
Posi-Pin System

Upgrade for older Ultrafeed™ Sewing Machines

Older Sailrite Ultrafeed sewing machines (introduction—circa 2007) will have a compression clutch mechanism which creates the friction causing the balance wheel to actuate the drive shaft of the sewing machine. These units will have a black plastic hand knob at the right end of the machine inside the balance wheel. Tightening and loosening this knob engages and disengages the machine. The problem with this mechanism is that potential slippage of the clutch robs needle penetration power.

Sailrite's patented solution is a direct drive system called the Posi-Pin. A solid pin is pushed through the balance wheel and drive shaft bushing flange to create a positive connection that does not slip. It adds tremendous sewing power to the Ultrafeed and makes bobbin winding effortless. The Posi-Pin can be completely disengaged when removed and there is a shear point on the pin for added safety.

This system can be operated with a Monster II, PowerPlus, or Standard Small Diameter balance wheel. The Monster II is a large diameter, solid steel (nickel plated) balance wheel with hand crank weighing 7 pounds! Its large diameter slows down the machine and increases power while the hand crank provides effortless manual operation when electricity is not available. The PowerPlus wheel has a large diameter and comes standard on all new Ultrafeed sewing machines. The Standard Small Diameter wheel allows for more speed but offers less power. All new wheels are machined to function with the Posi-Pin.

Important details:

- If your old balance wheel does not have a hole through the face of the wheel, it is not useful with the Posi-Pin system.
- Sailrite recommends purchasing a belt cover for the PowerPlus or Monster II balance wheels for safety.

POSI-PIN INSTALLATION INSTRUCTIONS

1. Remove the existing balance wheel.
2. Drive the roll pin out that secures the bushing to the main drive shaft.
3. Use a gear puller to remove the bushing, or place a few small nuts in the end cavity of the bushing and gently thread the clutch screw back on the end. As the end of the clutch screw comes in contact with the loose nuts, it will pull the bushing off the shaft. When the clutch screw goes tight, remove and add more nuts. Repeat this sequence until the bushing comes off.
4. Slide the Posi-Pin bushing onto the drive shaft, nearly touching the machine. Tighten the two set screws in the bushing to secure.
5. Slide the new balance wheel over the bushing and thread the Posi-Pin Nut onto the bushing to keep the balance wheel from coming off.
6. Rotate the wheel so that the face hole in the wheel lines up with one of the four flange bushing holes.
7. Push the Posi-Pin into the holes to engage the drive.
8. The machine is ready to sew.
9. To disengage for bobbin winding, pull the Posi-Pin out and put it in the hole of the Posi-Pin Nut for safe keeping until you are ready to engage the drive again.

ITEMS NEEDED:

- Posi-Pin Bushing (#100537)
- Posi-Pin Nut (#100536)
- Posi-Pin (#102043)
- 2 - Set Screws (#713100)
- 3/32" Allen Wrench (#102264)
- New Balance Wheel: Small Diameter for LS-1 (#W060), Small Diameter for LSZ-1 (#W060Z), PowerPlus Wheel (#100181), or Monster II Wheel (#604U)
- Cogged Belt for Balance Wheel (Small Diameter Wheels need #5265 and PowerPlus Wheels need #56535. Monster II Wheel includes belt.)
- Optional: Belt Cover (#W050, #100871, #102628, or #102631)

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