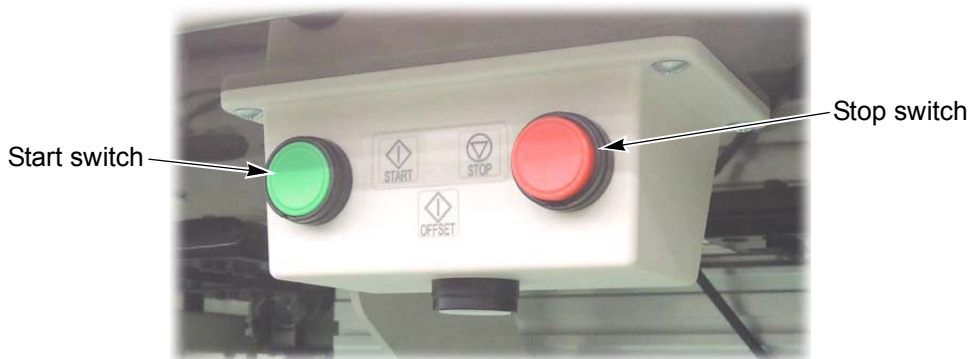
(2) During operation

<p>Move the bar switch to the left and release it.</p>	<p>Operation stops. The presser foot will stop at the upper dead point of the presser foot stroke.</p>
<p>Move the bar switch to the right and hold it at that position.</p>	<p>The embroidery speed will go down, and become slow operation.</p>

2-4. Start/Stop switch

 **CAUTION**

 Before starting the machine, pay enough attention to the surrounding safety. Moving needle bar and/or frame could injure you.



(1) During stop

<p>Press the start switch once.</p>	<p>Operation starts.</p>
<p>Keep on pressing the start switch.</p>	<p>The machine will work slowly.</p> <p>When released, the machine will run normally.</p>

<p>[H head (PAX-VF, HAR-VF)]</p> <p>Press the stop switch once. (Up to 10 stitches)</p>	<p>The head with thread breakage will move its presser foot to FB position and perform Frame Back by one stitch unit.</p> <p>The head without thread breakage will move its presser foot to the retractable position and perform Frame Back or Frame Forward by one stitch unit.</p> <p>Frame Back: This function makes the frame move to the direction which stitches return with the needle bar stopped.</p> <p>Frame Forward: This function makes the frame move to the direction which stitches advance with the needle bar stopped.</p>
<p>[P head]</p> <p>Press the stop switch once. (Up to 10 stitches)</p>	<p>Frame Back or Frame Forward will be performed by one stitch unit in the state that the presser foot is at the retractable position.</p>
<p>Keep on pressing the stop switch. (11 stitches and more)</p>	<p>The machine will continue Frame Back/Frame Forward. Even if you release it, the machine will not stop.</p> <p>Frame feed amount can be selected among 1, 3 and 5 stitches.</p> <p>Moving it to the left again will cause the machine to stop FB/FF.</p>

(2) During operation

<p>Press the stop switch once.</p>	<p>Operation stops. The presser foot will stop at the upper dead point of the presser foot stroke.</p>
<p>Keep on pressing the start switch.</p>	<p>The embroidery speed will go down, and become slow operation.</p>

3. Warning labels

The machine has warning labels that bear instructions for safe operation. Machine operators must follow the instructions shown on the warning labels. Do not detach the warning label nor make them illegible by painting, etc. If the warning label is missed or damaged, contact your TAJIMA distributor.



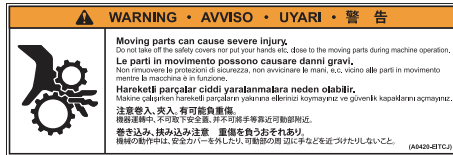
[a] There could be danger of burn, death or severe injury due to electric shock. Persons except the service personnel designated by Tajima should not open the covers. When you open the cover, turn OFF the power switch and wait for four minutes or more.



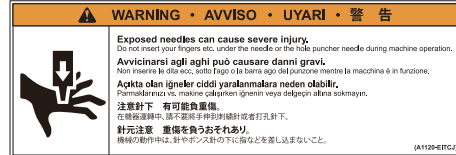
[b] There could be danger of being caught.

Persons except the service personnel designated by Tajima should not open the covers.

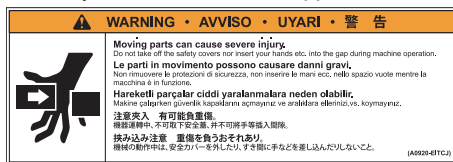
[c] Pay attention not to be caught into the machine.



[e] Pay attention around needle.



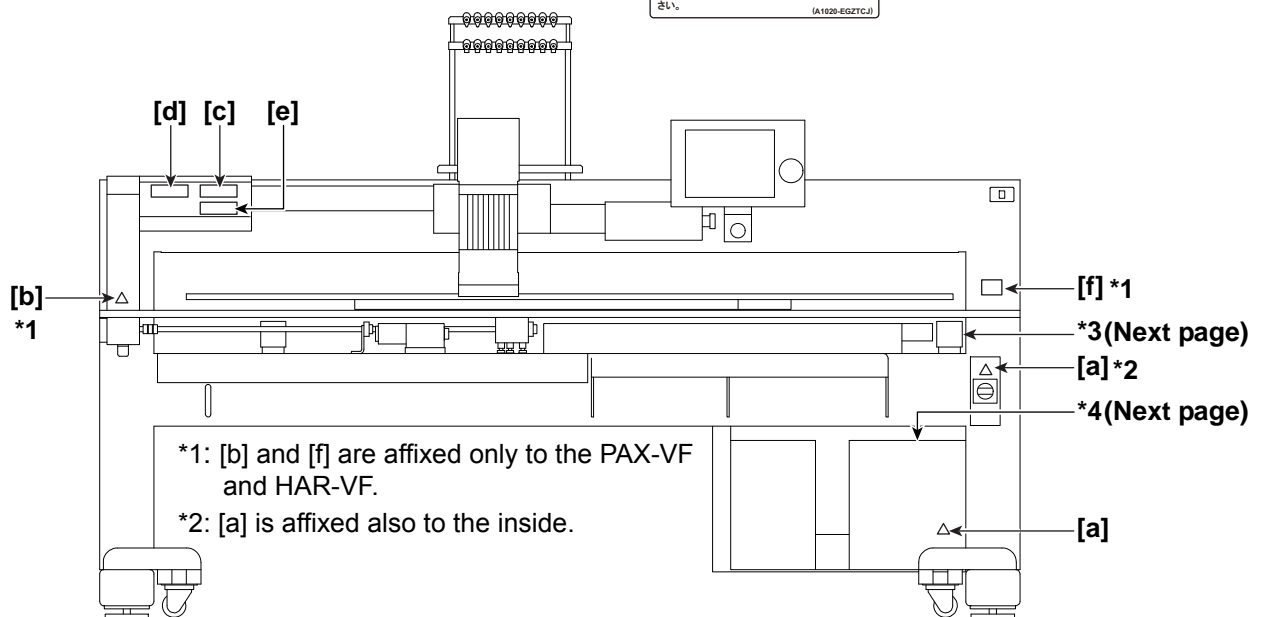
[d] Pay attention not to be clipped into the machine.



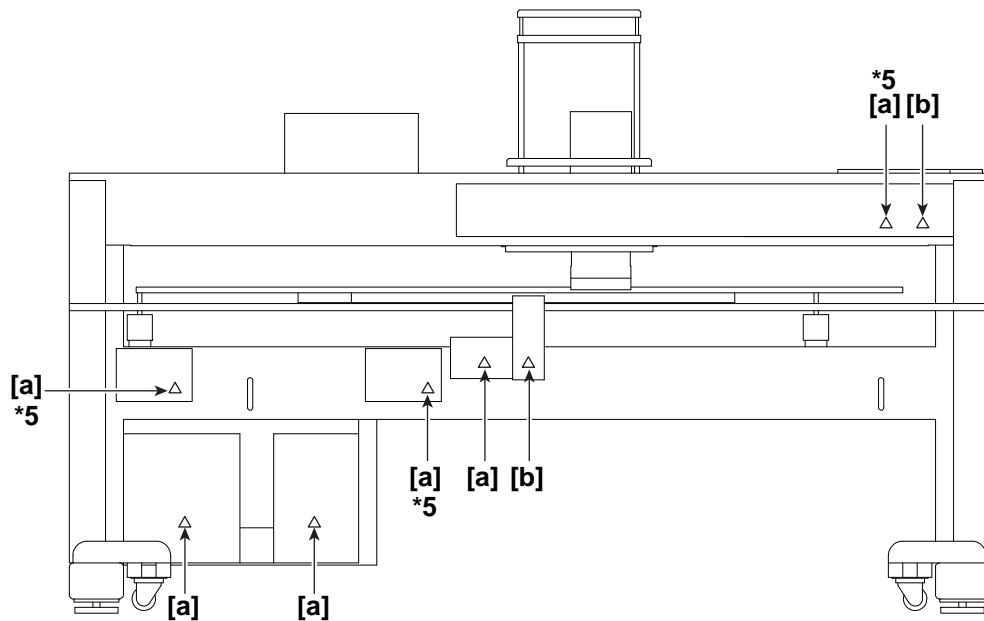
[f] Pay attention to rotary hook.



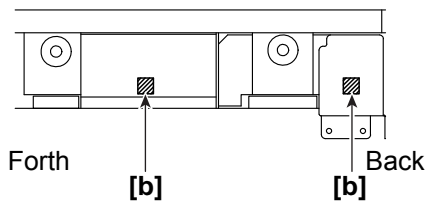
[Front view]



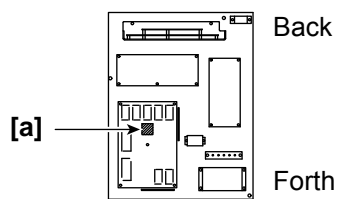
[Rear view]



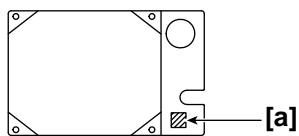
*3: Viewing X-axis drive system belt cover from side



*4: Viewing power supply box from top



*5: [a] is affixed also to X-axis / Y-axis / Main shaft driver card base inside the cover.



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