

**INSTALLATION, OPERATING
INSTRUCTIONS AND PARTS LIST FOR
SEARS
EIGHT-TRACK MOBIL STEREO TAPE PLAYER**

12 VOLT NEGATIVE GROUND

MODEL NUMBER 849. 62300

The MODEL NUMBER of your stereo tape player will be found stamped on a metal label, attached to the back. Always give this number when communicating with us regarding this unit, or when ordering parts.

All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. or SIMPSONS-SEARS LIMITED. When ordering parts by mail, selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST:

1. The PART NUMBER
2. The PART NAME
3. The MODEL NUMBER 849. 62300
4. The NAME of item—SEARS SOLID STATE STEREO TAPE PLAYER

**COAST TO COAST NATION-WIDE
SERVICE FROM SEARS
FOR YOUR SEARS TAPE PLAYER**



SEARS, ROEBUCK AND CO. and SIMPSONS-SEARS LIMITED in Canada back up your investment with quick, expert mechanical service and genuine SEARS replacement parts.

If and when you need repair or service, call on us to protect your investment in this fine piece of equipment.

**SEARS, ROEBUCK and CO., U.S.A.
AND
IN CANADA-SIMPSONS-SEARS LIMITED**

DESCRIPTION

Your SEARS 849. 62300 Mobile Stereo Cartridge Player is a fully-transistorized unit which will play all presently-available eight-track stereo cartridges. Program switching is fully automatic, with manual program change at any time by front-panel button.

The high sound output power (12 watts peak total) will provide ample volume even in convertibles, with low battery drain (less than 1 ampere playing). Normal operation with precise governor-controlled speed is maintained over the full range of battery voltage (11-16 volts) from a NEGATIVE-GROUND battery system only.

OPERATION

Controls for your unit are indicated in Fig. 1. Place the front end (tape slot) of the cartridge against the cartridge door and insert the cartridge by pushing it straight into the opening until program indicator lights up and a "click" is heard. The unit is now operating and sound can be adjusted by the VOLUME, BALANCE, and TONE controls.

The VOLUME control should be adjusted for comfortable listening level. The BALANCE control should normally remain in mid position, but may be adjusted as necessary to equalize the loudness of the sound coming from the left and right speakers. The TONE control will provide maximum treble brilliance when turned fully rightward and maximum bass when turned fully leftward, and should be adjusted to your individual taste.

To change programs manually press the program SELECTOR button until the desired program is playing.

The program indicator lamps will show program in play at any time. Pull the cartridge straight out and the program indicator lamp go out.

If a cartridge is left engaged in the unit when power is off, a flat spot will develop on the pinch roller in the cartridge, producing uneven sound.

NOTE: When playing cartridges all four program indicator lamps will illuminate in sequence: 1, 2, 3 and 4.

Due to the high power capability of your player, you may find that parts of your vehicle such as instruments, controls, ash trays, and trim strips may vibrate and create mechanical noise at high volume levels. If this occurs, locate and tighten the offending part.

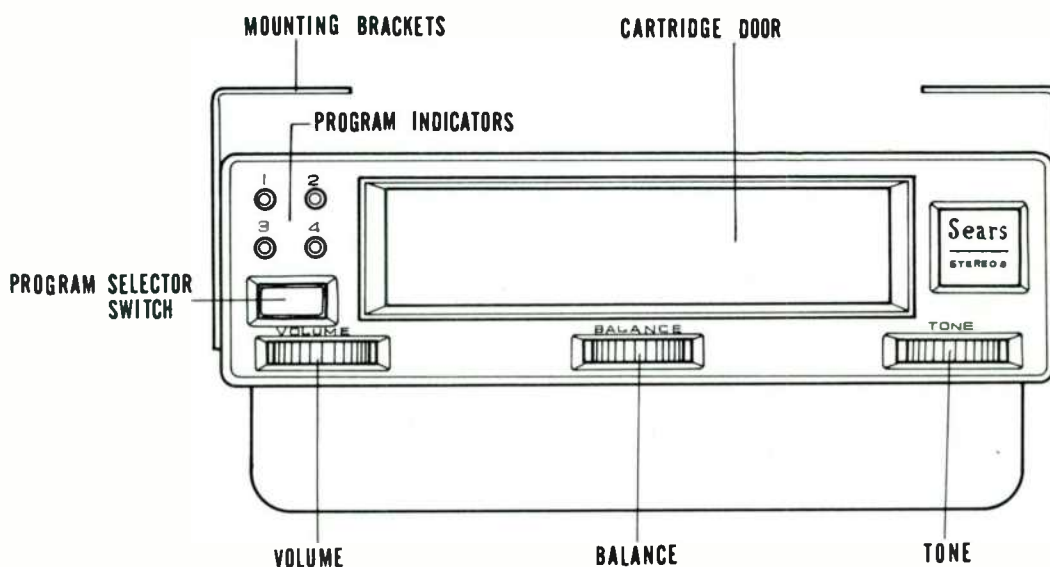


Fig. 1

CARE AND MAINTENANCE

Tape Cartridges

The cartridge case is made of high-impact plastic and should not be exposed to heat exceeding 130°F., as this may result in deforming.

On the other hand, the cartridge should not be left in excessive cold atmosphere below 20°F., as this may make the tape brittle and result in tape breakage during playback.

If the tape has been exposed to cold atmosphere, it should be used only after leaving it in normal temperature (about 70°F.), for about 15 to 30 minutes.

Never place the tape in the vicinity of a strong magnetic field (such as electric motors, loudspeakers, TV sets, radios, or other electrical appli-

ances) as this may result in erasure of the sound contained in the tape or hum and noise.

Tape cartridges should be placed in plastic bags and stored in places that are not exposed to the sun: that are not excessively hot or cold: or that do not have excessive humidity. This will ensure lasting satisfaction.

Periodic Maintenance

This stereo tape player should be cleaned and lubricated every three months (or 200 hours of use). This work should be performed only by a qualified service technician equipped with the proper tools and instruments.

INSTALLATION

Mounting the Unit

The player is furnished with newly designed two-piece universal mounting brackets which can be mounted in several different positions to get optimum location and projection of the unit out from under the dash, or on the floor or console of any car, truck or boat with 12 volt negative ground electrical system. (Typical mounting locations are shown in Figs. 2 and 3). Brackets can be mounted with arms turned in or out, right to left or left to right, so that projection of the unit from mounting holes in its side can be either forward or rearward of the top end of the bracket.

For mounting under the dash, first determine

the most suitable location for appearance and convenience of operation of the unit. Use the template supplied to mark locations where the mounting holes are to be drilled. Always use at least two mounting screws, and preferably three or four. Drill 5/32" diameter holes at the marked locations, and fasten the brackets in place with No. 10 self-tapping screws (not supplied). Re-install the unit in the mounting brackets, selecting the appropriate front and rear mounting screw holes in the brackets and unit, to position the unit at the desired angle (no more than 20 degrees from horizontal). Tighten all screws securely.

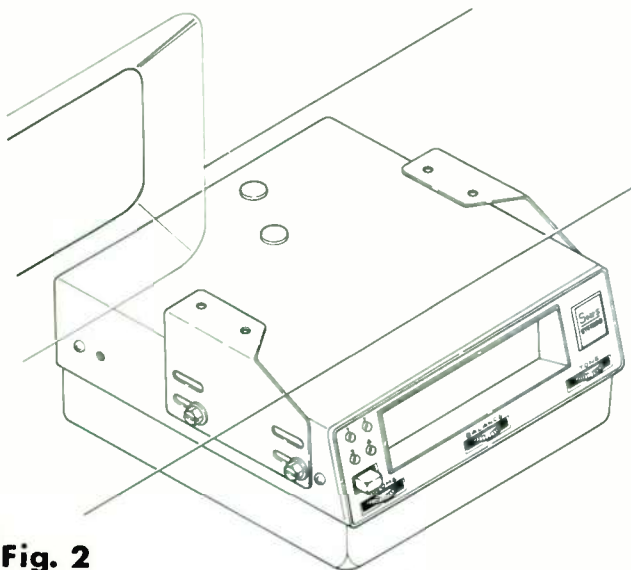


Fig. 2

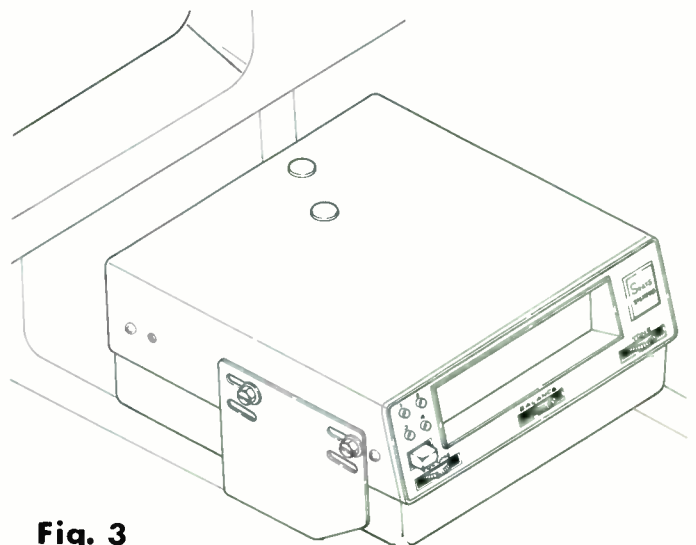


Fig. 3

If the mounted unit shows significant vibration when the vehicle is in motion, it will be necessary to further support the unit at the rear. This can be done by using the perforated support strap furnished. Install the mounting screw for strap (in the mounting kit) in the tapped hole at the upper rear of the unit. Place the end hole of the strap, spring washer and hexagonal nut onto the mounting screw, and tighten the nut. The strap should be pointing upward at this time. Suitably bend the strap so that the free end can be attached to the

firewall or other structure by another No. 10 self-tapping screw at some point as far as possible above the unit. When installed, minor adjustments of the mounting screw may be necessary to ensure that this strap is tight and is properly supporting the rear of the unit.

To mount the unit on the floor or console follow a procedure similar to that outlined above with the arms of the bracket pointed upward as shown in Fig. 3. The rear support strap will not normally be required for this type of mounting.

Electrical Connection

CAUTION: REMOVE THE FUSE FROM THE FUSEHOLDER IN THE RED LEAD WIRE BEFORE MAKING ELECTRICAL CONNECTIONS. THIS UNIT WILL WORK ONLY ON NEGATIVE GROUND SYSTEMS WITH 12 VOLT BATTERIES.

To determine that your vehicle has the proper system, examine the battery. It should appear as shown in Fig. 4, with six filler caps. If the smaller of the two terminals (sometimes marked—) has a heavy piece of metal braid or a heavy cable

connecting to the vehicle frame or chassis, the electrical system is negative ground and is suitable for operation of the player.

Electrical connections are made as shown in Fig. 5. The RED lead from the fuseholder should be connected to the fuseblock, ammeter, or other terminal where power is always available. Do not connect to the accessory terminal of the ignition switch, since this could result in removal of power to the unit when the cartridge is in play position. Under this condition, a flat spot will soon develop on the pinchroller, producing uneven sound.

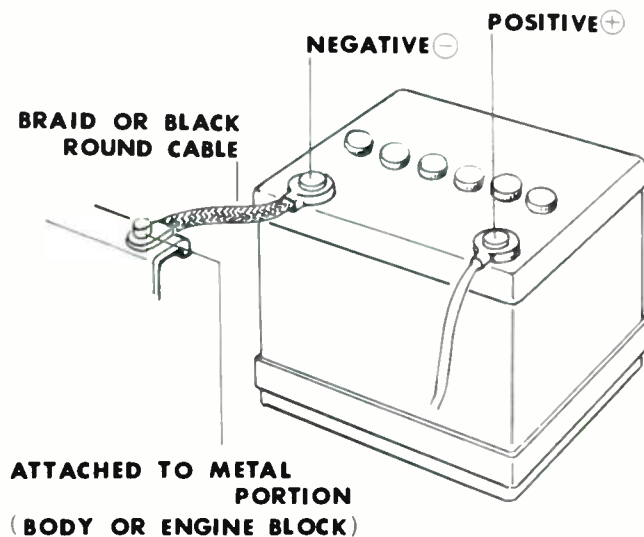


Fig. 4

Loudspeakers

Your unit is designed to work with speaker load impedances of 2-8 ohms. Peak performance will result from the use of matched sets of two or four speakers of 4 ohm impedance, but essentially equal quality can be obtained with two or four 8 ohm units. Mixing speakers of different impedance or type can cause unbalanced sound.

NOTE: POWER TO THE STEREO UNIT MUST BE REMOVED DURING SPEAKER CONNECTION TO AVOID POSSIBLE DAMAGE DUE TO ACCIDENTAL SHORTING OF SPEAKER LEADS DURING THE INSTALLATION PROCESS.

You must always install a minimum of two speakers, one on the right and the other on the left, to get the proper stereo effect. For the ultimate in stereo performance, install four speakers, two in front and two in rear right and left areas of the car. Connections should be made as shown in Fig. 5. Although "built-in" speaker installations in the car doors will give optimum baffling for maximum frequency range, other possible locations include the right and left sides of the package shelf behind the rear seat, and/or front kick panel areas.

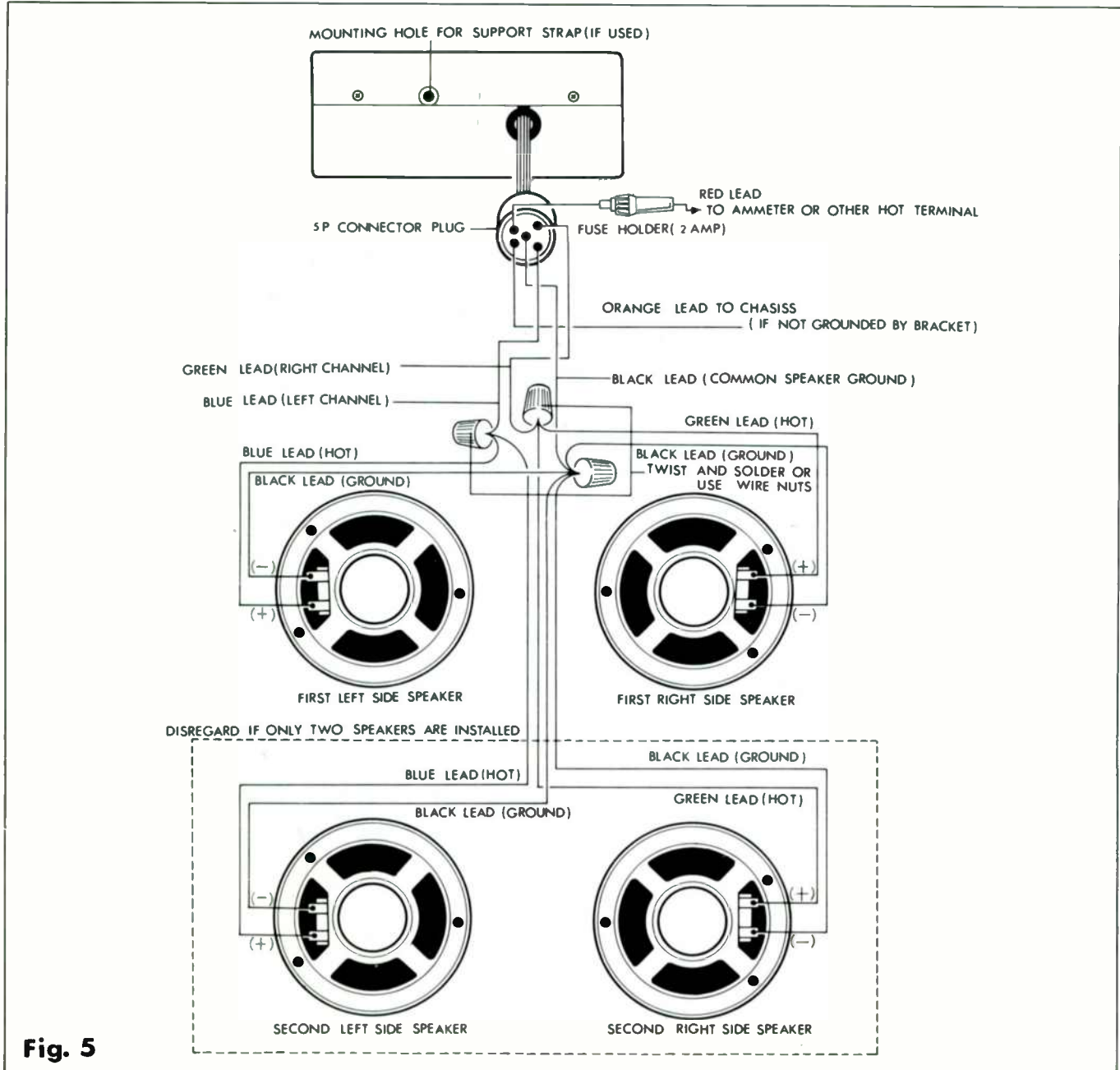


Fig. 5

PROFESSIONAL SERVICE INFORMATION

All service and internal adjustment of this unit should be performed only by a qualified service technician equipped with the proper tools and instruments.

Disassembly

- (1) If the support strap is installed on the rear panel of the unit, remove the support strap.
- (2) Remove the four mounting screws that install the unit to the mounting brackets, and then take off the unit.
- (3) Remove the six self-tapping screws (black) from both sides and rear panel of the upper case. Remove the upper case from the unit by sliding the upper case rearward.
- (4) Remove the four self-tapping screws (black) from both sides of the bottom case. Remove the bottom case by lifting the front of the unit, and remove the output lead wires and rubber bushing from the bottom case.

Reassembly

- (1) Insert the unit into the bottom case to a certain extent, fit the rubber bushing of output lead wires to the slit of the bottom case, and then completely set the unit in the bottom case. Install the bottom case with the four self-tapping screws (black).
- (2) Fasten the upper case to the unit with the six self-tapping screws (black) that were removed at the time of disassembly.
- (3) Install the unit to the mounting brackets with the four mounting screws.

NOTE: When installing the upper case to the unit, check if the door spring is projecting.

Power Switch Replacement

- (1) Unsolder the three lead wires that are soldered to the terminals of the power switch.
- (2) Remove the two screws from the top of the power switch, and then replace the new power switch.
- (3) Solder wires as illustrated in Fig. 8.

NOTE: During soldering wires to the power switch, keep the terminals untouched one another.

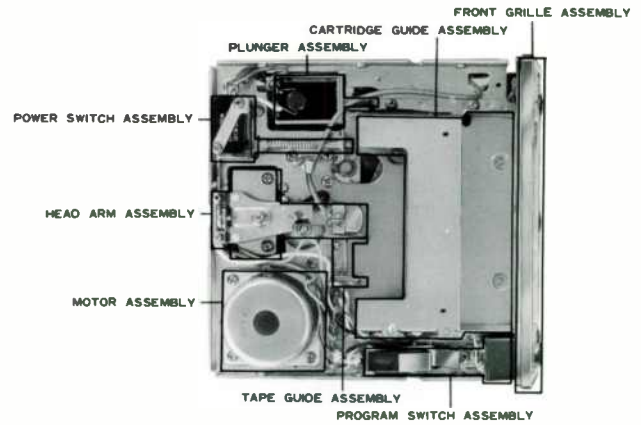


Fig. 6

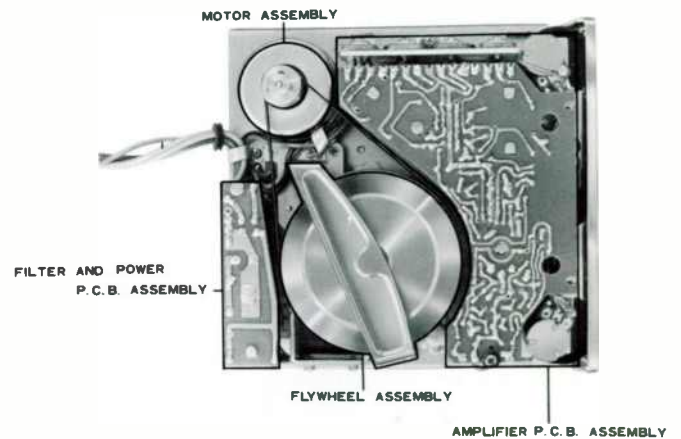


Fig. 7

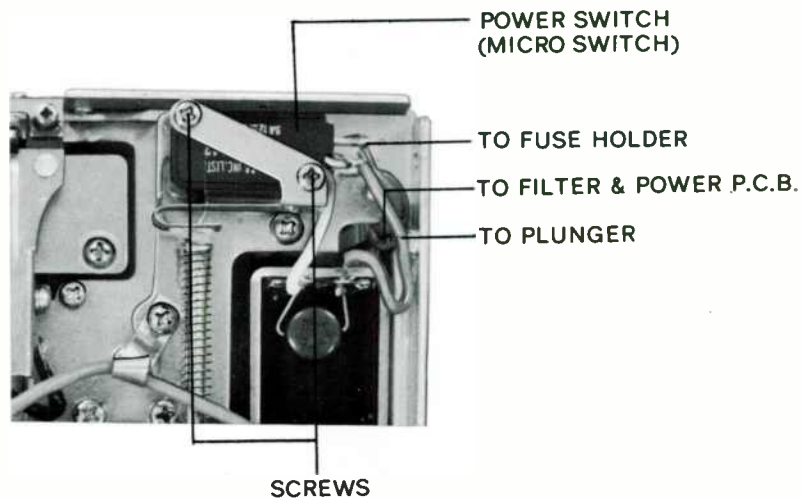


Fig. 8

Flywheel and Flywheel Bearing Replacement

- (1) Remove the two screws that install the flywheel plate to the chassis, and then remove the flywheel plate. Extract the flywheel from the bearing. Do not lose the nylon ball.
- (2) Remove the three mounting screws from the flywheel bearing, and remove the bearing from the chassis.
- (3) Install the new flywheel bearing to the chassis with the three screws. Be sure to install the bearing in the correct direction.
- (4) Clean the flywheel bearing with clean cloth, and apply oil to the bearing.
Attach the oil proof felt to the new flywheel by using an adhesive material, put the cushion ring on the capstan shaft, and insert the

flywheel into the bearing with care not to scratch the bearing and capstan shaft.

- (5) Put the nylon ball onto the tip of flywheel shaft and lubricate a silicone grease onto the nylon ball.
Install the flywheel plate to the chassis with the two screws.
- (6) Clean the sides of the drive belt, flywheel and motor pulley with cloth and alcohol or equivalent solvent, and install the drive belt on the flywheel and motor pulley.
- (7) Lubricate the flywheel bearing with one or two drops of oil. Do not apply an excessive oil.
- (8) Clean the oil adhering to the capstan shaft and other parts not needing oil.

Motor Replacement

- (1) Remove the drive belt from the flywheel and motor pulley. Loosen the two screws that install the motor pulley, and remove the motor pulley from the motor shaft.
- (2) Unsolder the two motor lead wires that are soldered to the filter and power P.C. board.

- (3) Remove the four screws from the motor shield case, and remove the motor assembly from the chassis.
- (4) Install the new motor assembly on the chassis by following the above steps in the reverse procedure.

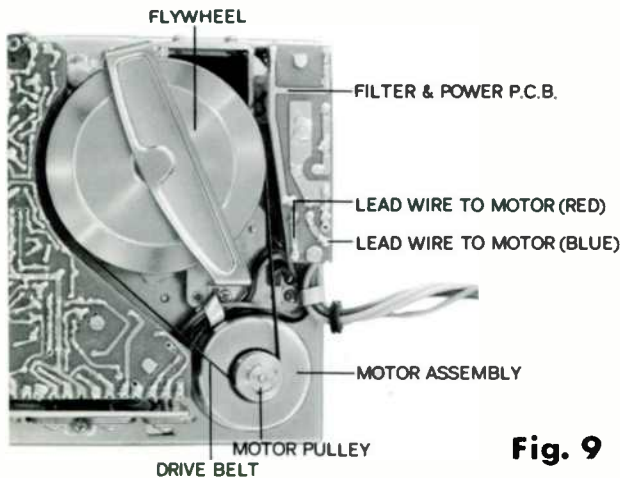


Fig. 9

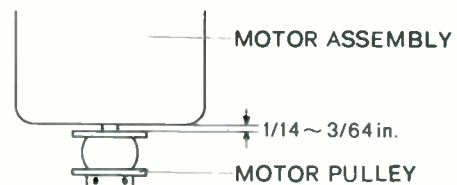


Fig. 10

NOTE:

1. Install the motor assembly so that the outlet of motor lead wires is nearest to the head arm.
2. The clearance between the motor pulley and shield case should be $1/64 \sim 3/64$ in.
3. Be sure to clean the sides of the drive belt, motor pulley and flywheel with alcohol or

equivalent solvent.

4. The luscious side of the drive belt should be outside when it is set on the flywheel and motor pulley.
5. When setting the drive belt, do not expand it unnecessarily.

Amplifier Assembly Replacement

- (1) Unsolder the two lead wires of the amplifier assembly that are soldered to the filter and power P.C. board. Also unsolder the lead wire that is connected from the fuse holder to the power switch.
- (2) Remove the two screws that install the amplifier assembly to the chassis, and the two screws that install the volume control panel.
- (3) Remove the amplifier assembly while extracting the radiation plate from the fixing pieces of

the chassis.

- (4) Install the new amplifier assembly by following the above steps in the reverse procedure.

Head Replacement and Adjustment

Since this adjustment is very critical follow with extra care the procedure described hereunder. Demagnetize the head and all tools (screw-driver, pliers, long-nose pliers) to be used on head screw, otherwise the head may be accidentally magnetized and result in noise in playback operation.

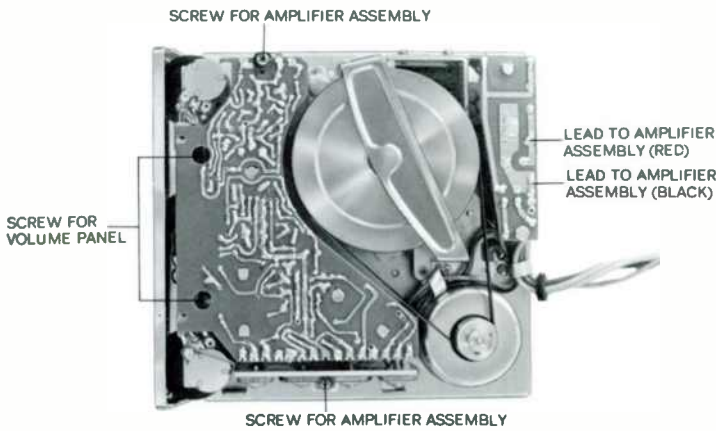


Fig. 11

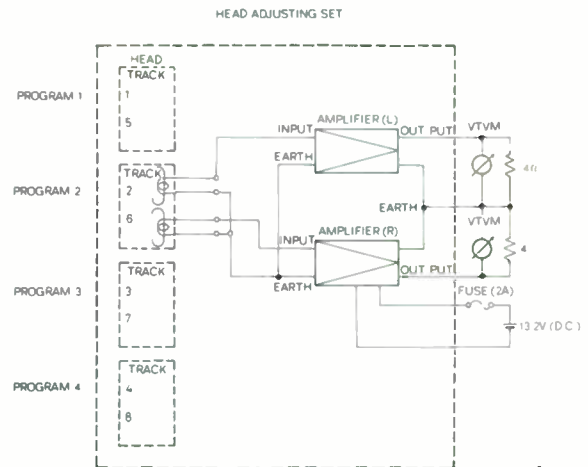


Fig. 12

• Measuring Instruments

- (1) Vacuum-tube voltmeter (VTVM) or high-accuracy circuit tester (VOM).
- (2) Load resistor ($4\Omega \pm 5\%$; more than 5 W in rated capacity).
- (3) DC power supply (12-volt automotive battery or DC voltage regulator).

- (4) Head-azimuth adjusting test cartridge.

• Head Replacement

- (1) Unsolder the shielded wire that is soldered to the oval lug installed to the head arm. Loosen the head mounting screw and extract the head



Fig. 13

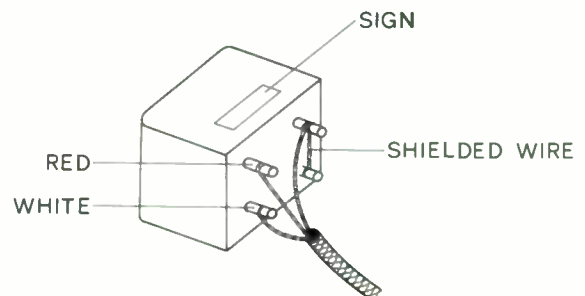


Fig. 14

- forward.
- (2) Unsolder the lead wires soldered to the four terminals of the head.
 - (3) Solder the above lead wires to the four terminals of the new head as shown in Fig. 14. The figure-marked side of the head should be upside.
 - (4) Insert the new head into the head arm, set the head so that the distance from the head height adjusting screw to the head surface is $1-11/32''$ as shown in Fig. 15, and tighten the head mounting screw.
 - (5) Make sure that the gap between the tape guide and the clamp of the head arm is $1/64 \sim 3/64$ in.
 - (6) Adjust the head height and head azimuth.

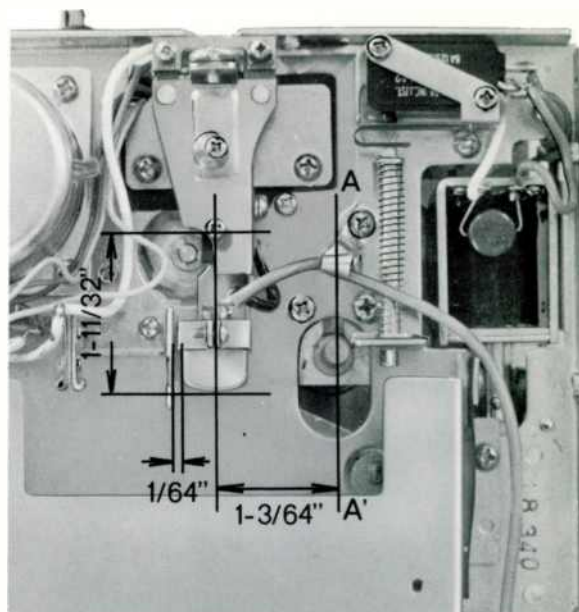


Fig. 15

● **Head Arm Pressure Adjustment**

Adjust the pressure of the head arm pressure adjusting spring to be 3.6~5.4 lbs by turning the head arm pressure adjusting screw shown in Fig. 13. The spring pressure will increase when the screw is rotated clockwise.

● **Head Height Adjustment**

Make certain that the line A-A' shown in Fig. 15 and the center line of the head arm is parallel and $1-3/64''$ apart from each other. Also make sure that the tip of the head height adjusting screw is at the center of the flat portion of the cam face.

If either of the above is improper, loosen the mounting screws, adjust the position of the head arm, and retighten the screws.

● **Head Azimuth Adjustment**

- (1) Set the volume control to an appropriate position, and the tone control to the fully clockwise turned position.
- (2) Loosen about one quarter turn the head arm lock screws shown in Fig. 13.
- (3) Place the head azimuth adjusting test cartridge in the unit.

● **The following describes the adjusting procedure**

- (1) Adjustment of head height and azimuth requires the use of special test tapes for best result. Recommended tapes are RCA No. 328 for head height and RCA No. 326 for azimuth.

PCA No. 8TSC101 gives both height and azimuth tests, and Delco No. J-22683 is also suitable for both adjustments.

- (2) Using an azimuth test tape producing a 5000 Hz or 8000 Hz signal, loosen the lock screw about $1/4$ turn. Turn the azimuth adjusting screw for maximum output as indicated by a vacuum-voltmeter or an audio output meter connected across the load resistors or appropriate speaker leads. Retighten the lock screw.
- (3) Using a medium-frequency test tape (400~3000 Hz) with the signal recorded on one program track (or one pair of tracks) with adjacent blank programs select the signal program. Turn the height adjusting screw for maximum output. New select the adjacent programs (Nos. 1 and 3 if the test program is No. 2) and check that there is no crosstalk coming from the No. 2 program signal. If there is crosstalk, make a slight readjustment of the height screw to minimize crosstalk on both adjacent program, at maximum volume setting.
- (4) After all adjustments have been made, secure the adjusting screws with daubs of paint or glue.

Plunger Replacement and Adjustment

● Plunger Replacement

- (1) Unsolder the two lead wires and diode soldered to the terminals of the plunger.
- (2) Remove the split pin that links the plunger with the cam pushing lever.
- (3) Remove the two mounting screws, and remove the plunger from the chassis.
- (4) Place the new plunger. The terminals should be on the power switch side as shown in Fig. 17.
- (5) Temporarily install the new plunger to the chassis with the two screws.

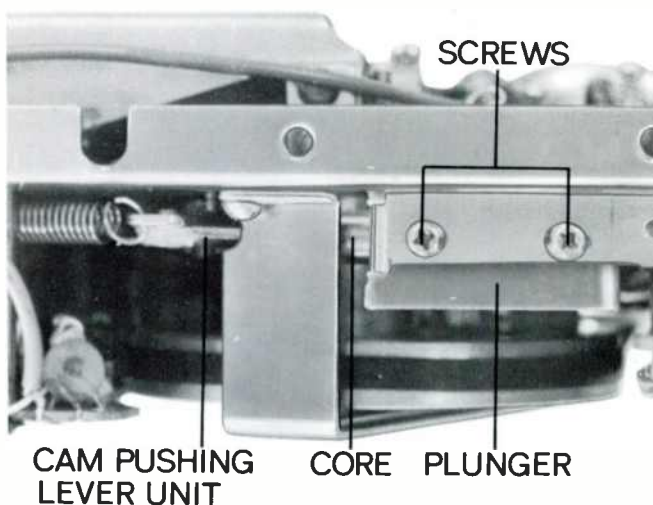


Fig. 16

- (6) Link the plunger with the cam pushing lever by using the split pin.
- (7) Solder the two lead wires and diode to the terminals of the plunger.

NOTE: The plunger and lead wires do not have polarity. However, since there is the diode, wire them as shown in Fig. 17.

● Plunger Adjustment

Tighten the plunger with the screws so that the gap between the plunger and chassis is $1/64''$ as shown in Fig. 17.

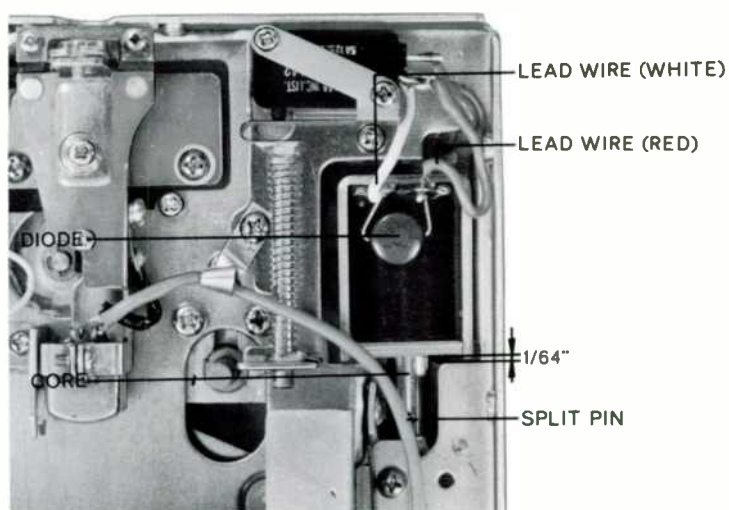


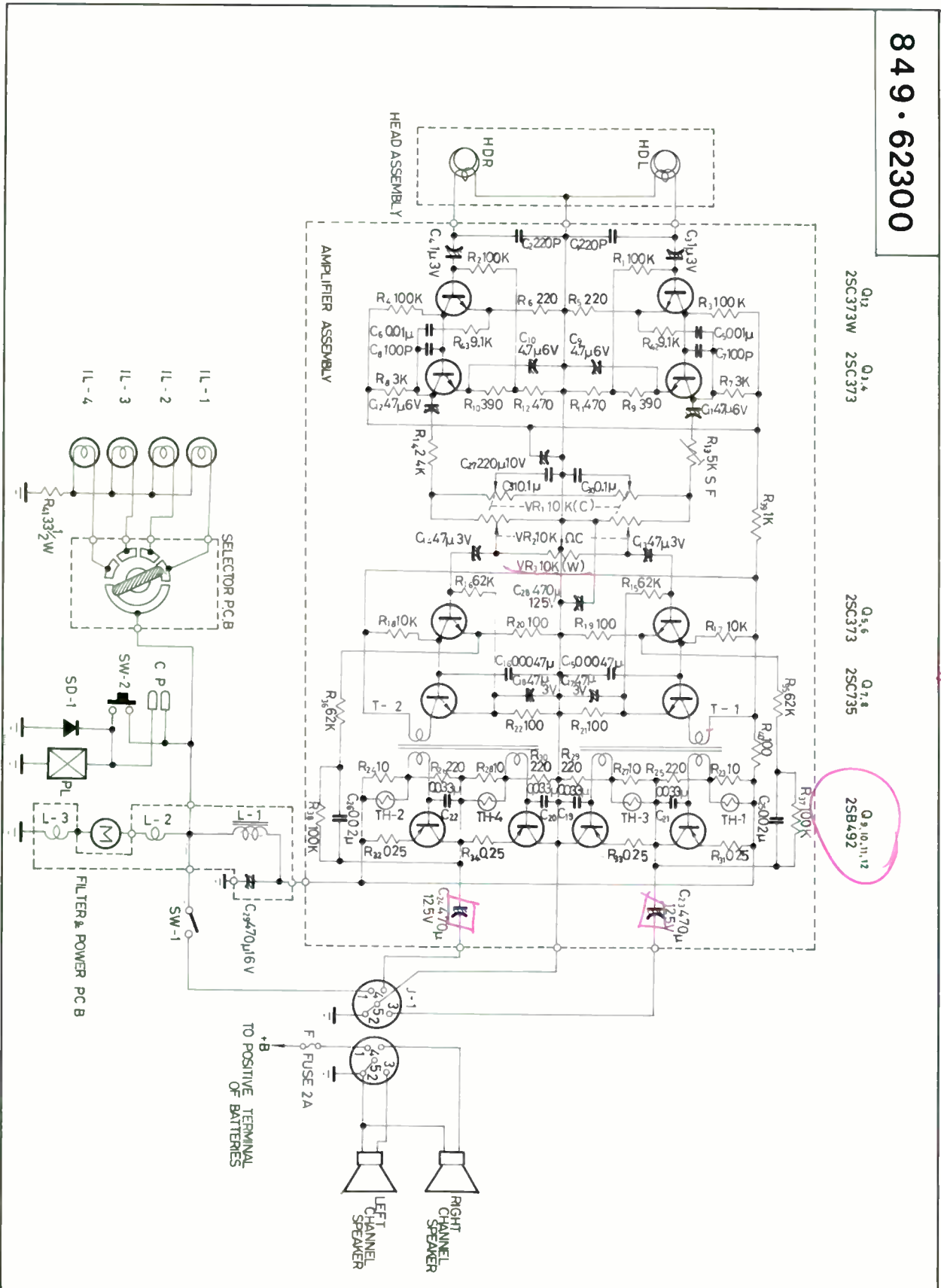
Fig. 17

TROUBLE-SHOOTING

Symptom	Possible Cause	Remedy
Program lamp does not light. Tape does not move.	<ol style="list-style-type: none"> 1. Power fuse has blown. 2. Fuse and fuse holder are in poor contact. 3. Power wires are poorly connected. 	<ol style="list-style-type: none"> 1. Replace the fuse. 2. Polish the contacts of fuse holder with emery-paper. 3. Make sure to link the fuse holder. Polish the battery connecting tips with emery-paper and/or reconnect the other hot terminal connection. 4. Replace the power switch or adjust the contacting position.
Fuse blows when the power switch is turned on.	<ol style="list-style-type: none"> 5. Loudspeaker lead wire or loudspeaker internal circuit is shorted. 6. A positive lead wire inside the unit is shorted. 7. Circuit inside the motor is shorted. 8. Capacitor C₂₉ (470 μF) is shorted. 	<ol style="list-style-type: none"> 5. Replace the lead wire or cover it with vinyl tape. 6. Correct the lead wire by replacement, resoldering, etc. 7. Replace the motor assembly. 8. Replace the capacitor.
Program lamp lights, but tape does not move.	<ol style="list-style-type: none"> 9. Drive belt is loose. 10. Screws of motor pulley is loose and the pulley idles. 11. Motor is frozen or burnt. 12. Capstan is frozen. 	<ol style="list-style-type: none"> 9. Replace the drive belt. 10. Tighten the screws. 11. Replace the motor assembly. 12. Remove the flywheel, clean the shaft and bearing, and lubricate. Or, replace the flywheel and flywheel bearing. 13. Have the tape cartridge replaced.
Tape cartridge cannot be set smoothly.	<ol style="list-style-type: none"> 14. Head or tape guide position is maladjusted. 15. Tape cartridge is faulty. 	<ol style="list-style-type: none"> 14. Re-adjust the position of head or tape guide. 15. Have the tape cartridge replaced.
Wow and flutter are intensive.	<ol style="list-style-type: none"> 16. Side of pinch roller is dented. 17. Drive belt has elongated and is loose. 18. Motor rotation is unstable. 19. Capstan is almost frozen. 	<ol style="list-style-type: none"> 16. Have the tape cartridge replaced. 17. Replace the drive belt. 18. Replace the motor assembly. 19. Remove the flywheel, clean the shaft and bearing, and lubricate. Or, replace the flywheel and flywheel bearing.
	<ol style="list-style-type: none"> 20. Tape movement is irregular slips as pinch roller, capstan, flywheel, drive belt or motor pulley is oily or dirty. 21. Tape in the cartridge is wound hard, or has been abraded and elongated. 22. Pinch roller of the cartridge is eccentric. 	<ol style="list-style-type: none"> 20. Clean oil from the pinch roller, capstan, flywheel, drive belt and motor pulley with cloth dampened with alcohol or equivalent solvent. 21. Have the tape cartridge replaced. 22. Have the tape cartridge replaced.
Electrical and mechanical noises are high.	<ol style="list-style-type: none"> 23. Ignition noise of the automobile. 24. Motor generates noise. 25. Capstan generates noise. 	<ol style="list-style-type: none"> 23. Repair or replace the filter and power P.C. board assembly. 24. Replace the motor assembly. 25. Lubricate the flywheel bearing, or replace the flywheel. 26. Have the tape cartridge replaced.
	<ol style="list-style-type: none"> 26. Rotary parts and tape pad arm of the tape cartridge generate noise. 27. Transistor, resistor or capacitor of the amplifier P.C. board is defective. 28. Head is magnetized, case and core is not shorted, or a soldered part is not completely connected. 29. Head assembly is almost shorted to the chassis. 	<ol style="list-style-type: none"> 26. Have the tape cartridge replaced. 27. Check Q₁, Q₂ (2SC373W), R₁, R₂, R₃ and R₄ (100 kΩ), and replace faulty ones. 28. Demagnetize or replace the head, short the case and core, or completely solder the part. 29. Replace and adjust the insulating board of the head arm assembly, or repair so that the head arm assembly does not touch the chassis.
No output or a low output.	<ol style="list-style-type: none"> 30. Speaker or speaker lead wire is in bad connection, or speaker winding is broken. 31. Recorded sound on the tape is erased or the tape is abraded. 	<ol style="list-style-type: none"> 30. Replace the speaker or repair the connection. 31. Have the tape cartridge replaced.

Symptom	Possible Cause	Remedy
	<p>32. Amplifier assembly is faulty.</p> <p>33. Head is faulty or maladjusted.</p> <p>34. Head face is dirty.</p> <p>35. Power voltage is lower than the required value.</p> <p>36. Tape pad arm of the tape cartridge is bent and the pad is not working.</p> <p>37. Head is projecting or retracted too much.</p>	<p>32. Check the voltages of transistor in each stage of the amplifier. Also check C₂₃ and C₂₄. Repair or replace faulty parts.</p> <p>33. Replace or re-adjust the head.</p> <p>34. Clean the head face with cloth and alcohol or equivalent solvent.</p> <p>35. Check the terminal voltage of the power source (12 V DC). If the voltage is low, re-connect the unit to a nearer power source.</p> <p>36. Correct the tape pad arm to the required position, or have the cartridge replaced.</p> <p>37. Adjust the head position.</p>
High distortion.	<p>38. Power voltage is lower or higher the required value.</p> <p>39. Amplifier assembly is faulty.</p> <p>40. Record sound on the tape is distorted or the tape has been abraded.</p> <p>41. Voice coil of the speaker touches the magnet or the cone paper is broken.</p>	<p>38. Check the power voltage (10.7~16 V).</p> <p>39. Check voltages of the transistor in each amplifier stage. Check the mylar film (power transistor insulator) of Q₉, Q₁₀, Q₁₁ and Q₁₂, and if the film is shorted, replace it. Replace or repair defective parts.</p> <p>40. Have the tape cartridge replaced.</p> <p>41. Replace the speaker.</p>
Crosstalk is intensive.	<p>42. Head height is maladjusted.</p> <p>43. Record sound on the tape is bad in quality.</p> <p>44. Cam vertically moving the head is faulty.</p>	<p>42. Re-adjust the head height.</p> <p>43. Have the tape cartridge replaced.</p> <p>44. Replace the cam.</p>
Treble is not reproduced.	<p>45. Head face is dirty.</p> <p>46. Head face has been abraded.</p> <p>47. Head is faulty or maladjusted.</p> <p>48. Tape pad arm of the tape cartridge is bent and the pad is not working.</p>	<p>45. Clean the head face with cloth and alcohol or equivalent solvent.</p> <p>46. Replace the head.</p> <p>47. Replace or re-adjust the head.</p> <p>48. Correct the tape pad arm to the required position, or have the cartridge replaced.</p>
Howling occurs.	<p>49. Speaker lead wire is too close to the head.</p> <p>50. Amplifier assembly is faulty.</p> <p>51. Head arm assembly is almost shorted to the chassis.</p>	<p>49. Let the speaker lead wire away from the head.</p> <p>50. Check capacitors C₁₉ through C₂₄. Replace the defective capacitor. Check soldered parts on the amplifier P.C. board. Re-solder the poorly soldered parts.</p> <p>51. Replace and adjust the insulating board of the head arm assembly, or repair so that the head arm assembly does not touch the chassis.</p>
Program cannot be changed although the program lamp changes.	<p>52. Head arm is maladjusted.</p> <p>53. Head height adjusting screw is faulty.</p> <p>54. Head arm hinges are faulty.</p>	<p>52. Adjust the head.</p> <p>53. Replace the screw.</p> <p>54. Replace the head arm assembly.</p>
Amplifier and motor operate, but some or all program lamps do not change.	<p>55. Program selector switch is faulty.</p> <p>56. Lamp selector P.C. board is faulty.</p> <p>57. Lamp selector P.C. board and slide piece are in poor contact.</p> <p>58. Cam pushing lever vertically moving the head is in incorrect position.</p> <p>59. Plunger is faulty.</p>	<p>55. Replace the switch.</p> <p>56. Replace the board.</p> <p>57. Disassemble and clean them with alcohol or equivalent solvent, or replace them.</p> <p>58. Adjust the cam pushing lever.</p> <p>59. Replace the plunger.</p>
Sound reproduction is abnormal when vertical vibration occurs.	<p>60. Head arm pressure is low.</p>	<p>60. Adjust the head arm pressure adjusting spring.</p>

849 • 62300



Q1,4 25C373W 25C373
 Q5,6 25C373 25C735
 Q7,8 25C735
 O3, 10.11.12 25B492

25C735

Fig. 18 Schematic Circuit Diagram

SEARS EIGHT-TRACK MOBILE STEREO TAPE PLAYER MODEL NO. 849. 62300

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN ON THIS LIST;

1. PART NUMBER
 2. PART NAME
 3. MODEL No.—849. 62300
 4. NAME OF ITEM—STEREO TAPE PLAYER
- ALWAYS ORDER BY PART No.—NOT BY KEY No.

PARTS LIST FOR SCHEMATIC CIRCUIT DIAGRAM

NOTE: Resistors; In ohm, unless otherwise noted K=Kilohm, M=Megohm, W=Watt
Capacitors; In μF , unless otherwise noted P= μF .

Ref. Key	Parts No.	Description	
R1, R2	Y05-346-K	Carbon Resistor	100K 1/4W
R3, R4	"	"	" "
R37, R38	"	"	" "
R5, R6	Y05-264-K	"	220K "
R19, R20	Y05-258-K	"	100K "
R21, R22	"	"	" "
R40	"	"	" "
R7, R8	Y05-297-K	"	3K "
R9, R10	Y05-271-K	"	390 "
R11, R12	Y05-274-K	"	470 "
R13	C92-605-0	Semi-Variable Resistor	5K S.F.
R14	Y05-294-K	Carbon Resistor	2.4K 1/4W
R15, R16	Y05-338-K	"	62K "
R35, R36	"	"	" "
R17, R18	Y05-317-K	"	10K "
R23, R24	Y05-231-K	"	10 "
R27, R28	"	"	" "
R25, R26	Y05-264-K	"	220 "
R29, R30	"	"	" "
R31, R32	Y40-002-K	Flexible Wire Resistor	0.25 1/2W
R33, R34	"	"	0.25 1/2W
R39	Y05-287-K	Carbon Resistor	1K 1/4W
R41	Y04-441-K	"	33 1/2W
C1, C2	C07-104-K	Ceramic Capacitor	220P/50V
C3, C4	C00-002-P	Electrolytic Capacitor	1/3V
C5, C6	C03-230-K	Mylar Capacitor	0.01/50V
C25, C26	C03-234-K	"	0.02/50V
C7, C8	C07-101-K	Ceramic Capacitor	100P/50V
C9, C10	C00-113-P	Electrolytic Capacitor	4.7/6V
C11, C12	"	"	"
C13, C14	C00-033-P	"	47/3V
C17, C18	"	"	"

Ref. Key	Parts No.	Description	
C15, C16	C03-218-K	Mylar Capacitor	0.0047/50V
C19, C20	C03-239-K	"	0.033/50V
C21, C22	"	"	"
C23, C24	C00-353-P	Electrolytic Capacitor	470/12V
C28	"	"	"
C27	C00-247-P	"	220/10V
C29	C00-533-P	"	470/16V
C30, C31	C03-254-K	Mylar Capacitor	0.1/50V
VR-1	C82-615-0	10K, 2 Sect. B (Tone)	
VR-2	C82-614-0	10K, 2 Sect. C (Volume)	
VR-3	C82-609-0	10K, W (Balance)	
T1, T2	T62-603-0	Driver Transformer 1500 ohm, 100 ohmx2	
L-1	T63-613-0	Choke Coil	
L-2, L-3	T63-612-0	Choke Coil	
Q1, Q2	G05-011-A	Transistor	2SC373W
Q3, Q4	G05-010-A	"	2SC373
Q5, Q6	"	"	"
Q7, Q8	G05-015-D	"	2SC735
Q9, Q10	G04-703-A	"	2SB492
Q11, Q12	"	"	"
TH1, TH2	G10-003-A	Thermistor MT-010	
TH3, TH4	"	"	
D1	G00-502-A	Diode SD-1Y	
PL	N15-604-A	Plunger	
IL1, IL2	E32-604-A	Indicator Lamp	
IL3, IL4	"	"	
HD-L/R	P52-601-0	Head	
M	W71-750-0	Motor Assembly	
SW1	S21-602-0	Power Switch	
SW2	S21-002-0	Program Switch	
F	E21-005-0	Fuse 2A	

SEARS EIGHT-TRACK MOBILE STEREO TAPE PLAYER MODEL NO. 849. 62300

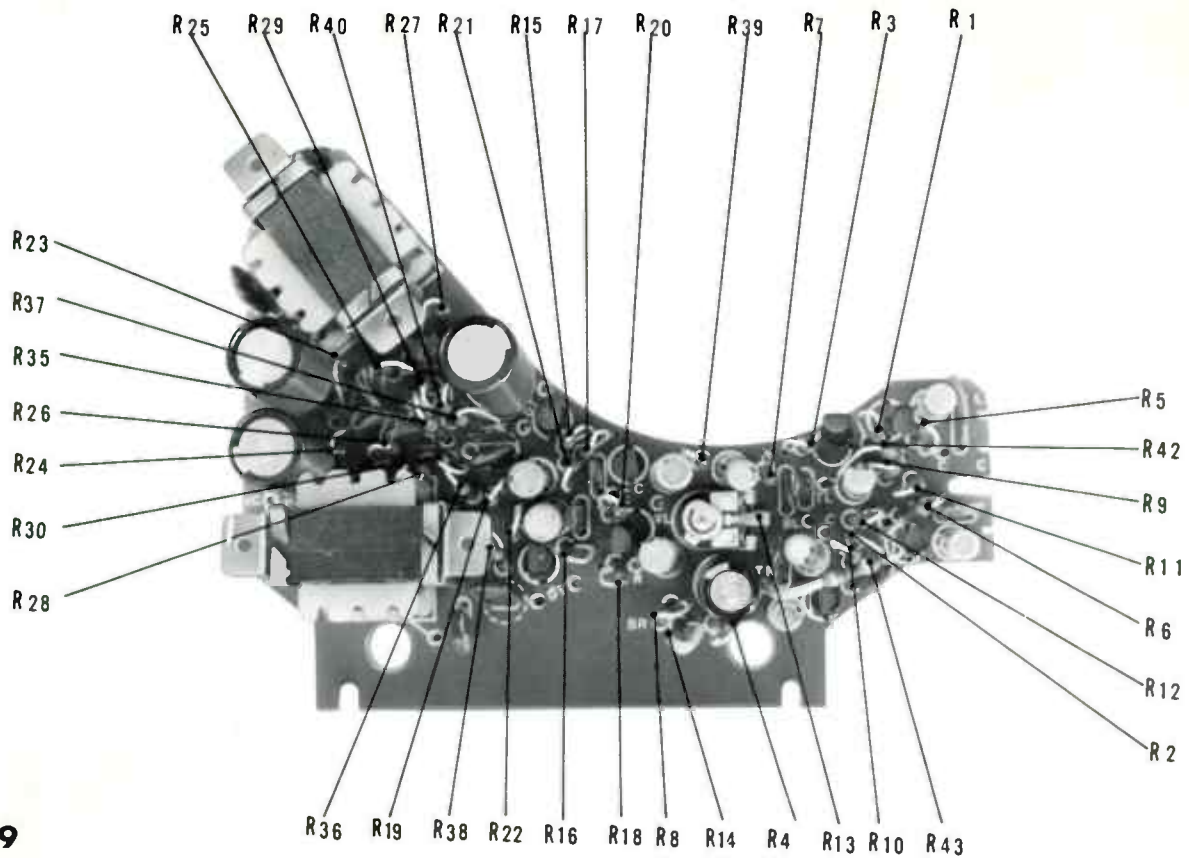


Fig. 19

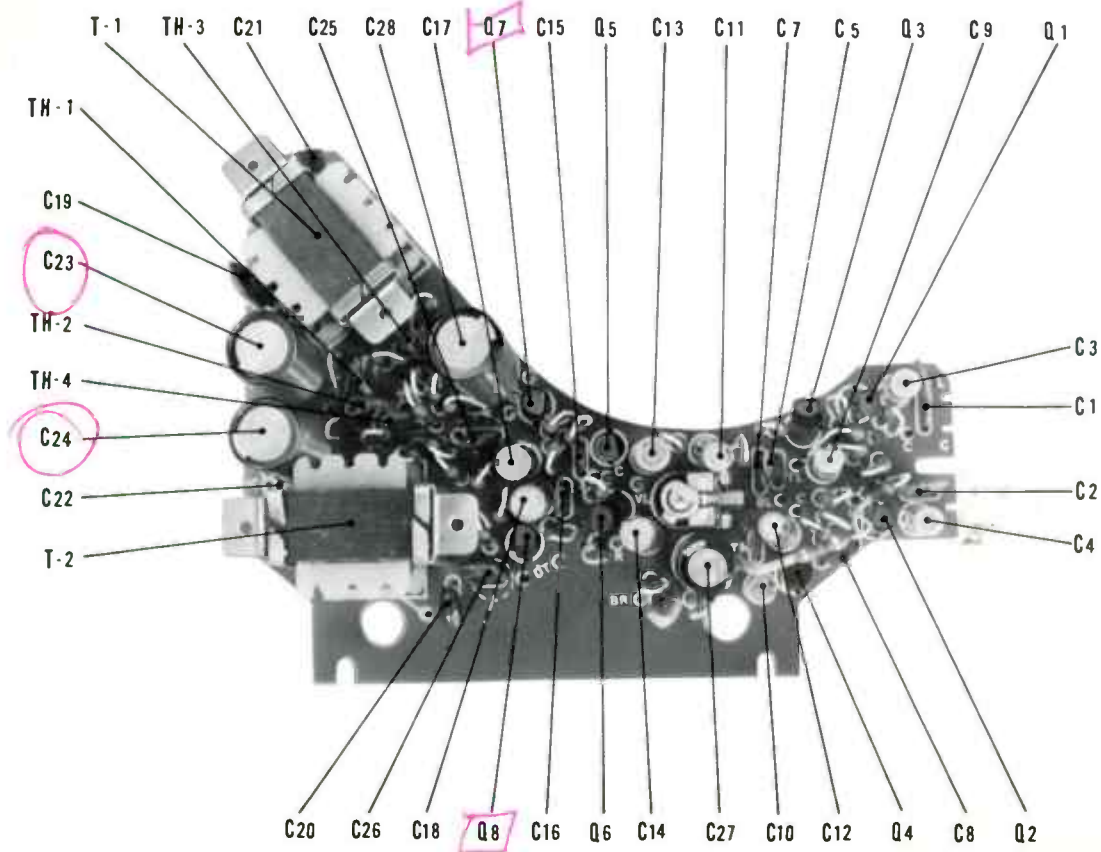


Fig. 20

**SEARS EIGHT-TRACK MOBILE STEREO TAPE PLAYER MODEL NO. 849. 62300
AMPLIFIER P. C. BOARD AND FILTER & POWER P. C. BOARD**

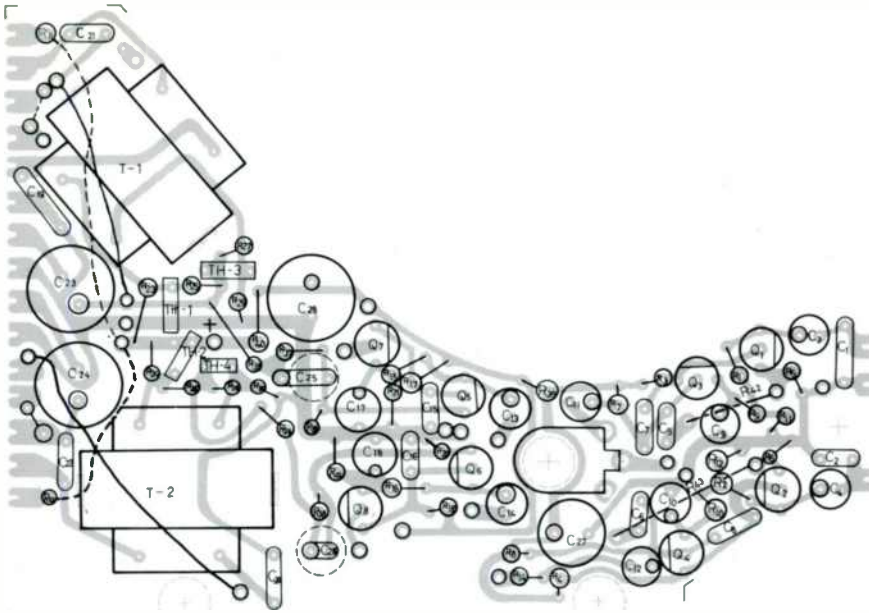


Fig. 21

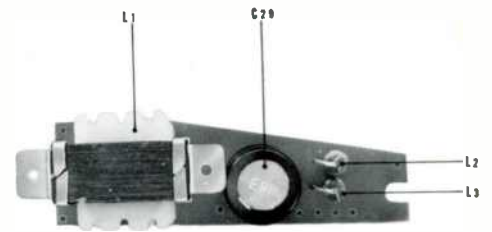


Fig 22

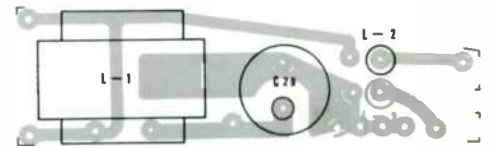


Fig 23

Ref. Key	Parts No.	Description	
R1, R2	Y05-346-K	Carbon Resistor	100K 1/4W
R3, R4	"	"	" "
R37, R38	"	"	" "
R5, R6	Y05-264-K	"	220K "
R19, R20	Y05-258-K	"	100K "
R21, R22	"	"	" "
R40	"	"	" "
R7, R8	Y05-297-K	"	3K "
R9, R10	Y05-271-K	"	390 "
R11, R12	Y05-274-K	"	470 "
R13	C92-605-0	Semi-Variable Resistor	5K S.F.
R14	Y05-294-K	Carbon Resistor	2.4K 1/4W
R15, R16	Y05-338-K	"	62K "
R35, R36	"	"	" "
R17, R18	Y05-317-K	"	10K "
R23, R24	Y05-231-K	"	10 "
R27, R28	"	"	" "
R25, R26	Y05-264-K	"	220 "
R29, R30	"	"	" "
R31, R32	Y40-002-K	Flexible Wire Resistor	0.25 1/2W
R33, R34	"	"	0.25 1/2W
R39	Y05-287-K	Carbon Resistor	1K 1/4W
R41	Y04-441-K	"	33 1/2W
C1, C2	C07-104-K	Ceramic Capacitor	220P/50V
C3, C4	C00-002-P	Electrolytic Capacitor	1/3V
C5, C6	C03-230-K	Mylar Capacitor	0.01/50V
C25, C26	C03-234-K	"	0.02/50V
C7, C8	C07-101-K	Ceramic Capacitor	100P/50V
C9, C10	C00-113-P	Electrolytic Capacitor	4.7/6V
C11, C12	"	"	"
C13, C14	C00-033-P	"	47/3V
C17, C18	"	"	"

Ref. Key	Parts No.	Description	
C15, C16	C03-218-K	Mylar Capacitor	0.0047/50V
C19, C20	C03-239-K	"	0.033/50V
C21, C22	"	"	"
C23, C24	C00-353-P	Electrolytic Capacitor	470/12V
C28	"	"	"
C27	C00-247-P	"	220/10V
C29	C00-533-P	"	470/16V
C30, C31	C03-254-K	Mylar Capacitor	0.1/50V
VR-1	C82-615-0	10K, 2 Sect. B (Tone)	
VR-2	C82-614-0	10K, 2 Sect. C (Volume)	
VR-3	C82-609-0	10K, W (Balance)	
T1, T2	T62-603-0	Driver Transformer 1500 ohm, 100 ohmx2	
L-1	T63-613-0	Choke Coil	
L-2, L-3	T63-612-0	Choke Coil	
Q1, Q2	G05-011-A	Transistor	2SC373W
Q3, Q4	G05-010-A	"	2SC373
Q5, Q6	"	"	"
Q7, Q8	G05-015-D	"	2SC735
Q9, Q10	G05-015-E	"	2SC735
Q11, Q12	G04-703-A	"	2SB492
Q11, Q12	"	"	"
TH1, TH2	G10-003-A	Thermistor MT-010	
TH3, TH4	"	"	
D1	G00-502-A	Diode SD-1Y	
PL	N15-604-A	Plunger	
IL1, IL2	E32-604-A	Indicator Lamp	
IL3, IL4	"	"	
HD-L/R	P52-601-0	Head	
M	W71-750-0	Motor Assembly	
SW1	S21-602-0	Power Switch	
SW2	S21-002-0	Program Switch	
F	E21-005-0	Fuse 2A	

SEARS EIGHT-TRACK MOBILE STEREO TAPE PLAYER MODEL NO. 849. 62300

ELECTRICAL COMPONENT PARTS

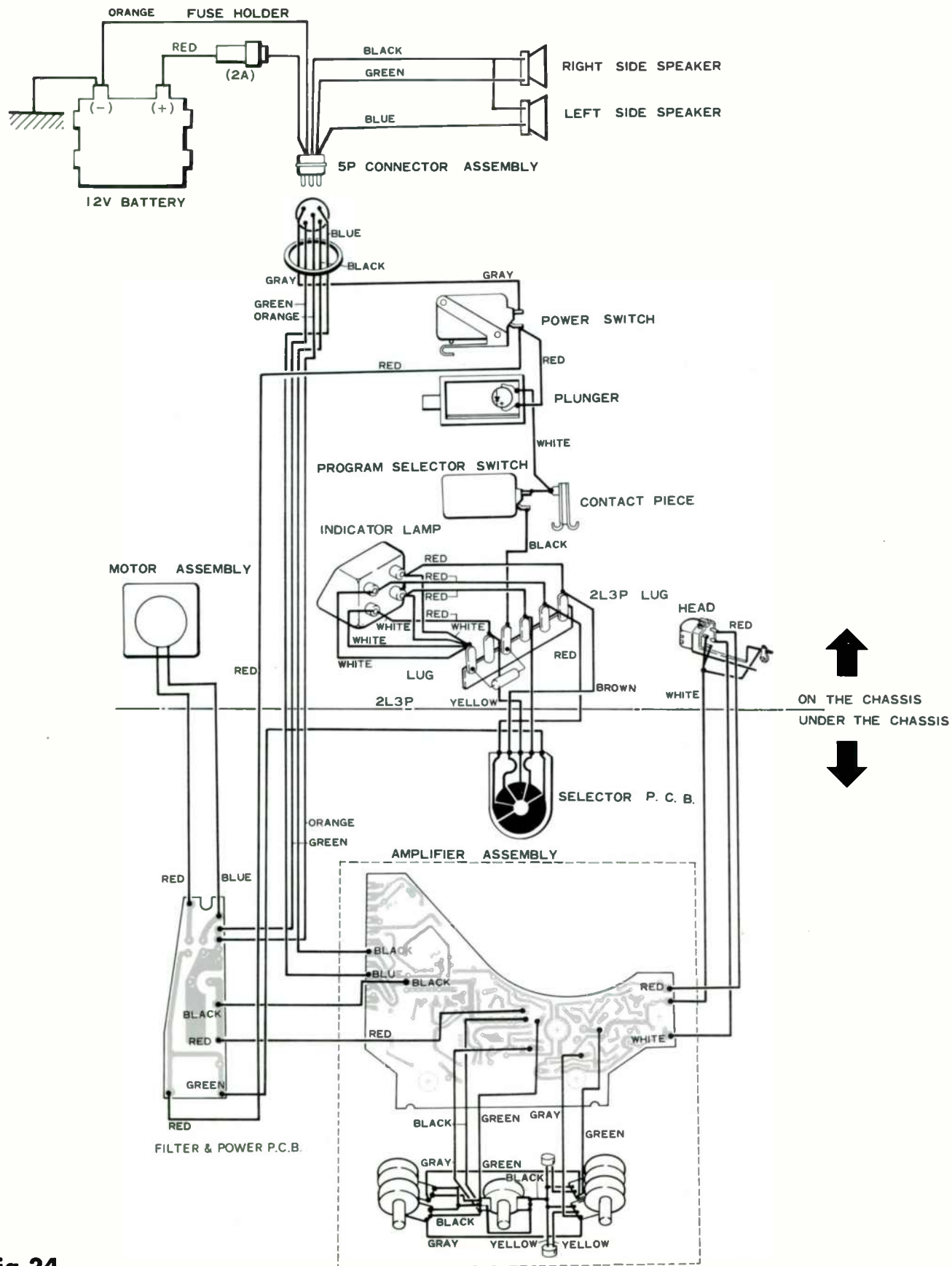


Fig. 24

**SEARS EIGHT-TRACK MOBILE STEREO TAPE PLAYER MODEL NO. 849. 62300
DISASSEMBLY PARTS AND PARTS LIST**

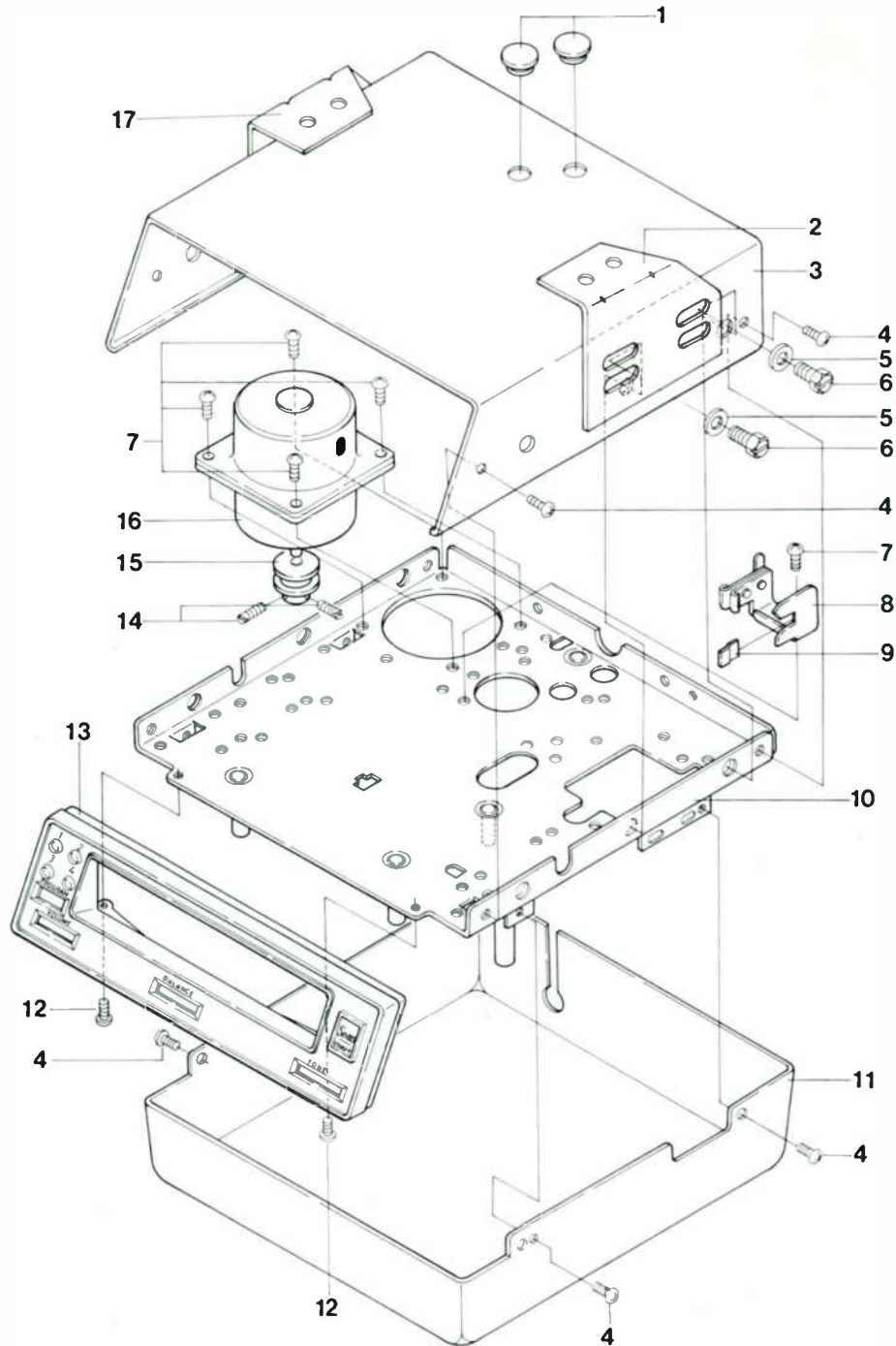


Fig. 25

Ref. Key	Parts No.	Description
1	N93-674-0	Rubber Cap
2	M49-646-A	Mounting Bracket (R)
3	M32-613-0	Upper Case
4	B00-863-E	Plus Brassiere Head Self-tapping Slotted Screw M3 x 6 (Black)
5	B21-613-0	Washer for Mounting Screw
6	B11-651-0	Screw for Mounting Bracket
7	B00-863-C	Plus Brassiere Head Self-tapping Slotted Screw M3 x 6
8	W72-706-B	Tape Guide Assembly

Ref. Key	Parts No.	Description
9	E32-656-0	Tape Protector C
10	W72-733-C	Chassis Assembly
11	M32-614-B	Bottom Case
12	B00-064-C	Plus Round Head Self-tapping Screw M3 x 8
13	M21-612-B	Front Grille
14	B11-608-0	Set Screw
15	N24-608-E	Motor Pulley
16	W71-750-0	Motor Assembly
17	M49-645-A	Mounting Bracket (L)

SEARS EIGHT-TRACK MOBILE STEREO TAPE PLAYER MODEL NO. 849. 62300

DISASSEMBLY PARTS AND PARTS LIST

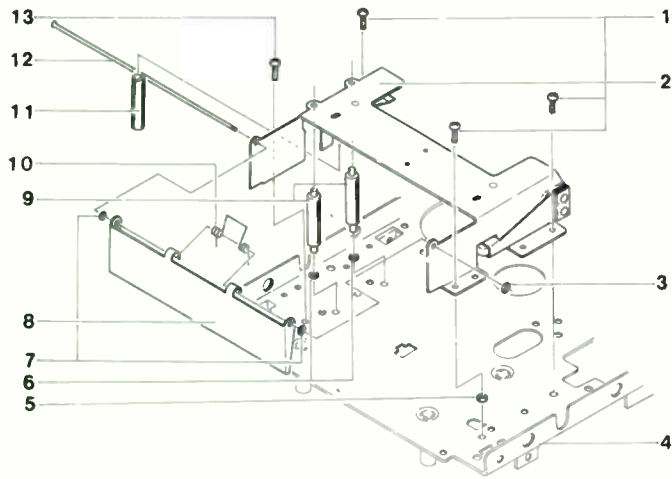


Fig. 26

Ref. Key	Parts No.	Description
1	B00-863-C	Plus Brassiere Head Self-tapping Slotted Screw M3 x 6
2	N62-786-B	Cartridge Guide
3	B20-111-H	E-Type Washer E-1.5
4	W72-733-C	Chassis
5		Teflon Washer M4
6		Teflon Washer M3
7	B23-630-0	Mylar Washer M2
8	N64-692-A	Cartridge Door
9	N54-827-0	Cartridge Guide Roller Shaft
10	B33-614-B	Cartridge Door Spring
11	E32-603-0	Guide Chip
12	B33-613-0	Cartridge Door Shaft
13	B10-263-C	Plus Round Head Screw M3 x 6

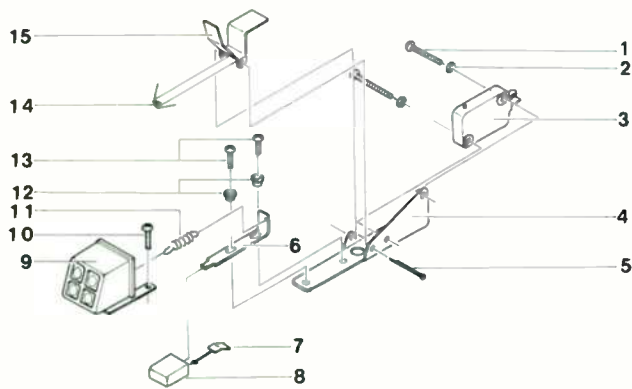


Fig. 27

Ref. Key	Parts No.	Description
1	B10-267-C	Plus Round Head Screw M3 x 14
2	B20-012-C	Spring Washer M3
3	S21-602-0	Program Switch
4	M46-626-B	Program Switch Holder
5	B20-203-B	Split Pin M2 x 15
6	N62-820-0	Program Lever
7	B32-631-0	Program Knob Lock Spring
8	A19-614-0	Program Knob
9	M46-716-0	Lamp Holder
10	B10-263-C	Plus Round Head Screw M3 x 6
11	B31-756-0	Program Lever Return Spring
12	B21-662-B	Program Lever Guide Collar
13	B10-264-C	Plus Round Head Screw M3 x 8
14	B33-612-A	Program Switch Actuator Spring
15	N62-781-A	Program Switch Actuator

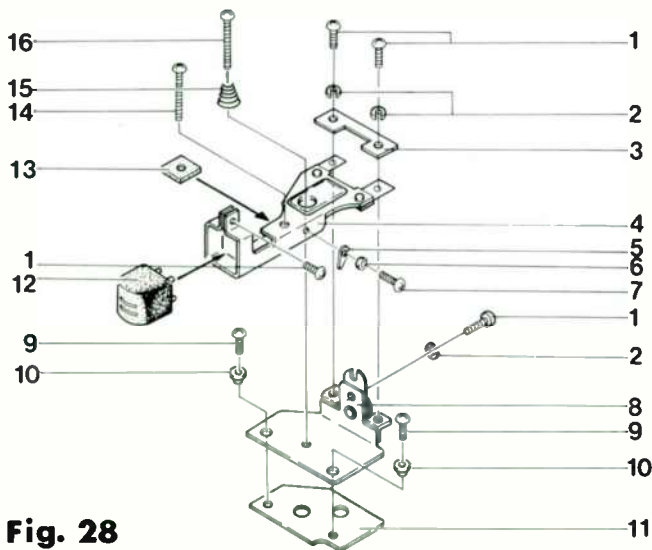


Fig. 28

Ref. Key	Parts No.	Description
1	B10-211-C	Plus Round Head Screw M2.6 x 6
2	B20-011-C	Spring Washer M2.6
3	N61-798-0	Hinge Supporting Plate
4	W72-707-A	Head Arm Unit
5	K16-663-0	Oval Type Lug M3
6	B20-012-C	Spring Washer M3
7	B10-263-C	Plus Round Head Screw M3 x 6
8	N62-784-0	Hinge Stand
9	B00-865-C	Plus Brassiere Head Self-tapping Slotted Screw M3 x 10
10	E32-633-0	Insulating Bushing
11	E33-633-0	Insulating Sheet
12	P52-601-0	Head
13	E31-712-C	Lock Sheet
14	B11-601-0	Head Height Adjusting Screw
15	B31-768-0	Pressure Adjusting Spring
16	B10-270-C	Plus Round Head Screw M3 x 20

SEARS EIGHT-TRACK MOBILE STEREO TAPE PLAYER MODEL NO. 849. 62300

DISASSEMBLY PARTS AND PARTS LIST

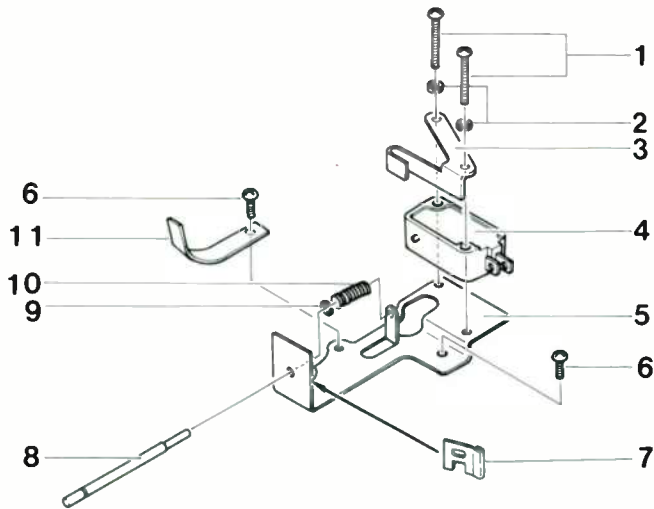


Fig. 29

Ref. Key	Parts No.	Description
1	B10-267-C	Plus Round Head Screw M3 x 14
2	B20-012-C	Spring Washer M3
3	B32-652-0	Power Switch Actuator
4	S21-602-0	Power Switch
5	M44-627-A	Power Switch Supportor
6	B00-863-C	Plus Brassiere Head Self-tapping Slotted Screw M3 x 6
7	B32-668-0	Tape Stopper
8	N54-828-0	Power Switch Push Rod
9	B20-105-H	E-Type Washer E-3.2
10	B31-757-0	Power Switch Spring
11	M46-657-A	Lead Retainer B

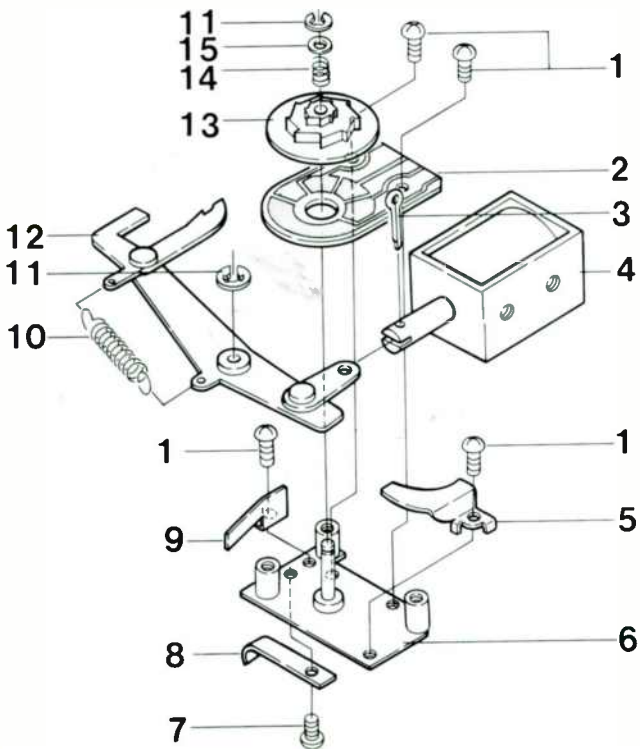


Fig. 30

Ref. Key	Parts No.	Description
1	B10-263-C	Plus Round Head Screw M3 x 6
2	M91-609-B	Lamp Selector P.C.B.
3	B20-202-B	Split Pin M2 x 12
4	N15-604-A	Plunger
5	N62-782-0	Lever Guide
6	W72-710-A	Base Assembly
7	B10-264-C	Plus Round Head Screw M3 x 8
8	M46-657-A	Lead Retainer B
9	B32-637-C	Ratchet Brake Spring
10	B31-756-0	Program Lever Return Spring
11	B20-105-H	E-Type Washer E-3.2
12	W71-775-C	Cam Pushing Lever Unit
13	N26-601-B	Cam
14	B31-707-0	Cam Pushing Spring
15	B22-615-0	Washer D

SEARS EIGHT-TRACK MOBILE STEREO TAPE PLAYER MODEL NO. 849. 62300 DISASSEMBLY PARTS AND PARTS LIST

Ref. Key	Parts No.	Description
1	W73-638-0	Flywheel Bearing Unit
2	E32-637-0	Cushion Ring
3	E33-613-0	Oil Proof Felt
4	W72-749-0	Flywheel Unit
5	N24-606-0	Drive Belt
6	N63-651-0	Flywheel Plate
7	B00-863-C	Plus Brassiere Head Self-tapping Screw M3x6
8	B10-264-C	Plus Round Head Screw M3 x 8
9	B20-012-C	Spring Washer M3

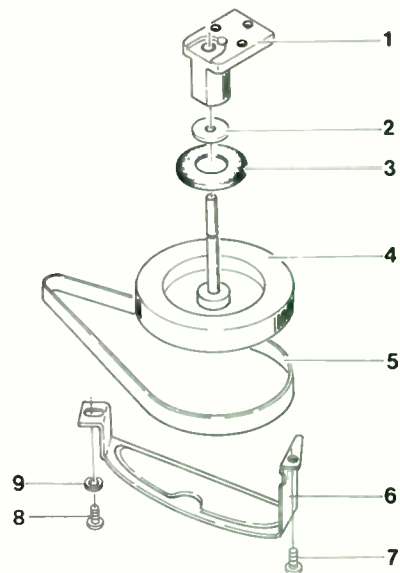


Fig. 31

PACKING CASE AND ACCESSORIES

Parts No.	Description
B11-602-0	Screw for Strap
B71-601-0	Nut for Strap
A55-621-0	I.S.O plate
H43-686-0	Packing Case A
H43-687-0	Packing Case B
H43-675-0	Packing Case C
W72-714-0	Survive Parts Case Assembly

Parts No.	Description
M46-660-0	Strap
R12-658-0	Instruction Book
E13-610-0	Polyethylene Bag 300 (W) X 400 (D) X 0.1 (t)
E36-606-0	Polyethylene Bag 50 (W) X 100 (D) X 0.03 (t)

2SB492

GUARANTEE

SEARS SOLID STATE STEREO TAPE PLAYER

Sears Solid State Stereo Tape Players are guaranteed against defects in material and workmanship for a period of ninety (90) days from date of sale to customer. Transistors are guaranteed for a period of one year from date of sale.

Should a defect occur, return the equipment to us and we will:

- (1) During the first ninety (90) days from date of sale, at our option, either repair or replace and install any defective parts or transistors, free of charge.
- (2) After the ninety (90) day period and for the balance of the year we will replace any defective transistors, charging only for labor.

This guarantee does not apply if examination of the part or of the automobile stereo unit shows that willful abuse, operation not in accordance with the operating manual packed with the unit, or faulty installation was the cause of the service problem.

The cost of de-installation or re-installation of the automobile stereo unit into or from the customer's vehicle is not covered by this guarantee.

We do not authorize any persons or representative to make any other guarantee or to assume for us any liability in connection with the sale of this equipment other than contained herein. Any agreements outside of or contradictory to the foregoing shall be void and of no effect.

This guarantee applies only to Sears equipment purchased and used in the United States.