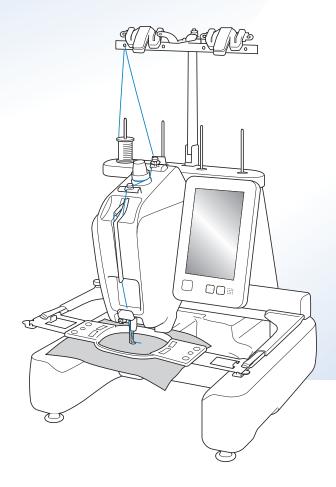


# **Operation Manual**

# **Embroidery Machine**

Product Code: 882-T52



Instruction Videos



https://s.brother/cvcab/

#### **INTRODUCTION**

Thank you for purchasing this machine. Before using this machine, carefully read the "IMPORTANT SAFETY INSTRUCTIONS", and then study this manual for the correct operation of the various functions.

In addition, after you have finished reading this manual, store it where it can quickly be accessed for future reference.

Failure to follow these instructions may result in an increased risk of personal injury or damage to property, including through fire, electrical shock, burns or suffocation.

# IMPORTANT SAFETY INSTRUCTIONS

Please read these safety instructions before attempting to use the machine.

# **ADANGER**

- To reduce the risk of electric shock
- **1** Always unplug the machine from the electrical outlet immediately after using, when cleaning, when making any user servicing adjustments mentioned in this manual, or if you are leaving the machine unattended.

# **AWARNING**

- To reduce the risk of burns, fire, electric shock, or injury to persons.
- 2 Always unplug the machine from the electrical outlet when lubricating it or when making any other user servicing adjustments mentioned in the Operation Manual.
- To unplug the machine, switch the machine to the symbol "O" position to turn it off, then grasp the plug and pull it out of the electrical outlet. Do not pull on the cord.
- Plug the machine directly into the electrical outlet.
   Do not use an extension cord.
- Always unplug your machine if the power is cut.

## **3** Electrical Hazards:

- This machine should be connected to an AC power source within the range indicated on the rating label. Do not connect it to a DC power source or inverter. If you are not sure what kind of power source you have, contact a qualified electrician.
- This machine is approved for use in the country of purchase only.
- 4 Never operate this machine if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or water is spilled on the unit. Return the machine to the nearest authorized Brother dealer or service center for examination, repair, electrical or mechanical adjustment.
- To avoid electric shock or fire; do not use a damaged power supply plug or loose electrical outlet, and ensure that the power supply plug is fully inserted and secure.
- While the machine is stored or in use if you notice anything unusual, such as an odor, heat, discoloration or deformation, stop using the machine immediately and unplug the power cord.
- When transporting the machine, be sure to lift it from the bottom positions. Lifting the machine by any other part may damage the machine or result in the machine falling, which could cause injuries.
- When lifting the machine, be careful not to make any sudden or careless movements, otherwise you may injure your back or knees.
- While the machine is being transported, be careful not to touch the operation panel, thread guides or any other part, otherwise injuries may result.

## **5** Always keep your work area clear:

- Never operate the machine with any air openings blocked. Keep ventilation openings of the machine free from the build up of lint, dust, and loose cloth.
- Do not use extension cords. Plug the machine directly into the electrical outlet.
- Never drop or insert any object into any opening.
- Keep fingers out of all machine openings, such as near the carriage, otherwise injuries may result.
- Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- Do not use the machine near a heat source, such as a stove or iron; otherwise, the machine, power cord or garment being embroidered may ignite, resulting in fire or an electric shock.
- Do not use this machine near an open flame; the movement of the embroidery frame could cause the garment being embroidered to catch fire.

- Do not place this machine on an unstable surface, such as an unsteady or slanted table, otherwise the machine may fall, resulting in injuries.
- While attaching or detaching an embroidery frame or other included accessory or while maintaining the machine, be careful not to hit the machine with your body or any other part of it.

## **6** Special care is required when embroidering:

- Always pay close attention to the needle. Do not use bent or damaged needles.
- Keep fingers away from all moving parts. Special care is required around the machine needle.
- While the machine is in operation, keep your hands away from the needle bar case and all moving parts near the needle bar case, otherwise injuries may result.
- Switch the machine to the symbol "O" position to turn it off when making any adjustments in the needle area, such as changing the needle.
- Do not use a damaged or incorrect needle plate, as it could cause the needle to break.

## 7 This machine is not a toy:

- Your close attention is necessary when the machine is used by or near children.
- This machine is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with this machine.
- This product contains small parts. Keep the product out of the reach of children to prevent accidental ingestion of small parts.
- Do not use the included scissors or seam ripper in any other way than how they are intended. In addition, when opening a hole with the seam ripper, do not place your hands or fingers in the cutting path, otherwise injuries may result if the seam ripper slips.
- The plastic bag that this machine was supplied in should be kept out of the reach of children or disposed of. Never allow children to play with the bag due to the danger of suffocation.
- Do not use outdoors.

# $oldsymbol{8}$ For a longer service life:

- When using and storing this machine, avoid direct sunlight and high humidity locations. Do not use or store the machine near a space heater, iron, halogen lamp, or other hot objects.
- Do not use cleansers or organic solvents, such as thinner, petroleum ether or alcohol, to clean the

- machine. Otherwise, the finish may peel off or become scratched.
- Always consult the Operation Manual when replacing or installing any assemblies, the presser feet, needle, or other parts to assure correct installation.

# **9** For repair or adjustment:

- Do not try to disassemble, repair or alter this machine in any way, otherwise a fire, electric shock or injuries may result.
- If the light unit is damaged, it must be replaced by an authorized Brother dealer.
- In the event a malfunction occurs or adjustment is required, first follow the troubleshooting table in the back of the Operation Manual to inspect and adjust the machine yourself. If the problem persists, please consult your local authorized Brother dealer.

Use this machine only for its intended use as described in the manual.

Use accessories recommended by the manufacturer as contained in this manual.

Use the interface cable (USB cable) included with this machine.

Values and measurements provides in inches are approximate. Actual values are provided in the metric unit of measurement.

The contents of this manual and specifications of this product are subject to change without notice.

For additional product information and updates, visit our website at <a href="https://www.brother.com">www.brother.com</a>

# SAVE THESE INSTRUCTIONS This machine is intended for household use.

# FOR USERS IN COUNTRIES EXCEPT EUROPEAN COUNTRIES

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

# FOR USERS IN EUROPEAN COUNTRIES

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

# FOR USERS IN THE UK, EIRE, MALTA AND CYPRUS ONLY

#### **IMPORTANT**

- In the event of replacing the plug fuse, use a fuse approved by ASTA to BS 1362, i.e. carrying the mark, rating as marked on plug.
- Always replace the fuse cover. Never use plugs with the fuse cover omitted.
- If the available electrical outlet is not suitable for the plug supplied with this equipment, you should contact your authorized Brother dealer to obtain the correct lead.

# **Terms of Use**

# IMPORTANT-PLEASE READ CAREFULLY:

This Terms of Use ("Agreement") is a legal agreement between Brother Industries, Ltd. ("Company") and you that governs your use of any Software, installed on or made available by Company for use with the machine (including sewing, embroidery or craft products, collectively "Company Product"). The term of "Software" means any and all contents data (including without limitation design and embroidery data, collectively "Content"), data format, firmware of Company Product, and PC application or mobile device application.

By using the Software and Company Product, you shall be deemed to have agreed to be bound by the terms of this Agreement. If you do not agree to the terms of this Agreement, Company is unwilling to license the Software and you are not allowed to use the Software. Amendments and supplements to this Agreement may be attached to the Software.

An individual who accepts this Agreement on behalf of an entity represents to Company that he or she has the legal right to enter into a binding legal agreement for that entity.

#### **Terms and Conditions**

#### 1 Grant of License.

- 1.1 Subject to this Agreement, Company hereby grants you a personal, non-exclusive, non-transferable and revocable license to use the Software only within the Company Product.
- 1.2 Your right to use of the Software is licensed and not sold, and solely for your use subject to this Agreement. Company or its suppliers retains all right, title, and interest relating to Software, including without limitation all intellectual property rights relating thereto.

#### 2 Restrictions

- 2.1 Except as expressly set out in this Agreement or as required by any local law, you shall undertake:
  - 2.1.1 not to disassemble, de-compile, reverse engineer, translate or otherwise attempt to learn the source code of the Software (including Content created by using Company Product or contents editing application software; hereinafter the same shall apply in this Clause 2.);
  - 2.1.2 not to create derivative works based on the whole or any part of the Software, but excluding, Your Content set forth in Clause 7.2;
  - 2.1.3 not to distribute, provide or make available the Software in any form, in whole or in part to any person without prior written consent from Company;
  - 2.1.4 not to copy the Software, except where such copying is incidental to normal use of the Software with Company Product or where it is necessary for the purpose of back-up or operational security;

- 2.1.5 not to transfer, rent, lease, sub-license, loan, translate, merge, adapt, vary, alter or modify, the whole or any part of the Software nor permit the Software or any part of it to be combined with, or become incorporated in, any other programs;
- 2.1.6 to include Company's or its licensor' copyright notice and this Agreement on all entire and partial copies of the Software; and
- 2.1.7 not to use the Software for any purpose (including, but not limited to, use with unauthorized sewing/embroidery/craft products or software) other than as provided under Clause 1 of this Agreement.

#### 3 No warranty

TO THE EXTENT PERMISSIBLE BY APPLICABLE LAW, THIS SOFTWARE IS PROVIDED TO YOU "AS IS" WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. COMPANY SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, NON-INFRINGEMENT AND/OR FITNESS FOR A PARTICULAR PURPOSE.

#### 4 Limitation of liability

- COMPANY SHALL NOT BE LIABLE TO YOU, ITS END-USERS OR ANY OTHER ENTITY FOR ANY LOSS OF PROFITS OR INCOME OR SAVINGS, LOSS OF DATA, INTERRUPTION OF USE, OR CONSEQUENTIAL, INCIDENTAL, SPECIAL, PUNITIVE OR INDIRECT DAMAGES INCURRED BY SUCH PARTY (WHETHER IN AN ACTION IN CONTRACT OR TORT), EVEN IF COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING OUT OF OR RELATING TO THE SOFTWARE, SUPPORT SERVICE OR THIS AGREEMENT. THESE LIMITATIONS SHALL APPLY TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.
- 4.2 NOTWITHSTANDING THE CLAUSE 3 OR 4.1 HEREOF, THIS AGREEMENT DOES NOT PURPORT TO EXCLUDE OR RESTRICT COMPANY'S LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM NEGLIGENCE OR LIMIT THE STATUTORY RIGHTS OF A CONSUMER.

# 5 Cost, charge incurred for your use of the Software.

- 5.1 You agree and understand that service(s) available by the Software may be provided through any network communication and therefore, during the course of your using this Software, any communication charge due to utilization of such networks will occur, and you shall bear such charge.
- 5.2 In addition to the above charge, you are solely responsible for any costs or expenses incurred by you in connection with your use of the Software.
- 5.3 In no event shall Company reimburse you for any above charge, costs or expenses.

#### 6 Support and Updates.

Company reserves the right, at its sole discretion, and with or without notice to you, to add or remove features or functions to or from the Software, or to provide programming fixes, enhancements, updates and upgrades, to the Software (collectively "Updates"). You agree that Company has no obligation to provide you with Updates, or make available to you any subsequent versions of the Software. You also agree that you may, in Company's sole discretion, be required to enter into a modified version of this Agreement if you want to use an Updates.

#### 7 Use of Content

- 7.1 You may use any Content uploaded or recorded or otherwise made available using, through or in connection with the Software by Company and its licensor (collectively "Company Content"). You may at least create hand-made craftwork items and use such handmade craftwork items for private use by using Company Content. Any requirements in such private use (e.g. editing restrictions) and other conditions for use (e.g. prohibited commercial use of hand-made craftwork items) may depend on Company Content, respectively. Please see TERMS OF USE (FOR PATTERNS) accompanied by this Software or Company Products.
- 7.2 You may produce new Content using this Software or other devices connected to this Software by creating or editing. If you produce new content ("Your Content"), you shall use such Your Content at your own risk.

#### **8** Your Obligations in respect of the Software

You warrant that you will:

- A) comply with all applicable laws, regulations and codes of practice with respect to your use of the Software;
- B) not use the Software in a way which is unlawful, defamatory, obscene, indecent, offensive or threatening or which infringes the Intellectual Property Rights of any third party; and
- C) not distribute or transmit any viruses, worms, Trojan horses or any other technologically harmful data, programs or software through, via or using the Software.

#### 9 Termination

- 9.1 Company shall have the right to terminate this Agreement at any time by providing a written notice to you if you commit a material breach of any terms of this Agreement and fail to immediately rectify such breach upon Company's request.
- 9.2 Upon termination for any reason all rights granted to you under this Agreement, you shall cease all activities authorized by this Agreement and you shall immediately delete or remove the Software from all computer equipment in your possession and delete or destroy all copies of the Software or its derivative works in your possession. In addition to the above, you shall delete Content created by you from the Company Product in your possession.

#### 10 Miscellaneous terms

- 10.1 You shall not export or re-export the Software or any copy or adaptation thereof in violation of any applicable laws or regulations.
- 10.2 Except for cases where transferring Company Products together with ownership, you shall not assign all or any part of this Agreement to any third party or any interest therein, without prior written consent of Company. A change of control or reorganization of you pursuant to a merger, sale of assets or stock shall be deemed to be an assignment under this Agreement.
- 10.3 You agree that a breach of this Agreement will cause irreparable injury to Company for which monetary damages would not be an adequate remedy and Company shall be entitled to seek equitable relief in addition to any remedies it may have hereunder or at law without a bond, other security, or proof of damages.
- 10.4 If any provisions of this Agreement shall be declared or determined as void or unenforceable by a court of competent jurisdiction, such provisions shall be severable and independent from the other provisions of this Agreement and the validity of the other provisions and of the entire Agreement shall not be affected thereby.
- 10.5 This Agreement, together with all exhibits or other attachments referenced herein, constitutes the entire agreement between the parties on the subject matter hereof, and supersedes all proposals, oral and written, between the parties on this subject.
- 10.6 If Company fails to insist that you perform any of your obligations under this Agreement, or if Company does not enforce any rights against you, or if Company delay in doing so, that will not mean that Company have waived any rights against you and will not mean that you do not have to comply with those obligations. If Company does waive a default by you, Company will only do so in writing, and that will not mean that Company will automatically waive any later default by you.

- 10.7 This Agreement is governed by the laws of Japan and Japanese Courts shall have exclusive jurisdiction with respect to this Agreement except with regard to enforcement in which case the jurisdiction of the Japanese Courts shall be non-exclusive.
- 10.8 The Company may update this Agreement in the following cases: A) When the changes are made for the users' benefit, or B) When the updates to the Agreement are adequate, reasonable, and not contrary to the purposes of the Agreement. Notwithstanding the foregoing, in principle, the contents of the amendments or modifications shall be published on the Company's website or by any other appropriate methods before the effective date of the amendments or modifications and enter into effect from the date that is separately specified in the notification.

#### 11 Third-Party Software

The Software may contain third-party software and/or open source software programs (collectively, "Third-Party Software"). As for details of the Third-Party Software, please refer to the terms and condition separately defined.

# TERMS OF USE (FOR PATTERNS)

All embroidery patterns, including but not limited to design and embroidery pattern and Content, in the machine ("Embroidery Patterns") is protected by copyright and other intellectual property rights (collectively "Intellectual Property Rights") owned by Company and/or its licensors.

You may use Embroidery Patterns and create handmade craftwork items by using Embroidery Patterns for the sole purpose of using Company Product, subject to the following conditions:

If you do not agree to the terms of this conditions, Company is unwilling to license Embroidery Patterns and you are not allowed to use Embroidery Patterns.

#### YOU MAY NOT:

- use Embroidery Patterns in a way which is or in manner that could be considered unlawful, defamatory, obscene, indecent, offensive or threatening or which infringes the Intellectual Property Rights (including trademarks) of any third party;
- use Embroidery Patterns with deceptive advertising, with display for third party's merchandise or sales to cause confusion or for imitation merchandise of third party;

The following conditions apply to each Embroidery Patterns.

#### You may

- use and edit Embroidery Patterns for the sole purpose of using Company Product;
- create hand-made craftwork items by using Embroidery Patterns, and assign, sell, rent, distribute or otherwise transfer such hand-made craftwork items for a profit.

#### YOU MAY NOT:

- remove copyright notice in Embroidery Patterns;
- use Embroidery Patterns with falsely represent, expressly or by way of reasonable implication, that any Embroidery Patterns were created by you or a person other than the copyright holder(s) of that Embroidery Patterns;
- assign, distribute or otherwise transfer Embroidery Patterns to third party;
- use Embroidery Patterns as or in connection with trademarks, servicemark, logo or otherwise merchantability shape of you or third party;
- use Embroidery Patterns to cause confusion in connection with copyright notice of you or identical or similar to third party.

# Laser Notices (For European countries)

# EN 60825-1:2014+A11:2021 and EN 50689:2021 Specification

This machine is Class 1 consumer laser product in EN60825-1:2014+A11:2021 and EN50689:2021 specifications. This laser indicates the needle drop point.



# Laser Notices (For countries except U.S.A. and European countries)

### **IEC 60825-1 Specification**

This machine is a Class 1 laser product as defined in IEC 60825-1:2007 and IEC 60825-1:2014 specifications.



# For countries except U.S.A.

The laser beam emitted by the laser unit installed in this machine is restricted to an output at a safe level. However, the machine contains 6-milliwatt, 630-640 nanometer wavelength, 6-12 degree at parallel divergence angle, 28-40 degree at perpendicular divergence angle, InGaAIP laser diodes. Therefore, eye damage may result from disassembling or altering this machine.

Safety precautions have been designed to prevent any possible laser beam exposure to the operator.

# **A** CAUTION

- This machine has a Class 3B Laser Diode in the Laser Unit. The Laser Unit should not be opened under any circumstances.
- Use of controls, adjustments or the performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

### **LICENSE AGREEMENT**

The enclosed machine includes data, software and/or documentation (collectively "CONTENT") that are proprietary products of Brother Industries, Ltd. ("BROTHER"). BY USING THE CONTENT, THE CUSTOMER ACCEPTS THE TERMS AND CONDITIONS OF THIS AGREEMENT. BROTHER retains ownership of all rights to CONTENT and to the copies of the CONTENT included in this package. The CONTENT are licensed (not sold) to you ("CUSTOMER") under the terms and conditions of this Agreement.

#### CUSTOMER is licensed to:

- Use the CONTENT in combination with an embroidery machine to create embroidery.
- Use the CONTENT in combination with an embroidery machine that CUSTOMER owns or uses, provided that the CONTENT is not used on more than one embroidery machine at a time.

Except as otherwise provided herein, CUSTOMER may not:

- Allow more than one copy of the CONTENT to be available for use at any one time.
- Reproduce, modify, publish, distribute, sell, rent, sublicense or otherwise make available to others CONTENT.
- Distribute, rent, sublicense, lease, sell, transfer or assign the media card or CONTENT.
- Decompile, disassemble or otherwise reverse engineer the CONTENT or assist others to do the same.
- Alter, translate, modify or adapt the CONTENT or any part thereof for business, commercial or industrial purposes.
- Sell or otherwise distribute the EMBROIDERY created by use of the CONTENT, WHICH ORIGINALLY BEARS CERTAIN COPYRIGHT NOTICE UNDER THE NAME OF ANY THIRD PARTIES OTHER THAN BROTHER (e.g. "©DISNEY").

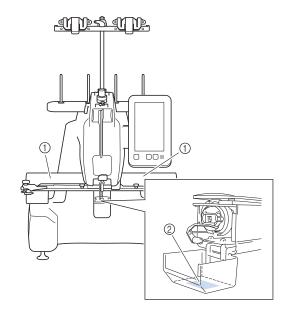
BROTHER retains all rights not expressly granted to CUSTOMER herein.

Nothing in this agreement constitutes a waiver of the rights of BROTHER under any law. This agreement shall be governed by the laws of Japan.

Please direct all inquiries concerning this Agreement in writing by regular mail, to Brother Industries, Ltd., 1-1-1 Kawagishi, Mizuho-ku, Nagoya 467-8562, Japan, Attention: P&H business division Sales and Marketing Dept.

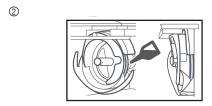
### **WARNING SIGN**

The following warning signs are on the machine. Be sure to observe the precautions described in the signs.









Please put a drop of oil onto the hook before use.

## **TRADEMARKS**

Any trade names and product names of companies appearing on Brother products, related documents and any other materials are all trademarks or registered trademarks of those respective companies.

# OPEN SOURCE LICENSING REMARKS

This product includes open-source software. To see the open source licensing remarks, please go to the manual download section on your model's home page of Brother support website at <a href="https://s.brother/cpcab/">https://s.brother/cpcab/</a>.

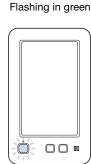
# MACHINE STRUCTURE AND FEATURES

#### ■ Safety mechanism

The machine is equipped with a locking mechanism that helps prevent injuries from accidental operation. The machine can only be started after the machine is unlocked. The color of the "Start/Stop" button changes to inform you of whether or not the machine is locked.

Lit in red

The machine is locked.



The machine can be started.

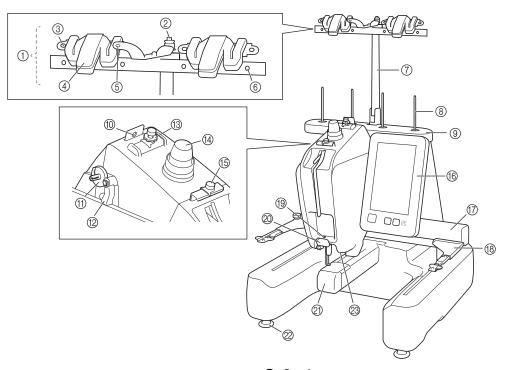
# CONTENTS

INTRODUCTION	
IMPORTANT SAFETY INSTRUCTIONS	1
LICENSE AGREEMENT	7
WARNING SIGN	8
TRADEMARKS	8
OPEN SOURCE LICENSING REMARKS	8
MACHINE STRUCTURE AND FEATURES	8
NAMES OF MACHINE PARTS AND THEIR	
FUNCTIONS	10
Front view	
Right-side/rear view	11
Operation panel	11
INCLUDED ACCESSORIES	12
SETTING UP THE MACHINE	12
Setup and transporting precautions	
Setup location	13
Setting up the machine	13
Preparing the thread guide assembly  Attaching the Embroidery Frame Holder	
OPERATING PRECAUTIONS	
Power supply precautions	
PREPARING FOR STARTING THE	13
EMBROIDERY	16
Turning on the machine	
Removing the bobbin case	
Winding the bobbin	
Installing the bobbin	20
Installing the bobbin case	
Selecting the embroidery pattern	
Checking a preview image	21
Understanding the pattern editing screen	24
Attaching stabilizer (backing) to fabric	
Hooping the fabric in the embroidery frame	
Embroidery frame types	
Attaching the embroidery frame to the machine	
Upper threading	28
Threading the needle	
Checking the needle drop point with the Embroidery Crossh	
Positioning Laser	
Easily changing the thread spools	32
Removing the embroidery frame	
Removing the fabric	
Turning off the machine	
Replacing the needle	
APPENDIX	
Checking the thread tension	
Maintenance	
TROUBLESHOOTING	
Error messages	
UPDATING YOUR MACHINE'S SOFTWARE	
Using USB media to update Using computer to update	48
Osing Computer to update	49

### NAMES OF MACHINE PARTS AND THEIR FUNCTIONS

The names of the various parts of the machine and their functions are described below. Before using the machine, carefully read these descriptions to learn the names of the machine parts.

#### Front view



- ① Thread guide assembly
- ② Bobbin pretension disc

Pass the thread around the bobbin pretension disc when winding the bobbin thread.

3 Thread guide hole

Pass the thread through thread guide hole from front side to back when winding the bobbin thread.

4 Thread cutter/holder

Cut the thread here when changing the upper thread. Also, you can hold the thread here when not using.

(5) Front hole in the thread guide

Pull the thread toward you placing the thread through the guide hole from top to bottom.

(6) Thread guide hole

Place the thread from back to front through the hole when winding the bobbin or threading the machine.

- 7) Thread guide assembly support
- 8 Spool pin
- Spool stand
- 10 Thread guide

Pass the thread through when threading the machine.

(f) Bobbin winder seat

Set the bobbin when bobbin winding.

Bobbin winding switch

Set to the left to start bobbin winding.

Upper thread guide pretension knob

Adjust the tension of the thread.

Thread tension knob

Adjust the tension of the thread.

(5) Middle thread guide

Pass the thread through when threading the machine.

Operation panel

#### ⑦ Carriage

Attach the Embroidery Frame Holder to the carriage. When the machine is turned on or when the machine is embroidering, the carriage moves forward, backward, left and right.

- **(8)** Embroidery Frame Holder
- (9) Lower thread guide

Pass the thread through when threading the machine.

20 Thread cutter

Cuts and holds the thread for needle threading.

② Hook cover/Hook

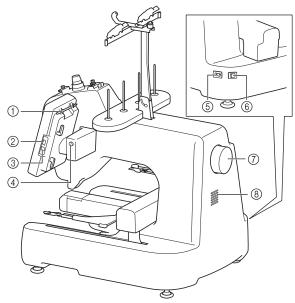
Open the hook cover, and then insert the bobbin case into the hook.

∅ Feet

Use the feet to level and adjust the height of the machine.

Embroidery light

## Right-side/rear view



#### 1 Touch pen holder

Use the touch pen holder to hold the touch pen when not in use.

#### ② USB port (USB 2.0)

In order to send patterns from/to USB media, plug the USB media directly into the USB port.

#### ③ USB port for computer

In order to import/export patterns between a computer and the machine, plug the USB cable into the USB port.

# **IMPORTANT**

• Do not insert anything other than a USB flash drive into the USB port. Anything else may damage the machine.

#### 4 LCD panel angle button

Press to change the angle of the operation panel. Do not change the angle without pressing this button.

#### ⑤ Power cord receptacle

Insert the plug on the power supply cord into the power supply plug.

#### (6) Main power switch

Use the main power switch to turn the machine ON (I) and OFF (O). Do not turn the power on soon after turning the power off. It is recommended that you wait 5 seconds before turning the power back on

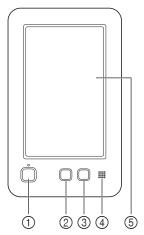
#### ⑦ Handwheel

Rotate the handwheel to move the needle up and down. Be sure to rotate the handwheel toward the operation panel.

#### 8 Ventilation slots

The ventilation slots allow the air surrounding the motor to circulate. Do not cover the ventilation slots while the machine is being used.

#### **Operation panel**



#### (1) "Start/Stop" button

Press the "Start/Stop" button to start or stop the machine. The lighting status and color of the button changes depending on the operation condition of the machine.

Lit in red : When the machine cannot start

embroidering

Flashing in green : When the machine can start

embroidering

Lit in green : While the machine is embroidering
Off : When the machine is turned off

#### ② Thread trimming button

Press the thread trimming button to trim both the upper and the bobbin threads.

#### 3 Automatic needle-threading button

Press the automatic needle-threading button to thread the needle.

#### 4 Speaker

#### (5) LCD (touch panel)

Touch the keys that appear on the touch panel to select and edit patterns and confirm various information.

### **INCLUDED ACCESSORIES**

For included accessories of your machine, refer to the additional sheet "Included Accessories".

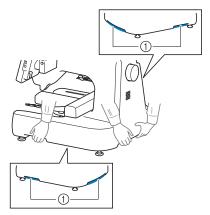
#### **SETTING UP THE MACHINE**

The procedures for setting up the machine are described below. If the machine is not set up correctly, it may shake or produce loud noises and the embroidery will not be performed correctly. An optional embroidery stand is also available.

#### Setup and transporting precautions

# **A** CAUTION

• The transporting or setting up of the machine should be performed by two people. When transporting the machine, be sure to have two people lift the machine from the bottom at the indicated slots (①). Lifting the machine from any other area may damage the machine or result in the machine falling, which could cause injuries.



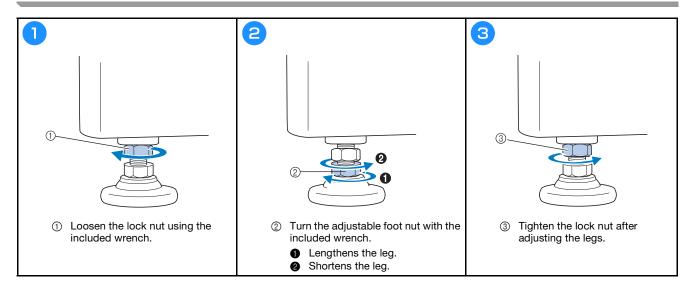
- Do not plug in the power supply cord until setup of the machine is completed, otherwise injuries may result if the "Start/Stop" button is accidentally pressed and the machine starts embroidering.
- When lubricating the machine, wear protective eyeglasses and gloves to prevent the oil or grease from getting into your eyes or on your skin. Do not put the oil or grease into your mouth. Keep the oil and grease out of the reach of children.
- In order to prevent malfunctions or damage, do not set up the machine in a location exposed to the following conditions.
  - Liquids, such as water
  - Extreme dust
  - Direct sunlight
  - Extremely high or extremely low temperatures. The operating environment should be between 5 °C (40 °F) and 40 °C (104°F).
  - Insufficient space (page 13)
  - Objects within the moving range of the embroidery frame
  - Blocked ventilation slots at the back and on the rear underside of the machine
  - An unstable surface

### **Setup location**

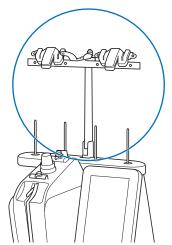
# Dimensions of machine 506 mm (W) × 587 mm (D) × 747 mm (H) (Approx. 20-59/64 inches (W) × 23-7/64 inches (D) × 29-13/32 inches (H)) \* When installing this machine, secure a space of at least 35 cm (approx. 13-25/32 inches) from the front of the machine, at least 5 cm (approx. 2 inches) from the rear, and at least 15 cm (approx. 6 inches) from the left and right sides.

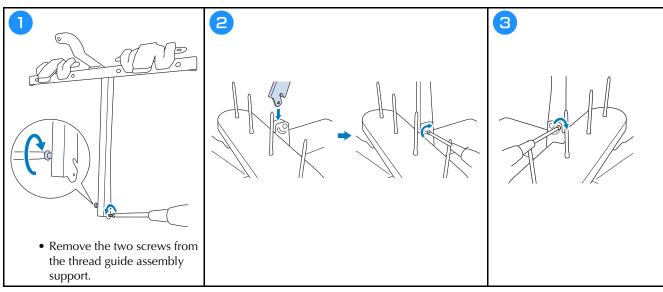
- Allow sufficient space around the machine.
- Place no objects within the moving range of the embroidery frame.
- Set-up machine near an electrical outlet.
- Use a level and stable surface, such as a desk or stand.
- Use a surface that can support the weight of the machine.
- Allow open space around the ventilation slots at the back and on the rear underside of the machine.

### Setting up the machine

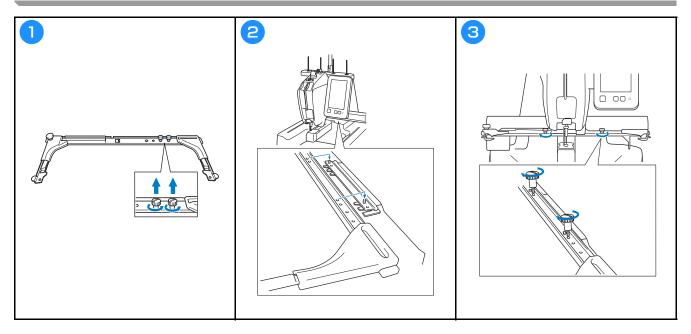


# Preparing the thread guide assembly





# Attaching the Embroidery Frame Holder



### **OPERATING PRECAUTIONS**

The necessary points to ensure the correct operation of this machine are described below.

#### **Power supply precautions**

Be sure to observe the following precautions concerning the power supply.

# **▲** WARNING

- Use only regular household electricity for the power source. Using other power sources may result in fire, electric shock, or damage to the machine.
- Do not plug in or unplug the power supply cord with wet hands, otherwise an electric shock may result.
- If any of the following occur, turn off the machine and unplug the power supply cord, otherwise a fire, an electric shock or damage to the machine may result.
  - When you are away from the machine.
  - After using the machine.
  - If a power outage occurs while the machine is being operated.
  - If the machine is not operating properly, for example, when there is a loose or cut connection.
  - During electrical storms.

# **A** CAUTION

- Do not plug this machine in with extension cords or multi-plug adapters with any other appliances plugged into them, otherwise a fire or an electric shock may result.
- When unplugging the power supply cord, be sure to first turn off the machine, and then grasp the plug when unplugging the cord. Pulling on the cord may damage it or result in a fire or an electric shock.
- Do not allow the power supply cord to be cut, damaged, modified, forcefully bent, pulled, twisted, or bundled. In addition, do not place heavy objects on the cord or expose it to heat, otherwise damage to the cord, fire or an electric shock may result. If the power supply cord or its plug is damaged, stop using the machine, and then take the machine to your authorized Brother dealer for repairs before continuing use.

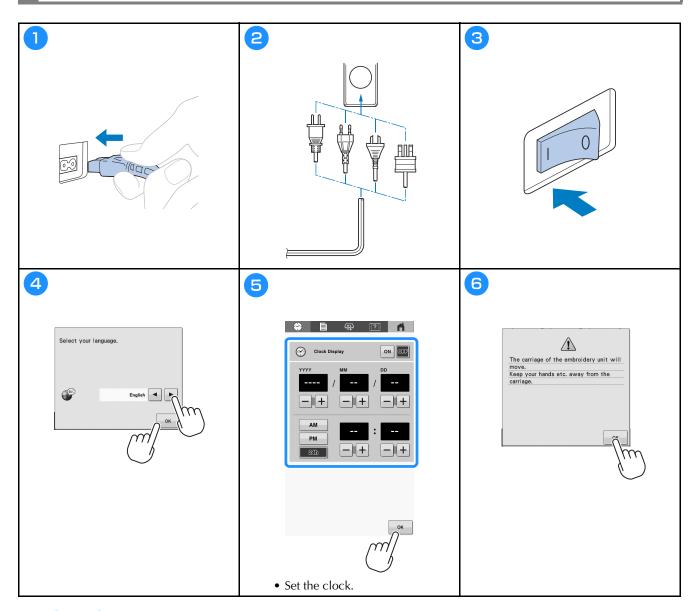
## PREPARING FOR STARTING THE EMBROIDERY

Refer to the detailed Operation Manual for detailed instructions.

### **Turning on the machine**

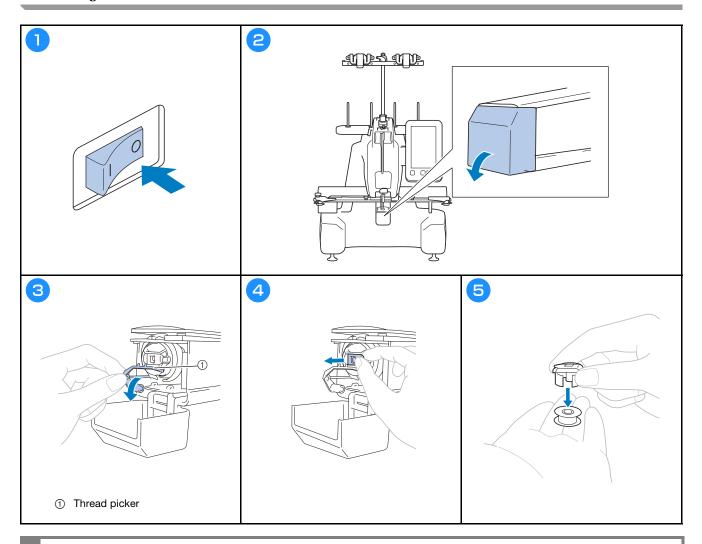
# **IMPORTANT**

• In order to prevent malfunctions or damage, do not place any objects within the moving range of the carriage.



Steps 4 and 5 are only needed when you turn on the machine for the first time.

# Removing the bobbin case



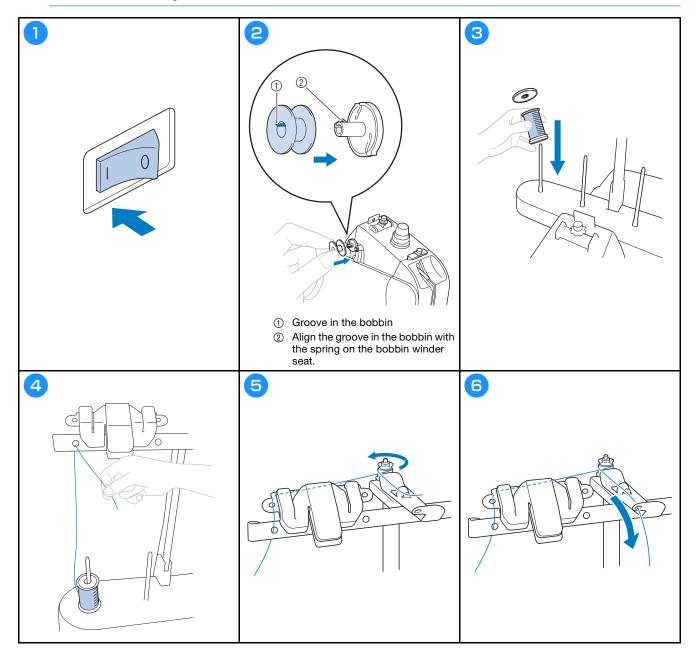
# **IMPORTANT**

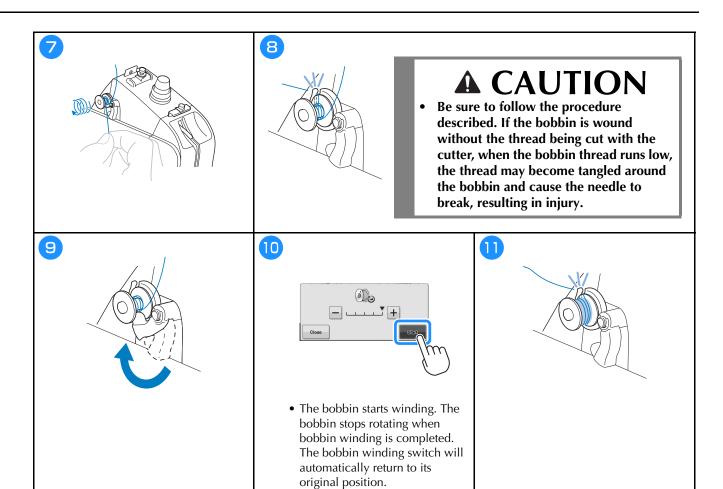
• The thread picker can only be moved within a certain range. Do not pull it with extreme force.

# Winding the bobbin

#### ☆ Note

- Use cotton or spun polyester bobbin thread (from #90 to 120, or 74 dtex/2 to 100 dtex/2).
- Circled numbers on the thread guide assembly indicate the threading path for winding the bobbin. Also refer to these while threading the machine.



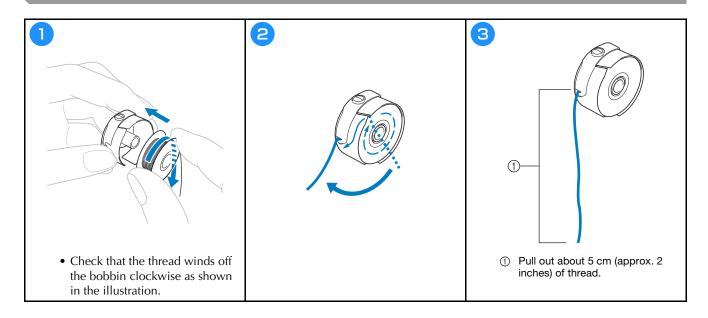


# **A** CAUTION

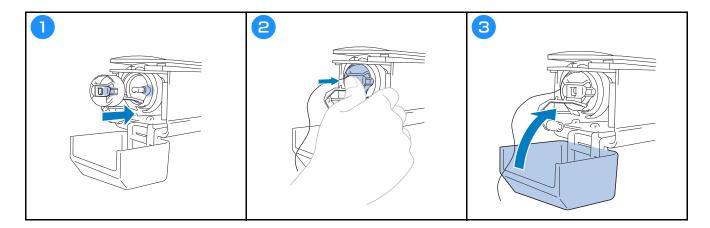
• Be sure to use a bobbin that has been correctly wound. Otherwise, the thread tension may be incorrect and the needle may break, causing injuries.



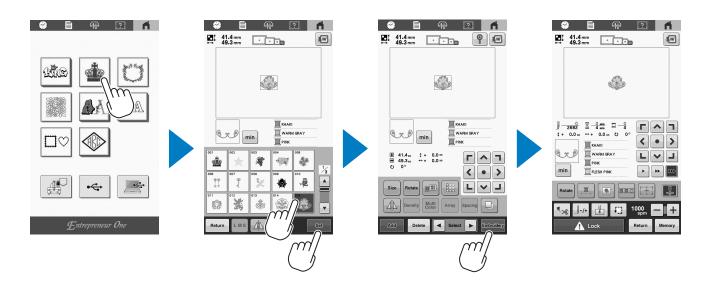
# Installing the bobbin



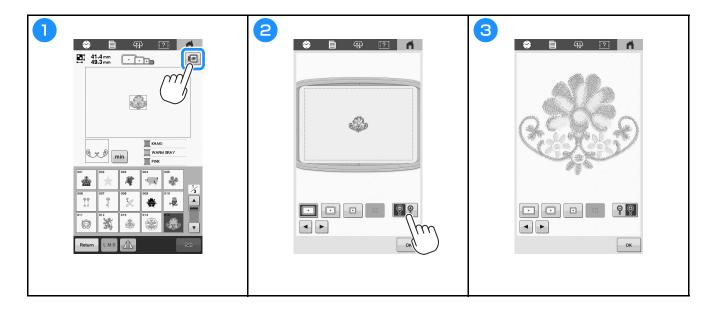
# Installing the bobbin case



## Selecting the embroidery pattern



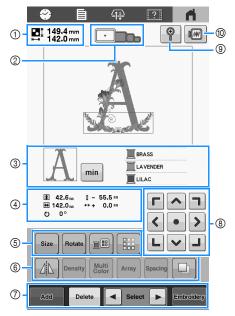
### Checking a preview image



## Understanding the pattern editing screen

#### Memo

• If a key display is grayed out, you cannot use that function with the selected pattern.



No.	Display	Function	
NO.	Key Name	Function	
1	149.4 mm 142.0 mm	Shows the size of the embroidery pattern currently displayed in the	
	Pattern size	pattern display area. The top value shows the height and the bottom value shows the width. If the embroidery pattern consists of multiple patterns that have been combined, the size will include all patterns.	
2	Embroidery frame indicators	Shows the sizes of embroidery frames that can be used to embroider the pattern currently displayed in the pattern display area.	
3	Region display	Shows the part of the pattern that will be embroidered with the thread color shown first in the thread color sequence display.  Change the thread color sequence display to embroidering time of each thread colors.  Shows the order for the thread color changes. During embroidering, this display scrolls automatically so that	
	Thread information (color/time)		
	BRASS LAVENDER LILAC		
	Thread color sequence display	the color of the thread currently being embroidered appears at the top. The displayed information can be switched between the thread color name and the embroidery thread number.	

No.	Display Key Name	Function	
4	<b>1</b> 42.6 mm <b>142.0</b> mm Size	Shows the size of the pattern being edited. The top value shows the height and the bottom value shows the width.	
	\$ - 55.5 mm  Distance from center (vertical)	Shows the vertical distance that the pattern being edited is moved.	
	Distance from center (horizontal)	Shows the horizontal distance that the pattern being edited is moved.	
	O O O Rotation angle	Shows the rotation angle that the pattern being edited is rotated.	
6	Size	Display the pattern sizing window.	
	Size key	Decrease the pattern proportionately.     Decrease the pattern vertically.     Decrease the pattern horizontally.     Enlarge the pattern proportionately.     Stretch the pattern vertically.     Stretch the pattern horizontally.     Select ▶: Select the pattern that you want to change.     Move the pattern in the direction shown by the arrow.     Reset : Reset the size.     OK : Close this screen.	
	Rotate	Display the pattern rotating window.	
	Rotate key	Reset : Reset the angle.  Rotate the pattern using the rotate key. You can also use the move keys during the rotation process.	
	Change thread color key	Change the color of the pattern.	
	Border key	Make and edit the repeated pattern.	

Na	Display	Function	
No.	Key Name	Function	
(a)	Horizontal mirror image key	Change the pattern to a horizontal mirror image.	
	Density Density key	Change thread density for some character and frame patterns.	
	Multi color key	Enable the thread color of each character in a character pattern to be changed; can only be used when a character is selected.	
	Array key	Change the layout of the character patterns.  • To arrange the character patterns on an arc, touch ▶■♥, ◀■♥, ▼ or	
		: Make the arc flatter.  : Make the arc rounder.  • To arrange the character patterns on an incline, touch	
		: Change the incline counterclockwise. : Change the incline clockwise.  • ABC : Reset the layout.	
	Character spacing/Text dividing key	Change the spacing of the character patterns.  • *ABC*: Increase the character spacing.  • *ABC*: Decrease the character spacing.  • *ABC*: Reset the spacing.	
		Separate the continuous character patterns to adjust the spacing or edit separately afterwards.  Select where the patterns is to be separated.	
		is to be separated.  • Separate the pattern.	
		Duplicate the pattern. The duplicated pattern will be	
	Duplicate key	positioned slightly lower and to the right from the original pattern.	

No.	Display Key Name	Function
7	Add key	Add a pattern. If touched, the pattern type selection screen appears.
	Delete key	Deletes the pattern. If touched, the pattern being edited is deleted.
	Pattern selection keys	Selects the pattern that is being edited when the embroidery pattern consists of multiple patterns that have been combined.
	Embroidery  Embroidery  key	Finish editing and continue to the embroidering screen.
8	(°)	• • • • • • Move the pattern in the direction shown by the arrow.
	Positioning keys	Move to the center of the embroidering area.
	•	Enlarge the pattern view up to 200%.
9	Enlarge key	When enlarged, ♠, ✔, ✔ and papear in the screen.
		Touch one of the keys that appeared to move the display area in the screen in the corresponding direction, making this convenient for checking pattern details. You can continue editing at 200% magnification.
100	Preview key	Display an image of the pattern so that it can be previewed.
	·	1

## STARTING THE EMBROIDERY

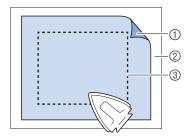
# **A** CAUTION

• Your machine can embroider fabric that is up to 2 mm (approx. 5/64 inch) thick. If thicker fabric is embroidered, the needle may break and cause injury.

### Attaching stabilizer (backing) to fabric

# **A** CAUTION

• When embroidering on thin or stretch fabrics, fabrics with a coarse weave or fabrics that easily allow the stitching to shrink, be sure to use stabilizer (backing) for embroidering. Not using a stabilizer (backing) may cause the needle to break and cause injury.



- ① Adhesive side of iron-on stabilizer (backing)
- ② Fabric (wrong side)
- ③ Size of the embroidery frame

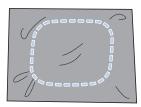
## Hooping the fabric in the embroidery frame





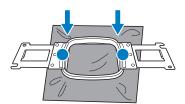
• Loosen the screw.





• Place the stabilizer and fabric with right side up on top of the outer frame.

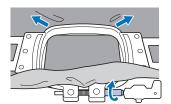




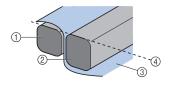


• Lightly tighten the screw.





- Securely tighten the screw, and then check to make sure that the fabric is taut.
- Use the 3-way screwdriver to tighten the screw securely.



- ① Outer frame
- ② Inner frame
- ③ Right side of fabric
- ④ Top of inner and outer frames are even
- Firmly clamp together the inner and outer frames so that their tops are even.

### **Embroidery frame types**

#### Embroidery frames that use Embroidery Frame Holder A

Fush validams from a	Embroidering area		
Embroidery frame	Usage		
Extra-large embroidery frame	300 mm (W) × 200 mm (H) (approx. 11-3/4 inches (W) × 7-7/8 inches (H))		
	Use when embroidering connecting characters or patterns, combined patterns or large patterns.		
Flat frame (optional)	300 mm (W) × 200 mm (H) (approx. 11-3/4 inches (W) × 7-7/8 inches (H))		
	Use when embroidering jackets and other thick garments. When embroidering, install the optional wide table onto the machine.		
Large embroidery frame (optional)	180 mm (W) × 130 mm (H) (approx. 7-1/8 inches (W) × 5-1/8 inches (H))		
and a	Use when embroidering patterns with a size less than 180 mm (W) × 130 mm (H) (approx. 7-1/8 inches (W) × 5-1/8 inches (H)).		
Medium embroidery frame	100 mm (W) × 100 mm (H) (approx. 4 inches (W)× 4 inches (H))		
	Use when embroidering standard-sized patterns.		
Small embroidery frame (optional)	60 mm (W) × 40 mm (H) (approx. 2-3/8 inches (W) × 1-1/2 inches (H))		
	Use when embroidering small-sized patterns, such as name tags.		

#### Embroidery frames that use Embroidery Frame Holder B

Embroidery frame	Embroidering area		
Embroidery frame	Usage		
Quilt frame (optional)	200 mm (W) × 200 mm (H) (approx. 7-7/8 inches (W) × 7-7/8 inches (H))		
	Use when embroidering pieces for quilts. When embroidering, install the optional wide table onto the machine.		
Border frame (optional)	300 mm (W) × 100 mm (H) (approx. 11-3/4 inches (W) × 4 inches (H))	•	
	Use when embroidering a long string of characters or patterns. When embroidering, install the optional wide table onto the machine.		
Sleeve frame (optional)	70 mm (W) × 200 mm (H) (approx. 2-3/4 inches (W) × 7-7/8 inches (H))		
	Use when embroidering long items such as shirt sleeves.		

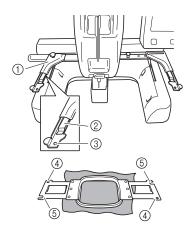
# **A** CAUTION

- Only use embroidery frames of the sizes indicated in the screen, otherwise the embroidery frame may hit the presser foot, which may result in injuries.
- If the size of the embroidery frame is wrong, the embroidery frame may hit the presser foot and damage the machine or cause injury to the user.

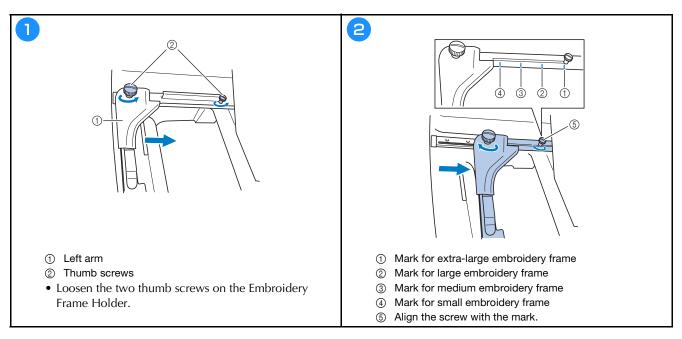
### Attaching the embroidery frame to the machine

# **A** CAUTION

- If the embroidery frame is not correctly attached, it may hit the presser foot and damage the machine, or cause injury to the user.
- When attaching the embroidery frame, make sure that the "Start/Stop" button is lit in red. If the "Start/Stop" button is flashing in green, the machine may start embroidering. If the machine accidentally starts operating, injuries may result.



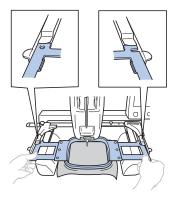
- ① Left arm of Embroidery Frame Holder Move the arm of the Embroidery Frame Holder to the left or right to adjust it to the size of the embroidery frame.
- ② Clip on Embroidery Frame Holder Insert the embroidery frame into the clips on the Embroidery Frame Holder.
- ③ Positioning pin
- (4) Holes
- ⑤ Positioning slots



#### <sup>™</sup> Note

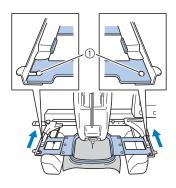
- Please firmly tighten the two thumb screws with included 3-way screwdriver. If the thumb screws are not tightened, any of the following problems may occur.
  - The machine will detect the embroidery frame size incorrectly.
  - The starting position for the embroidery frame is misaligned.
  - The embroidery pattern is misaligned.





• Slide the embroidery frame into the clip on the Embroidery Frame Holder. The inner frame should be on top.



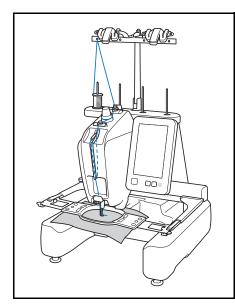


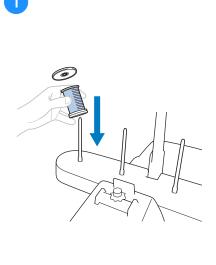
- Insert the embroidery frame until it snaps into place.
- ① Make sure that the pins on the left and right arms of the Embroidery Frame Holder fit into the positioning slot and hole on the embroidery frame.

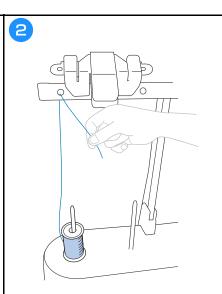
### **Upper threading**

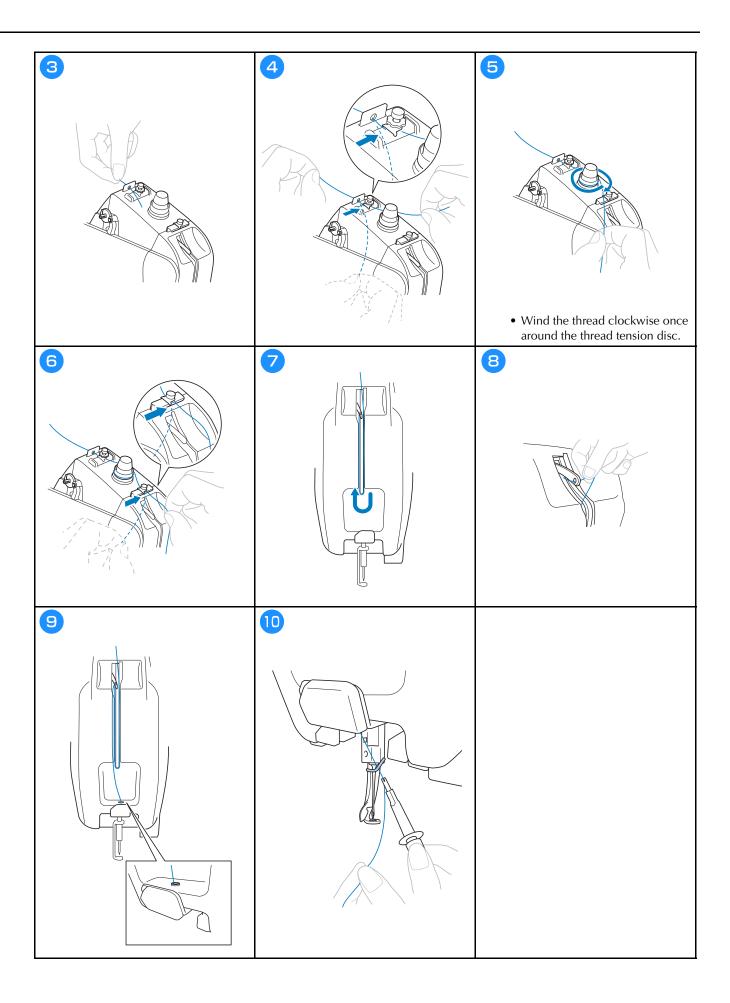
# **A** CAUTION

- When threading the upper thread, carefully follow the procedures. If the upper threading is not correct, the thread may become tangled or the needle may break and cause injury.
- When \_\_\_\_\_ (unlock key) in the embroidering screen is touched, the "Start/Stop" button begins flashing in green and the machine can start embroidering. If the upper threading is being performed or the needle is being threaded, be careful that the machine is not accidentally started, otherwise injuries may result.





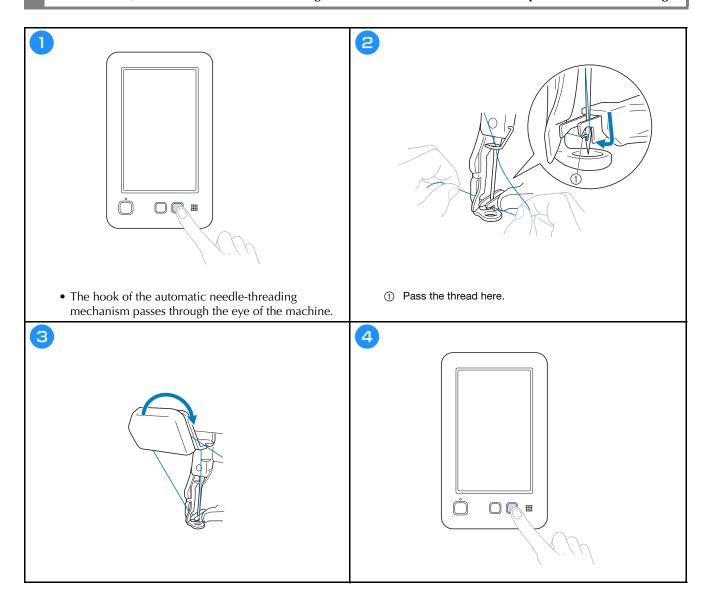




### Threading the needle

# **IMPORTANT**

- When using 65/9 needles or thinner, manually thread the needle. If the automatic needle-threading mechanism is used, its hook may be damaged.
- If the needle is not fully inserted, the hook of the automatic needle-threading mechanism will not pass through the eye of the needle during automatic needle threading, and the hook may bend or the needle cannot be threaded.
- While the hook of the automatic needle-threading mechanism is passed through the eye of the needle, do not rotate the handwheel. The automatic needle-threading mechanism may be damaged. If you turn the handwheel, the automatic needle-threading mechanism will return to its initial position to avoid damage.



#### Checking the needle drop point with the Embroidery Crosshair Positioning Laser



**Memo** 

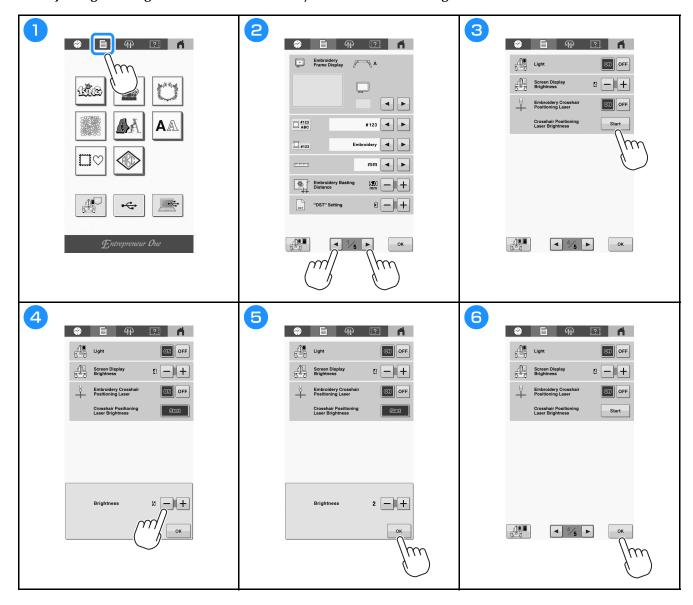
- With certain types of embroidery frames, the Embroidery Crosshair Positioning Laser function cannot be used.
- If the surface of the fabric is too uneven or rough, check and adjust the alignment of the Embroidery Crosshair Positioning Laser and the needle drop point before starting to embroider.
- When using the cap frame, check and adjust the alignment of the Embroidery Crosshair Positioning Laser and the needle drop point before starting to embroider.

**Embroidery Crosshair Positioning Laser lights ON.** 

**Embroidery Crosshair Positioning Laser lights OFF.** 

1

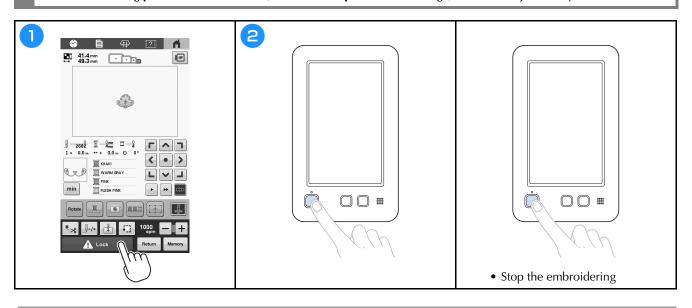
#### ■ Adjusting the brightness of the Embroidery Crosshair Positioning Laser



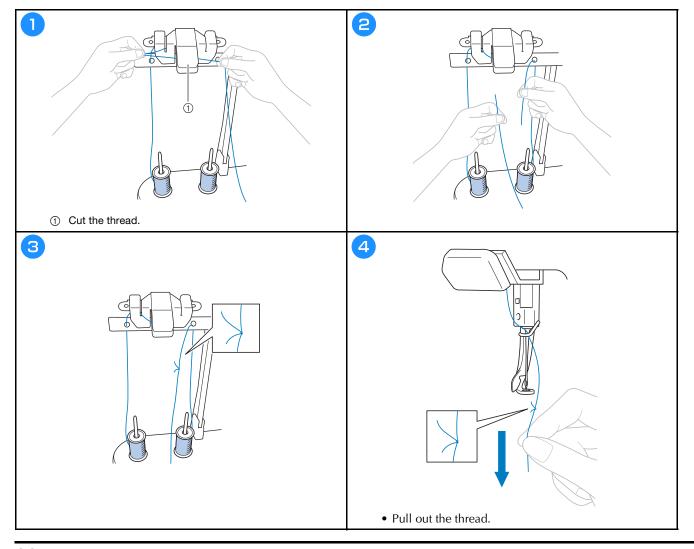
### Starting embroidering

# **A** CAUTION

• While the machine is in operation, pay special attention to the needle location. In addition, keep your hands away from all moving parts such as the needle, thread take-up lever and carriage, otherwise injuries may result.



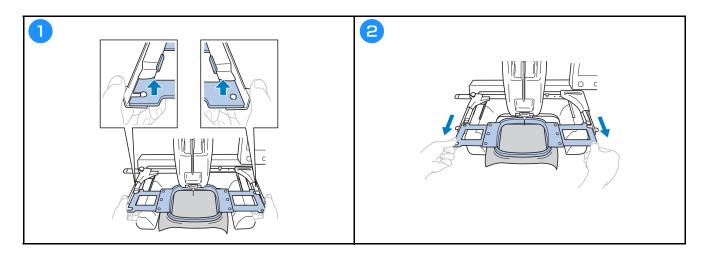
### Easily changing the thread spools



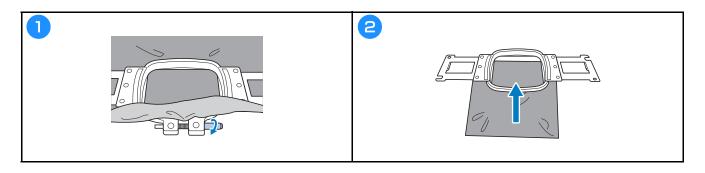
# Removing the embroidery frame

# **A** CAUTION

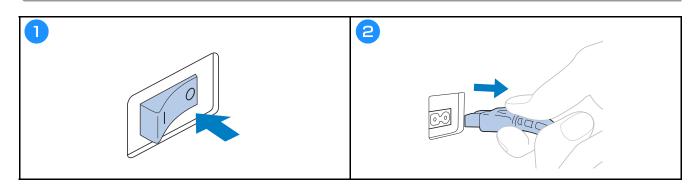
• When removing the embroidery frame, make sure that the "Start/Stop" button is lit in red. If the "Start/Stop" button is flashing in green, the machine may start embroidering. If the machine accidentally starts operating, injuries may result.



## Removing the fabric



## Turning off the machine



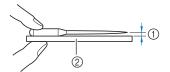
### Replacing the needle

# **A** CAUTION

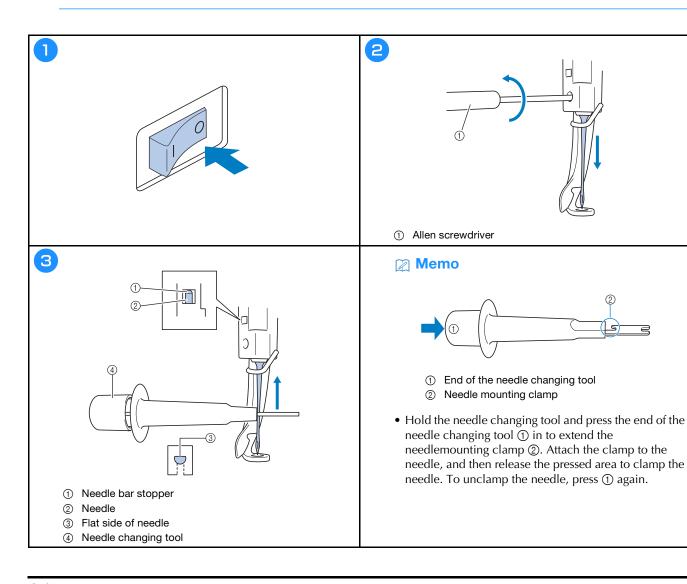
- Be sure to turn off the machine before replacing the needle, otherwise injuries may result if the machine starts embroidering.
- Never use bent needles. Injuries may result.
- Be sure to insert the needle in the needle bar chamber until it reaches the needle bar stopper and securely tighten the needle set screw with the Allen screwdriver, otherwise the needle may break and cause injury.

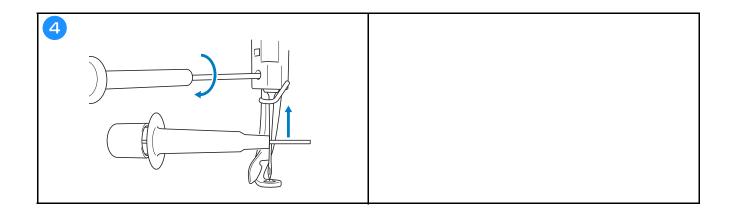
#### **Memo**

- Your machine is designed to use household embroidery needles. The factory recommended needle is "HAX 130 EBBR" (Organ). Schmetz needles 130/705 H-E may be used as a substitute.
- To check the needle correctly, place the flat side of the needle on a flat surface. Check the needle from the top and the sides. Throw away any bent needles.



- Parallel space
- ② Flat surface (glass, etc.)

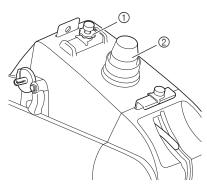




## **APPENDIX**

## **Checking the thread tension**

The upper thread tension can be adjusted using the thread tension knob or the upper thread guide pretension knob.



- ① Upper thread guide pretension knob
- ② Thread tension knob

## ■ Upper thread is too tight





- ① Right side
- ② Wrong side

The tension of the upper thread is too tight, resulting in the bobbin thread being visible from the right side of the fabric.





• Loosen by turning counterclockwise.

#### **■** Correct thread tension

From the wrong side of the fabric, the bobbin thread should be about one third of the stitch width.





- ① Right side
- ② Wrong side

### ■ Upper thread is too loose





- ① Right side
- ② Wrong side

The tension of the upper thread is too loose, resulting in a loose upper thread, loose thread locks or loops appearing on the right side of the fabric.





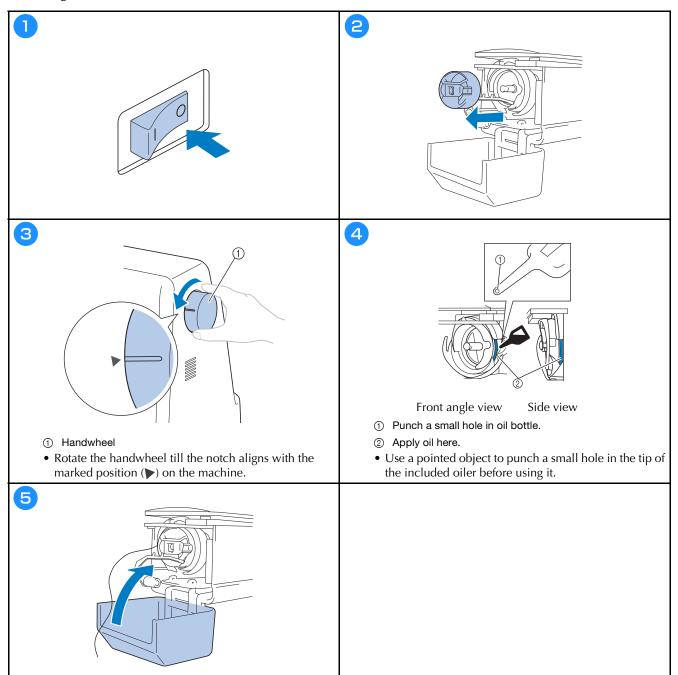
• Tighten by turning clockwise.

## Maintenance

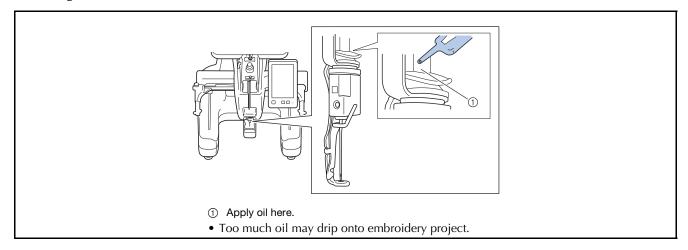
# **A** CAUTION

• Unplug the power supply cord before cleaning the machine, otherwise injuries or shock may occur.

## **■** Oiling the race



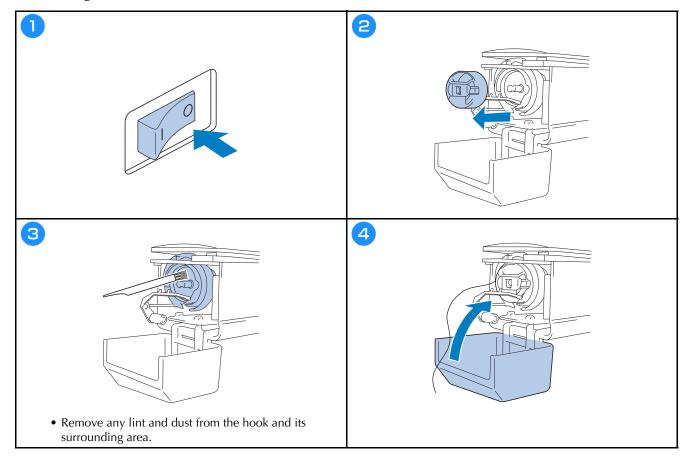
### **■** Oiling the needle bar



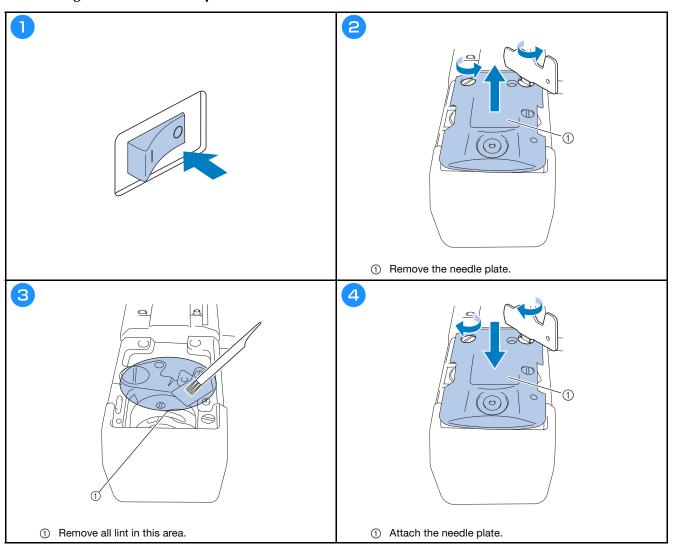
# **IMPORTANT**

- Put a drop of oil onto the hook before use.
- Apply one drop of oil on the lower needle bar above the felt washer every 40 50 hours of embroidering time.
- Apply only machine oil. Use of any other type of oil may result in damage to the machine.
- Do not apply too much oil. Fabric or thread may get contaminated. If too much oil is applied, wipe off any excess with a rag.
- If the thread breaks while embroidering or the operating noise of the hook becomes loud, apply oil onto the race hook.

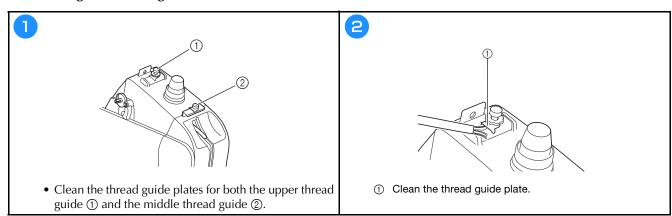
### ■ Cleaning the hook



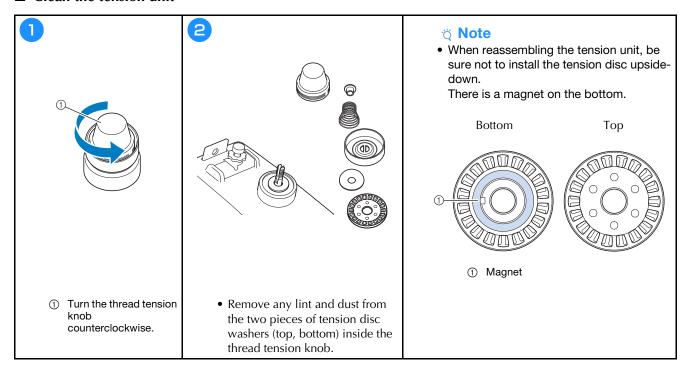
## ■ Cleaning around the needle plate



## **■** Cleaning the thread guides



### ■ Clean the tension unit



## **TROUBLESHOOTING**

If the machine stops operating correctly, check the following possible problems before requesting service.

You can solve most problems by yourself. If you need additional help, the Brother support website offers the latest FAQs and troubleshooting tips. Visit us at <a href="https://s.brother/cpcab/">https://s.brother/cpcab/</a>.

If the problem persists, contact your authorized Brother dealer or the nearest Brother authorized service center.

If the reference page is "\*" or the suggested remedy does not correct the problem, contact your authorized Brother dealer.

Probable Cause/Remedy  e machine does not operate.  The machine is not turned on.  The machine has not been unlocked.  The "Start/Stop" button was not pressed.  e embroidery frame cannot be attached to chine.  The Embroidery Frame Holder attached to the machine is not appropriate for the selected embroidery frame.  e embroidery frame cannot be removed or ached.  Depending on the position where the machine's carriage has stopped, it may be difficult to	16 32 32 <b>the</b> 26
The machine is not turned on.  The machine has not been unlocked.  The "Start/Stop" button was not pressed.  The "Start/Stop" button was not pressed.  The embroidery frame cannot be attached to chine.  The Embroidery Frame Holder attached to the machine is not appropriate for the selected embroidery frame.  The embroidery frame cannot be removed or ached.  Depending on the position where the machine's carriage has stopped, it may be difficult to	32 32 <b>the</b>
The machine has not been unlocked.  The "Start/Stop" button was not pressed.  e embroidery frame cannot be attached to chine.  The Embroidery Frame Holder attached to the machine is not appropriate for the selected embroidery frame.  e embroidery frame cannot be removed or ached.  Depending on the position where the machine's carriage has stopped, it may be difficult to	32 32 <b>the</b>
The "Start/Stop" button was not pressed.  e embroidery frame cannot be attached to chine.  The Embroidery Frame Holder attached to the machine is not appropriate for the selected embroidery frame.  e embroidery frame cannot be removed or ached.  Depending on the position where the machine's carriage has stopped, it may be difficult to	32 the
e embroidery frame cannot be attached to chine.  The Embroidery Frame Holder attached to the machine is not appropriate for the selected embroidery frame.  e embroidery frame cannot be removed or ached.  Depending on the position where the machine's carriage has stopped, it may be difficult to	the
The Embroidery Frame Holder attached to the machine is not appropriate for the selected embroidery frame.  e embroidery frame cannot be removed or ached.  Depending on the position where the machine's carriage has stopped, it may be difficult to	
machine is not appropriate for the selected embroidery frame.  e embroidery frame cannot be removed or ached.  Depending on the position where the machine's carriage has stopped, it may be difficult to	26
Depending on the position where the machine's carriage has stopped, it may be difficult to	-
carriage has stopped, it may be difficult to	_
<ul> <li>Touch to position the carriage, so the embroidery frame can easily be removed or attached.</li> </ul>	
needle breaks.	
The needle is not installed correctly.	34
The needle set screw is loose.	34
The needle is bent or blunt.	34
The area around the hole in the needle plate is damaged.	
① Scratches/Burrs	
1	embroidery frame can easily be removed or attached.  needle breaks.  The needle is not installed correctly.  The needle set screw is loose.  The needle is bent or blunt.  The area around the hole in the needle plate is damaged.

Symptom	
Probable Cause/Remedy	Page
The needle hits/touches the needle plate.	34
<ul><li>① Needle</li><li>② Hole in needle plate</li></ul>	
<ul><li>③ Needle hits hole</li><li>Replace the needle.</li></ul>	
The presser foot is set too high and not correctly positioned. The needle hits/touches the presser foot.	*
The area around the presser foot hole is damaged.	*
① Scratches/Burrs	
Replace the presser foot.  Sliding surface on hook race is not smooth. There are scratches or burrs on it.	*
① Hook race area	
The bobbin or bobbin case is not correctly installed.	17, 20
The hook is not correctly installed.	*

	Symptom		
	Probable Cause/Remedy	Page	
Th	e needle breaks.		
	The hook stopper is not correctly installed, the hook is making a complete rotation.	*	
	The upper thread is not threaded correctly. The upper thread is catching somewhere.	28	
	Pull the upper thread by hand from below the presser foot, and check that the thread moves smoothly. If the thread does not move, it is not threaded correctly. Thread the upper thread correctly. Make sure the thread is caught by the needle bar thread guide.		
	The upper thread tension is set too high.	36	
	A bobbin designed specifically for this machine is not used.	_	
	The needle and the hook are not correctly passing each other.  • Hook timing may be OFF.	*	
	The thread density of the embroidery data is too fine.  Three or more overlapping stitches are being embroidered.  • Using a data design system, correct the thread density and overstitching settings in the embroidery data.	-	
Th	e thread is not cut automatically.		
Lint or dust has accumulated around the needle plate (moving knife, fixed knife or thread retaining plate).			
	A bobbin case designed specifically for this machine is not used.  • Use the correct bobbin case.	-	
	Lint or dust has accumulated in the thread tension disc.	40	
	ter the threads are automatically cut, the up read is too short and comes out of the need		
	Lint or dust has accumulated around the needle plate (moving knife, fixed knife or thread retaining plate).	39	

Symptom	
Probable Cause/Remedy	Page
he upper thread breaks.	
The needle is not correctly installed.	34
The needle set screw is loose.	34
The needle is bent or blunt.	34
The area around the hole in the needle plate is damaged.	*
Scratches/Burrs     Replace the needle plate.	
The needle is touching the needle plate.	*
① Needle	
<ul><li>② Needle plate hole</li><li>③ Needle touching hole</li></ul>	
The presser foot is set too high and not correctly positioned. The needle hits/touches the presser foot.	*
The area around the presser foot hole is damaged.	*
① Scratches/Burrs	
<ul> <li>Replace the presser foot.</li> <li>Using a specialty thread like a metallic thread.</li> <li>Slow down the machine embroidery speed.</li> </ul>	_

	Symptom		
Γh	Probable Cause/Remedy Page e upper thread breaks.		
	Sliding surface on hook is not smooth. There are burns on it.	*	
	① Hook race area	00	
	The thread is loose in the hook area.  The play between the hook and the race is too much.	*	
	The hook does not rotate smoothly.  • Remove lint, clean and apply oil.	37, 38	
	The space between the hook stopper and the hook cannot be adjusted.	*	
	The upper thread is not threaded correctly.	28	
	Pull the upper thread by hand from below the presser foot, and check that the thread moves		
	smoothly. If the thread does not move smoothly, it is not correctly threaded. Unthread the machine and re-thread the machine. Make sure the thread is correctly positioned in the needle bar thread guide.		
	Upper thread is not positioned in upper or middle guide plate.  • Make sure thread passes completely under upper and middle guide plate.	28	
	There are knots or tangles in the thread.  Remove any knots or tangles.	-	
	The upper thread tension is too high.	36	
	The bobbin thread tension is incorrect. The thread does not roll out of the bobbin case smoothly.	_	
	The bobbin case is damaged.  Replace the bobbin case with a new one.	17	
	The bobbin thread is not wound correctly.  • Check that the bobbin is wound so that it is about 80% full and that the thread is evenly wound. If the bobbin is not correctly wound, replace the bobbin with one that is correctly wound or rewind the bobbin.	17	

	Symptom		
	Probable Cause/Remedy	Page	
	A bobbin designed specifically for this machine is not used.	-	
	The automatic needle-threading mechanism is broken.	*	
	Adhesive is attached to the needle.  • Replace the needle.	34	
	The fabric is not taut.	24, 25	
	The thread quality is poor.  The thread quality is too weak due to age of thread. Replace thread.	_	
	The thread density of the embroidery data is too fine.	_	
	Three or more overlapping stitches are being embroidered.  • Using a data design system, correct the thread density and overstitching settings in the embroidery data.		
	Lint or dust has accumulated in the thread tension disc.	40	
Th	e bobbin thread breaks.		
	The bobbin thread is not correctly threaded.	20	
	The bobbin is scratched or does not rotate smoothly.  • Replace the bobbin.	17	
	The bobbin case is damaged.  • Replace the bobbin case.	17	
	The thread is tangled.	37	
	A bobbin designed specifically for this machine is not used.	_	
	Lint or dust has accumulated in the thread tension disc.	40	
Sti	itches are skipped.		
	The upper thread is not threaded correctly.	28	
	The needle is bent or blunt.	34	
	The needle is not installed correctly.	34	
	Dust has accumulated under the needle plate or in the hook.	38, 39	
	The needle and the hook are not correctly passing each other.	*	
	The thread twist is either too tight or too loose. Improper twisting results in irregular loop formation. Try using a new spool.	_	

	Symptom			
	Probable Cause/Remedy	Page		
Th	he embroidery pattern is misaligned.			
	The thread is tangled.  • Use tweezers to remove any tangled thread from the hook.	_		
	The fabric is not secured in the embroidery frame (for example, the fabric is not taut).	24, 25		
	The embroidery frame is too large for the size of the embroidery.	26		
	The thumb screws on the Embroidery Frame Holder are loose.	14		
	Appropriate stabilizer (backing) is not used.	24		
	The embroidery frame is not correctly attached to the carriage.  • Correctly attach the embroidery frame to the carriage. Make sure that the pins on the left and right arms of the Embroidery Frame Holder securely fit into the holes in the handles on the embroidery frame.			
	The carriage or the embroidery frame is hitting	_		
	<ul><li>objects.</li><li>The pattern may become misaligned if the carriage or embroidery frame is hitting objects.</li></ul>			
	The fabric is caught or pinched.  Stop the machine, and then correctly position the fabric.	_		
	The carriage moved while removing embroidery frame.  The pattern may become misaligned if the presser foot was hit or the carriage was moved while embroidery.  Be careful when removing and reattaching the embroidery frame while embroidery. If the carriage is moved, turn the machine off, then on again. The correct frame position at the time that the machine was stopped is stored in the machine's memory, and the embroidery frame is returned to the correct position.	_		
	The design was not digitized correctly.  The design may need more pull compensation or underlay to accommodate stretchy or highnapped fabrics.	_		
	The size of the installed embroidery frame is not correctly detected.			
	The thumb screws on the Embroidery Frame Holder are loose.	14		
	e starting position for the embroidery framerizontally misaligned.	e is		
	The thumb screws on the Embroidery Frame Holder are loose.	14		

	Symptom		
	Probable Cause/Remedy	Page	
Th	here are loops in the upper thread.		
	The upper thread tension is low.	_	
	After passing the upper thread through the hole in the presser foot, pull the thread by hand to		
	check the thread tension.		
	The thread tension does not correspond to the amount that the thread tension knob was tightened.  • If the thread tension cannot be adjusted, thread wax and dust may have collected in the upper or middle thread guides, causing the thread guide plates to rise. Clean the thread guide plates.	39	
	Thread is not correctly threaded around the thread tension disc.  • Clean the thread tension disc. Rethread and make sure the thread tension disc rotate when pulling on thread.	40	
	The thread quality is poor.  • Try embroidery with different thread. If the problem no longer occurs after the thread is changed, the thread quality is the problem. Replace the thread with one of good quality.	-	
Th	e machine is noisy.		
	Lint may be wound in the hook.	38	
	The upper thread is not threaded correctly.	28	
	The hook is damaged.  • Replace the hook.	*	
	Not enough oil was applied.	37, 38	
Th	e needle threader cannot be used.		
	Recommended needles are not used on this machine.	34	
	The needle is not installed correctly.	34	
	The hook of the automatic needle-threading mechanism is bent.	*	

Symptom		
Probable Cause/Remedy	Page	
The thread tension is incorrect.	•	
The upper thread is not threaded correctly.	28	
The bobbin thread is not correctly threaded.	20	
The bobbin thread tension is incorrect.	_	
Lint or dust has accumulated in the thread tension disc.	40	
The upper thread does not reach the bobbin thread when embroidering begins.		
There is no more thread in the bobbin, the thread does not feed from the bobbin, or the thread that is fed from the bobbin is too short.  • Correctly thread the bobbin thread.	20	
Although the thread is not broken, a broken the error occurs and the machine stops.	hread	
If the thread breakage sensor in the thread tension disc of the thread tension knob cannot detect that the thread is being fed, even if the machine is running, a broken thread error occurs and the machine is stopped.  • Correctly pass the thread through the thread tension disc. If the broken thread error occurs after the machine is rethreaded, the sensor may be damaged.	28	
The thread is worn.		
Lint or dust has accumulated in the thread tension disc.	40	
Jump stitches are long.		
Lint or dust has accumulated in the thread tension disc.	40	
Long jump stitches have been specified.	_	
There are needle cuts or holes in the garment.		
The needle is dull.  • Replace the needle. Dull needles have a difficult time passing through the garment, causing fabrics to tear.	34	
The fabric is too delicate.  • The simple penetration of the needle could damage delicate fabrics. Use stabilizer on top of fabric.	_	

Symptom		
Probable Cause/Remedy	Page	
The thread tension is too tight.  • Adjust the tension according to the type of fabric and thread being used. Polyester thread will stretch during embroidery especially if the tensions are set too high. After the stitching is complete, the thread returns to its original strength, causing puckers in the fabric.	36	
The framing tension of the fabric is incorrect.  Tightly frame non-stretchable, woven fabrics. Loose framing will cause the fabric to bunch up under the stitching. Tautly frame soft knits using a stable backing. Overstretching the garment will cause it to look puckered when the frame is removed.	_	
The column stitches are too long.  Re-digitize the design with fill stitching or with multiple rows of column stitching.	-	
The needle is dull.  • Dull needles push fabric down and damage material. Replace the needle.	34	
The LCD cannot be read.		
The LCD screen is too bright or too dark.  • Adjust the brightness of the screen display.	_	
When embroidering thick fabric, the fabric ca correctly hooped.	nnot be	
Fabric slips within the frame because of its thickness.  • Wrap masking tape or bias tape around the outer frame. The tape will provide resistance so that the fabric does not easily slip.	-	
The Embroidery Crosshair Positioning Laser is hard to see.		
The Embroidery Crosshair Positioning Laser is too bright or too dim.  • Adjust the brightness of the Embroidery Crosshair Positioning Laser.	31	
When the machine is connected to your comp with the USB cable, "Removable Disk" is unu		
Disconnect the USB cable connecting the computer and the machine, and then reconnect cable to the machine.	-	

# **IMPORTANT**

• When using embroidery data other than our original patterns, the thread may break or the needle may break or bend when embroidering with a stitch density that is too fine or when embroidering three or more overlapping stitches. In that case, use one of our original data design systems to edit the embroidery data.

## **Error messages**

If the "Start/Stop" button is pressed while the machine is not correctly set up or if an incorrect operation is performed, the machine stops and informs you of the error with a buzzer and an error message. If an error message appears, correct the problem according to the instructions in the message.

To close the message, touch or perform the correct operation, then touch ok. If the message appears again, consult your nearest authorized Brother dealer.

	Error messages	Cause/solution
1	Cannot change the configuration of the characters.	This message is displayed when there are too many characters in the curved text arrangement. Change the text arrangement or the embroidery frame.
2	Cannot recognize the data for the selected pattern. The data may be corrupted. Please turn off the power and turn on again.	This message is displayed when trying to recall damaged pattern data or data created using another manufacturer's data design system. Turn the machine off, then on again to return it to its normal condition.
3	Change to a larger embroidery frame.	This message is displayed when the thumb screws of the Embroidery Frame Holder are loose. Using the included 3-way screwdriver, firmly tighten the two thumb screws. (page 27)
		This message is displayed when the installed embroidery frame is too small. Check which embroidery frames can be used, and then install a larger embroidery frame. (page 21)
4	Check upper and bobbin thread.	This message is displayed when the thread tension is too tight. Check the tensions of the upper thread and bobbin thread, and then adjust them. (page 36)
		This message is displayed when the upper thread breaks or the thread comes out of the thread tension disc or a thread guide. Check that the thread passes under the upper and middle thread guides, and correctly thread the upper thread. (page 28)
		This message is displayed when lint or dust has accumulated in the thread tension disc. Remove the thread tension knob, and then remove any lint or dust accumulated between the tension disc washers. (page 40)
		This message is displayed when the bobbin thread breaks or runs out. Check that there is thread on the bobbin and that approximately 50 mm (approx. 2 inches) of thread has been pulled out, and then re-install the bobbin. (page 20)
		This message is displayed when there may be another cause. Refer to "The upper thread breaks." on page 42 or "The bobbin thread breaks." on page 43. Touch J-/+ to advance or reverse through the stitching.
5	Failed to save file.	This message is displayed when you try to save more than 100 settings screen image files in the USB media. In this case, delete a file from the USB media or use different USB media.
6	Go to Embroidering Screen and press the unlock key.	This message is displayed when the thread trimming button is pressed while a screen other than the embroidering screen is displayed. Display the embroidering screen.
7	Inappropriate needle stop position	This message is displayed when the needle has stopped at an incorrect position. Turn the handwheel so that the mark on the handwheel is at the top, and then touch OK.
8	Needle threader error	This message is displayed when the automatic needle-threading mechanism does not operate correctly. Remove the thread entangled in the automatic needle-threading mechanism, and then touch ok.
9	Needle threader is in threading position.	This message is displayed when another operation is performed while the automatic needle-threading mechanism is threading the needle. Press the automatic needle-threading button, and then perform the other operation after the needle is threaded. (page 30)

	Error messages	Cause/solution
10	OK to recall and resume previous memory?	This message is displayed when the machine is turned off, then on again
		before embroidering is completed. Touch to resume embroidering. If the embroidering screen was displayed before the machine was turned off, back up several stitches, and then continue embroidering.
11	OK to separate the combined border pattern?	This message is displayed when a combined border pattern is being rotated in the embroidering screen.
12	Picker error	This message is displayed when the thread picker (page 17) does not operate correctly. Remove the thread entangled on the thread picker, and then touch ok.
13	Press the unlock key to unlock the machine.	This message is displayed when the thread trimming button is pressed
		before the machine is unlocked. Touch  to use the thread trimming function.
14	Preventive maintenance is recommended.	This message is displayed when the machine needs maintenance.
15	The pattern combination is too large for the extra large embroidery frame. If you plan to add more patterns, rotate the pattern combination.	This message is displayed when a long vertical pattern is recalled and no longer fits in the embroidery frame. Rotate the pattern 90 degrees.
16	The safety device has been activated. Is the thread tangled? Is the needle bent?	This message is displayed when a malfunction occurred, such as the thread becoming tangled or the needle is bent. The machine stops when it detects a malfunction. Check that the machine is correctly threaded (page 28) and that the needle is not bent.
17	This file cannot be used.	This message is displayed when the file format is incompatible with this machine. Check the list of compatible file formats.
18	This pattern cannot be used since it exceeds the data capacity.	This message is displayed when the pattern being opened exceeds the allowable number of stitches or data capacity, or when too many patterns are being edited.
19	This pattern cannot be used.	This message is displayed when you try to retrieve a pattern that was downloaded for a different machine.
20	This pattern cannot combine.	This message is displayed when a split (large-size) pattern is selected to be combined with another embroidery pattern.
21	Trimming sensor error.	This message is displayed when lint or dust may have accumulated within the moving knife, the fixed knife, the thread retaining plate, and their surrounding areas. Clean them. (page 39)
22	USB media is not loaded. Load USB media.	This message is displayed when you tried to recall or save a pattern while no USB media is loaded. Load USB media.
		This message is displayed when you try to use incompatible USB media. For a list of compatible USB media, visit <a href="https://s.brother/cpcab/">https://s.brother/cpcab/</a> .
23	Wiper error	This message is displayed when thread is tangled on the wiper. Remove the tangled thread.
		This message is displayed when lint or dust may have accumulated within the moving knife, the fixed knife, the thread retaining plate, and their surrounding areas. Clean them. (page 39)
		This message is displayed when the thread does not pass through the groove in the thread cutter. Pass the thread through the groove securely.

## **UPDATING YOUR MACHINE'S SOFTWARE**

You can update your machine's software using the following two procedures. For update information, refer to the Brother support website <a href="http://s.brother/cucab/">http://s.brother/cucab/</a>. If an update file is posted, download the file, and then update the machine according to the following procedure.

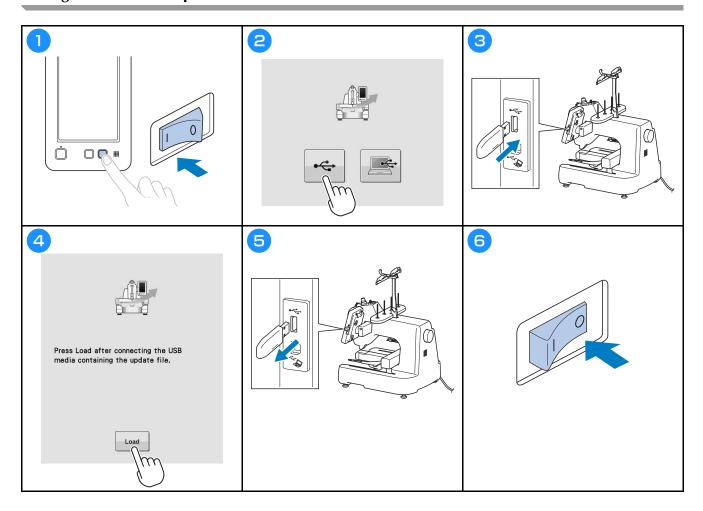
- Using USB media to update
- Using computer to update

#### **Memo**

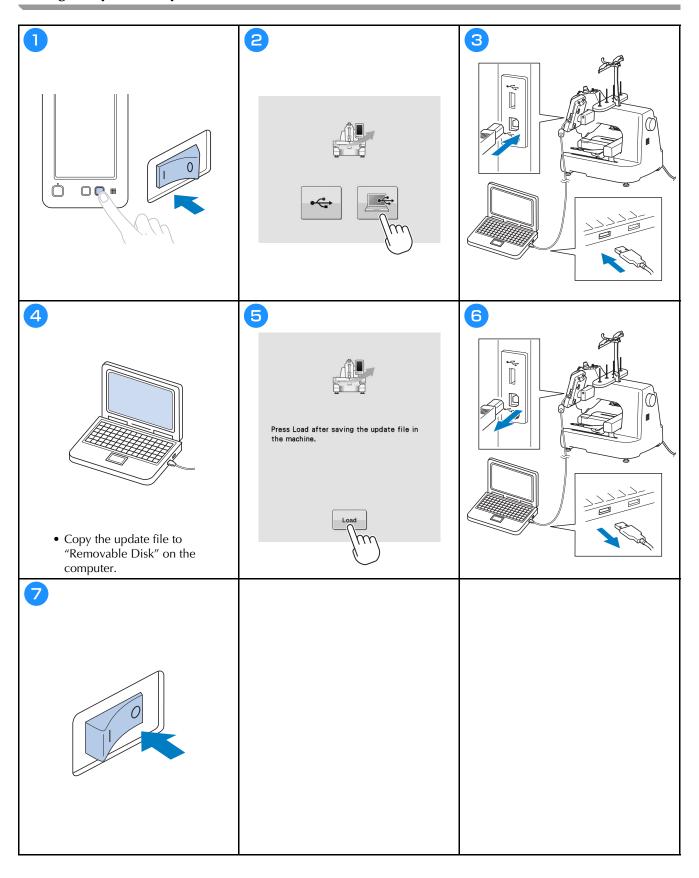
• The software version of the machine can be checked from the settings screen.



## Using USB media to update



# Using computer to update



You can find in the detailed Operation Manual at Brother support website ( <a href="https://s.brother/cpcab/">https://s.brother/cpcab/</a>).



Various optional accessories are available to be purchased separately.

Visit our website <a href="https://s.brother/cocab/">https://s.brother/cocab/</a>.



Please visit us at <a href="https://s.brother/cpcab/">https://s.brother/cpcab/</a> where you can get product support and answers to frequently asked questions (FAQs).





Be sure to install the latest software. A variety of functional improvements are being performed in the latest version.



Brother SupportCenter is a mobile app that provides the support information for your Brother product.

D02M0W-001