Stewart,
The following are our factory specs for Stylus Assembling.

You have two assembly options:

1) You can try using the existing Stylus Bottom Plastic (hammered onto the Stylus Support Pin) and conduct the positioning steps (with your new Stylus Triple) starting top of page 2. The Double Stylus' Bottom Plastic may work ok with your new Triple Stylus.

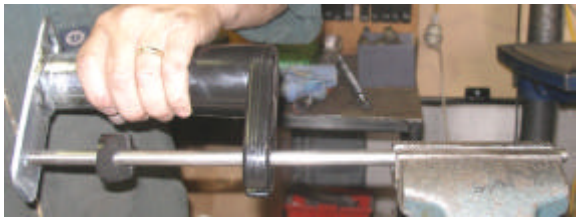
Or,

2) You can gently lever off the Double's Stylus Bottom Plastic, then gently knock out the Pin and follow the steps from scratch starting below:

VP STYSUPD: PP Stylus Double Support - lower Stylus plastic drilled, pin/Stylus fitted & aligned + XHEX 10-25Z

Equipment: 3mm Drill Bit + Drill, Screwdriver and 32mm O.D./ 25mm I.D. pipe
Time Average:
Process:
Loosen off the Grub Screw of the "fitted" Stylus Support.

Screw the Double or Triple Stylus Stainless Steel Rod into the Support with a Stylus Bottom Plastic threaded on. The Stylus Rod must be screwed in tight (in order to get some torque use a hammer in between the Rod and Support to help turn the Rod on tight). Do not bolt the Stainless Rod in place.



Thread the "assembled" Stylus Middle (Double or Triple) onto the Stainless Steel Rod and turn the Stylus to "On" indexed position (i.e. when the Roller Arms would be sitting on Spools). Position the Stylus Plastic Bottom so that it meets nicely with the Stylus Middle (i.e. so the two are "mated"). Tighten the Grub Screw.

Turn the correctly orientated unit upside down and secure the middle in the vice (in effect holding the Stylus Bottom Plastic against the Support Plate).

Using the Stylus Support Pin hole as a guide, drill up into the Stylus Bottom using a 3mm drill bit - drill up to the drill chuck.

After drilling, release the tension on the Ball Detent System by undoing the Grub Screw a bit. Remove the Stylus Middle and Bottom Plastic.

Hammer in the Stylus Support Pin.

Using the handy 32mm O.D./ 25mm I.D. pipe (hanging on the fabrication wall) gently hit the Stylus Bottom Plastic onto the Support Pin.

Full Assembly Steps

Thread the Stylus Double or Triple Middle Plastic onto the Stainless Rod again. Place the Stylus and Support Assembly on the Long Motor Mount and bolt the Stylus SS Rod on tight.

Mount the unit properly on the "testing" carrier and with the Stylus in "On" indexed position, tighten the Grub Screw.

Checking Roller Arm Height

Turn the Stylus to "Free Running" position and back to "On" position. If the Roller Arms run over the Spool (not underneath it) nicely then the roller arms get "a pass".

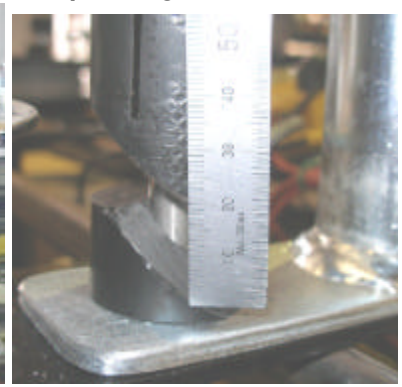
If the Roller Arms run under the Spool flange or way above it, then the only thing we can do is to bend the Roller Arms up or down until they run over the Spool nicely. This is not ideal, but, the only fix in this instance.
NOTE: *This scenario/outcome never really occurs.*

Tension Free Clearance Check

With the Stylus in "On" indexed position measure the distance between the Stylus Middle Plastic and Stylus Lower Plastic.

Stylus Double = 8-12mm vertical clearance is what we need (more is fine).
Stylus Triple = at least 16mm vertical clearance required.

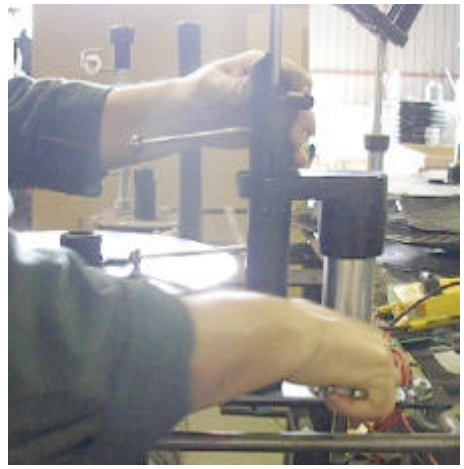
The Double Stylus being tested below has a 16mm clearance which is really good.
Stewart - if you do not have this clearance please give me a call.



Setting Roller Arm Position

Loosen the Stylus Double (or Triple) Bolt and the Stylus Support Bolt so that the Stylus Support can "just" twist freely along its slot.

With the Stylus in "On" indexed position, line up the Roller Arms so that they point directly towards the centre of the Spool.



Turn on the PowerPac Motor and fine adjust the Roller Arms to find the true "sweet" centre spot. At the "sweet" spot central position, the Roller running sound should be at its quietist (i.e. Roller Arms when twisted either side of the Spool centre will make more of a screeching or rumbling noise).

Once the "best" position is found (with the motor still on) hold the top of the Stylus Middle with one hand and tighten the Stylus Support Bolt with the other then turn the Motor off and tighten the Stylus Double (or Triple) Bolt.

Load on the second (and third Spool if a Triple Stylus) and switch the motor on again. Check that the top Roller Arms are also centrally aligned nicely.

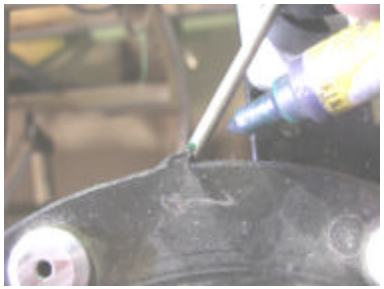
Setting Roller Arm Distance

At this point we need the tip of the Roller Arms to have a 5mm clearance from the Spool's Release Hook compartment ridge. If the Roller Arms are too close they will potentially hit "housed" Release Hooks and break them. If the tip is too close use a hammer and gently tap Roller Arms in a little.

If the Roller Arm tips are further than 5mm away they will not have enough influence/down pressure required to turn the Spool properly. Use a pin punch and hammer to push the Roller Arms out to the 5mm spec.

Trimming the Stylus Lock

Push the Base Drive Plate up off the Motor Shaft by about 10mm - use a screwdriver underneath to lever the plate up. NEVER pull up on the edges of the Base Drive Plate or it will develop a curved "set".



Move the Stylus around into "Locked" position and tap the Base Drive Plate down until it touches the top of the Stylus Lock. Mark where the Lock Arm needs cutting in order to engage the Base Drive Plate Stop perfectly.

Stewart - please just push the lock arm in or out of the Stylus Middle Plastic (and tweak it up or down) to meet the Base Drive Plate stop - we have already put a nice edge on the Lock for you.

~~Loosen off the Grub Screw and pull the Middle off in order to cut at the mark using wire cutters. Linish the cut end so that it has a slight angle then use the wire brush on the linisher to smooth off the rough edges.~~

~~Tap the Base Drive Plate "home" and thread the Stylus Middle back onto the Stylus Stainless Rod and while the Stylus is in "On" indexed position tighten the Grub Screw again.~~

Test the freshly cut Lock Arm - it should engage the Base Drive Plate Stop nicely and just skim the Base Drive Plate if the Plate is going in Reverse.

Final Stylus Assembly

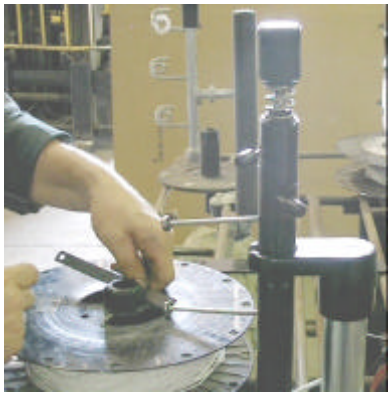
With Stylus in "On" indexed position thread on the Stylus Top Plastic. Turn the Stylus Top Plastic to it's lowest stop on the Stylus Middle Plastic (Normal Operation Torque setting) - see photo. Thread on a Spring Seat, Stylus Spring and another Spring Seat.

The Knob should stop when the Spring wriggle room has just had the slack taken out of it (i.e. the Spring should not be sitting under any tension, but, there should be no up/down free movement).

Final test of Stylus

Load on a Spool and turn the Stylus to "On" indexed position. As pictured below the Stylus Arm has flattened out a little and the tip of the Roller Arm has now 2-3mm clearance from the Spool's Release Hook compartment ridge (whereas before - without the knob on - the clearance was 5mm).

The Stylus Middle/Bottom Plastic vertical clearance distance is now 10mm (whereas before - without the knob on - the vertical clearance was 16mm).



Put on the Second (and Third Spool if a Triple Stylus) and ensure the Stylus turns to "On" indexed position nicely (Roller Arms all running cleanly over the Spools - not under).