

Drum Head Cleaning Procedure

About head cleaning

Studer recommends that the heads and tape path of the V-EIGHT be completely cleaned every 250 hours of drum/tape contact or whenever contaminants are causing a high error condition. To see the number of drum-on hours, hold PEAK CLR and press STOP. Head cleaning is within the capability of most people who are experienced with electronic equipment, but if done improperly may cause expensive damage. Failing to unplug the unit before opening may cause electrical shock. If you are not sure of your competency, refer all service to an experienced technician at a Studer service center.

Familiarize yourself with the tape path

When cleaning the V-EIGHT tape path for the first time, it may be a good idea to insert a tape into the transport after the top cover has been removed in order to view the tape path. To remove the top cover, simply remove the six hexagonal head screws which fasten the top cover in place. Next, insert any tape and press PLAY. Note how the tape is wrapped around the rotating headstack.

NEVER PUT ANYTHING IN THE WAY OF THE TAPE PATH WHILE THE HEADS ARE SPINNING.

This will most assuredly ruin the alignment and probably the heads themselves. Refer to Figure 1 for the identification of the various transport parts detailed in the text below.

Watching the tape travel path

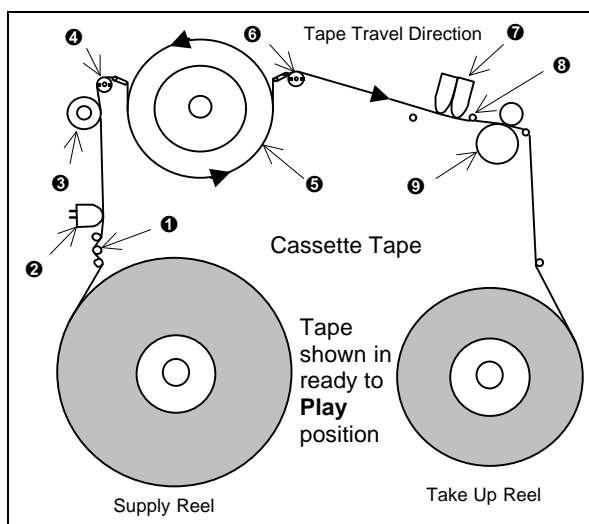


Figure 1 - Tape Travel Rollers

You will notice as the unit plays that the tape is being fed from the Supply Reel, and travels past a stationary tape guide, the Tension Arm ①, the ② Post and the Impedance Roller ③. Once the tape passes the ④ Assembly, it will enter the rotating Headstack ⑤ and pass by the heads. Note that the rotating headstack contains 4 heads, two for recording and two for playback. Once the tape exits the headstack, it will pass by the ⑥ Assembly, the Linear Head ⑦, the Post ⑧ and then past the Capstan Pinch Roller Assembly ⑨. Finally, the tape is wound onto the

Take Up Reel. Note that when the tape is not wrapped around the rotating headstack, or no tape is installed, the ④ and ⑥ assemblies as well as the Tension Arm ① are not in the physical positions shown in Figure 1.

Cleaning the rotary heads

Now you are ready to clean the rotating headstack. Because of the precision alignment of these heads, it is very important to follow these instructions carefully. Take a piece of lint free cloth or use head cleaning sticks and dip it in alcohol. Following guide is using sticks, but you could use lintfree clothes instead. Now place the stick against the rotating drum (the easiest spot to hold the stick is on the right side of the drum) and gently hold it in place with your index finger. While applying a VERY MILD pressure to the drum, spin the rotating head in a counter clockwise direction. This is the direction of its normal travel. There is a round rotor above the drum which spins with the drum. You can spin the drum by spinning this part. In this manner, your finger will not touch the headstack. If you place your index finger against the head and very gently rotate the drum with your other hand, you will feel the heads rubbing against the stick. Continue cleaning the drum until no more residue shows up on the stick. Remember to keep the stick moist with alcohol. You don't want to have a dry stick contacting the heads. Also, it is very important that you do not move the stick or your finger while the drum is spinning. It will most certainly throw the heads out of alignment.

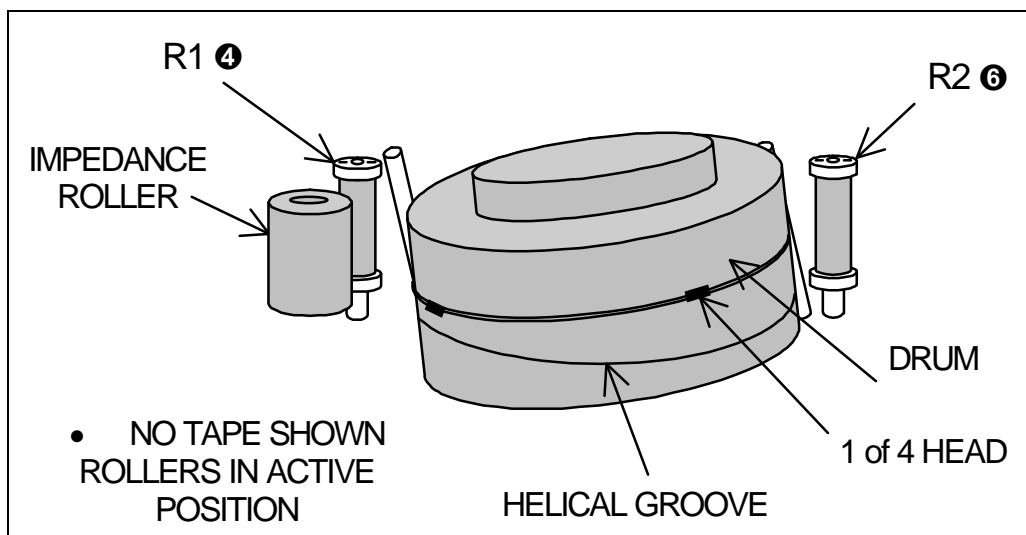


Figure 2 - Helical Groove and Tape Travel Rollers

Once the heads have been cleaned, you should now clean the Helical Groove. This groove is located on the headstack in the lower drum portion (see Figure 2). The lower drum does not spin so a cotton swab will suffice for cleaning. However, you may have to rotate the upper drum a little to keep the heads away from the cotton swab. Do not allow the cotton swab to come in contact with the heads.

Finally, put some rubber cleaner on a cotton swab and clean the pinch roller. Turn the pinch roller as you clean it. Do not use alcohol on the pinch roller as it will cause the rubber on the roller to eventually dry up and cause problems with tape travel across the capstan. Some rubber cleaners advise that you wipe off the excess with a dry cloth. If this is the case with your cleaner, remember to do so. If you have a dirty pinch roller but have no rubber cleaner, then water is an acceptable substitute. However, water will not fully clean the pinch roller like a rubber cleaner is designed to do.

CAUTIONS!

DON'T put a tape in the transport until all of the alcohol has had a chance to evaporate. If you insert a tape into the deck without letting the alcohol evaporate, there is a very good chance that the tape will slide up the rotating headstack and become instant garbage. Be warned. We suggest that you wait a minute or two before inserting a tape just to be sure. If you put the top cover back on the unit and screw it down with the six hexagonal head screws, that should be a sufficient amount of time for the alcohol to evaporate.

DON'T move your finger when cleaning the rotating headstack. Especially do not use an up and down motion because if you do, the chances are that the heads will be thrown out of alignment and possibly damaged. If you clean the drum with up and down strokes, and then try to play a tape, sometimes the V-EIGHT will display "NoFo" or "ERR 7" on the every tape in your archive. This is because the heads are either damaged or out of alignment and the V-EIGHT can not read the information previously recorded onto tape. If this happens, you will need to send the V-EIGHT to a service center for re-alignment.

DON'T use anything but a lint free cloth or Studer cleaning stiks as mentioned on the rotating heads. If you use a cotton swab on the V-EIGHT's heads, little pieces of cotton may get stuck in the head assembly. You can remove them but it is not guaranteed that the heads are free of debris. You may have actually made the heads worse than they were before you started cleaning the deck.

Remember, it does not take much to ruin the alignment of the heads within the V-EIGHT. This is not intended to be a scare tactic but should be noted. Proper cleaning of the V-EIGHT transport will keep your V-EIGHT healthy and working to optimum standards for years to come.

Cleaning goods

Description	Studer Part Nr.
Head cleaning stick (for Rotary Heads)	12.066.001.00
Isopropyl Alcohol (for Rotary Heads)	10.496.021.00
Vertrel (Cleaner for Pinch Roller)	99.01.1603