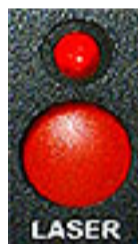


# I/S-2K adjustment procedure for Gammill machines with REV1.0 software

REV 1.0 of the I/S-2K software provides adjustment means to set the needle speed, the needle positioner's up and down positions and the freehand speed range. The SELECTOR DIAL is used to select the adjustment modes:



SELECTOR DIAL POSITION	ADJUSTMENT MODE
minimum	<a href="#">needle speed</a>
12 o'clock	<a href="#">needle position</a>
maximum	<a href="#">freehand speed range</a>



The LASER pushbutton is used to select between incrementing (red light on) and decrementing (red light off) an adjusted parameter.

To enter the adjustment mode, hold the RED BUTTON down while powering up the unit.



## A. NEEDLE SPEED ADJUSTMENT

In this mode the needle speed for the needle positioner and the regulated stitching can be adjusted.

**Note that the needle positioner speed adjustment will change parameters that affect the needle top position and the freehand speed range, so it should be performed first.**


### NEEDLE POSITIONER SPEED


1. Turn the SELECTOR DIAL to its minimum position.



2. Push and hold down . A needle positioning step (up or down) will be made.




1. Check the speed and strength of the needle movement. The proper setting should provide just enough strength to stitch through the fabric going down and pull out going up without jamming. Avoid setting the needle speed too high, for it may cause the needle to run over its top and bottom position.


2. If the speed and strength are sufficient, release , the adjustment is completed.

3. If the speed and strength are not sufficient, while still holding  down, turn off the red LASER light if the speed needs to be decreased, turn it on if increasing is necessary.

4. While still holding  down, hit . A beep will indicate that the speed was increased/decreased and the new value was stored in the computer's memory. A missing beep indicates that a high/low limit was reached.

5. Release  and repeat the procedure from Step 2 until the desired speed is reached.


## REGULATED STITCHING SPEED



1. With the SELECTOR DIAL still at the minimum position push and hold down . A fast single stitch will be made.


2. Check the speed of the stitch. The speed should be as high as possible without causing double stitching.



1. If the speed is acceptable, release , the adjustment is completed.

2. If the speed is not acceptable, while still holding  down, turn off the red LASER light if the speed needs to be decreased, turn it on if increasing is necessary.

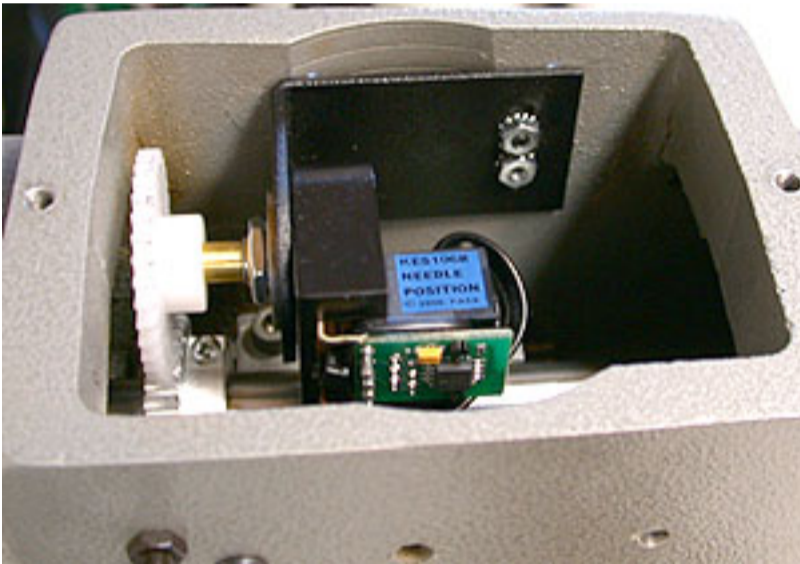
3. While still holding  down hit . A beep will indicate that the speed was increased/decreased and the new value was stored in the computer's memory. A missing beep indicates that a high/low limit was reached.

4. Release  and repeat the procedure from Step 1 until the desired speed is reached.


## B. NEEDLE POSITION ADJUSTMENT

The needle positioner adjustment has two steps: First a mechanical adjustment of the needle position sensor should be performed using fast single stitch, followed by the adjustment of the up and down positions.


### MECHANICAL ADJUSTMENT (TIMING)



On the Gammill machines the needle position sensor can be found inside the arm. The sensor is mounted on a bracket by a 1/2" nut.


1. Turn the SELECTOR DIAL to its 12 o'clock position.
2. Hit . A fast single stitch will be made.
3. If the needle stops at or slightly before its top position, continue with the up/down position adjustment.



1. If the needle does not stop at the right position, loosen up the mounting nut and turn the sensor's body while making repetitive stitches by  until the needle stops at the desired position.
2. When the needle stops at the desired position tighten the mounting nut.

3. Replace the cover on the needle position sensor.

## UP/DOWN POSITION ADJUSTMENT

1. With the SELECTOR DIAL at 12 o'clock position push and hold down . A needle positioning step (up or down) will be made.

**To differentiate between the "up" and "down" positions a beep will sound when the needle is supposed to be at the "up" position.**







1. Check the up or down position of the needle.

When adjusting the "up" position, the take-up lever should be at this position to release the thread from the hook.



When adjusting the "down" position, the needle should stop at its lowest position.



2. If the up(down) position is correct, release , and go to Step 1 to check the other position.
3. If the up(down) position is not acceptable, turn on the red LASER light if the needle position needs to move forward, turn off the light if the needle position needs to move backward.
4. While still holding  down hit . A beep will indicate that the new position was stored in the computer's memory.
5. Release  and repeat the procedure until the desired needle positions are reached.

Note that in some cases excessive overrun and occasional double stitching may occur during the up/down position adjustment. This may be due to unnecessary high needle positioner speed. In such cases a repeated [needle positioner speed adjustment](#) is necessary to eliminate the effect.

## C. FREEHAND SPEED RANGE ADJUSTMENT


1. Turn the SELECTOR DIAL to its maximum position.



2. Push and hold down . The motor will start running continuously with the fastest freehand speed.




1. Check the full speed range by turning the SELECTOR dial while holding  down.



**Note that  should be held down continuously during the whole procedure.**

2. If the maximum speed needs adjustment, while still holding  down, turn off the red LASER light if the speed needs to be decreased, turn it on if increasing is necessary.

3. While still holding  down hit . A beep will indicate that the speed was increased/decreased. Repeat the procedure from Step 2 until the desired maximum speed is reached.

4. While still holding  down turn the SELECTOR DIAL to its minimum position. This is the slowest speed.

5. If the slowest speed needs adjustment, while still holding  down, turn off the red LASER light if the speed needs to be decreased, turn it on if increasing is necessary.

6. While still holding  down hit . A beep will indicate that the speed was increased/decreased. Repeat the procedure from Step 7 until the desired slowest speed is reached.

7. When both the slowest and maximum speed are acceptable release  to save the adjusted speed range in the computer's memory.

**After the adjustments are made the power should be turned off and on again to start the unit in normal operating mode.**



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