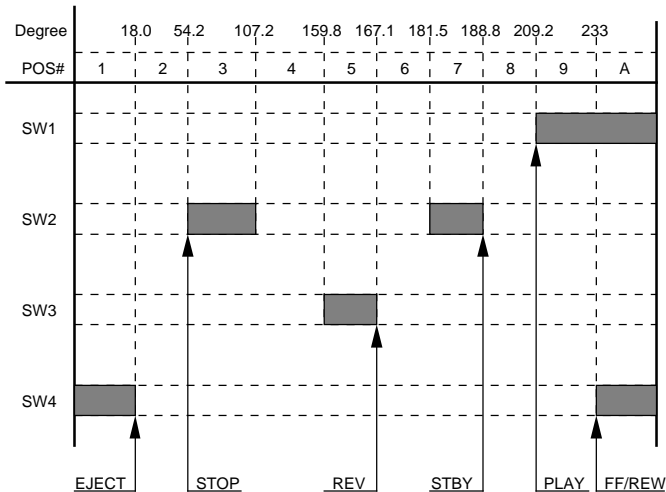
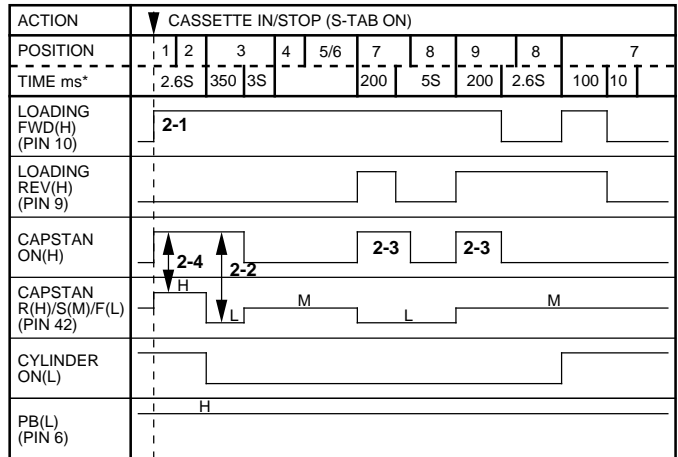


TIMING CHART

BASIC OPERATION WITH MODE SELECT SWITCH



TIMING CHART 2



NOTE: 1) PIN NO. WITH BRACKET INDICATES PIN NO. OF IC6001.
2) *:IT SHOWS MAXIMUM TIME.

MODE BY MODE OPERATION

2. CASSETTE IN/STOP(WITH SAFETY TAB)

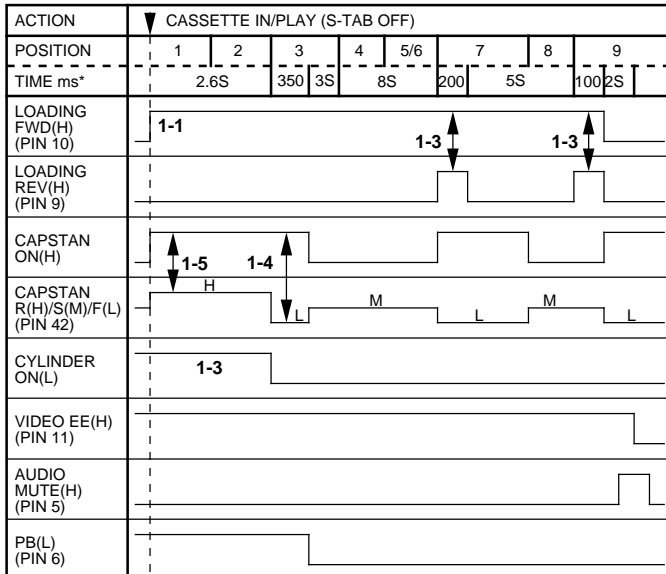
2-1. The Loading Motor starts rotation in a forward direction.

2-2. The Idler Gear swings over to Takeup Reel.

2-3. Takeup tape slack.

2-4. Supply Reel rotates until the cassette reaches the down position.

TIMING CHART 1



NOTE: 1) PIN NO. WITH BRACKET INDICATES PIN NO. OF IC6001.
2) *:IT SHOWS MAXIMUM TIME.

MODE BY MODE OPERATION

1. CASSETTE IN/PLAY(WITHOUT SAFETY TAB)

1-1. The Loading Motor starts rotation in a forward direction.

1-2. The Cylinder starts rotation for quick play.

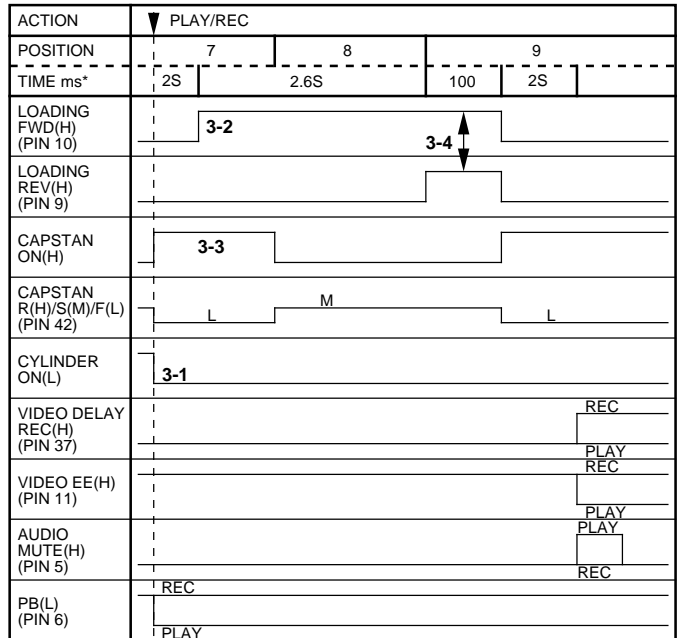
1-3. The Loading Motor stops.

1-4. The Idler Gear swings over to Takeup Reel.

1-5. Supply Reel rotates until the cassette reaches the down position.

If the mechanism does not reach position 3 from position 1 within 2.6 seconds, the mechanism moves to position 1 to eject the tape. If the mechanism does not reach position 4 from position 3 within 3 seconds, the mechanism moves to position 1 to eject the tape. If the mechanism does not reach position 7 from position 4 within 8 seconds, the unit shuts off.

TIMING CHART 3



NOTE: 1) PIN NO. WITH BRACKET INDICATES PIN NO. OF IC6001.
2) *:IT SHOWS MAXIMUM TIME.

MODE BY MODE OPERATION

3. PLAY/REC

3-1. The Cylinder Motor starts rotation for quick play.

3-2. The Loading Motor starts rotation in a forward direction.

3-3. The Capstan Motor rotates in a forward direction to the Idler Gear swings over to Takeup Reel.

3-4. When the Mode Switch reaches position 9, the Loading Rev(H) signal goes HIGH to apply a brake to the Loading Motor. Then the Loading Motor stops quickly.

TIMING CHART 4

ACTION	PAUSE	PAUSE RELEASE
POSITION	9 8 7 6 5 6 7 8 9	
TIME ms*	400 2.6S 300 2.6S 100 3.2S 2.6S 250 2.6S 100 1.2S 1.5S	
LOADING FWD(H) (PIN 10)		4A-2 4A-3 4A-6 4A-7 4A-8
LOADING REV(H) (PIN 9)	4A-1	
CAPSTAN ON(H)		4A-4 4A-5 4A-9 4A-10 4B-1
CAPSTAN R(H)/S(M)/F(L) (PIN 42)	M H M H M L M L	
CYLINDER ON(L)	L	
VIDEO DELAY REC(H) (PIN 37)		

NOTE: 1) PIN NO. WITH BRACKET INDICATES PIN NO. OF IC6001.
2) *:IT SHOWS MAXIMUM TIME.

MODE BY MODE OPERATION

4. REC TO REC PAUSE/REC PAUSE TO REC

4A. REC TO REC PAUSE

- 4A-1. Changes the mechanism position to 5(REV).
 - 4A-2. Apply a brake to the Loading Motor.
 - 4A-3.
 - 4A-4. The Idler Gear swings over to Supply Reel.
 - 4A-5. Rewind the tape for 3.2 sec(SP)/1.6 sec(LP)/1.06 sec(SLP).
 - 4A-6. Changes the mechanism position to 9(PLAY POSITION).
 - 4A-7. Apply a brake to the Loading Motor.
 - 4A-8.
 - 4A-9. The Idler Gear swings over to Takeup Reel.
 - 4A-10. Playback the tape for 1.2 second to adjust add-on recording portion.
- ##### 4B. REC PAUSE TO REC
- 4B-1. The Capstan Motor starts rotation in forward direction for playback.
(The video recording will be activated with the Video Delay Rec(H) signal.)

TIMING CHART 5

ACTION	REV	PLAY
POSITION	9 8 7 6 5 6 7 8 9	6 7 8 9
TIME ms*	100 1.5S 1.5S 400 2.6S 100 600 2.6S 200 300 2.6S 100 1S 2S	
LOADING FWD(H) (PIN 10)		5B-1 5B-2 5B-4
LOADING REV(H) (PIN 9)	5A-1	
CAPSTAN ON(H)		
CAPSTAN R(H)/S(M)/F(L) (PIN 42)	L H L H L	5B-3 L
CYLINDER ON(L)	L	
AUDIO MUTE(H) (PIN 5)		
PB(L) (PIN 6)		

NOTE: 1) PIN NO. WITH BRACKET INDICATES PIN NO. OF IC6001.
2) *:IT SHOWS MAXIMUM TIME.

MODE BY MODE OPERATION

5. REVIEW

5A. PLAY TO REVIEW

- 5A-1. The Loading Motor starts rotation in a reverse direction.
- 5A-2. The Loading Motor stops.
At this position, the Pressure Roller and the Tension Arm are released.
- 5A-3. The Idler Gear swings over to Supply Reel.
- 5A-4. Proper tape tension is maintained.
- 5A-5. The Loading Motor stops.
At this position, the Pressure Roller is applied to the Capstan Shaft.

5B. REVIEW TO PLAY

- 5B-1. The Loading Motor starts rotation in a forward direction.
- 5B-2. Apply a brake to the Loading Motor.
- 5B-3. While the Loading Motor is stopped, the Capstan Motor changes its direction to forward.
- 5B-4. When the Mode Switch reaches position 9, the Loading Motor stops.

TIMING CHART 6

ACTION	FF/REW
POSITION	7 8/9 A
TIME ms*	2S 3.5S 100 400 200
LOADING FWD(H) (PIN 10)	6-2 6-3
LOADING REV(H) (PIN 9)	
CAPSTAN ON(H)	6-4
CAPSTAN R(H)/S(M)/F(L) (PIN 42)	M H (REW) L (FF)
CYLINDER ON(L)	6-1
FF/REW(L)	

NOTE: 1) PIN NO. WITH BRACKET INDICATES PIN NO. OF IC6001.
2) *:IT SHOWS MAXIMUM TIME.

MODE BY MODE OPERATION

6. STOP TO FF/REW

- 6-1. The Cylinder Motor starts rotation.
- 6-2. Loading Motor starts rotation in a forward direction after Cylinder Motor rotation is stabilized.
- 6-3. When the Mode Switch reaches position A, the Loading Rev(H) signal goes HIGH to apply a brake to the Loading Motor.
Then the Loading Motor stops quickly.
- 6-4. The Capstan Motor starts rotation for FF/REW.
During FF/REW, the Cylinder keeps rotation to prevent a tape damage.

TIMING CHART 7

ACTION	STOP
POSITION	9 8 7
TIME ms*	100 500 3.5S 5S 3.5S 100 10
LOADING FWD(H) (PIN 10)	7-3 7-3 7-3
LOADING REV(H) (PIN 9)	7-2
CAPSTAN ON(H)	REW FF 7-5
CAPSTAN R(H)/S(M)/F(L) (PIN 42)	L (REW) H (FF) 7-4 M
CYLINDER ON(L)	
FF/REW(L)	

NOTE: 1) PIN NO. WITH BRACKET INDICATES PIN NO. OF IC6001.
2) *:IT SHOWS MAXIMUM TIME.

MODE BY MODE OPERATION

7. FF/REW TO STOP

- 7-1. (Without 0 search function:) Apply a brake to the Capstan Motor for quick stop.
(With 0 search function:) Tape forward or rewind to approximate 0 count position then apply a brake to stop.
- 7-2. The Loading Motor starts rotation in a reverse direction.
- 7-3. Apply a brake to the Loading Motor.
- 7-4. For rewind to stop operation, the Idler Gear swings over to the Takeup Reel.
- 7-5. (With 0 search function:) Forward to precise 0 count position within 5 seconds and stop.
(Without 0 search function:) Takeup tape slack for 200ms.

TIMING CHART 8

ACTION	STOP	5 MINUTES
POSITION	9 8 7	
TIME ms*	2.6S 100 10	
LOADING FWD(H) (PIN 10)	8-2	
LOADING REV(H) (PIN 9)	8-1	
CAPSTAN ON(H)		
CAPSTAN R(H)/S(M)/F(L) (PIN 42)	M	
CYLINDER ON(L)	8-3	
AUDIO MUTE(H) (PIN 5)	PLAY REC	
PB(L) (PIN 6)		

NOTE: 1) PIN NO. WITH BRACKET INDICATES PIN NO. OF IC6001.
2) *:IT SHOWS MAXIMUM TIME.

MODE BY MODE OPERATION

8. PLAY TO STOP/AFTER 10 MINUTES

8-1. The Mechanism changes the position to 7(Stop).

8-2. The Loading Motor stops.

At this position, the Pressure Roller and the Tension Arm are released to reduce the tape tension.

8-3. After 5 minutes, the Cylinder stops.

TIMING CHART 9

ACTION	EJECT
POSITION	7 6/5 4 3 2 1 20 500
TIME ms*	7S 5.1S 200 4S 20 500
T-PHOTO TR ON(L) (PIN 83)	9-5
LOADING FWD(H) (PIN 10)	9-6
LOADING REV(H) (PIN 9)	9-1
CAPSTAN ON(H)	9-2 9-3
CAPSTAN R(H)/S(M)/F(L) (PIN 42)	H M H M 9-7 L M
CYLINDER ON(L)	9-4

NOTE: 1) PIN NO. WITH BRACKET INDICATES PIN NO. OF IC6001.
2) *:IT SHOWS MAXIMUM TIME.

MODE BY MODE OPERATION

9. STOP TO EJECT

9-1. Unloads the mechanism to the Eject position(1).

9-2. The Idler Gear swings over to Supply Reel.

9-3. The Capstan Motor rotates in reverse direction to takeup a tape slack.

9-4. When the Mode Switch reaches position 1, the Cylinder stops.

9-5. T-Photo Tr signal goes LOW at position 1.

If T-Photo Tr signal does not become LOW within 4 seconds at position 1, the mechanism moves to position 7.

If the mechanism does not reach position 3 within 2.6 seconds, or does not reach position 4 from position 3 within 3 seconds after that, the mechanism moves to position 1.

If T-photo Tr signal does not become Low within 4 seconds again, the unit shuts off.

(For Auto Eject operation, if T-photo Tr signal does not become Low within 4 seconds at position 1, the mechanism moves to position 3 and the unit shuts off.)

9-6. The Loading Motor stops.

9-7. The Idler Gear is released from Supply Reel.