

Film-Tech

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Date 22/4/60

Modifiche

ASSEMBLING THE PROJECTOR

Place the base column upside down on the floor, upon a dust sheet or other means of protection against scratches.

Place the base frame on the inverted column, and insert the two 30mm bolts which secure the frame to the column, lock these two bolts with the two knurled nuts supplied.

In the base frame are 8 tapped holes for Allen cap bolts (10mm dia.) Two of such holes (one for each side of the base) have a correspondent hole in the column to allow the fastening of the column to the base during the mounting of the projector. The column and base may be now stood the right way up and roughly positioned in the projection room.

The Lamphouse beam is secured to the rear of the column by 5 Allen cap bolts : - 3 - 10mm x 40mm long; 2 - 10mm x 25mm long. The beam cable harness must be carried through the hole in the column, and connected to the terminal strip on the inside wall of the column.

The steel strip included with the tool kit is fastened to the top of the projector by two of the top spool - box securing bolts, thus providing an easy means of lifting and handling the mechanism. Place the mechanism on the column, and from the inside of the column, screw in, but do not tighten, the four Allen cap bolts (8mm x 25mm long). Insert the two short alignment pins from inside the column, when these are located in the projector base the four bolts may be tightened.

After the mechanism and beam are aligned and secured, but before fitting any other components, the cable harness should be fitted and connected as detailed in drawing No. 10C-1920.

The following parts may now be mounted in the column, and connected to the terminal board :

- Take-up motor with clutch
- Exciter lamp supply unit
- Cooling fan assembly.
- change over supply unit (on the projector No.1 only)

The connections for these items are clearly shown in the wiring diagram No. 10C-1920 but it is essential to take great care when connecting the threephase motors to ensure that all motors have the correct rotation.

The top spool-box is bolted to the top of the mechanism, alignment is provided by two dowel pins in the base of the spool-box arm.

A small flexible conduit protrudes from the bottom of the spool-arm, this contains the two wires which supply the top spool-box arm, these wires should be connected to the 2 pole terminal board at the rear of the mechanism.

The top and bottom fire-traps are each secured by two screws (5mm x 8mm long).

The rear cover of the magnetic soundhead should be removed to fix the magnetic soundhead to the front of the mechanism. The magnetic soundhead is aligned by two pins attached to it, and is fixed to the projector by three hexagon headed bolts (8mm x 20mm long). In the rear of the magnetic soundhead are two terminal boards to which the leads from the magnetic cluster should be connected to the magnetic Preamplifier input. After these connections are made the flywheel may be fitted and secured by the "spider" spring and hexagon nut.

The Optical Pre-amplifier should be mounted in the square recess at the front of the column. This unit has a cable with a concentric plug which should be plugged into the socket located at the rear of the optical soundhead. On the Preamplifier, a 4 pole plug is provided for a cable to be connected at the free end as shown in the drawing No. 5111.

LUBRICATION

Remove the dip-stick from the take-up gear box and fill with oil until the top mark on the dip-stick is reached.

Fill the projector with oil through the filler plug at the top of the mechanism, until the oil reached the Red Spot on the lower oil sight window (near the inching knob). Using the inching knob, turn the projector by hand to make sure that the projector runs smoothly and freely. Switch on the motors and check that they run in the correct direction. The projector should be run at 24 f.p.s., and topped up with oil until the oil level is steady on the upper oil sight window.

Referring to Drawing No.107-1908, fill the dash pots of the oil dampers for both magnetic and optical soundheads, thread some test film through the projector, and adjust the control springs of the filter rollers as detailed in Drawing No. 107-1908.

The take-up clutch should be adjusted so that the take-up spool winds on at the start of the film without excessive snatch or strain on the film.

PICTURE AND SOUND CHANGEOVER

The VICTORIA X 70/35 - 6 1/4" model - is fitted with an electrically actuated change-over for picture and sound (drawing No. 5228).

The picture change-over is performed by the safety shutter mounted on the mechanism on the back of the rotary shutter. The sound change-over is performed in the change-over box by means of a relais energized by a microswitch mounted on the projector mechanism.

The opening of the safety shutter is electrically actuated by means of a rotary solenoid energized through a foot switch. In the opening and closing travel, the shutter - through a microswitch - energizes the sound relais in the change-over box, performing the sound change-over.

The wiring in between the projectors and to the foot-switches is clearly indicated in the drawings Nos. 5258 and 10C-1920. The parts of the electrically actuated change-over are clearly showed in the drawing No. 5230.

PICTURE AND SOUND CHANGE-OVER OPERATION

The light shutter is retained in the open position by a latch which is controlled by the governor mechanism, consequently the shutter will remain open only when the projector is running at normal speed. This latch may be tripped :

- 1) by the governor (i.e. on reduction speed);
- 2) by the top loop trip mechanism (i.e. a film breakage in the projector);
- 3) by the action of the change-over solenoid.

The picture and sound change-over operate as follows :

From the Projector No. 2 to the Projector No. 1 :

With the Projector No. 2 running, the pushing of the foot switch causes the following sequences of operations : FS1

- 1) Energizes the rotary solenoid RS.1 opening the light path on the Projector No. 1.
- 2) Energizes the solenoid R.12 tripping the latch of the Projector No.2 shutter, cutting off the light beam of the projector No. 2
- 3) The shutter of the Projector No. 2 in the closing travel opens permanently the microswitch I.26, de-energizing the sound relais in the change-over box and performing the sound change-over.

From the Projector No. 1 to the Projector No. 2 :

With the Projector No. 1 running, the pushing of the foot switch FS.2 causes the following sequence of operations :

- 1) Energizes the rotary solenoid RS.2 opening the light path on Projector No. 2;
- 2) Energizes the solenoid R.11 tripping the latch on the shutter of the Projector No. 1, cutting off the light beam on the Projector No. 1.
- 3) The shutter of the Projector No. 2, in the opening travel closes permanently the microswitch I.26 energizing the sound relais in the change-over box and performing the sound change-over.

TILTING THE PROJECTOR

The tilting device is sketched on the Drawing No. 5232 and it is mounted in the back of the projector column.

For low tilting degrees (7° max.), insert the spacing plate 10C-1127b in between the socket bracket 10C-1127a and the socket body. For high tilting degrees, the aforementioned spacing plate is not to be used.

Loose the two screws (Allen cap, 10mm dia.) which fasten the column to the socket; the column can now rotate on the central 30mm bolts. The right tilting can easily be obtained by means of the two nuts 10C-1128a by which is possible to fasten the projector in the wanted tilting. When the right tilting is obtained, the column can be best fastened to the socket by means of screws mounted on the base frame.

Note No. 1

When the rotary switches I_{13} and I_{14} inside of the column are set to AUT and the main switch I_1 is closed, an external starter has to be used. When the rotary switches I_{13} and I_{14} inside of the column are set on MAN, the projector is started through the main switch I_1 .

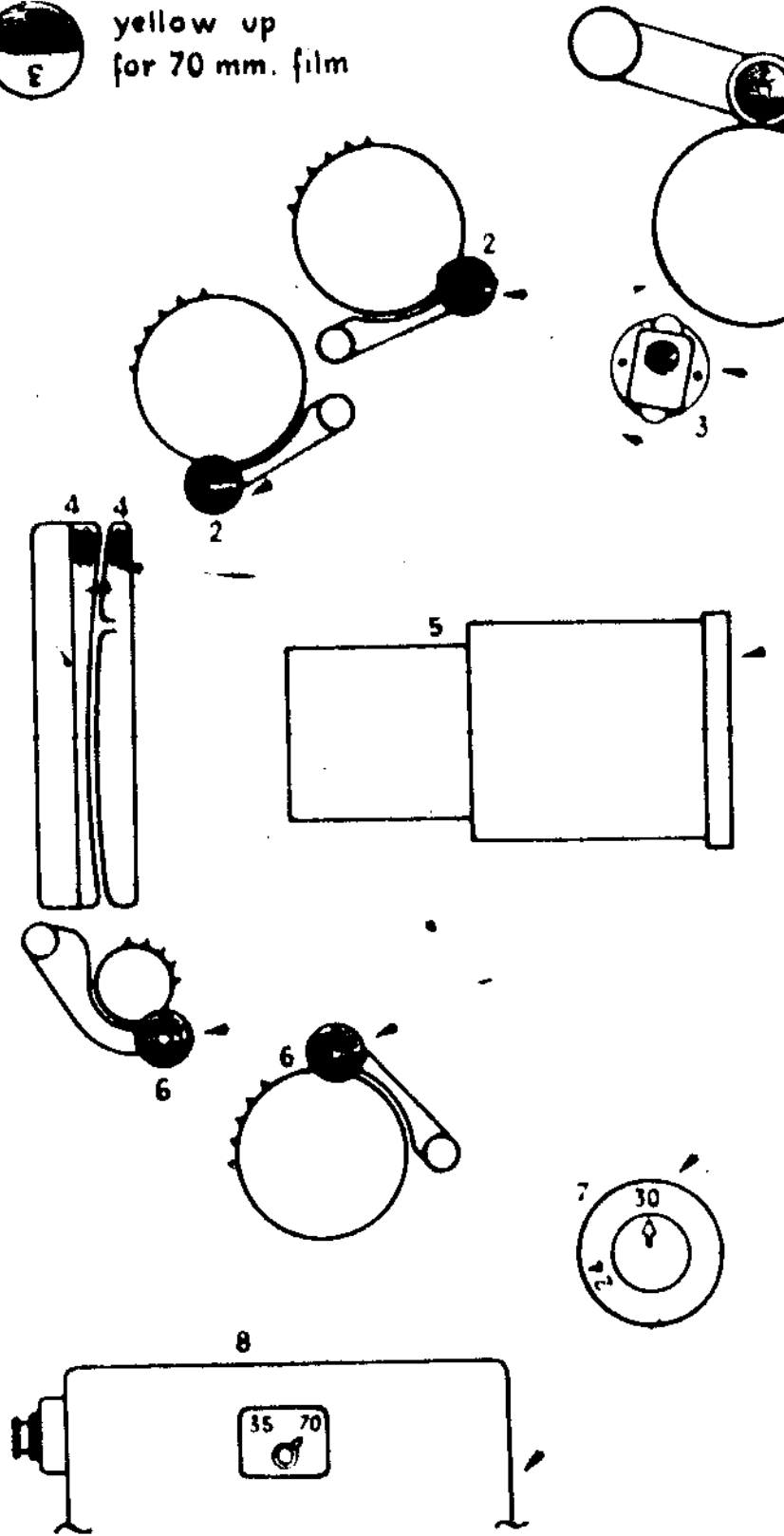
Note No.2

The safety shutter mounted behind the rotary shutter and used as picture change-over is of polished aluminium. It is mandatory to keep such aluminium disk very clean to avoid excessive heating and also the melting of the disk when stricken by the Arc lamp light flow. It is also strongly recommended, during the change-over operation, to reduce at the minimum the time such disk is stricken by the full arc lamp light.

Note No. 3

When replacing gears and particularly the Intermittent star it may be necessary to adjust slightly the shafts. The shafts dia. is generally grinded one mil. more than the corresponding hole.

 yellow up
for 70 mm. film



The sketch represents the mechanism ready for 70

VICTORIA X -70/35 mm. PROJECTOR

Instruction notes for switching the Projector from 70 mm. (yellow up) to 35mm. (red up) operation.

Loose (some few turns) the (⊕) screw, fastening the coloured knob. The knobs, pulled towards the operator, can now be rotated.

- 1 - Turn half a turn the pressure roller knob of the magnetic head drum.
- 2 - Turn half a turn the pressure rollers knob of the upper and intermediate sprockets.
- 3 - Unscrew the two knurled knobs of the magnetic head, turn half a turn the head, screwing again the two knobs.
- 4 - Interchange the two parts of the film gate assemblies.
- 5 - Interchange the lenses.
- 6 - Turn half a turn the pressure roller knobs of the intermittent and lower sprockets.
- 7 - Set the speed shift to 24 frames (if it was on 30 frames).
- 8 - Set to 35 the magnetic preamplifier rotary switch.
- 9 - Insert the adapting rings on the magazines spindles.

Fasten the (⊕) screws of the coloured knobs.

To switch the Projector from 35 to 70 mm., repeat vice versa the listed schedule i.e. turn "yellow up" the aforementioned colour, red knobs and the magnetic head, interchange film gate assemblies and lenses, set the speed shift and the magnetic preamplifier switch, take away from the magazines spindles the adapting rings.

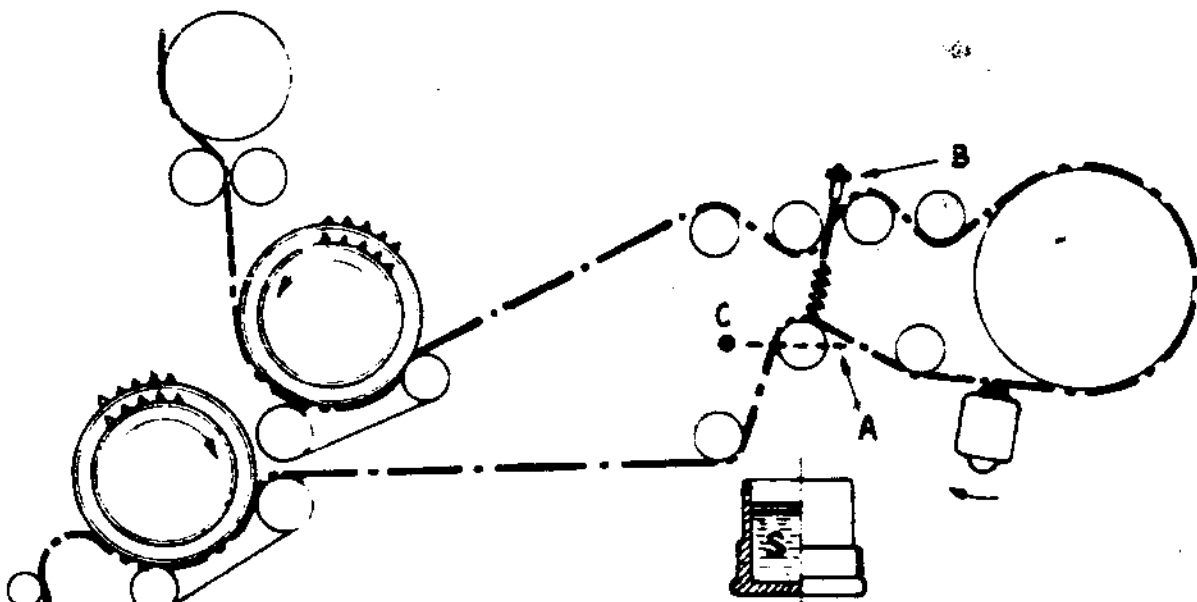


FIG. 3

Film 70 mm.

Film threadings:

- Optical 35 mm. FIG. 1
- Magnetic 35 mm. FIG. 2
- Magnetic 70 mm. FIG. 3

Hydraulic dampers filling.

Unscrew the container and pour the damping fluid S up to 3/8" from the rim.

Oil dampers setting.

The setting of the spring of the dampers as to be done while the projector is normally running.

Optical sound head dampers turn the screw R till the rim P of the damper is set on the pointer I.

Magnetic reproducer damper: turn the knurled knob B till the roller axis A reach the red spot C.

Drn. *Ally*

VICTORIA X - 70/35

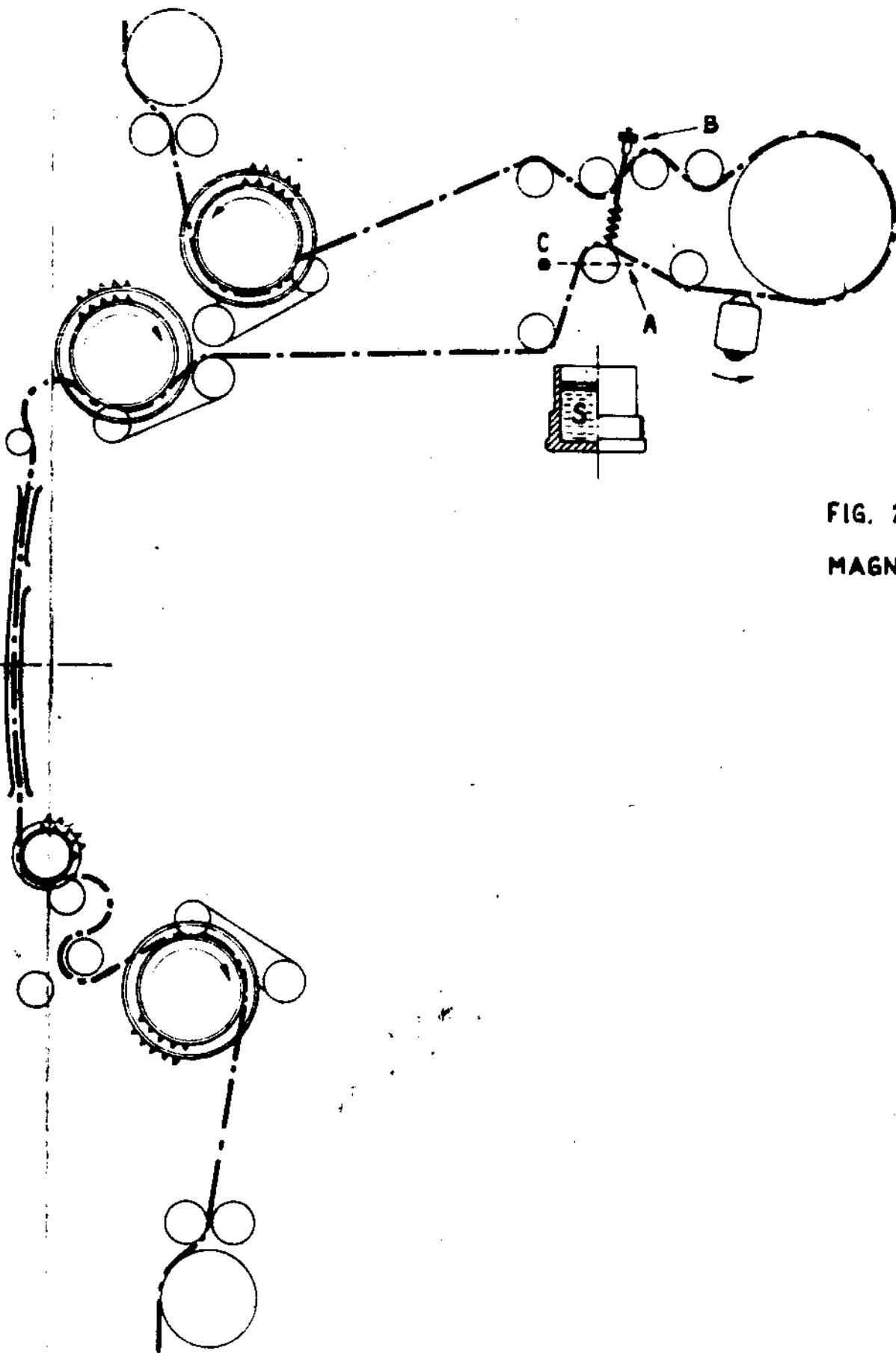


FIG. 2
MAGNETIC

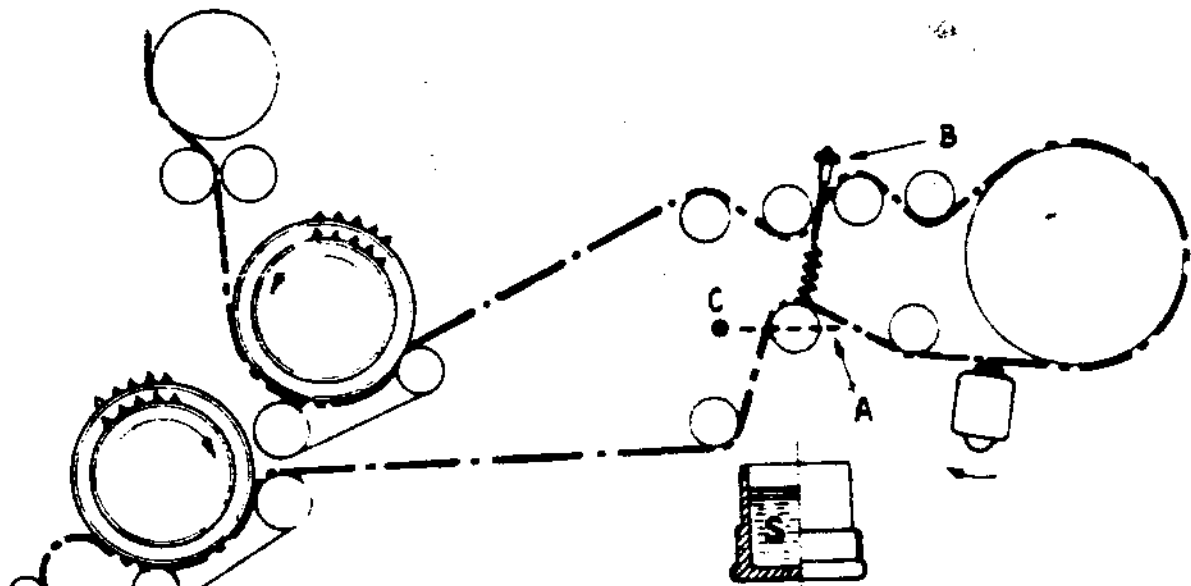


FIG. 3

Film 70 mm.

Film threadings:

- Optical 35 mm. FIG. 1
- Magnetic 35 mm. FIG. 2
- Magnetic 70 mm. FIG. 3

Hydraulic dampers filling.

Unscrew the container and pour the damp fluid S up to $\frac{3}{8}$ " from the rim.

Oil dampers setting.

The setting of the spring of the damper as to be done while the projector is normally running.

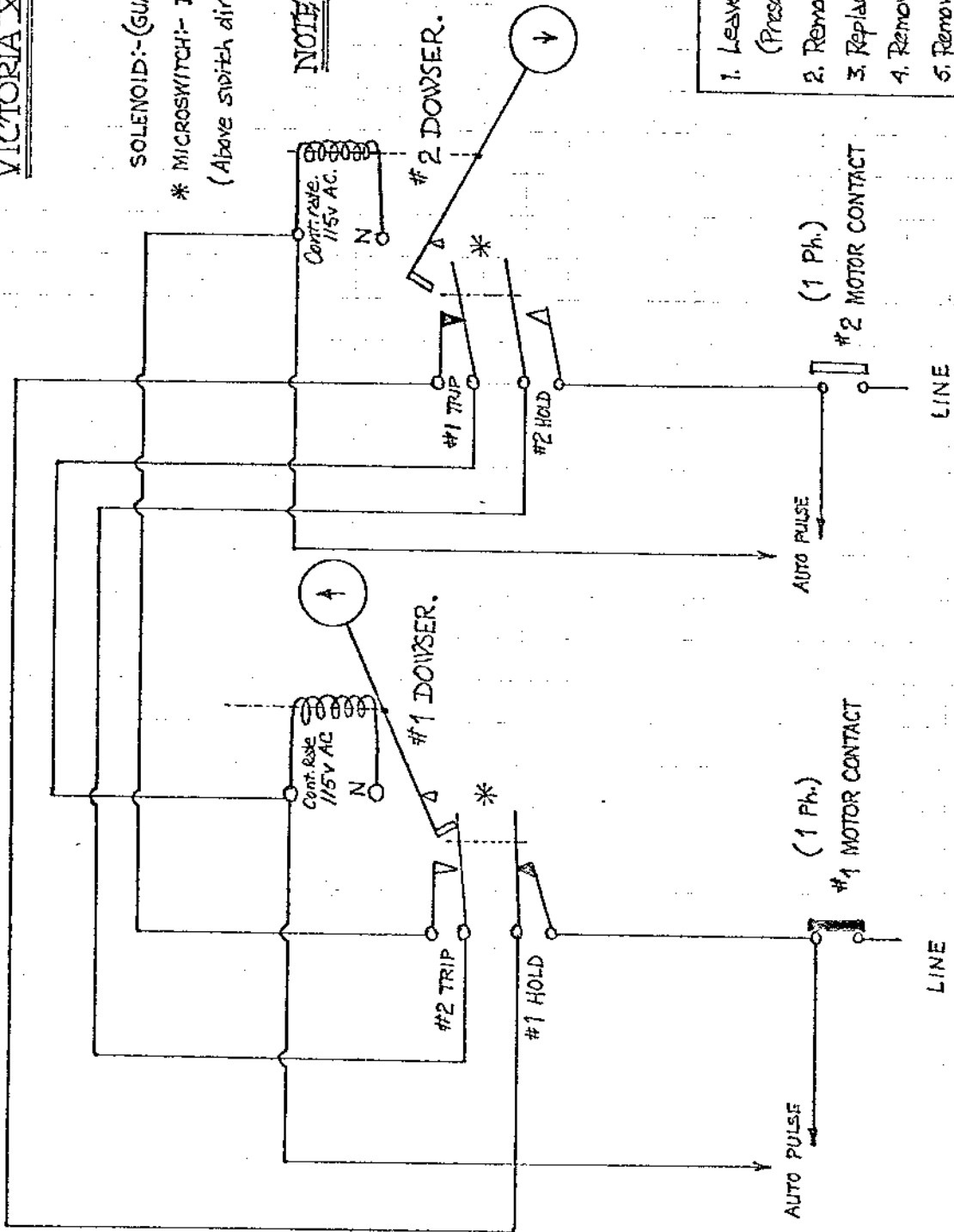
Optical sound head dampers turn the screw R till the rim P of the damper is set on the pointer I.

Magnetic reproducer damper: turn knurled knob B till the roller reach the red spot C.

VICTORIA X (% MODIFICATION)

SOLENOID:- (GUARDIAN 18AC-C 120V AC) LIFR-10oz. in 1"
 * MICROSWITCH:- DT-2RV-A7 D.R.D.T.
 (Above switch direct physical replacement.)

NOTE:- EACH MOTOR CONTACT TO BE ON SAME PHASE.



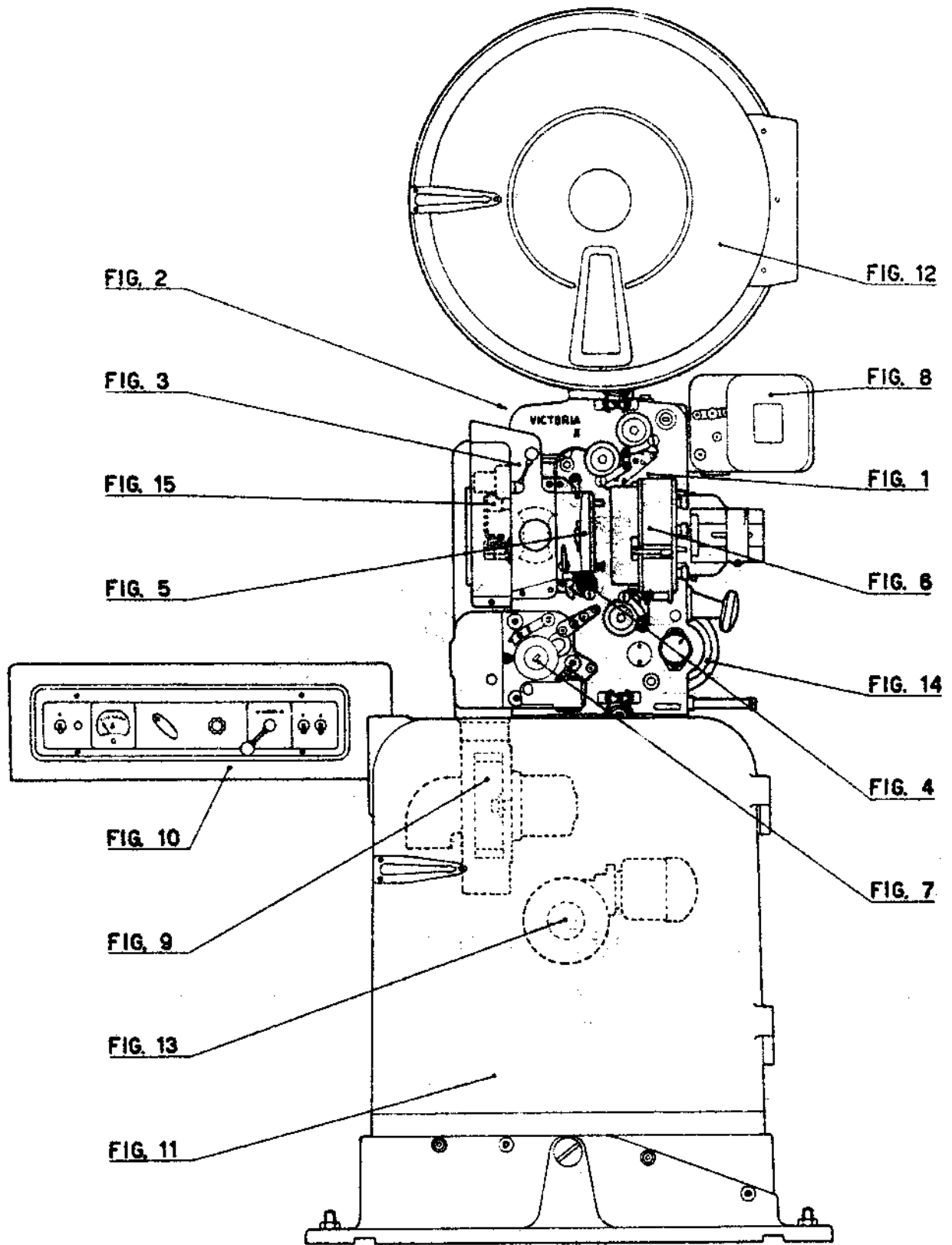
1. Leave existing exciter % switch as is.
(Present exciter switch not shown.)
2. Remove existing dowser 'trip-switch'
3. Replace 'trip-switch' with listed type (D.R.D.T.)
4. Remove all mechanical 'dowser-trip' units.
5. Remove present 'trip-solenoid'.

DOWSERS WILL NOT OPERATE IF MOTOR CONTACTOR OPEN.
 DOWSERS WILL CLOSE IF 'FAIL-SAFE' STOPS PROJECTORS.
 DOWSERS WILL OPERATE MANUALLY IF REQUIRED.

£.M.S.C. Feb. 1976.

VICTORIA X 70/35

- FIG. 1 - VICTORIA X 70/35 MECHANISM, operating side
- FIG. 2 - VICTORIA X 70/35 MECHANISM INTERIOR
- FIG. 3 - DRUM SHUTTER & SAFETY SHUTTER
- FIG. 4 - INTERMITTENT UNIT
- FIG. 5 - GATE BRACKET AND GATE FRAME
- FIG. 6 - LENS TURRET
- FIG. 6/bis SINGLE LENS HOLDER 5"
- FIG. 7 - OPTICAL SOUND HEAD
- FIG. 8 - MAGNETIC SOUNDHEAD
- FIG. 9 - AIR COOLING UNIT
- FIG. 10 - ARC SUPPORT
- FIG. 11 - STAND COLUMN
- FIG. 12 - TOP SPOOL-BOX (MAGAZINE) AND TOP AND BOTTOM FIRE TRAPS
- FIG. 13 - TAKE-UP MOTOR AND GEAR BOX
- FIG. 14 - DRIVE MOTOR AND SPEED CHANGE (SHIFT)
- FIG. 15 - PICTURE CHANGE-OVER MECHANISM
- FIG. 16 - PARTS KIT FOR INTERCHANGE BETWEEN 70 AND 35MM
- FIG. 17 - VICTORIA X 70/35 ENCLOSED TYPE MECHANISM
- FIG. 18 - LAMPHOUSE BEAM, AMERICAN TYPE
- FIG. 19 - STAND COLUMN, AMERICAN TYPE



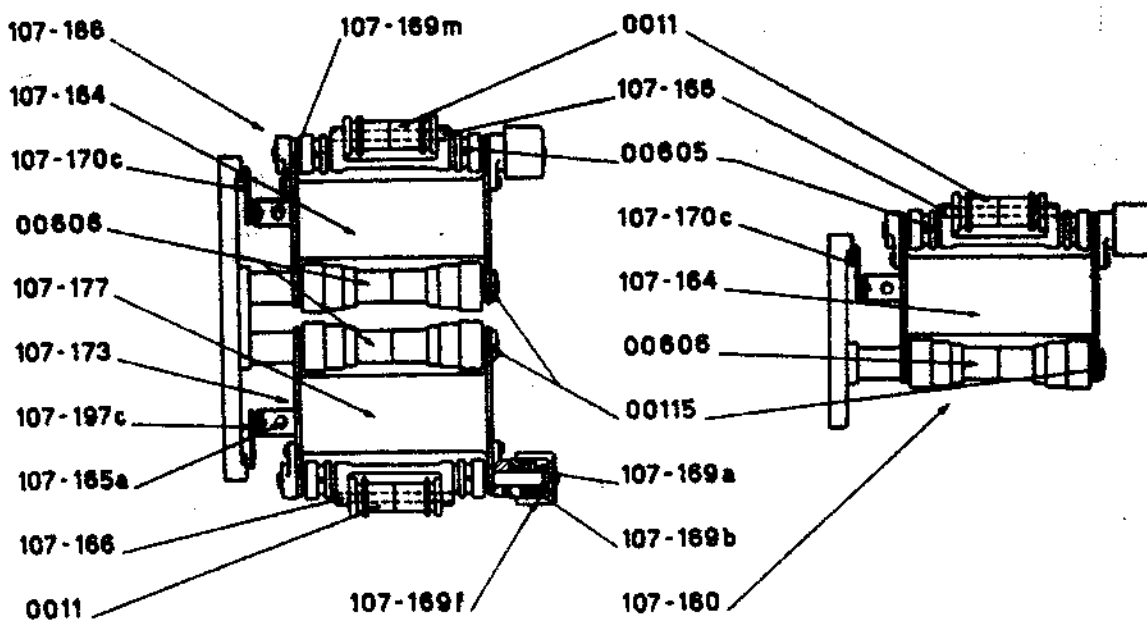
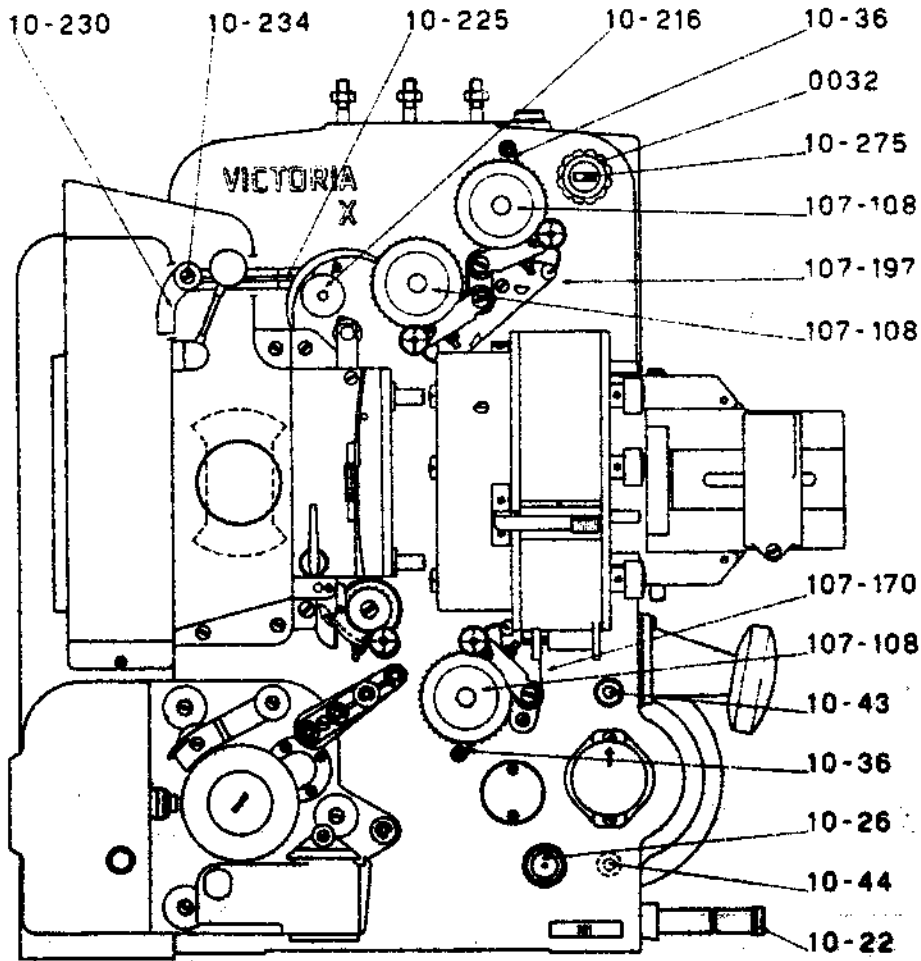


FIG. 1

FIG. 1 - VICTORIA X 70/35 MECHANISM, operating side

0011	- Grooved roller, 15mm. C.D. for 35mm
0032	- Upper oil sight window with bezel and gasket
00115	- Roller arm locking screw
00605	- Grooved roller, 14,5mm. C.D. for 70mm
00606	- Roller 19mm. outside dia.
10-22	- Oil drain plug with gasket
10-26	- Lower sight window with Gasket
10-36	- Stripper and post (Top and bottom sprockets)
10-43	- Upper fixing screw for motor
10-44	- Lower fixing screw for motor
107-108	- Sprockets, 40-32 teeth
107-160	- Bottom sprocket roller arm assembly
107-164	- Top and bottom sprocket roller arm only
107-165a	- Sprocket roller arm setting screw
107-166	- Spindle for 0011 grooved roller
107-169a	- Sprocket Roller arm knob
107-169b	- Sprocket Roller arm knob spring
107-169f	- Sprocket Roller arm knob cover indicator
107-169m	- Sprocket arm bush retaining screw
107-170	- Bottom sprocket roller arm assembly with base
107-170c	- Top and bottom sprocket roller arm pressure spring
107-173	- Intermediate sprocket roller arm assembly
107-177	- Intermediate sprocket roller arm only
107-186	- Top sprocket roller arm assembly
107-197	- Intermediate and top sprocket roller arm assembly with base
107-197c	- Intermediate sprocket roller arm pressure spring
10-216	- Disc with shaft (Top loop trip)
10-225	- Mascarini safety lever with film trip plate
10-230	- Latch for light cut-off
10-234	- Spindle for 10-230
10-275	- Filter magnet

FIG. 2 - VICTORIA X 70/35 MECHANISM INTERIOR

- 00250 - Oil filler plug
- 10-15 - Projector cover Gasket (non operating side)
- 10-21 - Oil draining tube with gasket
- 10-50 - Cover (non-op. side)
- 10-53 - Rear cover securing screw
- 10-80 - Spindle for motor reduction gear
- 10-81 - Motor reduction gear (24-60 and 75 teeth) mains frequency to be specified
- 10-100 - Bottom sprocket shaft
- 10-106 - Bottom sprocket Gear (104 teeth)
- 10-120 - Spindle and screw for double intermediate gear (10-124)
- 10-124 - Intermediate reduction gear (45 and 78 teeth)
- 10-130 - Spindle and screw for intermediate gear (10-136)
- 10-136 - Intermediate gear (120 teeth)
- 10-140 - Intermediate sprocket shaft
- 10-142 - Double gear driving intermediate sprocket (60 and 70 teeth)
- 10-150 - Top sprocket shaft
- 10-152 - Top sprocket gear (70 teeth)
- 10-200 - Governor assembly
- 10-207 - 13 teeth governor pinion
- 10-208 - Governor ball with lever
- 10-217 - Governor spring
- 10-250 - Oil pump assembly
- 10-258 - Drive gear for oil pump (24 teeth)
- 10-259 - Driven gear for oil pump (24 teeth)
- 10-260 - Spindle for drive gear (10-259)
- 10-270 - Oil filter body
- 10-272 - Oil filter
- 10-290 - Oil bath for motor reduction gear (10-81)
- 10-350 - Bracket with intermediate masking gears (28 teeth)
- 10-480 - Masking (Framing) knob
- 10-482 - Screw for masking knob (10-480)
- 10-485 - Friction rollers for masking assembly
- 10-486 - Spring for friction rollers
- 10-492 - Spring for masking assembly
- 10-495 - Masking pinion (23 teeth)

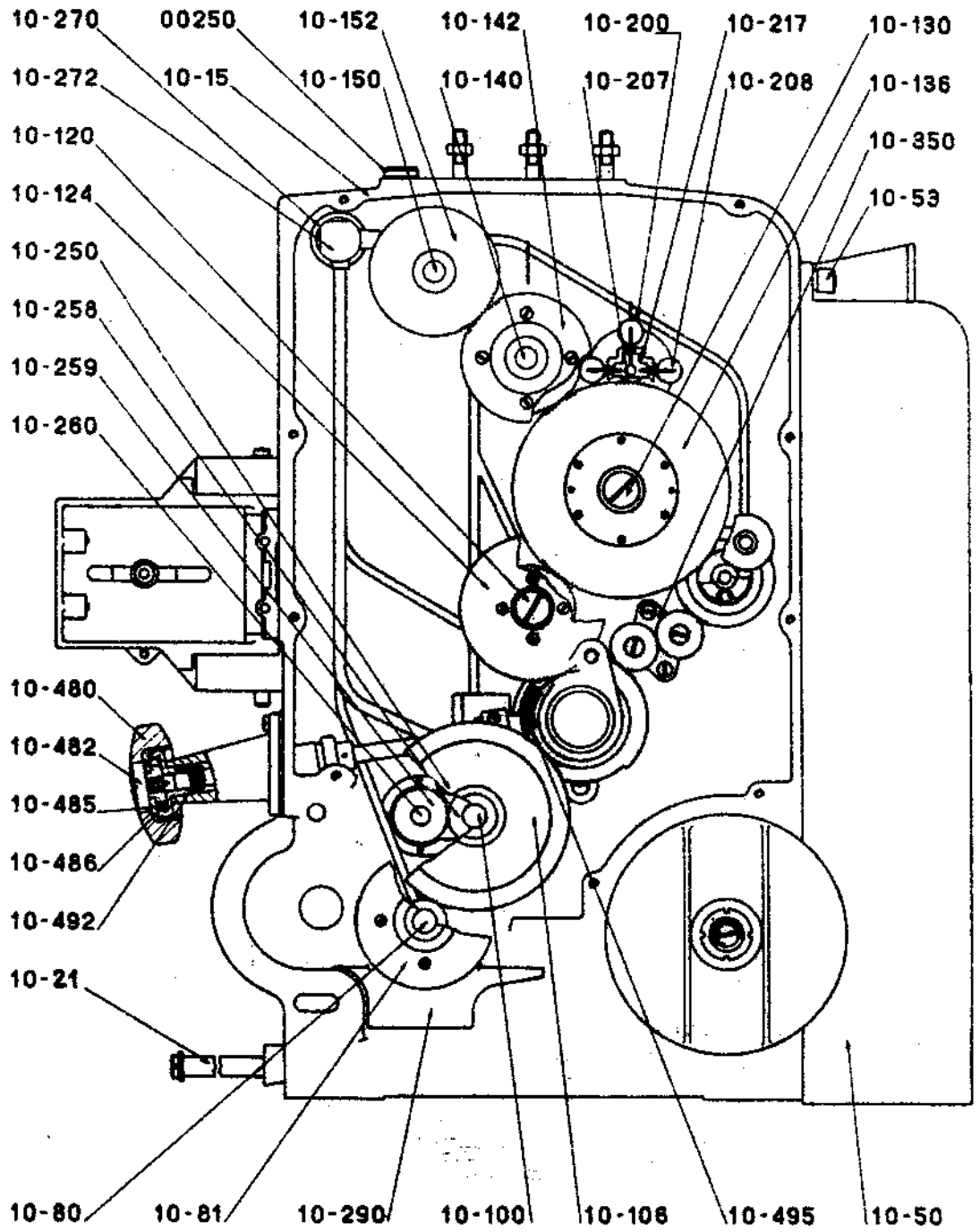


FIG. 2

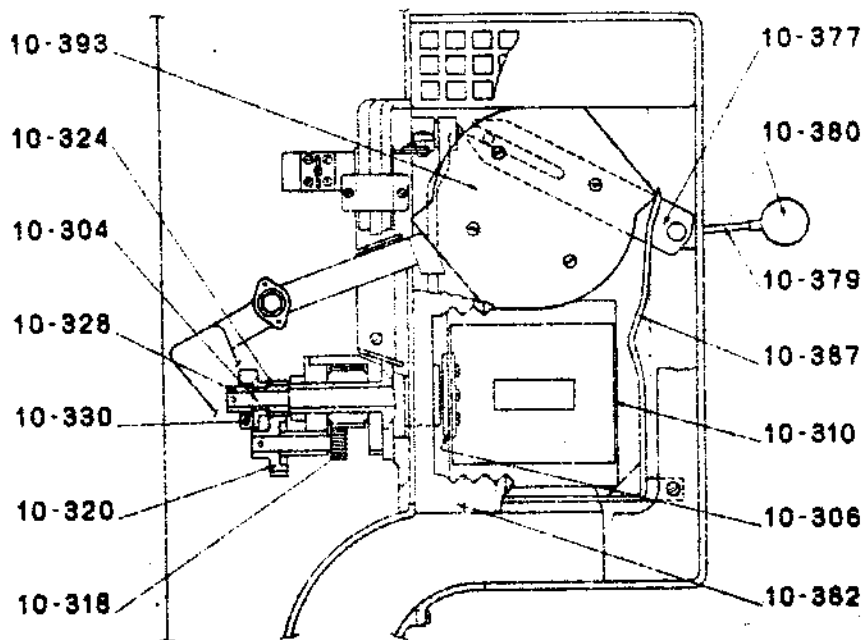


FIG. 3

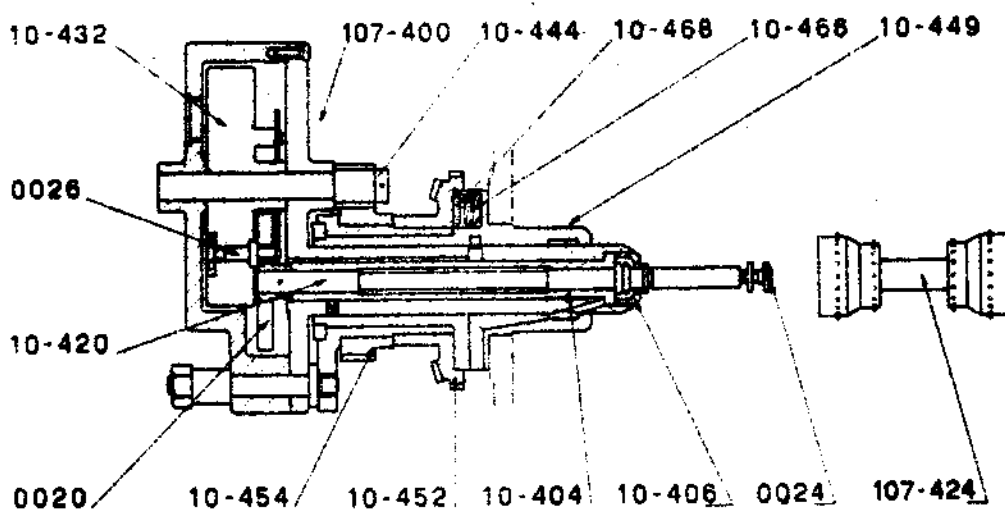


FIG. 4

FIG. 3 - DRUM SHUTTER AND SAFETY SHUTTER

- 10-304 - Shaft for drum shutter
- 10-306 - Flange for drum shutter
- 10-310 - Drum shutter
- 10-318 - 15teeth idler gear
- 10-320 - 30 teeth idler gear
- 10-324 - 15 teeth shutter shaft pinion with Torque collar
- 10-328 - Torque assembly for drum shutter
- 10-330 - Spring for Torque drive
- 10-377 - Operating arm and spindle for light cut-off disc
- 10-379 - Light cut-off disc lever
- 10-380 - Knob for light cut-off disc lever
- 10-382 - Cooling fins
- 10-387 - Latch for light cut-off disc
- 10-393 - Light cut-off disc with arm and counterweight

FIG. 4 - VICTORIA X PROJECTOR 70/35 Intermittent Unit

- 0020 - Maltese cross with cam pin and roller
- 0024 - Screw and washer securing intermittent sprocket
- 0026 - Cam pin and roller
- 107-400 - Intermittent unit complete with sprocket
- 10-404 - Eccentric bush
- 10-406 - Oil seal
- 10-420 - Intermittent sprocket, shaft
- 107-424 - Intermittent sprocket, 20 - 16 teeth
- 10-432 - Flywheel with cam, shaft and cam gear
- 10-444 - 13 teeth cam gear
- 10-449 - Intermittent unit bearing housing
- 10-452 - Masking (Framing) gear (76 and 80 teeth)
- 10-454 - Intermittent unit driving gear (52 teeth)
- 10-466 - Clutch spring for masking control
- 10-468 - Clutch disc for masking control

FIG. 5 - GATE BRACKET AND GATE FRAME

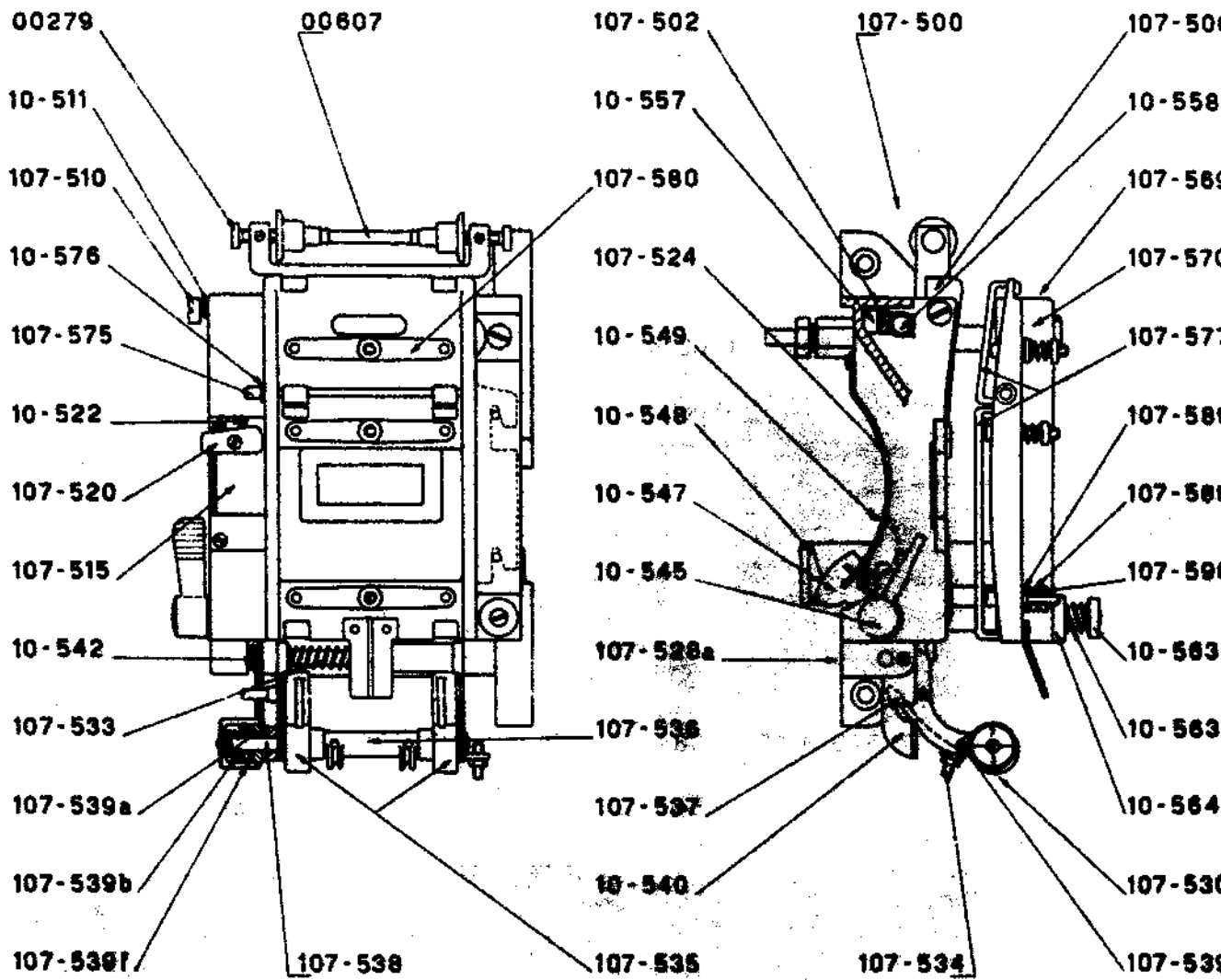
- 00279 - Adjusting screw for spring guide roller
- 00607 - Spring guide roller assembly
- 107-500 - Gate bracket assembly for 70 mm
- 107-502 - Gate bracket body for 70mm
- 107-506 - Gate plate with guide roller for 70mm
- 107-506a - Gate plate with velvet for 70mm
- 107-510 - Screw locking gate plate
- 10-511 - Spring for 107-510
- 107-515 - 70mm standard aperture plate (47mmx20mm) from n. 301
- 107-515a - 70mm undersized aperture plate (43mmx16mm) from n.301
- 107-520 - Latch for aperture plate
- 10-522 - Spring for aperture plate latch
- 107-524 - Cooling fins
- 107-528a - Roller arm assembly for intermittent sprocket with base
- 107-530 - Roller arm assembly for intermittent sprocket only
- 107-533 - Spring for roller arm
- 107-534 - Intermittent roller arm setting screw
- 107-535 - Left and right intermittent sprocket roller arm pads
- 107-536 - Intermittent sprocket roller
- 107-537 - Intermittent sprocket roller arm pressure spring
- 107-538 - Spacer and roller spindle
- 107-539a - Intermittent sprocket arm knob
- 107-539b - Intermittent sprocket arm knob spring
- 107-539f - Intermittent sprocket arm knob cover indicator
- 107-539i - Intermittent sprocket arm bush retaining screw
- 10-540 - Lever for roller assembly
- 10-542 - Spring for 10-540
- 10-545 - Gate opening lever
- 10-547 - Gate latch lever
- 10-548 - Gate latch arm
- 10-549 - Gate lever spring
- 10-557 - Threading lampholder assembly
- 10-558 - Threading lamp
- 10-563 - Gate frame support spring retaining knob
- 10-563a - Gate frame support spring
- 10-564 - Gate frame support
- 107-569 - 70mm gate frame assembly
- 107-570 - 70mm gate frame
- 107-575 - Upper pressure plates retaining screws
- 10-576 - Spring washer for 107-575
- 107-577 - 70mm pair of pressure plates (4 pieces)
- 107-580 - Pressure pads
- 107-588 - Pressure pads spring control
- 107-589 - Pressure pads spring bush
- 107-590 - Pressure pads spring knob
- 107-515f - 70mm standard fixed aperture plate (47mmx20mm) till n.300
- 107-515g - 70mm undersized fixed aperture plate (43mmx16mm) till n.300

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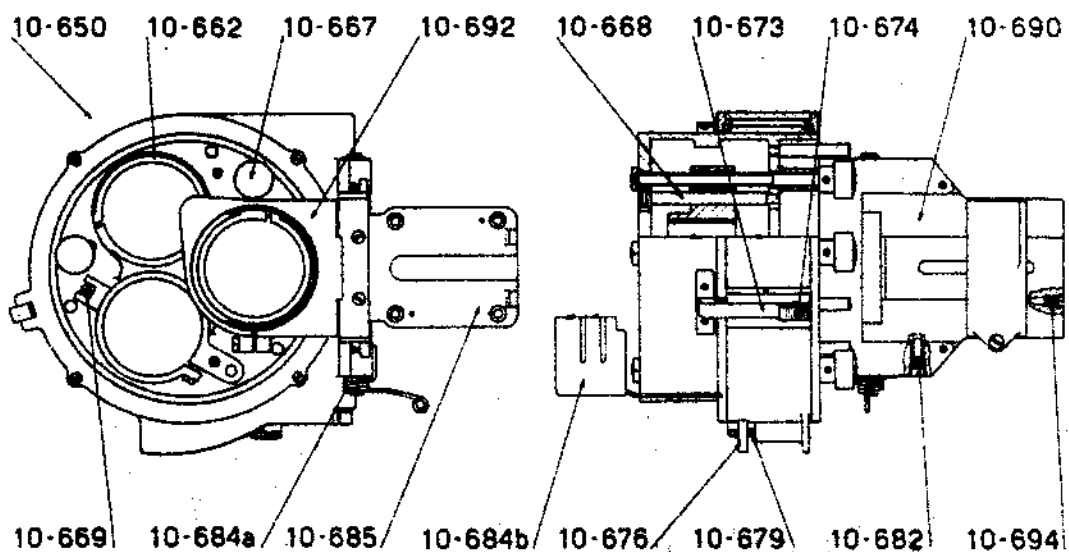


FIG. 6

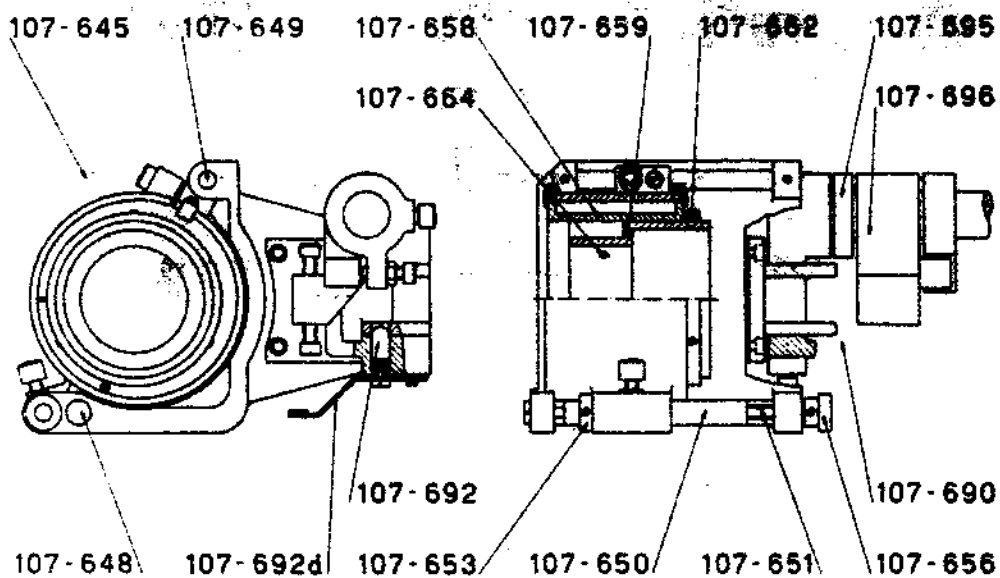


FIG. 6 bis

FIG. 6 - LENS TURRET

- 10-650 - Three Lens turret assembly
- 10-662 - Holding lens sleeve with focusing screw (62,5 mm)
- 10-662 s - Holding lens sleeve with focusing screw (70,6 mm)
- 10-667 - Focusing knob
- 10-668 - Focusing knob spindle
- 10-669 - Stop for eccentric mount
- 10-673 - Spring latch
- 10-674 - Spring for 10-673
- 10-676 - Lever locating turret
- 10-679 - Spring lever (for 10-676)
- 10-682 - Spring plunger (for 10-676)
- 10-684a - Spring for pivoting turret bracket
- 10-684b - Light shield
- 10-685 - Turret mounting bracket
- 10-690 - Bracket for anamorphic lens-holder
- 10-692 - Anamorphic lens-holder
- 10-694 - Spring plunger for 10-692

FIG. 6/bis - SINGLE LENS-HOLDER AND ANAMORPHIC LENS BRACKET

- 107-645 - 5" Single lens-holder assembly
- 107-648 - Lens sleeve guide
- 107-649 - Lens sleeve guide shaft
- 107-650 - Focusing screw bush
- 107-651 - Focusing screw
- 107-653 - Sleeve stop ring
- 107-656 - Focusing knob
- 107-658 - 5" to 4" eccentric adaptor
- 107-659 - 4" to 70,6mm adaptor
- 107-660 - 4" to 62,5mm adaptor
- 107-661 - 4" to 52,5mm adaptor
- 107-662 - Adaptor stop ring with screws
- 107-664 - Lens fixing screw
- 107-690 - Anamorphic lens bracket assembly
- 107-692 - Spring plunger
- 107-692d - Spring plunger lever
- 107-695 - Anamorphic lens stop ring
- 107-696 - Anamorphic lens-holder only (anamorphic lens type to be specified)

FIG. 7 - OPTICAL SOUND HEAD

up-to-date 12/12/60

008	- Filter (Dash pot) roller, 15mm o.d.	10-756	- Lay-on pressure roller arm
0035	- Reproducer drum with shaft and cover screw	10-750a	- Lay-on pressure roller arm and bracket assembly
0040/3	- Exciter lamp holder and support bracket assembly	10-752	- Lay-on pressure roller spring housing
0040/4	- Insulating bush and washer	10-754	- Spring for lay-on pressure roller
0040/10	- Exciter lamp locating spring with stud	10-757	- Spindle and screw for lay-on pressure roller
0092	- p.E.Cell connector		
00261	- p.E.Cell housing	10-760	- Lay-on roller
00337	- Plain roller (15mm dia.)	10-769	- Roller sprindle (6mm. dia.)
00338	- Circlips (lock washers) securing roller (6mm i.d.)	107-770	- Roller bracket
		107-770a	- Roller spindle (8mm dia.)
00339	- Circlips (lock washers) securing roller (8mm i.d.)	107-770d	- Roller bracket assembly
		10-792	- Oil damper
00603	- Flanged roller (18mm o.d.)	10-797	- Exciter lamphouse cover
00606	- Plain roller (19mm o.d.)	10-798	- Bracket for exciter lamp-holder and lens
10-707	- Cover screw (for P.E.Cell)		
10-708	- Ball race	10-799	- Objective lens mount
10-727	- Anti-static contact brush and spring	10-803	- Tracking adjustment knob
10-736	- Anti vibration mounting for scanning unit	107-700	- Complete Optical sound head.
10-743	- Bracket for P.E.C. housing		
0080	- Exciter lamp		
0081	- Objective lens		

FIG. 8 - MAGNETIC SOUNDHEAD

00339	- Circlips (lock washers) securing roller (8mm dia.)	107-849	- Eccentric spindle
		107-850	- lay-on pressure roller arm knob
00606	- Plain roller (19mm o.d.)		
00608	- Flanged roller (22mm o.d.)	107-851	- lay-on pressure roller arm spring
00609	- Lay-on pressure roller for 70mm (24mm O.d.) - till n. 329 (°)	107-851f	- lay-on pressure roller arm knob cover indicator
00610	- Lay-on pressure roller for 35mm (26mm o.d.) - till n. 329 (°°)	10-854	- Filter roller arm
107-830	- Sound drum with shaft and flywheel	107-856	- Filter roller spindle
10-832	- Ball race	10-858	- Filter roller spring
10-835	- Spring coupling for flywheel	10-859	- Filter roller tension screw
107-838	- Spindle for flanged rollers	10-862	- Oil damper for filter roller
107-840	- Lay-on pressure roller assembly	107-865	- Roller arm
10-842	- Lay-on pressure roller spring housing	107-865a	- Roller arm assembly
		107-866	- Roller arm spindle
10-844	- spring for lay-on pressure roller	107-870	- Magnetic head revolving base assembly
107-846	- Lay-on pressure roller arm		
107-848c	- Circlips (lock washers) securing roller (14mm i.d.)	107-871	- 10 elements magnetic cluster
		10-878a	- Terminal board (for 35mm)
		107-878a	- Terminal board (for 70mm)
(°°) 00604	- from n. 330	(°) 107-825	- Complete magnetic soundhead.
(°) 00619	- from n. 330		

(°) New number; old number

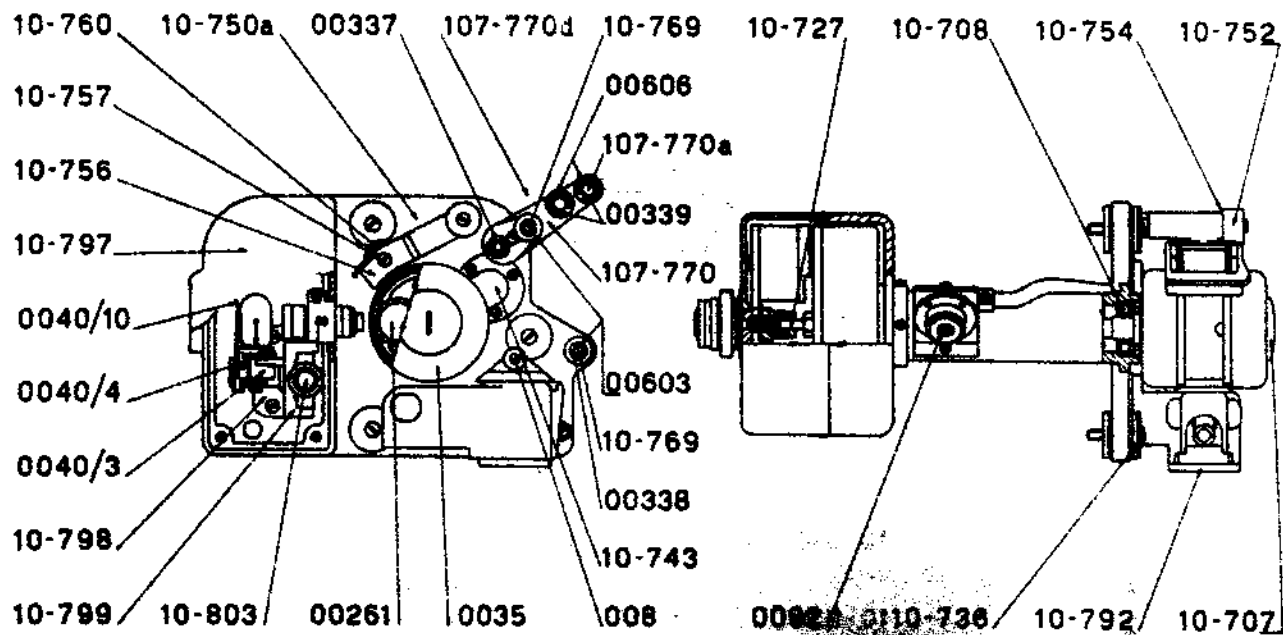


FIG. 7

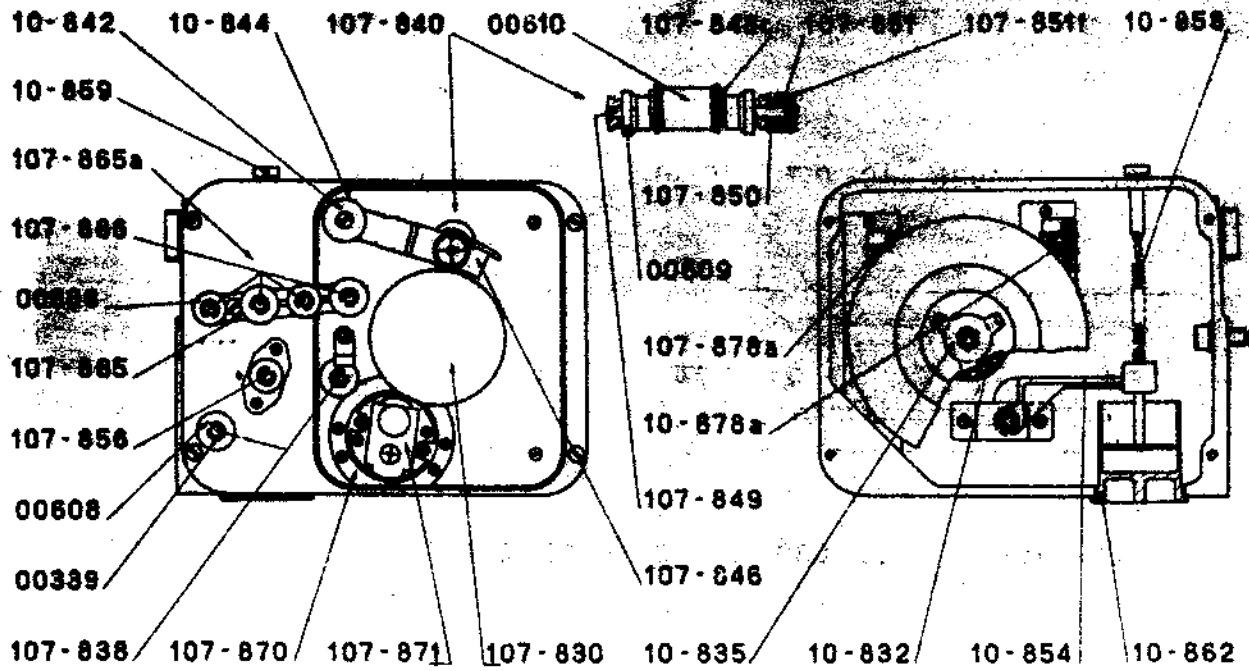


FIG. 8

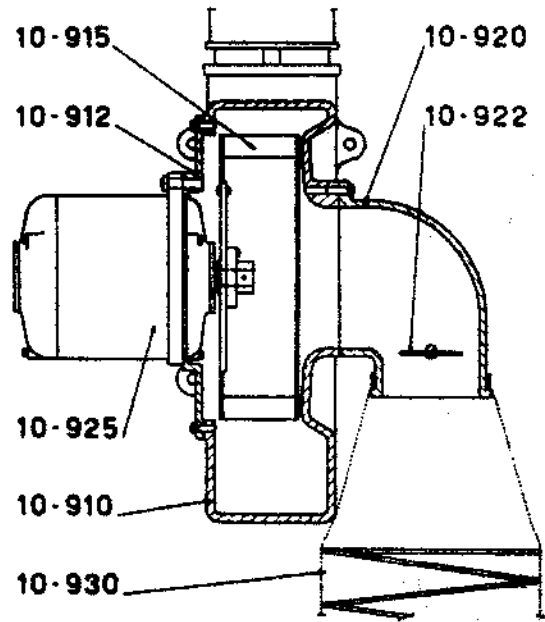


FIG. 9

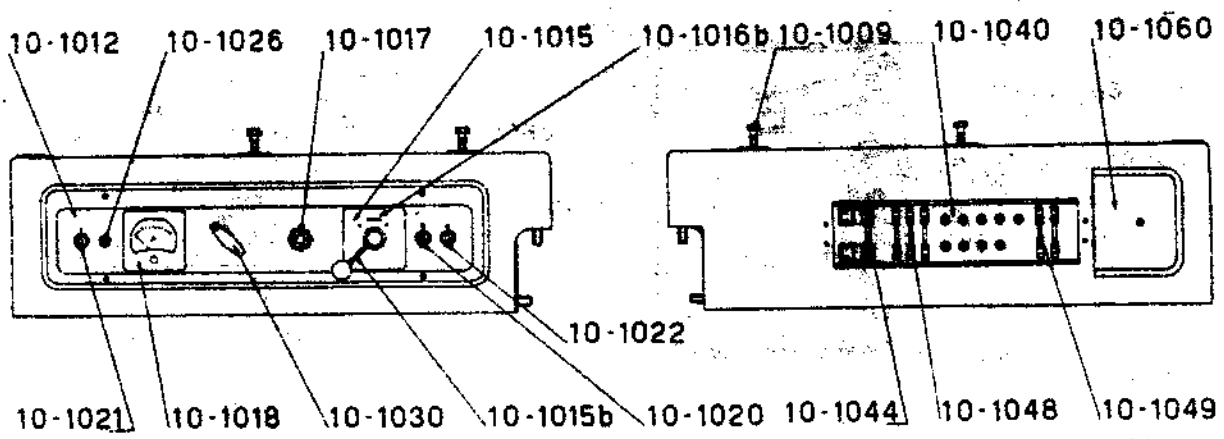


FIG. 10

FIG. 9 - AIR COOLING UNIT

- 10-910 - Fan housing
- 10-912 - Motor flange
- 10-915 - Fan
- 10-920 - Air inlet
- 10-922 - Butterfly valve with spindle
- 10-925 - Fan motor (mains voltage and frequency to be specified)
- 10-930 - Air filter

FIG. 10 - ARC SUPPORT

- 10-1009 - Bolts securing arc lamp
- 10-1012 - Control panel
- 10-1015 - Motor switch with resistors
- 10-1015b - Switch lever with spindle
- 10-1016b - Motor start resistors (value in ohms to be specified)
- 10-1017 - Exciter lamp resistor with knob
- 10-1018 - Ammeter for exciter lamp
- 10-1020 - Exciter lamp switch
- 10-1021 - Arc supply control switch
- 10-1022 - Masking (Framing) lamp switch
- 10-1026 - Arc supply pilot lamp
- 10-1030 - Mascarin master switch
- 10-1040 - Terminal board complete
- 10-1044 - Arc fuse (Amperage to be specified)
- 10-1048 - 5 ampere Fuse
- 10-1049 - 1 ampere Fuse
- 10-1060 - Terminal board cover

FIG. 11 - STAND COLUMN

- | | | | |
|----------|-----------------------------------|----------|--------------------|
| 10-1108 | - Spoolbox (Magazine) door handle | | |
| 10-1112 | - Spring cover | 10-1127b | - spacing plate |
| 10-1115 | - Rear cover complete | 10-1128 | - taped shaft |
| 10-1120b | - Base Column | 10-1128n | - tilting assembly |
| 10-1162 | - Exciter supply unit | | |
| 10-1170 | - Terminal board | | |

FIG.12 - TOP-SPOOL-BOX (MAGAZINE) AND TOP AND BOTTOM FIRE TRAPSTop spool-box

- | | |
|-----------|--|
| 107-1200 | - Top spool arm and spool-box (magazine) assembly (1800m-5400) |
| 107-1214 | - Top spool-box door |
| 10-1217 | - Inspection window-front |
| 10-1219 | - Inspection window-rear |
| 10-1226 | - Spoolbox (magazine) door handle |
| 107-1230 | - Complete clutch assembly |
| 107-1231 | - Top spoolbox (magazine) spindle (1/2" dia.) with collar |
| 107-1231b | - Ball race |
| 107-1232a | - Felt clutch disc |
| 107-1232c | - Clutch spring |
| 107-1232d | - Clutch control knob |
| 107-1233 | - Spool drive collar |
| 107-1234 | - Double Sneck assembly (70/35mm) |
| 10-1242 | - Inspection lampholder |
| 10-1244b | - Inspection lamp |

Top and bottom firetraps

- | | |
|-----------|--|
| 00115 | - Roller securing screw |
| 00117 | - Central roller securing screw |
| 00606 | - Plain roller (19mm. o.d.) |
| 00611 | - Flanged roller (19mm o.d.) |
| 107-1235 | - Top fire trap assembly |
| 107-1238a | - Ball Race |
| 107-1238b | - Circlips (lock washers) securing roller (30mm. o.d.) |
| 107-1239 | - Plain roller spindle |
| 107-1239c | - Top and bottom fire trap stop |
| 107-1239e | - Flanged roller spindle |
| 107-1285 | - Bottom fire trap assembly |

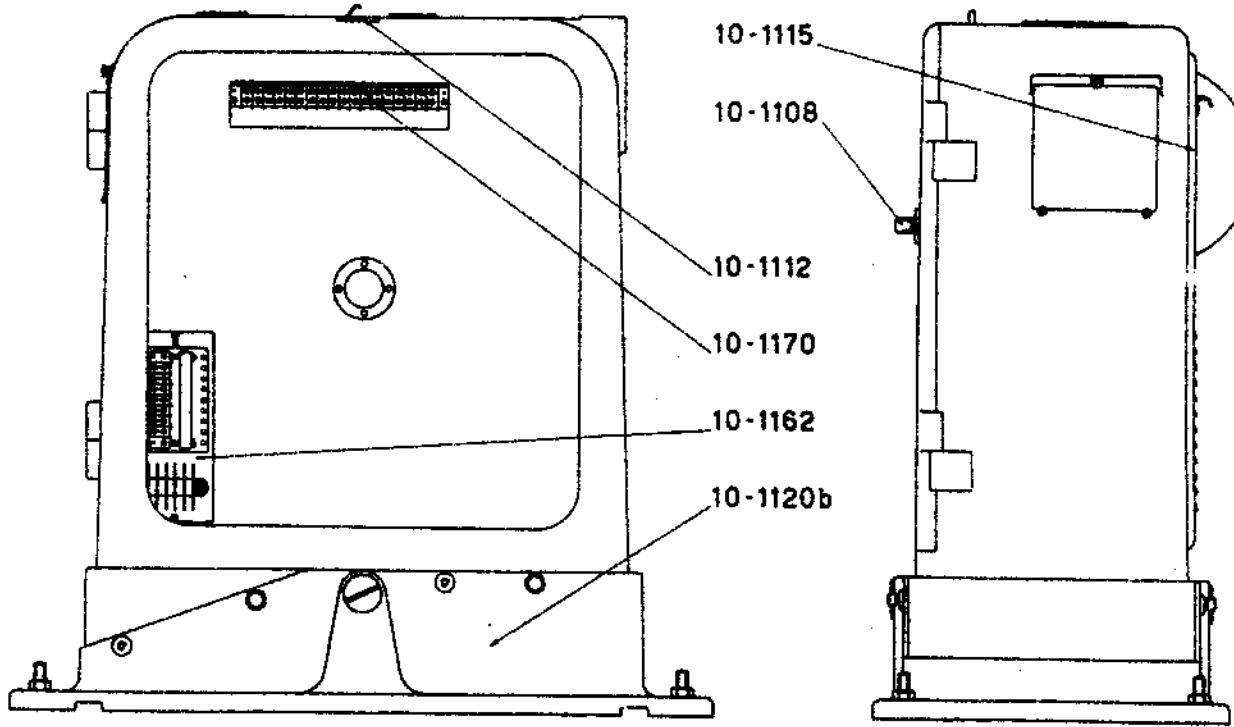
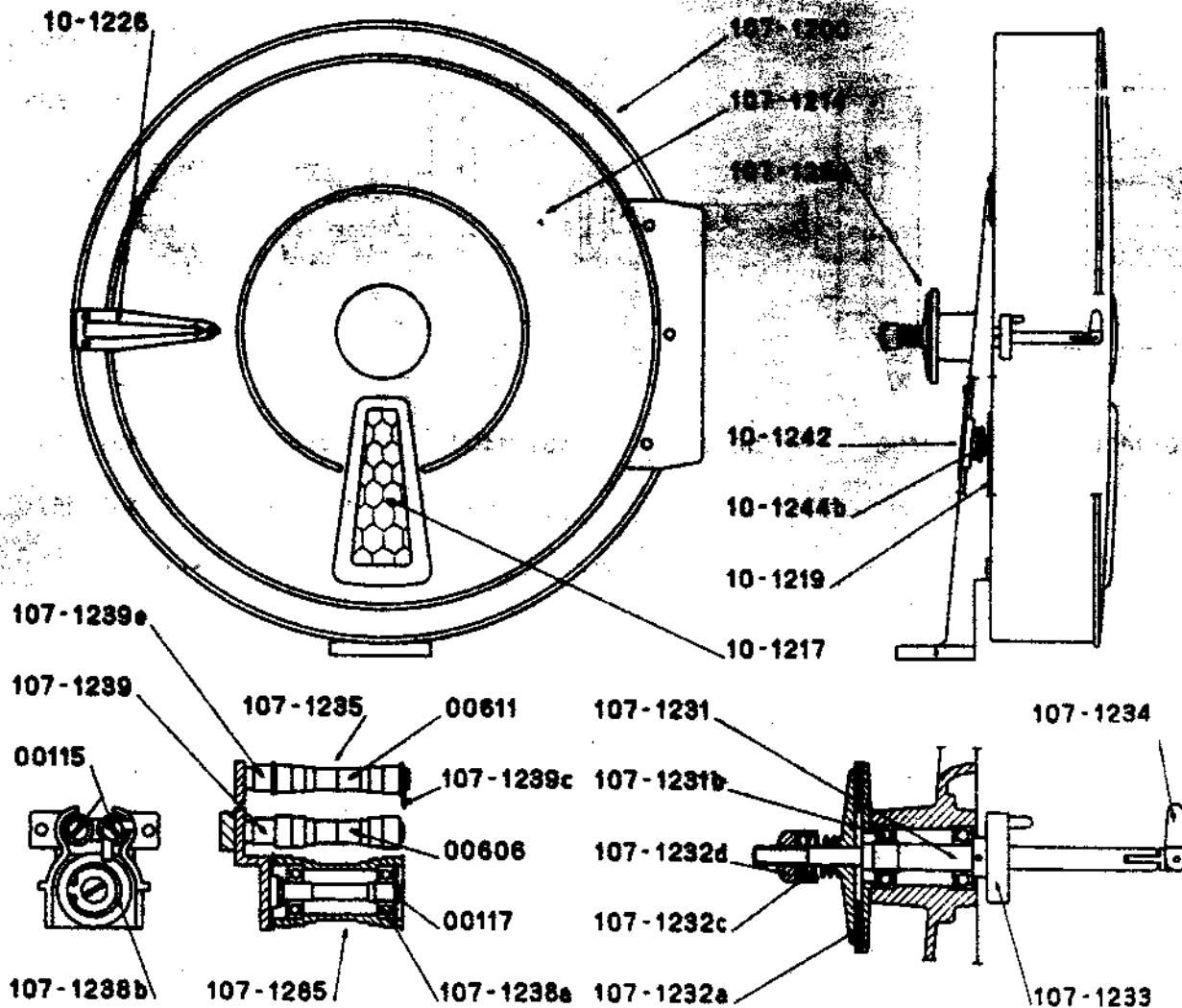


FIG. 11



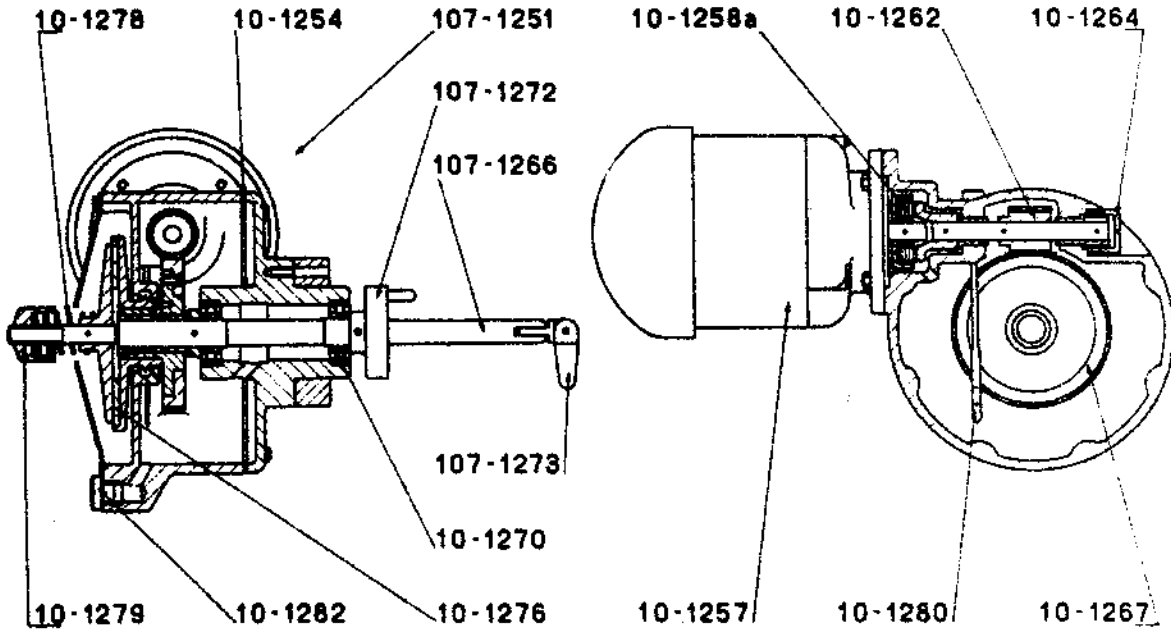


FIG. 13

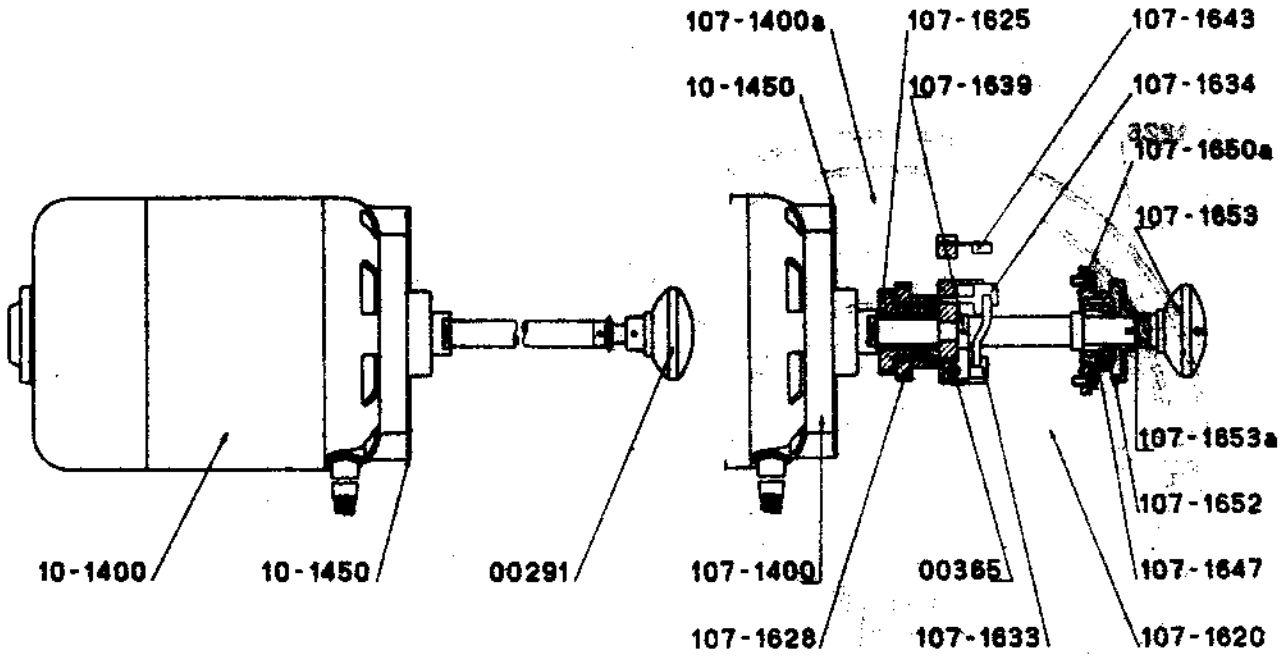


FIG. 14

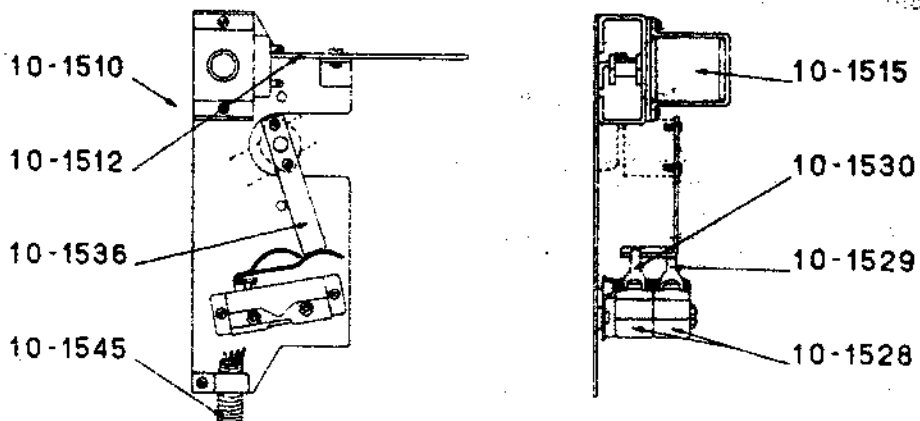


FIG. 15

FIG. 13 - TAKE-UP MOTOR AND GEAR BOX

- 107-1251 - Complete take-up drive assembly (mains voltage and frequency to be specified)
- 10-1254 - Gear box housing gasket
- 10-1257 - Take-up drive motor (Mains voltage and frequency to be spec.)
- 10-1258a - Torque coupling
- 10-1262 - Worm drive with 10-1267 gear (supply frequency to be spec.)
- 10-1264 - End cap for worm drive shaft
- 107-1266 - Spool spindle with driving collar (1/2")
- 10-1267 - See 10-1262
- 10-1270 - Ball-race
- 107-1272 - Spool driving collar
- 107-1273 - Double Sneck assembly (70mm,35mm)
- 10-1276 - Clutch disc
- 10-1278 - Clutch spring
- 10-1279 - Tension nut
- 10-1280 - Combined oil filler plug and dipstick
- 10-1282 - Oil drain plug

FIG. 14 - DRIVE MOTOR AND SPEED CHANGE (SHIFT)Drive motor (for 24 frames only)

- 00291 - Inching knob
- 10-1400 - Drive motor (Main voltage and frequency to be specified)
- 10-1450 - Motor mounting plate

Drive Motor with speed change (shift) for 24 and 30 frames

- 00365 - Spring for Torque assembly
- 107-1400 - Drive Motor only (mains voltage and frequency to be specified)
- 107-1400a - Drive motor with speed change (shift) assembly (idem)
- 107-1620 - Speed change (shift) assembly (frequency to be specified)
- 107-1625 - Speed shift driving gear for 24 f. (supply frequency to be spec.)
- 107-1628 - Speed shift driving gear for 30 f. (supply frequency to be spec.)
- 107-1633 - 24 f. driving gear plunger
- 107-1634 - 30 f. driving gear plunger
- 107-1639 - Plate for Torque assembly
- 107-1643 - Speed shift positioning dog with spring
- 107-1647 - Ball Race
- 107-1650a - Ball Race gasket
- 107-1652 - Speed shift setting and indicator disc
- 107-1653 - Inching knob
- 107-1653a - Circlips (lock washers), 10mm i.d.

FIG. 15 - PICTURE CHANGE-OVER MECHANISM

- 10-1510 - Complete sound and picture change-over unit
- 10-1512 - Trip lever for light cut-off disc (dowser)
- 10-1515 - Solenoid assembly
- 10-1528 - Micro-switch
- 10-1529 - Operating arm for sound change-over switch
- 10-1530 - Operating arm for picture change-over switch
- 10-1536 - Trip lever for microswitch
- 10-1545 - Cable form

FIG. 16 - PARTS KIT FOR INTERCHANGE BETWEEN 70mm and 35mm

up-to-date 14/2 /66

- CC1 - Intermittent sprocket - 16 teeth
- CC5 - 32 teeth sprocket
- CC7 - Spring guide roller assembly
- CC115 - Roller arm locking screw
- CC214 - Double aperture plate (aspect ratios to be specified) for 35 (from No.301)
- CC279 - Adjusting screw for spring guide roller
- CC337 - Roller 15mm o.d.
- CC601 - Grooved roller 20mm o.d.
- CC602 - Roller 20mm o.d.
- 10-107 - Mounting bushing washer and screws for 32 teeth sprocket

- 10-112 - Sprocket - 32 teeth ring type complete assembly
- 10-164 - Bottom sprocket roller arm only
- 10-166 - Spindle for CC601 grooved roller
- 10-171 - Bottom sprocket roller arm assembly
- 10-171d - Sprocket roller arm shaft
- 10-171m - Sprocket roller arm setting screw
- 10-172 - Bottom sprocket roller arm assembly with base
- 10-172c - Bottom and top roller arm torsion spring
- 10-177 - Intermediate sprocket roller arm only
- 10-184 - Intermediate sprocket roller arm assembly
- 10-190 - Top sprocket roller arm only
- 10-196 - Top sprocket roller arm assembly
- 10-197 - Top and intermediate sprocket roller arms with base
- 10-197c - Intermediate roller arm torsion spring
- 107-507 - Gate plate with guide roller for 35mm
- 107-507a - Gate plate with guide roller for 35mm with velvet
- 107-525 - Corrugated framing screen
- 10-530 - Intermittent sprocket roller arm assembly
- 10-533 - Intermittent sprocket roller arm spring
- 10-538 - Intermittent sprocket roller spindle
- 10-540 - Lever for roller assembly
- 10-542 - Spring for 10-540
- 10-569 - 35mm gate frame assembly
- 10-570 - 35mm gate frame
- 10-575 - Upper pressure plates retaining screw
- 10-576 - Spring washer for 10-575
- 10-577 - 35mm pair of pressure plates (4 pieces)
- 10-581 - Pressure pad for top plates
- 10-582 - Pressure pad for bottom plates
- 10-588 - Pressure pads control spring
- 10-589 - Pressure pads spring
- 10-590 - Pressure pads control screw
- 10-591 - Pressure pads control screw spring
- 10-595 - Gate frame cover
- 107-598 - Intermittent sprocket roller arm assembly with base
- 107-1233b - Magazines shaft adaptor for 35mm spools
- 107-513 - 35mm aperture mask removable guide
- 107-514f - Single aperture plate (aspect ratios to be specified) for 35 (fill No.300)

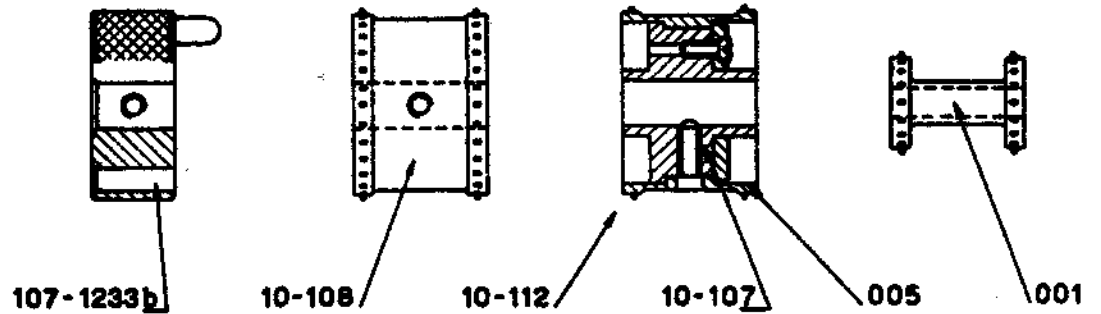
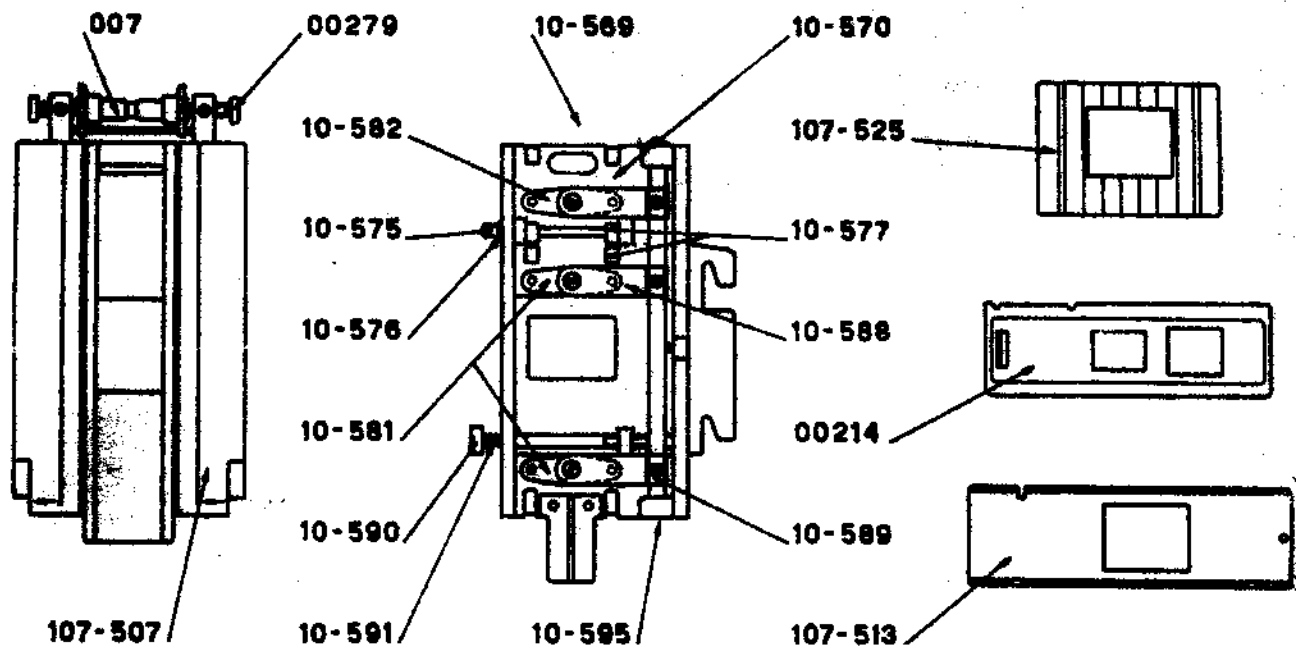
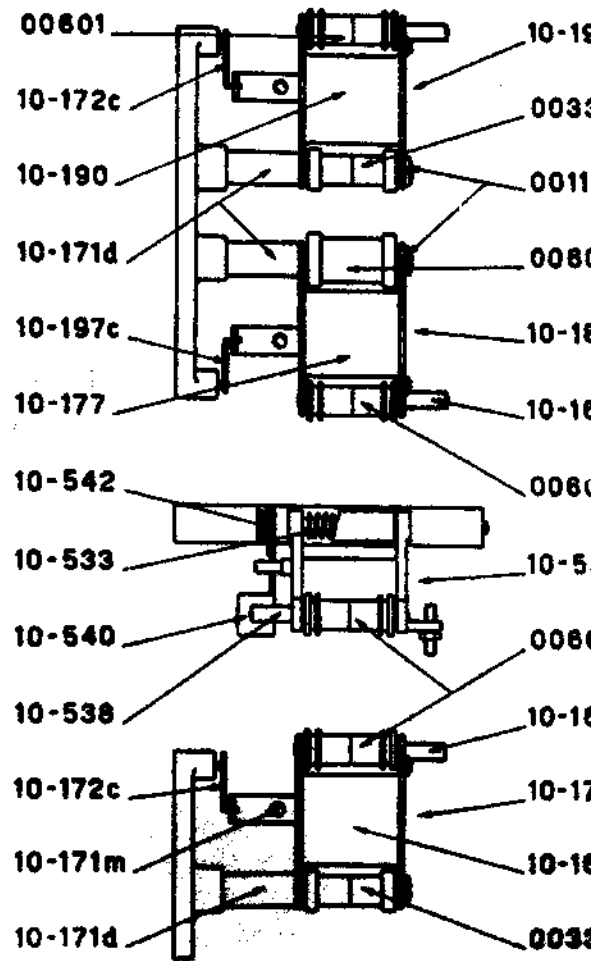
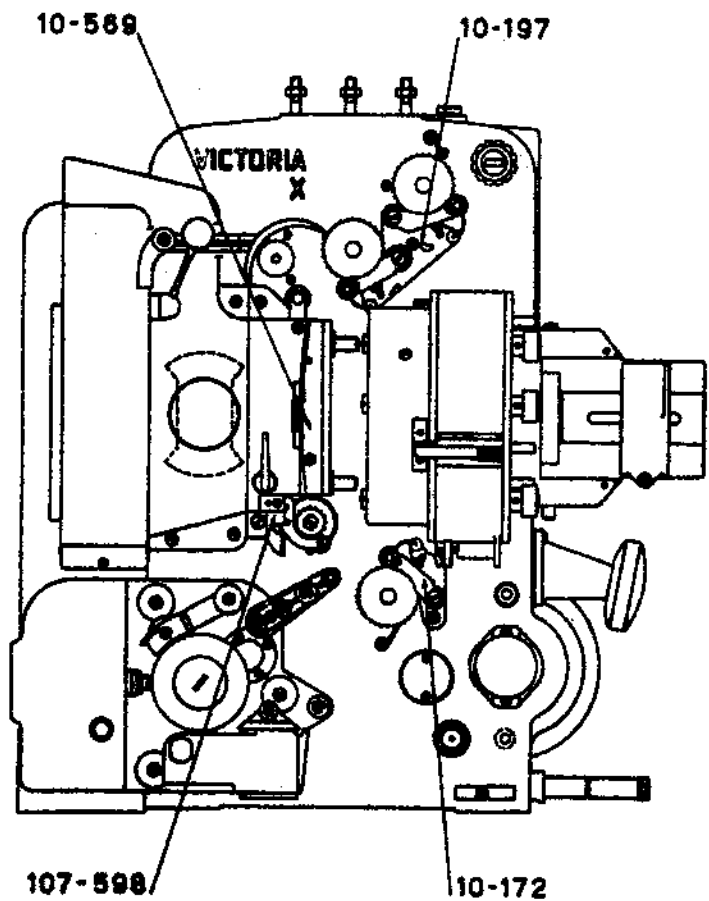


FIG. 16