ULTRAFEED® INDUSTRIAL TABLE PACKAGES

Set-up Guide for #120931, #120934 & #121091
The Ultrafeed Industrial Sewing Table #120934

This package takes your portable, Ultrafeed sewing machine and situates it securely in an industrial-style table stand, providing a large work surface for projects of all sizes. The sewing machine conveniently sits flush in the table for smooth sewing.

These instructions will guide you in the set-up of your Ultrafeed Industrial Sewing Table (#120934). Start here as well if you ordered the Ultrafeed Industrial Sewing Table with Workhorse Servo Motor (#120931, #121091).

Sewing Machine Safety

Please observe the following when using your Sailrite sewing machine:

• Do not operate in conditions where you or the machine are or may become wet.

• Operate the machine on a firm, level surface where there is adequate room for safe operation.

• Observe caution when placing your hands or other parts of your body or clothing near any moving parts including but not limited to the following: the walking foot, the needle, the drive belt, the balance wheel and any of its parts.

• Do not run the machine without its covers.

• Do not stop the movement of the balance wheel with your hands.

• Use caution in tilting the machine backwards in its table and in lowering it back into the table.

• Use proper lifting techniques when moving the machine.

• Do not drop the machine.

• Always use the proper voltage required for the motor and light.

• Wear protective eyewear when sewing.

• Wear shoes when operating the foot pedal.

• Provide supervision when allowing others to use the machine—particularly children and those who are unfamiliar with the machine’s operation.

• Do not use around flammable materials.

• Use both hands to guide the material while the belt and balance wheel are in motion.

• Maintain a safe distance from the belt and balance wheel when the machine is in motion.

• The operator’s hand should not be near the wheel pinch point (where moving parts may cause harm to the user) except to raise and lower the needle, and only when the motor is disengaged.

**WARNING:** Some products may be fabricated from materials which may contain chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.
Power Stand Assembly

Find parts A, B, C and D (Figure 1). Stand both k-legs upright. Bolt the back support bar (H) to the k-legs using the bottom hole on the back of each leg (Figure 2).

Find parts E, F and G. Turn the k-legs upside down. Position the treadle mount bar (I) across the k-legs (Figure 3). Bolt the bar into place toward the back of the front slot on the legs (Figure 4).
Being careful to not scratch the surface, place the tabletop face down on the floor. Line up the k-legs squarely 1-1/2” from the back of the tabletop and 1” in from the side closest to the cutout (Figure 5). Be sure the k-legs are facing the proper direction. For reference, the ruler is on the front of the tabletop.

Using a pencil, trace around the perimeter of each slot in the k-legs (Figure 6). With the legs removed, use a 5/32" drill bit to drill approximately 1/2” into the tabletop within each pencil outline. Do not drill completely through the tabletop.

Realign the k-legs on the tabletop with the pencil marks. Use the hex head lag screws (J), locking washers (L) and washers (M) (Figure 7) to bolt the frame to the tabletop at each position (Figure 8).
Installing the Drawer

Position the drawer as desired on the underside of the tabletop (Figure 9) so the drawer will pull out towards the front (Figure 10). Place the drawer rails over the edges of the drawer. Secure the rails using 6 of the included screws (K) (Figure 7).

**Tip:** Do not over tighten the screws or they will prevent the drawer from sliding freely.

Installing Rubber Foot Pads

Stretch the rubber foot pads onto each of the k-leg's rectangular metal feet (Figure 11).

Adjusting the Height

Flip the table upright.

Sit in front of the table and assess the table height. If adjustments are needed, loosen the four bolts toward the top of each leg (Figure 12). Raise or lower the tabletop to the desired position then tighten the bolts. Be sure to adjust the height before installing the sewing machine in the tabletop.
Oil Tray Installation

Locate the two hinge cushions (A), two chrome hinges (B), two wood screws (C), and four nails (D) (Figure 13).

With the table upright, place the two hinge cushions (A) in the back cutouts (Figure 14). Secure by driving a wood screw (C) directly through the center of the cushion. Using a power drill makes the process easier.

Position the oil tray so its top edge is just below the bottom of the hinge cushions and the right edge of the tray does not encroach on the belt slot cutout (E) (Figure 15). Use the 4 nails (D), to secure the tray.

Note: Positioning the oil tray too far to the right can cause the timing belt to rub against it causing unnecessary wear on the belt.
Mounting the Thread Stand

Find the threaded insert and its corresponding Allen wrench. Locate the pre-drilled hole in the tabletop just to the right of the belt slot cutout (F). Use the Allen wrench to carefully screw the threaded insert into the hole (Figure 16).

Sailrite’s Integrated Thread Stand can now be installed via the threaded insert (Figure 17). If another thread stand is being used, it can be placed on or screwed into the table near this same location.

**Note:** Running a bar of soap along the threads of the insert will help prevent the melamine surface of the table top from cracking as the insert is screwed in.

If you purchased the Ultrafeed Industrial Sewing Table & Workhorse Servo Motor (#120931 or #121091), skip to page 9 to complete the setup.

If you have the Ultrafeed Industrial Sewing Table only (#120934), you won’t need to install the foot treadle. The parts should be saved in case a Workhorse Motor is added in the future.
Machine Installation
To remove the Ultrafeed from its carrying case or wooden base, tilt the machine back and loosen the two set screws (A) that hold the machine on the hinges (Figure 18). Carefully slide the sewing machine off the case/base hinges.

Insert the chrome Euro hinges (B) into the two holes on the back of the sewing machine head. Carefully lift the sewing machine head and set it in the cutout so the hinges rest in the hinge cushions (C) (Figure 19). Tilt the sewing machine back and tighten the set screws (A).

Plug in your foot control and you are ready to sew! Assembly of the Ultrafeed Industrial Sewing Table is complete.

Upgrade Options
To upgrade an Ultrafeed sewing machine with the Industrial Sewing Table to the Workhorse Servo Motor setup, the following add-ons can be purchased and the remaining instructions followed:

• Sailrite Workhorse Servo Motor #120260 (110V) #121091 (220-240V)

• Cogged Timing Belt 42" #120580

• Belt Cover & Bracket for Ultrafeed with Workhorse #120930

• Support Pin for Sailrite Ultrafeed Industrial Sewing Table #120866

• Idler Pulley for Ultrafeed #W061-A

Note: A new idler pulley is only required for Ultrafeed sewing machines purchased prior to June 17, 2016.
The Ultrafeed Industrial Sewing Table & Workhorse Servo Motor
#120931 & #121091

This package transforms the portable Ultrafeed Sewing Machine into a stationary, industrial machine! The Workhorse Servo Motor provides top notch power at the slowest speeds so you can sew stitch-by-stitch in even heavy assemblies.

With this larger motor setup, we recommend oiling the machine more frequently than with the portable motor. A good rule of thumb is to oil after 40 hours of continual use or if the machine has been sitting for more than 30 days without running. Oiling locations can be found in the Ultrafeed Guidebook.

Installing Foot Treadle

Locate the foot treadle and its accompanying large bolts, small bolts and washers.

The foot treadle is typically installed to the right side of the treadle mount bar, but it can be set to the user’s preference anywhere on the bar. Determine the desired location of the treadle and flip the table onto its back side (Figure 20).

Locate the two end pivots (D). Very loosely bolt the end pivots to the treadle mount bar in the desired location. Then install the foot treadle by placing the pins on the end pivots into the holes on the side of the treadle (Figure 21). The side of the treadle with the bolt holes should be facing towards the back.

Once the treadle is in place, tighten the bolts. Test the treadle to be sure it moves freely once the bolts are tightened.
Install the L-bracket on the back of the treadle starting with the hole farthest to the right on the treadle. Hand tighten the bolts. Then slide the L-bracket over so that the curved end is directly over the second hole from the left on the treadle. Tighten the bolts (Figure 22 & 23).

**BEFORE CONTINUING:** See “Attaching a Pulley” and “Installing the Workhorse Servo Motor” in the Workhorse Servo Motor Instructions.

**Check Motor Rotation**

The machine’s motor shaft should rotate counterclockwise when viewed from the motor shaft end. Plug in the motor, switch the power on and press down on the foot treadle to confirm operation.

If motor rotation is not counterclockwise (Figure 24), please refer to “Changing Motor Rotation” in the Workhorse Installation Instructions.

Due to the immense amount of power and speed the Workhorse provides, do not set the top sewing speed above 25. The motor will arrive pre-set at 30. Be sure to turn the speed down to 25 prior to sewing. For more information, reference “Operation” in the Workhorse Servo Motor Instructions.
Machine Installation

To remove the Ultrafeed from its carrying case or wooden base, tilt the machine back and loosen the two set screws (A) that hold the machine on the hinges (Figure 25). Carefully slide the sewing machine off the case/base hinges.

Insert the chrome Euro hinges (B) into the two holes on the back of the sewing machine head. Carefully lift the sewing machine head and set it in the cutout so the hinges rest in the hinge cushions (C) (Figure 26). Tilt the sewing machine back and tighten the set screws (A).

Removing Ultrafeed Motor Housing

To utilize the Workhorse Servo Motor, the portable Ultrafeed motor (D) and motor housing (E) must be removed (Figure 27).

To begin, remove the Posi-Pin, Posi-Pin nut and the balance wheel from the Ultrafeed. Remove the bottom screw in the black belt cover (F) (Figure 28). Then unscrew the two screws holding the motor housing to the machine (G) (Figure 27). Keep one of these screws near as it will be used in a future step.

Tilt the motor housing and use a screwdriver to push the belt off the motor pulley (H). Then remove the motor and housing. Place all of these components in a safe location so you can make your machine portable again. Replace the balance wheel, Posi-Pin and Posi-Pin nut.
Belt Adjustment for the Workhorse Servo Motor

Before installing the drive belt, loosen the adjustment screw (A) at the top of the motor bracket to allow the Workhorse Servo Motor to freely pivot (Figure 29). This will prevent the belt from being stretched out of shape before proper adjustments are made.

With the machine tilted back, slip the drive belt onto the balance wheel track and guide it onto the motor pulley. Carefully lower the machine into the cutout (Figure 30). Lightly push the motor back until the belt is taut. Tighten the adjustment screw (A), locking the motor position.

Once installed, the belt should not touch the table and should be relatively centered on the track of both the balance wheel and motor pulley. If adjustments need to be made, loosen the nuts where the motor bracket is attached to the table and slide to the left or right. Test new motor positions by rotating the balance wheel on the machine a few times by hand. When the correct position is found, tighten the nuts.

Remove the belt so the pulley bracket can be installed in a later step.
Installing the Linkage Bar

Locate the linkage bar (B) and release the center nut to expand the two halves.

Using the attached nuts and washers on the linkage bar, bolt one end of the linkage bar to the outer most hole of the motor operation lever (C) on the Workhorse Servo Motor. Attach the opposite end of the linkage bar to the L-bracket (D) on the foot treadle. Push the two arms into the center bracket and finger tighten the bolt. Be sure the treadle is angled all the way up and tighten the center nut (Figure 31).

BEFORE CONTINUING: See “Installing the Pulley Cover” in the Workhorse Servo Motor Instructions.
Attaching the Balance Wheel Belt Cover

Find the screw set aside from the section, “Removing Ultrafeed Motor Housing.” Use the screw to install the L-shaped belt cover bracket (A) to the back of the machine (Figure 32).

**Note:** If your machine has a metal idler pulley (B), you’ll need to replace it with the new Delrin idler pulley provided. To do this, use a small flathead screwdriver to remove the E5 ring (C) from the idler pulley shaft (Figure 33). Place the new Delrin idler pulley (D) on the shaft and reinstall the E5 ring (Figure 34). The new Delrin idler pulley can be left on the machine when converted back to a portable configuration. This upgraded part provides quieter and smoother machine operation. The metal pulley can be set aside with the motor and motor housing.
To install the belt cover (E), guide the elongated slot of the cover (F) over the idler pulley shaft (G), between the idler pulley (D) and the idler pulley bracket (H) (**Figure 35**). The protrusion of the L-shaped bracket (I) on the machine should fit snugly into a slot (J) on the belt cover (**Figure 36**).

**Support Pin Installation**

Locate the machine support pin (K). Push the support pin into the pre-drilled hole behind the machine, nearest the carriage bolts that support the motor. The fit may be tight. Push until snug (**Figure 37**).

Assembly of the Ultrafeed Industrial Table & Workhorse Servo Motor (#120931, #121091) is now complete. Enjoy!