INSTALLATION

HAILEY FRAME

ANSLEY MACHINE
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Manufactured for Tin Lizzie 18 by:
Quilt-EZ, LLC  
8532 S. Paradise West Dr.  
Paradise, UT 84328

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Included Parts:

- Touch Screen Remote (EB147)
- Power Supply with cord (EB146)
- Motor Box (MA144)
- Carriage Bracket (MT71)
- Rear Pulley (MT66)
- Motor Box Bracket (MT65)
- Carriage Belt (MA74)
- 12ft White Belt (AY101)
- Encoder wires (AW128)
- Belt Brackets (MH83)
- Bag of hardware (AA100) (See pg 2)
- Stitcher Box (EB145)
- White Remote Cable (EW47)
- Black Motor Box Cable (EW59)
- Remote Bracket (MT9)
- 1.5 ft 9 Pin Cable (AW94)
## Parts Bag (AA148):

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Installing the Shirley Stitcher II:

Installing the Shirley Stitcher II Motor Box
1. Using the Motor Box Bracket, attach this to the pre-drilled holes in the front of your carriage.
2. It is important when attaching the bracket that the 2 empty holes for the motor box are on the inside left of the carriage (if at the front of the carriage).

3. Line the Shirley Stitcher II motor box mounting holes with the 2 pre-drilled holes in the motor box bracket.

4. Using the 10-24 x ½” screws and washers, place one washer on each screw and drop the screw down through the drilled holes, attaching the motor box on the underside.
5. Tighten screws securely.
Attaching belts:

The belt that attaches onto your carriage has been precut to length, but the length of the frame belt that is supplied is 12ft 4" long. Depending on the length of your frame will depend on the length of belt to cut. You will want to cut your belt 4 inches longer then the length of your frame. For example, if you have a 10ft frame, you will want to cut your belt at 10ft 4in (standard office scissors can be used).

1. Locate (2) eye bolts with nuts and washers in the parts bag (if not in the parts bag these may already be attached to the brackets), also locate the belt clamps. These will be used for the belt stretched the length of the frame.

2. To attach the belt stretched the length of the frame, slide a belt clamp on each end of the previously cut belt.

3. Attach one eye bolt on each end by looping the belt around the eye of the bolt, be sure to have the teeth facing each other, with the smooth side out. Allow 1” for the tail when looped around.

4. Slide the belt bracket over the looped tail and tighten down with the thumb screw.

5. It is important the belt clamp is placed inside the support bracket for your frame wall. If it is placed on the outside it will not line up straight.

6. Using the included bolts and nuts clamp the belt bracket to the frame. The eye bolt should be right above the support bracket for the frame. This will ensure the belt isn’t being pulled up when attached to the motor box.

7. Extend the belt to the other side placing it between the pulley and the tensioner on the motor box. Be sure to have the belt teeth facing up towards the pulley.

8. Attach the opposite side just as steps 4-6 denote.

9. To tighten your belt, loosen one of the belt bracket about ¼ way. Loosen the belt clamp and pull the belt till it is tight and re-screw the belt clamp. Now re-tighten the belt clamp, this should give a nice tight belt. NOTE: For the belt tensions, you want to ensure the belt doesn’t vibrate when quilting. If you hear vibrations when quilting, your belts need to be tightened. A nice taught belt will do just fine, the belt should NEVER droop.
10. Locate the carriage tension bracket. Line the 2 pre-drilled holes in the bracket with the 2 predrilled holes in the carriage (at the back side of the carriage). The distance between the belt tension wheel and the carriage should be between 1/8-1/4" (the tension wheel will be on the right side if at the back of the carriage). Tighten securely.

11. Locate the carriage bracket and (2) 10-24 x 1/2” screws and washers.

12. Attach the bracket to the pre-cut groove in the top carriage. Note: The distance between the bracket and the wheel bar can be adjusted to ensure the belt is straight when attached

13. Slide the bracket as close to the carriage as possible without having it touch the carriage.

14. Locate the hole at the front of the bracket (see picture), a hole will need to be drilled in the carriage to accommodate this. Mark the hole, remove the bracket and drill the marked hole. Then re-attach using the included screws.

15. Locate the 6ft long belt, the carriage belt bracket, (1) belt clamp and (1) eye bolt with nuts (Note: These parts should all be pre-assembled)

16. Screw the carriage belt bracket to the carriage bracket (using the pin in the bracket to help line it straight)

17. Loop the belt back to the carriage tension wheel then up to the gear on top of the motor box then back to the carriage belt bracket (Note: Ensure the teeth of the belt are facing the gear).

18. To set the correct tension, dis-engage the lever on the black motor box and push the belt closest to the carriage towards the carriage. Once the belt touches the carriage the carriage should start to roll slightly. If you press the belts towards the carriage and it doesn’t move at all, it needs to be tighter.
19. Once you have the correct tension, tighten the nut on the right side of the adapter with a wrench. This will ensure your belt doesn’t twist.

20. A guard for the gear on the top of the motor box has been provided. Locate the (2) 10-32 nuts and attach the guard with the opening facing the carriage.

21. Your Shirley Stitcher II is now attached to the frame and ready to be connected to the machine.

Connecting the Shirley Stitcher II to your Machine:

**NOTE: Make sure all wires are connected before plugging in the power to the wall.**

The Shirley Stitcher II is designed with many functions. When the Shirley Stitcher II is activated and running, your stitches will be controlled by the Shirley Stitcher II. When the Shirley Stitcher II is disengaged, meaning the motors aren’t moving the machine, you are able to use the handle bar controls when ever you like. Moving the machine with the belts attached will not harm the Shirley Stitcher II at all.

The encoders attached to the frame will now be plugged into the new Stitcher box along with all other wires. The only wire that will run into the Tin Lizzie box will be the one short 2 ft cable from the Stitcher box to the Tin Lizzie Power Box.
Attaching the new Cables
Locate the Stitcher Box, the 1.5 ft long new 9 pin cable, data cable (ends look like a phone cord), power supply and remote wire.

1. Plug the black data cable into the motor box marked “Stitcher box” and run it along side the bottom carriage.

2. Locate the wire clamps and zip ties and tie the wire on the right side of the bottom carriage (if you are going to run the remote wire here as well, wait to tie the cables.)

3. Tie the wires to the back side of the bottom carriage as well.

4. Plug the other end of the black data cable into the Stitcher box marked “Motor Box”.

5. Plug the 1.5ft 9 pin cable into the Stitcher box marked “Tin Lizzie Power Box”. Plug the other end into the Tin Lizzie Power Box in the connector where the handle bars use to be connected.

6. Plug your front (and back if available) handle bar wire into the Stitcher box marked “Front Handle Bar”.

7. Using the provided velcro, attach your stitcher box to the back side of the machine (just to the left of the machine motor)

8. Hang the power supply under the frame with the included hook (hang it on one of the cross bars closest to the center of the frame)
9. Plug the power supply into the motor box in the connector marked “Power”.

10. Plug the White remote wire into the motor box into the connector marked “Remote”.

11. Plug the remote wire into the top of the remote.

12. Attach the Remote Bracket on the back side of the remote using the included screws and 2 pre-drilled holes in the case.

13. The remote wire may be run in a few different places:
   
a. Along the side of the bottom carriage, same place as the Stitcher box cable. Then up the back and to the front. This makes things look clean, but harder to hold the remote in your hands.

b. Under your quilt and around the “take-up” roller. This makes it easier to hold the remote, but be sure it doesn’t get caught on your carriage wheels.

c. In front of your quilt. This method only works if you don’t have your batting hanging down from the quilt.

14. Plug the power into the wall jack (ONLY AFTER ALL CABLES ARE CONNECTED) (use only standard 110V)

15. Turn on the switch on the motor box to the “on” position and the LED (above the power wire on the motor box) should be lit. Also the LED on the Stitcher box should be lit when the machine is turned on.
Adjusting Speed and Stitch Length

1. Adjusting Stitch length can be done before or while the Shirley Stitcher II is running by turning the “Stitches Per Inch” dial on the left handle bar.
2. Adjusting the machine speed can be done before or while the Shirley Stitcher II is running by turning the “Speed” dial on the right handle bar. When the Shirley Stitcher II is not activated the speed dial will then control the machine stitching speed in manual mode.

Detaching the Belts for Free Motion

When the Shirley Stitcher II is not running (meaning it isn’t moving your machine, but could still be on), the motors will be free and you can move your machine to wherever you like. If you want your machine to move as it did before you attached the Shirley Stitcher 2, it is very easy to disengage the belts.

1. On the motor box there is a lever, move the lever forward then up to disengage the belt (NOTE: The lever is spring loaded, you will need to give it some effort.)

2. To detach the carriage belt simply unscrew the carriage belt bracket and hang it to the side. Having it still attached to the pulleys will be ok.

Shutting Down the Shirley Stitcher II

Shutting down your Shirley Stitcher II is very easy. There is no shutdown sequence like on your computer, there are only 2 steps.

1. Turn off your Shirley Stitcher II using the power switch on the black box.
2. Unplug the Shirley Stitcher II remote and remove from handle bars if desired.
Question and Answer

Q: My black belt (Y axis) rubs on the carriage adapter.
A: Make sure that it is not your belt clamp screw that is rubbing on your belt. Next check that your carriage adapter is squarely connected on the carriage, and also ensure your motor box is mounted square on the bottom carriage.

Q: When I move my machine left to right, my white belt falls off the pulley on the back (the X pulley).
A: Ensure the motor box is mounted square on the bottom carriage, if it is skewed, this will cause the belt to come off when moving left to right. Also ensure your lever (on the top of your black box) is in the activated position in the long slot farthest away from the carriage. Next ensure the white belt is positioned correctly and is square with the black motor box.

Q: What are my options for attaching encoders to my machine.
A: There are 2 options for encoders on your machine.
1. One is to leave your encoders as they are plugged into your machine.
2. Two is to switch out your encoder cables for the cables that came in your parts box. This will give a more accurate stitch, but your max speed for stitch regulation will be reduced. See the steps below for attaching the new cables if desired.

Attaching New Encoder Cables

1. Unplug your carriage encoder cable from the Machine Power Box and unplug the 2 small wires from the encoders on the carriage (because the connectors are so small, it may be hard to remove them, but be careful pulling on the wires to get them out from the encoder.

2. Locate the new encoder wires and plug each of the two ends into each of the encoders. Ensure when pressing the connector together that the showing metal pieces in the connector are facing away from the large encoder rubber wheel. It is not important which connector goes into which encoder.
3. Once the encoder wire is connected carefully ensure your machine will move all the way forward and back without breaking the wire.