

Tape Guide Replacement on the Digital Multi Track

Introduction

In a few cases we have seen an abrasion of the sapphire guides. After 500 h the sapphire can have a wear of 0.2 mm. This can cause higher CRC rates and so a risk of interpolation or dropouts is possible.

It is recommended to inspect the all guides carefully at D820 and D827.

Reason:

The hardness of the sapphire surface depends on its crystal orientation. The guides now delivered have a defined crystal orientation to the hard side.

Indication is made by a green mark at the guide.

If you can not see any wear after 500 h or more hours, then the guides are in perfect condition. Please mark it with a black dot as shown in the drawing.

Required tools:

- 2 mm Studer screw driver (2 mm Allen key 26.06.1020)
- 2.5 mm Studer screw driver (2.5 mm Allen key 26.06.1025)
- 3 mm Studer screw driver (3 mm Allen key 26.06.1030)
- 6 mm spanner
- 6 mm socket wrench or a second 6 mm spanner
- 7 mm socket wrench

Required material:

- Tape Guide for D820 / D827 (1.050.498.00-V),
as many as required for the exchange.
- Optional dummy record head for D827 only (1.050.475.00-V)
only required if abrasion is visible (only for Version without New Record Head).
- Optional tape tension sapphire guide for D820 / D827 (1.862.150.06-V
for left and right)
only required if abrasion is visible.

Action:

Caution: The head block is the most critical mechanical part of the machine consequently very precise work is required by using the proper tools. Work in a clean environment.

To avoid dust or dirt on the head block reference pads, please clean them before mounting.

According to your situation please exchange the worn parts:

Tape Guides:

1. **Caution:** The machine has to be switched off.
Unscrew the head block:
 - Remove tape transport cover, pinch roller, head cover (top and base cover), repro head shielding.
 - Disconnect all heads, (also the play back head and push its cables through the hole), then remove the head block carefully.

2. The tape tension guide is fixed with a nut from the bottom side of the head block. Carefully remove it by unscrewing with 7 mm socket wrench.
Caution: Do not turn the top nut with the white sealing lack. This is for the height adjustment and is factory aligned.
Mount the new Tape guide carefully.
No alignment necessary! Do not turn the nut with the white sealing lack.

3. Mount the head block. Check to have clean reference pads. No adjustments required.
Caution: All elements are already aligned, do not change the height of the guides, rollers nor heads.

Record Dummy Head:

1. The Record Dummy Head is attached with two screws from the top side of the head block. If only the Dummy Record Head has to be replaced, it is not necessary to remove the complete head block, only all covers.
2. Carefully unscrew the complete Dummy Head with the 2.5 mm STUDER screwdriver.
3. Carefully mount the new Record Dummy Head marked with the green dot. **Fix first the front screw**, then the screw for the elongated holes in the rear. The rough like scratch surface on the right hand side of the sapphire guide is normal and indicates the soft part of the guide.
4. Mount the covers and check the machine.

Tape Tension Sapphire Guides left and/or right:

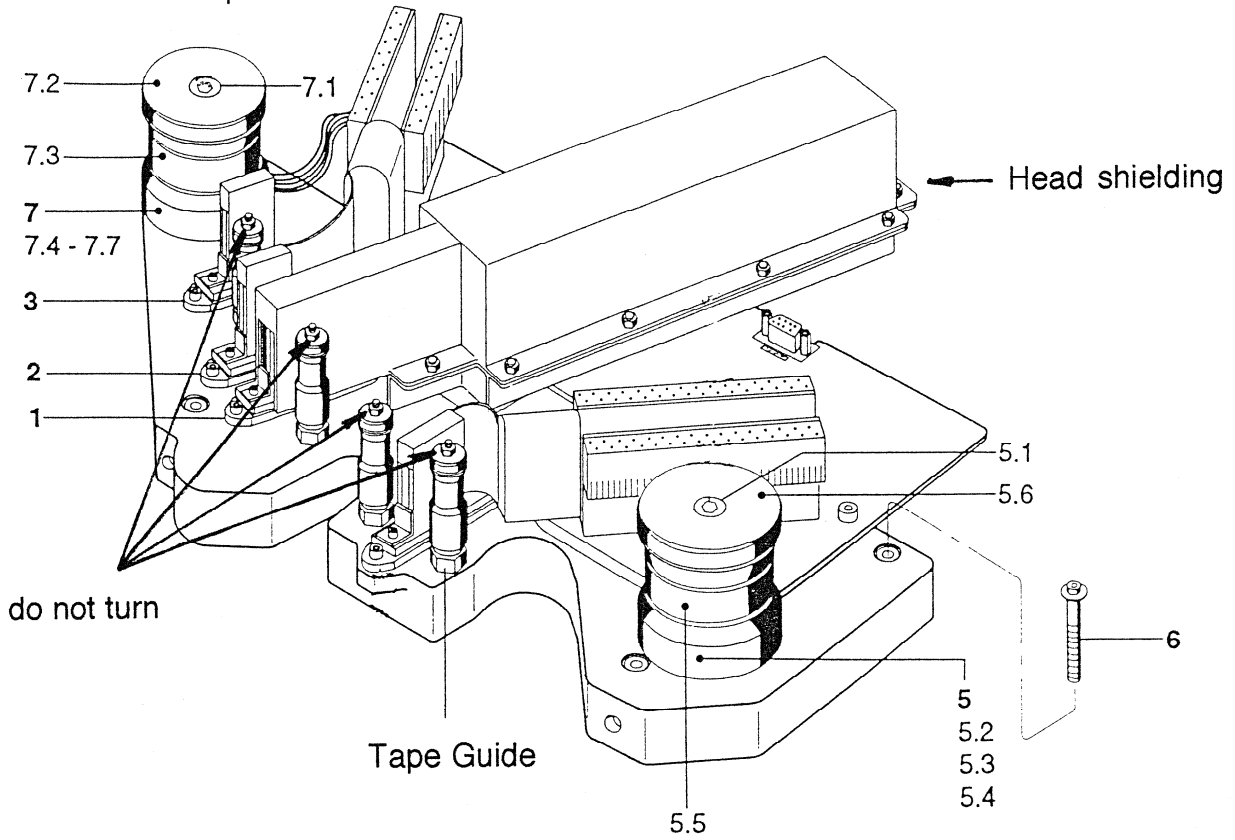
1. Remove the tape transport cover.
2. Fix with a 6 mm spanner the lower part of the guide.
Unscrew with 6 mm socket wrench the to aluminum screw.
Replace the sapphire guide. The mark of the new guide (rough surface) has to point in direction to the arm. See also the drawing.
Tighten the screw gently.
Caution: Do not tighten to much, otherwise you can damage the guide or the screw.
Mark the screw with a black dot (permanent black pen).
3. Mount the tape transport cover.

Final Test

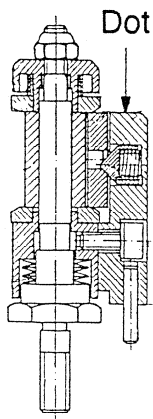
Check the CRC rate and the performance of the machine.

Please report the serial number, the head hours and mark the assembly you replaced onto the attached drawing and send it back to Regensdorf, attention: Product support S. Egli.

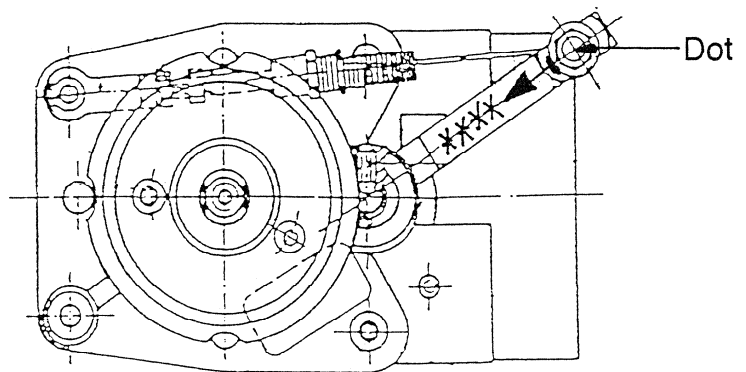
Head Block complete



Tape Guide



Tape Tension Assembly



**** The position of the guide mark has to be in in direction of the arrow.