

TIMING CHARTS

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Play/Record

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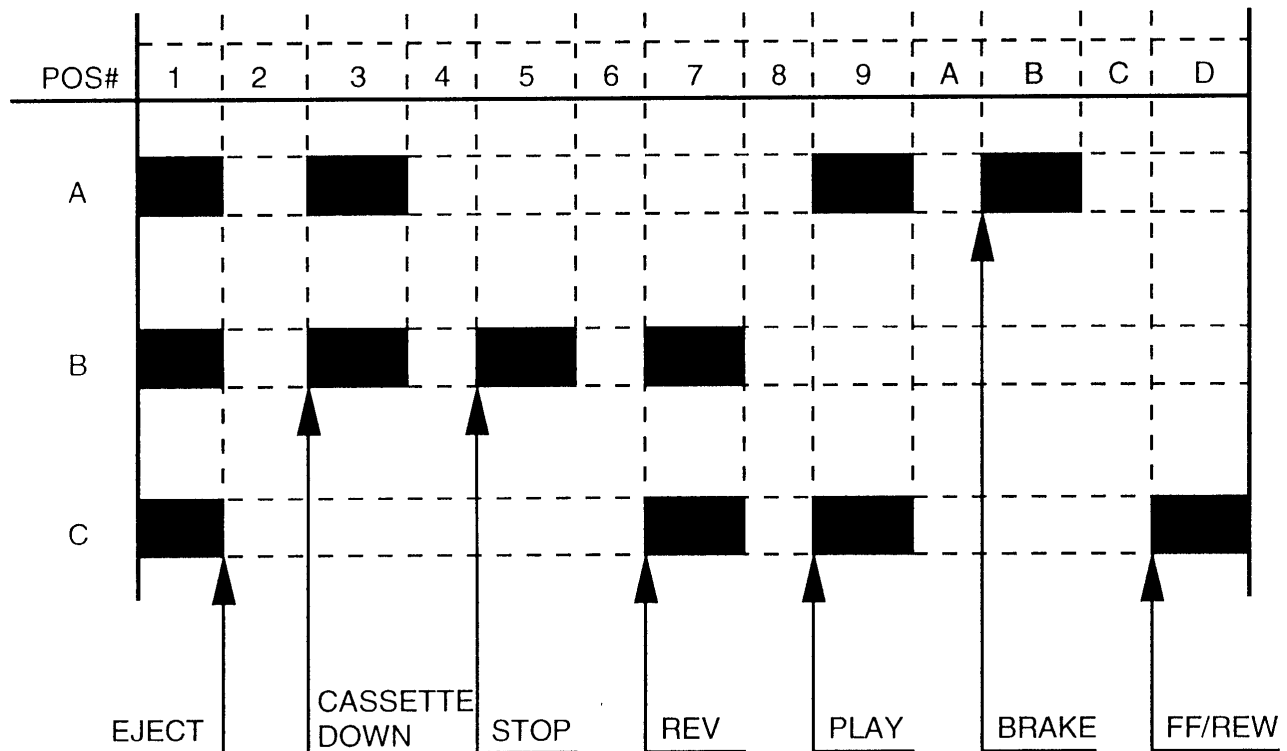
Play/Record To Stop (After Five (5) Minutes)

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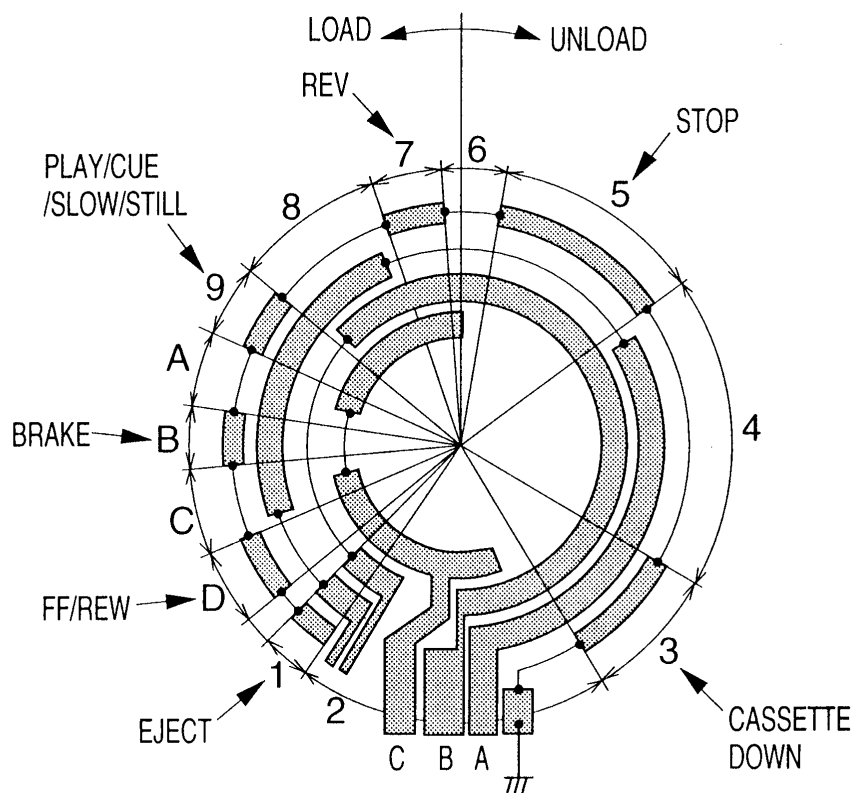
TIMING CHARTS

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Basic Operation/Mode Select Switch



MODE SELECT SWITCH

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Cassette-In/Play (With S-Tab Off)

TIMING CHART 1

ACTION	CASSETTE IN/PLAY (S-TAB OFF)										
POSITION	1/2		3/4				5/6/7/8		9		
TIME ms	2S*		20	80	300	5S*	5S*		20	80	2S
LOADING FWD(H) (PIN 8)	1-1		1-4				1-4		1-4		
LOADING REV(H) (PIN 7)											
CAPSTAN ON(H)			1-2								
CAPSTAN R(H)/S(M)/F(L) (PIN 21)	H		L				M		L		
CYLINDER ON(L)	1-3										
VIDEO EE(H)											
AUDIO MUTE(H) (PIN 6)											
PB(L) (PIN 9)											

MODE BY MODE OPERATION

1. CASSETTE IN /PLAY(WITHOUT SAFETY TAB)

- 1-1. Changes the mechanism position to 3(CASSETTE DOWN).
- 1-2. The Capstan Motor rotates in a forward direction.
- 1-3. The Cylinder Motor starts rotation for quick play.
- 1-4. Apply a brake to the Loading Motor.

(If the mechanism does not reach position 3 from position 1 within 2 seconds or position 5 from position 3 within 5 seconds or position 9 from position 5 within 5 seconds, the mechanism moves to position 1 to eject the tape.)

NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME

Cassette-In/Stop (With S-Tab On)

TIMING CHART 2

ACTION	CASSETTE IN/STOP (S-TAB ON)											
POSITION	1/2	3			5/6/7/8			9			6	5
TIME ms	2S*	20	80	200	5S*	5S*	20	80	200	5S*	20	80
LOADING FWD(H) (PIN 8)												
LOADING REV(H) (PIN 7)												
CAPSTAN ON(H)												
CAPSTAN R(H)/S(M)/F(L) (PIN 21)												
CYLINDER ON(L)												
PB(L) (PIN 9)												

MODE BY MODE OPERATION

2. CASSETTE IN /STOP(WITH SAFETY TAB)

- 2-1. Changes the mechanism position to 9(PLAY).
- 2-2. The Capstan Motor rotates in a forward direction.
- 2-3. The Cylinder Motor starts rotation for quick play.
- 2-4. Apply a brake to the Loading Motor.
- 2-5. Changes the mechanism position to 5(STOP).

NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME

Play/Record

TIMING CHART 3

ACTION	PLAY/REC
POSITION	5 6/7/8 9
TIME ms	2S* 5S* 20 80 2S*
LOADING FWD(H) (PIN 8)	3-2 3-4
LOADING REV(H) (PIN 7)	
CAPSTAN ON(H)	3-3 3-5
CAPSTAN R(H)/S(M)/F(L) (PIN 21)	M L M L
CYLINDER ON(L)	3-1
VIDEO DELAY REC(H) (PIN 30)	REC
VIDEO EE(H)	PLAY REC
AUDIO MUTE(H) (PIN 6)	PLAY PLAY
PB(L) (PIN 9)	REC PLAY

MODE BY MODE OPERATION

3.PLAY/REC

- 3-1. The Cylinder Motor starts rotation for quick play.
- 3-2. Changes the mechanism position to 9(PLAY).
- 3-3. The Idler Arm Unit swings over to Takeup Reel.
- 3-4. Apply a brake to the Loading Motor.
- 3-5. The Capstan Motor rotates in a forward direction.

NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME

Record to Record Pause/Record Pause to Record

TIMING CHART 4

ACTION	PAUSE	PAUSE RELEASE
POSITION	9/8/7/6 5 6 7 6 5 6/7 8 9	
TIME ms	100 5S* 20 80 300 30 3S* 20 80 2.6S 3S* 20 80 300 50 5S* 20 80 600 10 1.5S	
LOADING FWD(H) (PIN 8)		
LOADING REV(H) (PIN 7)		
CAPSTAN ON(H)		
CAPSTAN R(H)/S(M)/F(L) (PIN 21)		
CYLINDER ON(L)		
VIDEO DELAY REC(H) (PIN 30)		

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(STOP).

4A-2.Changes the mechanism position to 7(REV).

4A-3.Changes the mechanism position to 9(PLAY).

4A-4.Apply a brake to the Loading Motor.

4A-5.The Idler Arm Unit swings over to Supply Reel.

4A-6.Rewind the tape for 2.6 sec(SP)/1.26 sec(LP)/0.82 sec(SLP).

4A-7.The Idler Gear swings over to Takeup Reel.

4A-8.Playback the tape for 0.6 second to adjust add-on recording portion.

4B. REC PAUSE TO REC

4B-1.Forward the tape for 1.5 second before recording.

NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME

[Play to Review/Review to Play](#)**TIMING CHART 5**

ACTION	REV	PLAY
POSITION	19 8/7/6 5 6 7 7 6 5 6/7 8 9	
TIME ms	4S* 20 80 650 3S* 20 80 600 1S 300 3S* 20 80 570 5S* 20 80 1S*	
LOADING FWD(H) (PIN 8)		
LOADING REV(H) (PIN 7)		
CAPSTAN ON(H)		
CAPSTAN R(H)/S(M)/F(L) (PIN 21)		
CYLINDER ON(L)		
AUDIO MUTE(H) (PIN 6)		
PB(L) (PIN 9)		

MODE BY MODE OPERATION**5. PLAY TO REVIEW/REVIEW TO PLAY****5A. PLAY TO REVIEW**

5A-1.Changes the mechanism position to 5(STOP).

5A-2.Apply a brake to the Loading Motor.

At this position, the Pressure Roller is released.

5A-3.The Capstan Motor rotates in a reverse direction.

5A-4.Changes the mechanism position to 7(REV).

5A-5.Apply a brake to the Loading Motor.

At this position, the Pressure Roller is applied to the Capstan Shaft.

5B. REVIEW TO PLAY

5B-1.Changes the mechanism position to 5(STOP).

5B-2.Apply a brake to the Loading Motor.

5B-3.The Capstan Motor changes the direction to forward.

5B-4.Changes the mechanism position to 9(PLAY).

NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME

Stop To Fast Forward

TIMING CHART 6

ACTION	FF
POSITION	5 6/7/8 9 A B/C D
TIME ms	2S* 5S* 20 80 200 ※1 200 500 3S* 20 80
LOADING FWD(H) (PIN 8)	6-2 6-3 6-5 6-3
LOADING REV(H) (PIN 7)	
CAPSTAN ON(H)	6-4
CAPSTAN R(H)/S(M)/F(L) (PIN 21)	M L
CYLINDER ON(L)	6-1

MODE BY MODE OPERATION

This one time operation is performed at FF or REW to fix the FF/REW speed.

6. STOP TO FF

- 6-1. The Cylinder Motor starts rotation.
- 6-2. Changes the mechanism position to 9(PLAY).
- 6-3. Apply a brake to the Loading Motor.
- 6-4. The Capstan Motor rotates in a forward direction.

Check the reel size of cassette tape at ※1 while the speed gradually increases . FF/REW speed is adjusted according to reel size.

- 6-5. Changes the mechanism position to D(FF/REW).

**NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME**

Stop To Rewind

TIMING CHART 7

ACTION	REW
POSITION	1 5 6 7 7/6 5 6/7/8 9 A B/C D
TIME ms	12S* 400 3S* 20 80 200 ※2 400 3S* 20 80 200 5S* 20 80 500 3S* 20 80
LOADING FWD(H) (PIN 8)	
LOADING REV(H) (PIN 7)	
CAPSTAN ON(H)	
CAPSTAN R(H)/S(M)/F(L) (PIN 21)	
CYLINDER ON(L)	

MODE BY MODE OPERATION

7. STOP TO REW

This one time operation is performed at REW or FF to fix the FF/REW speed.

- 7-1. The Cylinder Motor starts rotation.
- 7-2. Changes the mechanism position to 7(REV).
- 7-3. Apply a brake to the Loading Motor.
- 7-4. The Idler Arm Unit swings over to Supply Reel.
- 7-5. The Capstan Motor starts rotation in a reverse direction.
Check the reel size of cassette tape at ※2 while the speed gradually increases. FF/REW speed is adjusted according to reel size.
- 7-6. The Idler Arm Unit swings over to Takeup Reel, and takeup tape slack.
- 7-7. Changes the mechanism position to D(FF/REW).

NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME

Stop To Fast Forward/Rewind

TIMING CHART 8

ACTION	FF/REW											
POSITION	5	6/7/8	9	A	B/C				D			
TIME ms	12S*	5S*	20	80	500	3S*			20	80	60	200
LOADING FWD(H) (PIN 8)												
LOADING REV(H) (PIN 7)												
CAPSTAN ON(H)												
CAPSTAN R(H)/S(M)/F(L) (PIN 21)												
CYLINDER ON(L)												

MODE BY MODE OPERATION**8. STOP TO FF/REW**

- 8-1. The Cylinder Motor starts rotation.
- 8-2. Changes the mechanism position to 9(PLAY).
- 8-3. Apply a brake to the Loading Motor.
- 8-4. Takeup tape slack.
- 8-5. Changes the mechanism position to D(FF/REW).

NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME

Fast Forward/Rewind To Stop

TIMING CHART 9

ACTION	STOP														
POSITION	D	C	B			A	9	8/7/6					5		
TIME ms	220*	1.5S*	20	80	1500	1.5S*	20	80	650	5S*	200	5S*	20	80	
LOADING FWD(H) (PIN 8)															
LOADING REV(H) (PIN 7)															
CAPSTAN ON(H)															
CAPSTAN R(H)/S(M)/F(L) (PIN 21)															
CYLINDER ON(L)															

MODE BY MODE OPERATION**9. FF/REW TO STOP**

- 9-1. Changes the mechanism position to B(BRAKE).
- 9-2. The Capstan Motor stops.
- 9-3. Apply a brake to the Loading Motor.
- 9-4. (FF TO STOP operation:) The Idler Arm Unit swings over to Supply Reel.
(REW TO STOP operation:) The Idler Arm Unit swings over to Takeup Reel.
- 9-5. (Without 0 search function:) Takeup tape slack.
(With 0 search function:) Forward to precise 0 count position within 5 seconds and stops.
- 9-6. Changes the mechanism position to 9(PLAY).
- 9-7. Changes the mechanism position to 5(STOP).

NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME

TIMING CHARTS (Continued)

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Play/Record To Stop (After Five (5) Minutes)

TIMING CHART 10

ACTION	STOP	5 MINUTES
POSITION	9 8/7/6 5	
TIME ms	200 5S*	20 80
LOADING FWD(H) (PIN 8)		10-2
LOADING REV(H) (PIN 7)	10-1	
CAPSTAN ON(H)		
CAPSTAN R(H)/S(M)/F(L) (PIN 21)	L M	
CYLINDER ON(L)		10-3
AUDIO MUTE(H) (PIN 6)	PLAY	
	REC	
PB(L) (PIN 9)		

MODE BY MODE OPERATION

10. PLAY/REC TO STOP/AFTER 5 MINUTES

10-1. Changes the mechanism position 5(STOP).

10-2. Apply a brake to the Loading Motor.

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

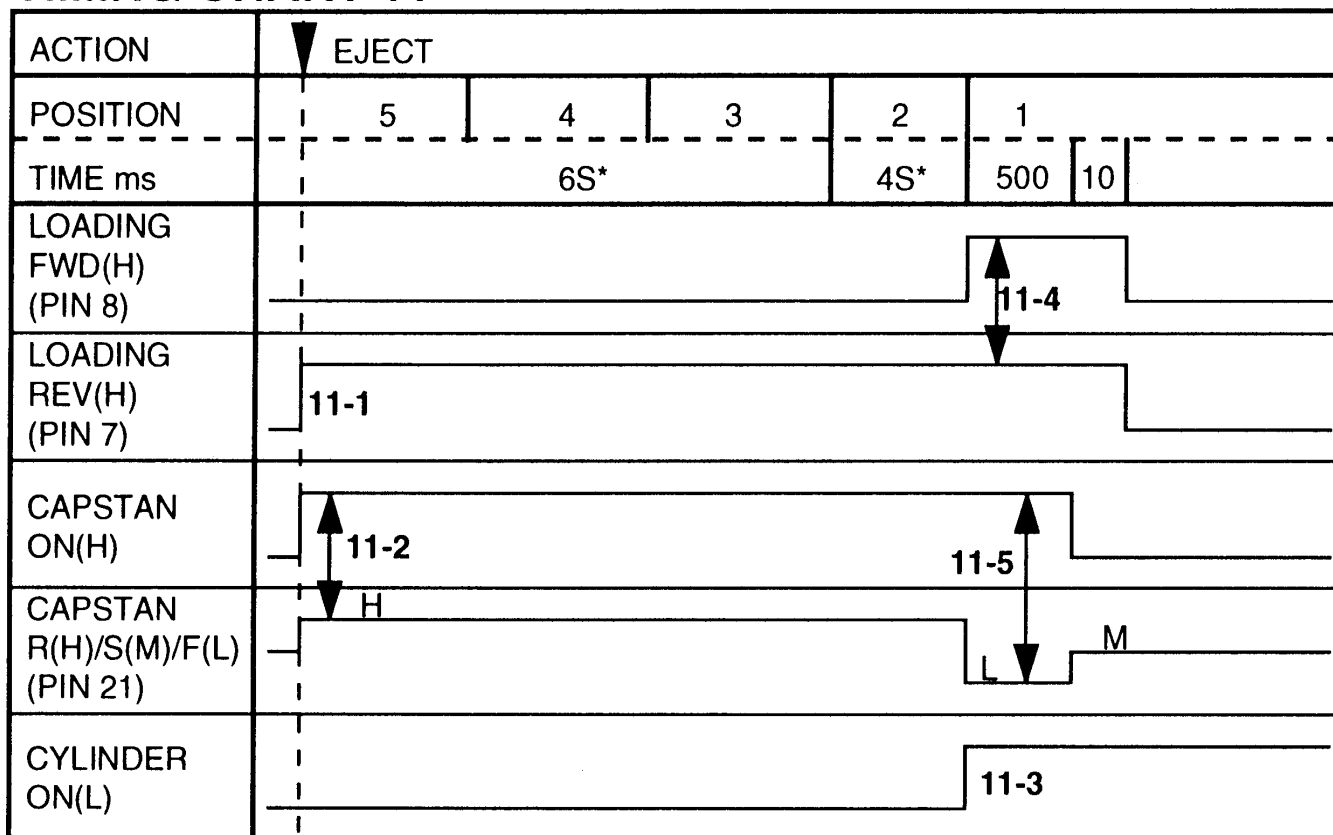
10-3. After 5 minutes, the Cylinder stops.

NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME

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Stop To Eject

TIMING CHART 11



MODE BY MODE OPERATION

11. STOP TO EJECT

11-1. Unloads the mechanism position to 1(EJECT).

11-2. The Capstan Motor rotates in reverse direction to takeup tape slack.

11-3. When the Mode Switch reaches position 1, the Cylinder stops.

11-4. The Loading Motor stops.

11-5. The Idler Arm Unit is released from Supply Reel.

(If the mechanism does not reach position 2 from position 5 within 6 seconds, the unit shuts off. If the mechanism does not reach position 1 from position 2 within 4 seconds, the mechanism moves to position 5(STOP).)

NOTE: PIN NUMBERS IN PARENTHESES () REFER TO PIN NUMBERS OF IC6001
THE STAR (★) SYMBOL INDICATES MAXIMUM TIME