

Film-Tech

The information contained in this Adobe Acrobat pdf file is provided at your own risk and good judgment.

These manuals are designed to facilitate the exchange of information related to cinema projection and film handling, with no warranties nor obligations from the authors, for qualified field service engineers.

If you are not a qualified technician, please make no adjustments to anything you may read about in these Adobe manual downloads.

www.film-tech.com



R31-E
MAGNETIC SOUND
REPRODUCER
PARTS LIST

PRECISION - MADE



R31-E
MAGNETIC SOUND
REPRODUCER

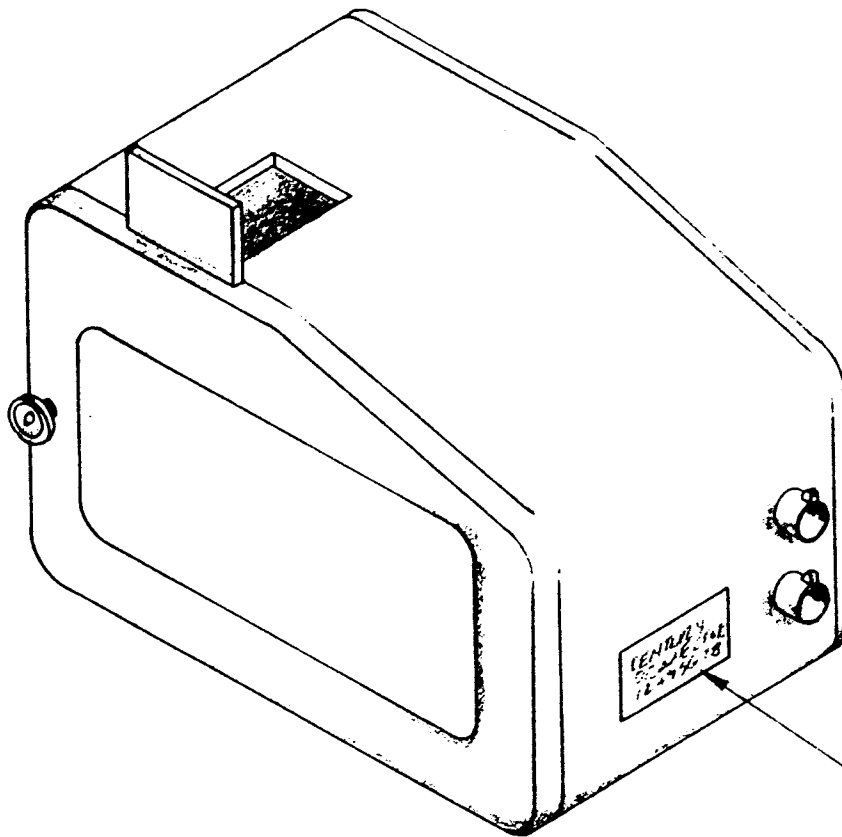
CENTURY PROJECTOR CORPORATION

CENTURY MODEL "R31-E" MAGNETIC PENTHOUSE

TABLE OF CONTENTS

DESCRIPTION OF ASSEMBLY	PAGE NO.
Operating Side, (picture)-----	4, 5
Drive Side, (picture)-----	6, 7
Cover, Drive side-----	20, 21
Damper-----	8, 9
Damper Rollers and Shafts-----	12, 13
Door, operating side-----	20, 21
Idler Roller, 70mm film(lower)-----	14, 15
Idler Roller, 35mm film(large)-----	14, 15
Idler Roller, 35mm film(small)-----	14, 15
Impedance Drum(large)-----	10, 11
Impedance Drum(small)-----	18, 19
Indicator Plates-----	10, 11
Pad Roller Arm-----	18, 19
Sprocket and Shaft-----	16, 17
Stripper(film)-----	12, 13
Terminal Strip-----	22
Upper Film Guide Roller(70 and 35mm)-----	14, 15
Vertical Drive Shaft-----	16, 17

WHEN ORDERING PARTS INCLUDE:
MODEL NO.
SERIAL NO.
PART NO.



MODEL NO. / SERIAL NO. PLATE

CENTURY MODEL "R31-E" MAGNETIC REPRODUCER

<u>Part No.</u>	<u>Description</u>
R31-10	MAIN FRAME AND PIN ASSEMBLY
R31-120A	ASSEMBLY (STRIPPER, FILM SPROCKET)
C1-A-11	ASSEMBLY (DOOR HINGE AND PIN) (2)
BU-29	Bushing Oilite, Sprocket Shaft (2)
BU-728	Bushing Stripper Retaining
CT-86	Catch Door
CN-87	Connector Squeeze (2)
FR-83	Frame Main
PN-21	B.B. Bkt. Locating
PE-219	Plate Name
SC-226	Screw Door Link
SC-565	Screw Door Catch Fastening (2)
SC-594	Screw Name Plate Fastening (4)
SC-661	Screw Hinge Fastening (6)
SC-902	Screw Stripper, Sound Sprocket

ASSOCIATED PARTS

ML-98	<u>Manual</u>	<u>Parts</u>
-------	---------------	--------------

R31-E

PAD ROLLER ARM
J1-C-10 ASS'Y

FILM GUIDE ROLLER ASS'Y
R31-180A

35MM IDLER ROLLER
R31-160

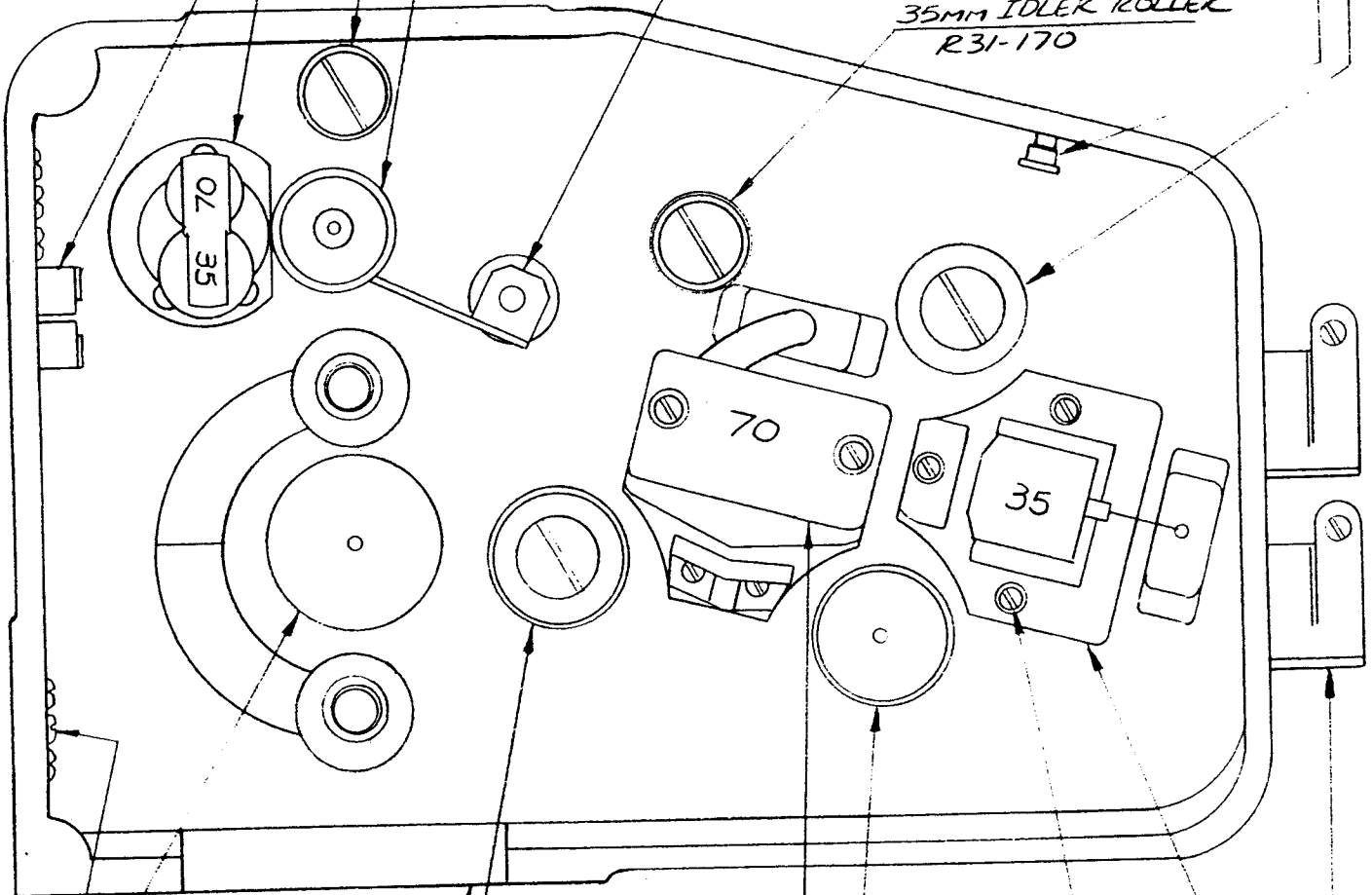
DOOR CATCH & SCREW
CT-86, SC-565

SOUND SPROCKET
SHAFT ASS'Y
R31-220A

SCREW
SC-226

FILM STRIPPER
R31-120A

35MM IDLER ROLLER
R31-170



IMPEDANCE DRUM
ASS'Y (LARGE)
R31-50

MAGNETIC HEAD
(70MM) MH-33

SCREW
SC-81(4)

SCREWS
SC-70(6)

70MM FILM IDLER
ROLLER ASS'Y
R31-190

35MM MAGNETIC HEAD
A1-W-30

FR-B3
MAIN FRAME

IMPEDANCE DRUM ASS'Y
(SMALL) R31-100

SQUEEZE CONNECTOR
CN-87(2)

CENTURY MODEL "R31-E" MAGNETIC REPRODUCER

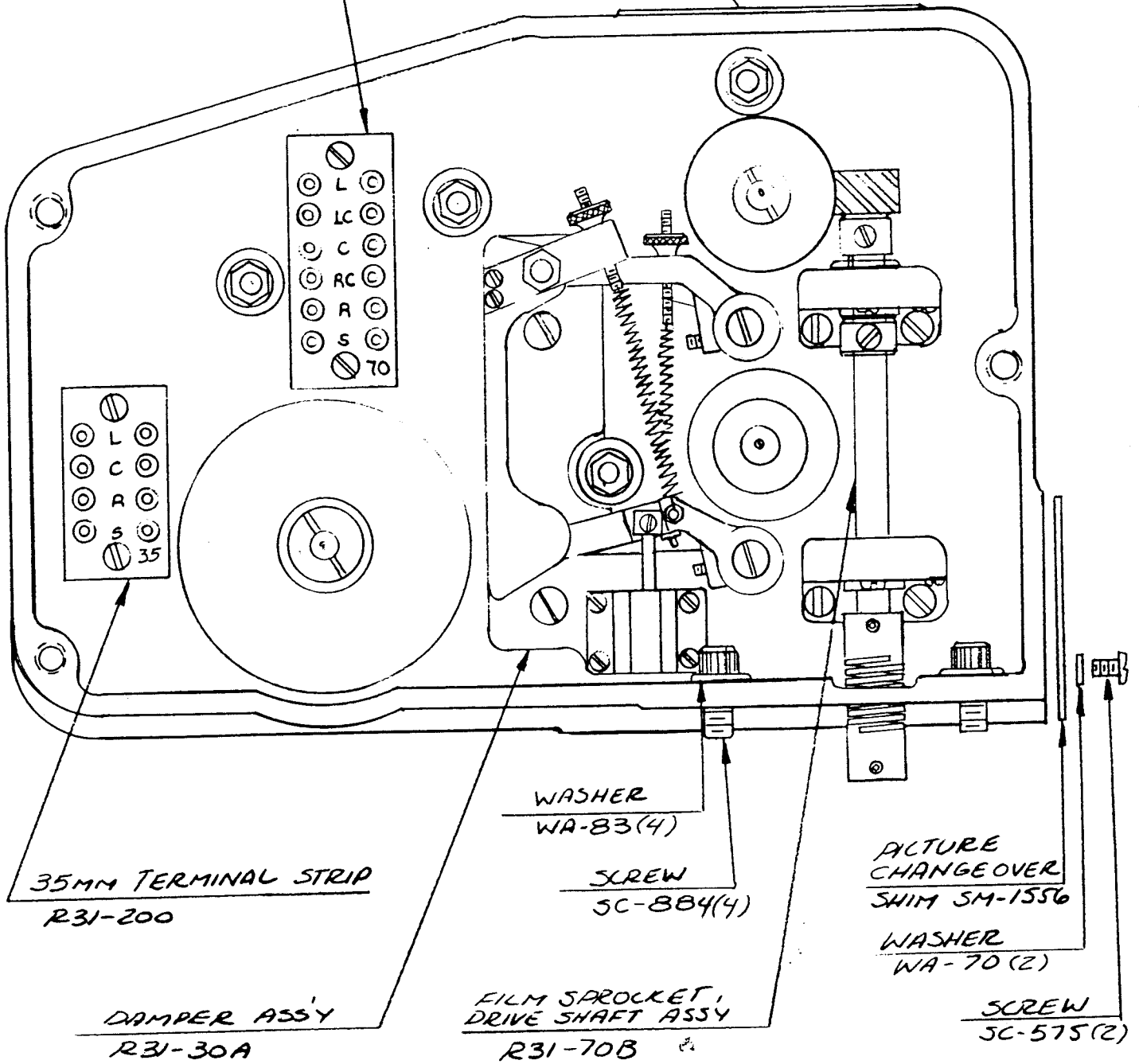
OPERATING-SIDE, PICTURE

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
	A1-W-30	MAGNETIC HEAD 35MM ASSEMBLY
	C1-A-11	DOOR HINGE AND PIN ASSEMBLY
	J1-C-10	PAD ROLLER ARM ASSEMBLY
	R31-50	IMPEDANCE DRUM ASSEMBLY (LARGE)
	R31-100	IMPEDANCE DRUM ASSEMBLY (SMALL)
	R31-120A	STRIPPER ASSEMBLY (SPROCKET)
	R31-160	35MM FILM IDLER ROLLER ASSEMBLY (LARGE)
	R31-170	35MM FILM IDLER ROLLER ASSEMBLY (SMALL)
	R31-180A	35MM AND 70MM FILM GUIDE ROLLER ASSEMBLY
	R31-190	70MM FILM IDLER ROLLER ASSEMBLY
	R31-220A	SOUND SPROCKET SHAFT ASSEMBLY
	CT-86	Catch Door
	MH-33	Mag. Head 70MM (Cluster & Shielding)
	SC-70	Screw Hinge Mounting (6)
	SC-81	Screw Magnetic Head Mounting (4)
	SC-226	Screw Door Link Stop
	SC-565	Screw Door Catch Mounting (2)
	<u>ASSOCIATED PARTS</u>	
	CN-87	Connector Squeeze (2)

"R31-E"

70 MM TERMINAL STRIP & CABLE ASSY
R31-210

FR-83
FRAME

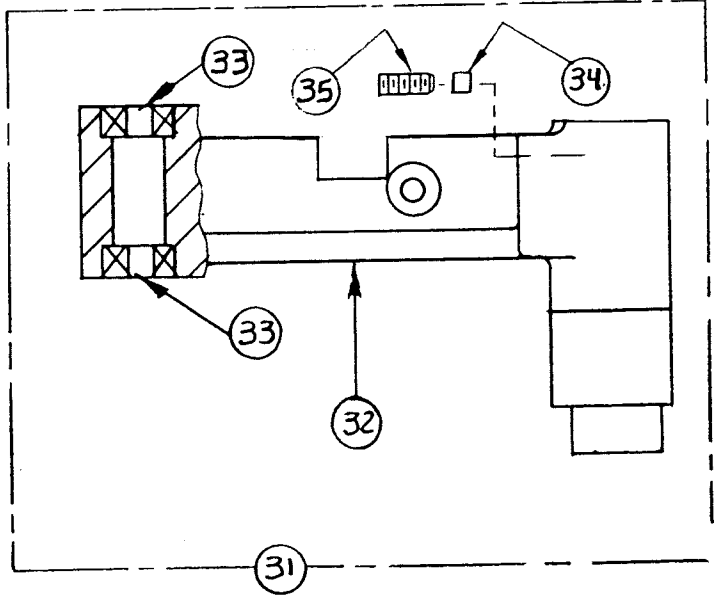
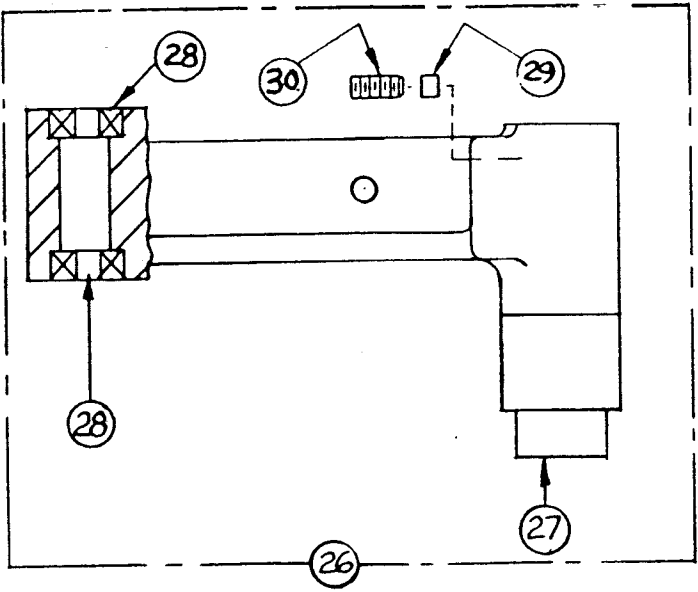
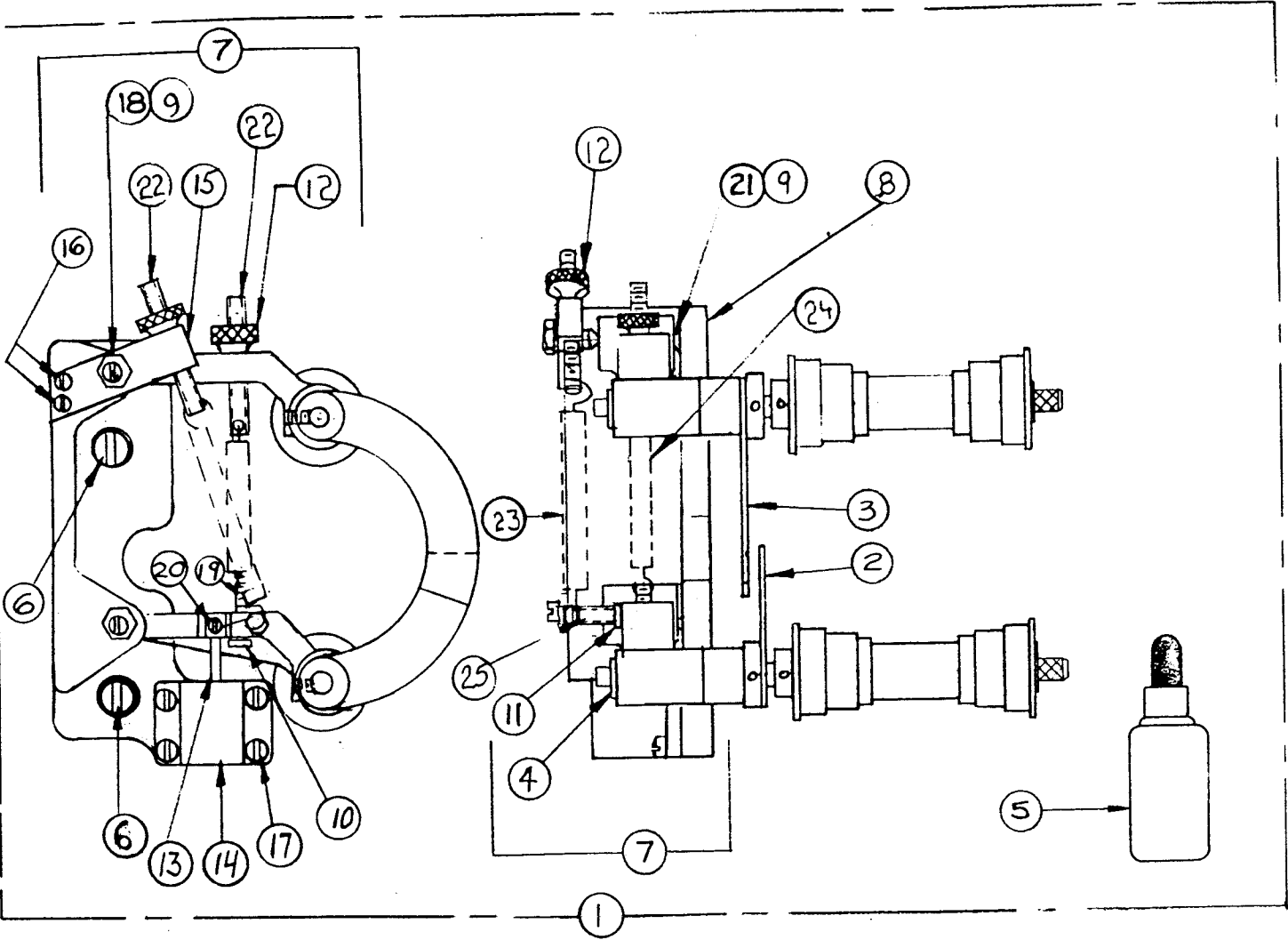


CENTURY MODEL "R31-E" MAGNETIC REPRODUCER

DRIVE-SIDE, PICTURE

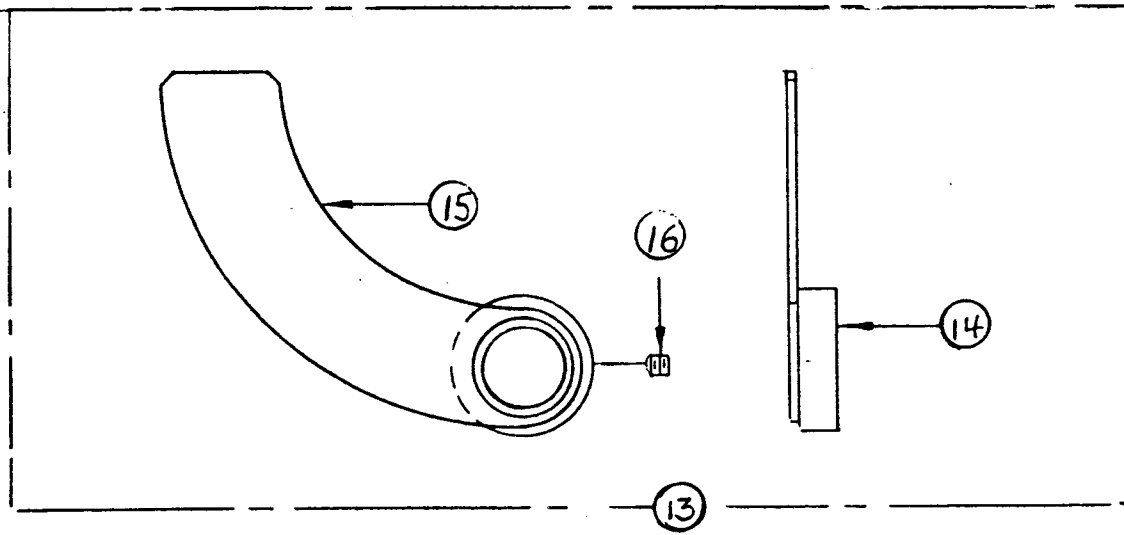
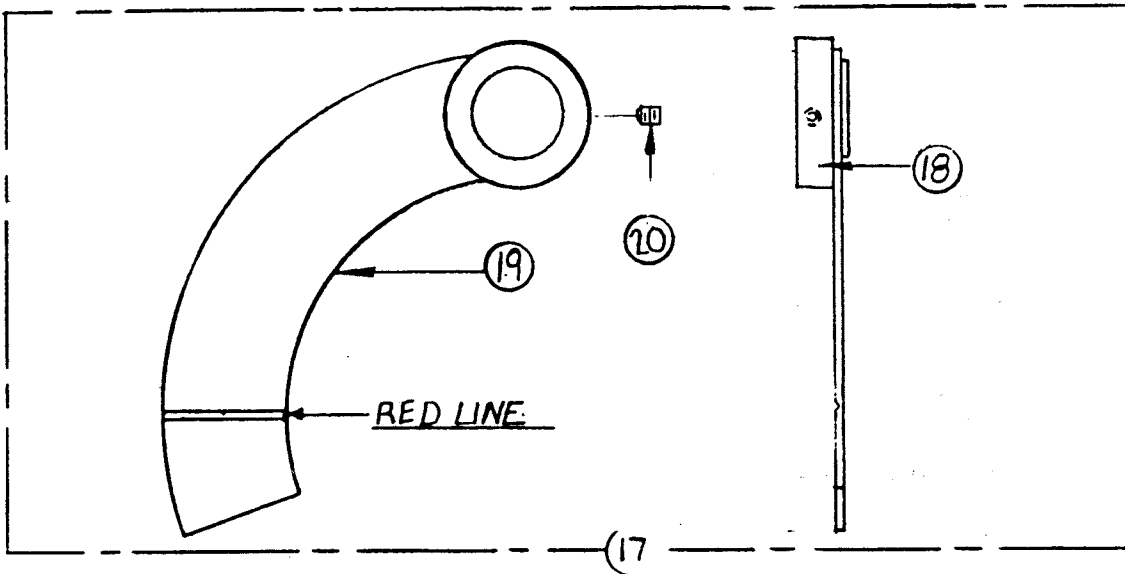
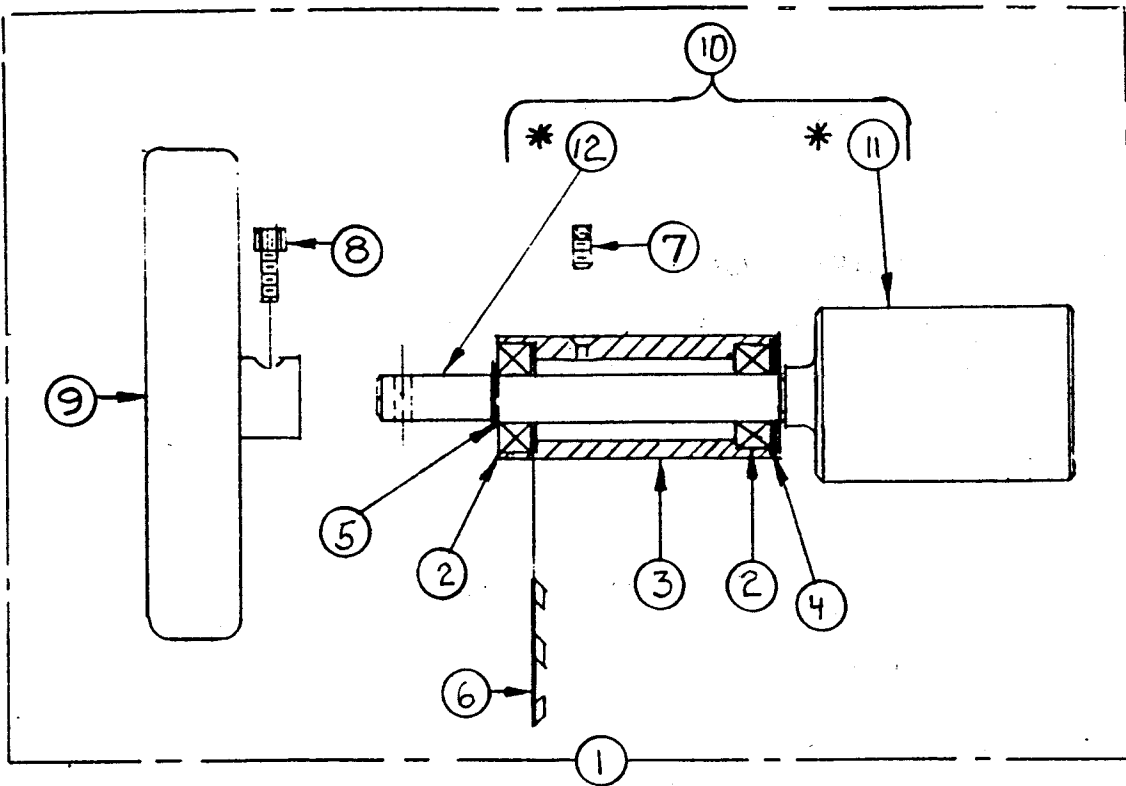
<u>Item</u>	<u>Part No</u>	<u>Description</u>
	R31-30E	DAMPER ASSEMBLY
	R31-70B	VERTICAL DRIVE SHAFT ASSEMBLY
	R31-200	35MM TERMINAL STRIP AND CABLE ASSEMBLY
	R31-210	70MM TERMINAL STRIP AND CABLE ASSEMBLY
		<u>ASSOCIATED PARTS</u>
	SC-884	Screw Frame Mtg.
	WA-83	Washer Frame Mtg.
		<u>INDIVIDUAL PARTS</u>
	SC-575	Screw Picture Changeover Mtg. (2)
	SM-1556	Shim Picture Changeover Mtg. (Mag. Shld.)
	WA-70	Washer Picture Changeover Mounting (2)

"R31-E"



CENTURY MODEL "R31-E" MAGNETIC REPRODUCER

<u>Item</u>	<u>Part No</u>	<u>Description</u>
1	R31-30E	DAMPER ASSEMBLY (MAGNETIC REPRODUCER)
	R31-31E	DAMPER ROLLER & SHAFT ASSEMBLY (2) (See Pages 12 & 13)
	R31-35E	DAMPER BRACKET & ARMS ASS'Y
2	R31-36	LOWER INDICATING PLATE & COLLAR ASS'Y (See Pages 10 & 11)
3	R31-37	UPPER INDICATING PLATE & COLLAR ASS'Y (See Pages 10 & 11)
4	RI-550	Ring "E" Retaining
<u>ASSOCIATED PARTS</u>		
5	FD-120	Fluid Damper
6	SC-137	Screw Damper Mounting (2)
	R31-31E	DAMPER ROLLER & SHAFT ASSEMBLY (UPPER & LOWER) (Please See Pages 12 & 13)
7	R31-35E	DAMPER BRACKET & ARMS ASSEMBLY
	R31-33E	UPPER DAMPER ARM ASSEMBLY
	R31-34E	LOWER DAMPER ARM ASSEMBLY
8	BR-722	Bracket Damper
9	NU-33	Nut Pivot Screw Retaining (4)
10	NU-94	Nut Spring, Screw
11	NU-73	Nut Auxiliary Damper Spring Stud
12	NU-83	Nut Spring Adjusting Screw
13	PU-733	Plunger Damper
14	RT-221	Retainer Damper Fluid
15	RT-240	Retainer Auxiliary Damper Spring
16	SC-83	Screw Aux. Damper Spring Retainer Fastening (2)
17	SC-88	Screw Fluid Retainer Fastening (4)
18	SC-282	Screw Arm Pivot (Long) (2)
19	SC-519	Screw Spring Adjusting (Short)
20	SC-550	Screw Plunger Pivot
21	SC-551	Screw Arm Pivot (Short) (2)
22	SC-1587	Screw Spring Adjusting (Long) (2)
23	SG-1588	Spring Damper
24	SG-1589	Spring Auxiliary Damper
25	SU-1586	Stud Auxiliary Damper Spring
26	R31-33E	UPPER DAMPER ARM ASSEMBLY
27	AR-190	Arm Upper Damper
28	BG-1220	Bearing Ball (2)
29	PG-13	Plug Fiber
30	SC-981	Screw Shaft Locating
31	R31-34E	LOWER DAMPER ARM ASSEMBLY
32	AR-191	Arm Lower Damper
33	BG-1220	Bearing Ball (2)
34	PG-13	Plug Fiber
35	SC-981	Screw Shaft Locating

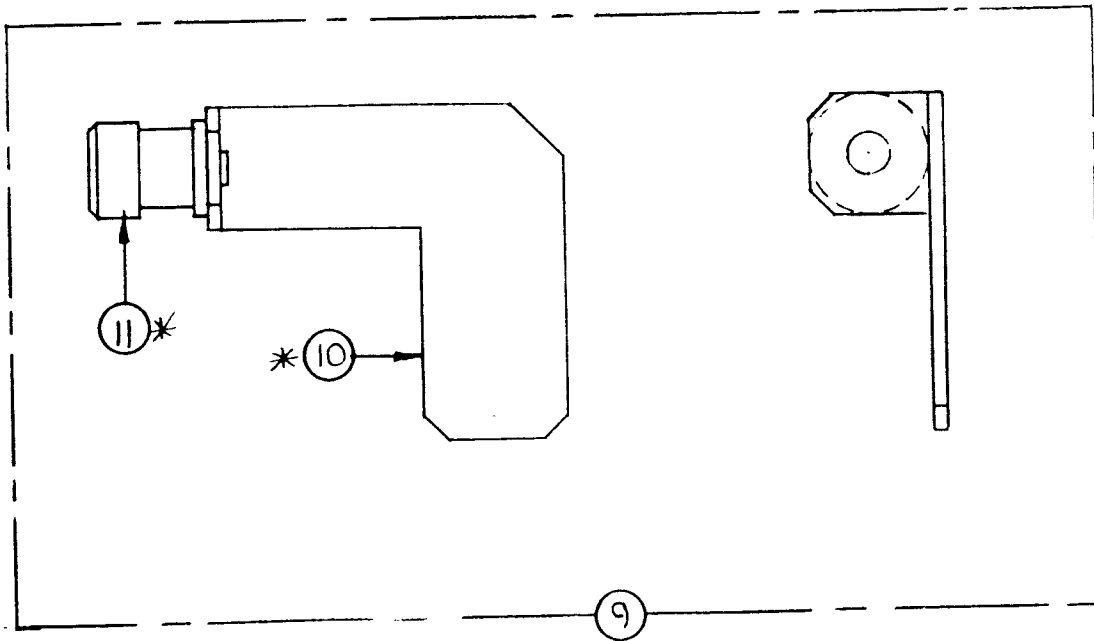
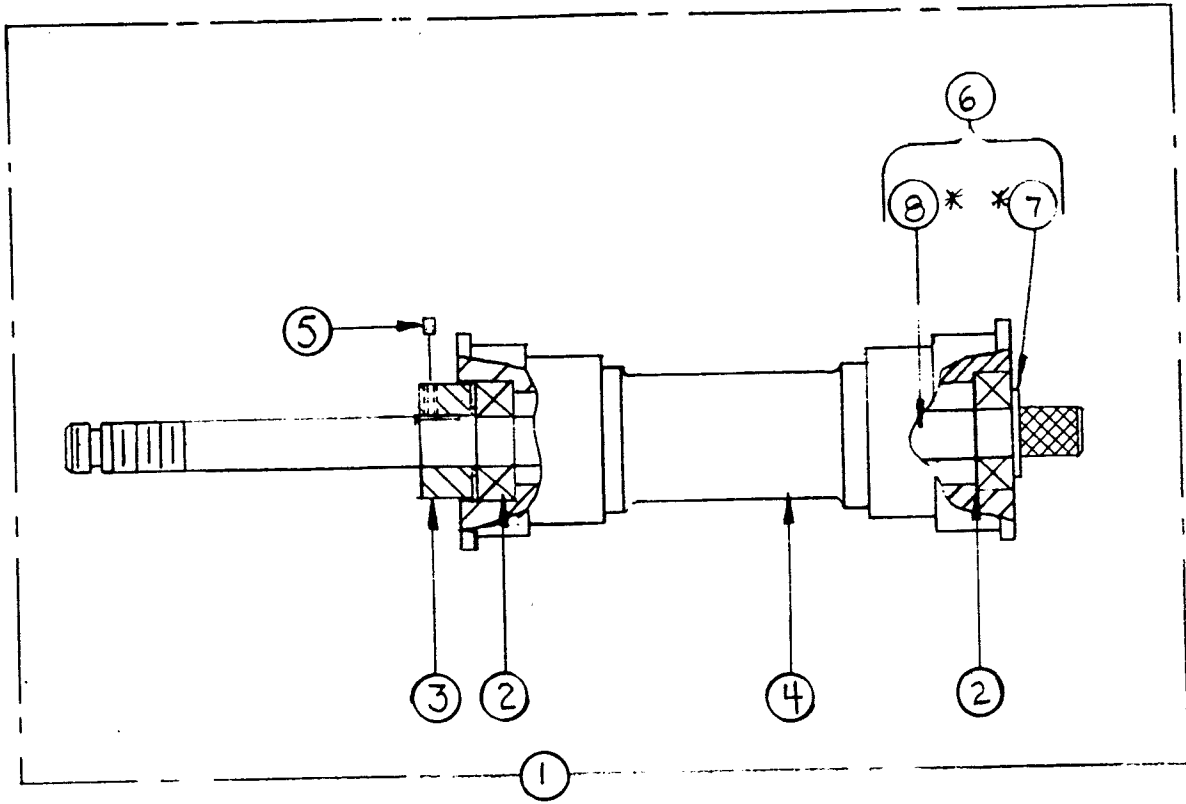


CENTURY MODEL "R31-E" MAGNETIC REPRODUCER

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	
1	R31-50	IMPEDANCE DRUM, BALL BEARINGS AND BUSHING ASS'Y (LARGE)	
	R31-51	IMPEDANCE DRUM ASSEMBLY	
2	BG-726	Bearing	Impedance Drum Ball (2)
3	BU-724	Bushing	Impedance Drum
4	RI-89	Ring	Retaining (Internal)
5	RI-90	Ring	Retaining (External)
6	SG-943	Spring	Impedance Drum Loading
		<u>ASSOCIATED PARTS</u>	
7	SC-155	Screw	Impedance Drum Bushing Fastening
8	SC-681	Screw	Flywheel Fastening
9	WH-205	Flywheel	Impedance Drum (Large)
10	R31-51	UPPER IMPEDANCE DRUM ASSEMBLY	
11	*DR-77	Drum	Impedance
12	*ST-1506	Shaft	Impedance Drum
13	R31-36	LOWER INDICATING PLATE & COLLAR ASSEMBLY	
14	CL-618	Collar	Indicating
15	PE-735	Plate	Lower Indicating
16	SC-1235	Screw	Lower Indicating Fastening
17	R31-37	UPPER INDICATING PLATE & COLLAR ASSEMBLY	
18	CL-618	Collar	Indicating
19	PE-734	Upper	Indicating
20	SC-1235	Screw	Upper Indicating Fastening

* Not Sold Separately

"R31-E"

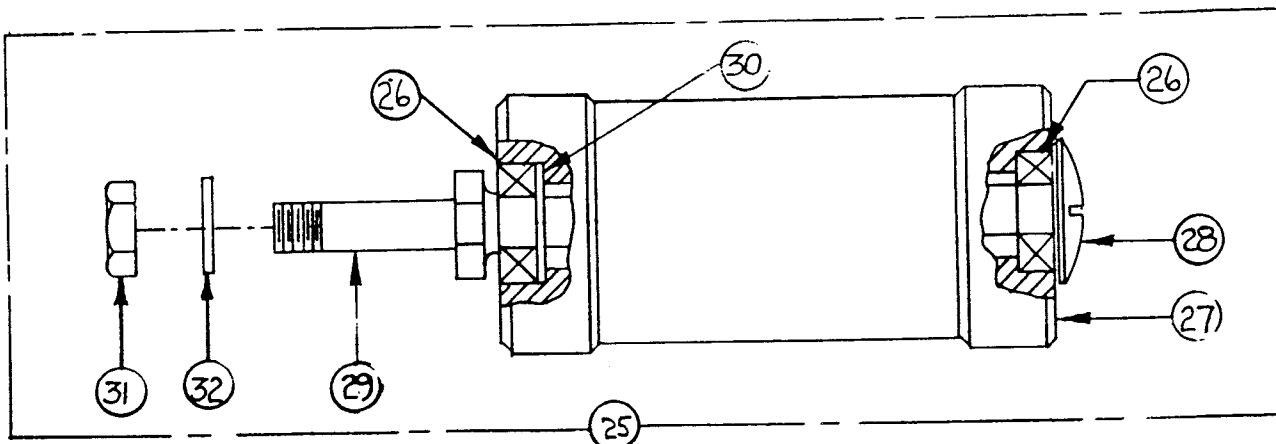
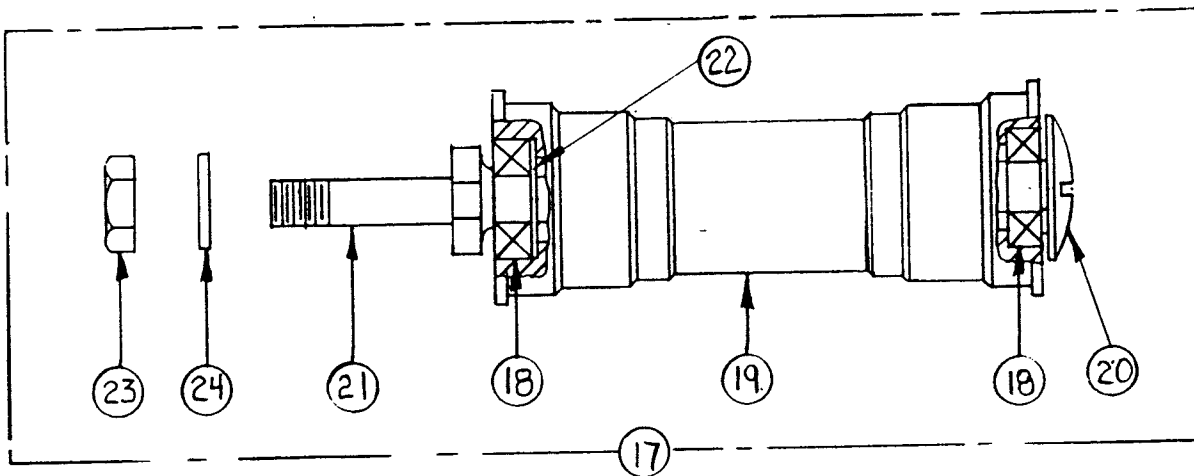
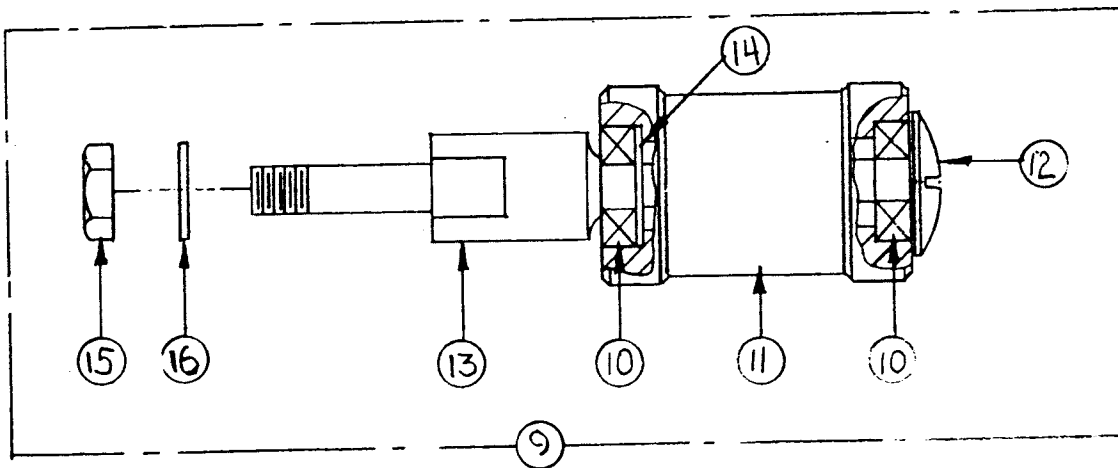
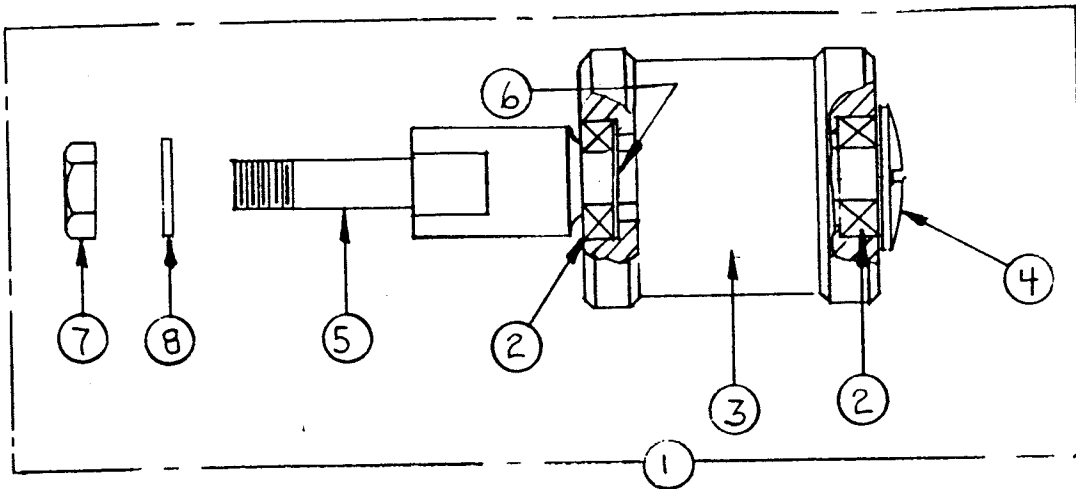


CENTURY MODEL "R31-E" MAGNETIC REPRODUCER

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	R31-31E	DAMPER ROLLER & SHAFT ASSEMBLY (UPPER & LOWER)
	R31-32E	DAMPER SHAFT & RETAINING RING ASS'Y (UPPER & LOWER)
2	BG-259	Bearing Ball (2)
3	CL-617	Collar Bearing Thrust
4	RO-212	Roller Damper (Upper & Lower)
5	SC-1235	Screw Thrust Collar Fastening
6	R31-32E	DAMPER SHAFT & RETAINING RING ASS'Y (UPPER & LOWER)
7	RI-79	Ring Retaining
8	ST-2247	Shaft Damper Roller
9	R31-120A	STRIPPER ASSEMBLY (See Page 3)
10	*PE-762	Plate Film Stripper
11	*SU-1537	Stud Film Stripper

*Not Sold Separately

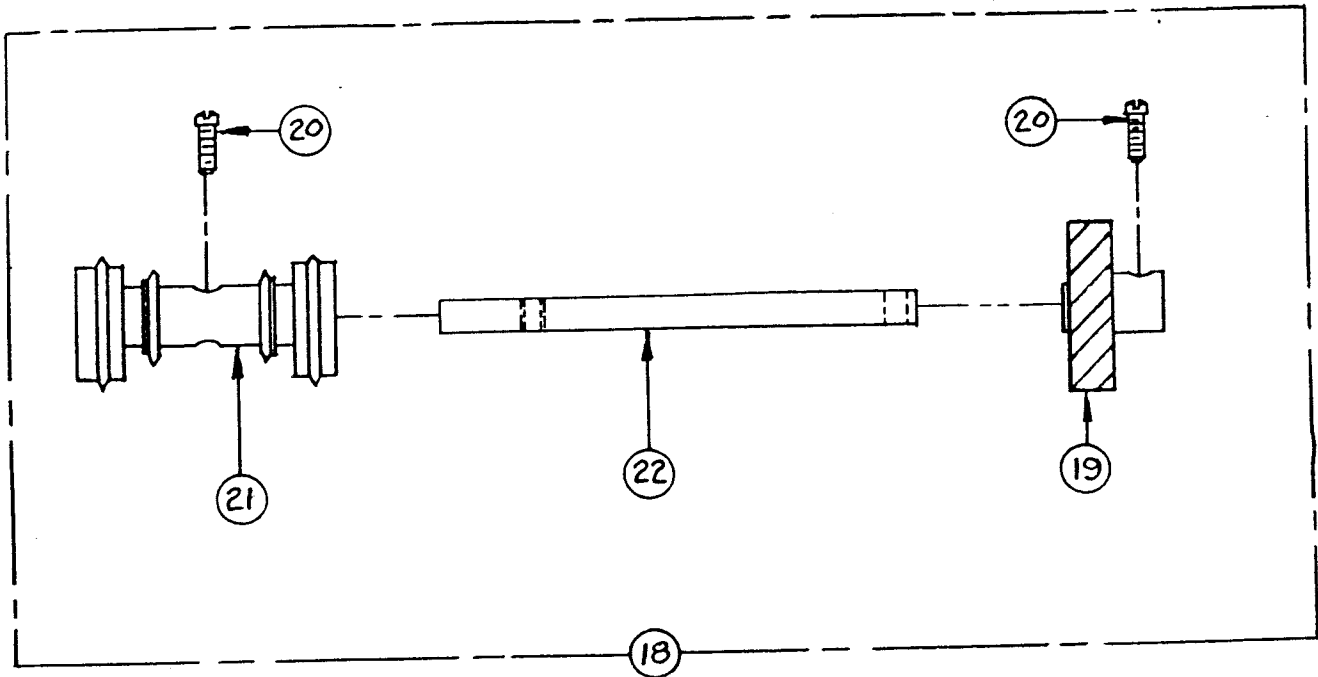
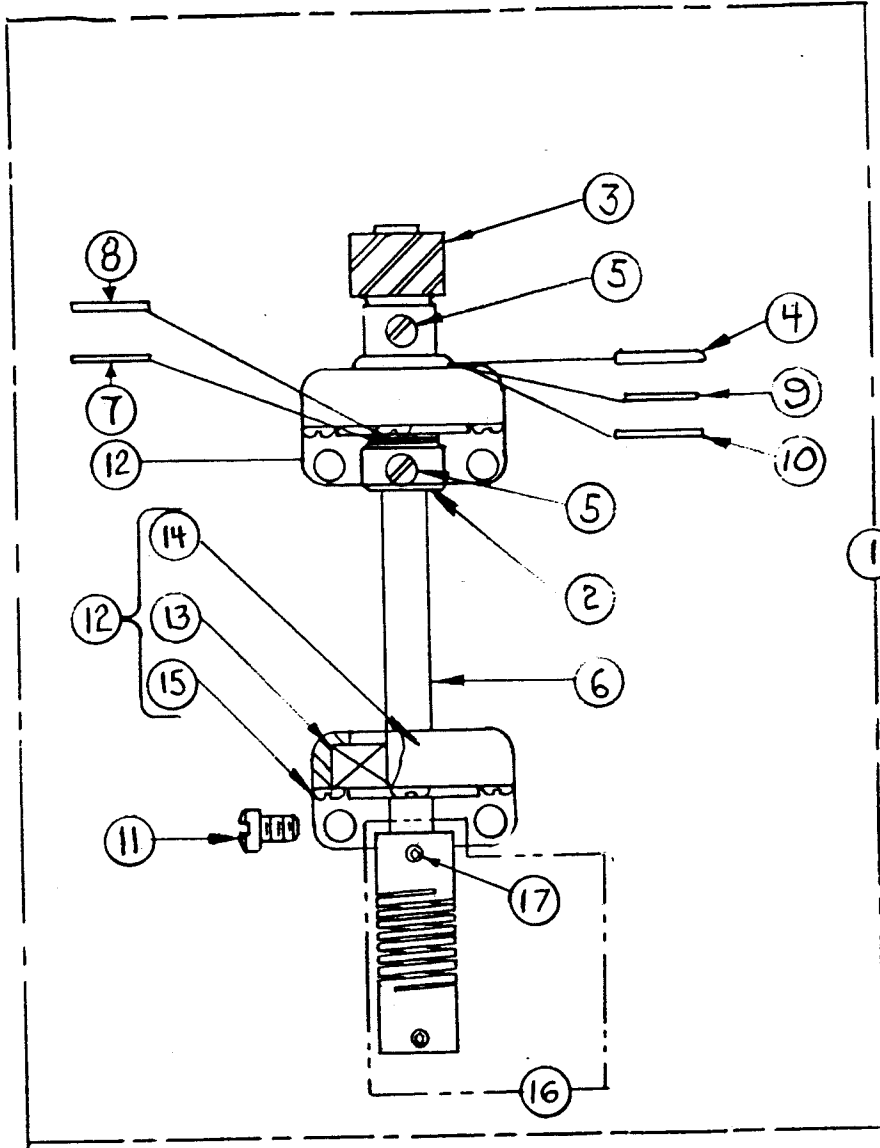
"R31-E"



CENTURY MODEL "R31-E" MAGNETIC REPRODUCER

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	
1	R31-160	35MM FILM IDLER ROLLER ASSEMBLY (LARGE)	
2	BG-259	Bearing	Ball (2)
3	RO-223	Roller	35MM Film Idler (Large)
4	SC-1233	Screw	Ball Bearing Retaining
5	SU-1516	Stud	35MM Film Roller
6	WA-200	Washer	Spring Preloading
<u>ASSOCIATED PARTS</u>			
7	NU-7	Film Roller Stud	
8	WA-77	Washer	Film Roller Stud
9	R31-170	35MM FILM IDLER ROLLER ASSEMBLY (SMALL)	
10	BG-259	Bearing	Ball (2)
11	RO-222	Roller	35MM Film Idler (Small)
12	SC-1233	Screw	Ball Bearing Retaining
13	SU-1516	Stud	35MM Film Roller
14	WA-200	Washer	Spring Preloading
<u>ASSOCIATED PARTS</u>			
15	NU-7	Nut	Film Roller Stud
16	WA-77	Washer	Film Roller Stud
17	R31-180A	UPPER FILM GUIDE ROLLER ASSEMBLY	
18	BG-259	Bearing	Ball (2)
19	RO-239	Roller	Upper Film Guide
20	SC-1233	Screw	Ball Bearing Retaining
21	SU-1517	Stud	Film Guide Roller
22	WA-200	Washer	Spring Preloading
<u>ASSOCIATED PARTS</u>			
23	NU-7	Nut	Film Roller Stud
24	WA-77	Washer	Film Roller Stud
25	R31-190	70MM LOWER FILM IDLER ROLLER ASSEMBLY	
26	BG-259	Bearing	Ball (2)
27	RO-225	Roller	Lower Film Idler
28	SC-1233	Screw	Ball Bearing Retaining
29	SU-1517	Stud	Lower Film Idler Roller
30	WA-200	Washer	Spring Preloading
<u>ASSOCIATED PARTS</u>			
31	NU-7	Nut	Film Roller Stud
32	WA-77	Washer	Film Roller Stud

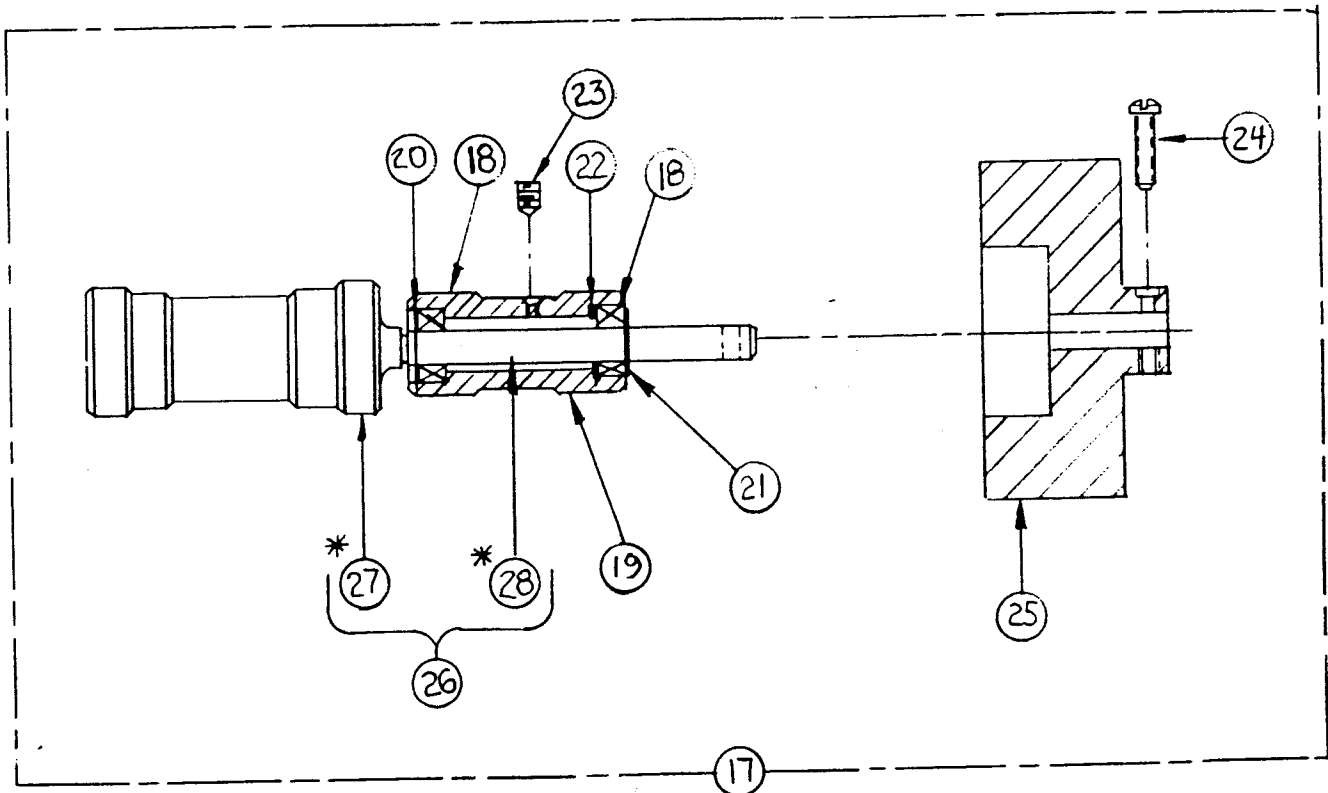
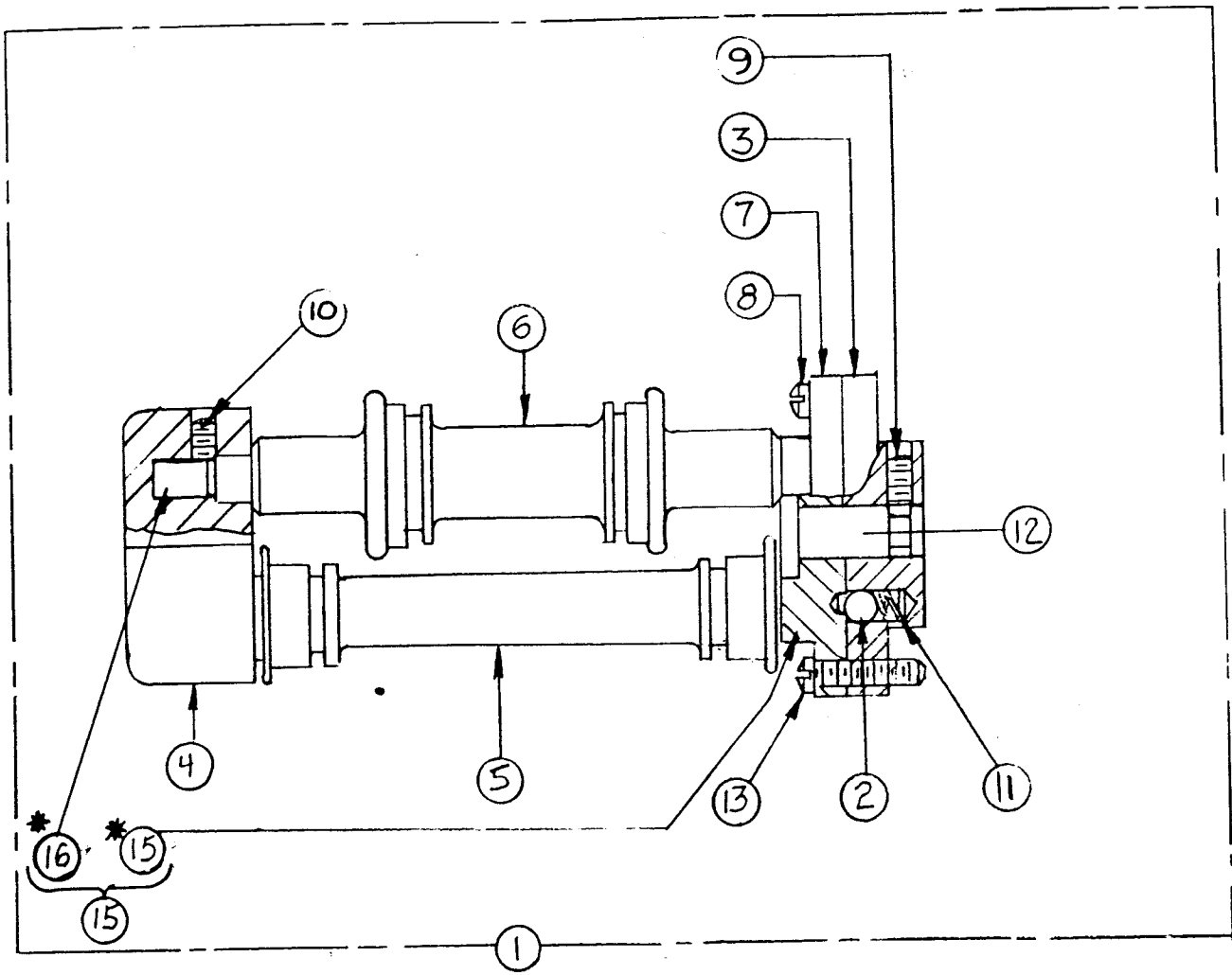
"R31-E"



CENTURY MODEL "R31-E" MAGNETIC REPRODUCER

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	R31-70B	FILM SPROCKET DRIVE SHAFT & FLEXIBLE SHAFT ASSEMBLY
	C1-G-31	BALL BEARING BRACKET ASSEMBLY (2)
	R31-73	FLEXIBLE SHAFT AND COUPLING ASSEMBLY
2	CL-13	Collar Shaft Thrust
3	GR-133	Gear Sprocket Drive
4	RT-61	Retainer Ball Bearing Thrust Washer (Upper)
5	SC-81	Screw Gear & Collar Fastening (2)
6	ST-1974	Shaft Sprocket Drive
7	WA-3	Washer Shaft Thrust (Fiber)
8	WA-10	Washer Shaft Thrust (Steel)
9	WA-130	Washer Shaft Thrust (Neoprene)
10	WA-131	Washer Shaft Thrust (Steel)
		<u>ASSOCIATED PARTS</u>
11	SC-143	Screw Drive Shaft Assembly Fastening (4)
12	C1-G-31	BALL BEARING BRACKET ASSEMBLY
13	BG-9	Bearing Drive Shaft Ball
14	BR-20	Bracket Drive Shaft Bearing
15	SC-127	Screw Drive Shaft Bearing Retaining (3)
16	R31-73	FLEXIBLE COUPLING ASSEMBLY
17	SC-585	Screw Coupling Fastening (4)
18	R31-220A	SPROCKET SHAFT ASSEMBLY
19	GR-132	Gear Sprocket Shaft (Formica)
20	SC-1190	Screw Sprocket & Gear Fastening (2)
21	SK-1529	Sprocket Sound (70 and 35MM)
22	ST-1481	Shaft Sprocket

"R31-E"

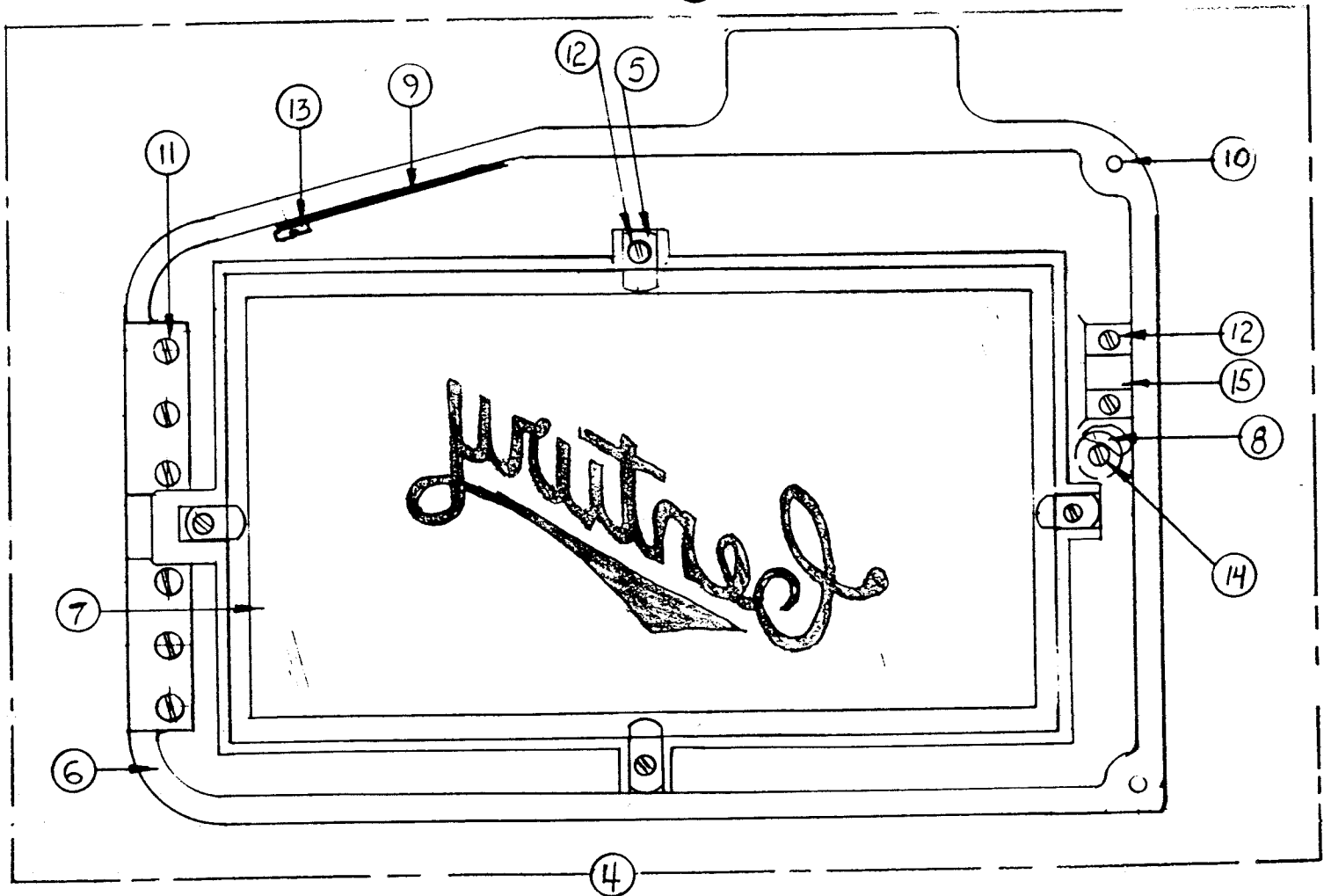
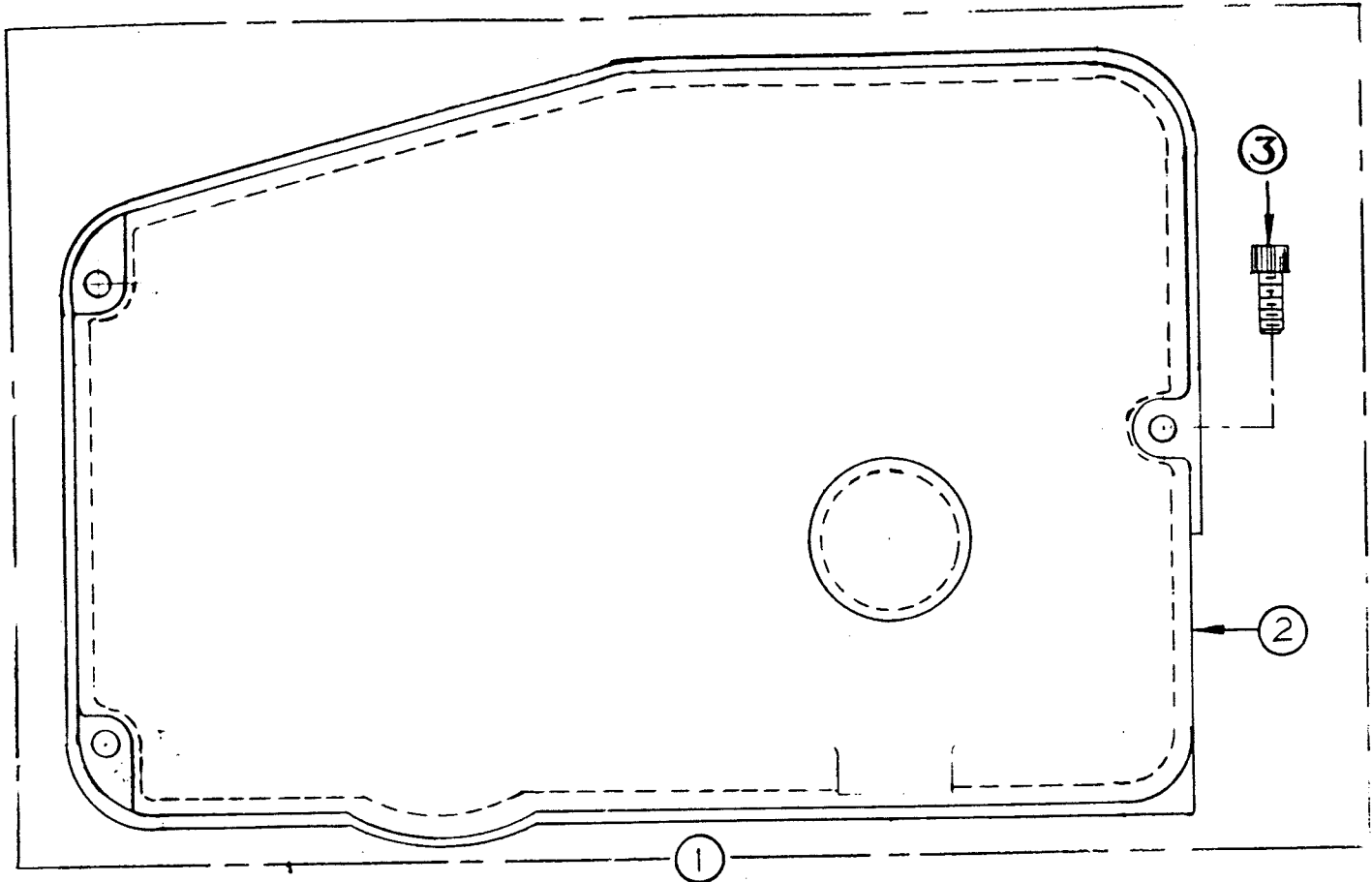


CENTURY MODEL "R31-E" MAGNETIC REPRODUCER

<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	J1-C-10	UPPER PAD ROLLER ARM ASSEMBLY
	J1-C-11	UPPER PAD ROLLER, STUD & RETAINING PLATE ASS'Y
2	BL-18	Ball Pad Roller Arm (2)
3	BU-714	Bushing Pad Roller
4	KN-58	Knob Pad Roller
5	RO-209	Roller 70MM Pad
6	RO-210	Roller 35MM Pad
7	RT-211	Retainer Pad Roller Bushing
8	SC-88	Screw Pad Roller Bushing Retaining Fast. (3)
9	SC-873	Screw Pad Roller Bushing Fastening (2)
10	SC-882	Screw Pad Roller Knob Fastening (2)
11	SG-1230	Spring Pad Roller Arm (2)
12	SU-1490	Stud Pad Roller Arm
		<u>ASSOCIATED PARTS</u>
13	SC-1492	Screw Pad Roller Arm Assembly Fastening (3)
14	J1-C-11	UPPER PAD ROLLER STUD & RETAINING PLATE ASSEMBLY
15	*PE-722	Plate Pad Roller Stud Retaining
16	*SU-1491	Stud Pad Roller Stud Retaining (2)
17	R31-100	IMPEDANCE DRUM, BALL BEARING & BUSHING ASS'Y (SMALL)
	R31-101	IMPEDANCE DRUM ASSEMBLY (SMALL)
18	BG-723	Bearing Ball (2)
19	BU-725	Bushing Impedance Drum
20	RI-217	Ring Retaining (Internal)
21	RI-218	Ring Retaining (External)
22	SG-1507	Spring Loading
		<u>ASSOCIATED PARTS</u>
23	SC-155	Screw Impedance Drum Bushing Fastening
24	SC-915	Screw Flywheel Fastening
25	WH-206	Flywheel Impedance Drum
26	R31-101	IMPEDANCE DRUM ASSEMBLY (SMALL)
27	*DR-76	Drum Impedance
28	*ST-1519	Shaft Impedance Drum

* Not Sold Separately

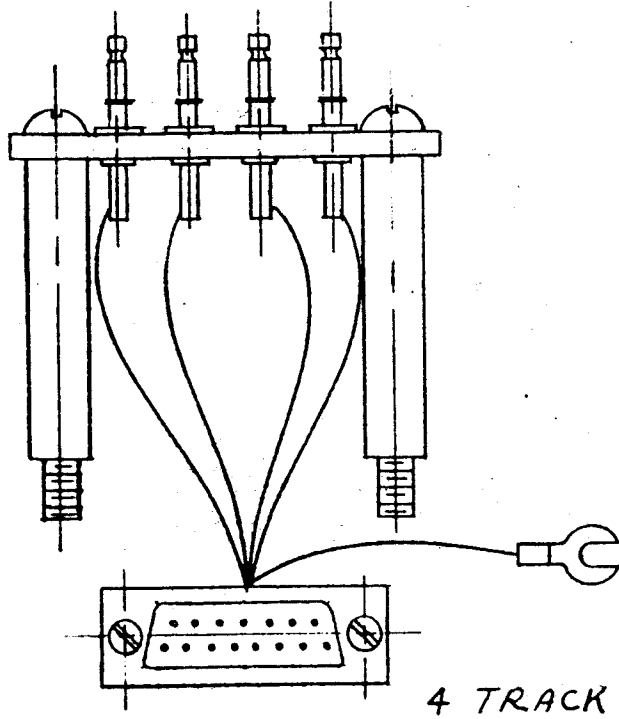
"R31-E"



CENTURY MODEL "R31-E" MAGNETIC REPRODUCER

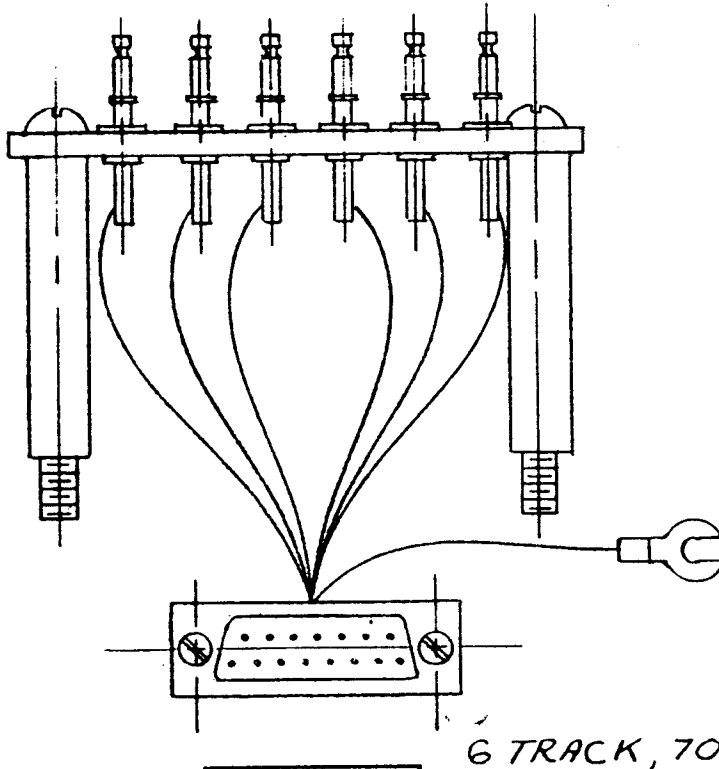
<u>Item</u>	<u>Part No.</u>	<u>Description</u>	
1	R31-11	DRIVE SIDE COVER ASSEMBLY	
2	CR-612	Cover	Drive Side
3	SC-137	Screw	Cover Mounting (3)
4	R31-20	OPERATING SIDE DOOR ASSEMBLY	
5	CP-20	Clamp	Door Glass (4)
6	DO-75	Door	Operating Side
7	GL-205	Glass	Door
8	KN-47	Knob	Door
9	LI-7	Link	Door Stop
10	SB-60	Stop	Door Closing Felt (2)
11	SC-70	Screw	Hinge Fastening (6)
12	SC-123	Screw	Glass Clamp & Strike Fastening (6)
13	SC-226	Screw	Stop Link
14	SC-1356	Screw	Knob Fastening
15	SS-528	Strike	Door

35^{MM} TERMINAL STRIP & CABLE ASS'Y



R31-200

70^{MM} TERMINAL STRIP & CABLE ASS'Y



R31-210