

## Install Instructions to Upgrade to Ball Bearing Line Roller for 'Older' Penn Skirted Spool Spinning Reels

For: Model 4500SS:     Kit Part #: P24-4500SP  
      Model 5500SS:     Kit Part #: P24-5500SP

Refer to Penn Parts Schematic and Penn Reel Parts List (model specific) available from  
[www.pennparts.com](http://www.pennparts.com)

Note: Please read completely and fully understand the instructions before starting work.  
      Schematic drawing item numbers appear in parentheses.  
      Do not open the kit bag of new parts until instructed but verify the contents before starting work.  
      An empty egg carton is ideal to keep small parts.

1. Remove drag knob (52) and spool assembly (47).
2. Remove crank handle (15).
3. Remove bail stud screw and star washer (36 and 36A) from the bail arm (34) on the line roller side. Note the nylon patch on the screw threads.
4. Carefully undo and retain the roller washer (132), line roller (35), and line roller bushing (35A). Keep these parts separate from the previously removed parts. If you plan to keep them, mark them in such a manner so they can be identified as the different part numbers they are.
5. Remove the bail cam screw (31A) carefully while noting how the bail spring (32) fits into the bail wire (24).
6. Remove the bail wire and put with the parts removed in Step 4. Please note: **Do not mix the new kit parts with the old parts just removed. Store them separately for they are not compatible.**
7. Open the kit bag. There should be 5 pieces, total, consisting of the following: 1 each; bail wire, gold colored line roller, roller washer, and finally, 2 ball bearings.
8. Reassemble the reel with lubrication procedures from the Owner's Manual.
9. Place the new bail wire (24) onto the bail spring (32) and insert the bail cam shoulder screw (31A) into the bail arm carefully. Load the spring to align the threaded hole with the screw. Start the screw by hand and tighten.
10. Prestage the following on the bail arm (34): screw (36), star lockwasher (36A) and new line roller washer (132).
11. Insert a ball bearing (25A) into the line roller (35) and place onto the new bail wire (24).
12. Insert the second ball bearing between the line roller and the "axle".
13. Be very careful not to force anything or bend the new bail wire. Orient the new roller assembly with the prestaged bail arm from Step 10 and start screw (36) by hand.
14. Draw the two assemblies together very carefully as not to bind or nick the parts. Do not tighten the screw.
15. With a black permanent marker place a dot or two on the new gold line roller outside of the groove the fishing line will ride in. Place a dot or two on the new line roller washer.
16. Using a piece of fishing line about 2 feet long wrapped around the line roller, with **very light pressure and slowly**, using a dental floss motion, ensure the line roller rotates. Full fishing forces cannot be applied at this time because the assembly will be too loose. This testing can be accomplished by putting the reel between your legs to leave both hands free. It is easier without the crank handle.
17. Tighten the bail stud screw (36) until just snug, **in small increments**, using Step 15's flossing test between each turn of the screwdriver. If binding occurs, stop and cure the cause. You may need to 'back off' the screw to allow the roller to turn properly. This was an adjustment on the original system hence the patchlock threads. Fully tightened, the screw could bind or stop the roller. If "fishing forces" can be applied with the line roller turning and the roller washer stationary, then proceed to Step 18.
18. Install the crank handle, spool assembly, and drag knob.
19. **You have successfully completed the conversion.**

**Please note:** A converted reel will now be easily identified by the new gold colored (titanium nitride plated) line roller. These are the individual kit parts. If repair parts are needed for the converted reel please use:

<b>Item #</b>	<b>Description (new style component)</b>	<b>Part #</b>
35	Line Roller	35-8500J
35A	Ball Bearing	35A-8500J (2 required)
132	Roller Washer	132-8500J
24	Bail Wire for Model 4500SS	24-4500J
24	Bail Wire for Model 5500SS	24-5500J

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Tight Lines,  
Pete-the-Pest Gomez