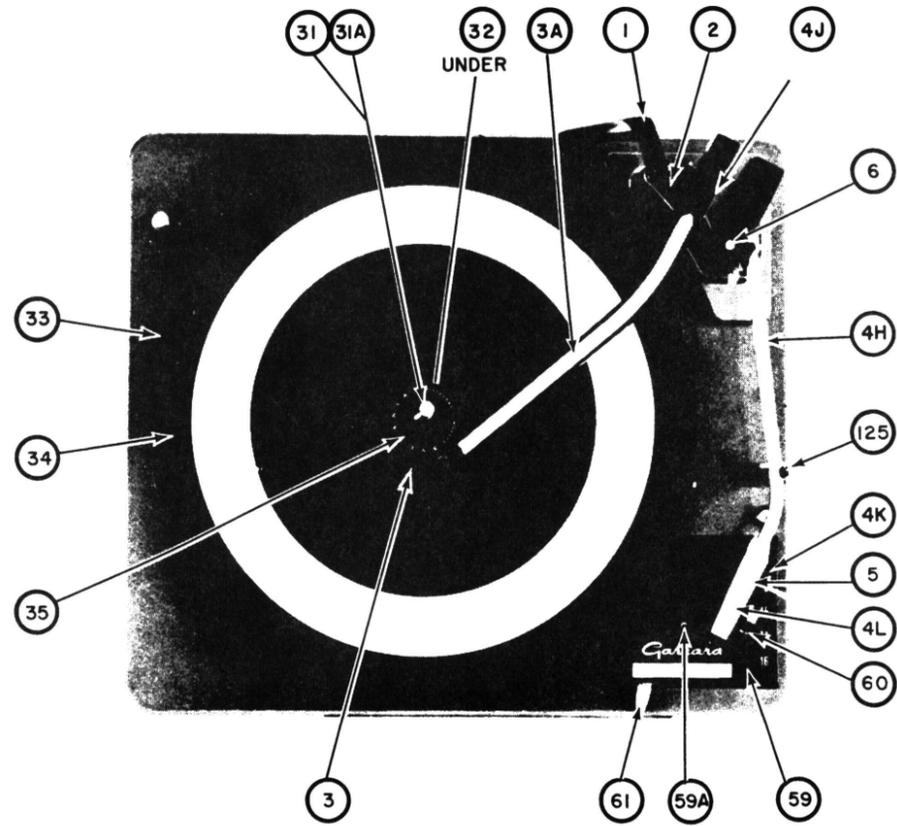
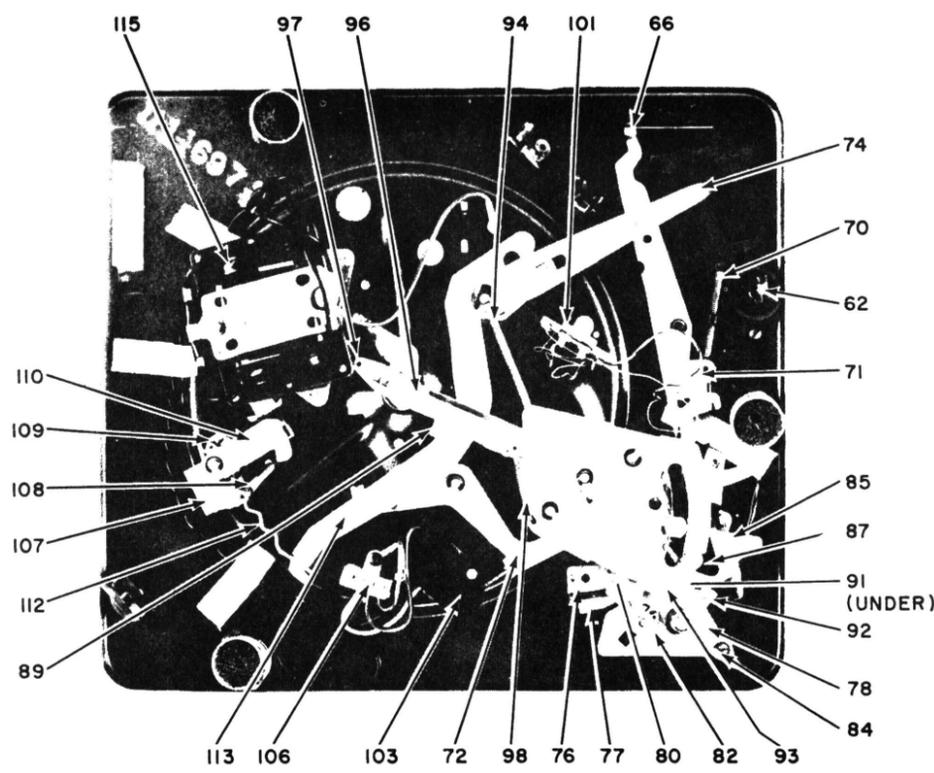


Sylvania Record Changer Part Number 11-18254 -1,-2,-4,-5,-6

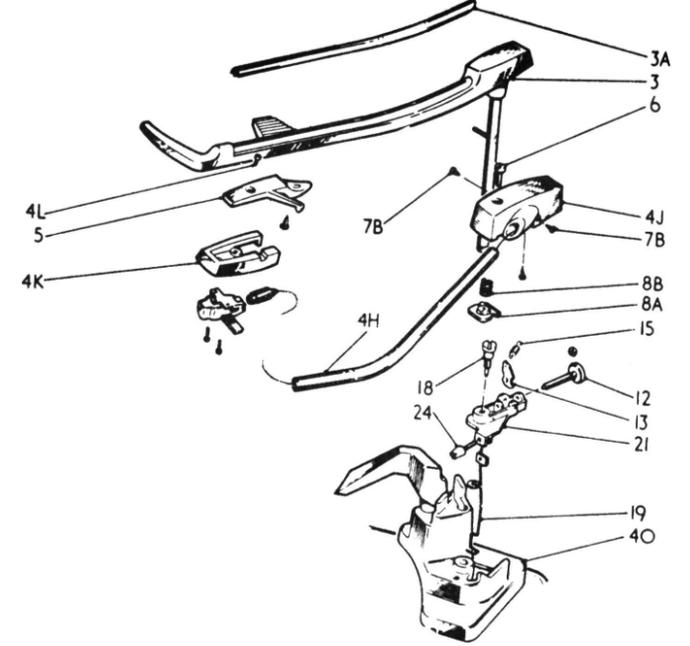
RECORD CHANGER (TOP VIEW)



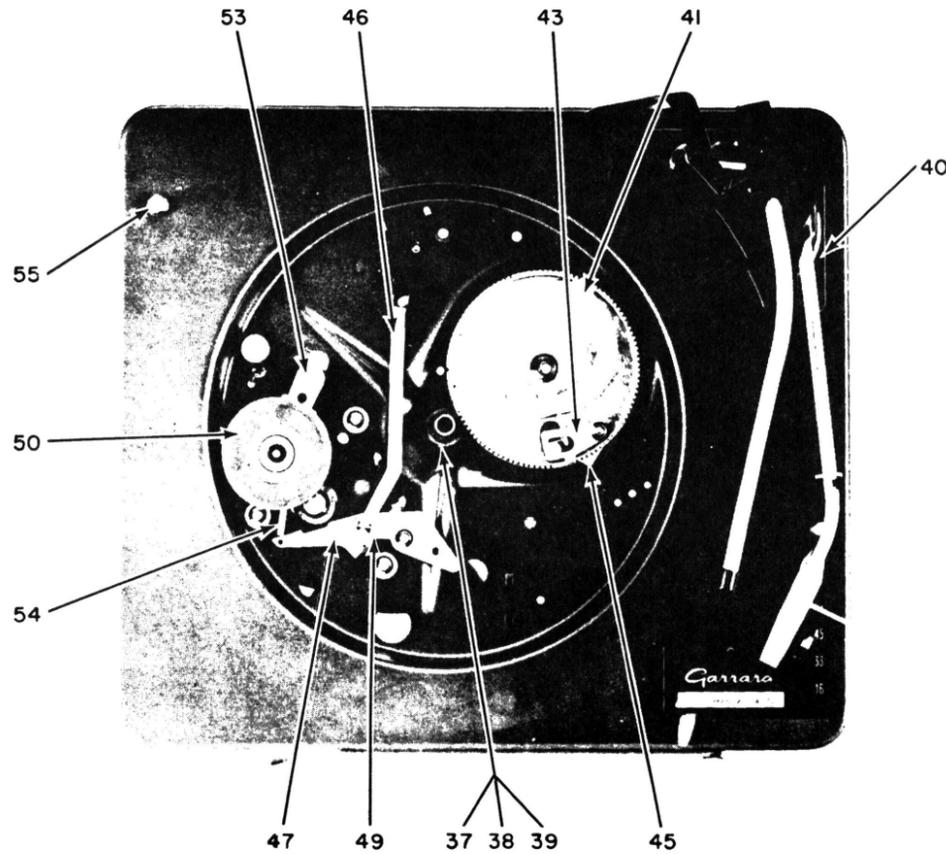
RECORD CHANGER (BOTTOM VIEW)



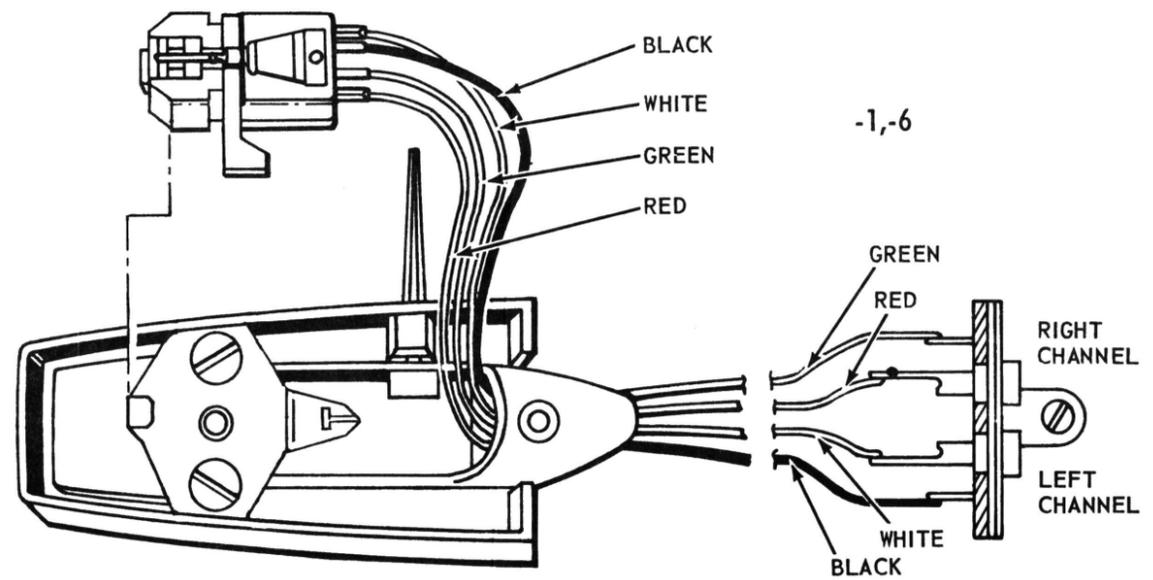
RECORD CHANGER (Garrard Autoslim)



RECORD CHANGER - WITH TURNTABLE REMOVED

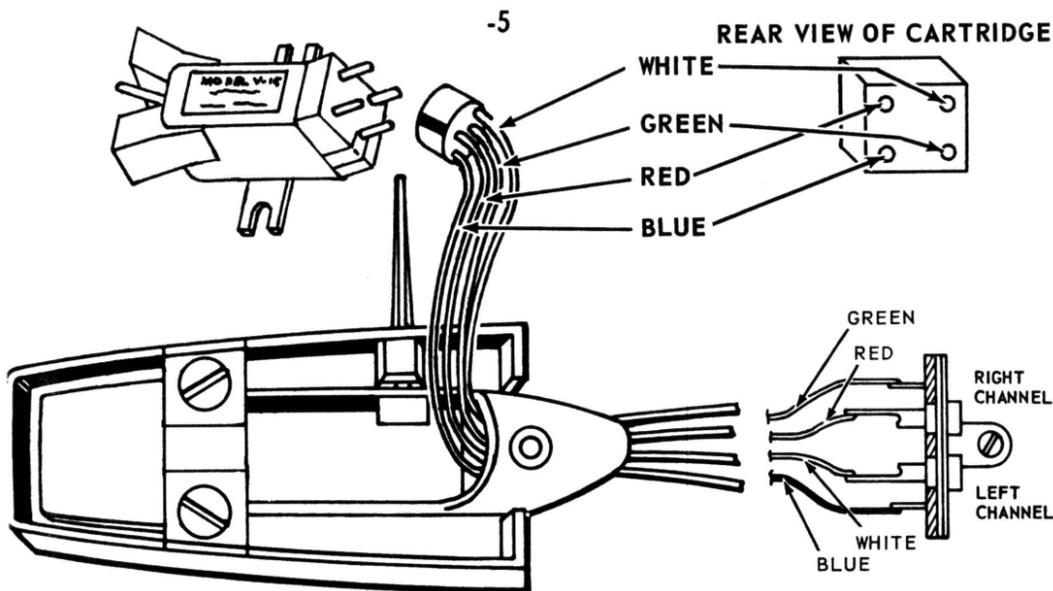
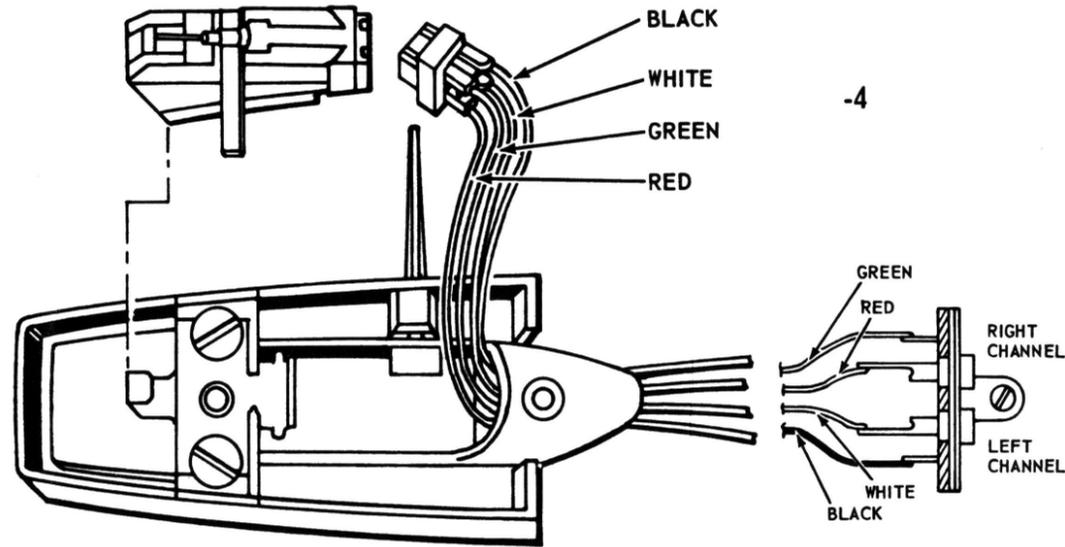
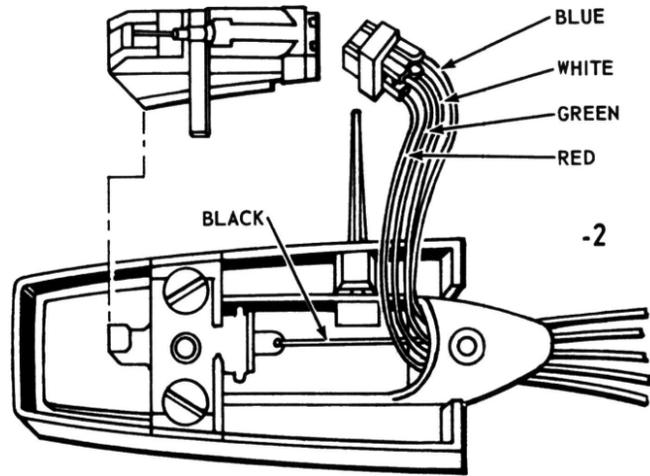


CARTRIDGE WIRING CONNECTIONS



Sylvania Record Changer Part Number 11-18254-1,-2,-4,-5,-6

CARTRIDGE WIRING CONNECTIONS



RECORD CHANGER REPLACEMENT PARTS LIST

REF. NO.	SERVICE PART NO.	DESCRIPTION	REF. NO.	SERVICE PART NO.	DESCRIPTION
1	11-96156-17	Selector (Black)	61	74-18107-1	Control Knob
2	11-96156-18	Selector Extension (Black)	62	11-96165-65	Transit Screw Clip
3	11-10311-10	Overarm Unit (Black)	66	11-10317-3	Control Lever Unit
3A	11-13801-10	Overarm Trim (Silver)	70	11-96139-58	Return Spring
4H	11-96141-14	Pickup Arm Tube (Silver)	71	11-10315-7	Reject Lever
4J	11-96141-4	Pickup Body Machined (Black)	72	11-10315-8	Switch Lever Unit
4K	11-96141-7	Pickup Head Extension (Black)	74	11-10317-4	Speed Control Lever
4L	11-96165-37	Screw (Pickup Head Ext.)	76	11-96164-16	Knob Off Lever
5	11-96141-15	Pickup Head Machined (Silver)	77	11-96164-17	Overarm Lever
6	11-96165-36	Lifting Screw	78	11-96172-2	Lower Casting Assy.
7B	11-96165-38	Pivot Screw	78A	11-96165-66	Pin
8A	11-96165-39	Lifting Plate Machined	80	11-96139-55	Return Spring
8B	11-96139-38	Spring	82	11-10315-9	Selector Lever
12	11-96165-33	Counterbalance Screw Assy.	83	11-96165-10	Fixing Nut
13	11-96165-40	Spring Anchor	84	11-96139-16	Selector Spring
15	11-96139-39	Stylus Pressure Spring	85	11-96159-17	Pickup Lever Unit
18	11-96165-34	Pivot Screw Assy.	87	11-96139-15	Friction Spring
19	11-96139-40	Overload Spring	89	11-96159-18	Trip Link
21	11-96141-5	Pickup Bracket Assy.	91	11-96170-8	Lifting Spindle Unit
24	11-96165-35	Screw (Dropping Position)	92	11-96160-9	Friction Link Unit
31	11-96161-13	Record Spindle Assy. -1,-4,-5,-6	93	11-96180-4	Pickup Cam Unit
31	11-96161-8	Record Spindle Assy. -2	93A	11-96139-59	Return Spring
31A	11-96161-9	Manual Spindle	94	11-96139-10	Index Spring
32	11-96165-41	Spindle Clip	96	11-10315-11	Release Lever
33	11-10309-14	Turntable Assy. -1,-4,-5,-6	97	11-96139-11	Pawl Spring
33	11-10309-11	Turntable Assy. -2	98	11-96139-12	Return Spring
34	74-18199-1	Turntable Mat -1,-2,-4,-5	101	73-98079-2	Twin Phono Socket
34	11-10310-10	Turntable Mat -6	101A	11-96167-11	Muting Switch -4,-5,-6
35	74-14658-1	Nameplate -1,-2,-4,-5	101B	11-96139-7	Spring - Muting Switch -4,-5,-6
35	74-14792-2	Nameplate (Black) -6	103		Muting Switch Assembly
36	74-14657-1	Turntable Trim -1,-2,-4,-5	A	11-96167-2	Switch Body
37	11-96162-5	Thrust Washer	B	11-96167-3	Switch Blade
38	11-96162-4	Ball Race	C	11-96167-4	Contact Plate
39	11-96162-6	Cushion Ring	D	11-96167-5	Plunger
40	11-96145-5	Upper Casting Assy. -1,-4,-5,-6	E	11-96167-6	Cover
40	11-96145-4	Upper Casting Assy. -2	L	11-96139-7	Spring -1
41	11-96180-2	Cam Unit	L	11-96167-7	Spring -2
43	11-96154-2	Trip Pawl	M	11-96167-11	Muting Switch -1,-2
45	11-96165-11	Pivot Plate Unit	106	73-14206-2	Amplok Plug
46	11-96160-8	Tension Link	107	11-96182-3	Index Bracket Assy.
47	11-96154-20	Tension Lever	107A	11-96159-19	Index Roller
49	11-96139-7	Tension Spring	108	11-96139-13	Index Spring
50	11-96178-2	Interwheel Unit	109	11-96139-14	Lifting Spring
53	11-10315-13	Support Lever Unit	110	11-96182-2	Support Bracket
54	11-96139-57	Interwheel Spring	110A	11-96158-7	Setting Blade
55	11-96165-64	Transit Screw	112	11-96180-13	Speed Cam
59	74-18108-1	Control Moulding	113	11-10315-12	Speed Lever
	74-18106-1	Escutcheon Insert (Blue) -4,-5,-6	115	11-96148-15	(4) Pole Motor -1,-4,-5,-6
59A	11-13801-12	Brush Unit	115	11-96148-13	(4) Pole Motor -2
B	Part of 59A	Brush	115G	11-96148-9	60 Cycle Pulley (4 Pole)
C	Part of 59A	Tube	115M	11-96148-3	Rotor Assy. (4 Pole)
D	Part of 59A	Spring	115P	11-96168-8	Nut (4 Pole)
59E	74-18106-1	Escutcheon Insert (Blue) -1,-2	125	11-96146-7	Pickup Rest Assy. -1,-2
60	74-18107-1	Speed Control Knob	125	11-96146-11	Pickup Rest Assy. -6

MAINTENANCE AND ADJUSTMENTS

TO REMOVE THE TURNTABLE

To remove the turntable, slide off center disc and clip; lift the turntable with equal pressure on opposite sides.

LUBRICATION

The motor, turntable and idler wheel bearings are of the oil-retaining type and rarely need lubricating. When the need for oil is apparent, remove the turntable and lubricate these bearings with a fine grade of machine oil. Carefully remove all traces of surplus oil--especially from the motor pulley, idler wheel tire and inside of turntable rim.

TO NE ARM HEIGHT

The tone arm height is adjusted by turning screw (6) located at the rear of the tone arm. The height should be adjusted so that the stylus point is 27/32" above the turntable mat surface at the outside edge position of a 7" record as the tone arm returns to its rest.

RECORD SPINDLE ASSEMBLY

Place the record spindle in position and rotate it until loca-

tion is felt, then press firmly downwards to secure in turntable clip.

STYLUS SET-DOWN POSITION

To move the tone arm away from the center of the record, turn screw (24) counterclockwise; to move the tone arm toward the center of the record, turn screw (24) clockwise.

STYLUS PRESSURE

The stylus pressure should be 4 gram \pm 1/2 gram. It is recommended that a periodical check be made to see that the correct pressure is maintained. To adjust the stylus pressure, turn adjusting screw (12) clockwise to decrease and counterclockwise to increase stylus pressure.

MOTOR PULLEY AND IDLER WHEEL HEIGHT

The relative height of the motor pulley and idler wheel (50) must be such that, when they are in contact on either the 16, 33 or 45 rpm steps, the lower face of idler wheel (50) is about 1/64" clear of the adjacent pulley step.

TROUBLE CHART (CONT.)

TROUBLE	CAUSE	REMEDY
NUMBERS REFER TO PARTS LIST REFERENCE NUMBERS.		
Tone arm remains in center of record or repeats in record groove when nearing center in record.	a) Stylus pressure too light. b) Worn stylus. c) Cartridge case touching record or record label. d) Tone arm leads too tight. e) Too much friction on automatic trip links.	a) Make sure tone arm pivots freely on pivot screw (7B). If necessary, lubricate pivot spindle (7B) with light machine oil. b) Check stylus with magnifying glass, replace it if worn. c) Check that cartridge bracket mounting screw and cartridge clip mounting screws are tight. Then make sure stylus bar is not bent; if bent, replace it. d) Check that cartridge leads at rear of tone arm have enough slack to allow free tone arm movement. e) Should any stiffness be felt when moving tone arm inward by hand, check associated levers for freeness. Grease trip link (89).
Turntable runs too fast or too slow.	a) Voltage range of motor set incorrectly. b) Stiff idler wheel (50) bearing.	a) Disconnect power supply and check all voltage connections. Also check that switch components are tight and making good contact. Check that the supply voltage is correct and if necessary, check with specification on motor end cover. b) Spin idler wheel (50) to see if it runs freely. If stiff, remove and wipe spindle with a clean rag; then lubricate with light machine oil. Correctly set height adjustment.
Motor will not start.	a) No power being supplied to motor b) Poor electrical connection. c) Open motor coils.	a) Check that current is reaching motor. b) Examine all connections to make sure they are making good electrical contact. c) Check continuity of motor coils. The total resistance should be 195 ohms.
Interference when record is playing.	a) Poor electrical connection. b) Loose cartridge connections.	a) Examine all connections to make sure they are making good electrical contact. b) Make sure the cartridge leads are securely soldered to the cartridge clips.

TROUBLE	CAUSE	REMEDY
Speed slightly fast or slow.	a) Wrong size motor pulley or idler wheel (50).	a) If it is not possible to obtain the correct turntable speed within reasonable limits by following the foregoing "Remedy" carefully check the size of the motor pulley and idler wheel (50). If a replacement pulley or idler wheel is needed, order from replacement parts.
Speed varies erratically.	a) Oil on driving surfaces. b) Motor pulley height incorrect. c) Motor shaft tight. d) Record slipping.	a) Remove turntable and with a clean rag wipe the motor pulley, idler wheel (50) and the inside rim of the turntable to remove any oil or dirt. Remove any other surplus oil that may be observed. b) Check to see if the motor pulley is adjusted properly and that its mounting screws are tight. c) If the motor shaft is tight in its bearings, it will not spin freely when spun with the fingers. This will be caused by using too heavy a lubricating oil or the motor bearings being out of alignment. d) Warped records may slip if placed one on top of another. This may be overcome by sticking a small strip of adhesive tape on the labels of the slipping records.
Speed varies consistently (Wow and Flutter).	a) Tight turntable shaft. b) Dirt on inside of turntable rim. c) Flats on idler wheel (50). d) Bent motor shaft or unbalanced motor rotor.	a) Revolve turntable by hand, without the record changing mechanism in engagement; it should turn freely. If rough or sticky, remove the turntable and clean the turntable shaft and bearing with a clean cloth. Oil the turntable shaft and ball-race (38) with light machine oil. Remove surplus oil. b) Clean inside of turntable rim with a clean cloth. c) Flat spots can sometimes be removed by running the unit continuously for a few hours. If, however, this does not cure the fault, replace idler wheel (50). d) Should the motor shaft with pulley removed be more than .0005" out of alignment, or the motor vibrates badly, the rotor and shaft assembly should be replaced. The rotor and shaft are integral and no attempt should be made to separate them.
Turntable does not revolve when motor is running.	a) Oil on driving surfaces. b) Idler wheel spring (54) broken or disconnected. c) Idler wheel support bracket (110) binding.	a) With a clean cloth wipe the motor pulley, idler wheel (50), and the inside rim of the turntable until all traces of oil have been removed. b) Check that idler wheel spring (54) is still in place. Move the Off-Manual-Auto control to "Manual" and watch the spring to make sure it goes into tension. If not, it means the spring has stretched and should be replaced. c) Check that idler wheel support bracket (110) is free to move in the slot in the unit plate. The idler wheel should firmly engage the motor pulley when moving the Off-Manual-Auto control to "Manual" and freely retract when switching to "Off." If the bracket is stiff, check the speed change mechanism underneath the unit plate.

Sylvania Record Changer Part Number II-18251 THUR II-18254 Series

— TROUBLE CHART (CONT.) —

TROUBLE	CAUSE	REMEDY
Records do not drop.	<ul style="list-style-type: none"> a) Damaged automatic spindle (31). b) Top of spindle pawl rough. c) Record support arm (3) binding. d) Release lever return spring (98) weak or disconnected. e) Pawl spring (97) weak or disconnected. 	<ul style="list-style-type: none"> a) If spindle pawl sticks, replace automatic spindle (31). b) Lightly polish with a fine emery cloth. c) Grease support arm spindle so that arm (3) is free to follow a stack of records downwards as dropping occurs. d) Replace spring (98). e) Replace pawl spring (97).
Stylus consistently lands too far in or out on record.	<ul style="list-style-type: none"> a) Stylus set-down position requires adjustment. b) Selector lever mounting nut (83) loose. c) Selector arm molding (1) damaged or out of position. 	<ul style="list-style-type: none"> a) See "Stylus Set-Down Position" under Adjustments. b) Tighten nut (83). c) Check that selector arm (1) is not chipped or damaged. Check its position thus: With no record on spindle and power off, place Off-Manual-Auto control in "Auto" and revolve turntable by hand. Watch record spindle pawl as it moves out across the record spindle step. Stop turning the turntable when the pawl reaches its outer-most position. Then, with record support arm (3) in its operating position, check that the tip of selector arm (1) is between 4 21/32" and 4 3/4" radius from the turntable center. Also move separately a 10" and then a 12" record slowly down the record spindle and make sure that selector arm (1) catches into its 10" and 12" selecting positions respectively. If selector arm (1) is faulty, it should be replaced.
Tone arm begins to lower, then swings in toward spindle.	<ul style="list-style-type: none"> a) Cartridge leads not free. b) Lifting spring on lifting spindle (91) or friction spring (87) not working. 	<ul style="list-style-type: none"> a) Check that cartridge leads are not strained in any way preventing free movement of the tone arm. b) Replace either spring if faulty.
Stylus fails to track.	<ul style="list-style-type: none"> a) Stylus pressure too light. b) Tone arm pivot not free. c) Worn or wrong size stylus. 	<ul style="list-style-type: none"> a) See "Stylus Pressure" under adjustments. b) Lubricate tone arm pivot screw (7B) with light machine oil. c) Check that stylus is correct for type of record being played. If stylus is worn or damaged, replace it.
Rumble.	<ul style="list-style-type: none"> a) Lack of lubrication on turntable shaft and ball race (38) b) Faulty motor suspension. c) Dirt on idler wheel (50). d) Hardened or cracked idler wheel tire (50). e) Motor pulley out of alignment. 	<ul style="list-style-type: none"> a) Clean turntable shaft and ball race (38) with a clean cloth and lubricate them with light machine oil. b) Check motor suspension. c) Remove dirt with a clean cloth. If necessary, scrape surface of idler wheel (50). d) Replace. e) Make sure pulley mounting screws are equally tightened. If motor rotor shaft is out of alignment, replace it.
Two records drop together.	<ul style="list-style-type: none"> a) Record spindle latch binding. b) Non - standard records. 	<ul style="list-style-type: none"> a) Remove noticeable burrs with a fine file. If necessary, remove latch by driving out cross pin at top of spindle. Make sure latch and its slot are smooth and that latch is flat. Lightly clinch hole to retain pin when reassembling. b) If record center holes are under .053" thick, two may drop together.

TROUBLE	CAUSE	REMEDY
Fails to switch off when last record has played or switches off without playing a record.	<ul style="list-style-type: none"> a) Record support arm (3) binding. b) Excessive friction on control lever (66). 	<ul style="list-style-type: none"> a) Check that record support arm (3), when in its operating position, will drop freely under its own weight when lifted up. If not, remove record support arm (3) and wipe its spindle clean with a cloth, then lightly grease it. Reassemble and check for freeness. b) Check that the movement of control lever (66) is not restricted and its associated levers not damaged. Should any lever be damaged in transit, repair or replace it.
Tone arm does not lower onto record.	<ul style="list-style-type: none"> a) Lifting spindle (91) sticking. b) Tone arm pivot not free. 	<ul style="list-style-type: none"> a) Check that lifting spindle (91) is not fouled by any leads or parts of the mechanism and see that its spring has not slipped over its retaining shoulder. Lubricate lifting spindle (91) with light machine oil. b) Lubricate tone arm pivot spindle (7B) with light machine oil. Check stylus pressure and adjust, if necessary, as described in adjustments.
Stylus jumps first few grooves of record.	<ul style="list-style-type: none"> a) Stylus pressure too light. b) Worn or wrong size stylus. c) Changer not level. d) Cartridge leads too tight. 	<ul style="list-style-type: none"> a) See "Stylus Pressure" under adjustments. b) Check that stylus is correct for type of record being played. If stylus is worn or damaged, replace it. c) Level changer while observing a level on a record on the turntable. d) Check that cartridge leads are not strained in any way preventing free movement of the tone arm as it moves across a record.
Motor runs slowly.	<ul style="list-style-type: none"> a) Lack of lubricant. b) Motor bearings out of alignment. 	<ul style="list-style-type: none"> a) Disassemble motor and clean shaft and bearings with a clean cloth. Lubricate bearings with a thin machine oil and reassemble. b) Tap body of motor with a piece of wood or a screwdriver handle.
Motor runs hot.	<ul style="list-style-type: none"> a) Normal running condition. b) Short circuit in motor coils. c) Insulation leakage to ground. 	<ul style="list-style-type: none"> a) Provided current does not exceed 10 watts or .1 amp. for high voltage range motors or .2 amp. for low range motors, motor temperature is normal. b) Check continuity of coils; the total resistance should be 195 ohms. c) Check the insulation between the coil windings and frame with a 500 volt insulation test meter; it should not be less than 2 megohms.
Mechanical noise.	<ul style="list-style-type: none"> a) Lack of lubrication on turntable shaft and ball race (38). b) Flats on idler wheel (50). c) Loose lever. 	<ul style="list-style-type: none"> a) Clean turntable shaft and ball race (38) with a clean cloth and lubricate them with light machine oil. b) If flats do not smooth out after several hours of continuous running, replace idler wheel (50). c) Touch each lever with finger until offending lever is found. A spot of fine machine oil on its pivot and points of contact usually remedies the trouble.