

Film-Tech

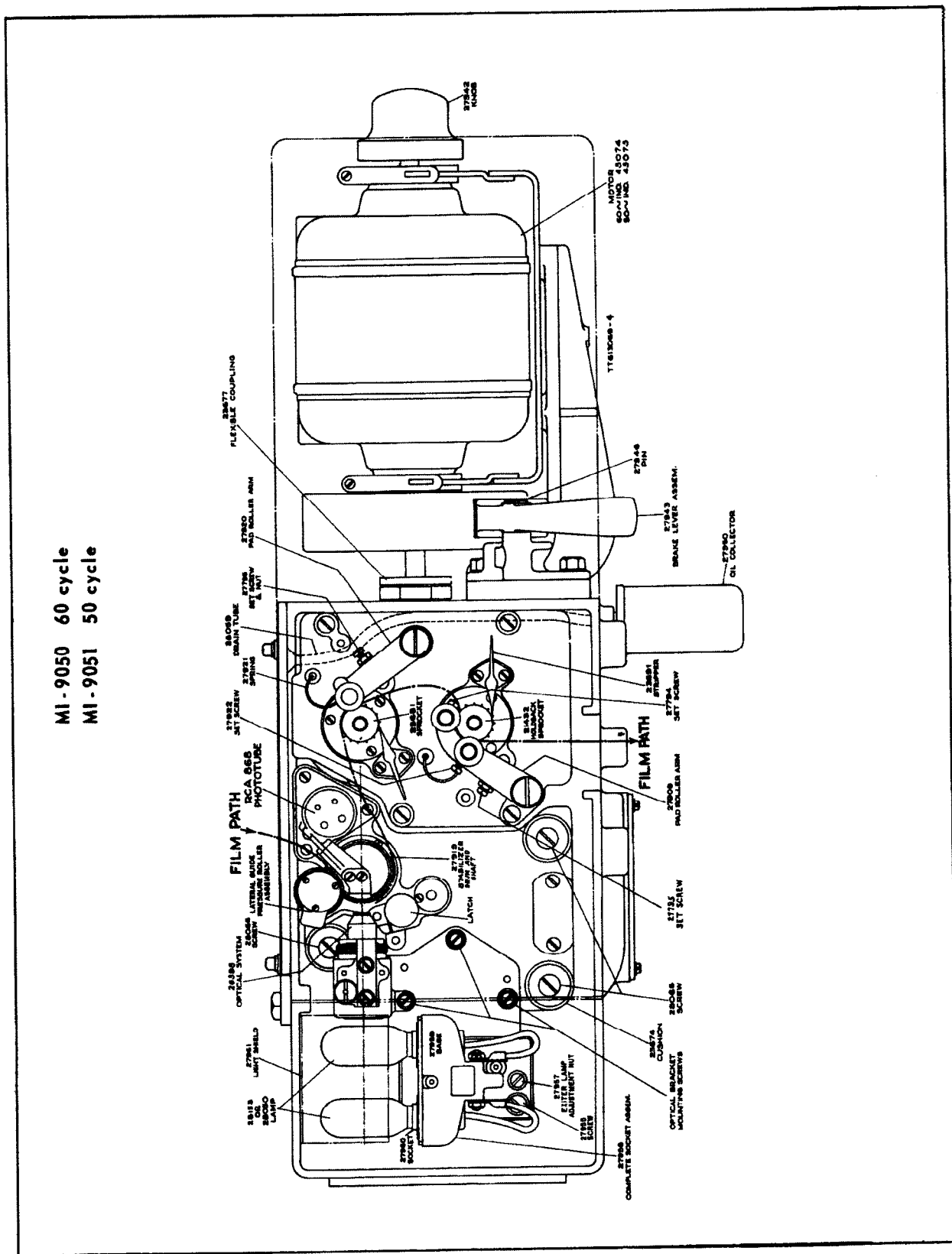
The information contained in this Adobe Acrobat pdf file is provided at your own risk and good judgment.

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

RCA 9050 SOUND HEAD



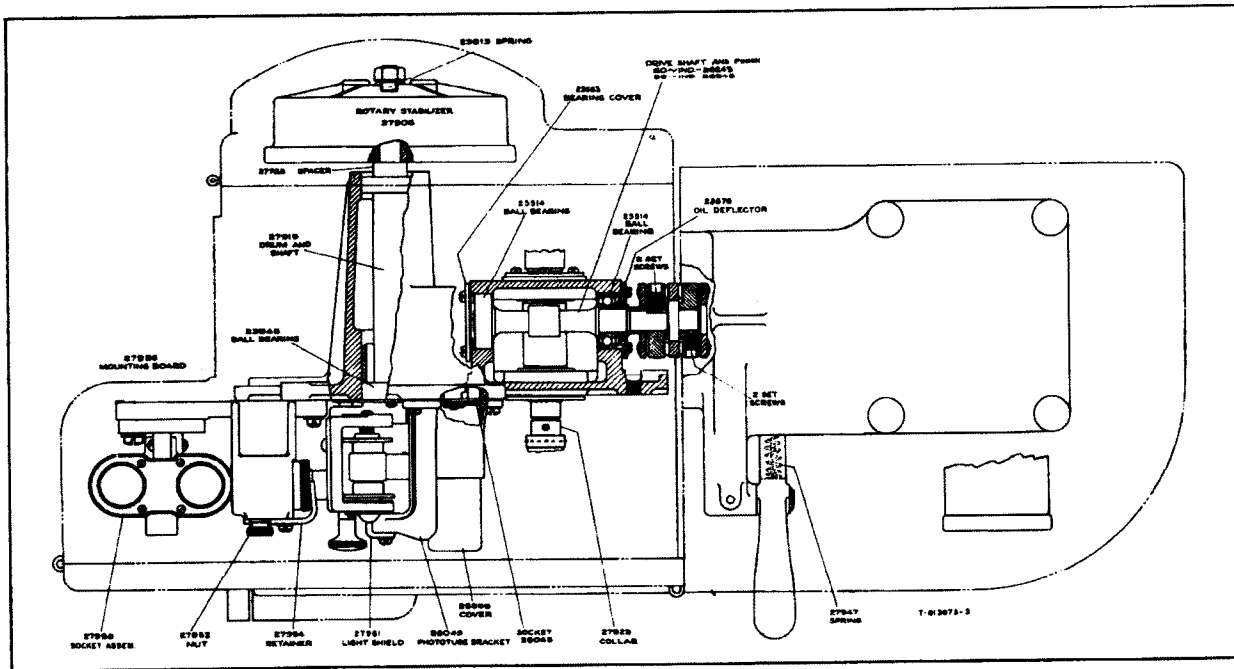


Figure 2—Cross Section of Soundhead

RCA Stock number 25551 oil is recommended for use in the gear box, but a good grade of S.A.E. No. 30 oil may be used.

The oil cup on the projector drive gear shaft should receive two drops of the same oil used in the gear box, at least once each day. The soundhead drive motor is equipped with special sealed grease-packed bearings and requires no oiling.

During the winter months, where the projection room temperature may drop considerably below normal room temperature between performances, each machine should be run, without film, for about 15 minutes before regular performance.

Exciter Lamps

The exciter lamps used are of the prefocused type. After the exciter lamp mounting bracket has been properly adjusted to give the correct light on the photocell, new exciter lamps may be installed without any further adjustment. A spare lamp should always be kept focused in the extra socket of the exciter lamp holder. It will then only be necessary to reverse the holder to place the spare exciter lamp in operation.

Optical System

The optical unit, photocell lens, photocell, and exciter lamps should be cleaned with lens tissue or a soft piece of clean linen before each day's per-

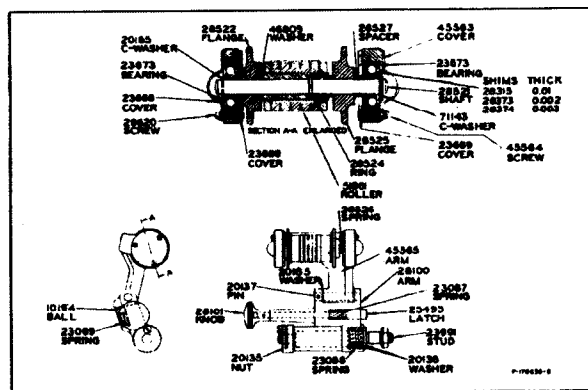


Figure 3—Lateral Guide and Pressure Roller

formance. Never use ordinary tissues for cleaning lens parts because lint from the tissue may be left on the lens surfaces.

Sound Take-Off Drum

The sound drum should be kept thoroughly clean. Foreign material on the drum, such as dirt, lint, or film emulsion, may cause poor quality sound. Never use any metallic instrument such as a knife, screwdriver, etc., for cleaning purposes, as any scratches made on the drum may cause scratches on the film.

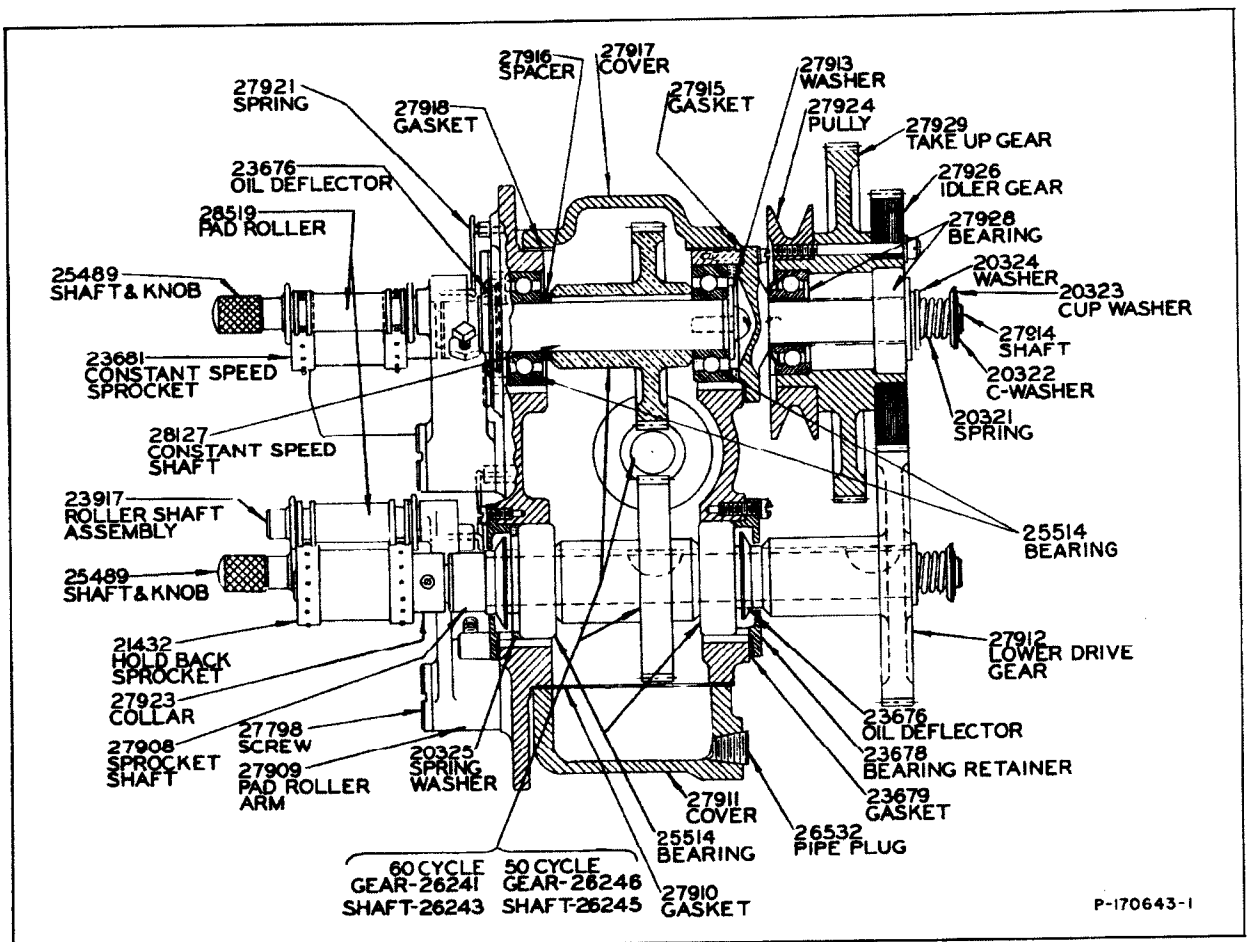


Figure 4—Cross Section of Gear Box

REPLACEMENT PARTS

The following parts list is included to provide identification when ordering replacement parts. Order from *RCA Replacement Parts Department, Camden, New Jersey*, giving the *stock number* and *description* of the parts wanted. Replacement parts supplied may be slightly different in form or size from the original parts but will be completely interchangeable with them.

LIST OF PARTS

Description	Stock No.
GEAR BOX	
Bearing, ball; C.S.S., H.B.S., and motor drive shafts	25514
Collar and setscrew, sprocket adjustment	27923
Cover, drive shaft rear bearing	23683
Cover, lower; with plug and screws	27911
Cover, upper, with screws	27917

Description	Stock No.
GEAR BOX (Cont'd)	
Deflector, oil	23676
Gasket, lower cover	27910
Gasket, upper cover	27918
Gasket, bearing retainer	23679
Gasket, between take-up gear bearing stud and gear case	27915
Gear, 37-tooth bronze drive, C.S.S. shaft and H.B.S. shaft (50 cycle)	26246
Gear, 49-tooth bronze drive, C.S.S. shaft and H.B.S. shaft (60 cycle)	26241
Gear, 50-tooth steel, lower drive	27912
Plug, pipe	26532
Retainer, ball bearing	23678
Shaft, C.S.S.	28127
Shaft, H.B.S.	27908
Shaft and pinion, main drive; 50 cycles, 9-tooth	26245
Shaft and pinion, main drive; 60 cycles, 10-tooth	26243
Spacer, C.S.S. drive gear and bearing	27916
Spring, gear retaining coil; end of shaft	20321
Sprocket, constant speed	23681
Sprocket, hold back	21432
Stripper, film	23691

Description	Stock No.
GEAR BOX (Cont'd)	
Stud, bearing; take-up gear and pulley shaft	27914
Washer, spring; used between bearing and oil deflector on C.S.S. shaft or H.B.S. shaft	20325
Washer, "C"; end of shaft	20322
Washer, cup; end of shaft	20323
Washer, retaining; end of C.S.S. shaft	27913
Washer, thrust; end of shaft	20324
NOTE: C.S.S.—Constant Speed Sprocket H.B.S.—Hold Back Sprocket	
DOUBLE PAD ROLLER	
Arm, roller	27909
Roller, pad	28519
Screw, arm bearing	27798
Screw, 8-32 x 5/16 Allen head steel set screw; roller shaft	27794
Screw, 8-32 x 3/8 Allen head steel set screw; roller shaft	27922
Screw, 8-32 x 3/4 Allen head steel set screw and nut; pad roller arm adjustment	27795
Shaft, roller	23917
Shaft, roller; with knurled knob	25489
Spring, arm position	27921
SINGLE PAD ROLLER	
Arm, C.S.S. pad roller	27920
Roller, pad	28519
Screw, arm bearing	27798
Screw, 8-32 x 5/16 Allen head steel set screw; roller shaft	27794
Screw, 8-32 x 3/4 Allen head set screw and nut; pad roller arm adjustment	27795
Shaft, roller; with knurled knob	25489
Spring, roller arm position	27921
LATERAL GUIDE AND PRESSURE ROLLER	
Arm, lower	28100
Arm, upper	45565
Ball, arm locking mechanism	10194
Bearing, ball	23673
Cover, inner end; inner ball bearings	23669
Cover, outer end; inner ball bearings	45563
Cover, outer end; outer ball bearings	23668
Flange, inner guide; has extended hub	28525
Flange, outer guide	28522
Knob, guide roller latch	28101
Latch, guide roller	25493
Nut and screw, adjusting	20135
Pin, upper arm pivot; with taper pin	20137
Ring, guide roller retaining	28524
Roller, pressure	51961
Screw, 2-56 x 1/2; inner bearing cover	45564
Screw, 2-56 x 3/8; outer bearing cover	26620
Shaft, roller; with one retaining ring and two "C" washers	28521
Spacer, under spring No. 28526	28527
Spring, roller	28526
Spring, lower arm pivot	23088
Spring, pressure roller latch	23087
Spring, pressure roller arm mechanism	23089
Stud, assembly mounting	23991
Washer, "C"; roller shaft ends	71143
Washer, pivot tension spring retaining	20136
Washer, spring; between roller and flange	46809
Washer, upper arm end play	20185
Washer, bearing spacer; .002 thick	28373
Washer, bearing spacer; .003 thick	28374
Washer, bearing spacer; .010 thick	28315

Description	Stock No.
MOTOR	
Bearing (13 mm); framing knob end	28058
Bearing (17 mm); flywheel end	28057
Brake	27943
Coupling, flexible	23677
Governor, centrifugal, 60 cycle; less ring	47085
Knob, motor hand	27942
Lining, brake	27944
Motor, 50 cycle, 110 v, single phase; with flywheel	45075
Motor, 60 cycle, 110 v, single phase; with flywheel	45074
Mounting, rubber mounting washers for motor shaft	26936
Pin and washer, brake lever bearing	27946
Ring, clamping, enclosing motor mounting washers	26538
Ring, bakelite contact, 60 cycle centrifugal switch	47086
Spring, re-loading, motor bearing	28060
Spring, spiral; brake handle release	27947
Stationary section of centrifugal switch	26260
Rotating section of 50 cycle centrifugal switch	26374
Washers, shim, armature end play; set	28061
MAIN CASE	
Catch, female section; gear cover or sound-head doors	21446
Catch, male section; gear cover or sound-head doors	23094
Clamps, window support; set of two	26623
Cover, transformer compartment	27948
Cushion, rubber mounting; sound bracket	23674
Door, soundhead, operating compartment	54515
Door, soundhead, exciter lamp housing	54516
Handle, door	45187
Hinge, gear box cover	54395
Hinge, door, operating compartment	54404
Hinge, door, exciter lamp housing	54401
Knob, gear cover	23683
Mirror, steel; on soundhead partition	28064
Nipple, oil gauge	28069
Oil collector	27950
Oil gauge	28068
Screw, thumb; terminal board cover	28072
Screw and metal washer; sound barcket lower mounting	28065
Screw and metal washer; sound bracket upper mounting	28066
Shield, static	27949
Stop, door	23690
Stud, door-stop	28073
Thumb nut; holding motor cover	28067
Tube, oil drain	28059
Window, glass, operating compartment door	27940
OPTICAL SYSTEM	
Base, double exciter lamp socket	27959
Board, mounting; exciter lamp	27956
Contact and lead; with washers and coil spring	27963
Contact, flat spring; with mounting bushings, screw and washer	27962
Lamp, prefocused exciter; 10 v, 5 amp.	28050
Lamp, prefocused exciter; 10 v, 7 1/2 amp.	28153
Nut, knurled; locking pin	27952
Nut, exciter lamp mounting board adjustment	27957
Optical system, 1 1/4 mil	27951
Pin, locking	27953
Retainer, adjusting nut	27954
Screws, exciter lamp mounting board; three	27955
Setscrew, optical sleeve adjustment	28166

Description	Stock No.
OPTICAL SYSTEM (Cont'd)	
Shield, light; exciter lamp	27961
Socket, exciter lamp socket assembly	27958
Socket, exciter lamp socket less base	27960
ROTARY STABILIZER	
Bearing, ball; drum shaft	23948
Cover, shaft bearing	27785
Drum and shaft	27919
Spacer; between wheel and ball bearing	27783
Spacer; between ball bearings	27784
Spring driver	23913
Wheel, damping	27806
PHOTOTUBE	
Bracket	28049
Cover	25559
Gasket, socket	23106
Holder, lens	25539
Lens	25538
Phototube, RCA-868
Ring, socket, spacer	27805
Shield, light	28052
Shim, light shield; set of 4	28149
Socket	28045
Phototube Transformer, MI-9181	
Transformer, XT-2874-B	28794
Cushions, phototube transformer mounting; six	28070
NOTE: These parts are used only in sound-heads which are NOT low capacity coupled.	
PROJECTOR DRIVES	
Brenkert BX-40, -80 MI-9129-A	
Gear, textolite; pinion drive	28661
Oil cup; with nut	22490
Pinion, steel drive	28666
Screws, drive gear, 8-32 x 1/2"; six	28667
Shaft, complete	28673
Washer, spacing	22235
Washer, thrust; ball bearing	28674
Motigraph K, MI-9124	
Gear, textolite; pinion drive	28661
Nut, drive shaft	28446
Oil cup; with nut	22490
Pinion, steel drive	28664
Screws, drive gear, 8-32 x 1/2", six	28667
Shaft	28447
Washer, bronze thrust; gear end	23984
Washer, steel thrust; gear end	26811
Washer, steel thrust; pinion end	22235
Simplex E-7, MI-9128	
Gear, textolite; pinion drive	28661
Oil cup; with nut	22490
Pinion, steel drive	28665
Screws, drive gear, 8-32 x 1/2", six	28667
Shaft, complete	26627
Washer, spacing	22235
Washer, thrust; bronze	23984
Washer, thrust; steel	26811

Description	Stock No.
*Simplex Standard, MI-9127	
Gear, textolite; pinion drive	28661
Nut, drive shaft	20012
Oil cup; with nut	22490
Pinion, steel drive	28664
Screws, drive gear, 8-32 x 1/2", six	28667
Shaft, complete	27819
Washer, spacing	22235
Washer, thrust, bronze	23984
Washer, thrust, steel	26811
*Also for Century, Gardner, Kaplan, Simplex Super, Simplex SI, and Wenzel.	
Superior X, MI-1096	
Gear and pinion	26544
Oil cup; with nut	22490
Shaft	26543
PROJECTOR ACCESSORIES	
All Brenkert Models, MI-9123	
Bearing, ball; take-up gears and pulley assembly	27928
Belt, take-up, 44 inches long	26197
Brake, motor	27943
Catch, female, gear cover	23094
Gear, idler, 50-tooth composition	27926
Gear, take-up drive, 66-tooth steel	27929
Hinge, gear cover	54395
Knob, gear cover	23688
Lining, brake	27944
Nut, mounting plate adjusting	28041
Pin, pulley and gears assembly	27927
Pulley, take-up drive	27924
Ring, snap, adjusting nut	28042
Screw, projector mounting, 3/8-16 x 3/4 lg. flat head	28043
Screw, projector mounting, 3/8-16 x 1 lg. flat head	45064
Spacer, take-up shaft, .376 ID	28081
Spacer, take-up shaft, .750 ID	28044
Motigraph K, MI-9133-B	
Bearing, ball; pulley and gear assembly	27928
Belt, take-up, 44 inches long	26197
Brake, lever assembly	27943
Gear, helical drive, 50-tooth fiber	27926
Gear, spiral drive, 66-tooth steel	27929
Hinge, gear cover	54395
Knob, gear cover	23688
Latch, gear cover	23094
Lining, brake	27944
Pin, pulley and gears	27927
Pulley, take-up drive	27924
All Simplex Models, MI-9130-C	
Bearing, ball	27928
Belt, take-up, 44 inches long	26197
Brake, lever assembly	27943
Gear, helical drive, 50-tooth fiber	27926
Gear, spiral drive, 66-tooth steel	27929
Hinge, gear cover	54395
Knob, gear case	23688
Latch, gear case cover	23094
Lining, brake	27944
Nut, mounting plate adjusting	28041
Pin, pulley and gear assembly	27927
Pulley, take-up drive	27924

<i>Description</i>	<i>Stock No.</i>
All Simplex Models, MI-9130-C (Cont'd)	
Ring, snap; adjusting nut	28042
Screw, projector mounting, $\frac{3}{8}$ -16 x $\frac{3}{4}$ lg., flat head	28043
Spacer, take-up shaft, .376 ID	28081
Spacer, take-up shaft, .750 ID	28044
Chain Sprocket Assembly, Motiograph H.U., MI-9144	
Bearing, ball; pulley and gear	27928
Gear, 66-tooth spiral steel drive gear	27929
Gear, 50-tooth fibre helical gear	54884
Pin, assembly; pulley and gear	27927
Pulley, take-up drive	27924
Wheel, silent chain, 80-tooth	54885

<i>Description</i>	<i>Stock No.</i>
Motiograph H.U., MI-9134-A	
Belt, take-up; 44 inches long	26197
Bearing, ball; pulley and gear	27928
Catch, gear cover	23094
Chain, take-up, silent, 114 inches long	51964
Gear, 66-tooth spiral steel drive gear	27929
Gear, 50-tooth fibre helical gear	54884
Hinge, gear cover	54395
Knob, gear cover	23688
Lever, motor brake	27943
Lining, brake	27944
Nut, mounting plate adjusting	28041
Pin, assembly; pulley and gear	27927
Pulley, take-up drive	27924
Ring, snap; mounting plate adjusting nut	28042
Wheel, chain; projector	51963
Wheel, silent chain, 80-tooth	54885

Reverse Scan retro-fit kit available from Component Engineering.