

Film-Tech

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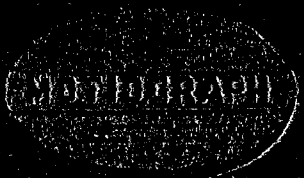
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MOTIOGRAPH

"AA"

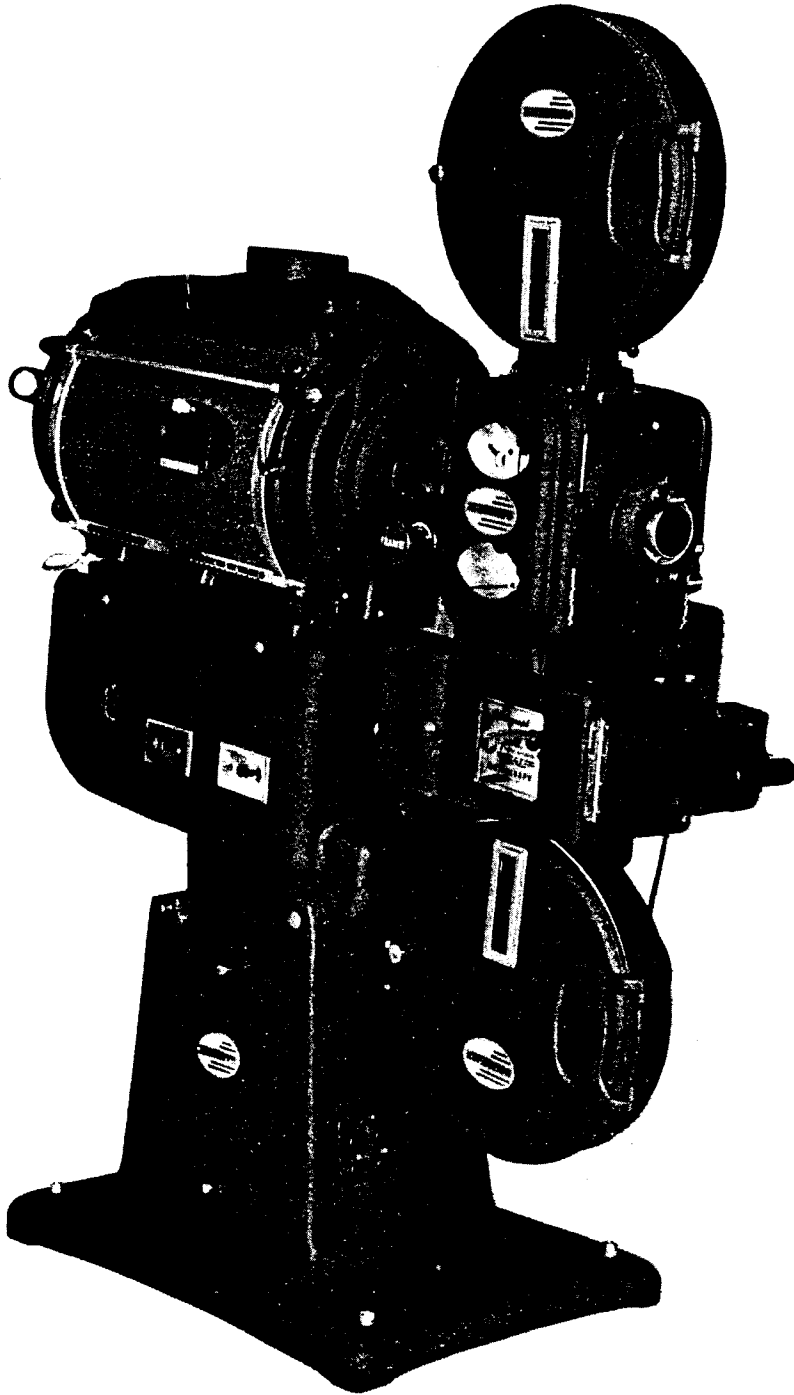
PARTS BOOK

W. H. & A. S.



MODEL "AA" MECHANISM
MODEL "AA" UPPER MAGAZINE
MODEL "AA" LOWER MAGAZINE
MODEL "AA" BASE
MODEL "S" BASE

Received this parts book 5/28/4,



MOTIOGRAPH, INC.

4431 W. LAKE STREET

CHICAGO 24, ILLINOIS

ORDERING INFORMATION

This illustrated book is designed for ready identification of replacement parts used in current models of Motiograph projection equipment. In cases where parts are not found on the illustrations they can be found in the lists on the following pages, and such parts can be identified by the descriptions of their use and location in relation to other illustrated parts. As prices are subject to change, price lists are furnished separately.

Parts must be ordered from the authorized Motiograph distributor in the territory. Your distributor will have an ample stock of all wearing parts. In emergencies, parts may be ordered direct from the factory at current list prices, but these will be shipped C.O.D. unless the order is accompanied by a check in full payment.

The serial number of the projector mechanism is stamped on the top of the main housing (gear side). To assure best service, refer to this number in placing your order. When ordering intermittent movement parts, give movement serial number, which is stamped on movement case (film side).

Handling and packing costs necessitate a minimum charge of \$1.00 per order. Orders for parts totaling less than this amount will be billed at the minimum rate.

The Motiograph guarantee reads as follows:

The Company guarantees with respect to all Products sold, that for a period of ninety (90) days following date of installation, it will replace in its factory all parts becoming defective under normal service which are in the opinion of the Company a direct result of defect in material or workmanship. Defective parts or equipment shall be returned to the Company for inspection and test, carriage prepaid. This guarantee shall not apply where Products have been altered or repaired outside of Company's factory and such guarantee shall extend to Products in the hands of first users only.

March, 1947

MOTIOGRAPH, INC.

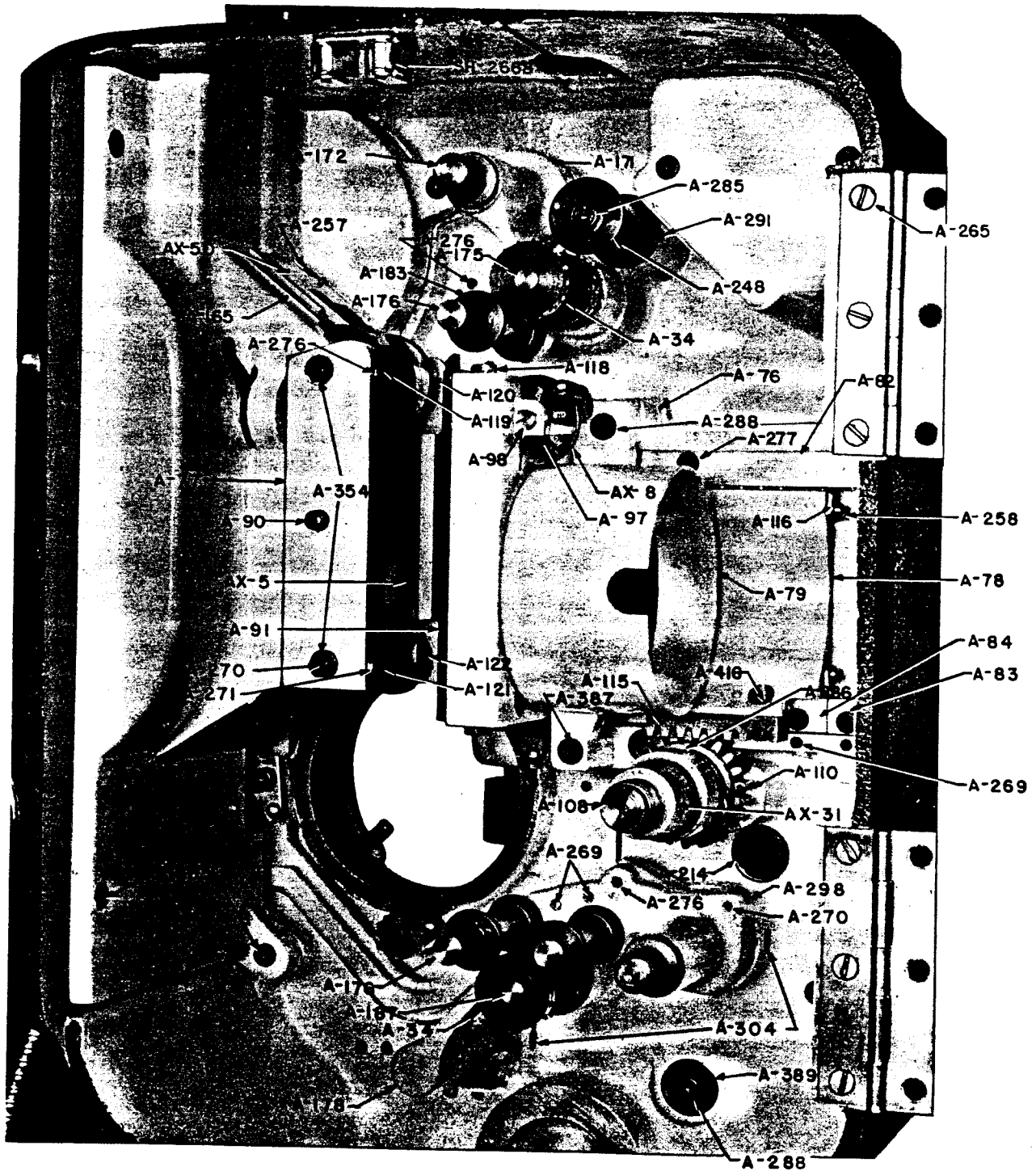


FIG. 1

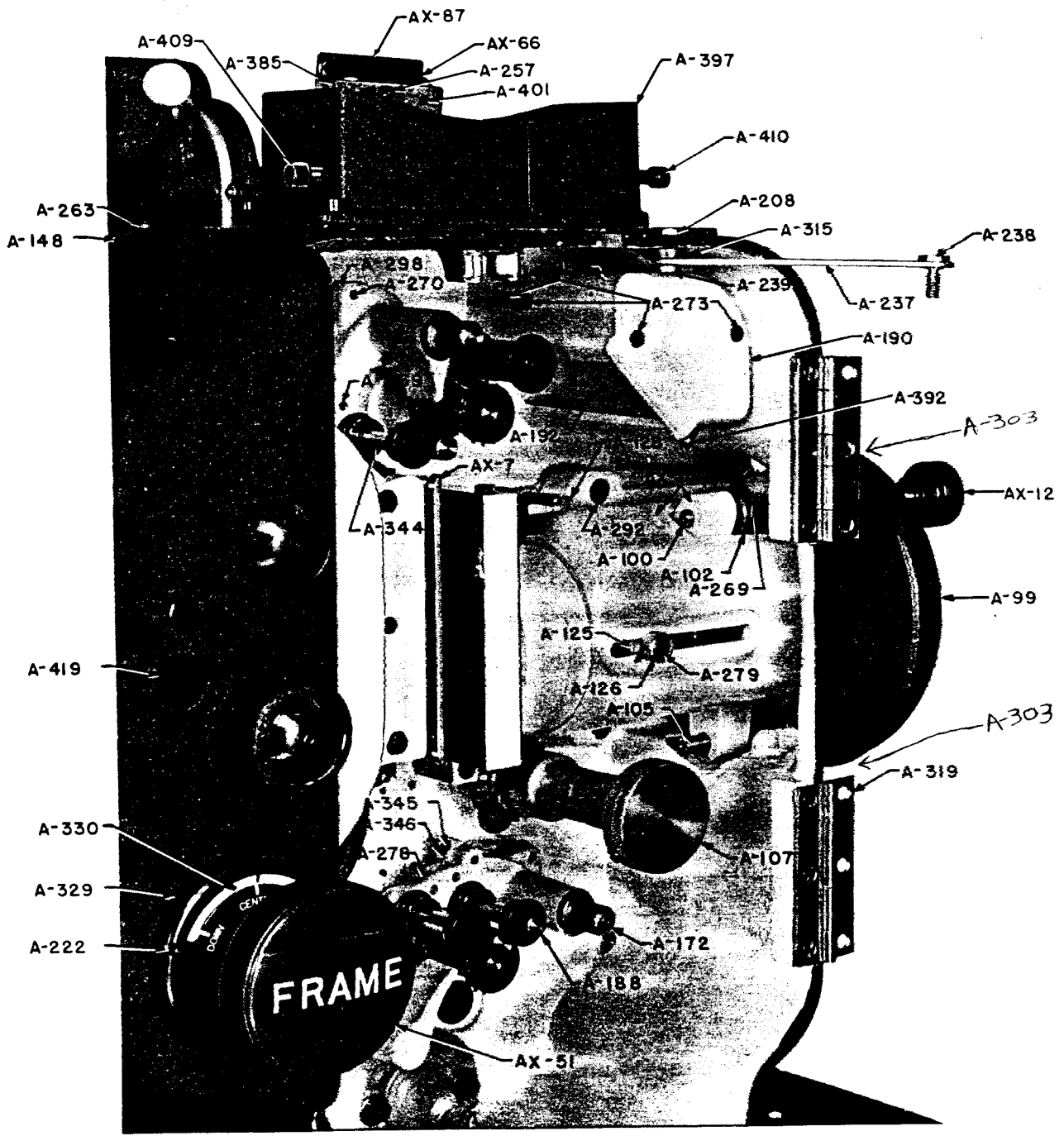


FIG. 2

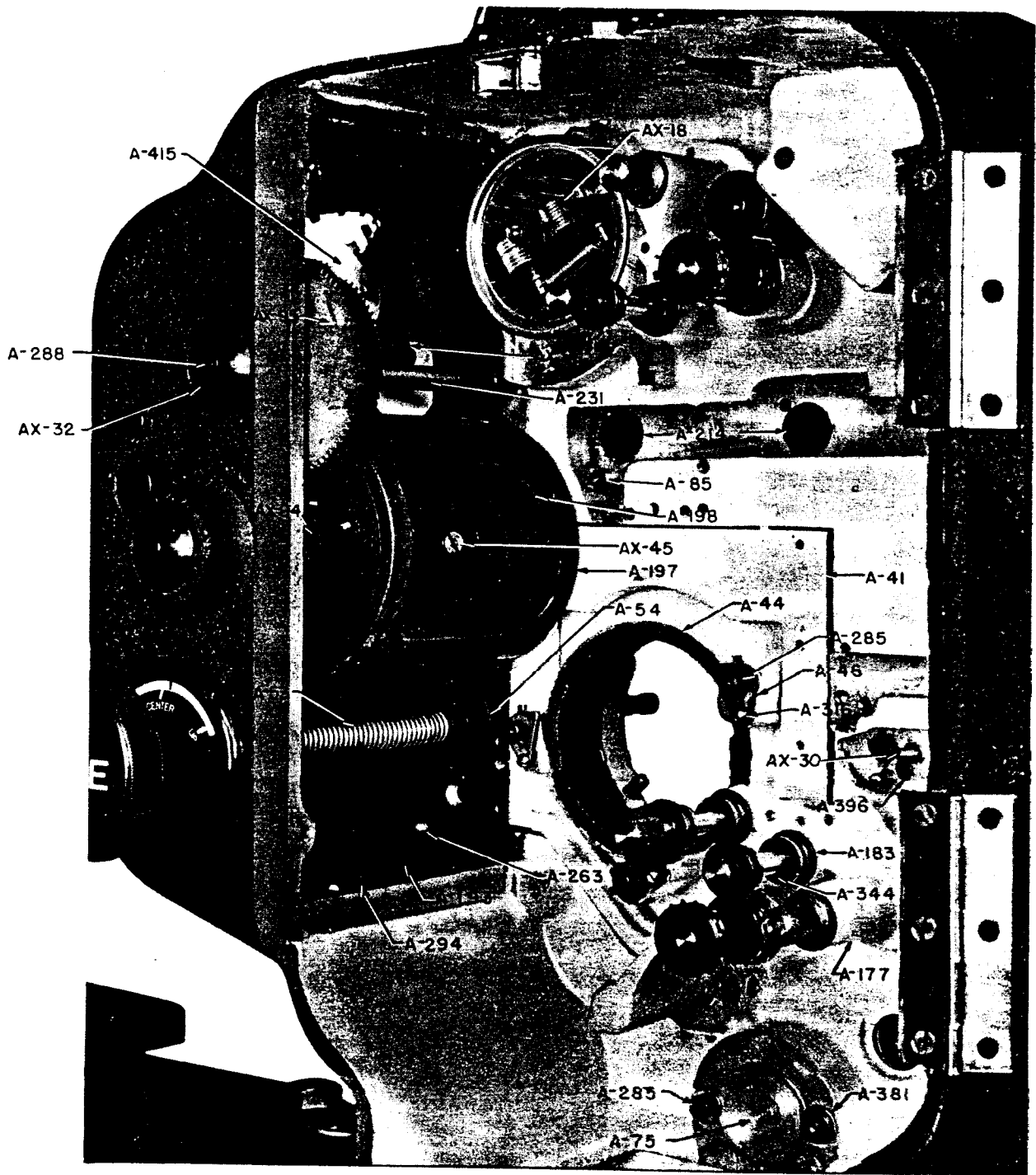


FIG. 3

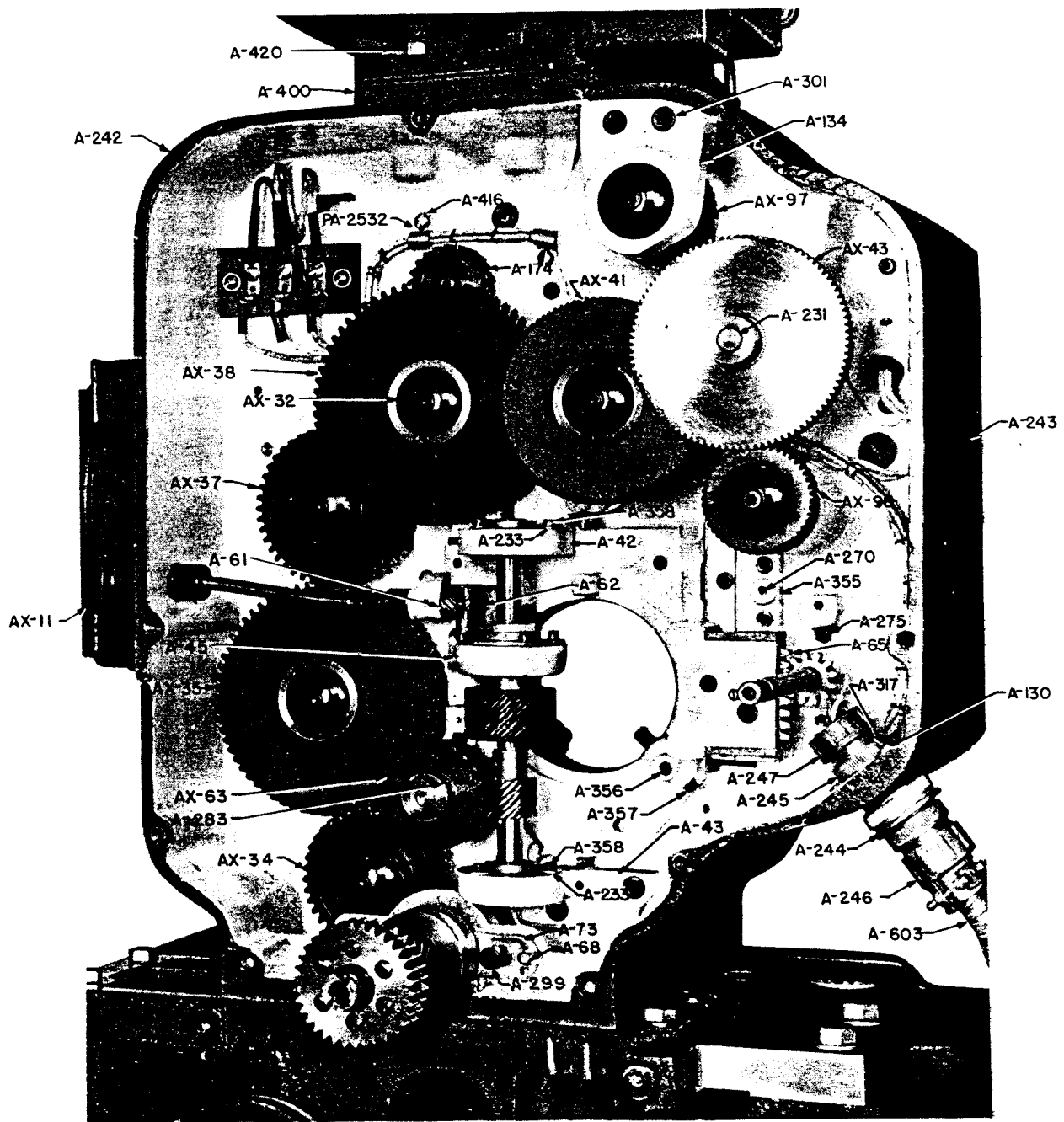


FIG. 4

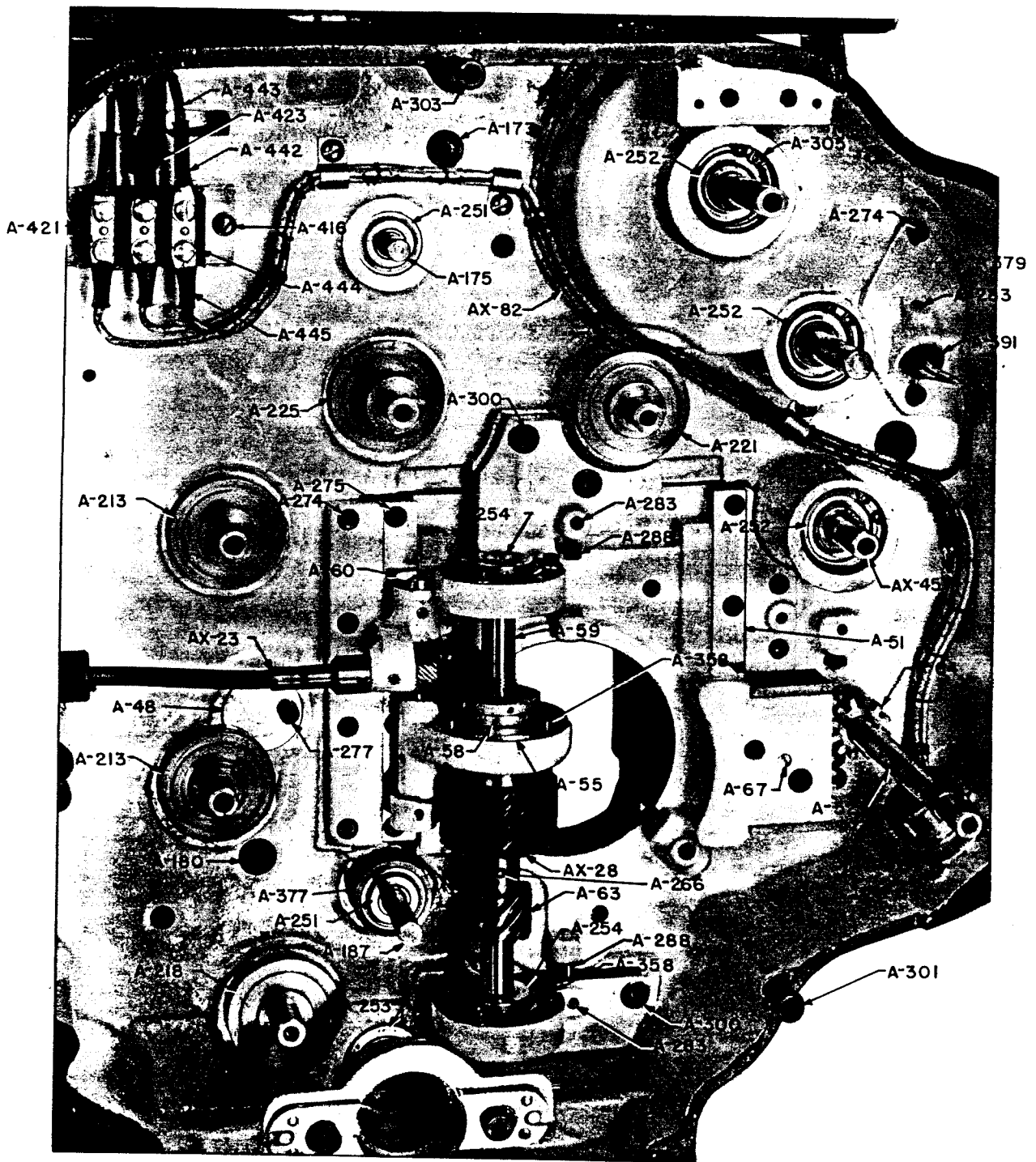


FIG.5

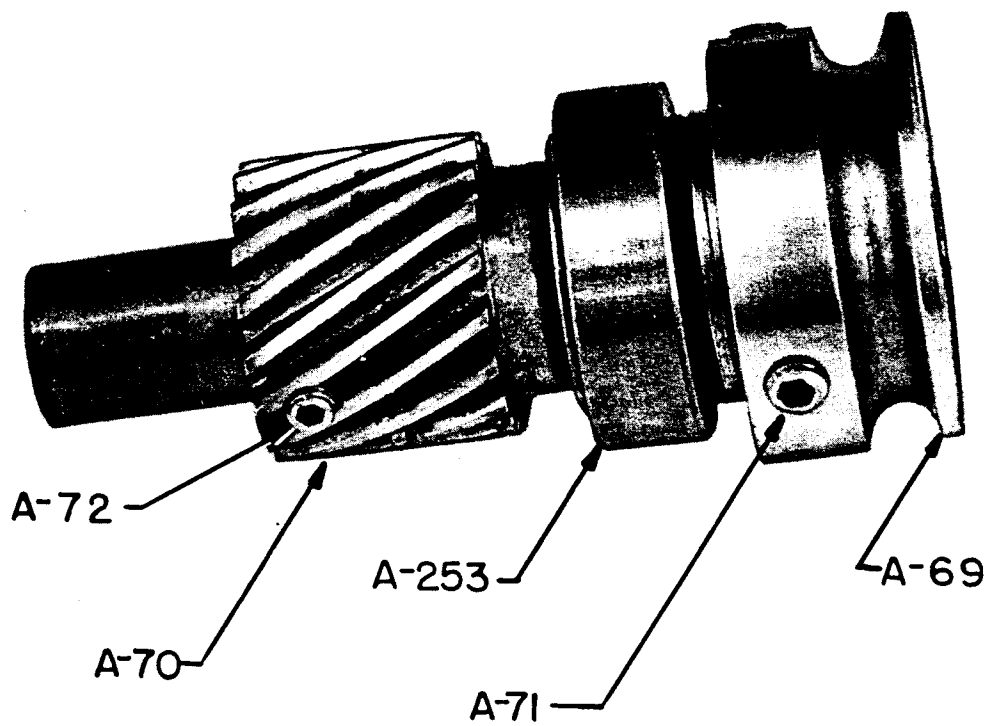


FIG. 6

AX-17 DRIVE SHAFT ASSEMBLY
FOR SOUND HEAD DRIVE

AX-80 INTERMITTENT MOVEMENT ASSEMBLY

AX-62 FIRE SHUTTER ASSEMBLY

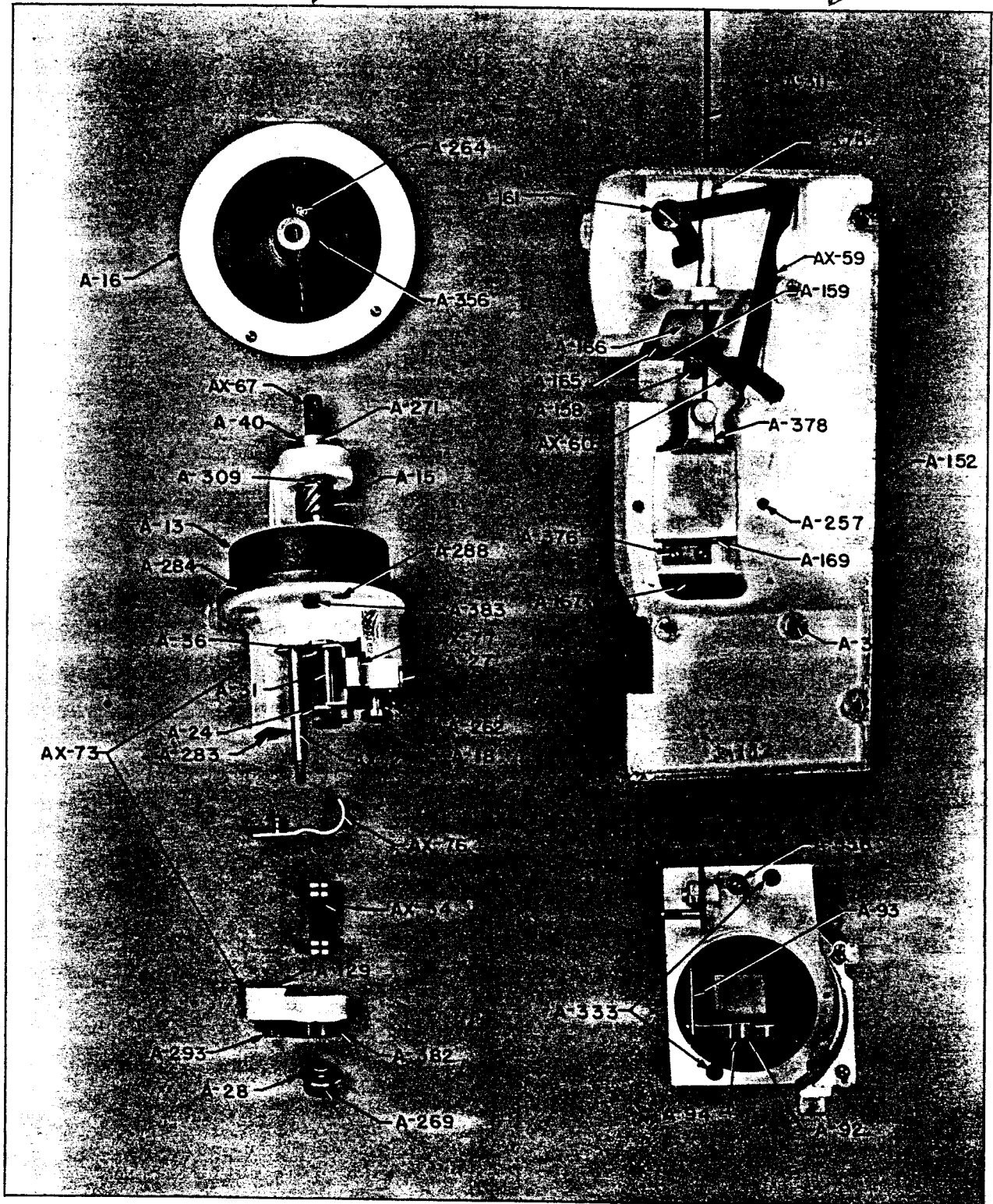
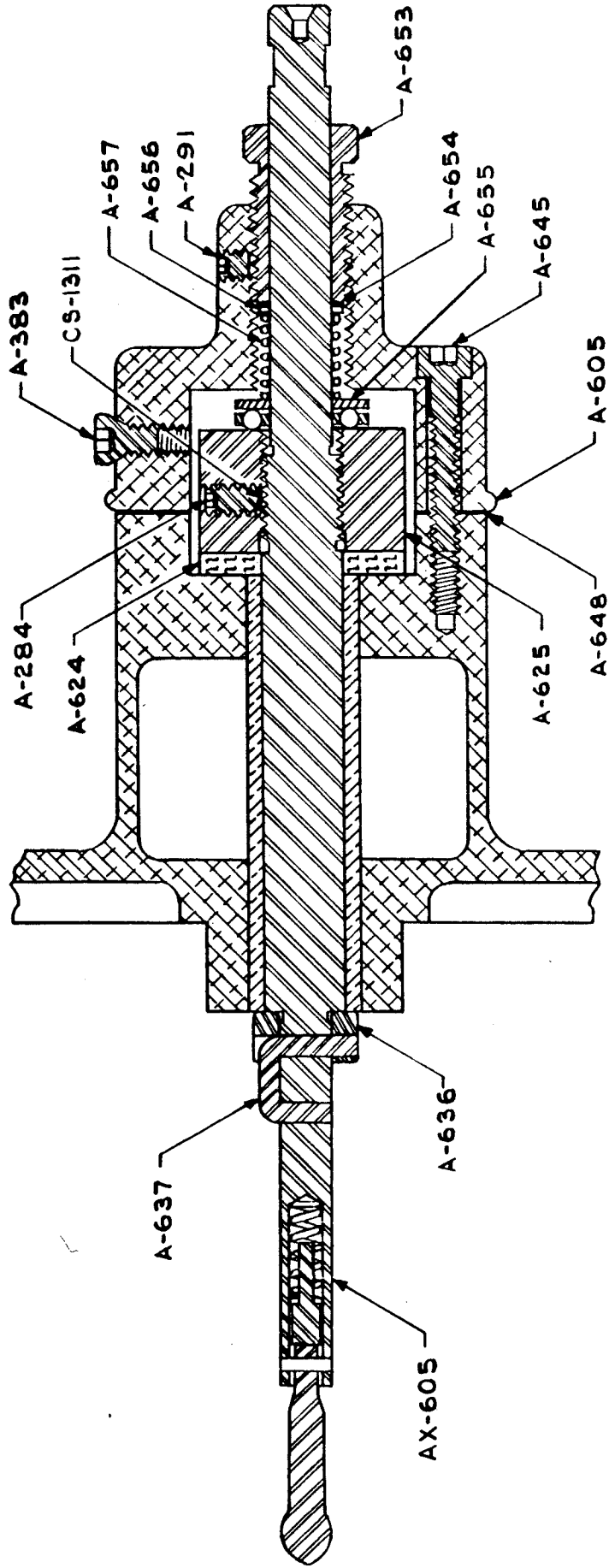


FIG. 7

A-78 TENSION SHOE CASTING

AX-605

FEED REEL SHAFT ASSEMBLY



• FIG. 8

AX-611

TAKE-UP REEL SHAFT ASSEMBLY

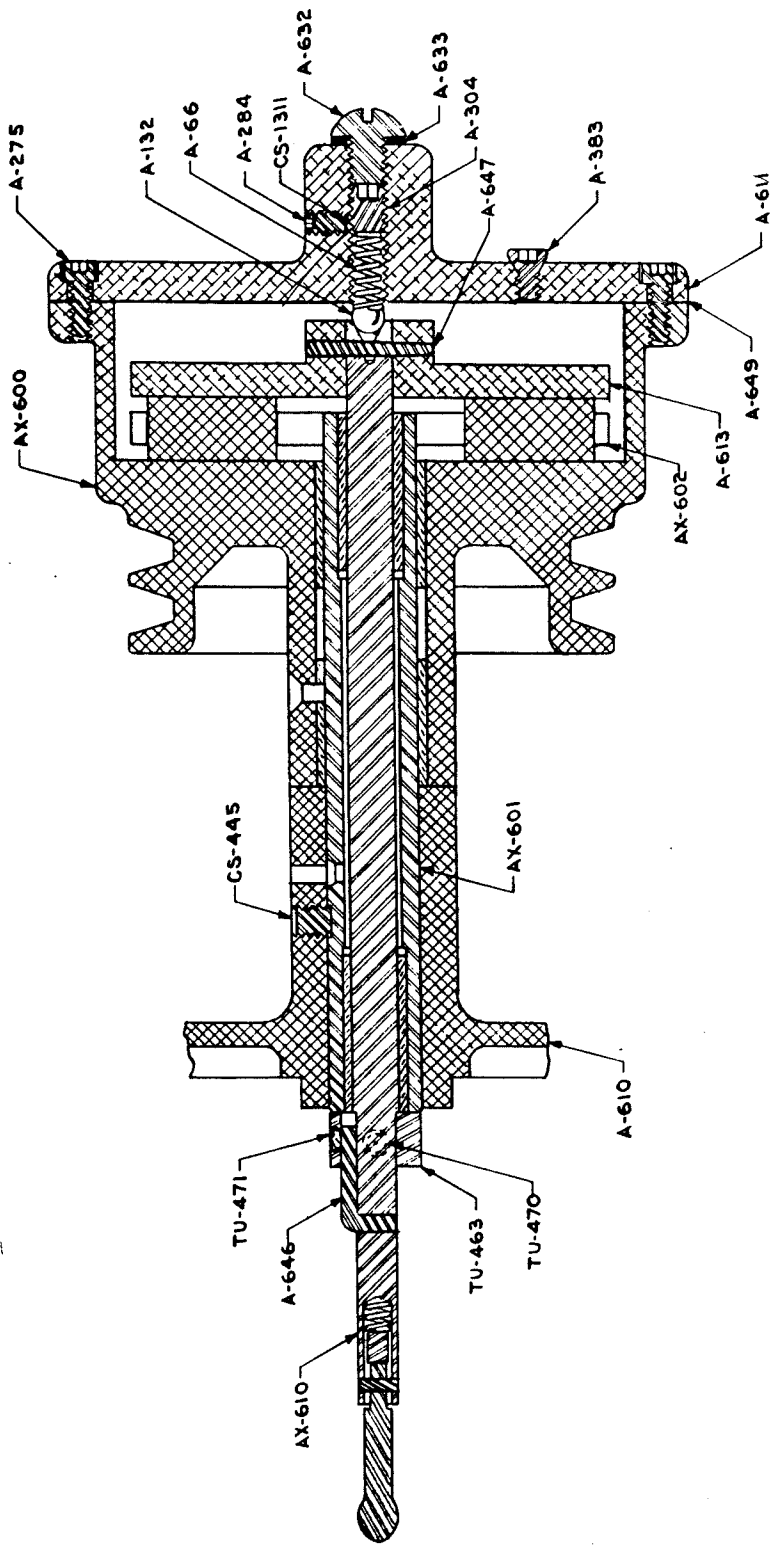


FIG. 9

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-1 MAIN ASSEMBLY</u>		
A-34	Sprocket	1
A-38	Dowel Pin (in A-134)	***
A-42	Upper Bearing Bracket	4
A-43	Lower Bearing Bracket	4
A-48	Spring Retainer (for AX-30)	5
A-50	Lockwasher (in A-315)	***
A-52	Framing Shaft	5
A-53	Balance Spring	3
A-54	Hub	3
A-59	Vertical Shaft	5
A-63	Gear	5
A-64	Framing Shaft Pinion	5
A-68	Driv-Lok Pin	4
A-73	Slide Catch	4
A-74	Driv-Lok Pin (for A-41, A-42, & A-43)	***
A-75	Cap	3
A-85	Aligning Pin	3
A-107	Gate Knob	2
A-108	Gate Pinion Shaft	1
A-110	Gate Pinion	1
A-112	Spring (on A-108)	***
A-130	4-40 Hex. Nut	4
A-134	Blower Bracket	4
A-148	Blower Guard	2
A-174	Gear	4
A-175	Shaft	1 & 5
A-178	Stripper	1
A-187	Shaft	1 & 5
A-193	Light Shield	3
A-197	Outer Rotor	3
A-198	Inner Rotor	3
A-201	Spacer (on A-202)	***
A-202	Film Side Shutter Shaft (for A-198)	***
A-203	Spacer (on AX-45)	***
A-204	Gear Clutch (for AX-98)	***
A-208	12-24 Hex. Nut	2
A-213	Gear Stud (for AX-35 & AX-37)	5
A-214	Screw (for A-213, A-221, A-225 & A-426)	1 & 3
A-218	Gear Stud (for AX-34)	5
A-221	Gear Stud (for AX-41)	5

*** Not illustrated.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-1 MAIN ASSEMBLY (Cont'd.)</u>		
A-222	2-56 x 9/16" Fil. Hd. Screw	2
A-225	Gear Stud (for AX-38)	5
A-231	Cross Shaft	3 & 4
A-233	Washer (on A-42 & A-43)	4
A-239	Screw	2
A-241	Housing Cover (lower gear side)	***
A-242	Main Housing	4
A-243	Light Beam Cone	4
A-244	Connector	4
A-245	Connector	4
A-246	Cable Clamp	4
A-247	Cap	4
A-248	Idler Roller	1
A-251	Ball Bearing (on A-175 & A-187)	5
A-252	Ball Bearing (on A-202) (on AX-45, A-231 & AX-18)	5 ***
A-253	Ball Bearing (behind A-75)	5
A-254	Ball Bearing (in A-42 & A-43)	5
A-263	6-32 x 1/4" Rd. Hd. Screw (on A-148) (on A-193) (on SH-2668)	2 3 ***
A-264	Tapered Screw (on A-34, AX-43 & AX-95)	***
A-265	6-32 x 1/4" Flat Hd. Screw	1
A-266	Screw (staked to A-63)	5
A-267	Washer (behind A-360)	***
A-273	8-32 x 5/16" Socket Cap Screw (to lock A-282 in A-110)	***
A-274	8-32 x 3/8" Socket Cap Screw (to mount A-41 on A-242) (to mount A-379)	5 5
A-275	8-32 x 7/16" Socket Cap Screw (for A-54) (for A-243)	5 ***
A-277	8-32 x 1/2" Socket Cap Screw	5
A-279	8-32 x 5/8" Socket Cap Screw (mounts A-197 & A-198)	***
A-282	Clutch Hub (in A-110)	***
A-283	10-32 x 1/4" Socket Set Screw (in AX-63) (in A-379) (in A-42) (in A-43)	4 5 5 5
A-285	10-32 x 3/8" Socket Cap Screw (for A-75) (for A-350)	3 1

*** Not illustrated.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-1 MAIN ASSEMBLY (Cont'd.)</u>		
A-286	Washer	1
A-287	10-32 x 7/16" Socket Cap Screw (to mount AX-70)	***
A-288	10-32 x 1/2" Socket Cap Screw (for AX-32)	3
	(on A-389)	1
	(on A-42)	5
	(on A-43)	5
	(on A-53)	***
A-289	10-32 x 7/16" Socket Set Screw (for A-174)	***
A-291	10-32 x 3/16" Socket Set Screw	1
A-292	10-32 x 3/4" Socket Set Screw	2
A-294	Ventilation Plug Button (center)	3
A-299	1/4 - 28 x 9/16" Socket Cap Screw	4
A-300	1/4 - 28 x 11/16" Socket Cap Screw (for AX-24)	5
	(for AX-29)	5
A-301	1/4 - 28 x 3/4" Socket Cap Screw (to mount A-241)	5
	(to mount A-134)	4
A-303	1/4 - 28 x 1-1/4" Socket Cap Screw (for A-99)	***
	(for AX-48)	5
A-304	5/16 - 24 x 3/8" Socket Set Screw (for A-180 & A-178)	1
	(for A-173)	***
A-305	Snap Ring	5
A-307	Taper Pin (for A-64)	***
A-312	Woodruff Key (for AX-28)	***
	(for AX-97)	***
	(for AX-98)	***
A-315	Washer	2
A-317	4-40 x 3/8" Rd. Hd. Screw	4
A-328	Locknut (behind A-267; staked to AX-51)	***
A-329	Indicator Cover	2
A-330	Disc Indicator	2
A-333	10-32 x 9/16" Socket Cap Screw	1
A-339	Plug Button (above A-415)	***
A-350	Shaft (for A-248)	***
A-358	6-32 x 3/8" Socket Cap Screw (on A-42 & A-43)	4
A-360	Spring (behind A-330)	***
A-361	Rear Mounting Plate (for AX-53)	***
A-377	Bearing Support	5
A-379	Lamp Bracket	5
A-381	Washer (for A-75)	3
	(for A-288 on A-53)	***

*** Not illustrated.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-1 MAIN ASSEMBLY (Cont'd.)</u>		
A-389	Washer (for A-218)	1
A-391	Insulating Bushing	5
A-396	Plunger Bushing	3
A-398	Washer (under A-292)	***
A-400	Spacer Block	4
A-415	Bulb	3
A-416	8-32 x 1/4" Rd. Hd. Screw (for PA-2532)	4
	(for A-444)	5
A-418	Internal Tooth Lockwasher (for A-416 on A-444)	***
A-419	Screw	2
A-420	3/8 - 16 x 1-5/8" Hex. Hd. Screw	4
A-423	Insulating Bushing	5
A-424	Insulating Bushing (for wires to changeover)	***
A-426	Gear Stud (for AX-96)	***
A-444	Terminal	5
A-445	Black Sleeve - 5/8" long (in A-244)	***
	(on A-444)	5
A-603	3/8" Flexible Conduit - 4' long	4
A-608	Insulator (in A-246)	***
A-641	8-32 x 5/16" Truss Hd. Screw (to hold A-600 on AX-90)	***
CS-1236	Washer (for A-420)	***
PA-2532	Cable Clamp	4
SH-2668	Door Catch	1

AX-1 SUBASSEMBLIES

AX-11	Shutter Setting Knob	4
AX-15	Upper Roller Bracket	See P.6
AX-16	Lower Roller Bracket	See P.6
AX-17	Drive Shaft	See P.7
AX-18	* Governor Blower	3
AX-23	Flexible Shaft	5
AX-24	Upper Bearing Bracket (A-42, A-233, A-254, A-358, A-283 & A-288)	**
AX-25	Shifting Frame	See P.7
AX-29	Lower Bearing Bracket (A-43, A-233, A-254, A-283, A-288 & A-358)	**
AX-30	* Plunger & Spring	3
AX-31	* Index Sleeve & Pin	1
AX-32	* Red Retainer Cap (for gear assemblies)	3 & 4

*** Not illustrated.

** Component parts illustrated individually.

* Sold as Unit only.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-1 SUBASSEMBLIES (Cont'd.)</u>		
AX-34	Gear & Bearing	4
AX-35	Gear & Bearing	4
AX-37	Gear & Bearing	4
AX-38	Double Gear & Bearing	4
AX-41	Double Gear & Bearing	4
AX-43	Double Gear	4
AX-45	* Shutter Shaft (for A-197)	3 & 5
AX-46	Film Side Door	See P. 8
AX-47	Framing Shaft (A-52, A-64 & A-307)	**
AX-48	Gear Side Door	See P. 8
AX-51	Framing Knob (film side)	2
AX-52	Framing Knob (gear side) (on A-52)	***
AX-53	Framing Handle (film side) (AX-51, A-267, A-328, A-329, A-330 & A-360)	**
AX-62	Fire Shutter	See P. 8
AX-63	* Double Gear	4
AX-65	Gate Pinion & Clutch (A-110, A-282, A-273 & A-286)	**
AX-70	Mechanism Light	See P. 9
AX-79	Vertical Shaft & Gear (A-59, A-63 & A-266)	**
AX-80	Intermittent Movement	7
AX-81	Ventilation Button & Stud (mounts A-193)	***
AX-82	Mechanism Cable (internal)	5
AX-86	Lens Barrel, Film Gate & Base	See P.10
AX-88	Wrench & Kit Set	See P.12
AX-90	Fire Trap	See P.13
AX-91	Socket	3
AX-94	* Gear	3
AX-95	* Gear	3
AX-96	Gear & Bearing (between AX-94 & AX-95)	***
AX-97	* Gear	4
AX-98	* Gear	4
AX-119	APERTURE PLATE, SCOPE	
AX-133	APERTURE PLATE, FLAT	

*** Not illustrated.

** Component parts illustrated individually.

* Sold as Unit only.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-15 UPPER ROLLER BRACKET ASSEMBLY</u>		
A-171	Bracket Casting	1
A-172	Handle Screw	1
A-173	Bracket Shaft (under A-172)	5
A-176	Thumb Screw	1
A-181	Roller Shaft (under A-176)	***
A-183	Bracket Roller	1
A-184	Spring (under A-296)	***
A-269	8-32 x 1/8" Socket Set Screw	2
A-270	8-32 x 3/16" Socket Set Screw (to lock A-298)	2
A-271	8-32 x 1/4" Socket Set Screw (to lock A-181)	***
A-276	8-32 x 7/16" Socket Set Screw	1
A-280	8-32 x 5/8" Socket Set Screw (locked by A-269)	***
A-296	1/4-28 x 3/8" Socket Set Screw (locked by A-276)	***
A-298	1/4-28 x 1/2" Dog Pt. Socket Set Screw	2
A-313	Steel Ball (under A-184)	***
A-344	Roller Spacer	2
<u>AX-16 LOWER ROLLER BRACKET ASSEMBLY</u>		
A-172	Handle Screw	2
A-176	Thumb Screw	1
A-177	Bracket Casting	3
A-180	Bracket Shaft (under A-172)	5
A-181	Roller Shaft (under A-176)	***
A-182	Eccentric Shaft (under A-188)	***
A-183	Bracket Roller	3
A-184	Spring (under A-345)	***
A-188	Thumb Screw	2
A-269	8-32 x 1/8" Socket Set Screw	1
A-270	8-32 x 3/16" Socket Set Screw	1
A-271	8-32 x 1/4" Socket Set Screw (to lock A-181)	***
A-276	8-32 x 7/16" Socket Set Screw	1
A-278	8-32 x 9/16" Socket Set Screw	2
A-298	1/4-28 x 1/2" Dog Pt. Socket Set Screw	1
A-313	Steel Ball (under A-184)	***
A-344	Roller Spacer	3
A-345	1/4-28 x 5/16" Socket Set Screw	2
A-346	8-32 x 1/2" Socket Set Screw	2

*** Not illustrated.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
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AX-17 DRIVE SHAFT ASSEMBLY

A-69	Drive Shaft	6
A-70	Drive Gear	6
A-71	1/4 - 28 x 1/2" Socket Set Screw	6
A-72	10 - 32 x 3/8" Drive Shaft Set Screw	6
A-253	Ball Bearing	6
A-347	Key (to locate A-70 on A-69)	***

AX-25 SHIFTING FRAME ASSEMBLY

A-41	Outer Shifting Frame Casting	3
A-44	Inner Shifting Frame Casting	3
A-45	Sliding Bracket	4
A-46	Intermittent Clamp	3
A-47	Clamp Spring (behind A-46)	***
A-51	"V" Rail	5
A-55	Locking Ring	5
A-58	Locking Nut	5
A-60	Bracket Shaft	5
A-61	Bracket Gear	4
A-62	Bracket Shaft Gear	4
A-65	Rack	4
A-66	Spring (for A-65)	***
A-67	Screw	5
A-253	Ball Bearing (in A-45)	***
A-270	8-32 x 3/16" Socket Set Screw (to lock A-355)	4
A-275	8-32 x 7/16" Socket Cap Screw	5
A-285	10-32 x 3/8" Socket Cap Screw (for A-46)	3
A-308	Taper Pin (for A-62)	***
A-316	Drive Screw	3
A-355	8-32 x 11/16" Socket Set Screw (to adjust A-51)	4
A-356	1/4-28 x 1/4" Socket Set Screw	4
A-357	1/4-28 x 1-3/8" Socket Set Screw	4
A-358	6-32 x 3/8" Socket Cap Screw	5

AX-25 SUBASSEMBLIES

AX-28	Timing Gear	5
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*** Not illustrated.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-46 FILM SIDE DOOR ASSEMBLY</u>		
A-101	Nameplate	***
A-234	Door Casting	***
A-235	Handle	***
A-236	Glass Retainer Clip	***
A-237	Stop Link	2
A-238	Pivot Screw	2
A-256	4-40 x 3/16" Fil. Hd. Screw (for A-101)	***
A-262	6-32 x 3/16" Rd. Hd. Screw (for A-236) (for SH-2635)	***
A-265	6-32 x 1/4" Flat Hd. Screw (for A-319)	***
A-268	6-32 x 5/8" Rd. Hd. Screw (for A-235)	***
A-318	Glass	***
A-319	Hinge	2
SH-2635	Flush Strike (engages SH-2668)	***
<u>AX-48 GEAR SIDE DOOR ASSEMBLY</u>		
A-236	Glass Retainer Clip	***
A-240	Door Casting	***
A-262	6-32 x 3/16" Rd. Hd. Screw (for A-236)	***
A-320	Glass	***
<u>AX-62 FIRE SHUTTER ASSEMBLY</u>		
A-152	Fire Shutter Casting	7
A-158	Shoulder Screw	7
A-159	Fire Shutter	7
A-161	Shoulder Screw	7
A-165	False Aperture Bottom	1 & 7
A-166	Glass	7
A-167	Guard	7
A-169	Stop	7
A-170	Shield (covers A-152)	***
A-257	4-40 x 1/4" Flat Hd. Screw	1 & 7
A-259	5-40 Hex. Nut (to hold AX-60)	***
A-265	6-32 x 1/4" Flat Hd. Screw (for A-167)	***
A-311	Flexible Shaft	7
A-314	4-40 x 1/8" Rd. Hd. Screw	7
A-375	Flexible Shaft Tube	7
A-376	8-32 x 1/4" Sems Fastener Rd. Hd. Screw	7
A-378	Changeover Shield	7

*** Not illustrated.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
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AX-62 SUBASSEMBLIES

AX-50	* False Aperture & Film Pin	1
AX-59	* Governor Link	7
AX-60	* Fire Shutter Link	7

AX-70 MECHANISM LIGHT ASSEMBLY

A-189	Housing	2
A-190	Cover	2
A-191	Bracket (for A-194)	***
A-192	Glass	2
A-194	Socket (for A-196)	***
A-196	Bulb (in A-189)	***
A-273	8-32 x 5/16" Socket Cap Screw (for A-190) (for A-191)	2 2
A-392	Tumbler Switch (with wire leads)	2
A-421	Terminal	5
A-442	Black Sleeve - 1" long	5
A-443	Stranded White Wire Lead - 5" long	5

AX-80 INTERMITTENT MOVEMENT ASSEMBLY

A-13	Cam Casting	7
A-15	Cam Pinion	7
A-16	Balance Wheel	7
A-17	Plunger (under A-18)	***
A-18	Push Button	7
A-19	Plunger Spring (on A-17)	***
A-20	Ball Spring (under A-21)	***
A-21	Steel Ball (under A-17)	***
A-22	Spring (between A-24 & AX-77)	***
A-23	Spring (between AX-77 & A-27)	***
A-24	Sprocket Shoe	7
A-27	Guide Plate	7
A-28	Star Shaft Button	7
A-30	Gasket (between A-13 & AX-73)	***
A-31	Shoe Stud	7
A-36	Sprocket Aligning Screw (on AX-2)	7
A-37	Dowel Pin (to locate A-13 on AX-73)	***
A-39	Locking Slug (under A-271)	***
A-40	Cam Shaft Collar	7
A-103	Locking Slug (under A-269)	***

*** Not illustrated.

* Sold as Unit only.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
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AX-80 INTERMITTENT MOVEMENT ASSEMBLY (Cont'd.)

A-129	Dowel Pin	7
A-249	Ball Bearing (for AX-67)	***
A-255	Ball Bearing (for AX-2)	***
A-262	6-32 x 3/16" Rd. Hd. Screw	7
A-264	Tapered Screw	7
A-269	8-32 x 1/8" Socket Set Screw (in A-28)	7
A-271	8-32 x 1/4" Socket Set Screw	7
A-283	10-32 x 1/4" Socket Set Screw (to lock AX-76)	7
A-284	10-32 x 5/16" Socket Set Screw	7
A-288	10-32 x 1/2" Socket Cap Screw	7
A-293	10-32 x 7/8" Socket Cap Screw	7
A-309	Taper Pin	7
A-340	Cam Pin	***
A-342	Bronze Bearing (for AX-2)	***
A-343	Bronze Bearing (for AX-67)	***
A-356	1/4-28 x 1/4" Socket Set Screw	7
A-382	Indicator Cap	7
A-383	Grease Plug	7
A-394	Locking Spring (under A-382)	***

AX-80 SUBASSEMBLIES

AX-2	* Star Shaft	7
AX-54	* Sprocket	7
AX-67	* Cam & Pin	7
AX-73	Star Casting (with A-129 & A-293)	7
AX-76	* Stripper & Dowel	7
AX-77	* Slide & Support	7

AX-86 LENS CARRIAGE, FILM GATE AND BASE ASSEMBLY

A-74	Driv-Lok Pin (to locate A-77 on A-76)	***
A-76	Lens Carriage Base Casting	1
A-77	Track Support Casting	1
A-78	Tension Shoe Casting	1
A-79	Light Guard	1
A-82	"V" Rail (upper)	1
A-83	"V" Rail (lower right)	1
A-84	"V" Rail (lower left)	1
A-90	Track Lock Screw	1
A-91	Cover Plate	1

*** Not illustrated.

* Sold as Unit only.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-86 LENS CARRIAGE, FILM GATE AND BASE ASSEMBLY (Cont'd.)</u>		
A-92	Pressure Bar	7
A-93	Spring Bar	7
A-94	Tension Shoe Spring	7
A-95	Cam Dial Pin (on A-93)	***
A-97	Dial Indicator	1
A-98	Screw	1
A-99	Nose Casting	2
A-100	Locking Shaft	2
A-102	Adjustment Collar	2
A-103	Slug (for A-102 & A-104)	***
A-104	Spacing Collar (between AX-13 & A-99)	***
A-105	Focusing Shaft	2
A-106	Gate Closing Spring (between A-76 & A-78)	***
A-115	Rack	1
A-116	Ball Stop	1
A-118	Screw (for A-93)	1
A-119	Upper Track Roller	1
A-120	Upper Roller Sleeve	1
A-121	Lower Track Roller	1
A-122	Lower Roller Sleeve	1
A-123	Track Roller Nut (on end of A-119 & A-121)	***
A-124	Spring (on A-123)	***
A-125	Lens Stop	2
A-126	Lens Stop Cap	2
A-127	Lens Arm Guide (for A-128)	***
A-128	Lens Extractor Arm	2
A-132	Steel Ball (in A-82 & A-84)	***
A-133	Dowel Pin (to locate A-115 on A-78)	***
A-179	Pivot (spring end - opposite A-354)	***
A-258	5-40 x 1/4" Fil. Hd. Screw	1
A-262	6-32 x 3/16" Rd. Hd. Screw (for A-127)	***
A-263	6-32 x 1/4" Rd. Hd. Screw (to hold A-94 on A-93)	***
A-269	8-32 x 1/8" Socket Set Screw (for A-102 & A-104) (to lock A-271 & A-346)	2 1
A-270	8-32 x 3/16" Socket Set Screw	1
A-271	8-32 x 1/4" Socket Set Screw (for lower pivots A-179 & A-354) (to adjust A-83 & A-84)	1 ***
A-276	8-32 x 7/16" Socket Set Screw (for upper pivots A-179 & A-354)	1

*** Not illustrated.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-86 LENS CARRIAGE, FILM GATE AND BASE ASSEMBLY (Cont'd.)</u>		
A-277	8-32 x 1/2" Socket Cap Screw	1
A-279	8-32 x 5/8" Socket Cap Screw	2
A-285	10-32 x 3/8" Socket Cap Screw (to mount A-77 on A-76)	***
A-288	10-32 x 1/2" Socket Cap Screw	1
A-333	10-32 x 9/16" Socket Cap Screw	7
A-334	Lock Pin Cap (for A-335)	***
A-335	Spring (on A-336)	***
A-336	Lock Pin Knob	7
A-337	Slug (between A-338 & A-105)	***
A-338	Spring (between A-337 & AX-14)	***
A-346	8-32 x 1/2" Socket Set Screw (to adjust A-83)	***
A-354	Pivot	1
A-387	10-32 x 1-1/2" Socket Cap Screw	1
A-411	Internal Tooth Lockwasher (between A-258 & A-116)	***
A-416	8-32 x 1/4" Rd. Hd. Screw	1
A-449	Asbestos Heat Baffle (on A-77)	***

AX-86 SUBASSEMBLIES

AX-3	Upper Track Roller (consists of A-119, A-120, A-123 & A-124)	**
AX-4	Lower Track Roller (consists of A-121, A-122, A-123 & A-124)	**
AX-5	* Aperture & Film Track Shoe	1
AX-7	* Tension Shoe	2
AX-8	* Cam Dial	1
AX-12	* Lens Lock Knob	2
AX-13	* Lens Focus Knob (on A-105)	***
AX-14	* Lens Carriage & Locking Casting	2

AX-88 WRENCH & KIT SET

		Quan.	Per Set
A-404	5/64" Hexagon Wrench	1	***
A-405	3/32" Hexagon Wrench	1	***
A-406	1/8" Hexagon Wrench	2	***
A-407	5/32" Hexagon Wrench	1	***
A-408	3/16" Hexagon Wrench	1	***
A-425	Wrench Kit	1	***

*** Not illustrated.

** Component parts illustrated individually.

* Sold as Unit only.

MOTIOGRAPH AA MECHANISM REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-90 FIRE TRAP ASSEMBLY</u>		
A-257	4-40 x 1/4" Flat Head Screw	2
A-385	Side Plate	2
A-397	Fire Trap Casting	2
A-401	Roller Shaft	2
A-409	1/4-28 x 2-1/2" Socket Cap Screw	2
A-410	1/4-28 x 1-1/2" Socket Cap Screw	2

AX-90 SUBASSEMBLIES

AX-66	* Roller	2
AX-87	* Roller Casting & Dowel Pin	2
AX-89	Chute (A-257, A-385, A-401, AX-66, AX-87)	**

FOLLOWING PARTS FOR AA-2 MECHANISM ONLY

A-438	Shutter Rotor	***
A-447	Collar (on A-231)	***
A-448	Plug Button (for 1" hole in Main Housing Boss)	***

MISCELLANEOUS

AX-83	Grease Gun	***
AX-1000	Gear Lubricant	***
AX-1007	Snap Ring Pliers (for A-305)	***
AX-1010	5/64" Hex. Wrench with Handle	***
AX-1011	3/32" Hex. Wrench with Handle	***
AX-1012	1/8 " Hex. Wrench with Handle	***
AX-1013	5/32" Hex. Wrench with Handle	***
AX-1014	3/16" Hex. Wrench with Handle	***
LP-715-C	Grease	***

*** Not illustrated.

** Component parts illustrated individually.

* Sold as Unit only.

MOTIOGRAPH AA MAGAZINE REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-607 UPPER MAGAZINE ASSEMBLY</u>		
A-101	Nameplate	***
A-284	10-32 x 5/16" Socket Set Screw	8
A-291	10-32 x 3/16" Lg. Socket Hd. Set Screw	8
A-383	Grease Plug	8
A-600	Body	***
A-601	Door	***
A-602	Glass Frame	***
A-605	Hub Casting	8
A-606	Body Hinge	***
A-607	Cover Hinge	***
A-619	Door Knob	***
A-620	Door Catch Spacer (between A-621 & AX-604)	***
A-621	Door Catch Cover (for AX-604)	***
A-624	Leather Washer	8
A-625	Friction Collar	8
A-626	Glass	***
A-634	Hinge Pin	***
A-636	Reel Shaft Collar	8
A-637	Staple	8
A-639	4-40 x 3/16" Truss Hd. Screw (for A-602) (for A-101)	*** ***
A-640	4-40 Hex. Nut (for A-639)	***
A-641	8-32 x 5/16" Truss Hd. Screw (to mount A-600 & A-601 on AX-603 & AX-606)	*** ***
A-642	10-32 x 1/2" Truss Hd. Screw (for A-619)	***
A-643	10-32 x 3/8" Truss Hd. Screw (on A-621)	***
A-644	10-32 Hex. Nut (for A-643)	***
A-645	10-32 x 1-1/4" Socket Cap Screw	8
A-648	Gasket	8
A-653	Adjusting Screw	8
A-654	Grease Retainer	8
A-655	Thrust Bearing N.H. EW 3/8	8
A-656	Washer	8
A-657	Spring	8
CS-1311	Brass Slug	8
<u>AX-607 SUBASSEMBLIES</u>		
AX-604	* Door Catch and Spring	***
AX-605	* Upper Reel Shaft (includes A-636 & A-637 which are also sold separately)	8 ***
AX-606	* Spider and Bearing *** Not illustrated. * Sold as Unit only.	***

MOTIOGRAPH AA MAGAZINE REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
<u>AX-612 LOWER MAGAZINE ASSEMBLY</u>		
A-101	Nameplate	***
A-376	8-32 x 1/4" Sems Fastener Rd. Hd. Screw (for A-609)	***
A-602	Glass Frame	***
A-606	Body Hinge	***
A-607	Cover Hinge	***
A-609	Fire Trap Casting	***
A-610	Spider	9
A-617	Body	***
A-618	Cover	***
A-619	Door Knob	***
A-620	Door Catch Spacer	***
A-621	Door Catch Cover	***
A-626	Glass	***
A-634	Hinge Pin	***
A-639	4-40 x 3/16" Truss Hd. Screw (for A-602) (for A-101)	***
A-640	4-40 Hex. Nut (for A-639)	***
A-641	8-32 x 5/16" Truss Hd. Screw (to mount A-617 and A-618 on A-606, A-607 and A-610)	***
A-642	10-32 x 1/2" Truss Hd. Screw (for A-619)	***
A-643	10-32 x 3/8" Truss Hd. Screw (for A-621)	***
A-644	10-32 Hex. Nut (for A-643)	***
CS-445	Set Screw (to lock AX-611 in A-610)	9
CS-470	Roller Shaft	***
<u>AX-612 SUBASSEMBLIES</u>		
AX-66	* Fire Trap Roller	***
AX-604	* Door Catch and Spring	***
AX-611	Take-up	See P.16

*** Not illustrated.
* Sold as Unit only.

MOTIOGRAPH AA MAGAZINE REPLACEMENT PARTS

PART NO.	DESCRIPTION	FIGURE NUMBER
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AX-611 TAKE UP ASSEMBLY

A-66	Spring	9
A-132	Ball Bearing	9
A-275	8-32 x 7/16" Socket Cap Screw	9
A-284	10-32 x 5/16" Socket Set Screw	9
A-304	5/16-24 x 3/8" Socket Set Screw	9
A-383	Grease Plug	9
A-611	Cover	9
A-613	Friction Disc	9
A-632	5/16-24 x 3/8" Rd. Hd. Screw	9
A-633	Gasket Washer	9
A-646	Staple	9
A-647	Taper Pin	9
A-649	Gasket	9
CS-1311	Brass Slug	9
TU-463	Collar	9
TU-470	Set Screw	9
TU-471	Set Screw	9

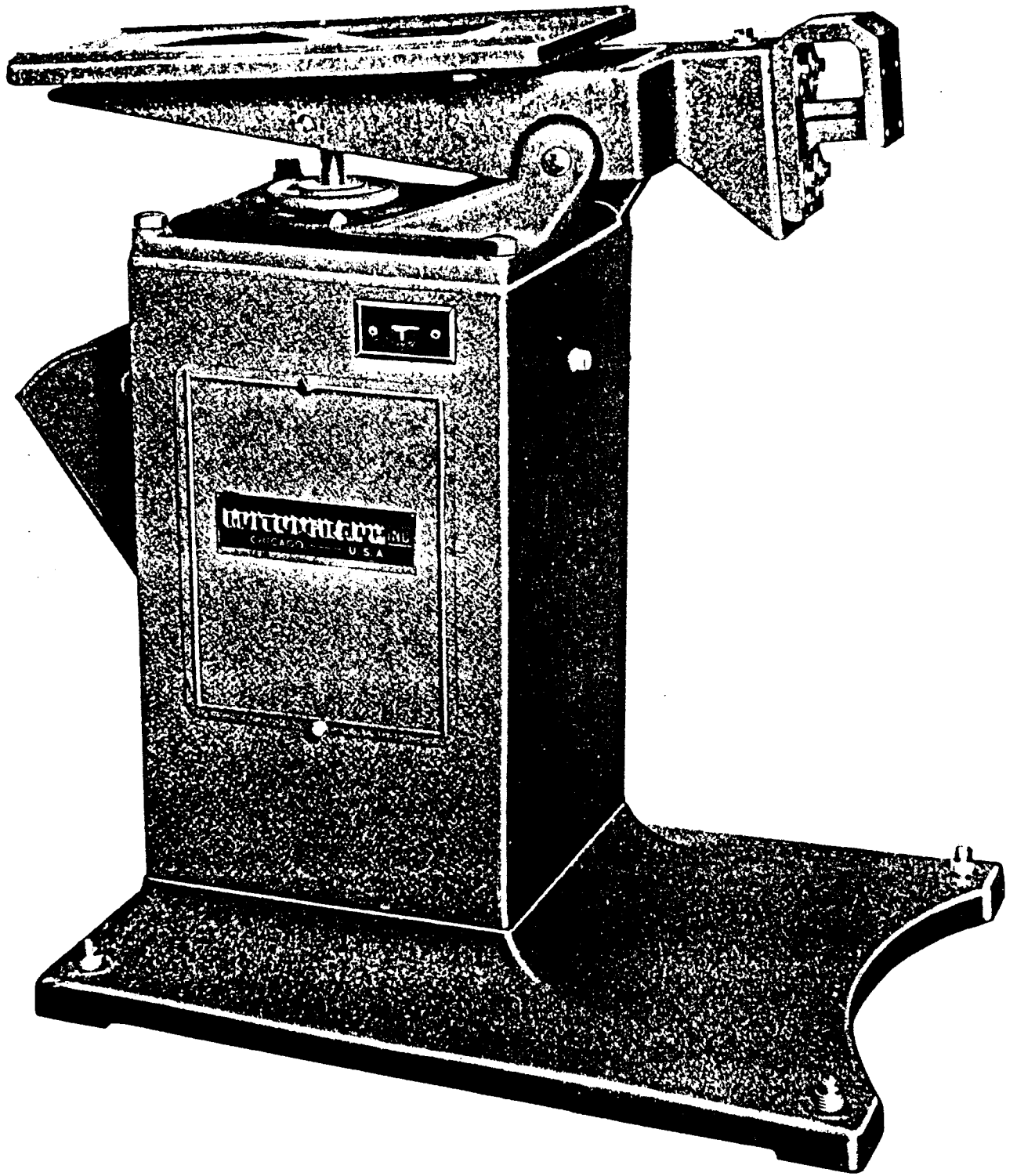
AX-611 SUBASSEMBLIES

AX-600	* Take Up Pulley and Bearing	9
AX-601	* Take Up Bearing	9
AX-602	* Cork Retainer Plate	9
AX-610	* Take Up Shaft	9

* Sold as Unit only.

MOTIOGRAPH PEDESTAL REPLACEMENT PARTS

PART NO.	DESCRIPTION	MODEL USED IN
PS-1329	Motor Switch	S
PS-1460	Screw (for PS-1496, PS-1571 or PS-1596)	AA & S
PS-1461	Screw (for PS-1496, PS-1571 or PS-1596)	AA & S
PS-1474	Motor Mounting Block (for W.E. 206, 208, 209, 211, Motiograph MK, RCA PS-1, PS-8, PS-16, PS-22)	AA & S
PS-1475	Soundhead Mounting Bracket	AA & S
PS-1496	Adapter Bracket (for RCA MI-9001, 1040, 1070, Simplex SH-1000, Westrex, Ball. Royal Soundmaster)	AA & S
PS-1503	Arc Switch Handle Lock Collar	AA & S
PS-1504	Arc Switch Handle Mounting Screw	AA & S
PS-1510	Motor Switch	AA
PS-1535	Bracket Mounting Screw (for PS-1475)	AA & S
PS-1559	Pilot Light Transformer	K
PS-1571	Adapter Bracket (for W.E. TA-7400 and TA-7500)	AA & S
PS-1596	Adapter Bracket (for W.E. 209 and 211, Ultraphone, Ballantyne Soundmaster, Weber ABH)	AA & S
PS-1604	Adapter Bracket (for RCA MI-9030, 9050, 9060)	AA & S
PS-1641	Switch Handle	AA & S
PS-2033-C	Arc Switch Handle Assembly	AA & S
SB-408	100-Ampere Switch	AA & S



MOTIOGRAPH MODEL "S" PEDESTAL

MOTIOGRAPH MODEL S STAND

The S stand provides for precise horizontal optical alignment, as its lamphouse carriage may be moved from side to side in three slots on its main frame casting. After being adjusted to the proper position, the carriage casting can be securely locked in place by means of three hexagon cap screws.

The lamphouse carriage is designed to fit any standard arc lamphouse.

Vertical optical alignment of the lamp and mechanism is simple. A large cap screw raises or lowers the union block supporting the sound reproducer and projector mechanism to the desired setting. Four screws then lock the union block securely in its proper place.

Angular adjustment is a simple operation with the easily accessible tilting device. This device like all others, may be securely locked in position. All possible projection angles are readily provided for as the S stand may be tilted 32° in a downward direction and 17° in an upward direction.

Leveling screws are provided to compensate for irregularities in the booth floor and to permit exact and easy leveling of the image on the screen.

An arc switch, of the 100 ampere double-pole single-throw type, is furnished. A motor starting switch is conveniently placed on the operating side of the stand.

The entire S stand is constructed of grey cast iron and heavy gauge sheet steel and its weight of 216 pounds is evenly distributed over a floor area of 25 inches by 32 inches. The base of the stand projects forward so that the entire projector is well balanced and steady when even the greatest projection angle is utilized.

The finish is crinkle gray to match other parts of the projector. ALSO AVAILABLE IN BROWN COLOR.

MOTIOGRAPH AA LUBRICATION CHART

Supersedes all previous recommendations. As required frequency of lubrication varies with different operating conditions, rather frequent checking is recommended at first. Never allow parts to run dry. (Figure numbers refer to AA Parts Book.)

LUBRICATION OF AA MECHANISM

LP-715 MOVEMENT GREASE—Remove both A-383 Plugs (Fig. 7) from movement case. Fill case through upper right hole till grease begins to pour from lower drain level hole. Check level monthly and add grease as needed.

AX-1000 GEAR OIL—This is a new oil with superior lubricating qualities for gear tooth surfaces. Check all gears monthly and apply as needed to keep gears "wet".

LP-722 MECHANISM OIL—Apply with pressure oiler to reach all inner surfaces. Use often enough to keep shafts and rollers turning freely.

For Upper and Lower Track Rollers—Remove Socket Set Screw from each of the two A-354 Pivots (Fig. 1) and shoot oil into screw holes. Check weekly.

For Sprocket Rollers—Remove Thumb Screws from ends of three Roller Shafts and force oil into hole. Check monthly.

For Idler Roller—Remove Socket Cap Screw from end of Roller Shaft and force oil into screw hole. Check monthly.

For Sliding Bracket and Shifting Frame—Force oil into hole in hub of AX-28 Gear, into hole in A-45 Sliding Bracket (Fig. 4), and into three nearby holes in A-44 Shifting Frame Casting. (These holes can best be seen in Fig. 5, just to the left of the A-59 Vertical Shaft.) If AX-28 Gear has no hole, oil A-59 Shaft and frame up and down a few times to distribute oil. Check monthly.

For Governor—Remove Retainer Cap from A-134 Blower Bracket (Fig. 4) and shoot oil into exposed screw hole in shaft. Check monthly.

LUBRICATION OF AA UPPER MAGAZINE

LP-715 MOVEMENT GREASE—Remove A-383 Plug (Fig. 8) and fill hub halfway. (If plug is at top, turn hub one-quarter turn so plug will also serve as a drain level hole. If over-filled, excess will leak out.) Check every second month.

LP-722 MECHANISM OIL—Refill oil cup on hub of Spider Casting with a few drops of LP-722 Oil as needed to keep reel shaft turning freely.

LUBRICATION OF AA LOWER MAGAZINE

LP-715 MOVEMENT GREASE—Remove A-383 Plug (Fig. 9) from Takeup Cover when Plug is at low point of its rotation. If grease does not flow from hole, add amount needed. Check every second month. Once a year remove cover to clean out old grease.

LP-722 MECHANISM OIL—Apply a few drops as needed to oil hole in hub of A-610 Spider Casting, and to hole under A-383 Plug in adjoining hub of AX-600 Pulley Casting. Oil enough to keep shaft turning freely.

LUBRICATION OF SH-7500 SOUNDHEAD GEARS

AX-1000 GEAR OIL also is superior for Soundhead Gears. Apply weekly through lubricating pipes. See sound instruction book for other soundhead lubrication points.