

TALK

VIDEO

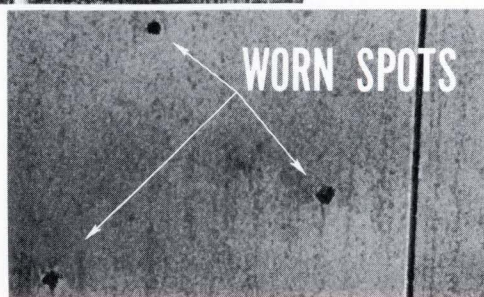
FROM THE MAKERS OF "SCOTCH" BRAND MAGNETIC TAPE

VIDEO TAPE SPLICING

The relative simplicity with which video tape splicing is accomplished tends to de-emphasize the importance of several cautions which should be observed for error-free splicing. Here are the most common errors in video tape splicing and how they can be avoided:

AIR BUBBLES

The presence of air bubbles between splicing tape and video tape backing create an aggravative penetration into the tape by the recording heads. This results in excessive head wear and tape wear, and early occurrence of dropouts in the area of the splice.

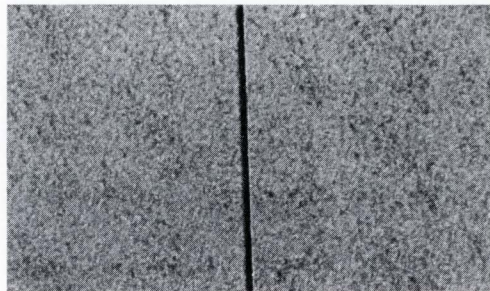


The photomicrographs above are from a recent study into the affects of air bubbles in splices. The air bubbles in the upper photo, though extremely small (Photo magnification: 50X.), caused the wear areas seen in the lower photo. This in turn resulted in signal loss affecting picture quality.

It is most important that ample pressure be applied to the splicing tape to assure absolute contact with the video tape backing for elimination of all air bubbles. It is recommended that a blunt instrument be used (or the back of the thumbnail) to apply pressure to the spliced area to remove air bubbles.

USE OF CLEANERS

Weakening and subsequent breakdown of splices can occur if solvents used to remove the edivue powder are permitted to seep onto the adhesive of the splicing tape.



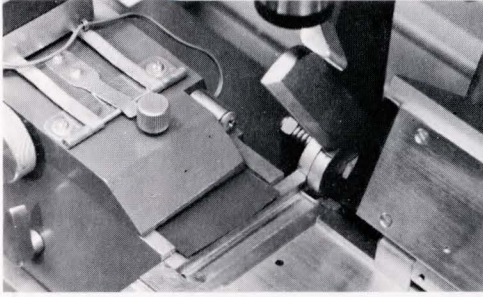
Keep in mind that a finite separation (though extremely small) exists between the tapes being spliced. Note above photomicrograph. The low viscous solvents normally used (naptha, alcohol, Freon TF*) can seep through the separation to deteriorate the adhesive.

(*DuPont trademark.)

To avoid this, be sure solvent on the tape has completely evaporated and is dry before applying the splicing tape. Some editors prefer using only a clean dry cloth to remove the edivue powder. While some of the powder may remain on the tape, a few passes through the recorder will "clean up" the splice.

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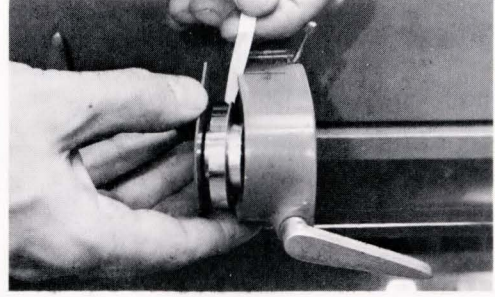
CLEAN SPLICING AREA

Fingerprints (body oils), dirt or oxide powder on the backing of video tape reduces the contact of the splicing tape adhesive with the backing, creating a weak splice.

We recommend that the backing be cleaned with a cotton swab moistened with Freon TF. Again, be sure that the solvent is completely evaporated and the backing completely dry before applying splicing tape. Also, the splicing block or machine should be cleaned regularly as further assurance against "dirty splices".

PRE-EXPOSED SPLICING TAPE

On some types of video splicing tape dispensers a portion of the splicing tape (about 1 1/2 inches) remains exposed to the air. This causes the splicing tape to dry, reducing its "tack" or ability to adhere properly. While the amount of drying is relative to the room's



temperature and humidity, as a general rule we recommend NOT using splicing tape lengths which have been exposed to the air for over four hours.

Ordinary pressure sensitive tapes are unsatisfactory to use in splicing #379 Video Tape. Experience has shown that the splicing tape for video application be as thin as possible to minimize head wear and physical distortion. A firm adhesive is necessary to hold the spliced ends intact, and to prevent seepage of the adhesive from under the splicing tape backing. Such adhesive must age well; neither softening nor drying out, to assure dependable durability against splices pulling apart. The base on which the adhesive is coated should be sufficiently conductive to provide static drain. Video Splicing Tapes Nos. 391 and 390, quarter and half-mil polyester films respectively, fulfill these characteristics and are recommended for use.