1. For 6-in-line configuration, height adjustable ranges of those for 1st and 2nd strings are different from those for 3rd to 6th strings. HAPM Nut 4 for 1st to 3rd strings have narrower (1.2mm diameter) string through holes and those for 4th to 6th strings have wider (1.8mm diameter) string through holes.

The machine heads to be used for 1st and 2nd strings can be identified by a round sticker on the back. The machine head for 3rd string can be identified by a narrower (1.2mm diameter) string through hole and it does not have a round sticker. The machine heads for 4th to 6th strings can be identified with wider (1.8mm diameter) string through holes.

2. Locking and unlocking HAPM Movable Post 3

To lock or unlock HAPM Movable Post 3, insert a 1.5mm hex wrench into the hole of the body cap and loosen the Locking Set-Screw 1. Note: the threading direction to lock or unlock the HAPM Movable Post is dependent upon on which side (right or left) the machine head is located. (See Figure A)
3. Post height adjustment

Make sure that Locking Set-Screw ① is loosened before adjusting height. In order to lower the height of HAPM Movable Post ③, Locking Set-Screw ① needs to be lowered enough so it does not interfere with HAPM Movable Post. Once the lock is released, HAPM Movable Post ③ can be rotated by hand to raise or lower its height. The adjustment direction depends on which side (right or left) the machine head is located. (See Figure B)

After setting the adjustable post to the desired position, securely tighten the Locking Set-Screw ①. ** Adjustable range is 4.5 to 5 mm. The HAPM Movable Post ③ may come off from the Fixed Post ② when loosened too much.

In case only HAPM Nut ④ turns while adjusting height of HAPM Movable Post ③, lock HAPM Movable Post ③ by turning the Locking Set-Screw ①, lightly tighten HAPM Nut ④ by using a coin or a proper tool (rotating direction is same as HAPM Movable Post ③), release Locking Set-Screw ①, and try again.

** CAUTION **

- When setting HAPM Movable Post ③ to a higher position, make sure there is at least 2 full turns of the screw threading left between Fixed Post ② and HAPM Movable Post ③. Otherwise, the string tension could cause the HAPM Movable Post ③ to come off and/or it could lead to breakage of the unit.

- When HAPM Movable Post ③ is set to its lowest position and string is set without tightening the Locking Set-Screw ①, Fixed Post ② and Fixing Screw ③ are secured by string tension, which disables height adjustment by hand. To avoid this, make sure the Locking Set-Screw ① is locked (tightened) before setting the string.
4. How to lock and tune strings

**Magnum Lock is an auto-locking system by using string tension. Tightening HAPM Nut ⁴ does not lock a string.**

1) Loosen HAPM Nut ⁴ until there is an enough space for a string to go through. If it is difficult to loosen by hand, use a coin or a proper tool. Note that the HAPM Nuts have different turning directions to tighten or loosen depending on which side (right or left) the machine head is located (See Figure C)

2) Insert a string in the hole of HAPM Nut ⁴, pull it tight, and turn Button ⁵ to wind the string (locking can be done without pulling a string tight, but it requires more turns). Use of a string winder is recommended.

Stop pulling when the string is locked and HAPM Nut ⁴ starts to turn. Then stretch the string properly, and tune it.

5. Changing strings

<Changing a string that is not broken>
Turn Button ⁵ to loosen, so string is unlocked automatically.

<Changing a string when broken>
Loosen HAPM Nut ⁴ by using a coin or a proper tool. Note that the HAPM Nuts have different turning directions to tighten or loosen depending on which side (right or left) the machine head is located (See Figure C)

For additional assistance, please view the video on the Gotoh® website.
https://g-gotoh.com/international/portfolio/whats-h-a-p-m.html