



STEREO TAPE RECORDER

MODEL 1722W

ALSO APPLICABLE TO MODEL 1722L
STEREO TAPE RECORDER

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|-----------|-------------------------|----|
| SECTION 1 | SERVICE MANUAL | 3 |
| SECTION 2 | PARTS LIST | 21 |
| SECTION 3 | SCHEMATIC DIAGRAM | 40 |

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SECTION 1

SERVICE MANUAL

TABLE OF CONTENTS

| | |
|--|----|
| I. SPECIFICATIONS | 4 |
| II. MEASURING METHOD | 6 |
| 1. TAPE SPEED DEVIATION | 6 |
| 2. WOW AND FLUTTER | 6 |
| 3. FREQUENCY RESPONSE | 6 |
| 4. SIGNAL TO NOISE RATIO | 6 |
| 5. TOTAL HARMONIC DISTORTION FACTOR | 7 |
| 6. CROSS TALK (Cross talk between the tracks) | 7 |
| 7. ERASE RATIO | 7 |
| 8. POWER OUTPUT | 7 |
| III. DISMANTLING OF UNIT | 8 |
| IV. MECHANISM ADJUSTMENT | 9 |
| 1. PINCH WHEEL ADJUSTMENT | 9 |
| 2. SUPPLY REEL TABLE TENSION ADJUSTMENT | 11 |
| 3. TAKE UP REEL TABLE TENSION ADJUSTMENT | 11 |
| 4. FWD/REC MODE MECHANISM CHANGE AND ADJUSTMENT | 12 |
| 5. DRIVE BELT POSITION ADJUSTMENT | 12 |
| 6. FLYWHEEL LOOSE PLAY ADJUSTMENT | 12 |
| 7. ADJUSTMENT OF IDLER #2 POSITION AT FAST FORWARD MODE | 14 |
| 8. AUTOMATIC SHUT-OFF OPERATING POINT ADJUSTMENT | 14 |
| V. HEAD HEIGHT ADJUSTMENT | 15 |
| 1. HEAD HEIGHT ADJUSTMENT | 15 |
| 2. HEAD SLANT ADJUSTMENT | 15 |
| 3. RECORDING/PLAYBACK HEAD AZIMUTH ALIGNMENT ADJUSTMENT | 16 |
| VI. AMPLIFIER | 17 |
| 1. RECORDING BIAS FREQUENCY CHECK | 17 |
| 2. FREQUENCY RESPONSE CHECK | 17 |
| 3. RECORDING BIAS VOLTAGE CHECK | 17 |
| 4. ERASE VOLTAGE | 17 |
| 5. HUM ALLEVIATION COIL ADJUSTMENT | 17 |
| VII. D.C. RESISTANCE OF VARIOUS COILS | 18 |
| VIII. COMPOSITE VIEWS OF COMPONENTS | 19 |

I. SPECIFICATIONS

An asterisk next to a figure indicates the minimum guaranteed performance.

| | |
|-----------------------------|--|
| TRACK SYSTEM | 4-track 2-channel stereo/monaural system. |
| REEL CAPACITY | Up to 7" reel |
| TAPE SPEED | 7-1/2 and 3-3/4 ips. $\pm 2\%$ (* $\pm 3\%$) |
| WOW AND FLUTTER | Less than 0.14% (*0.15%) R.M.S. at 7-1/2 ips. Less than 0.18% (*0.20%) R.M.S. at 3-3/4 ips. |
| TOTAL WOW AND FLUTTER | Less than 0.22% R.M.S. at 7-1/2 ips. (Scotch #175 TAPE 3,000 Hz recording and playback) |
| FREQUENCY RESPONSE | 1,000 Hz -16VU Recording, measured at speaker output |
| WIDE RANGE TAPE | 30 to 21,000 Hz (*50 to 20,000 Hz) ± 3 dB at 7-1/2 ips. 40 to 15,000 Hz (*50 to 12,000 Hz) ± 3 dB at 3-3/4 ips. |
| LOW NOISE TAPE | 30 to 18,000 Hz (*50 to 18,000 Hz) ± 3 dB at 7-1/2 ips. 40 to 13,000 Hz (*50 to 10,000 Hz) ± 3 dB at 3-3/4 ips. |
| DISTORTION FACTOR | Less than 2% at 7-1/2 ips. |
| TOTAL DISTORTION FACTOR | Less than 3% at 1,000 Hz "0" VU recording at 4 mV mic Input, Output 2W and Tone Control Max using Scotch #211 |
| SIGNAL TO NOISE RATIO | Better than 50 dB (*47 dB) at 10 dBm output and Tone Control Max (from Speaker Out) |
| TOTAL SIGNAL TO NOISE RATIO | Better than 43 dB at 10 dBm output and Tone Control Max. (from Speaker Out) |
| CROSS TALK | Better than 60 dB (*55 dB) Monaural (Mic input 4 mV, 1,000 Hz +3 VU recording, measured at line output) Better than 45 dB (*43 dB) Stereo (mic input 4 mV, 1,000 Hz +3 VU recording, measured at line output) |
| ERASE RATIO | Better than 70 dB (*65 dB) 1,000 Hz +3 VU recording |
| INPUTS | Volume at maximum, 1,000 Hz "0" VU indication |
| MIC INPUT | More than 0.5 mV |
| LINE INPUT | More than 70 mV |
| DIN INPUT | More than 70 mV (High) More than 5 mV (Low) |
| OUTPUTS | OV (volume min) to 2.3V (volume max) using a 250 Hz "0" VU pre-recorded tape at 7-1/2 ips. |
| DIN OUTPUT | 1V |
| PHONE OUTPUT | 100 mV at 8 Ω each CH. |
| SPEAKER OUTPUT | 3W/8 Ω each CH. *More than (2W/2W) continuous power at 8 Ω |
| RECORDING BIAS FREQUENCY | 63 kHz $\pm 8\%$ |
| BIAS LEAK | Less than -20 VU measured at line output |
| HIGH FREQUENCY DEVIATION | With 2 dB using an 8,000 Hz 3-3/4 ips. pre-recorded tape at 7-1/2 ips. Tone Control Max |
| RECORDING CAPACITY | 2 hours stereo recording using a 1,200 ft. tape at 3-3/4 ips |
| FAST FOWARD AND REWIND TIME | 80/100 sec. using a 1,200ft. tape at 60/50 Hz |
| MOTOR | 2-4 pole induction 2-speed motor. type: IC-16Y Revolutions: 1,790/1,490 r.p.m. at 60/50 Hz (Low Speed) 3,580/2,980 r.p.m. at 60/50 Hz (High Speed) |
| HEADS | RECORDING/PLAYBACK HEAD |
| | Type: P4-150 Gap: 2 microns Impedance: 1,250 $\Omega \pm 15\%$ at 1,000 Hz D.C. Resistance: 91 Ω |
| | ERASE HEAD |
| | Type: E4-200 Gap: 0.6 mm Impedance: 200 $\Omega \pm 5\%$ at 100 kHz D.C. Resistance: 2 Ω |

| | | |
|-------------------|--|--|
| TRANSISTORS | 2SC458LG(B) (C) . . . 4 2SC711 (D) (E) . . . 4 2SC968 (3) (Red) . . . 2 | 2SC1013 (F) (D) . . . 4 2SC1312 (F) (G) . . . 2 |
| DIODES | 1N34A . . . 2 | 10DC-1 (Blk) . . . 1 10DC-1 (Red) . . . 2 |
| SPEAKERS | 2 built in (5" x 7") Oval speakers Impedance: 8Ω | |
| POWER SUPPLY | 100 to 240V A.C. 50/60 Hz 120V A.C. 60 Hz for CSA/UL Models 220V A.C. 50 Hz for CEE Models | |
| POWER CONSUMPTION | 50W | |
| DIMENSIONS | 1722W | 358(W) x 360(H) x 248 (D)mm (14" x 14.1" x 9.8") |
| | 1722L | 359(W) x 366(H) x 248 (D)mm (14.1" x 14.4" x 9.8") |
| WEIGHT | 1722W | 13.2 kg (29 lbs.) |
| | 1722L | 14.0 kg (30.8 lbs.) |

NOTE: Specifications subject to change without notice.

II. MEASURING METHOD

1. TAPE SPEED DEVIATION

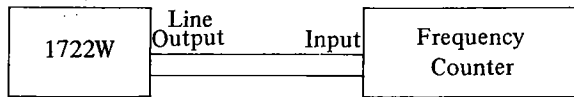


Fig. 1

As shown in Figure 1, connect a Frequency Counter to the Line Output of the recorder. Take a frequency counter reading at the beginning, middle, and end of tape winding during playback. The maximum value of these respective readings will represent tape speed deviation.

2. WOW AND FLUTTER

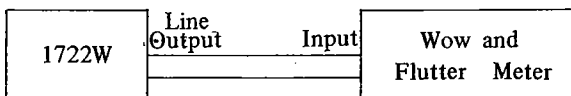


Fig. 2

Method A

As shown in Fig. 2, connect the Line Output of the recorder to the Input of a Wow and Flutter Meter. Use a 3,000 Hz pre-recorded test tape and take a wow and flutter meter reading at the beginning, middle, and end of tape winding. The maximum value of these respective readings will represent the wow and flutter.

Method B

Supply a 3,000 Hz sine wave signal from an Audio Frequency Oscillator and make a recording on a blank tape at the beginning, middle, and end of tape winding. Rewind and playback tape. Measure wow and flutter with a Wow and Flutter Meter. (The wow and flutter value of Method B will be close to $\sqrt{2}$ times of Method A)

3. FREQUENCY RESPONSE

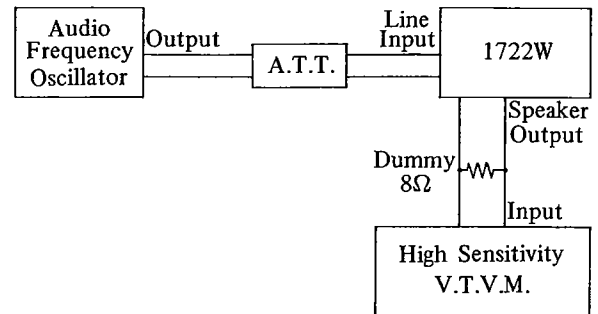


Fig. 3

- 1) Connect the various instruments as shown in Fig. 3 and supply a 1,000 Hz sine wave signal to the Line Input of the recorder from an Audio Frequency Oscillator through an Attenuator. Set recorder to "REC" mode and turn recording level control volume to obtain "0" VU meter reading.
- 2) Under conditions described in 1) above, readjust Attenuator so that the Line Input is -16 dB, and record 50 to 18,000 Hz spot frequencies.
- 3) Rewind tape and playback from the beginning. Take V.T.V.M. spot frequency readings and plot values on a graph.

NOTE: When measuring frequency response, new tape should be used.

4. SIGNAL TO NOISE RATIO

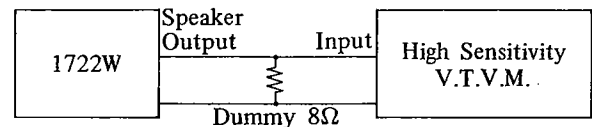


Fig. 4

Connect the various instruments as shown in Fig. 4 and playback a 250 Hz "0" VU pre-recorded test tape and adjust volume control to obtain +10 dbm V.T.V.M. reading. Then remove the tape and measure the noise level under the same condition. Convert each of the measured values into decibels.

5. TOTAL HARMONIC DISTORTION FACTOR

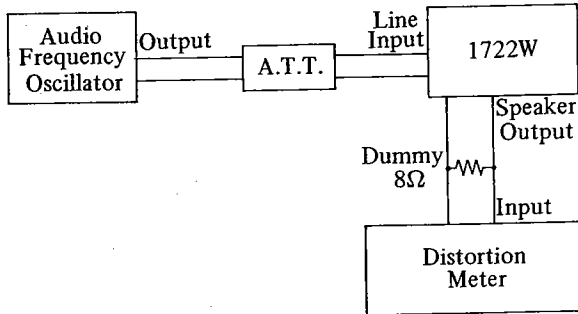


Fig. 5

- 1) Connect the various instruments as shown in Fig. 5. Load a Scotch #211 tape and set Tone control to "MAX" position.
- 2) Record a 1,000 Hz sine wave signal at "0" VU. Playback the resultant signal and measure the overall distortion factor.

NOTE: 1) At this time, Distortion factor of the Audio Frequency Oscillator must be sufficiently small.
2) When measuring the distortion factor, new tape should be used.

6. CROSS TALK (Cross talk between the tracks)

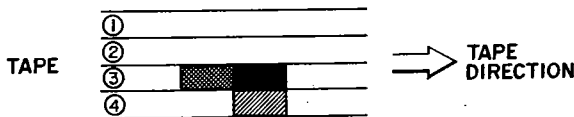


Fig. 6

As shown in Fig. 6, first record a 1,000 Hz sine wave signal on Track No.3 at +3 VU level. Next, record under a non-input condition. Then, playback the tape on Tracks No.3 and 4 through the B.P.F. (band pass filter sensitivity ... 1 : 1) and obtain a ratio between the two from the following formula:

$$C = 20 \log \frac{E_0}{E_2 - E_1} \text{ (dB)}$$

where,

- C = desired cross talk ratio (dB)
- E_0 = 1,000 Hz signal output level (V)
- E_2 = 1,000 Hz cross talk level (V)
- E_1 = Non-input signal recorded level (V)

7. ERASE RATIO

As shown in Fig. 4, connect a High Sensitivity V.T.V.M. to the Line Output of the recorder. Playback a virgin tape and take a V.T.V.M. reading of the output level. Next, record a 1,000 Hz sine wave signal at +3 dB, then playback this recorded signal and take a V.T.V.M. reading of the output level. Next, using this pre-recorded tape, record under a non-input condition and take a reading of the noise level output of the erased signal and obtain a ratio between the two from the following formula:

$$E_r = 20 \log \frac{E_0}{E_2 - E_1} \text{ (dB)}$$

where,

- E_r = Desired erase ratio (dB)
- E_0 = 1,000 Hz signal output level (V)
- E_2 = Non-input signal recorded level (V)
- E_1 = Virgin tape noise output level (V)

8. POWER OUTPUT

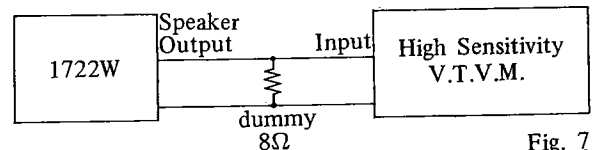


Fig. 7

As shown in Fig. 7, connect an 8Ω dummy load resistor to the speaker output of the recorder and connect this terminal to a High Sensitivity V.T.V.M. Playback a 250 Hz "0" VU pre-recorded test tape and take a V.T.V.M. reading of the output level. The resultant output can be obtained from the results of the above measurement by using the following formula:

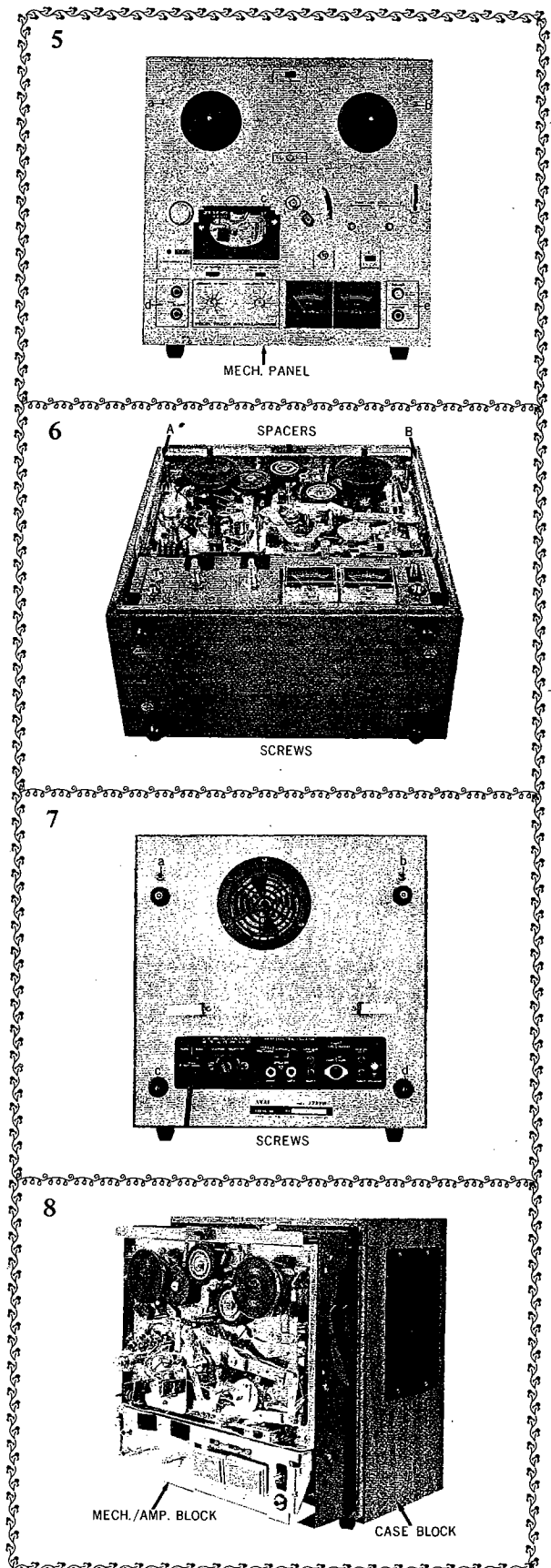
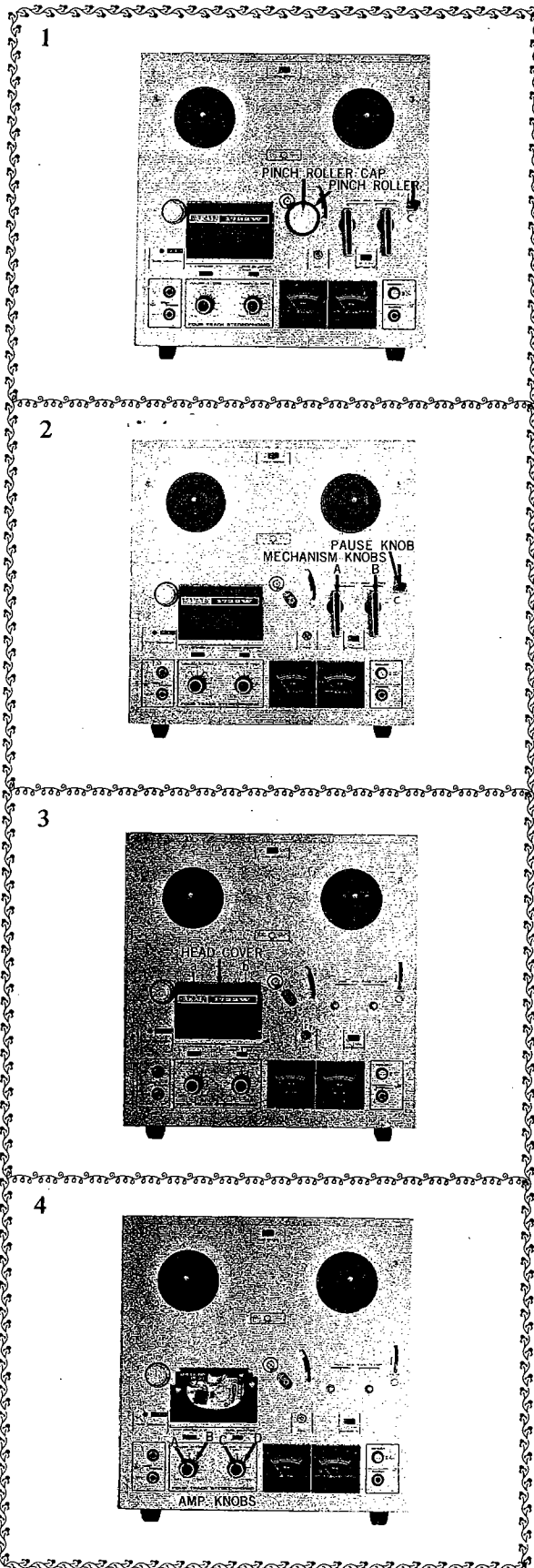
$$P = \frac{E^2}{R} \text{ (W)}$$

where,

- P = Desired power output (watts)
- E = Measured voltage (V) (R.M.S.)
- R = 8Ω

III. DISMANTLING OF UNIT

In case of trouble, etc. necessitating disassembly, please disassemble in the order shown in photographs. Reassemble in reverse order.



IV. MECHANISM ADJUSTMENT

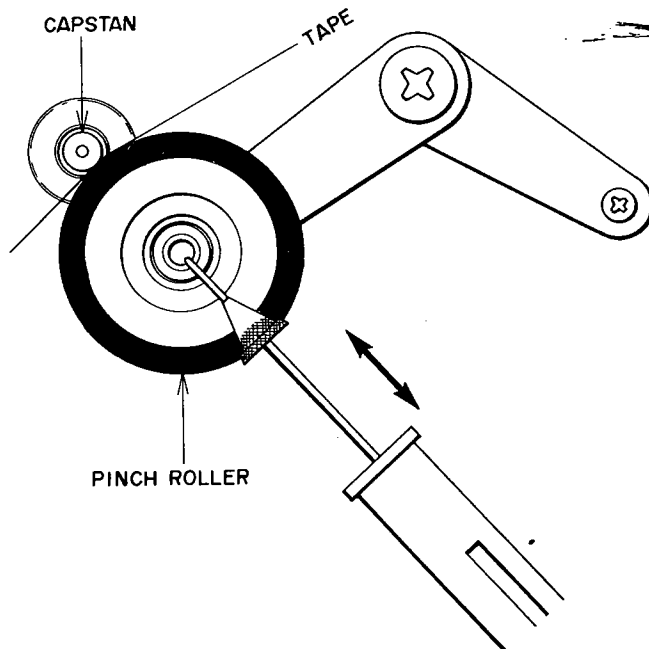


Fig. 8

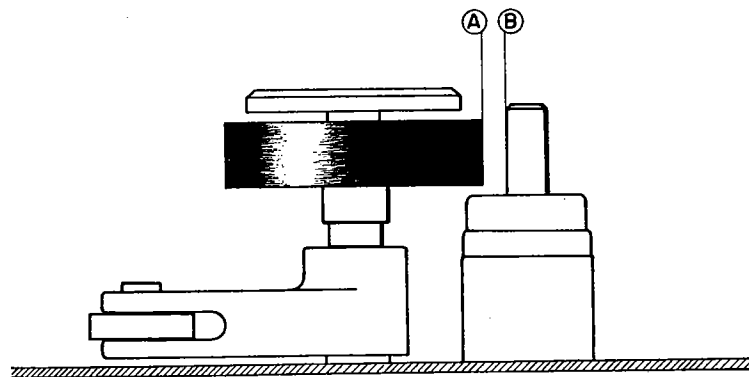


Fig. 9

1. PINCH WHEEL PRESSURE MEASUREMENT

(See Fig. 8)

Confirm the following prior to pinch wheel pressure measurement: (See Fig. 9)

The part of the pinch wheel over which the tape passes is parallel with the capstan shaft. (represented by **A** and **B** in Fig. 9)

- 1) As shown in Fig. 8, measure pinch wheel pressure with a spring gauge by pulling the pinch wheel away from the capstan and then returning. Take a reading of the spring gauge indication at the time the pinch wheel contacts the capstan. Correct pinch wheel pressure at this time is within 1,150 to 1,200 gr.

- 2) In case **A** and **B** in Fig. 9 is not parallel, check for the following.

- a. Rubber part of pinch wheel is worn. (Replace pinch wheel)
- b. Capstan or pinch wheel shaft is bent. (Adjust)

NOTE: This condition may also be caused by twisted tape or wow and flutter.

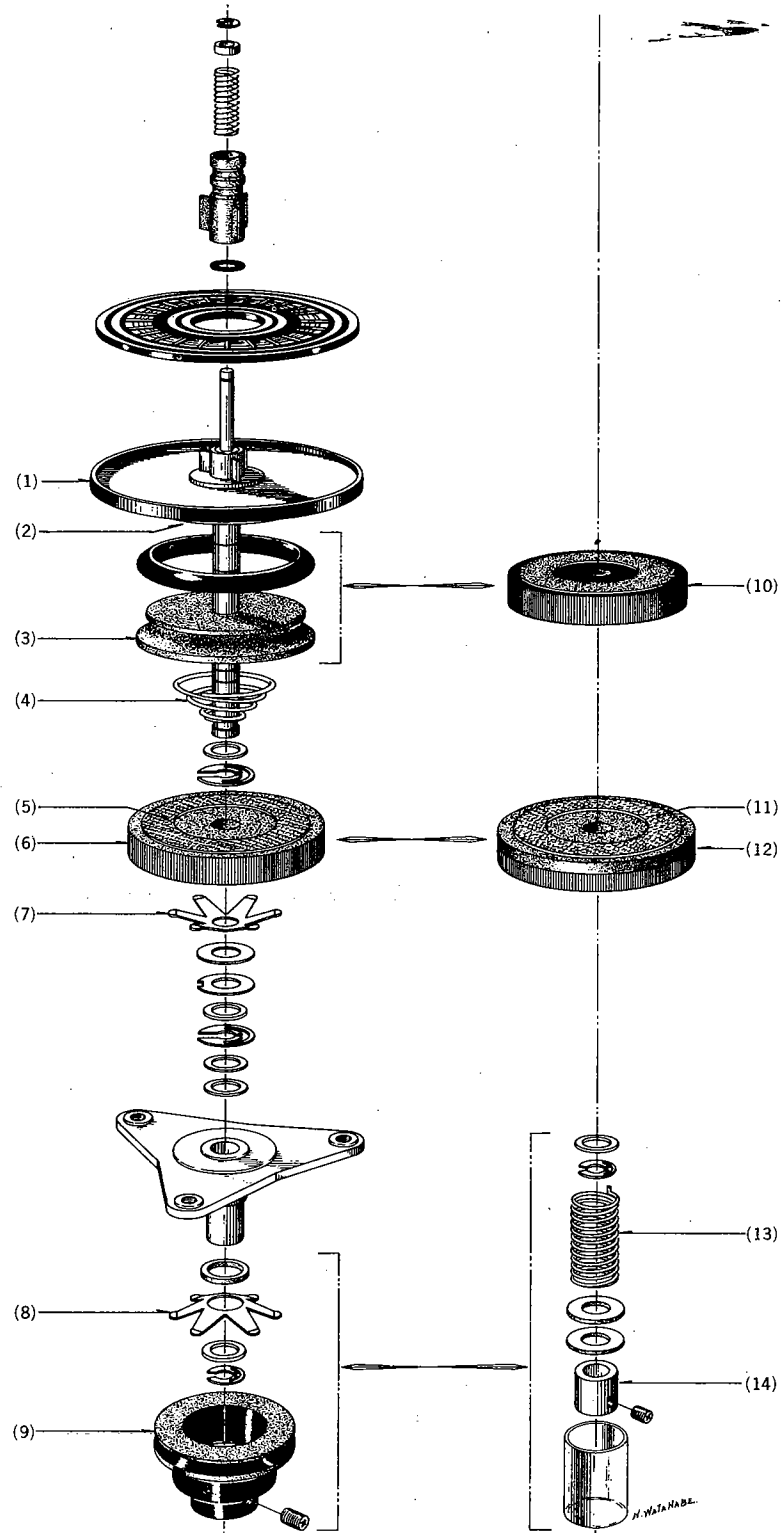


Fig. 10

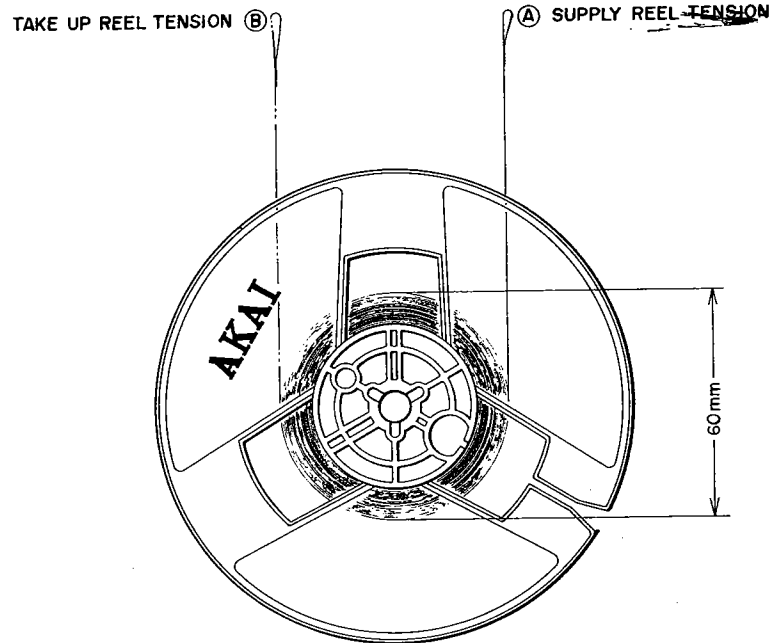


Fig. 11

2. SUPPLY REEL TABLE TENSION ADJUSTMENT (See Fig. 10 at left)

Clutch felt (2) is used on the bottom part of rewind pulley (3) and reel table base plate (1) to protect the tape from excessive tension at rewind mode.

For measuring the tension of each reel, it is ideal to use on empty 5" reel on which a tape has been wound to cover a 60 mm diameter as shown in Fig. 11.

Check and Adjustment (See Fig. 11- (A))

- (a) At rewind mode, the tension of felt (2) part shown in Fig. 10 should be from 400 to 500 grams when the tape is gently pulled upward with a spring gauge. If adjustment is necessary, this can be accomplished by increasing or decreasing the number of washers used.
- (b) Felt (5) is for the purpose of applying suitable clutch (back tension) at Forward and Recording modes. Measure in the same way as outlined in item (a) and adjust by strengthening or weakening the tension by increasing or decreasing the number of washers respectively to obtain 80 to 100 grams of tension.
- (c) At Fast Forward mode, the tension (free tension) should be 15 to 20 grams. To adjust, strengthen or weaken tension by increasing or decreasing the number of washers and by moving Pulley (9) up and down and tightening to fixed position with screw.

3. TAKE UP REEL TABLE TENSION ADJUSTMENT (See Fig. 10 at right)

Clutch felt (2) is used on the bottom of reel table base plate (1) for the purpose of preventing excessive tension from being applied to the tape and tape stretch from occurring at Fast Forward mode.

Check and Adjustment (See Fig. 11- (B))

- (a) To measure the tension between felt (2) and rewind roller A (10), load the tape and at forward mode, gently pull end of tape upward with a spring gauge (Fig. 11- (B)) Ideal tension at this part is 400 to 500 gr.
To adjust, increase or decrease the number of washers used. Also, if rotation is not smooth when turned by hand, replace felt.
- (b) Felt (11) on take up roller D (12) is for the purpose of clutch between take up roller A (10) and take up roller D. Measure the tension at this part in the same way as outlined in paragraph (a).
Ideal tension is 150 to 180 grams. Adjust by increasing or decreasing the number of washers used.
- (c) At Rewind mode the tension (free tension) should be 15 to 20 grams. Adjustment can be made by increasing or decreasing the number of washers used and by moving set sleeve B (14) up and down and repositioning.

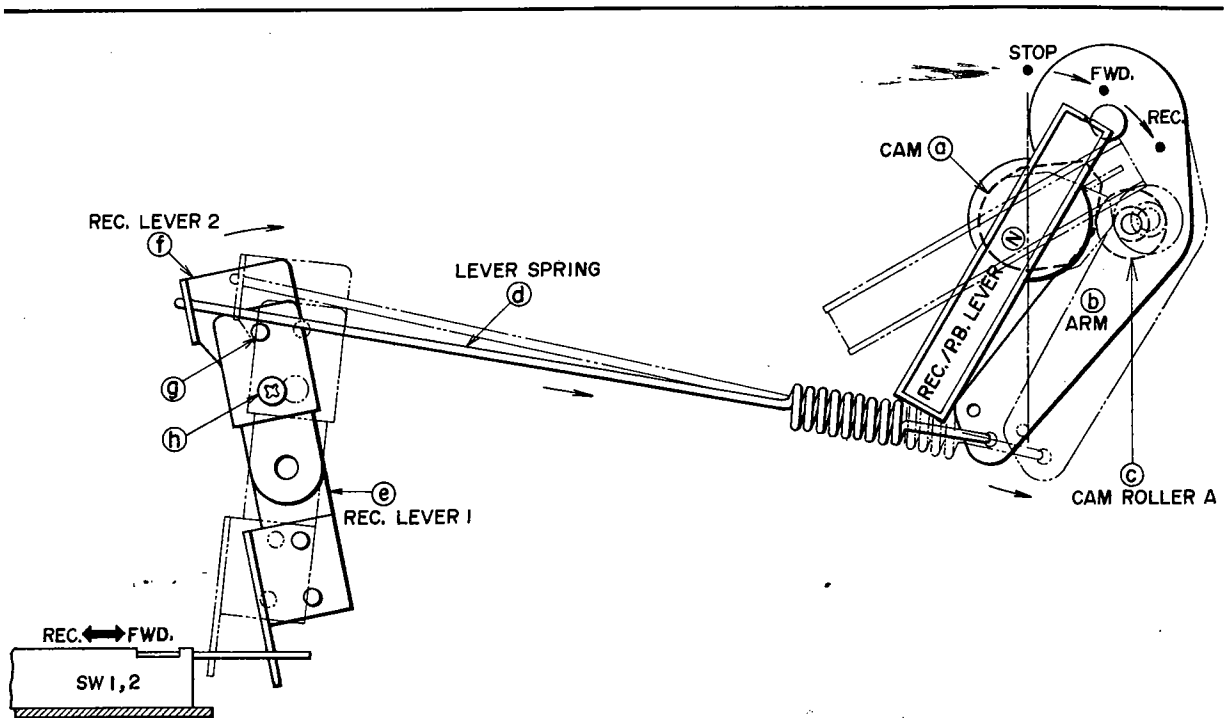


Fig. 12

4. FWD/REC MODE MECHANISM CHANGE AND ADJUSTMENT

OPERATION

- (1) Set REC/PLAY Lever from FWD to REC position.
- (2) Cam (a) pushes Cam Roller (c) and Arm (b) as illustrated by the dotted lines in Fig. 12.
- (3) Arm (b) pulls Lever Spring shaft (d) as indicated by the arrow mark.
- (4) Then, Recording Levers 1 and 2 ((e) and (f)) set Slide Switches SW-1 and SW-2 to recording condition.

In the event that the Recording Levers (REC LEVER 1 (e), REC LEVER 2 (f)) do not push the Slide Switches perfectly, too much loose play exists.

* Vibration or the inability to record is sometimes caused by imperfect slide switch operation.

Adjustment: Adjust position of Recording Levers 1 and 2 while checking to confirm that the levers are pushing the Slide Switches perfectly.

Fix at adjusted position with screws

(g) and (h)

5. DRIVE BELT POSITION ADJUSTMENT

If drive belt position adjustment is necessary, with the power turned ON, insert a U shaped washer in the place indicated in the figure so that the drive belt come to the center of the motor pulley as shown in Fig. 13.

6. FLYWHEEL LOOSE PLAY ADJUSTMENT

With a minus driver, turn bearing and adjust gap to obtain a 0.3 mm loose play between the Steel Ball and Bearing when the flywheel is moved as indicated by the arrow mark (↔) in Fig. 14.

Fix at ideal position by turning nut to right (see figure).

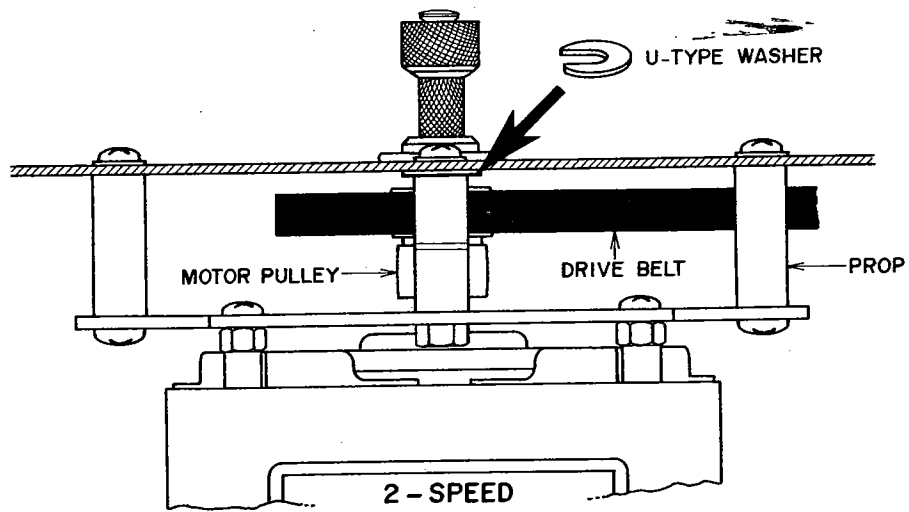


Fig. 13

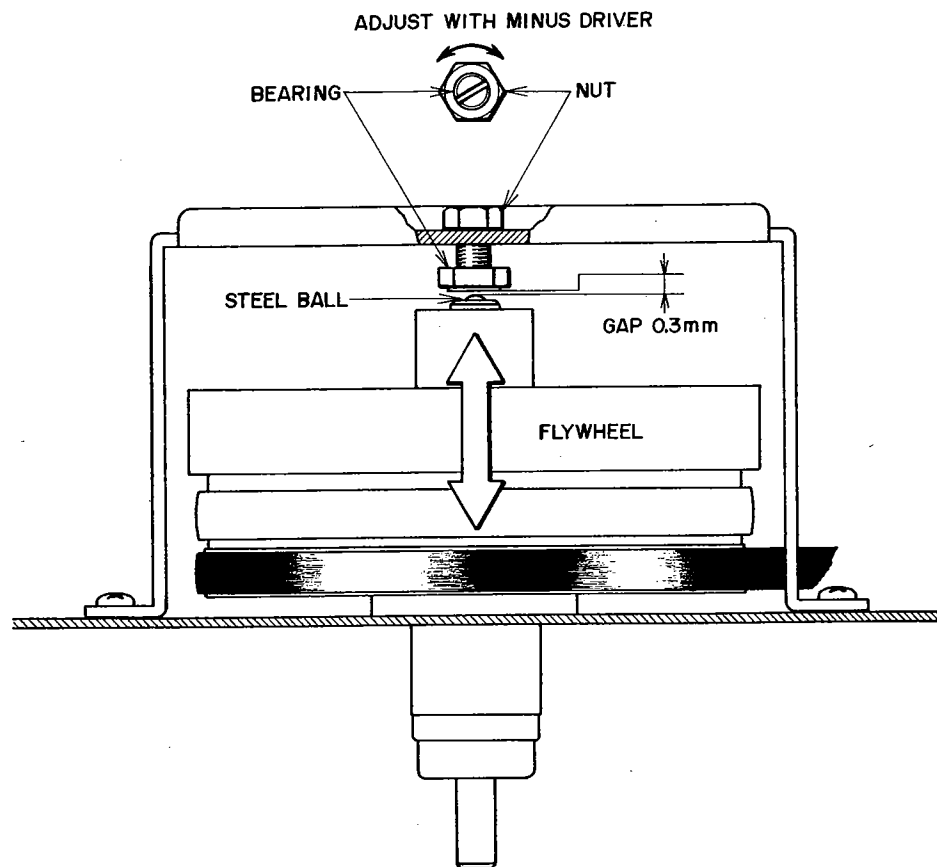


Fig. 14

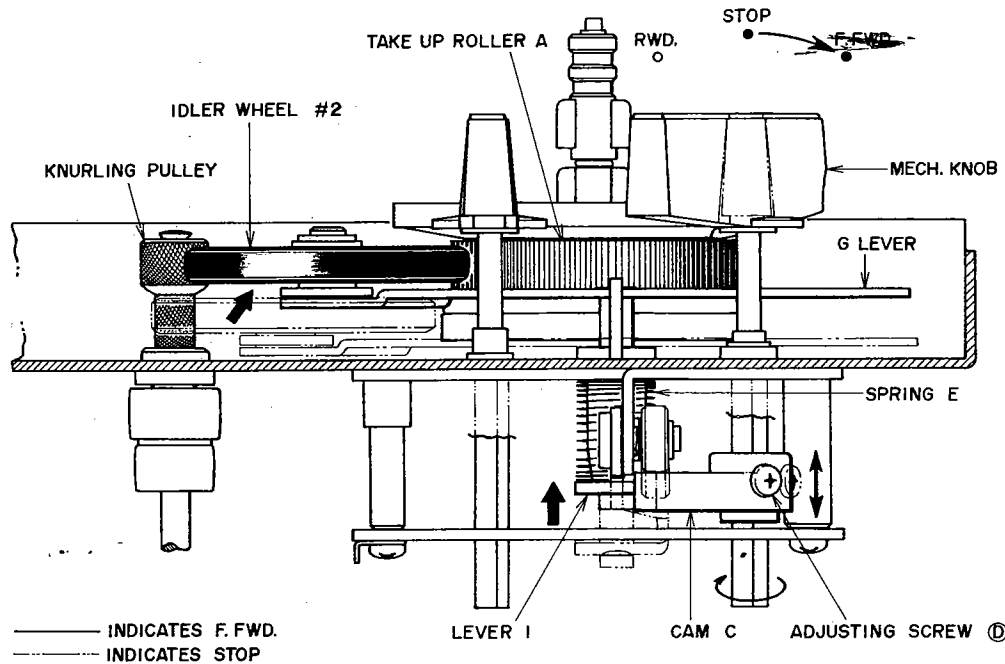


Fig. 15

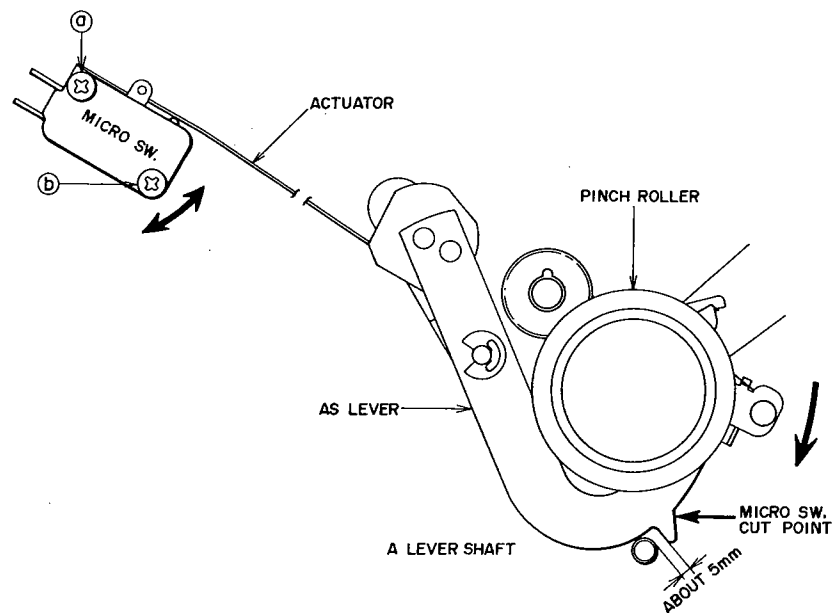


Fig. 16

7. ADJUSTMENT OF IDLER #2 POSITION AT FAST FORWARD MODE

Move Cam © shown in Fig. 15 up and down as indicated by the arrow mark (↔) in the figure and adjust Lever © height so that Idler #2 contact between Take Up Roller A and the knurling Pulley is uniform when the F.FWD/RWD Lever is set to F.FWD position. Fix at adjusted position with Adjustment Screw ©. During operation, confirm that the rotating position of Idler #2 is ideal.

8. AUTOMATIC SHUT-OFF OPERATING POINT ADJUSTMENT

Move Micro Switch as indicated by the arrow mark (↔) in the figure and fix Screws (a) and (b) so that when the Automatic Shut-off Switch is at ON position, the Micro Switch is perfectly turn off at position at which the gap between A lever shaft and AS lever Stopper is about 5 mm as shown in Fig. 16.

V. HEAD HEIGHT ADJUSTMENT

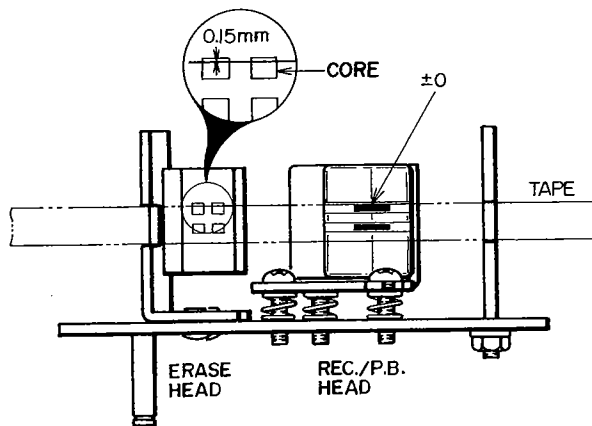
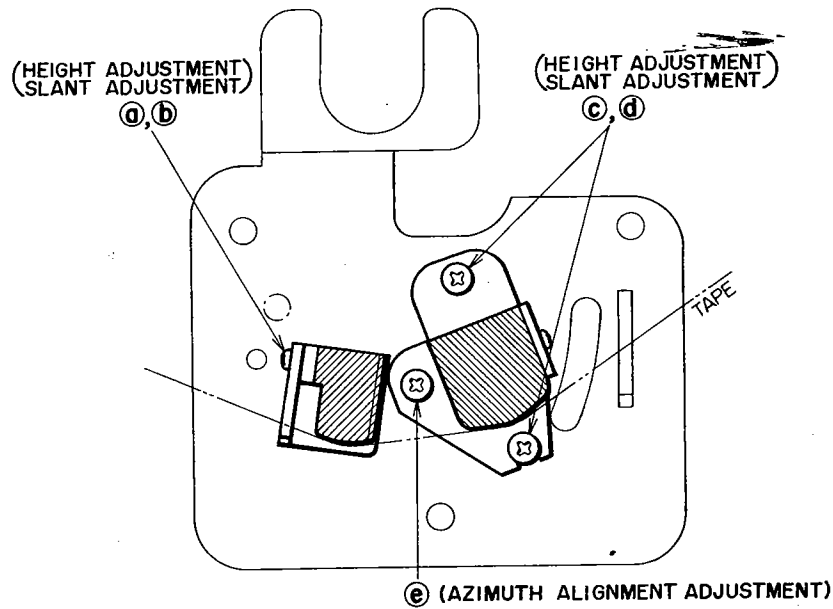


Fig. 17

As head adjustment is of utmost importance to the operation of a tape recorder, please be especially careful in making these adjustments. Also please check the tape travel system.

If the tape travel system is faulty, because this causes the tape to twist, etc., be sure that reel height adjustment is precise.

2. HEAD SLANT ADJUSTMENT (See Fig. 17)

Adjust Adjustment Screws (a), (b), (c), and (d) so that the erase and recording/playback heads contact the tape at the proper angle in relation to tape travel.

1. HEAD HEIGHT ADJUSTMENT

1) Erase Head

Loosen Screws (a) and (b) and adjust the erase head height. Tighten screws. At position at which the upper edge of the tape is 0.15 mm lower than the upper edge of the erase head core.

2) Recording/Playback Head

Adjust with Head Height Adjustment Screws (c) and (d) so that the upper edge of the tape and the upper edge of channel 1 head core are the same height.

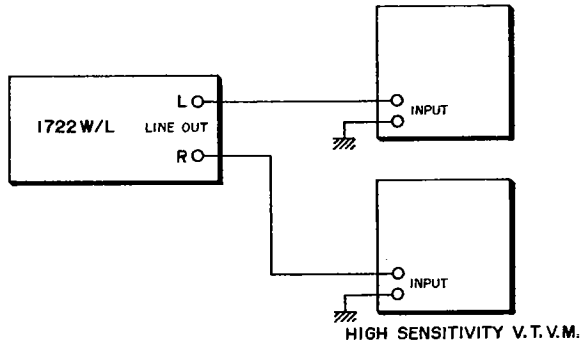


Fig. 18

3. RECORDING/PLAYBACK HEAD AZIMUTH ALIGNMENT ADJUSTMENT (See Figs. 17 and 18)

- 1) Playback an Ampex Alignment Test Tape (8,000 Hz, 3-3/4 ips recorded) at 7-1/2 ips.
- 2) Connect a High Sensitivity V.T.V.M. to the line output ~~input~~ as shown in Fig. 18 and adjust Screw (e) to obtain maximum V.T.V.M. indication at -10 dBm range.
- 3) Repeat Items 1 through 3 two or three times for optimum performance.

VI. AMPLIFIER

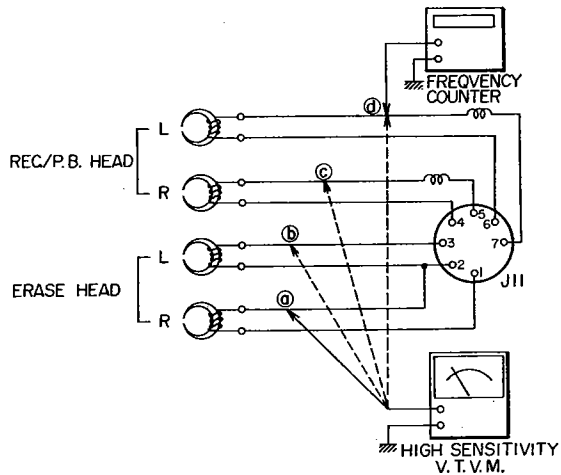


Fig. 19

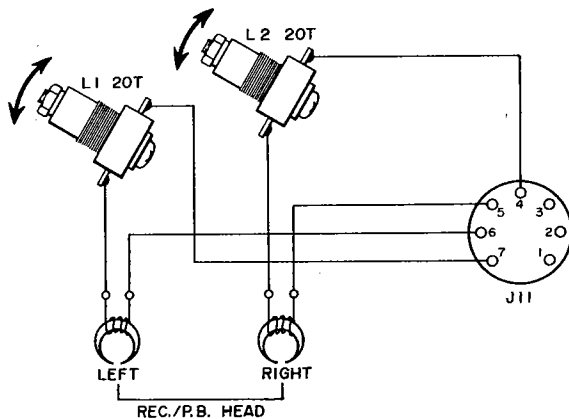


Fig. 20

Connect the various measuring instruments as shown in Fig. 19.

1. RECORDING BIAS FREQUENCY CHECK (See Fig. 19)

- 1) Set recorder to recording mode.
 - 2) Connect a Frequency Counter to point (d) of the Recording/Playback Head as shown in Fig. 19 and read indication.
- * Specified recording bias frequency is $63 \text{ kHz} \pm 8\%$.

2. FREQUENCY RESPONSE CHECK

- 1) For measuring instrument connections, see Fig. 3. Set recorder to recording mode and supply a 1,000 Hz sine wave signal to the line input from an Audio Frequency Oscillator. Record at 1,000 Hz -16 VU and then switch the Oscillation frequency of the Audio Frequency Oscillator to 10,000 Hz and record.
- 2) The Volume Controls must be set to obtain a VU meter indication of -16VU at 1,000 Hz. The Tone Controls should be set to maximum for 3-3/4 ips. tape speed and to about 4 or 5 position for 7-1/2 ips. tape speed.
- 3) The V.T.V.M. indication should display equally flat frequency response at the two frequencies in items 1) and 2) (both channels).

3. RECORDING BIAS VOLTAGE CHECK

Check the voltage at points (c) and (d) shown in Fig. 19.
Correct recording bias voltage is about 13V A.C.

4. ERASE VOLTAGE

Correct erase voltage is about 43.5V A.C.

5. HUM ALLEVIATOR COIL ADJUSTMENT

(Refer to Fig. 4 of Measuring Method)

Connect a High Sensitivity V.T.V.M. to the Speaker output Terminal through an 8Ω dummy load resistor, ~~Load a 250 Hz "0" VU recorded test tape~~ and set Tone Controls to Maximum. Playback the test tape and move hum alleviator coils as indicated by the arrow marks in Fig. 20 while observing V.T.V.M. indication and position at place where V.T.V.M. indication is minimum. (Must be better than 47 dB).

VII. D. C. RESISTANCE OF VARIOUS COILS

D.C. resistance value is average value.

| Designation | Type | D.C. Resistance |
|-------------------------|-------------|---|
| Main Motor | IC-16Y | Between Red-Vlt 100Ω Between Gry-Vlt 80Ω Between Wht-Blk 140Ω Between Ylw-Blk 310Ω |
| Driver Transformer | N24-6847 AT | Primary 150Ω Secondary 70Ω |
| Oscillation Coil | OT-204 | Between 1-3 0.3Ω Between 4-6 0.7Ω Between 7-9 8.2Ω |
| Erase Head | E4-200 | 2Ω |
| Recording/Playback Head | P4-150 | 91Ω |
| Hum Alleviator Coil | 20T | 0.5Ω |
| Power Transformer | LST-1 | (Refer to diagram shown below) |

The diagram shows the LST-1 power transformer with the following specifications:

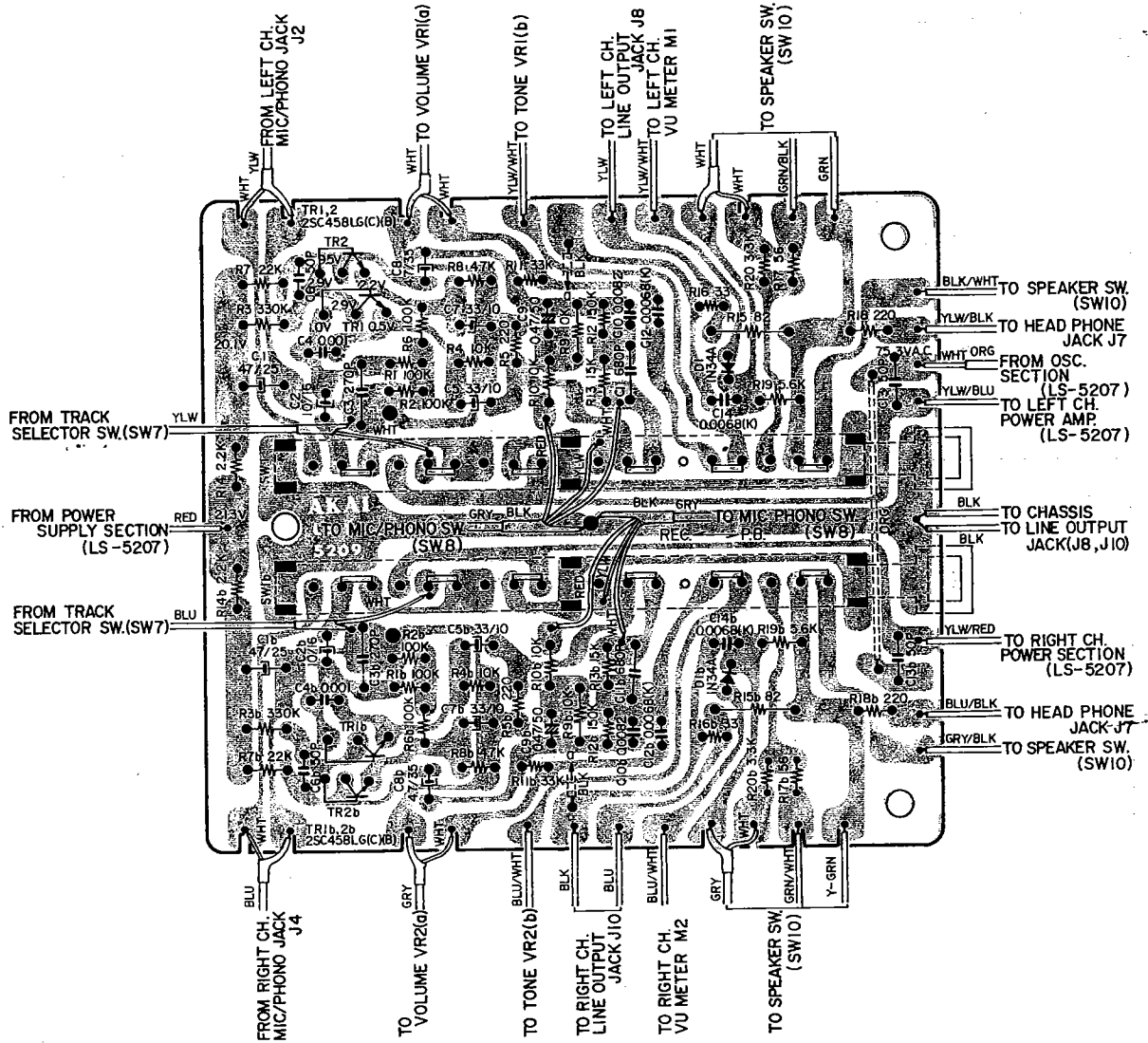
- Primary Winding:**
 - 240V BLU: 4.0Ω
 - 220V WHT: 3.8Ω
 - 200V PNK: 14.2Ω
 - 120V YLW: 1.9Ω
 - 110V BRN: 1.9Ω
 - 100V GRN: 1.9Ω
 - Total Primary Resistance: 15.9Ω
- Secondary Winding:**
 - 15.5V ORG: 1.0Ω
 - 0V ORG: 1.0Ω

Fig. 21

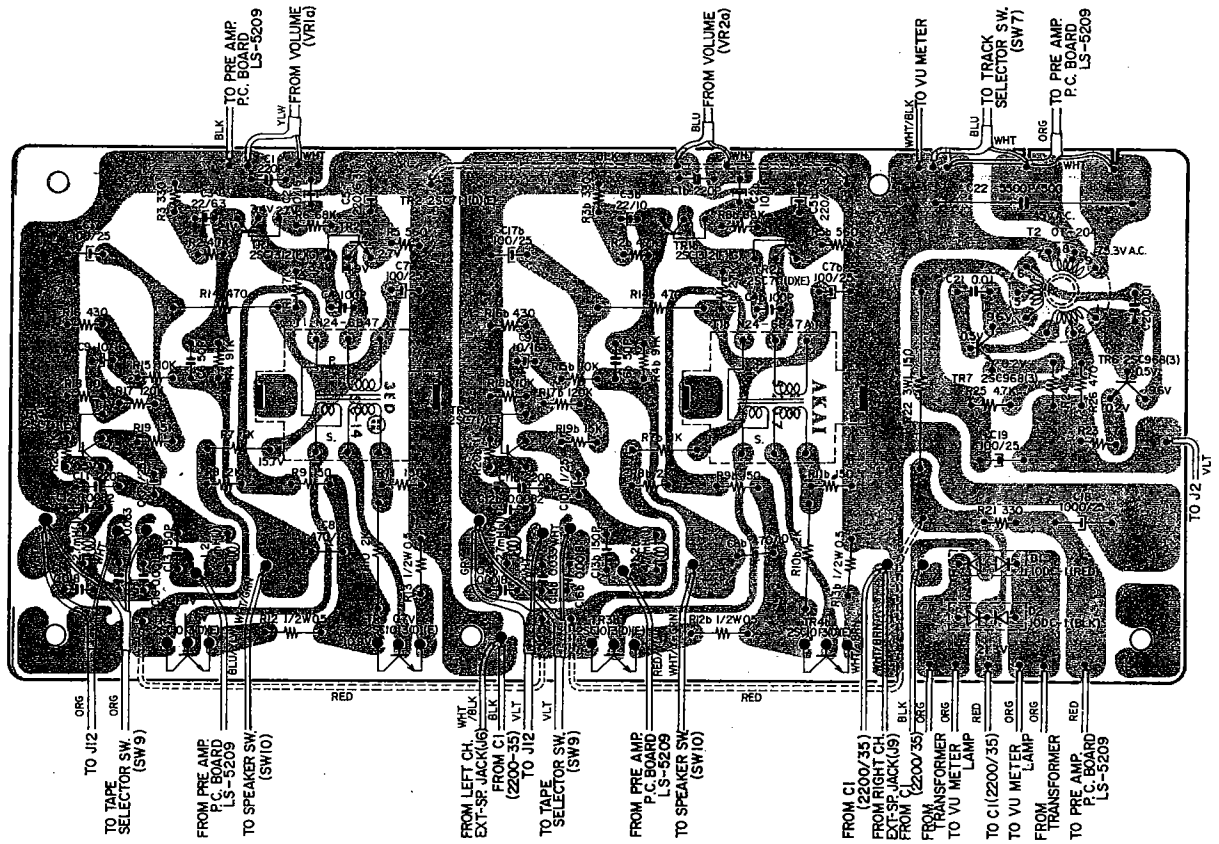
Chart 1

VIII. COMPOSITE VIEWS OF COMPONENTS

I. PRE-AMP. P.C. BOARD (LS-5209)



2. MAIN AMP./OSC./POWER SUPPLY P.C. BOARD (LS-5207)



SECTION 2

PARTS LIST

TABLE OF CONTENTS

| | | |
|-------------|---|----|
| FIG. 1 | HEAD BLOCK | 24 |
| FIG. 2 | REEL TABLE BLOCK | 25 |
| FIG. 3 | MOTOR/BELT CHANGE LEVER BLOCK | 26 |
| FIG. 4 | FLYWHEEL BLOCK | 28 |
| FIG. 5 | SWITCH BLOCK | 29 |
| FIG. 6 | MECH. ASSEMBLY BLOCK | 30 |
| FIG. 7 | PRE-AMP. P.C. BOARD (LS-5209) BLOCK | 32 |
| FIG. 8 | MAIN AMP./OSC./POWER SUPPLY P.C. BOARD (LS-5207) BLOCK | 33 |
| FIG. 9 | AMP. ASSEMBLY BLOCK | 34 |
| FIG. 10 | FINAL ASSEMBLY BLOCK | 36 |
| INDEX | | 38 |

HOW TO USE THIS PARTS LIST

1. This parts list is compiled by various individual blocks based on assembly process.
2. When ordering parts, please describe parts number, serial number, and model number in detail.
3. How to read list.

The reference number corresponds with illustration or photo number of that particular parts list.

This number corresponds with the Figure Number.

This number corresponds with the individual parts index number in that figure.

A small "x" indicates the inability to show that particular part in the Photo or Illustration.

12-115x

Schematic Diagram Number of individual manufactured part.





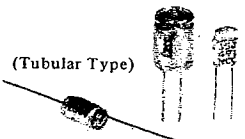
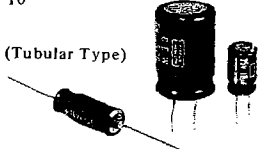
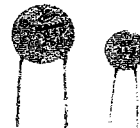
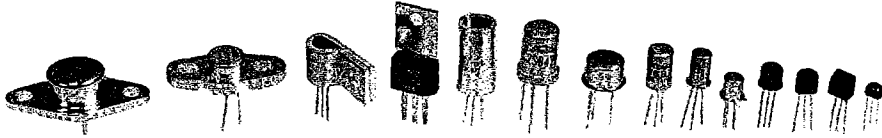
(not required for parts order)

Quantity of particular part required.

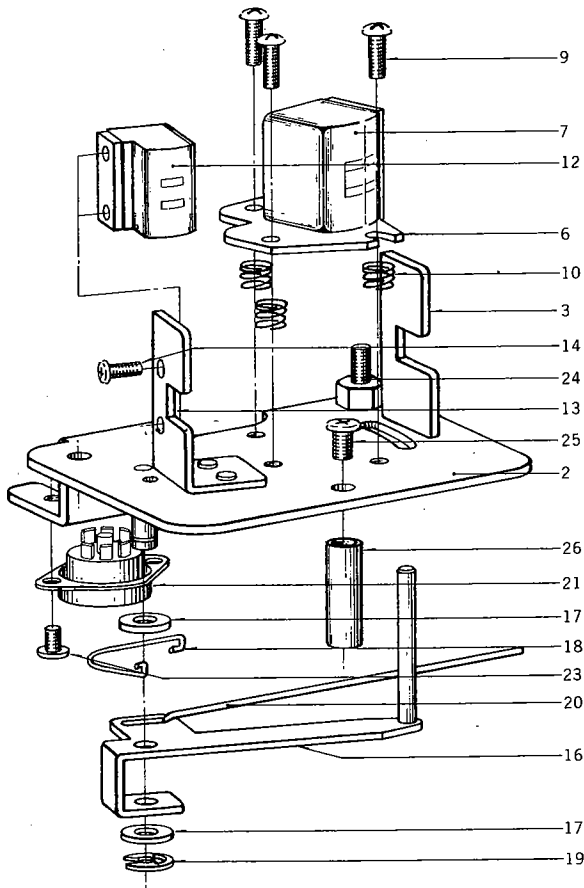
| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|---------------------------|-----------|----------------------------|---------------|------|
| FLYWHEEL BLOCK #13 | | | | |
| 12-115x | 800425 | Flywheel Block Assy. Comp. | RDG #13 | 1 |
| 12-116 | 244506 | Flywheel Only | RD-233 | 1 |
| 12-117x | 244754 | Felt, Flywheel | RD-275 | 1 |
| 12-118 | 251324 | Main Metal Case | RD-236 | 1 |
| 12-119 | 253080 | Main Metal | RD-237 | 1 |

4. The symbol numbers shown on the P.C. Board list can be matched with the Composite Views of components of the Schematic Diagram or Service Manual.
5. The indications of Resistors and Capacitors in the photos of P.C. Board are being eliminated.
6. The shape of the parts and parts name, etc. can be confirmed by comparing them with the parts shown on the Electrical Parts Table of P.C. Board.
7. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List.
It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index. (meaning of ref. no. outlined in Item 3 above).
8. Utilize separate "Price List for Parts" to determine unit price. The most simple method of finding parts Price is to utilize the reference number.

ELECTRICAL PARTS TABLE

| | | | |
|---|--|--|--|
| <p>Because the indication of resistors and capacitors in the P. C. Board photos are being eliminated, please confirm parts name and shape by comparing them with the parts shown in this table.</p> | <p style="text-align: center;">1</p>  <p style="text-align: center;">Solid Resistor</p> | <p style="text-align: center;">2</p> <p style="text-align: center;">Stopper Type</p>  <p style="text-align: center;">Insulator Type</p> <p style="text-align: center;">Carbon Resistor</p> | <p style="text-align: center;">3</p>  <p style="text-align: center;">Metal Oxide Film Resistor</p> |
| | <p style="text-align: center;">4</p>  <p style="text-align: center;">Cement Resistor</p> | <p style="text-align: center;">5</p>  <p style="text-align: center;">Wire-Wound Resistor</p> | <p style="text-align: center;">6</p>  <p style="text-align: center;">Thermister</p> |
| <p style="text-align: center;">1</p>  <p style="text-align: center;">MP Capacitor (Tubular Type)</p> | <p style="text-align: center;">2</p>  <p style="text-align: center;">Plastic Capacitor</p> | <p style="text-align: center;">3</p>  <p style="text-align: center;">Mylar Capacitor</p> | <p style="text-align: center;">4</p>  <p style="text-align: center;">VFM (Hi-Q) Capacitor</p> |
| <p style="text-align: center;">5</p>  <p style="text-align: center;">Mylar Capacitor</p> | <p style="text-align: center;">6</p>  <p style="text-align: center;">Tantalum Capacitor</p> | <p style="text-align: center;">7</p>  <p style="text-align: center;">Oil Capacitor (Tubular Type)</p> | <p style="text-align: center;">8</p> <p style="text-align: center;">Vertical Type</p> <p style="text-align: center;">(Tubular Type)</p>  <p style="text-align: center;">Styrol Capacitor</p> |
| <p style="text-align: center;">9</p>  <p style="text-align: center;">Electrolytic Capacitor (Tubular Type)</p> | <p style="text-align: center;">10</p> <p style="text-align: center;">Vertical Type</p> <p style="text-align: center;">(Tubular Type)</p>  <p style="text-align: center;">Electrolytic Capacitor</p> | <p style="text-align: center;">11</p>  <p style="text-align: center;">Ceramic Capacitor</p> | <p style="text-align: center;">12</p>  <p style="text-align: center;">Metalized Mylar (Paper) Capacitor</p> |
| <p style="text-align: center;">13</p>  <p style="text-align: center;">Trimmer Condenser</p> | | <p style="text-align: center;">VR</p>  <p style="text-align: center;">Semi-Fixed Volume</p> | |
| <p style="text-align: center;">L</p>  <p style="text-align: center;">Ferri Inductor</p> | <p style="text-align: center;">TR</p>  <p style="text-align: center;">Transistor</p> | | |
| <p style="text-align: center;">CR</p>  <p style="text-align: center;">Spark Quencher</p> | <p style="text-align: center;">D</p>  <p style="text-align: center;">Diode (Silicon, Zener, Germanium)</p> | | |

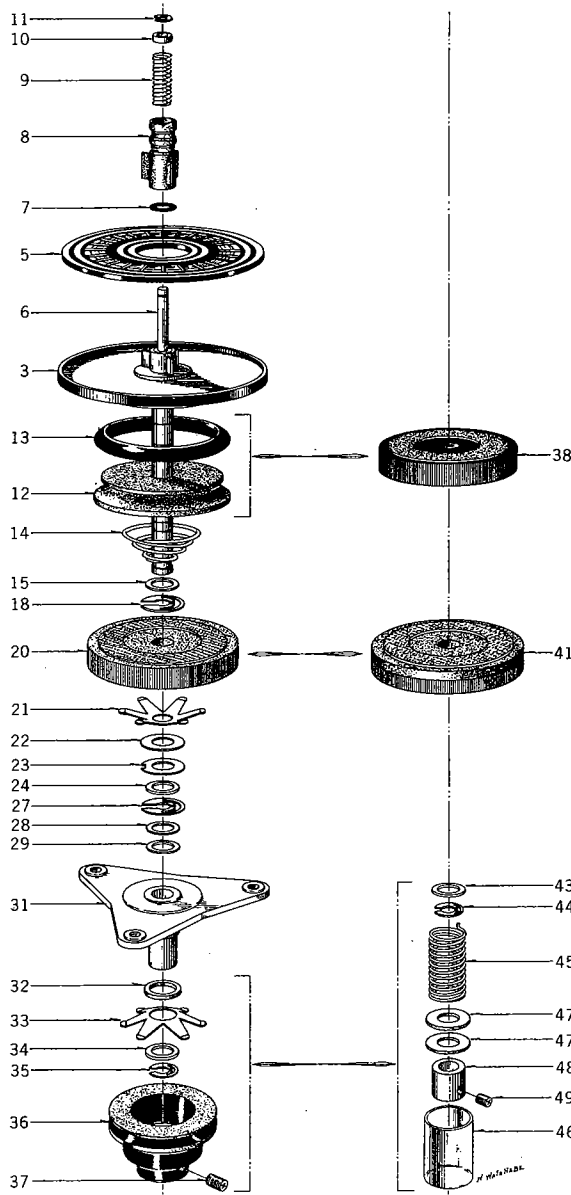
**FIG. 1 ILLUSTRATION OF
HEAD BLOCK**



HEAD BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|----------|-----------|------------------------------|---------------|------|
| 1-1x | BH482051 | 4-TR-LC Head Block Comp. | LS-2, 3 | 1 |
| 1-2 | HZ392501 | Head Base, LS (s/pin) | LS-0001 | 1 |
| 1-3 | HZ274195 | Tape Guide No. 11 | 1630-19 | 2 |
| 1-4x | ZW273745 | Spring Washer M3 | | 2 |
| 1-5x | ZW601290 | Nut M3 | | 2 |
| 1-6 | HZ392545 | RH Angle Base | LS-0003 | 1 |
| 1-7 | HP375131 | REC./PB. HEAD P4-150 | | 1 |
| 1-8x | ZS201508 | Screw, pan head 2x4 | | 2 |
| 1-9 | ZS345914 | Screw, round head 3x10 | | 3 |
| 1-10 | ZG382757 | Angle Adjust Spring D | RD-A12 | 3 |
| 1-11x | HZ393974 | I-MK Head Terminal Plate | RC-89 | 1 |
| 1-12 | HE384693 | ERASE HEAD E4-200 | | 1 |
| 1-13 | HZ410984 | Erase Head Base | LF-0002 | 1 |
| 1-14 | ZS201475 | Screw, pan head 2x3 | | 2 |
| 1-15x | ZS344283 | Screw, pan head 3x4 | | 2 |
| 1-16 | HZ256432 | Lifter Mt. Table B, w/pin | LM-4 | 1 |
| 1-17 | ZW345442 | Washer (Nylon) D4.2x9x1t | | 2 |
| 1-18 | ZG389283 | Tension Spring, LS | LS-0005 | 1 |
| 1-19 | ZW290283 | 'U' Ring 2.85M | 6-1-1 | 1 |
| 1-20 | MZ301048 | Lifter Spoke, 920 | LM-12 | 1 |
| 1-21 | EJ392567 | Mold Socket SB-5202 (M Type) | 31-1-75 | 1 |
| 1-22x | ZW273881 | Earth Lug M4 | | 1 |
| 1-23 | ZS202061 | Screw, binding head 3x5 | | 3 |
| 1-24 | ZS391588 | Head Chassis Retaining Screw | LS-1001 | 1 |
| 1-25 | ZS413201 | Screw, pan head 4x8 | | 2 |
| 1-26 | HZ247511 | Head Prop C | 900-142 | 3 |

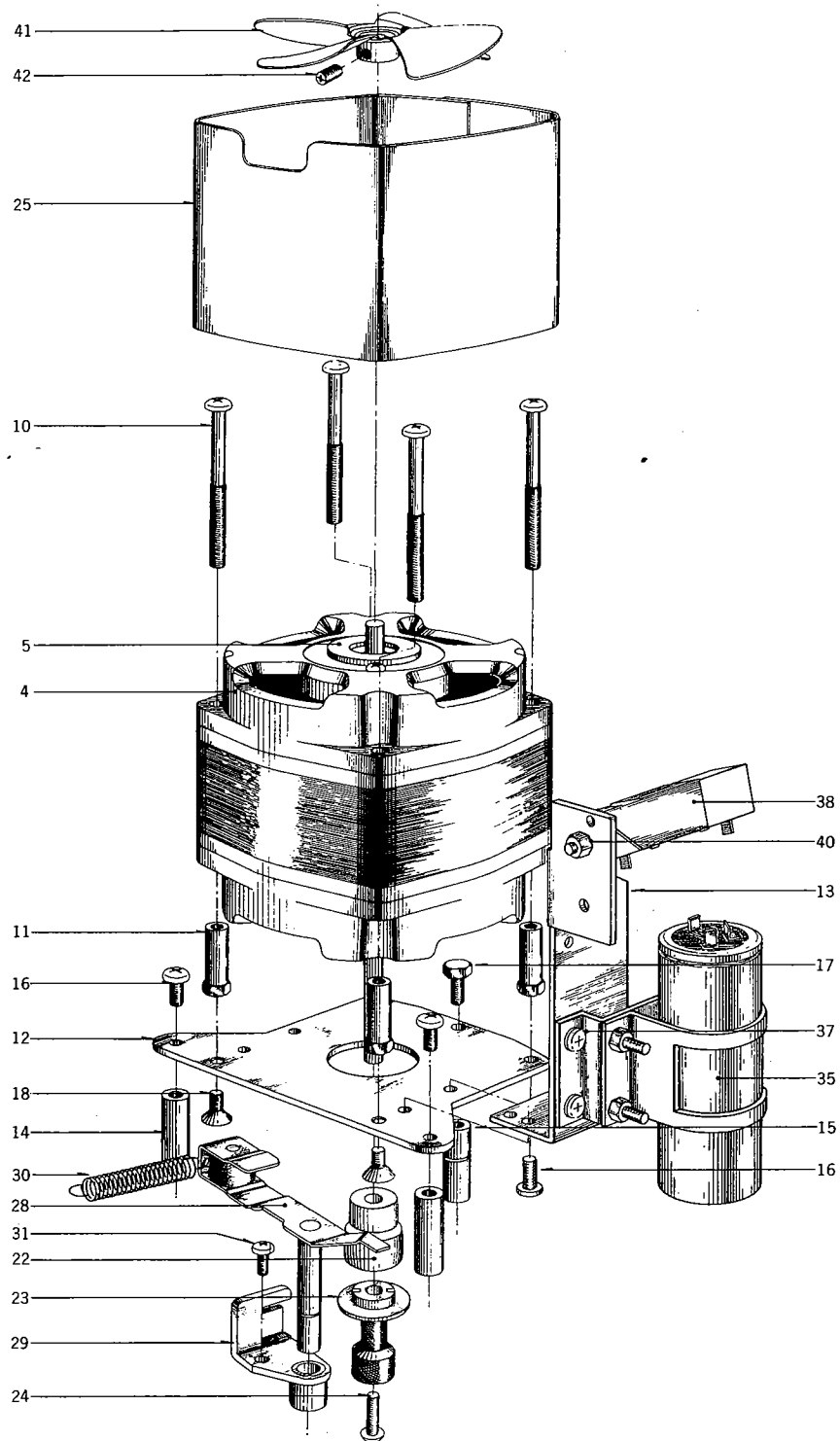
**FIG. 2 ILLUSTRATION OF
REEL TABLE BLOCK**



REEL TABLE BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Qty |
|----------|-----------|---|---------------|-----|
| 2-1x | BR570802 | Supply Reel Table Block Comp. | LS-3 | 1 |
| 2-2x | BR570813 | Take-up Reel Table Block Comp. | LS-3 | 1 |
| 2-3 | MT255712 | Reel Table Disk B, w/shaft A | XR-101 | 1 |
| 2-4x | MT252112 | Friction Cloth B | 900-225 | 1 |
| 2-5 | MT376110 | Reel Table Rubber, CD-2 | CD-201 | 1 |
| 2-6 | MS255600 | Reel Shaft B | XR-103 | 1 |
| 2-7 | MT297663 | 3R 'O' Ring 2.9x 1.65M | 3R-139 | 1 |
| 2-8 | MT255420 | Reel Retainer | 3R-102 | 1 |
| 2-9 | ZG255683 | Reel Spring | 3R-109 | 1 |
| 2-10 | MT255565 | Reel Shaft Ring | XR-177 | 1 |
| 2-11 | ZW270088 | 'E' Ring 1.9M | 6-1-9 | 1 |
| 2-12 | MR251460 | Rewind Pulley | 900-222 | 1 |
| 2-13 | MT222366 | Rubber Ring | 900-234 | 1 |
| 2-14 | ZG227553 | Spring G-2 (Left) | 900-230 | 1 |
| 2-15 | ZW260021 | Washer (SUP) D6.1x10x0.13t | | 3 |
| 2-16x | ZW260054 | Washer (SUP) D6.1x10x0.25t | | 3 |
| 2-17x | ZW260065 | Washer (SUP) D6.1x10x0.35t | | 3 |
| 2-18 | MT255870 | Reel Table Thrust Retainer Pin | 900-237 | 1 |
| 2-19x | MT252101 | Friction Cloth A | 900-224 | 1 |
| 2-20 | MR252066 | Take-up Roller C | 900-220 | 1 |
| 2-21 | MT255971 | Reel Table Spring Plate A | 900-227 | 1 |
| 2-22 | MT438647 | Reel Torque Adjust Thrust 7 D6.2x13x0.5t | 101022 | 1 |
| 2-23 | ZW231693 | Thrust Washer, w/claw | 900-235 | 1 |
| 2-24 | ZW260021 | Washer (SUP) D6.1x10x0.13t | | 2 |
| 2-25x | ZW260054 | Washer (SUP) D6.1x10x0.25t | | 2 |
| 2-26x | ZW260065 | Washer (SUP) D6.1x10x0.35t | | 2 |
| 2-27 | MT255870 | Reel Table Thrust Retainer Pin | 900-237 | 1 |
| 2-28 | MT438592 | Reel Torque Adjust Thrust 2 D6.1x10x0.3t | 101017 | 1 |
| 2-29 | MT438603 | Reel Torque Adjust Thrust 3 D6.1x10x0.5t | 101018 | 1 |
| 2-30x | MT438625 | Reel Torque Adjust Thrust 5 D6.1x10x1t | 101020 | 1 |
| 2-31 | MT292386 | Reel Metal Mt. Parts. XR (w/metal) | XR-191 | 1 |
| 2-32 | ZW437804 | Flywheel Thrust A D7.9x13x1t (Nylon) | 101024 | 1 |
| 2-33 | MT255993 | Reel Table Spring Plate C | M8-207 | 1 |
| 2-34 | ZW260065 | Washer (SUP) D6.1x10x0.3t | | 1 |
| 2-35 | MH270000 | Retaining Pin D4 | 900-257 | 1 |
| 2-36 | MR256094 | Reel Table Pulley | 900-239 | 1 |
| 2-37 | ZS434171 | Set Screw, hexagon socket 4x7 (Cup/p.) | | 1 |
| 2-38 | MR252044 | Take-up Roller A | 900-218 | 1 |
| 2-39x | ZG227542 | Spring G-2 (Right) | 900-230 | 1 |
| 2-40x | MT255881 | Reel Table Slip Plate A (Deer Skin) | MH-219 | 1 |
| 2-41 | MR252077 | Take-up Roller D (Lower) | M8-204 | 1 |
| 2-42x | MT255982 | Reel Table Spring Plate B | 900-228 | 1 |
| 2-43 | MT438614 | Reel Torque Adjust Thrust 4 D6.1x10x0.8t | 101019 | 1 |
| 2-44 | ZW312693 | 'E' Ring 4M | 6-1-4 | 1 |
| 2-45 | ZG414077 | Spring F-4 | CD-67 | 1 |
| 2-46 | MT440313 | Nylon Tube D12-L19 | | 1 |
| 2-47 | MT438636 | Reel Torque Adjust Thrust 6 D6.2x13x1t | 101021 | 1 |
| 2-48 | MT228598 | Set Sleeve B | CD-66 | 1 |
| 2-49 | ZS434160 | Set Screw, hexagon socket 3x3 (cup/p.) | | 1 |

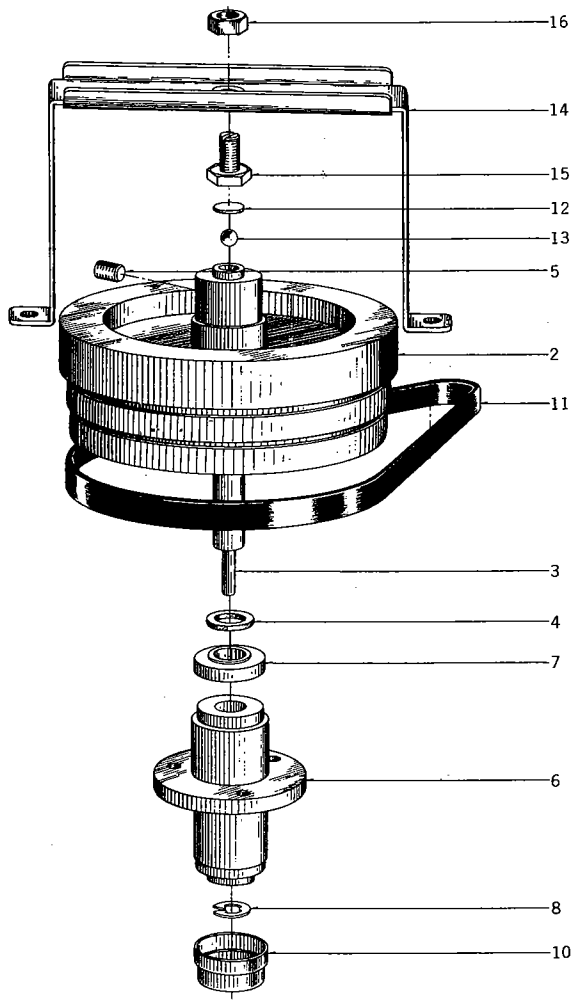
FIG. 3 ILLUSTRATION OF MOTOR/BELT CHANGE LEVER BLOCK



MOTOR/BELT CHANGE LEVER BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|--------------------------------|-----------|--|---------------|------|
| MOTOR BLOCK | | | | |
| 3-1x | BM364320 | Motor Block 16Y Comp. | LS-1,2,3 | 1 |
| 3-2x | BM486663 | Motor Block 16Y Comp. (CSA) | LS-2,3 | 1 |
| 3-3x | BM489137 | Motor Block 16Y Comp. (CEE) | LS-2,3 | 1 |
| 3-4 | MZ448222 | 24 Motor Cover, w/metal | 24X-781 | 2 |
| 3-5 | MZ459178 | 24 Seal D | 24X-786 | 1 |
| 3-6x | MZ458594 | Oil Felt D | BS-7031 | 1 |
| 3-7x | MZ453598 | 24 Seal C | 24X-785 | 1 |
| 3-8x | MZ458605 | Oil Felt E | BS-7032 | 1 |
| 3-9x | ZS384131 | Screw, round head 3x5 | | 4 |
| 3-10 | ZS427037 | Screw, pan head 4x50, w/washer | | 4 |
| 3-11 | MH254316 | 24 Motor Prop B | 24X-729 | 4 |
| 3-12 | MZ254373 | Motor Mt. Plate L | 24X-733 | 1 |
| 3-13 | MZ430334 | Motor/R. Table B | RC-112 | 1 |
| 3-14 | MH254160 | Motor Prop A | 24X-730 | 2 |
| 3-15 | MH254182 | Motor Prop B | 24X-731 | 1 |
| 3-16 | ZS424056 | Screw, pan head 4x10 | | 4 |
| 3-17 | ZS272395 | Motor Prop Retaining Screw, M-7 | 24X-732 | 1 |
| 3-18 | ZS427026 | Screw, countersunk head 4x10 | | 2 |
| 3-19x | MZ296144 | 24 Oil-cut | 24X-735 | 2 |
| 3-20x | ZW222388 | Rubber Washer | 24X-739 | 1 |
| 3-21x | ZW259885 | Washer (PBP) D5.1x10.3x0.1t | | 1 |
| 3-22 | MR336172 | Motor Pulley B, 24L | 24X-775 | 1 |
| 3-23 | MR257984 | Knurling pulley, w/sleeve | 24X-740C | 1 |
| 3-24 | ZS413921 | Screw, oval countersunk bead 3x15 | | 1 |
| 3-25 | MZ254068 | Motor Out-side Shield 2 | 3A-770C | 1 |
| 3-26x | MZ292364 | Motor Shield Plate B, XR (CSA, CEE) | XR-705 | 1 |
| BELT CHANGE LEVER BLOCK | | | | |
| 3-27x | BL564107 | Belt Change Lever Block (E) Comp. | LS-3 | 1 |
| 3-28 | ML217462 | Belt Change Lever B (small), w/roller | AT-25 | 1 |
| 3-29 | MZ248354 | Belt Guide Stop, w/metal | 4TR-221 | 1 |
| 3-30 | ZG465478 | Brake Lever Spring | KD-1092 | 1 |
| 3-31 | ZS417150 | Screw, pan head 4x6 | | 1 |
| 3-32x | ZG217394 | Belt Change Spring B | MH-125 | 1 |
| 3-33x | ZW260054 | Washer (SUP) D6.1x10x0.25t | | 1 |
| 3-34x | ZW290283 | 'U' Ring 2.85M | 6-1-1 | 1 |
| 3-35 | EC330401 | MP/C. (Lug Type Uni/D.) 2+1μF 250WVAC | 24-9-38 | 1 |
| 3-36x | EC486630 | MP/C. (Lug Type Uni/D.) 2μF 250WVAC (UL, CSA) | 24-9-64 | 1 |
| 3-37 | ZS323728 | Screw, binding head 3x5 | | 2 |
| 3-38 | ER339805 | Cement/R, H20B 450(K) | 35-16-16 | 1 |
| 3-39x | ZS413728 | Screw, binding head 3x6 w/washer | | 1 |
| 3-40 | ZW273756 | Nut M3 | | 1 |
| 3-41 | MZ256882 | Motor Fan D, w/boss | MH-636 | 1 |
| 3-42 | ZS476987 | Set Screw, hexagon socket 5x4 (cup/p.) | | 1 |

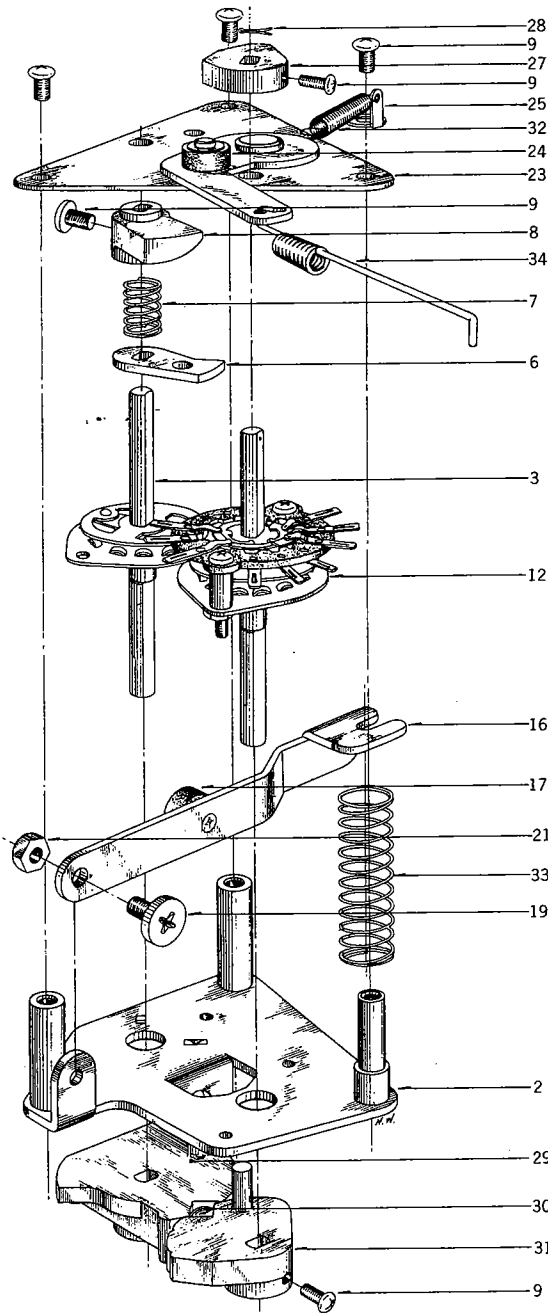
**FIG. 4 ILLUSTRATION OF
FLYWHEEL BLOCK**



FLYWHEEL BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|----------|-----------|--|---------------|------|
| 4-1x | BF482040 | Flywheel Block Comp. | LS-2, 3 | 1 |
| 4-2 | MI296245 | Flywheel 24 | MH-202 | 1 |
| 4-3 | MS481858 | Main Shaft | LS-2201 | 1 |
| 4-4 | ZW447208 | Flywheel Thrust B D7.9x9x13x0.5t | 101025 | 1 |
| 4-5 | ZS373577 | Set Screw, hexagon socket 5x6 (Flat/p.) | | 2 |
| 4-6 | MZ413976 | Main Case B 24 Comp. | 1630-205 | 1 |
| 4-7 | MZ446635 | Thrust Cap, Main Metal B2 | LF-2006 | 1 |
| 4-8 | MH244710 | Flywheel Fixing Pin | 900-250 | 1 |
| 4-9x | MZ586438 | Main Metal Cap Felt | A0414 | 1 |
| 4-10 | MZ253113 | Main Metal Cap B | MH-208 | 1 |
| 4-11 | MB256590 | Double Face Flat Belt D=110 | 100912 | 1 |
| 4-12 | ZW392681 | Washer (Nylon) D8x1t (without hole) | | 1 |
| 4-13 | MV269965 | Steel Ball D4 | | 1 |
| 4-14 | MZ585911 | Shaft Supporting Plate | LS-1204 | 1 |
| 4-15 | MZ585900 | Shaft Support | LS-1203 | 1 |
| 4-16 | ZW463410 | ISO Nut #3 M5 | | 1 |
| 4-17x | ZS419736 | Screw, binding head 4x6 | | 2 |

**FIG. 5 ILLUSTRATION OF
SWITCH BLOCK**



SWITCH BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Qty |
|----------|-----------|--------------------------------------|---------------|-----|
| 5-1x | BS601604 | Switch Block Comp. | LS-1,2,3 | 1 |
| 5-2 | MZ316901 | SW. Table A-2, SX (w/props) | MR-201 | 1 |
| 5-3 | ES601650 | RWD Shaft, Y Type | 25-8-10 | 1 |
| 5-4x | ZS413728 | Screw, binding ehad 3x6, w/washer | | 2 |
| 5-5x | ZW260133 | Washer (Fiber) D6.1x10x1t | | 2 |
| 5-6 | MZ327341 | Cap Trap Plate B | SX-201 | 1 |
| 5-7 | ZG227586 | Spring K | 900-214 | 1 |
| 5-8 | MZ327352 | Cam C-2 | SX-202 | 1 |
| 5-9 | ZS413201 | Screw, pan head 4x8 | | 7 |
| 5-10x | ZW434193 | Washer (Nylon) D6.1x10.3x0.5t | | 1 |
| 5-11x | ZW434215 | Washer (Nylon) D6.1x10.3x0.3t | | 1 |
| 5-12 | ES601672 | Rotary SW. Y-133 | 25-7-42 | 1 |
| 5-13x | ZW273802 | Toothed Lock Washer M3 | | 2 |
| 5-14x | ZW273756 | Nut M3 | | 2 |
| 5-15x | MZ316945 | Nut Plate | MR-245 | 1 |
| 5-16 | ML257128 | Lover I, w/shaft | 900-209 | 1 |
| 5-17 | MR217203 | Cam Roller A (Nylon) D12 | 900-153 | 1 |
| 5-18x | ZW290283 | 'U' Ring 2.85M | 6-1-1 | 2 |
| 5-19 | ZS217877 | Pause Lever Set Screw | 900-136 | 1 |
| 5-20x | ZW571072 | Washer (Nylon) D6.2x13x0.125t | | 1 |
| 5-21 | ZW416698 | Nut M4 | | 1 |
| 5-22x | ZW273892 | Toothed Lock Washer M4 | | 1 |
| 5-23 | MZ225720 | SW. Table B-2, w/rec. lever | M9-308 | 1 |
| 5-24 | MR217203 | Cam Roller A (Nylon) D12 | 900-153 | 1 |
| 5-25 | ZW273881 | Earth Lug M4 | | 1 |
| 5-26x | ZW260122 | Washer (Nylon) D6.1x10x1t | | 1 |
| 5-27 | MZ317068 | Amp. SW. Cam B | MR-243 | 1 |
| 5-28 | MH260425 | Cotter Pin 1x10 | | 1 |
| 5-29 | MZ316956 | Cam A-3 | MR-242 | 1 |
| 5-30 | MV270066 | Steel Ball D8 | | 1 |
| 5-31 | MZ217271 | Cam B (without tap) | 900-206 | 1 |
| 5-32 | ZG232121 | Tension Lever Spring | MH-143 | 1 |
| 5-33 | ZG227485 | Spring E | 900-119 | 1 |
| 5-34 | ZG256937 | Lever Spring | LCS-205 | 1 |
| 5-35x | MZ256814 | Rewind Shaft Spacer | M9-124 | 2 |

MECH. ASSEMBLY BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty | Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|-----------------------------|-----------|--|---------------|------|----------|-----------|--|---------------|------|
| TAPE GUIDE BLOCK | | | | | 6-66x | ZW560801 | Washer (Polyslider) D6.1x10x0.5t | | 2 |
| 6-1x | BZ400948 | Tape Guide Block Comp. | LS-1,2,3 | 1 | 6-67 | ZG205571 | Idler Tension Spring | MH-135 | 1 |
| 6-2 | MH204311 | Tape Guide Prop #1700 | AT-16 | 1 | 6-68 | ZS413234 | Screw, pan head 4x12 | | 3 |
| 6-3 | SZ465377 | Tape Guide Table A | LC-618 | 1 | 6-69 | MZ217708 | Pause Lever Retaining Parts B | 900-170 | 1 |
| 6-4 | ZW231805 | Tape Guide Washer (Large) | 3A-356 | 2 | 6-70x | ZW260054 | Washer (SUP) D6.1x10x0.25t | | 1 |
| 6-5 | MV238117 | Bearing SSR1950ZZSD52 | | 1 | 6-71 | MZ327251 | G Lever Stopper, SX | SX-110 | 1 |
| 6-6 | SZ465388 | Tape Guide Table B | LC-619 | 1 | 6-72x | ZS349288 | ISO Screw, binding head 3x5 w/washer | | 1 |
| SPEED CHANGE BLOCK | | | | | 6-73x | EJ373623 | Pin Contact 61116-1 | 52-1-1 | 1 |
| 6-7x | BZ482062 | Speed Change Block Comp. | LS-2, 3 | 1 | 6-74 | MZ217113 | Cam Stopper B | RC-129 | 1 |
| 6-8x | MZ481612 | Speed SW. Retaining Plate | LS-2203 | 1 | 6-75 | ZW217102 | Cam Stopper Insulator Washer | 900-165 | 1 |
| 6-9 | ES479496 | Slide SW. S-2 | 25-3-67 | 1 | 6-76 | ZS413245 | Screw, pan head 4x15 | | 2 |
| 6-10x | ZS425981 | ISO Screw, binding head 3x3 | | 1 | 6-77 | SB258478 | Rec. Button (Red) | 900-167 | 1 |
| 6-11x | ES481656 | Slide SW. SSD02239 | 25-3-70 | 1 | 6-78x | ZW413256 | Washer (SPC) D3.4x7.8x0.5t | | 1 |
| 6-12x | ZS481645 | Screw, binding head 2.6x3 | | 2 | 6-79x | ZW260436 | Cotter Pin 1x12 | | 1 |
| 6-13x | ML481768 | Speed SW. Interlocking Lever | LS-2205 | 1 | 6-80 | ML217934 | Supply Brake Comp. | 900-113 | 1 |
| 6-14x | ZS231298 | Graduated Screw C | XR-514 | 1 | 6-81 | MT245215 | Brake Rubber (Large) | 900-163 | 1 |
| 6-15x | HZ468281 | Sensing Insulator Paper | BS-2086 | 1 | 6-82x | ZW259942 | Washer (Fiber) D5.1x10.3x0.5t | | 3 |
| MECH. ASSEMBLY BLOCK | | | | | 6-83 | ZG290384 | JN Spring D | 1630-108 | 1 |
| 6-16 | MZ392490 | Mech. Frame, LS (w/bush) | LCS-27 | 1 | 6-84 | ML251932 | Take-up Brake Comp. | 900-114 | 1 |
| 6-17 | MH273295 | Mech. Panel Prop, M-9 | M9-302 | 2 | 6-85x | MT376457 | Brake Rubber (Small) | M8-110 | 1 |
| 6-18x | ZS414033 | Screw, countersunk head 3x8 | | 2 | 6-86 | ZG227452 | Spring D | 900-118 | 1 |
| 6-19 | MS257051 | Lever FA Shaft | 900-127 | 1 | 6-87 | ML548280 | Lever LF, w/lever E2 | LF-1013 | 1 |
| 6-20x | ZW413267 | Flang Nut M4 | | 2 | 6-88 | ML300161 | 707 Lever A, w/metal | LC-103 | 1 |
| 6-21 | MZ257073 | Lever FB Guide Base | M9-103 | 1 | 6-89 | ZW259918 | Washer (SUP) D5.1x10.3x0.25t | | 2 |
| 6-22x | ZS417150 | Screw, pan head 4x6 | | 2 | 6-90x | ZS201767 | Screw, pan head 4x6, w/washer | | 2 |
| 6-23 | ZG257095 | Lever FB Vibration Proof Spring | M8-104 | 1 | 6-91 | ML262337 | Lever C3 | M8-106 | 1 |
| 6-24x | MH248343 | Belt Guide Pin | 4TR-109 | 1 | 6-92 | ZG217337 | Belt Return Spring | 4TR-224 | 1 |
| 6-25 | ZW413188 | Nut M4 | | 8 | 6-93 | MZ260662 | AS Lever Prop Base, w/prop | 4TR-236 | 1 |
| 6-26 | MS245463 | Brake Lever Shaft | 900-129 | 2 | 6-94 | ZW273767 | Earth Lug D3x20L | | 1 |
| 6-27x | MH245485 | Brake Lever Pin (UL, CSA) | MH-138 | 1 | 6-95 | MZ210071 | Auto. SW Plate | M8-114 | 1 |
| 6-28x | ML308564 | Belt Vibration Stopper (UL, CSA) | MH-137 | 1 | 6-96 | ES479485 | Slide SW. S-1 | 25-3-66 | 1 |
| 6-29x | MZ518973 | Shut-off SW. Barrier (CSA) | LS-2207 | 1 | 6-97 | ZS413166 | Screw, round head 3x6 | | 2 |
| 6-30 | MS260515 | A Lever Shaft | 900-126 | 1 | 6-98 | ML257040 | Lever FA, w/shaft | 900-107 | 1 |
| 6-31x | ZW273914 | Spring Washer M4 | | 2 | 6-99 | MR217203 | Cam Roller A (Nylon) D=12 | 900-153 | 1 |
| 6-32 | EO606071 | Hum Backing Coil 20T | 23-3-40 | 2 | 6-100 | ML295727 | 2-speed Motor Lever F, w/shaft | M8-107 | 1 |
| 6-33x | EO609862 | Hum Backing Coil 30T (CEE) | 23-3-41 | 2 | 6-101 | ZG270358 | F.B. Pull Spring | M8-108 | 1 |
| 6-34 | MZ237418 | Hum Backing Coil Metal Fitting (L Type) | M8-103 | 2 | 6-102 | MI204423 | Idler Wheel #2 | | 1 |
| 6-35x | ZS432718 | Screw, round head 3x22 | | 2 | 6-103 | ML257163 | Lever K, w/shaft | 900-111 | 1 |
| 6-36x | ZW273745 | Spring Washer M3 | | 2 | 6-104 | ZG224796 | New Spring D | MH-142 | 1 |
| 6-37x | ZW273756 | Nut M3 | | 2 | 6-105 | ZW376391 | Washer (Polyslider) D6.1x10x0.13t | | 1 |
| 6-38 | ZS323728 | Screw, binding head 3x5 | | 6 | 6-106x | ZW432347 | Washer (Luminar) D6.2x13x0.125t | | 2 |
| 6-39 | ML226258 | Start Lever A, w/lever C | 4TR-122 | 1 | 6-107 | ZS223233 | Fulcrum Screw A | 900-135 | 1 |
| 6-40 | SB485741 | Start Button C | MS-1002 | 1 | 6-108 | ML231423 | Middle Wheel | 900-155 | 1 |
| 6-41 | ZS425788 | Screw, round head 3x4 | | 2 | 6-109 | ZW260122 | Washer (Nylon) D6.1x10x1t | | 1 |
| 6-42 | ES250007 | Micro SW. M-8-3 U/L | 25-1-6 | 1 | 6-110 | ML492344 | Pinch Roller Lever (Black) | 900-161 | 1 |
| 6-43 | MZ585887 | Actuator B, w/pin lever | LS-1202 | 1 | 6-111 | MS243404 | Pinch Roller Shaft C | 4TR-102 | 1 |
| 6-44 | ZS417148 | Screw, binding head 3x15 | | 2 | 6-112x | ZW259975 | Washer (SUP) D5.1x10.3x0.8t | | 1 |
| 6-45 | ZS323728 | Screw, binding head 3x5 | | 5 | 6-113 | MS582906 | Cam Roller Shaft A-1 | 7-3-6 | 1 |
| 6-46x | ZW462835 | Washer (PBP) D4.3x11x0.2t | | 1 | 6-114 | MR269763 | Cam Roller D=13 | 900-154 | 1 |
| 6-47x | ZW462846 | Washer (PBP) D4.3x11x0.3t | | 1 | 6-115 | ZG272981 | Pinch Roller Spring, M-9 | M9-104 | 1 |
| 6-48x | ZW330412 | Adjust, Washer (U) D4x13x0.13t | | 1 | 6-116 | ML369718 | Pause Lever A, w/screw | RCC-101 | 1 |
| 6-49x | ZW330423 | Adjust, Washer (U) D4x13x0.25t | | 1 | 6-117 | ZS217877 | Pause Lever Set Screw | 900-136 | 1 |
| 6-50x | ZW330445 | Adjust, Washer (U) D4x13x0.8t | | 1 | 6-118 | MZ217855 | Pause Stopper | 900-169 | 1 |
| 6-51x | EJ205986 | Cramp Terminal 2-SD | 32-1-8 | 5 | 6-119 | ZG217866 | Pause Lever Spring A | 900-123 | 1 |
| 6-52x | ZS413201 | Screw, pan head 4x8 | | 13 | 6-120 | MZ217686 | Pause Lever Cushion | LC-102 | 1 |
| 6-53x | MZ452496 | Cycle Angle (CEE) | LS-1007 | 1 | 6-121 | MZ293567 | Head Lifter Cam A #1630 | 1630-104 | 1 |
| 6-54 | ML475920 | New Spring Hook | 900-185 | 1 | 6-122 | MZ293578 | Head Lifter Cam B #1630 | 1630-105 | 1 |
| 6-55 | ML309093 | Lever B, w/lever D | 900-103 | 1 | 6-123 | MC216448 | Counter MP-391-16 (w/base) | 9-1-2 | 1 |
| 6-56 | MR217203 | Cam Roller A (Nylon) D=12 | 900-153 | 1 | 6-124x | MB406168 | Counter Belt D123x1.8 | 3-3-14 | 1 |
| 6-57 | MR217214 | Cam Roller B (Steel) D=10.5 | 4TR-240 | 1 | 6-125 | BL204658 | AS Lever Comp. #2 | | 1 |
| 6-58 | ZW290283 | 'U' Ring 2.85M | 6-1-1 | 13 | 6-126x | ZG294153 | AS Lever Spring, 1700 | AT-107 | 1 |
| 6-59 | ZG469427 | Spring B-1 | LS-2004 | 1 | 6-127x | MP204794 | Pinch Roller #3 D=40 | 3A-348 | 1 |
| 6-60 | MZ253653 | Metal Mt. Parts, w/metal | 900-174 | 1 | 6-128x | EJ450573 | Mate-N-Lock Cap Housing 9P 1-480277-0 | 52-1-7 | 1 |
| 6-61 | ML270685 | G Lever, w/H lever SX | 900-109 | 1 | 6-129x | EJ373623 | Pin Contact 61116-1 | 52-1-1 | 8 |
| 6-62 | MS205560 | Idler Shaft B | 100150 | 3 | 6-130x | MZ229138 | Wire Bundle Holder N-108 | 2-35-1 | 2 |
| 6-63 | ZS200384 | Screw, countersunk head 3x6 | | 1 | 6-131 | MZ301048 | Lifter Spoke, 920 | LM-12 | 1 |
| 6-64x | ZW260076 | Washer (Nylon) D6.1x10x0.5t | | 1 | 6-132 | ZG217394 | Belt Change Spring B | MH-125 | 1 |
| 6-65 | MI204423 | Idler Wheel #2 | | 1 | 6-133 | MZ316956 | Cam A-3 | MR-242 | 1 |
| | | | | | 6-134 | MV270066 | Steel Ball D8 | | 1 |
| | | | | | 6-135 | MZ217271 | Cam B (without Tap) | 900-206 | 1 |
| | | | | | 6-136x | MZ605700 | Frame Support A | LS-6228 | 1 |
| | | | | | 6-137x | MZ605711 | Frame Support B | LS-6228 | 1 |

When ordering parts, please describe Parts Number, Serial Number, and Model Number in detail.

FIG. 6 ILLUSTRATION OF MECH. ASSEMBLY BLOCK

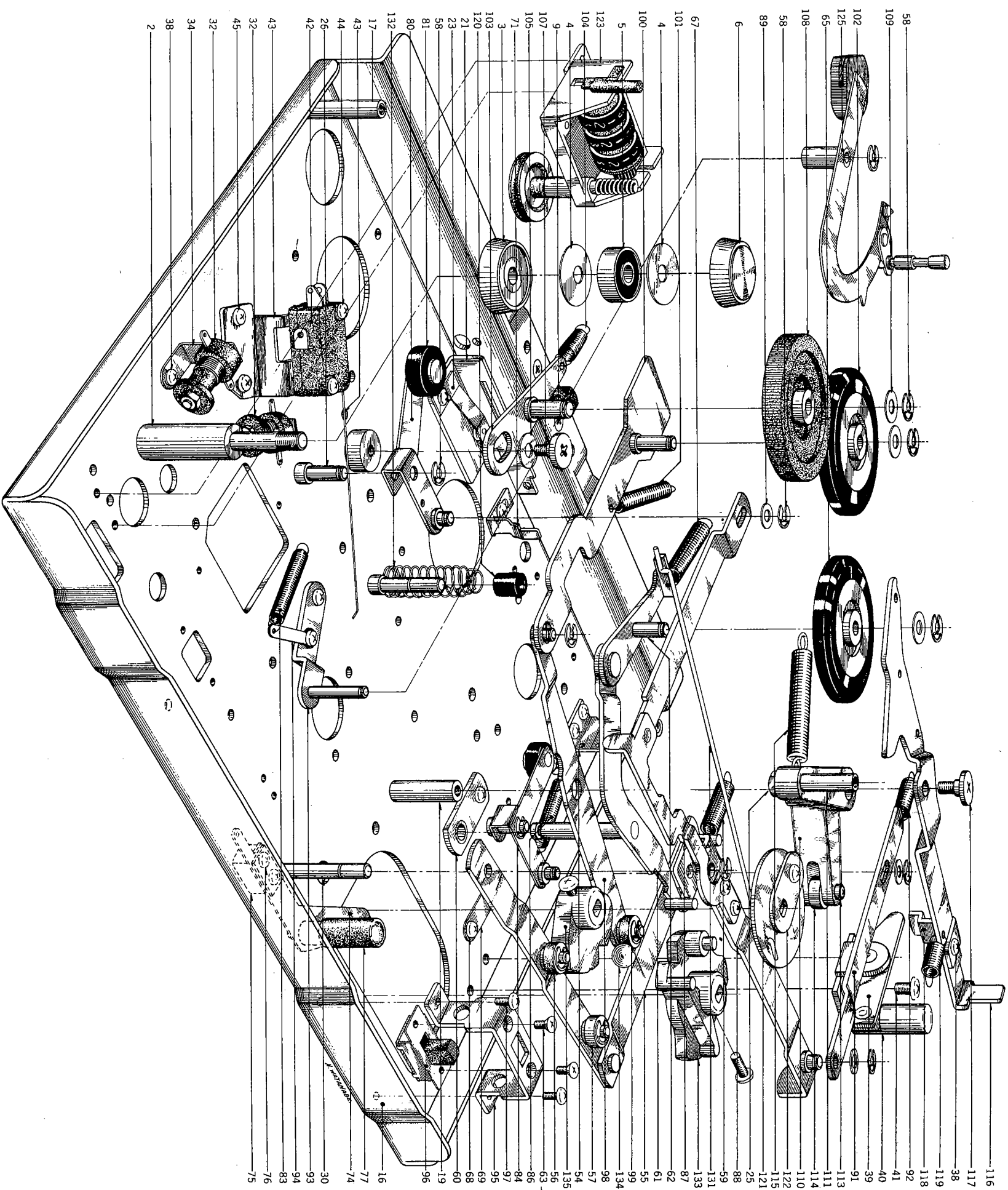
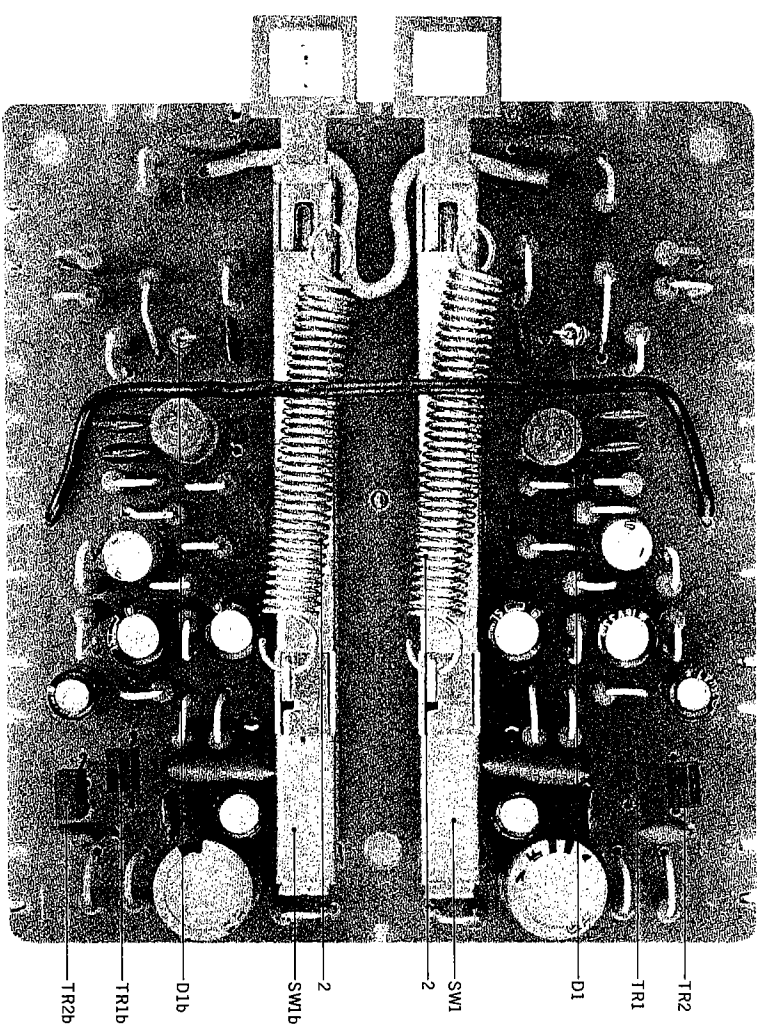


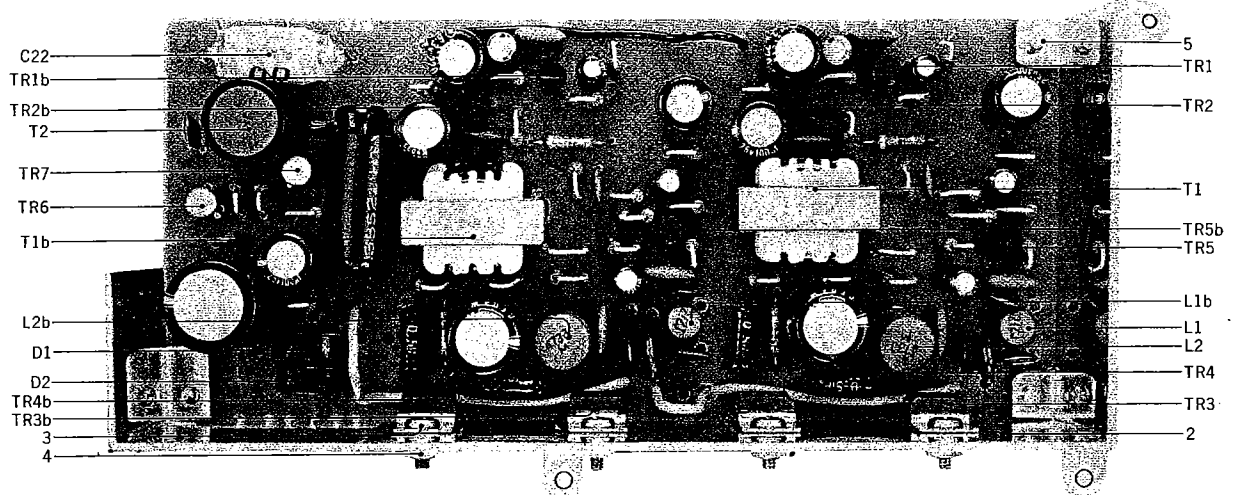
FIG. 7 PHOTO OF PRE-AMP. P.C. BOARD (LS-5209) BLOCK



PRE-AMP. P.C. BOARD (LS-5209) BLOCK

| Symbol No. | Parts No. | Description | Qty | Symbol No. | Parts No. | Description | Qty |
|------------|-----------|-------------------------------------|-----|------------|-----------|------------------------|-----|
| 7-1x | BA482117 | PRE-AMP. P.C. Board Comp. (LS-5209) | 1 | 7-R1, 2 | ER211757 | Resistor, Stopper Type | 4 |
| 7-TR1 | ET234843 | Transistor 2SC458L(G)(B) (C) | 2 | 7-R3 | ER362485 | Carbon RDI/4 330k(U) | 2 |
| 7-TR2 | ET234843 | Transistor 2SC458L(G)(B) (C) | 2 | 7-R4 | ER336442 | Carbon RDI/4 10k(U) | 2 |
| 7-D1 | ED219464 | Germanium Diode 1N34A | 2 | 7-R5 | ER357412 | Carbon RDI/4 220(U) | 2 |
| 7-SW1 | ES307877 | Slide SW. CL162B35 | 2 | 7-R6 | ER211757 | Carbon RDI/4 100k(U) | 2 |
| 7-2 | ZG227441 | Spring C | 2 | 7-R7 | ER212264 | Carbon RDI/4 22k(U) | 2 |
| 7-3x | EZ392095 | Fasten Tab | 3 | 7-R8 | ER212883 | Carbon RDI/4 4.7k(U) | 2 |
| | | | | 7-R9, 10 | ER336442 | Carbon RDI/4 10k(U) | 4 |
| | | | | 7-R11 | ER349907 | Carbon RDI/4 33k(U) | 2 |
| 7-C1 | EC220678 | Capacitor, Vertical Type | 2 | 7-R12 | ER357570 | Carbon RDI/4 150k(U) | 2 |
| 7-C2 | EC320051 | Elect. 47µF 25WV | 2 | 7-R13 | ER306887 | Carbon RDI/4 15k(U) | 2 |
| 7-C3 | EC336194 | Elect. 10µF 16WV | 2 | 7-R14 | ER357456 | Carbon RDI/4 2.2k(U) | 2 |
| 7-C4 | EC250604 | VFM 270PF(U) 50WV | 2 | 7-R15 | ER399644 | Carbon RDI/4 82(U) | 2 |
| 7-C5 | EC220590 | Mylar 0.001µF(K) 50WV | 2 | 7-R16 | ER380913 | Carbon RDI/4 33(U) | 2 |
| 7-C6 | EC220590 | Elect. 33µF 10WV | 2 | 7-R17 | ER212477 | Carbon RDI/4 3.3k(U) | 2 |
| 7-C7 | EC350616 | VFM 50PF(U) 50WV | 2 | 7-R18 | ER357412 | Carbon RDI/4 220(U) | 2 |
| 7-C8 | EC450527 | Elect. 4.7µF 25WV | 2 | 7-R19 | ER213030 | Carbon RDI/4 5.6k(U) | 2 |
| 7-C9 | EC487157 | NP 0.47µF(M) 50WV | 2 | 7-R20 | ER213120 | Carbon RDI/4 56(U) | 2 |
| 7-C10 | EC411827 | Elect. 33µF 10WV | 2 | | | | |
| 7-C11 | EC429851 | EC411827 | 2 | | | | |
| 7-C12 | EC342821 | VFM 680PF(U) 50WV | 2 | | | | |
| 7-C13 | EC270573 | Mylar 0.0068µF(K) 50WV | 2 | | | | |
| 7-C14 | EC342821 | FMS0PF(U) 500WV | 2 | | | | |
| | | Mylar 0.0068µF(K) 50WV | 2 | | | | |

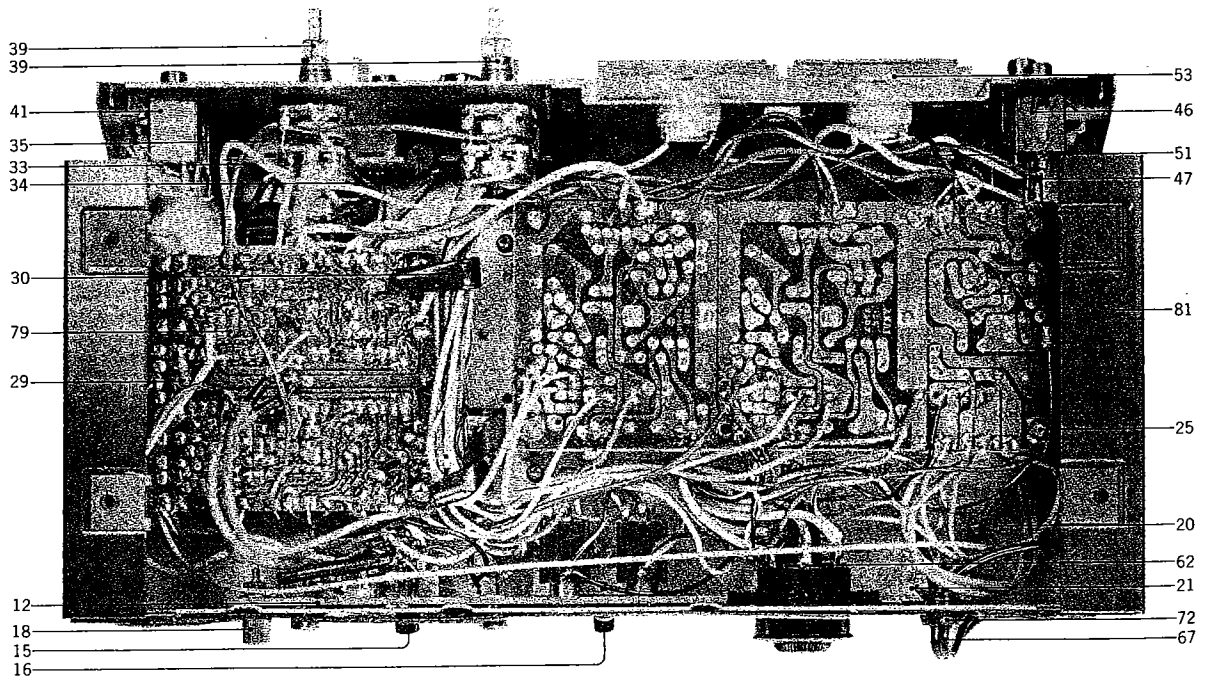
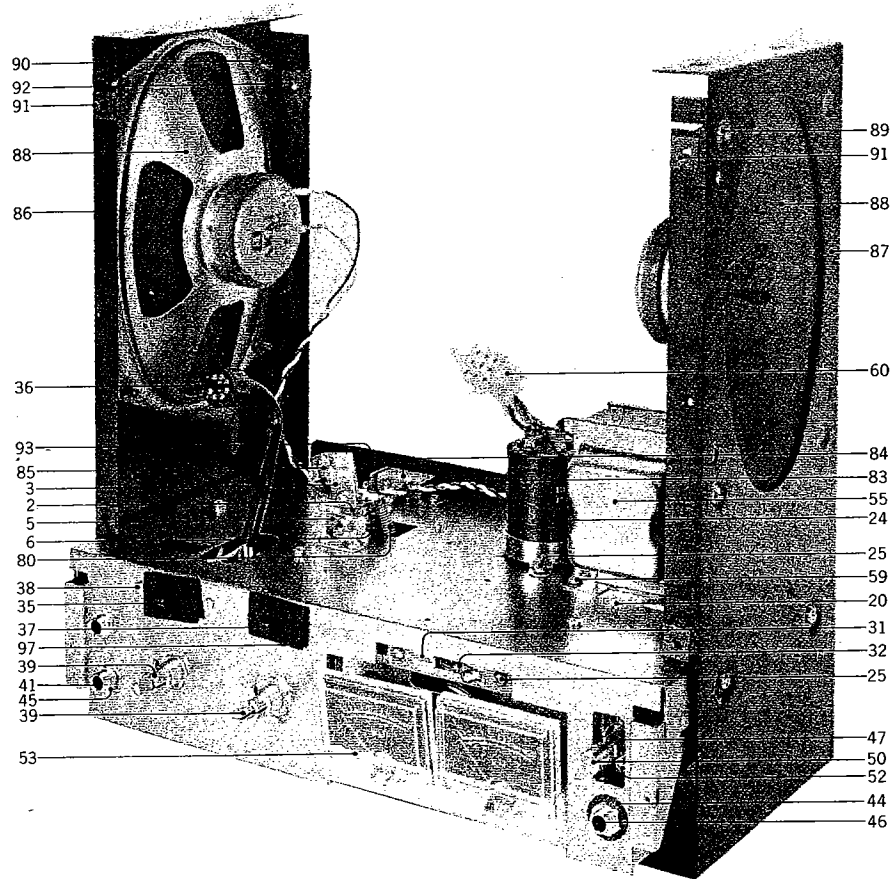
FIG. 8 PHOTO OF MAIN AMP./OSC./POWER SUPPLY P.C. BOARD (LS-5207) BLOCK



**MAIN AMP./OSC./POWER SUPPLY
P.C. BOARD (LS-5207) BLOCK**

| Symbol No. | Parts No. | Description | Q'ty | Symbol No. | Parts No. | Description | Q'ty |
|------------|-----------|---|------|------------|-----------|---|------|
| 8-1x | BA482128 | Main Amp./OSC./Power Supply P.C. Board Comp. (LS-5207) | 1 | 8-R1 | ER342933 | Resistor, Stopper Type Carbon RD1/4 27k(J) | 2 |
| 8-TR1 | ET539987 | Transistor 2SC1312(F) (G) | 2 | 8-R2 | ER212883 | Carbon RD1/4 4.7k(J) | 2 |
| 8-TR2 | ET379462 | Transistor 2SC711(D) (E) | 2 | 8-R3 | ER212681 | Carbon RD1/4 330(J) | 2 |
| 8-TR3, 4 | ET391735 | Transistor 2SC1013(D) (E) | 4 | 8-R4 | ER391961 | Carbon RD1/4 91k(J) | 2 |
| 8-TR5 | ET380834 | Transistor 2SC711(E) | 2 | 8-R5 | ER363644 | Carbon RD1/4 560(J) | 2 |
| 8-TR6, 7 | ET338894 | Transistor 2SC968(3) | 2 | 8-R6 | ER350100 | Carbon RD1/4 68k(J) | 2 |
| 8-D1 | ED329128 | Silicon Diode 10DC-1(Red) | 1 | 8-R7 | ER211465 | Carbon RD1/4 1k(J) | 2 |
| 8-D2 | ED329130 | Silicon Diode 10DC-1(Black) | 1 | 8-R8 | ER392534 | Carbon RD1/4 2k(J) | 2 |
| 8-T1 | BT390565 | Driver Trans. N24-6847AT | 2 | 8-R9 | ER212016 | Carbon RD1/4 150(J) | 2 |
| 8-T2 | EO383365 | OSC. Coil OT-204 | 1 | 8-R10 | ER371946 | Carbon RD1/4 2k(J) | 2 |
| 8-L1 | EO383308 | Ferri Inductor FL7H 2.7MH(J) | 2 | 8-R11 | ER212016 | Carbon RD1/4 150(J) | 2 |
| 8-L2 | EO393423 | Ferri Inductor FL11H 47MH(J) | 2 | 8-R12, 13 | ER251583 | Wire-wound 1/2W 0.5(K) (L Type) | 4 |
| 8-2 | EZ481792 | Heat-sink | 1 | 8-R14 | ER214402 | Carbon RD1/4 470(J) | 2 |
| 8-3 | ZS321298 | Screw, binding head 3x8 | 4 | 8-R15 | ER336442 | Carbon RD1/4 10k(J) | 2 |
| 8-4 | ZW273756 | Nut M3 | 4 | 8-R16 | ER350065 | Carbon RD1/4 430(J) | 2 |
| 8-5 | ZS325495 | Tapping Screw #2 3x6 (BR) | 3 | 8-R17 | ER450011 | Carbon RD1/4 120k(J) | 2 |
| | | Capacitor, Veritcal Type | | 8-R18 | ER336442 | Carbon RD1/4 10k(J) | 2 |
| 8-C1 | EC329850 | VFM 220PF(J) 50WV | 2 | 8-R19 | ER306887 | Carbon RD1/4 15k(J) | 2 |
| 8-C2 | EC320051 | Elect. 10µF 16WV | 2 | 8-R20 | ER211465 | Carbon RD1/4 1k(J) | 2 |
| 8-C3 | EC220465 | Elect. 22µF 6.3WV | 2 | 8-R21 | ER212681 | Carbon RD1/4 330(J) | 1 |
| 8-C4 | EC290520 | VFM 100PF(J) 50WV | 2 | 8-R22 | ER251730 | Wire-wound 3W 150(K) (L Type) | 1 |
| 8-C5 | EC350616 | VFM 50PF(J) 50WV | 2 | 8-R23, 24 | ER399723 | Carbon RD1/4 4.7(J) | 2 |
| 8-C6 | EC324516 | Elect. 220µF 6.3WV | 2 | 8-R25 | ER212883 | Carbon RD1/4 4.7k(J) | 1 |
| 8-C7 | EC220151 | Elect. 100µF 25WV | 2 | 8-R26 | ER304402 | Carbon RD1/4 470(J) | 1 |
| 8-C8 | EC220768 | Elect. 470µF 10WV | 2 | | | | |
| 8-C9 | EC320051 | Elect. 10µF 16WV | 2 | | | | |
| 8-C10 | EC450055 | Elect. 1µF 25WV | 2 | | | | |
| 8-C11 | EC329850 | VFM 220PF(J) 50WV | 2 | | | | |
| 8-C12 | EC411827 | Mylar 0.0082µF(J) 50WV | 2 | | | | |
| 8-C13 | EC451462 | VFM 150PF(J) 50WV | 2 | | | | |
| 8-C14 | EC389485 | Mylar 0.018µF(J) 50WV | 2 | | | | |
| 8-C15 | EC379157 | Mylar 0.033µF(J) 50WV | 2 | | | | |
| 8-C16 | EC424708 | Mylar 0.0018µF(J) 50WV | 2 | | | | |
| 8-C17 | EC220151 | Elect. 100µF 25WV | 2 | | | | |
| 8-C18 | EC450270 | Elect. 1000µF 25WV | 1 | | | | |
| 8-C19 | EC220151 | Elect. 100µF 25WV | 1 | | | | |
| 8-C20, 21 | EC250841 | Mylar 0.01µF(J) 50WV | 2 | | | | |
| 8-C22 | EC520481 | Styrol 5500PF(J) 500WV | 1 | | | | |

FIG. 9 PHOTO OF AMP. ASSEMBLY BLOCK



AMP. ASSEMBLY BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty | Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|----------------------------|-----------|---|---------------|------|----------|-----------|---|---------------|------|
| REC. LEVER BLOCK | | | | | 9-58x | BT481702 | Power Trans. LST-5 (CEE) | 38-4-173 | 1 |
| 9-1x | BL482130 | Rec. Lever Block Comp. | LS-2, 3 | 1 | 9-59 | ZS200700 | Tapping Screw #2 4x8 (Round) | | 4 |
| 9-2 | ML294625 | Rec. Lever 1, 1720 | LCS-5 | 1 | 9-60 | EJ300508 | Mate-N-Lock Plug Housing 9P 1-480274-0 | 52-1-7 | 1 |
| 9-3 | ML294636 | Rec. Lever 2, 1720 | LCS-7 | 1 | 9-61x | EJ373634 | Socket Contact 61115-1 | 52-1-1 | 8 |
| 9-4x | ZS349288 | Screw, binding head 3x5, w/washer | | 4 | 9-62 | EJ233370 | Socket (Volt. Selector) S-18010 | 40-2-3 | 1 |
| 9-5 | EZ294434 | 1720 Shaft Hodler | LCS-6 | 1 | 9-63x | EF563681 | Fuse 1A 250V | 39-1-50 | 1 |
| 9-6 | MS294513 | Tension Arm Shaft, 1720 | LCS-4 | 1 | 9-64x | ZS201183 | ISO Screw, Truss Head 3x8 (Black) | | 2 |
| 9-7x | ZW273914 | Spring Washer M4 | | 1 | 9-65x | EJ254970 | Lug Plate KP1L1 | 33-3-3 | 1 |
| 9-8x | NW273960 | Nut M4 | | 1 | 9-66x | EF460653 | Fuse ST-1 1A (UL) | 39-1-25 | 1 |
| 9-9x | ZW290283 | 'U' Ring 2.85M | 6-1-1 | 1 | 9-67 | EW540112 | AC Cord (CUL) 2.5M | 26-3-19 | 1 |
| 9-10x | MZ481825 | SW. Interlocking Plate, 1720, (w/plate spring) | LS-5204 | 1 | 9-68x | EW354240 | Power Cord (CEE) ER-0150 | | 1 |
| JACK PLATE BLOCK | | | | | 9-69x | EW315448 | Australia Cord (3 core) | 26-3-11 | 1 |
| 9-11x | BJ482141 | Jack Plate Block Comp. | LS-2, 3 | 1 | 9-70x | EW486797 | Power Supply Cord (WG) | 26-3-26 | 1 |
| 9-12 | EJ481590 | Jack Plate 1721, w/jack | LS-5205 | 1 | 9-71x | EJ585876 | Fuse Terminal Plate 8 (CSA) | 101061 | 1 |
| 9-13x | ER440921 | Carbon/R. RD1/4 27k(J) (Insu. Type) | 35-9-5 | 2 | 9-72 | EZ382263 | Strain Relief SR-4K-4 | 2-7-12 | 1 |
| 9-14x | ER443790 | Carbon/R. RD1/4 470k(J) (Insu. Type) | 35-9-5 | 2 | 9-73x | EZ246936 | Strain Relief SR-6W-1 (WG, 3 core) | 2-7-8 | 1 |
| 9-15 | ES422436 | Slide SW. SL-222B4C | 25-3-40 | 1 | 9-74x | ZW392692 | Washer, Strain Relief | LS-5017 | 11 |
| 9-16 | ES481601 | Slide SW. SL-243B4F | 25-3-65 | 1 | 9-75x | ZW459134 | Washer, Strian Relief (CEE) | LS-5027 | 1 |
| 9-17x | EJ486404 | Terminal C (Nut) | LS-5218 | 1 | 9-76x | EJ585865 | Fuse Holder (CEE) | 101060 | 1 |
| 9-18 | EJ457637 | Terminal B (Screw) | 55-5033 | 1 | 9-77x | EF354295 | Fuse (T Type) 1.6AT (CEE) | | 1 |
| 9-19x | EZ328331 | Fasten Receptacle 170043-2 | 52-1-8 | 4 | 9-78x | EF480903 | Fuse 1A 125V (CSA) | 39-1-44 | 1 |
| AMP. ASSEMBLY BLOCK | | | | | 9-79 | BA482117 | Pre-Amp. P.C. Board (LS-5209) Comp. | LS-5209 | 1 |
| 9-20 | EZ481307 | Amp. Chassis 1721 | LS-5201 | 1 | 9-80 | ZG250367 | Micro Spring E | MH-22 | 1 |
| 9-21 | ES317531 | Slide SW. ESD-271DU | 25-3-24 | 1 | 9-81 | BA482128 | Main Amp./Osc./Power Supply P.C. Board (LS-5207) Comp. | LS-5207 | 1 |
| 9-22x | ZW273881 | Earth Lug M4 | | 1 | 9-82x | EJ314403 | Nylon Clip HP-2N (CEE) | 2-7-36 | 1 |
| 9-23x | ZS200700 | Tapping Screw #2 4x8 (Round) | | 1 | 9-83 | EZ512122 | SW. Retaining Plate | LS-5228 | 1 |
| 9-24 | EC353766 | Elect./C. 2200µF 25WV (Lug T (Lug Type) | 24-10-47 | 1 | 9-84 | ES422436 | Slide SW. SL-222B4C | 25-3-40 | 1 |
| 9-25 | ZS325495 | Tapping Screw #2 3x6 (BR) | | 11 | 9-85 | ML294647 | Rec. Lever 3, 1720 | LCS-8 | 1 |
| 9-26x | EZ225077 | Jack Plate Prop (Main Amp.) | LD-512 | 1 | 9-86 | EZ293231 | Speaker Mt. Chassis A, 1630 (Left) | 1630-601 | 1 |
| 9-27x | ZS322626 | Screw, binding head 3x8, w/washer | | 1 | 9-87 | EZ293242 | Speaker Mt. Chassis B, 1630 (Right) | 1630-601 | 1 |
| 9-28x | MH481678 | 32 Prop (Pre-Amp.) | LCS-53 | 3 | 9-88 | SS487168 | Speaker 75E-8A | 29-2-6 | 2 |
| 9-29 | ZS413728 | Screw, binding head 3x6, w/washer | | 1 | 9-89 | ZS200496 | Screw, countersunk head 4x12 (Black) | | 8 |
| 9-30 | MZ259233 | Wire Band C | 3A-745 | 2 | 9-90 | ZW413188 | Nut #1 M4 | | 8 |
| 9-31 | EA390543 | Pilot Lamp P.C. Board LS | LS-5016 | 1 | 9-91 | ZW290248 | Speed Nut (U Type) #1 M4 (Small) | 6-3-1 | 4 |
| 9-32 | EL390576 | Pilot Lamp (L/T) RM6-24V-50MA | 28-2-6 | 1 | 9-92 | ZW290250 | Speed Nut (U Type) #1 M4 (Large) | 6-3-2 | 8 |
| 9-33 | EA498958 | SRTR SW. P.C. Board | LS-5226 | 1 | 9-93 | SM481342 | Jack Name Plate A | LS-6206, 7 | 1 |
| 9-34 | EO392578 | Ferri Inductor FL9H 200µH(K) | 23-1-4 | 1 | 9-94x | SM481353 | Jack Name Plate B (UL, CSA) | LS-6206, 8 | 1 |
| 9-35 | ES368436 | Slide SW. SL-243B4D | 25-3-33 | 1 | 9-95x | SM481364 | Jack Name Plate C (CEE) | LS-6206, 9 | 1 |
| 9-36 | EJ390453 | Connector Plug 7P S-17302 | 42-1-40 | 1 | 9-96x | ZS201150 | Screw, truss head 3x6 (Black) | | 2 |
| 9-37 | ES422436 | Slide SW. SL-222B4C | 25-3-40 | 1 | 9-97 | SE449100 | Mask B | BS-6012 | 2 |
| 9-38 | ZS442585 | Screw, binding head 2.6x4 | | 4 | 9-98x | SE225977 | SW. Mask (Nylon) | 1630-605 | 1 |
| 9-39 | EV390554 | Double/Vol. D24N 50 kB+50kA | 36-3-24 | 2 | | | | | |
| 9-40x | ER214290 | Carbon/R. RD1/4 4.7k(J) (Insu. Type) | 35-9-5 | 2 | | | | | |
| 9-41 | EJ433844 | Mic. Jack 2PMJ4 | 31-2-35 | 2 | | | | | |
| 9-42x | ER364948 | Carbon/R. RD1/4 3.3k(J) (Insu. Type) | 35-9-5 | 2 | | | | | |
| 9-43x | EZ225180 | Nylon Collar, Jack | LD-520 | 2 | | | | | |
| 9-44 | ZW455275 | Washer (Fiber) D9.1x18x0.5t | | 3 | | | | | |
| 9-45 | ZW391680 | E Jack Nut | 7-1-20 | 3 | | | | | |
| 9-46 | EJ442078 | Mic. Jack 3PMJ4 | 31-2-36 | 1 | | | | | |
| 9-47 | ES246025 | Push SW. SDF1PBP1 (UEH-12BP) | 25-5-11 | 1 | | | | | |
| 9-48x | ES469541 | Push SW. TV-3 JB52 (UL) | 25-5-60 | 1 | | | | | |
| 9-49x | ES499972 | Push SW. JS-09 (CEE, WG) | 25-5-67 | 1 | | | | | |
| 9-50 | SK569790 | Push Button | LS-5230 | 1 | | | | | |
| 9-51 | ER376413 | Spark Quencher U/L 0.033µ+120Ω 500WV | 41-1-37 | 1 | | | | | |
| 9-52 | ZS442585 | Screw, binding head 2.6x4 | | 4 | | | | | |
| 9-53 | EM476482 | VU Meter D-1807R (18B Type) | 46-1-54 | 2 | | | | | |
| 9-54x | SE446545 | Mask A | DF-6041 | 2 | | | | | |
| 9-55x | BT390598 | Power Trans. LST-1 | 38-4-101 | 1 | | | | | |
| 9-56x | BT390587 | Power Trans. LST-2(UL) | 38-4-102 | 1 | | | | | |
| 9-57x | BT481713 | Power Trans. LST-4 (CSA) | 38-4-172 | 1 | | | | | |

FIG. 10 PHOTO OF FINAL ASSEMBLY BLOCK



FINAL ASSEMBLY BLOCK

| Ref. No. | Parts No. | Description | Schematic No. | Q'ty |
|-----------------------------|-----------|---|---------------|------|
| FRONT PANEL BLOCK | | | | |
| 10-1x | SP570745 | Front Panel Block Comp. | LS-3 | 1 |
| 10-2x | SP570756 | Front Panel Block Comp. (UL,CSA,CEE) | LS-3 | 1 |
| 10-3 | SP569766 | Front Panel A 1722 | LS-6219 | 1 |
| 10-4x | SP569777 | Front Panel B 1722 (UL,CSA,CEE) | LS-6219 | 1 |
| 10-5 | SC481487 | Head Cover Base, 1721 | LS-6203 | 1 |
| 10-6 | ZS252426 | Screw, truss head 3x6 (Without Groove) | | 2 |
| 10-7x | ZW273756 | Nut M3 | | 2 |
| 10-8 | SE569788 | Meter Escutcheon | LS-6220 | 2 |
| 10-9x | ZS524812 | Screw, countersunk head 2x4 | | 8 |
| CASE BLOCK | | | | |
| 10-10 | BC575695 | Wood Case Block Comp. | | 1 |
| 10-11x | BC575706 | Leather Case Block Comp. | | 1 |
| 10-12 | SA377190 | Rubber Foot, LM | LM-404 | 6 |
| 10-13x | ZW406247 | Washer (SUP) D3.2x10x0.5t | | 6 |
| 10-14x | ZS202511 | Screw, round head 3x18 | | 6 |
| 10-15x | ZW345947 | Tapping Screw #1 2.6x8 countersunk | | 8 |
| 10-16x | ZS316642 | Wood Screw, countersunk head 2.4x6.3 | | 8 |
| 10-17x | SE382217 | Fan Grill | RD-A402 | 1 |
| 10-18 | ZS324448 | Tapping Screw #1 3x10 (Truss) (Black) | | 11 |
| 10-19 | SE382228 | Speaker Grill | RD-A403 | 2 |
| 10-20x | SZ237993 | Hooking Holder B | 100737 | 2 |
| 10-21x | SZ208271 | Holder Metal Supporting Plate | CD-64 | 2 |
| 10-22x | ZW304536 | Screw, oval countersunk head 3x14 | | 2 |
| 10-23x | ZS203218 | Wood Screw, round head 2.7x10 | | 6 |
| 10-24x | SZ304964 | Hooking #1 700 | AT-37 | 2 |
| 10-25x | ZS202375 | Screw, round head 3x10 | | 2 |
| 10-26x | VM293883 | Hinge #1700 | AT-38 | 2 |
| 10-27x | SZ293477 | Vinyl Handle #1630 | | 1 |
| 10-28x | SZ324303 | Handle Metal Fitting #1630 | | 2 |
| 10-29x | SZ293455 | Handle Metal Fitting Cover #1630 | | 2 |
| 10-30x | ZS345971 | Screw, countersunk head 4x35 | | 2 |
| FINAL ASSEMBLY BLOCK | | | | |
| 10-31x | SA377190 | Rubber Foot, LM | LM-404 | 2 |
| 10-32x | ZS434283 | Tapping Screw #1 4x30(Truss) | | 2 |
| 10-33x | ZW419646 | Washer (SPC) D4.5x9.8x0.5t | | 2 |
| 10-34 | SE569744 | Knob Escutcheon | TD-6017 | 4 |
| 10-35 | ZS570576 | Screw, oval countersunk head 3x8 | | 4 |
| 10-36 | ZW408418 | Panel Washer | KD-6029 | 4 |
| 10-37x | ZW273868 | Cap Nut M3 | | 1 |
| 10-38 | SC481408 | Head Cover, LS-II. | LS-6204 | 1 |
| 10-39 | SM576551 | Head Cover Name Plate 1722W | LS-6223 | 1 |
| 10-40x | SM576562 | Head Cover Name Plate 1722L | LS-6223 | 1 |
| 10-41x | SC465761 | Head Cover Shield Plate | LS-6018 | 1 |
| 10-42 | ZS201150 | Screw, truss head 3x6 (Black) | | 2 |
| 10-43 | MP204794 | Pinch Roller #3 D=40 | 3A-348 | 1 |
| 10-44 | SK425158 | Pinch Roller Cap | MS-6020 | 1 |
| 10-45x | ZW260201 | Washer (Nylon) D6.2x13x1t | | 2 |
| 10-46x | ZW404010 | Washer (BSP) D6.2x13x0.25t | | 2 |
| 10-47 | SK476684 | Mech. Knob | LE-6018 | 2 |
| 10-48x | ZS253405 | Mech. Knob Screw | 7-1-46 | 2 |
| 10-49 | SK576606 | Knob A (Black) | LE-6012 | 2 |
| 10-50 | SK576573 | Knob B (Black) | LE-6015 | 2 |
| 10-51x | ZW564118 | Washer (Nylon) D11x18x0.8t | | 2 |
| 10-52x | EF563670 | Fuse 0.5A 250V | 39-1-50 | 1 |
| 10-53x | SZ327442 | Cord Angle B | SX-405 | 2 |
| 10-54x | SZ476728 | Cord Cover, M-9 (Roberts) | M9-435 | 2 |
| 10-55x | ZS481454 | ISO Screw, truss head 3x12 | | 2 |
| 10-56 | SK314100 | Pause Knob B | MR-612 | 1 |
| 10-57x | ZS433001 | Set Screw, hexagon socket 3x5 (Cup/p.) | | 1 |
| 10-58x | EF563681 | Fuse 1A 250V | 39-1-50 | 1 |

INDEX

| Parts No. | Ref. No. & Symbol No. | Parts No. | Ref. No. & Symbol No. | Parts No. | Ref. No. & Symbol No. | Parts No. | Ref. No. & Symbol No. | Parts No. | Ref. No. & Symbol No. |
|-----------|-----------------------|-----------|-----------------------|-----------|-----------------------|-----------|-----------------------|-----------|-----------------------|
| BA482117 | 7-1x | EJ373623 | 6-129x | ES481656 | 6-11x | MR217203 | 5-24 | MZ317068 | 5-27 |
| BA482117 | 9-79 | EJ373634 | 9-61x | ES499972 | 9-49x | MR217203 | 6-56 | MZ327251 | 6-71 |
| BA482128 | 8-1x | EJ390453 | 9-36 | ES601650 | 5-3 | MR217203 | 6-99 | MZ327341 | 5-6 |
| BA482128 | 9-81 | EJ392567 | 1-21 | ES601672 | 5-12 | MR217214 | 6-57 | MZ327352 | 5-8 |
| BC575695 | 10-10 | EJ433844 | 9-41 | ET234843 | 7-TR1 | MR251460 | 2-12 | MZ392490 | 5-16 |
| BC575706 | 10-11x | EJ442078 | 9-46 | ET234843 | 7-TR2 | MR252044 | 2-38 | MZ413976 | 4-6 |
| BF482040 | 4-1 | EJ450573 | 6-128x | ET338894 | 8-TR6, 7 | MR252066 | 2-20 | MZ430334 | 3-13 |
| BH482051 | 1-1x | EJ457637 | 9-18 | ET379462 | 8-TR2 | MR252077 | 2-41 | MZ446635 | 4-7 |
| BJ482141 | 9-11x | EJ481590 | 9-12 | ET380834 | 8-TR5 | MR256094 | 2-36 | MZ448222 | 3-4 |
| BL204658 | 6-125 | EJ486404 | 9-17x | ET391735 | 8-TR3, 4 | MR257984 | 3-23 | MZ452496 | 6-53x |
| BL482130 | 9-1x | EJ585865 | 9-76x | EV539987 | 8-TR1 | MR269763 | 6-114 | MZ453598 | 3-7x |
| BL564107 | 3-27x | EJ585876 | 9-71x | EV390554 | 9-39 | MR336172 | 3-22 | MZ458594 | 3-6x |
| BM364320 | 3-1x | EL390576 | 9-32 | EW315448 | 9-69x | MS205560 | 6-62 | MZ458605 | 3-8x |
| BM486663 | 3-2x | EM476482 | 9-53 | EW354240 | 9-68x | MS243404 | 6-111 | MZ459178 | 3-5 |
| BM489137 | 3-3x | EO383308 | 8-L1 | EW486797 | 9-70x | MS245463 | 6-26 | MZ481612 | 6-8x |
| BR570802 | 2-1x | EO383365 | 8-T2 | EW540112 | 9-67 | MS255600 | 2-6 | MZ481825 | 9-10x |
| BR570813 | 2-2x | EO392578 | 9-34 | EZ225077 | 9-26x | MS257051 | 6-19 | MZ518973 | 6-29x |
| BS601604 | 5-1x | EO393423 | 8-L2 | EZ225180 | 9-43x | MS260515 | 6-30 | MZ585887 | 6-43 |
| BT390565 | 8-T1 | EO606071 | 6-32 | EZ246936 | 9-73x | MS294513 | 9-6 | MZ885900 | 4-15 |
| BT390587 | 9-56x | EO609862 | 6-33x | EZ293231 | 9-86 | MS481858 | 4-3 | MZ585911 | 4-14 |
| BT390598 | 9-55 | ER211465 | 8-R7 | EZ293242 | 9-87 | MS582906 | 6-113 | MZ586438 | 4-9x |
| BT481702 | 9-58x | ER211465 | 8-R20 | EZ294434 | 9-5 | MT222366 | 2-13 | MZ605700 | 6-136x |
| BT481713 | 9-57x | ER211757 | 7-R1, 2 | EZ328331 | 9-19x | MT228598 | 2-48 | MZ605711 | 6-137x |
| BZ400948 | 6-1x | ER211757 | 7-R6 | EZ382263 | 9-72 | MT245215 | 6-81 | SA377190 | 10-12 |
| BZ482062 | 6-7x | ER212016 | 8-R9 | EZ392095 | 7-3x | MT252101 | 2-19x | SA377190 | 10-31x |
| EA390543 | 9-31 | ER212016 | 8-R11 | EZ481307 | 9-20 | MT252112 | 2-4x | SB258478 | 6-77 |
| EA498958 | 9-33 | ER212264 | 7-R7 | EZ481792 | 8-2 | MT255420 | 2-8 | SB485741 | 6-40 |
| EC220151 | 8-C7 | ER212477 | 7-R17 | EZ512122 | 9-83 | MT255565 | 2-10 | SC465761 | 10-41x |
| EC220151 | 8-C17 | ER212681 | 8-R3 | HE384693 | 1-12 | MT255712 | 2-3 | SC481408 | 10-38 |
| EC220151 | 8-C19 | ER212681 | 8-R21 | HP375131 | 1-7 | MT255870 | 2-18 | SC481487 | 10-5 |
| EC220465 | 8-C3 | ER212883 | 7-R8 | HZ247511 | 1-26 | MT255870 | 2-27 | SE225977 | 9-98x |
| EC220590 | 7-C5 | ER212883 | 8-R2 | HZ256432 | 1-16 | MT255881 | 2-40x | SE382217 | 10-17x |
| EC220590 | 7-C7 | ER212883 | 8-R25 | HZ274195 | 1-3 | MT255971 | 2-21 | SE382228 | 10-19 |
| EC220678 | 7-C1 | ER213030 | 7-R19 | HZ392501 | 1-2 | MT255982 | 2-42x | SE446545 | 9-54 |
| EC220768 | 8-C8 | ER213120 | 7-R20 | HZ392545 | 1-6 | MT255993 | 2-33 | SE449100 | 9-97x |
| EC250604 | 7-C4 | ER214290 | 9-40x | HZ393974 | 1-11x | MT292386 | 2-31 | SE569744 | 10-34 |
| EC250841 | 8-C20, 21 | ER214402 | 8-R14 | HZ410984 | 1-13 | MT297663 | 2-7 | SE569788 | 10-8 |
| EC270573 | 7-C13 | ER251583 | 8-R12, 13 | HZ468281 | 6-15x | MT376110 | 2-5 | SK314100 | 10-56 |
| EC290520 | 8-C4 | ER251730 | 8-R22 | MB256590 | 4-11 | MT376457 | 6-85x | SK425158 | 10-44 |
| EC320051 | 7-C2 | ER304402 | 8-R26 | MB406168 | 6-124x | MT438592 | 2-28 | SK476684 | 10-47 |
| EC320051 | 8-C2 | ER306887 | 7-R13 | MC216448 | 6-123 | MT438603 | 2-29 | SK569790 | 9-50 |
| EC320051 | 8-C9 | ER306887 | 8-R19 | MH204311 | 6-2 | MT438614 | 2-43 | SK576573 | 10-50 |
| EC324516 | 8-C6 | ER336442 | 7-R4 | MH244710 | 4-8 | MT438625 | 2-30x | SK576606 | 10-49 |
| EC329850 | 8-C1 | ER336442 | 7-R9, 10 | MH245485 | 6-27x | MT438636 | 2-47 | SM481342 | 9-93 |
| EC329850 | 8-C11 | ER336442 | 8-R15 | MH248343 | 6-24x | MT438647 | 2-22 | SM481353 | 9-94x |
| EC330401 | 3-35 | ER336442 | 8-R18 | MH254160 | 3-14 | MT440313 | 2-46 | SM481364 | 9-95x |
| EC336194 | 7-C3 | ER339805 | 3-38 | MH254182 | 3-15 | MV248117 | 6-5 | SM576551 | 10-39 |
| EC342821 | 7-C12 | ER342933 | 8-R1 | MH254316 | 3-11 | MV269965 | 4-13 | SM576562 | 10-40x |
| EC342821 | 7-C14 | ER349907 | 7-R11 | MH260425 | 5-28 | MV270066 | 5-30 | SP569766 | 10-3 |
| EC350616 | 7-C6 | ER350065 | 8-R16 | MH270000 | 2-35 | MV270066 | 6-134 | SP569777 | 10-4x |
| EC350616 | 8-C5 | ER350100 | 8-R6 | MH273295 | 6-17 | MZ210071 | 6-95 | SP570745 | 10-1x |
| EC353766 | 9-24 | ER357412 | 7-R5 | MH481678 | 9-28x | MZ217113 | 6-74 | SP570756 | 10-2x |
| EC379157 | 8-C15 | ER357412 | 7-R18 | MI204423 | 6-65 | MZ217271 | 5-31 | SS487168 | 9-88 |
| EC389485 | 8-C14 | ER357456 | 7-R14 | MI204423 | 6-102 | MZ217271 | 6-135 | SZ208271 | 10-21x |
| EC411827 | 7-C10 | ER357570 | 7-R12 | MI231423 | 6-108 | MZ217686 | 6-120 | SZ237993 | 10-20x |
| EC411827 | 8-C12 | ER362485 | 7-R3 | MI296245 | 4-2 | MZ217708 | 6-69 | SZ293455 | 10-29x |
| EC424708 | 8-C16 | ER363644 | 8-R5 | ML217462 | 3-28 | MZ217855 | 6-118 | SZ293477 | 10-27x |
| EC429851 | 7-C11 | ER364948 | 9-42x | ML217934 | 6-80 | MZ225720 | 5-23 | SZ304964 | 10-24x |
| EC450055 | 8-C10 | ER371946 | 8-R10 | ML226258 | 6-39 | MZ229138 | 6-130x | SZ324303 | 10-28x |
| EC450270 | 8-C18 | ER376413 | 9-51 | ML251932 | 6-84 | MZ237418 | 6-34 | SZ327442 | 10-53x |
| EC450527 | 7-C8 | ER380913 | 7-R16 | ML257040 | 6-98 | MZ248354 | 3-29 | SZ465377 | 6-3 |
| EC451462 | 8-C13 | ER391961 | 8-R4 | ML257128 | 5-16 | MZ253113 | 4-10 | SZ465388 | 6-6 |
| EC486630 | 3-36x | ER392534 | 8-R8 | ML257163 | 6-103 | MZ253653 | 6-60 | SZ476728 | 10-54x |
| EC487157 | 7-C9 | ER399644 | 7-R15 | ML262337 | 6-91 | MZ254068 | 3-25 | VM293883 | 10-26x |
| EC520481 | 8-C22 | ER399723 | 8-R23, 24 | ML270685 | 6-61 | MZ254373 | 3-12 | ZG205571 | 6-67 |
| ED219464 | 7-D1 | ER440921 | 9-13x | ML294625 | 9-2 | MZ256814 | 5-35x | ZG217337 | 6-92 |
| ED329128 | 8-D1 | ER443790 | 9-14x | ML294636 | 9-3 | MZ256882 | 3-41 | ZG217394 | 3-32x |
| ED329130 | 8-D2 | ER450011 | 8-R17 | ML294647 | 9-85 | MZ257073 | 6-21 | ZG217394 | 6-132 |
| EF354295 | 9-77x | ES246025 | 9-47 | ML295727 | 6-100 | MZ259233 | 9-30 | ZG217866 | 6-119 |
| EF460653 | 9-66x | ES250007 | 6-42 | ML300161 | 6-88 | MZ260662 | 6-93 | ZG224796 | 6-104 |
| EF480903 | 9-78x | ES307877 | 7-SW1 | ML308564 | 6-28x | MZ292364 | 3-26x | ZG227441 | 7-2 |
| EF563670 | 10-52x | ES317531 | 9-21 | ML309093 | 6-55 | MZ293567 | 6-121 | ZG227452 | 6-86 |
| EF563681 | 9-63x | ES368436 | 9-35 | ML369718 | 6-116 | MZ293578 | 6-122 | ZG227485 | 5-33 |
| EF563681 | 10-58x | ES422436 | 9-15 | ML475920 | 6-54 | MZ296144 | 3-19x | ZG227542 | 2-39x |
| EJ205986 | 6-51x | ES422436 | 9-37 | ML481768 | 6-13x | MZ301048 | 6-131 | ZG227553 | 2-14 |
| EJ233370 | 9-62 | ES422436 | 9-84 | ML492344 | 6-110 | MZ301048 | 1-20 | ZG227586 | 5-7 |
| EJ254970 | 9-65x | ES469541 | 9-48x | ML548280 | 6-87 | MZ316901 | 5-2 | ZG232121 | 5-32 |
| EJ300508 | 9-60 | ES479485 | 6-96 | MP204794 | 6-127x | MZ316945 | 5-15x | ZG250367 | 9-80 |
| EJ314403 | 9-82x | ES479496 | 6-9 | MP204794 | 10-43 | MZ316956 | 5-29 | ZG255633 | 2-9 |
| EJ373623 | 6-73x | ES481601 | 9-16 | MR217203 | 5-17 | MZ316956 | 6-133 | ZG256937 | 5-34 |

INDEX

| Part No. | Ref. No. & Symbol No. | Part No. | Ref. No. & Symbol No. | Part No. | Ref. No. & Symbol No. | Part No. | Ref. No. & Symbol No. | Part No. | Ref. No. & Symbol No. |
|----------|-----------------------|----------|-----------------------|----------|-----------------------|----------|-----------------------|----------|-----------------------|
| ZG257095 | 6-23 | ZW217102 | 6-75 | ZW571072 | 5-20x | | | | |
| ZG270358 | 6-101 | ZW222388 | 3-20x | ZW601290 | 1-5x | | | | |
| ZG272981 | 6-115 | ZW231693 | 2-23 | | | | | | |
| ZG290384 | 6-83 | ZW231805 | 6-4 | | | | | | |
| ZG294153 | 6-126x | ZW259885 | 3-21x | | | | | | |
| ZG382757 | 1-10 | ZW259918 | 6-89 | | | | | | |
| ZG389283 | 1-18 | ZW259942 | 6-82x | | | | | | |
| ZG414077 | 2-45 | ZW259975 | 6-112x | | | | | | |
| ZG465478 | 3-30 | ZW260021 | 2-15 | | | | | | |
| ZG469427 | 6-59 | ZW260021 | 2-24 | | | | | | |
| ZS200384 | 6-63 | ZW260054 | 2-16x | | | | | | |
| ZS200496 | 9-89 | ZW260054 | 2-25x | | | | | | |
| ZS200700 | 9-23x | ZW260054 | 3-33x | | | | | | |
| ZS200700 | 9-59 | ZW260054 | 6-70x | | | | | | |
| ZS201150 | 9-96x | ZW260065 | 2-17x | | | | | | |
| ZS201150 | 10-42 | ZW260065 | 2-26x | | | | | | |
| ZS201183 | 9-64x | ZW260065 | 2-34 | | | | | | |
| ZS201475 | 1-14 | ZW260076 | 6-64x | | | | | | |
| ZS201508 | 1-8x | ZW260122 | 5-26x | | | | | | |
| ZS201767 | 6-90x | ZW260122 | 6-109 | | | | | | |
| ZS202061 | 1-23 | ZW260133 | 5-5x | | | | | | |
| ZS202375 | 10-25 | ZW260201 | 10-45x | | | | | | |
| ZS202511 | 10-14x | ZW260436 | 6-79x | | | | | | |
| ZS203218 | 10-23x | ZW270088 | 2-11 | | | | | | |
| ZS217877 | 5-19 | ZW273745 | 1-4x | | | | | | |
| ZS217877 | 6-117 | ZW273745 | 6-36x | | | | | | |
| ZS223233 | 6-107 | ZW273756 | 3-40 | | | | | | |
| ZS231298 | 6-14x | ZW273756 | 5-14x | | | | | | |
| ZS252426 | 10-6 | ZW273756 | 6-37x | | | | | | |
| ZS253405 | 10-48x | ZW273756 | 8-4 | | | | | | |
| ZS272395 | 3-17 | ZW273756 | 10-7x | | | | | | |
| ZS316642 | 10-16x | ZW273767 | 6-94 | | | | | | |
| ZS321298 | 8-3 | ZW273802 | 5-13x | | | | | | |
| ZS322626 | 9-27x | ZW273868 | 10-37x | | | | | | |
| ZS323728 | 3-37 | ZW273881 | 1-22x | | | | | | |
| ZS323728 | 6-38 | ZW273881 | 5-25 | | | | | | |
| ZS323728 | 6-45 | ZW273881 | 9-22x | | | | | | |
| ZS324448 | 10-18 | ZW273892 | 5-22x | | | | | | |
| ZS325495 | 8-5 | ZW273914 | 6-31x | | | | | | |
| ZS325495 | 9-25 | ZW273914 | 9-7x | | | | | | |
| ZS344283 | 1-15x | ZW273960 | 9-8x | | | | | | |
| ZS345914 | 1-9 | ZW290248 | 9-91 | | | | | | |
| ZS345971 | 10-30x | ZW290250 | 9-92 | | | | | | |
| ZS349288 | 6-72x | ZW290283 | 1-19 | | | | | | |
| ZS349288 | 9-4x | ZW290283 | 3-34x | | | | | | |
| ZS373577 | 4-5 | ZW290283 | 5-18x | | | | | | |
| ZS384131 | 3-9x | ZW290283 | 6-58 | | | | | | |
| ZS391588 | 1-24 | ZW290283 | 9-9x | | | | | | |
| ZS413166 | 6-97 | ZW304536 | 10-22x | | | | | | |
| ZS413201 | 1-25 | ZW312693 | 2-44 | | | | | | |
| ZS413201 | 5-9 | ZW330412 | 6-48x | | | | | | |
| ZS413201 | 6-52x | ZW330423 | 6-49x | | | | | | |
| ZS413234 | 6-68 | ZW330445 | 6-50x | | | | | | |
| ZS413245 | 6-76 | ZW345442 | 1-17 | | | | | | |
| ZS413728 | 3-39x | ZW345947 | 10-15x | | | | | | |
| ZS413728 | 5-4x | ZW376391 | 6-105 | | | | | | |
| ZS413728 | 9-29 | ZW391680 | 9-45 | | | | | | |
| ZS413921 | 3-24 | ZW392681 | 4-12 | | | | | | |
| ZS414033 | 6-18x | ZW392692 | 9-74x | | | | | | |
| ZS417148 | 6-44 | ZW404010 | 10-46x | | | | | | |
| ZS417150 | 3-31 | ZW406247 | 10-13x | | | | | | |
| ZS417150 | 6-22x | ZW408418 | 10-36 | | | | | | |
| ZS419736 | 4-17x | ZW413188 | 6-25 | | | | | | |
| ZS424056 | 3-16 | ZW413188 | 9-90 | | | | | | |
| ZS425788 | 6-41 | ZW413256 | 6-78x | | | | | | |
| ZS425981 | 6-10x | ZW413267 | 6-20x | | | | | | |
| ZS427026 | 3-18 | ZW416698 | 5-21 | | | | | | |
| ZS427037 | 3-10 | ZW419646 | 10-33x | | | | | | |
| ZS432718 | 6-35x | ZW432347 | 6-106x | | | | | | |
| ZS433001 | 10-57x | ZW434193 | 5-10x | | | | | | |
| ZS434160 | 2-49 | ZW434215 | 5-11x | | | | | | |
| ZS434171 | 2-37 | ZW437804 | 2-32 | | | | | | |
| ZS434283 | 10-32x | ZW447208 | 4-4 | | | | | | |
| ZS442585 | 9-38 | ZW455275 | 9-44 | | | | | | |
| ZS442585 | 9-52 | ZW459134 | 9-75x | | | | | | |
| ZS476987 | 3-42 | ZW462835 | 6-46x | | | | | | |
| ZS481454 | 10-55x | ZW462846 | 6-47x | | | | | | |
| ZS481645 | 6-12x | ZW463410 | 4-16 | | | | | | |
| ZS524812 | 10-9x | ZW560801 | 6-66x | | | | | | |
| ZS570576 | 10-35 | ZW564118 | 10-51x | | | | | | |

SECTION 3

SCHEMATIC DIAGRAM

1. 1722W SCHEMATIC DIAGRAM
 2. 1722L SCHEMATIC DIAGRAM
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