



SAILRITE

**LEATHER
WORK**

SEWING
MACHINE

Assembly Instructions



 Sew like a pro with Sailrite®

For in-depth information on setup and assembly of your Leatherwork Sewing Machine, please reference our free video at Sailrite.com/leatherwork-setup or search #300525XHT at Sailrite.com.

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Leatherwork Legs & Tabletop Components

Tabletop & Legs



Tabletop & Legs Hardware



Assembling the Leatherwork

Leg Assembly

Find bolts with washer and lock washer (A). Stand both L-legs (B) upside down and bolt the back support bar (C) to the back of the table legs (1). Do not tighten down.



Find treadle mount bar (D), bolts (E) and plates (F). Place the treadle mount bar (D) 3-1/2 inches (8.9cm) from the front toe of the legs (2). Bolt each side of the treadle mount bar to the bottom of the legs by placing plate (F) in the slot (G) and using bolt (E) to secure.



Attaching Tabletop

On a soft surface, place the tabletop top side down. The recess (H) should be upright and to your left. With the back of the legs facing you, place them on the tabletop and line up the back pilot holes in the table with the leg mount holes (I).

Loosely thread a hex head lag screw (J), lock washer (K) and large flat washer (L) into each back pilot hole (I). Then align the front leg holes to their corresponding tabletop pilot holes and thread in a screw (J), lock washer (K) and flat washer (3, L).

Use a 3/8-inch socket wrench to tighten the screws, compressing the lock washers (K). Now tighten the four bolts (M) attaching the back support bar (C).

The legs have adjustable feet (N). Rotate the locking nut (O) in a manner allowing each foot to be threaded all the way in. Once the table is upright this makes it easier to adjust one or two feet to level the table. Once adjusted, use the nut to lock the position permanently.



Assemble & Attach Treadle

Find the treadle pedal (A) and use B and C to mount the L-bracket (D) as shown (4).

Flip the table on its back side and use E, F and G to install the treadle in the center of the treadle mount bar (5).

The tabs on G are to be placed in the slots (H) of the treadle mount bar (6). Ensure that L-bracket (D) attachment arm (I) is pointing toward the back support bar (J). Tighten down.

Important: Check to make sure the treadle moves freely after the bolts (F) are tightened. If not, loosen bolt and reposition one of the pivots.

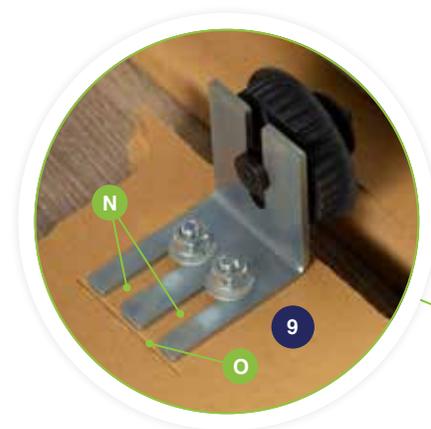
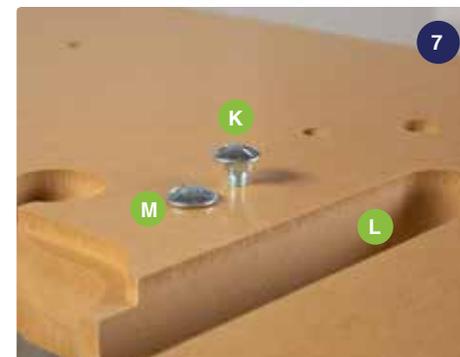


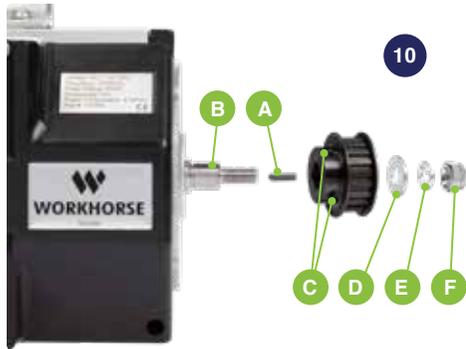
Attach Idler Pulley

Stand the table upright and place the two carriage bolts (K) through the holes left of the belt slot (L). Use a mallet or hammer to pound the bolts flush with the top of the table (7, M).

Flip the table upside down and place the slots (N) of the Idler Pulley L-Bracket over the bolts and slide it so the end is lined up with the score mark (O) on the table (9).

Use P, Q and R to lock the Idler Pulley L-Bracket in place.



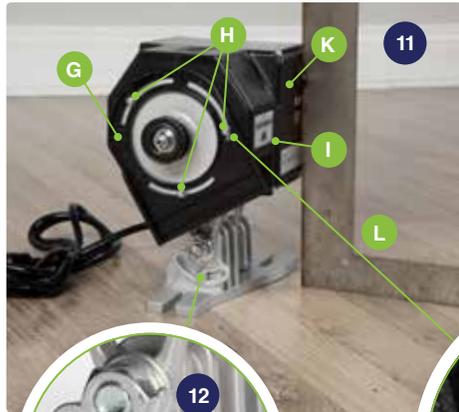


Preparing Workhorse® Motor

Place key (A) in keyway (B) on motor shaft. If fit is too tight, use sandpaper or a dremel tool to smooth out the key. Loosen the set screws (C) in the flange of the black 21-tooth pulley so that it can be installed on the motor shaft. The keyway in the pulley should fit snugly over the key (A) on the motor shaft. Use washer (D), lock washer (E) and locking nut (F) to lock the pulley in place. Tighten set screws (C).

Flip the motor upside down and install the belt cover bracket (G) with three screws (H). Orient the bracket as shown (11). The screw closest to the Workhorse Motor Plate (I) should be 3/8 inch (0.95cm) from the end of the slot (13).

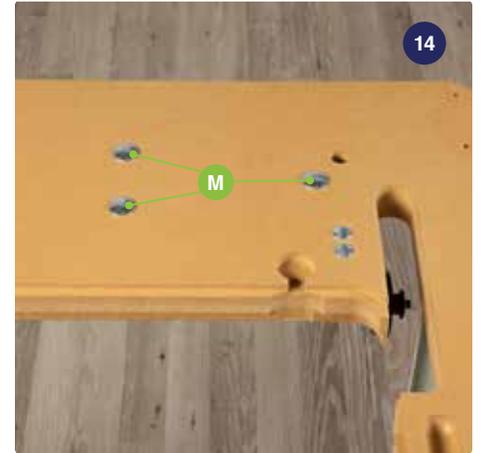
Loosen the pivot screw (J) on the Workhorse Servo Motor. The side of the Workhorse Motor (K) should be perfectly vertical with the ground. Use a Triangle or Square (L) to set the angle and tighten the pivot screw (J).



Tabletop Motor Attachment

With the table upright, use a mallet or hammer to pound the three carriage bolts (M) into the three through-holes in the tabletop (14).

Flip the table upside down and place the slots (N) of the Workhorse Motor Bracket over the bolts (M) and slide it so the end is lined up with the score mark (O) on the table. Use P, Q and R, in that order, to lock the Workhorse in place.



Linkage Bar Installation

Loosen the center nut (A) on the linkage bar (B) so that it will slide apart. Bolt the linkage bar (B) to the outermost hole of the motor operation lever (C) and the L-bracket (D).

Increasing or decreasing the overlap of the linkage bar changes the angle of the treadle pedal (E).

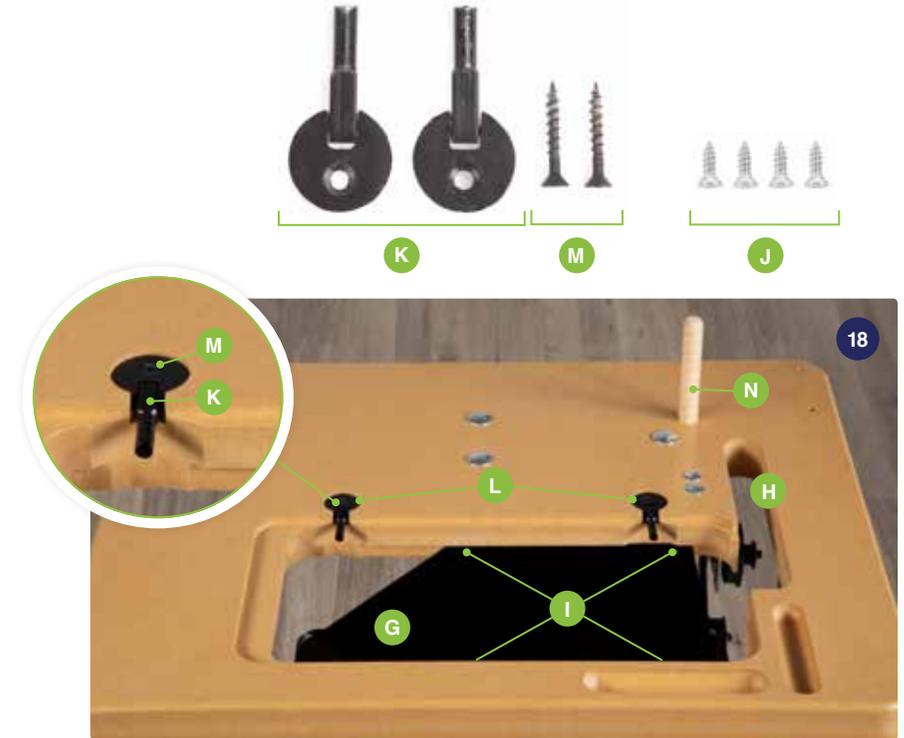
Note: You want at least a 1/4-inch clearance between the bottom of the treadle pedal and the floor (F).



Install Oil Tray & Hinges

Find the metal oil tray (G) and reference the belt slot (H) of the tabletop. Place the oil tray (G) under the tabletop and line up the mounting holes in the oil tray to the pilot holes inside the rim of the tabletop cutout (I). Use the four flat head tapping screws (J) to attach the oil tray (18).

Place the two hinges (K) into the hinge hole cutouts in the tabletop (L). Secure with included wood screws (M). Find and insert the support pin (N).

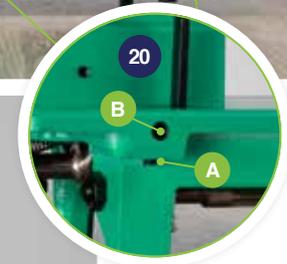


Install Sewing Machine & Cover Bracket

Loosen the hinge hole set screws (A) so that the holes (B) are not obstructed (20).

Remove the long screw (C) from the head of the sewing machine. Take the smaller part of the belt cover assembly (D) and secure with the screw (21, C).

Carefully lift the sewing machine and place the hinge holes (B) over the hinge pins in the tabletop (E). Allow the sewing machine to slide all the way back/down on the hinge pins and carefully rest the machine on the tabletop (22). Tighten the set screws (A). Pivot the sewing machine upright.



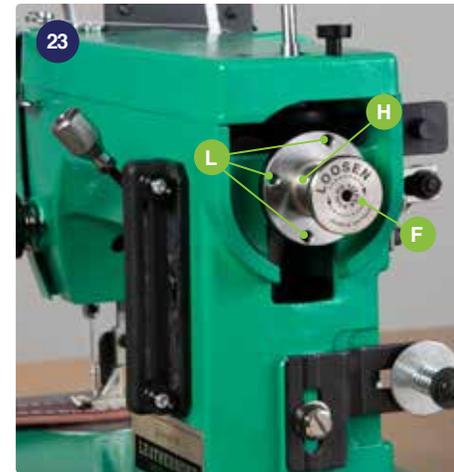
Securing the Balance Wheel

Unscrew the reverse-threaded Posi-Pin® Nut (F). Slide the balance wheel (G) onto the bushing (H). Reinstall the Posi-Pin Nut (F).

Push the Posi-Pin® (I) through one of the holes in the balance wheel (J). While maintaining pressure on the Posi-Pin (I), rotate (K) the balance wheel (G) until the Posi-Pin (I) locks into one of the balance wheel bushing holes (L). Rotation of the balance wheel will now cause the machine to function.

To disengage the machine (for bobbin winding), pull the Posi-Pin (I) out of the balance wheel (G). The balance wheel will now rotate without operating the machine. Push the Posi-Pin (I) into the hole at the center of the Posi-Pin Nut (M) to store.

Note: Always rotate the balance wheel by grabbing the top of the wheel and rotating down toward you (K).

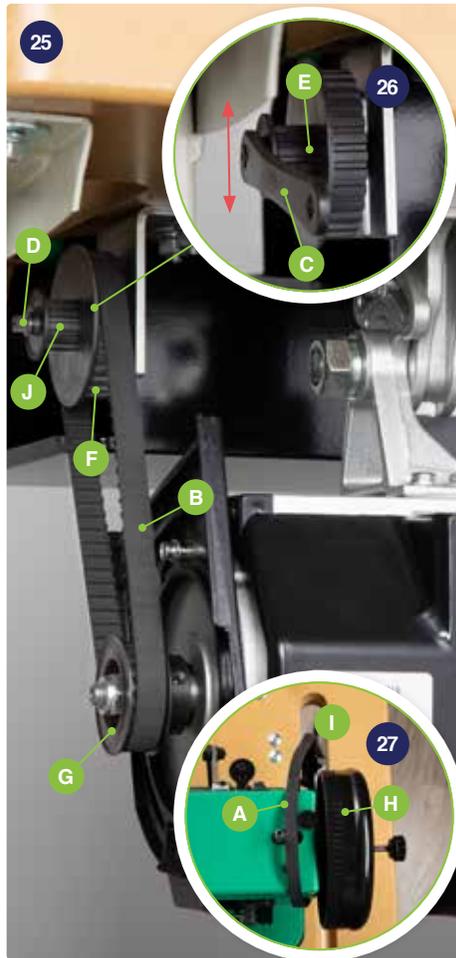


Installing Timing Belts

Find the long and short timing belts (**A** and **B**) and box end wrench (**C**). Use the box end wrench (**C**) to loosen the shaft (**D**) of the idler pulley (**E**) so that the shaft will be able to move up and down (**26**). Take the shorter timing belt (**B**) and place it over the big pulley (**F**) of the idler pulley and around the motor pulley (**G**). Then push the pulley shaft (**D**) up, tensioning the belt, and tighten.

Place the larger timing belt (**A**) over and to the left of the balance wheel (**H**). Feed the belt through the belt slot (**I**) and onto the small pulley of the idler pulley (**27, J**). With the Posi-Pin (p. 14, **I**) disengaged, rotate the balance wheel while guiding the belt into place around the balance wheel (just like a bicycle chain).

Check the tension of both timing belts by pressing at the middle of each belt. There should be equal tension between the two belts. If one is looser, use the box end wrench (**C**) to loosen and tighten the idler pulley accordingly (**26**).



Installing Belt Covers

Find the belt cover (**K**) and the included small screw (**L**). Slide the belt cover (**K**) over the belt cover bracket on the Workhorse® Motor. Thread the small screw (**L**) through the hole (**M**) in the belt cover and tighten with a screwdriver to lock it to the belt cover bracket.

The final belt cover (**N**) has a pointed forked end (**O**) that slides between the washer and the black bracket (**31**). The keyway cut (**P**) on the belt cover (**N**) will lock onto the shaft of the key (**Q**) of its mating component (**30**).

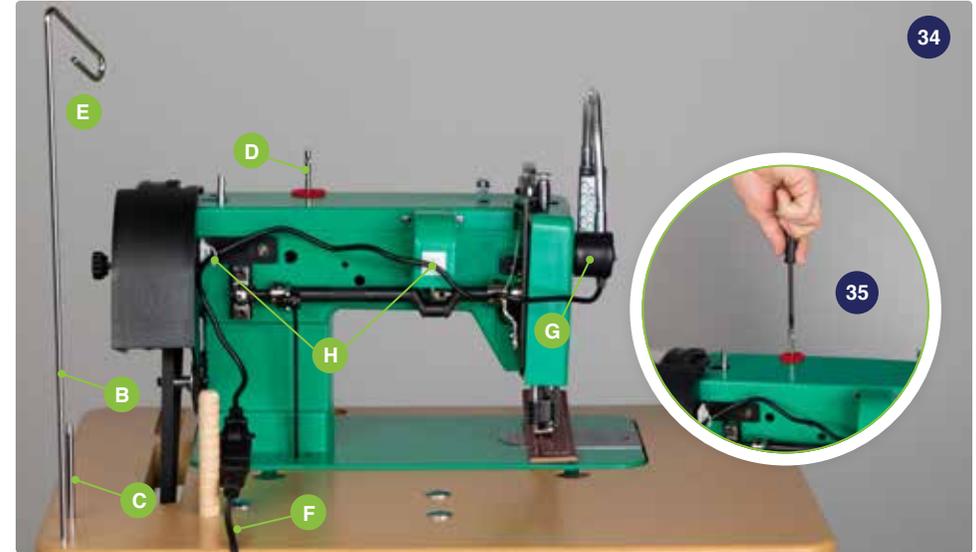


Changing Motor Rotation

Plug the motor in and turn it on. The standby screen will show a “P” with a rotating dash (33). With the Posi-Pin disengaged (p. 14, M) operate the machine and make sure the motor runs in a counterclockwise direction (A).

If the balance wheel is spinning the opposite direction from (32), follow the instructions below to reverse the direction.

1. Press the “P” button four times until the LED display reads “n3.”
2. Press the “S” button multiple times to select between “0” and “1.”
3. Select “1” and the motor will run clockwise.
4. Select “0” and the motor will run counterclockwise (this is the setting the motor should be on).
5. Press the “P” button to save the selection of “0.”
6. Turn motor off then on.



Insert Thread Stand Posts

Locate the thread stand posts (B, C and D). The longest post with looped end (E) will drop into the back corner hole on the tabletop. Gently tap the non-tapered end of the short post (C) in the tabletop corner hole just in front of the taller post. The thread post with holes in it (D) gets screwed into the top of the machine (35).

Install Light & Wire

Plug light into included extension cord (F). To attach the LED light (G), place the magnetic light in your desired location.

Note: If it is a 110 volt sewing machine, the light will plug into the back of the Workhorse® Servo Motor. If it is a 220-240 volt machine, the light will plug into a wall outlet.

Use the included adhesive pieces and wire ties (H) to secure the light cord in your desired locations. Make sure to keep the cord out of the way of any moving machine parts.

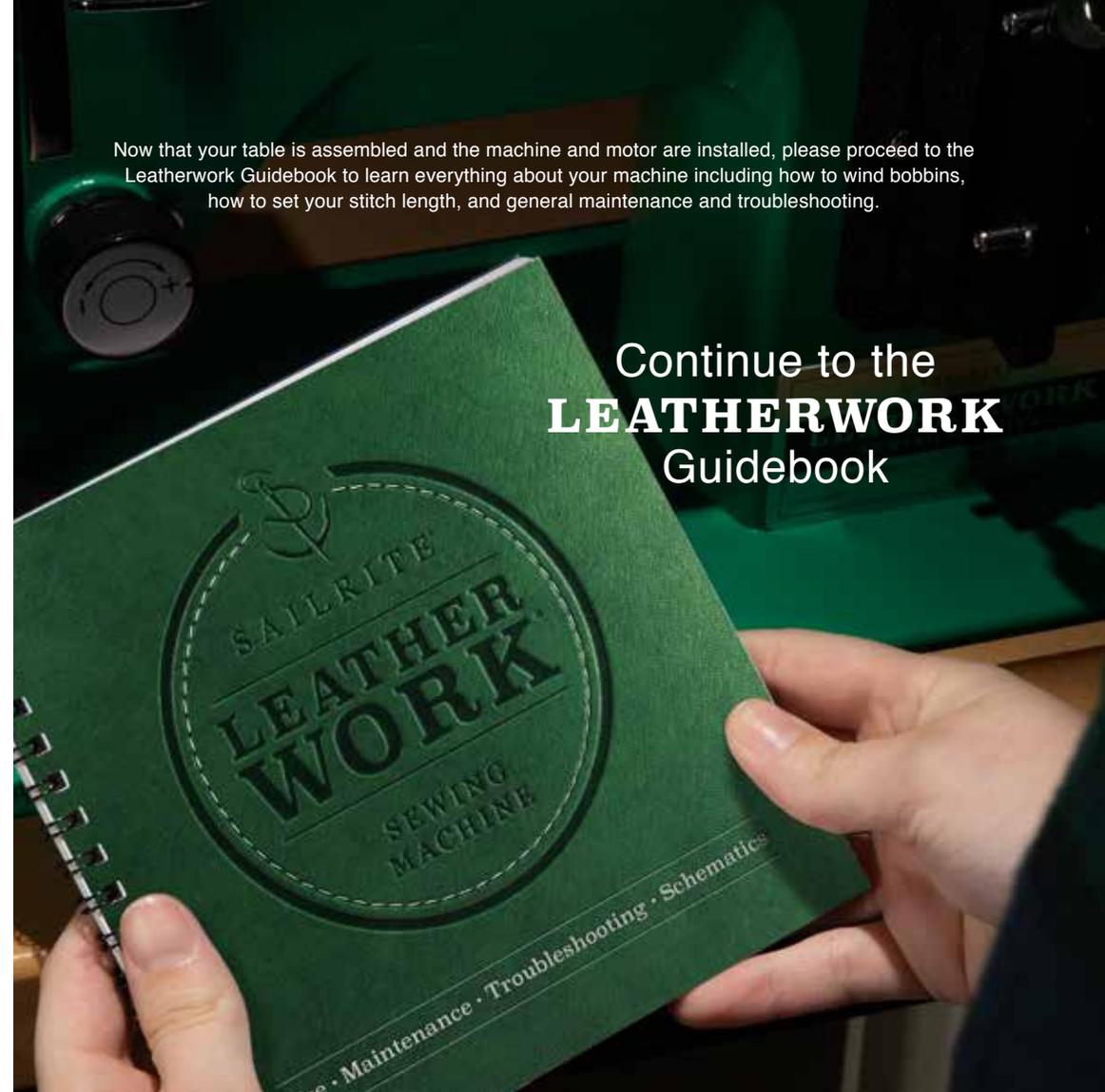
Removing the Leather Sample

Ensure the Take-Up Arm (A) is all the way up. If it is not, engage the Posi-Pin® (p.14) and raise the needle by grabbing the top of the balance wheel and rotating toward the front of the machine (B). **Never** rotate in the other direction. Use the foot lift (C) to lift the feet. Remove the fabric sample and cut the thread coming from below the machine.



Now that your table is assembled and the machine and motor are installed, please proceed to the Leatherwork Guidebook to learn everything about your machine including how to wind bobbins, how to set your stitch length, and general maintenance and troubleshooting.

Continue to the
LEATHERWORK
Guidebook





Service & Support

We are proud to provide you with everything you need to successfully maintain and repair your Leatherwork Sewing Machine. Your purchase comes with personalized support for the lifetime of your machine. We will do our best to satisfy every support request accurately, completely and in a timely manner.

Customer Service Questions or Concerns

To start a support case, go to [Sailrite.com/support](https://www.sailrite.com/support) and fill out the online form. One of our support staff members will review your case and contact you.

Sailrite.com

Equipping you to sew



122926*1

Assembly Instructions for Sailrite® Leatherwork®

Qty: 1

Original manual in English

Version 1-21

Serial #: _____

Date of Purchase: _____

Leatherwork® Patented Technology
Patent #7438009

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