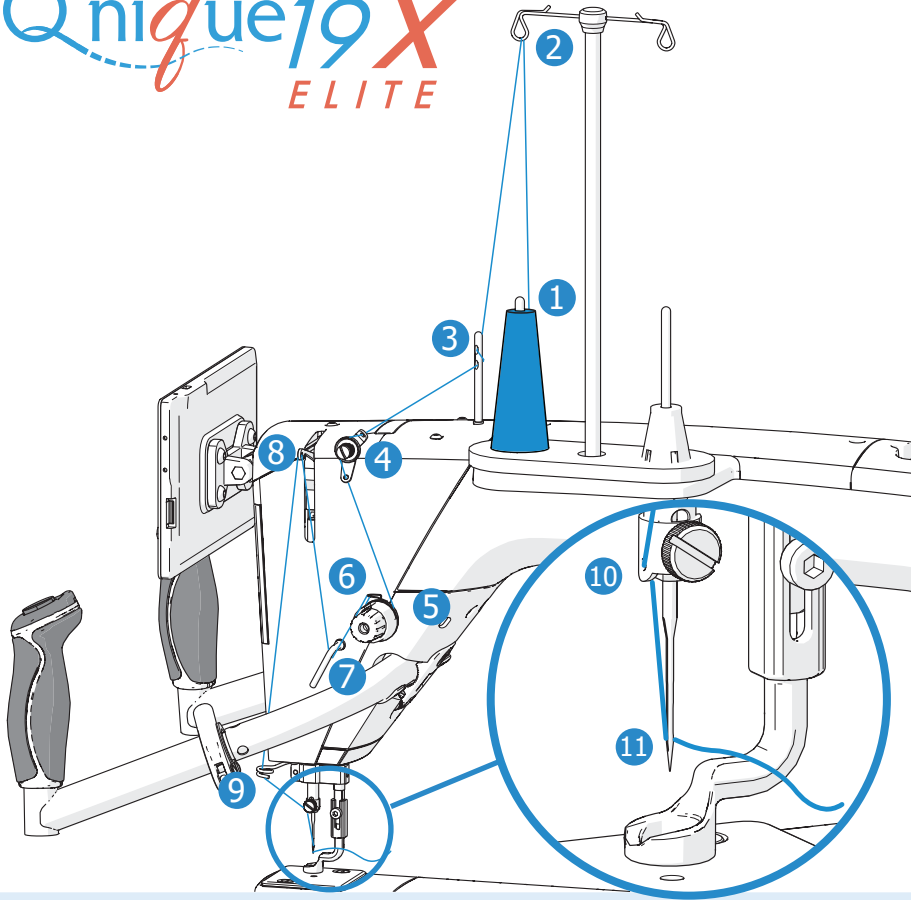


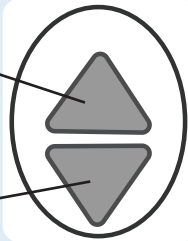
## Thread Guide



- 1 Thread Cone
- 2 Thread Mast
- 3 Thread Guide Rod
- 4 Small Tensioner
- 5 Thread Guide
- 6 Tensioner Check Spring
- 7 Thread Guide
- 8 Take-up Lever
- 9 Bottom Thread Guide
- 10 Needle Bar Eyelet
- 11 Eye of Needle

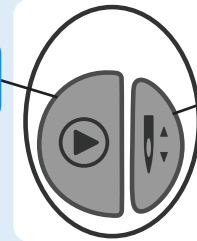
## Handlebar Button Controls

Increase



Decrease

Start/Stop  
Stitching



Single Stitch  
or Needle Up/  
Down (see  
Settings)

## Starting a New Project?

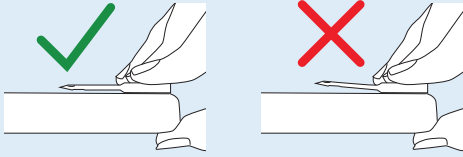
1. Gather fabric, batting, thread, and needles.
2. Clean your machine and carriage wheels and all tracks with a lint-free cloth.
3. Oil the hook assembly.\*
4. Check encoders are aligned with the tracks.\*
5. Use a compatible new needle, and install it correctly.\*
6. Confirm cables are plugged in, out of the way, and don't constrict the machine's movement.
7. Check the machine's hopping foot height with the height tool.\*
8. Wind and load the bobbin correctly.\*
9. Test your bobbin's tension (see "Bobbin Guide" on reverse side). Adjust if needed.
10. Set the bobbin estimator.\*
11. Use the "Thread Guide" above to thread your machine.
12. Measure and record your quilt's length and width for later reference.
13. Load your quilt onto your frame according to your frame manual's instructions.
14. Set the height of your take-up rail to about a finger's width from the machine bed.
15. Set your tension using scrap materials off to the side of your quilt.\*
16. Set the boundaries for the edge warning.\*
17. Pull up your bottom thread tails as you work (see manual instructions on "tying off").
18. Tack or baste down your quilt (see frame instructions).

\*See machine manual for details.

# Needle Information

**Needle Style:** DPx5 MR, 134 MR, **Bobbin Type:** M-Class  
1955 MR

Use a straight needle.

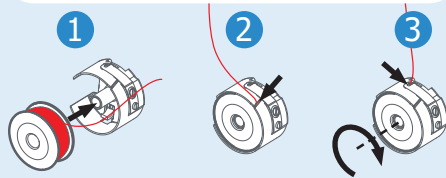


**Size: Thread Size and Type:**

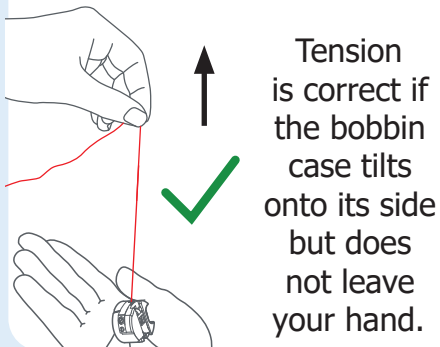
14/90	mono-filament, 100 wt. silk, 60 wt. polyester
16/100	mono-filament, 60 wt., 50 wt. polyester or cotton thread
18/110	40 wt. cotton and polyester, 30 wt. cottons and polyester
20/125	any thread 30 wt. or heavier

# Bobbin Guide

Place the bobbin in the bobbin case so that when you pull the thread, the bobbin rotates clockwise.

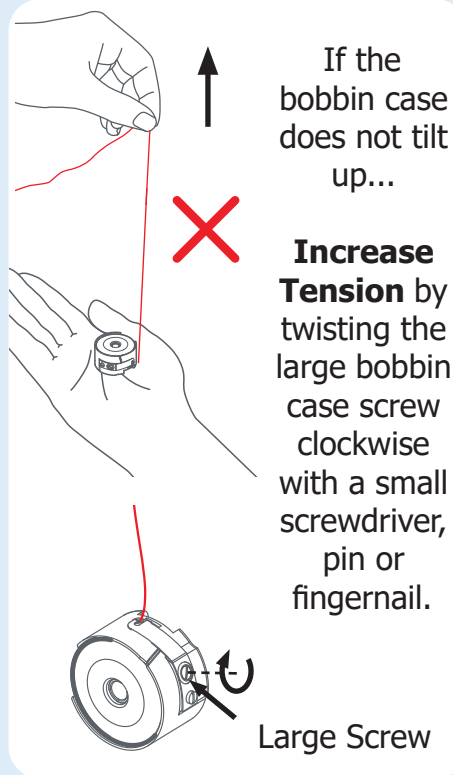


**Tension Test:** Hold the bobbin case in your hand and pull the thread up.



Tension is correct if the bobbin case tilts onto its side but does not leave your hand.

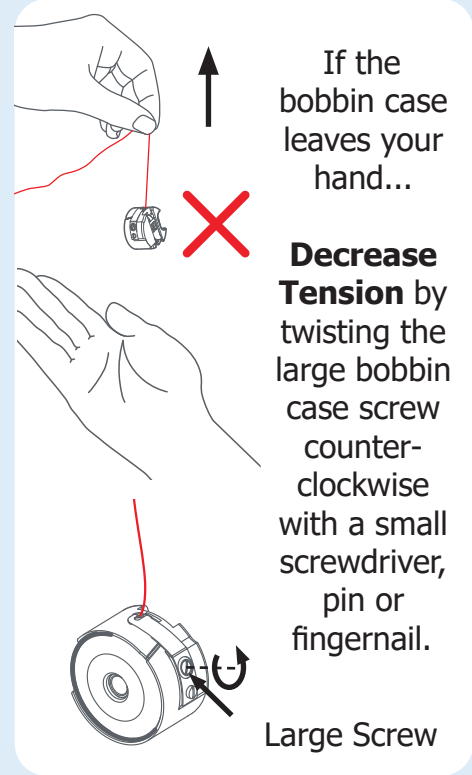
Set the bobbin tension first, and then adjust the top thread tension.



If the bobbin case does not tilt up...

**Increase Tension** by twisting the large bobbin case screw clockwise with a small screwdriver, pin or fingernail.

Large Screw



If the bobbin case leaves your hand...

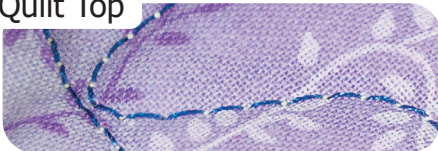
**Decrease Tension** by twisting the large bobbin case screw counter-clockwise with a small screwdriver, pin or fingernail.

Large Screw

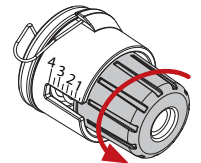
# Top Thread Tension

Set the bobbin tension first (see above).

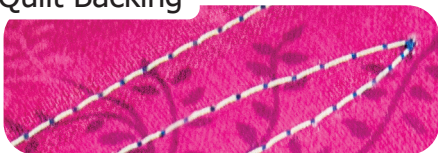
**Quilt Top**



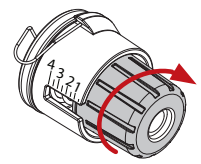
If the bobbin thread (shown here in white) is pulled through the top layer of fabric, decrease top thread tension.



**Quilt Backing**



If the top thread (shown here in blue) is pulled through to quilt backing, increase tension.



**Quilt Top**

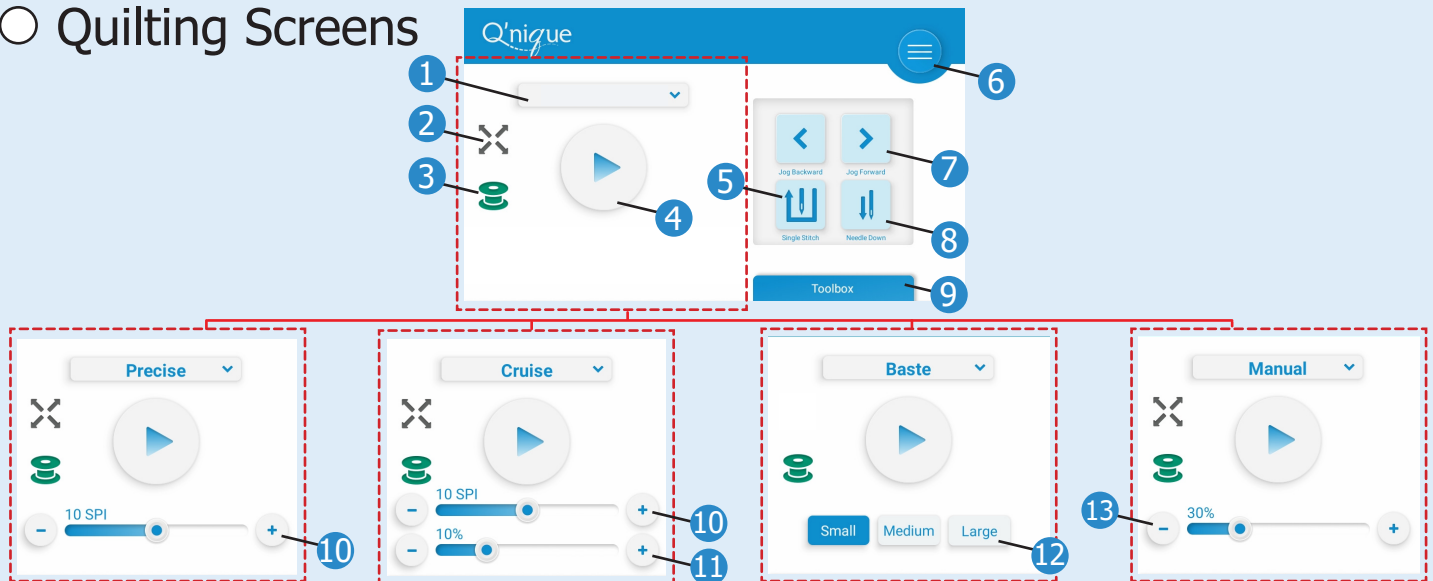


**Correct thread tension**

The top thread is not pulled to the quilt backing, and the bobbin thread is not pulled up to the quilt top.



## ○ Quilting Screens




### 1 Quilting Mode

Press the drop-down to select a sewing mode:

- Precise
- Cruise
- Baste
- Manual

### 2 Edge Indicator

Lights up [] when stitching within proximity of the quilt edge. Indicator only displays on screen after edge boundaries are set.

### 3 Bobbin Level Estimate

Estimated bobbin fill level.


 Above 21%


 Between 11–21%

 Under 10%

Indicator does not show if turned off in Bobbin Estimator.

### 4 Start/Pause Stitching

Press to start or stop stitching. Changes [] when moving too fast.

 Overspeed warning.  
Slow machine down.



### 5 Single Stitch

Creates a single stitch in place. Useful for tie-offs.

### 6 Menu Selection

Tap to open the Settings and Help menus.

### 7 Jog Needle

Press [] or [] to move the needle incrementally.

### 8 Needle Up/Down

Press to move the needle to the highest or lowest position.

### 9 Toolbox

Tap to open the measure, calculator, bobbin estimator, edge warning, and project (stitch counter) tool.

### 10 Stitch Length

Displayed in Stitches Per Inch (SPI) or Centimeter (SPC). Units can be changed in Settings.

### 11 Minimum Speed

Speed that the machine will stitch in place when not being moved.

### 12 Baste Stitch Length

### 13 Manual Speed

Speed of stitching. Displayed as a percentage of the total possible speed.

## Toolbox



1 **Measure** - Take measurements.

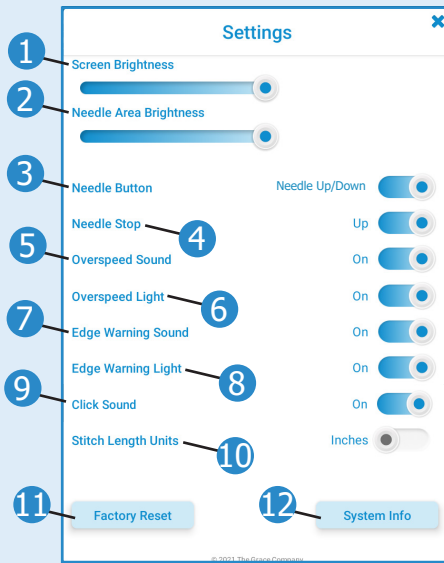
2 **Calculator**

3 **Bobbin Estimator** - Warns you of low bobbin levels.

4 **Edge Warning** - Set quilt boundaries.

5 **Project** - Track stitch count for project.

# Settings Menu



## 1 Screen Brightness

## 2 Needle Area Brightness

Controls brightness of the light in needle area (white light only).

## 3 Needle Button

Set the handlebar button to single stitch or needle up/down (moves the needle to highest or lowest position).

## 4 Needle Stop

Choose to have the needle stop in the [Up] or [Down] position when stitching is inactive.

## 5 Overspeed Sound

Press to mute the overspeed alarm.

## 6 Overspeed Light

Press to disable the red overspeed warning light.

## 7 Edge Warning Sound

Press to mute the edge warning alarm.

## 8 Edge Warning Light

Press to disable the red light that shines over the needle plate when the machine approaches or passes over the quilt edge.

## 9 Click Sound

Press to disable the click sound when you press buttons.

## 10 Stitch Length Units

Set the units to inches or metric.

## 11 Factory Reset

Press to return your display to the original factory settings

## 12 System Info

Displays the display and machine firmware versions.

# Lights, Alarms, and Icons

## Red Light (Needle Area)

The needle area may light up in red if:

- The machine is moving too quickly across the quilt for stitch regulation. This light can be disabled in the Settings menu (Overspeed Light).
- The machine is approaching or has passed over the quilt boundaries. This can be disabled in the Settings menu (Edge Warning Light).

## Alarm (Constant Tone)

Machine is being moved too quickly for regulated stitching. Alarm can be disabled in the Settings menu (Overspeed Sound).

## Alarm (Beeping)

Machine approaching or has passed over the boundaries of the quilt. Boundaries must first be established in the Edge Warning tool. This alarm can be disabled in the Settings menu (Edge Warning Sound).

## Screen Turned Off

The screen is set to turn off after five minutes of inactivity. Press any handlebar button to resume quilting. The screen sleep feature can be disabled in the Settings menu (Sleep).

## Edge Warning Indicator

- ✕ Machine is stitching within boundaries.
- ✕ Machine is approaching or has crossed quilt boundaries.

## Overspeed Icon



Machine is moving too quickly for stitch regulation. Slow down!

## Bobbin Level Estimate



Above 21%  
Between 11–21%  
Under 10%

*Grace*  
COMPANY