## Section 3

## **OPERATING INSTRUCTIONS**

## 3.1 OPERATING CONTROLS AND INDICATORS

## 3.1.1 Tape Transport (See Fig. 3-1)

Stop pushbutton

Speed Toggle switch

Selects fast ( $\Lambda$ ) or slow (V) tape speed. Electronic equal-

ization automatically changed with speed.

Rewind pushbutton Places tape in motion in rewind mode from takeup to supply

reel. Actuates rewind when tape is stationary, or in motion

in the play, record, or rewind modes.

Fast forward pushbutton Places tape in motion in fast forward mode from supply to

takeup reel. Actuates fast forward when tape is stationary,

or in motion in the play, record, or rewind modes.

Stops tape motion from any mode. Drops out record mode when applicable.

Play pushbutton Places tape in motion in the reproduce (play) mode. Must be

pressed before the equipment can be placed in record mode.

Reel toggle switch Selects large (O) or small (o) reel size. Changes tape

tension in accordance with selection.

## 3.1.2 Electronic Assembly (See Fig. 3-2)

OUTPUT SELECTOR rotary switch

Selects signal "reproduced" from the tape, the "input" record signal, or the "bias" current for monitoring at the vu meter. Connects reproduced or record signal to output

connector and monitor jack.

\*POWER toggle switch Controls application of a-c line power to all electronic as-

semblies and the tape transport.

\*RECORD pushbutton

Places preselected channels in the record mode. Has no effect unless the record selector switch is in the "ready" position and the play pushbutton (on the tape transport) has been previously pressed.

RECORD SELECTOR rotary switch

Selects "safe" condition, where channel cannot be placed in the record mode, or "ready" condition where channel can be placed in record mode.

READY indicator light

Indicates channel is ready to start recording.

RECORD indicator light

Indicates channel is operating in the record mode.

VU meter

Indicates reproduce, record, or bias level as selected by the output selector switch. Meter lights act as power indicator.

RECORD LEVEL rotary switch

Adjusts record level.

REPRODUCE LEVEL rotary switch.

Adjusts reproduce level.

\*Provided on master electronic assembly only.

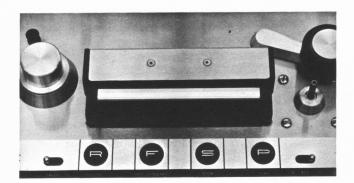


Fig. 3-1 Operating Controls, Tape Transport

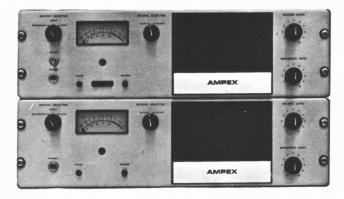


Fig. 3-2 Operating Controls and Indicators, Record/Reproduce Electronic Assembly

## 3.2 POSITIONING TRANSPORT

On console-mounted equipment, the operator can tilt the transport to suit his preference by loosening the knurled knob (see Fig. 3-3), tilting the transport to the desired position, and tightening the knob.

## 3.3 TAPE THREADING

The tape threading path is shown in Fig. 3-4. Open the head gate and thread the tape on the guides. When threading is completed, with the tape anchored to the takeup reel hub, turn the takeup reel manually until the supply reel starts to rotate; this removes all tape slack and ensures that the takeup tension arm is not contacting the safety switch.

## 3.4 APPLYING POWER

To apply power to the complete system, simply place the POWER toggle switch on the master electronic assembly in the up position.

## 3.5 SELECTING REEL SIZE

If 10-1/2 inch NAB reels are used, place the REEL toggle switch in the large reel (O) position; if 7 inch reels (or smaller) are employed, place this switch in the small reel (o) position.

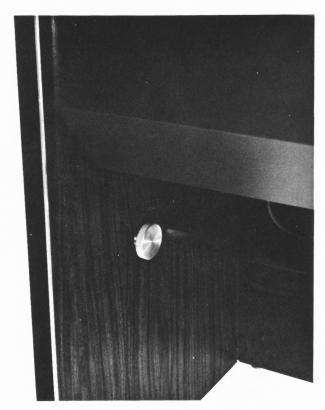


Fig. 3-3 Tape Transport Positioning Knob, Console

#### NOTE

Reels on the two turntables must be the same size and type, or the tape may be stretched or broken.

#### 3.6 SELECTING TAPE SPEED

Standard tape speed pairs available on this equipment are either 3-3/4 and 7-1/2 ips or 7-1/2 and 15 ips. Depending on the particular recorder and the tape speed desired, place the SPEED toggle switch in the fast ( $\Lambda$ ) or slow (V) position.

## 3.7 RECORDING

Step 1: Thread blank tape, or tape recorded with program material not necessary to save, on the recorder. Close the head gate after threading is completed.

#### NOTE

If a previously recorded tape was recorded on equipment with a different head configuration, it is possible that the old recording will not be completely erased. Such tape should be bulk erased before being rerecorded.

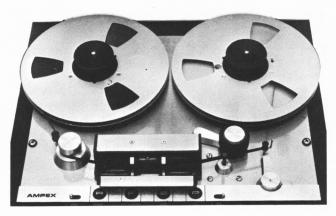


Fig. 3-4 Tape Threading Path

Step 2: Apply power to the equipment.

Step 3: Select the tape speed desired and place the REEL toggle switch in the position appropriate to the reels being used.

Step 4: Place the RECORD SELECTOR switch in the READY position for the channel(s) on which the recording is to be made. If certain channels are not to record, leave the RECORD SELECTOR on those channels in the SAFE position.

Step 5: Place the OUTPUT SELECTOR switch in the INPUT position. Using a rehearsal run or test signal, adjust the RECORD LEVEL control so that the vu meter indicator swings to 0 on the meter dial on most program peaks (maximum peaks can result in a swing to +2 or +3 on the meter.

Step 6: At the tape transport press the Play pushbutton to start tape in motion. Then press the record pushbutton on the master electronic assembly. All channels which were in the ready condition will be placed in the record mode (the RECORD indicator will light).

## NOTE

In monitoring the record run, the input signal can be compared with the signal actually being recorded and reproduced from the tape, by turning the OUTPUT SELECTOR from the INPUT to the REPRODUCE position and vice versa.

Step 7: At the completion of the recording, press the STOP pushbutton (on the tape transport) to stop tape motion and remove the equipment from the record mode.

## 3.8 REPRODUCING (PLAYING BACK)

Step 1: Thread the recorded tape on the transport. Close the head gate when threading is completed.

Step 2: Apply power to the equipment. Place all RECORD SELECTOR switches in the SAFE position.

Step 3: Select the tape speed which corresponds to that at which the tape was recorded. Place the REEL switch in the position appropriate for the size of reel being used.

<u>Step 4:</u> Place the OUTPUT SELECTOR switch in the REPRODUCE position.

#### NOTE

This switch must be positioned as described or there will be no reproduce output.

Step 5: At the tape transport, press the PLAY pushbutton. Tape will be placed in motion in the reproduce mode. Adjust the REPRODUCE LEVEL control for proper output level.

Step 6: To stop tape motion, press the STOP pushbutton on the tape transport.

#### 3.9 USING FASTWINDING MODES

#### NOTE

It is recommended that the head gate be opened, and tape thus lifted from the heads, whenever a fastwinding mode is used.

Whenever tape is threaded and power is applied, tape can be shuttled quickly from one reel to the other by using the fastwinding modes -- controlled by the Rewind and Fast forward pushbuttons. These pushbuttons can be pressed alternately (tape will slow to a stop, then start in the reverse direction) when editing or cueing. To stop the equipment from the fastwinding modes, press the STOP pushbutton (if tape is allowed to run completely off either reel, automatic stop will occur).

# CAUTION

WHEN USING A FASTWINDING MODE, DO NOT PRESS THE STOP AND PLAY PUSHBUTTONS IN SUCH RAPID SEQUENCE THAT TAPE MOTION CANNOT STOP BEFORE THE CAPSTAN IDLER CLAMPS THE TAPE TO THE CAPSTAN. IF MOTION DOES NOT STOP BEFORE THE PLAY PUSHBUTTON IS PRESSED, THE TAPE WILL PROBABLY BE BROKEN OR STRETCHED.