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Spare Parts Catalogue

GAUMONT-KALEE

"LIGHTMASTER" ARC LAMP

Operating Data

G. A. McLEOD ENTERPRISES
THEATRE EQUIPMENT SERVICE, RENTALS
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M4S 1A7 (416) 485-4826

THE GAUMONT-KALEE "LIGHTMASTER"

ARC LAMP

This Arc Lamp employs an elliptical mirror of 16 ins. (406 mm.) diameter, with foci at 6 ins. (152 mm.) and 36 ins. (914 mm.). Experience has shown that important practical advantages of its larger dimensions are that arc focus is less critical, and that the greater mirror-to-crater distance results in substantial freedom from pitting, and reduces the risk of mirror-breakage. It has been found quite safe to operate this lamp at tilt-angles of as much as 30°.

It has been possible to maintain the generally-accepted optical centre height with this large diameter mirror by keeping the positive carbon drive to the rear of the lamphouse. This has resulted in a clear unobstructed floor in front of the mirror. The lamp mechanism is of straightforward orthodox type. The positive carbon is driven directly by a variable speed motor connected across the arc gap. The negative carbon is driven from the same motor through a variable-ratio drive comprising a cam-operated, variable-stroke roller-clutch. The complete carbon-driving unit can be withdrawn through the rear of the lamp. The whole of the mechanism and the mirror holder is mounted upon a rigid cast "tray" which forms the base of the lamp. The lamphouse itself is constructed throughout of sheet steel, fabricated and welded into a rigid one-piece shell with flush fitting doors of similar construction.

Control knobs on the operating side of the lamp, below the door line, give independent manual control of positive and negative carbons. These have quick releases for resetting to focus the crater, whilst maintaining the length of the arc gap, and can be "clutched" together by pressing in a push-button on the rear control panel. A periscope system contained inside the lamphouse projects an image of the crater upon a screen in the top of the lamp. The "striking" of the arc is operated by push-button control.

A wedge-operated, quickly released, positive carbon-grip safeguards against excessive clamping force and may be dismantled instantly for cleaning. The actual speed of the feed motor is shown by the tachometer provided.

CARBON DRIVES

Both carbon feeds are driven by the variable-speed D.C. motor connected across the arc gap. A potentiometer mounted in the rear panel of the lamp gives control of motor speed, the actual speed in r.p.m. being shown by the tachometer. The motor circuit includes an "on-off" switch and a fuse.

The positive carbon is driven from the motor through the fixed-ratio reduction-gearing; the negative is driven through a ratchet device of variable stroke which enables adjustment of the feed rate of the negative carbon to be made in relation to that of the positive.

Both carbon holders are provided with quick releases for rapid setting, and with controls for manual adjustment. Friction clutches are employed in both feed-drives so that the manual controls can be used to override the power feeds if necessary.

The screwed threads of the feed screws are relieved at the forward end to avoid possibility of overrunning and jamming. If the carbon carriage is accidentally wound off the screw, press the quick release lever, and slide whole carbon holder back on feed screw.

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A gear train at the rear of the lamp enables the two carbon feeds to be coupled together for manual adjustment of the crater position without changing the length of gap.

The negative feed screw protrudes through the rear panel and is fitted with push button so that it may be pushed forward against a return spring to "strike" the arc.

FEEED ADJUSTMENT

1. First set the potentiometer to match the positive feed rate for the carbon and current combination employed.
2. Adjust the negative feed rate to suit by screwing in or out the milled head stop screw projecting through rear control panel. This varies the feed rate by limiting the stroke of the negative feed ratchet.

Mirror and Negative Crutch Adjustments

The mirror is provided with tilts for horizontal and vertical adjustment. These are controlled by slotted milled knobs at the side of the lamphouse near the negative hand feed knob.

The negative carbon crutch has vertical and horizontal adjustments for accurate carbon alignment. These adjustments are controlled through flexible drives and knobs on the right-hand side of the rear panel.

Interior Illumination

A lamp holder for a standard mains voltage E.S. lamp is mounted inside the lamphouse roof. This lamp is controlled by a push button switch operated by the rear hinge of the lamphouse door, on the operating side of the machine. The fuse for this lamp circuit is situated on the rear panel.

Arc Image

A periscope inside the lamphouse focuses an enlarged image of the arc upon a translucent screen on the operating side of the lamphouse. The correct crater position is that in which the end of the positive carbon is 6 in. distant from the back of the centre of the mirror.

The periscope is set to correspond to this position before the lamp leaves the factory. If necessary the position of the image on the screen may be adjusted by turning and tilting the reflector carried by the periscope.

The reflector can be adjusted with the arc burning, but the glare and heat of the arc makes adjustment difficult and dangerous. It is preferable to employ a small flash lamp bulb, lit from a torch battery, and lightly held between the carbons when in their correct burning positions.

Positive Carbon Clamp

This clamp employs a wedge locking action which avoids the risk of carbon breakage and is easily manipulated whilst it is hot. The operative parts are retained in position by a locking latch. To dismantle for cleaning, lift this latch and withdraw the pin which it retains.

To insert the carbon, lift the weighted operating handle, raise the clamping finger with the carbon, and slide the carbon into the V-shaped groove. Slight downward pressure on the weighted lever will then lock the carbon firmly into position. Note that it is neither necessary nor advisable that the carbon be tightly gripped. Adequate electrical contact is assured when the carbon is firmly held and yet may be rotated using finger pressure only.

The carbon is released quickly from the holder by a quick lift of the lever.

To remove the Motor Drive and Negative Carbon Feed

The complete drive unit, including the negative carbon feed and holder, may be detached from the lamp as a unit, as detailed below:—

1. Remove the panel on the rear of the lamphouse by releasing four

knurled screws controls. If the it may require screws have b

2. Disconnect the the motor lead the lamphouse.
3. Remove the k which clamps t house.
4. Remove the co lamphouse.
5. When replacin the end of the spindle mesh co driving the po the drive mec

Lubrication

All bearings and oiling points provid in the front end of motor drive reduc negative feed rat

Take care to prev and negative feed

Adjustment to N

This operates on a hardened disc ar by the feed cam a other a stationary ratchet imparts un

The "bite" of th and out. This adj screws provided a

The feed ratchet to permit hand fee this clutch are pr adjustable. The tw groove. Should th may disengage an preventing the flar happens, rotate on snaps into the gro

Adjustment of Dr

The clutches mu not so tight as to bin stiff. The clutch to lock-nut provided adjusted so tightly

Unreliable feedin high speed, indicat nees in some of the the clutch friction n

IT IS IMPORTANT ANY SLIP RATHER EXCESSIVE SPRING

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side of the lamphouse

horizontal adjustments for
are controlled through
of the rear panel.

lamp is mounted inside
a push button switch
on the operating side
ated on the rear panel.

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Carbon Feed

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as detailed below:—
use by releasing four

knurled screws, when the panel may be lifted away clear of the various controls. If the panel adheres to the surface to which it is clamped, it may require to be prised off with a thin blade after the retaining screws have been removed.

2. Disconnect the lead from the negative carbon holder and un-plug the motor lead which is connected to a socket inside the back end of the lamphouse.
3. Remove the knurled-headed screw, situated in front of the motor, which clamps the complete drive assembly to the base of the lamphouse.
4. Remove the complete unit by withdrawing it through the rear of the lamphouse.
5. When replacing the unit care must be taken that the bevel gears at the end of the negative feed screw and on the negative hand-drive spindle mesh correctly; also to ensure that the flexible shaft connection, driving the positive feed screw, enters the corresponding socket in the drive mechanism.

Lubrication

All bearings and slides should be oiled sparingly, daily. Note the two oiling points provided for the positive carbon hand feed cross shaft located in the front end of the base casting. Apply a little graphite grease to the motor drive reduction gear and to the face of the cam which rocks the negative feed ratchet.

Take care to prevent oil from reaching the friction surfaces of the positive and negative feed clutches.

Adjustment to Negative Ratchet Drive

This operates on the well-known principle of a roller jamming between a hardened disc and a wedge. Twin ratchets are employed, one rocked by the feed cam and transmitting motion to the negative feed screw, the other a stationary check to assure that the oscillatory motion of the feed ratchet imparts uni-directional rotation only to the feed screw.

The "bite" of the rollers can be altered by adjusting the wedges in and out. This adjustment is effected by loosening one of the opposed screws provided and tightening the other.

The feed ratchet assembly also incorporates the friction clutch necessary to permit hand feeding of the negative carbon. The gripping flanges of this clutch are pressed together by a spring, the tension of which is adjustable. The two flanges are coupled rotationally by a tongue and groove. Should they be accidentally separated the tongue and groove may disengage and fail to re-locate when they come together again, thus preventing the flanges from gripping the clutch friction washers. If this happens, rotate one of them, holding the other firmly, until the tongue snaps into the groove.

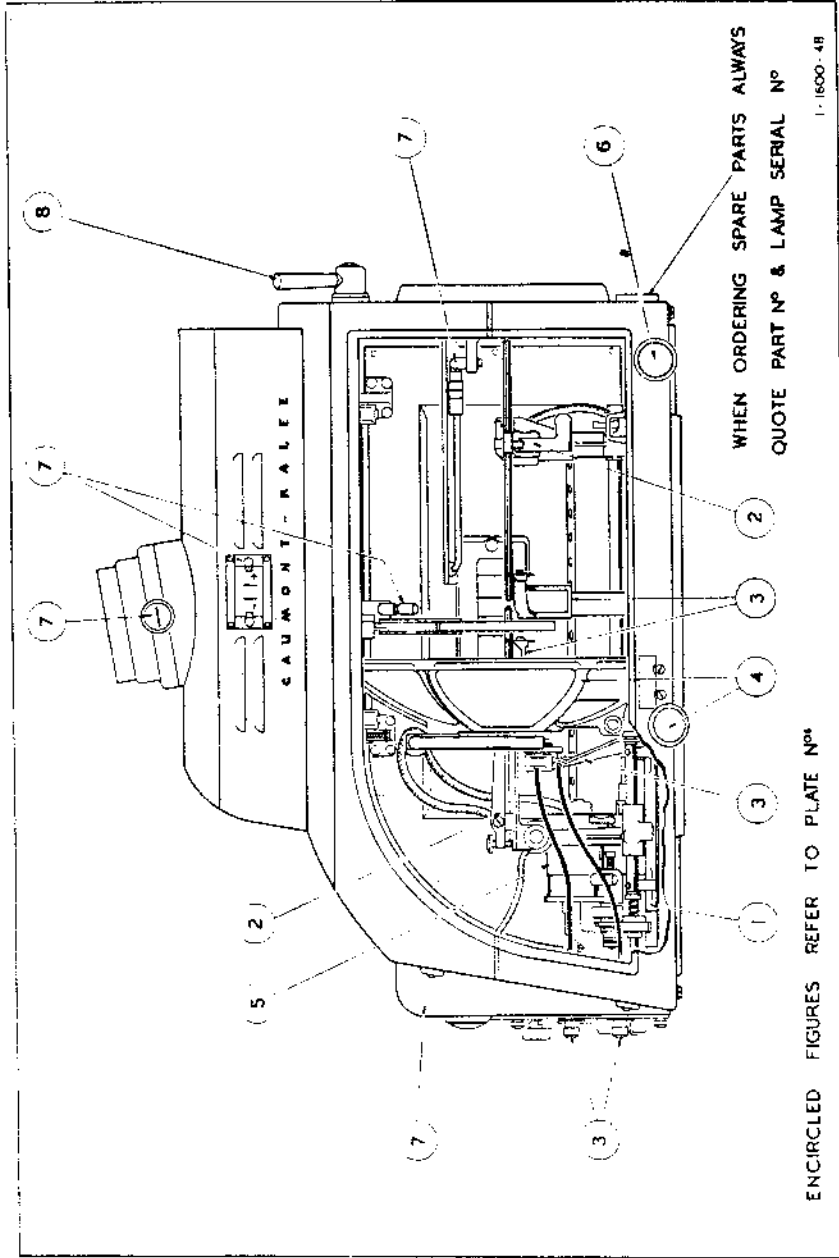
Adjustment of Drive Clutches

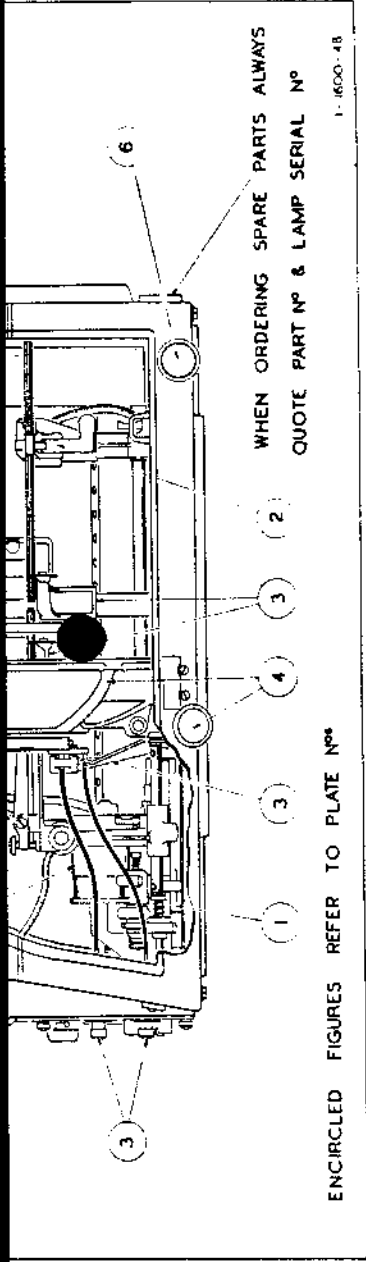
The clutches must be sufficiently tight to drive without slipping, but not so tight as to bind, otherwise operation of the hand feeds will be unduly stiff. The clutch torque is adjustable by means of the knurled nut and lock-nut provided for carrying the spring tension, and should not be adjusted so tightly that the spring is solid.

Unreliable feeding, or the necessity for running the feed motor at high speed, indicates slipping of the clutches. This may arise from tightness in some of the driven parts, which should be feed immediately, or the clutch friction may have been reduced due to oil on the faces.

IT IS IMPORTANT TO INVESTIGATE AND REMEDY THE CAUSE OF ANY SLIP RATHER THAN TO SEEK TO OVERCOME THIS BY APPLYING EXCESSIVE SPRING LOAD TO THE CLUTCHES.

KEY PLATE FOR THE COMPLETE ASSEMBLY THE GAUMONT-KALEE "LIGHTMASTER" ARC LAMP





ENCIRCLED FIGURES REFER TO PLATE N°

WHEN ORDERING SPARE PARTS ALWAYS QUOTE PART N° & LAMP SERIAL N°

1-16000-4B

Plate Number	Description	Page Numbers
1	Automatic Feed and Tachometer Panel	6 & 7
2	Positive and Negative Carbon Holders	8 & 9
3	Positive and Negative Crutches	10 & 11
4	Complete Mirror Holder and Controls	12 & 13
5	Motor Drive Assembly	14 & 15
6	Positive Leadscrew and Details	16 & 17
7	Lamphouse Details	18 & 19
8	Dowser and Light Cut-off Assemblies	20 & 21
9	Wiring Details	22 & 23

PLATE No. 1. AUTOMATIC FEED AND TACHOMETER PANEL

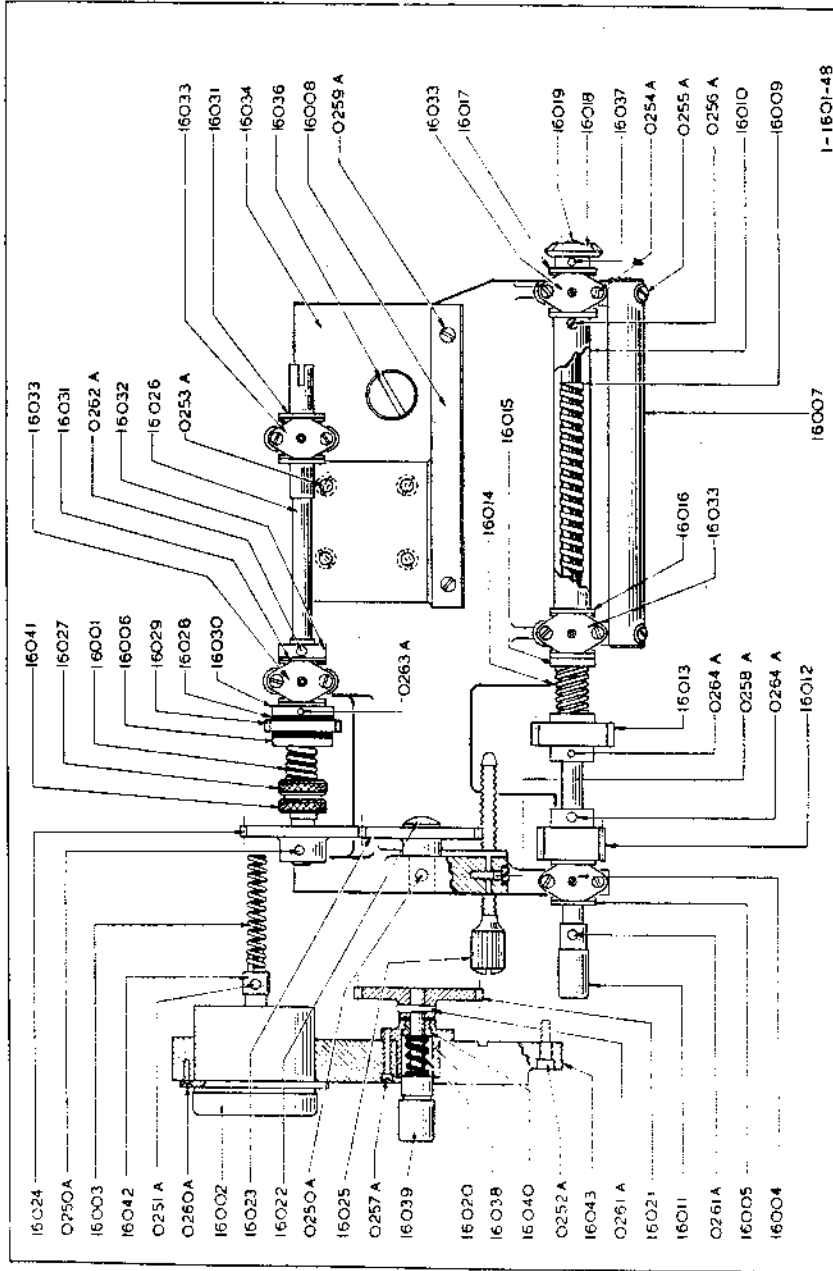


PLATE No 1

PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16001	Spring, Compression, Positive Feed	16015	Collar, Loose, Negative Lead Screw	16029	Gear, Driven, Positive Clutch
16002	Tachometer	16016	Bush, Negative Lead Screw	16030	Collar, Fixed, Positive Clutch
16003	Spring, Tachometer Drive	16017	Bush, Negative Lead Screw Front Bearing	16031	Bush, Positive Extension Bar
16004	Plate, Clamping, Negative Feed Rear Bearing	16018	Gear, Mire	16032	Collar, fixed for 16026
16005	Bush, Negative Lead Screw	16019	Screw, Mire Gear Stop	16033	plate, Clamping, for Bearings

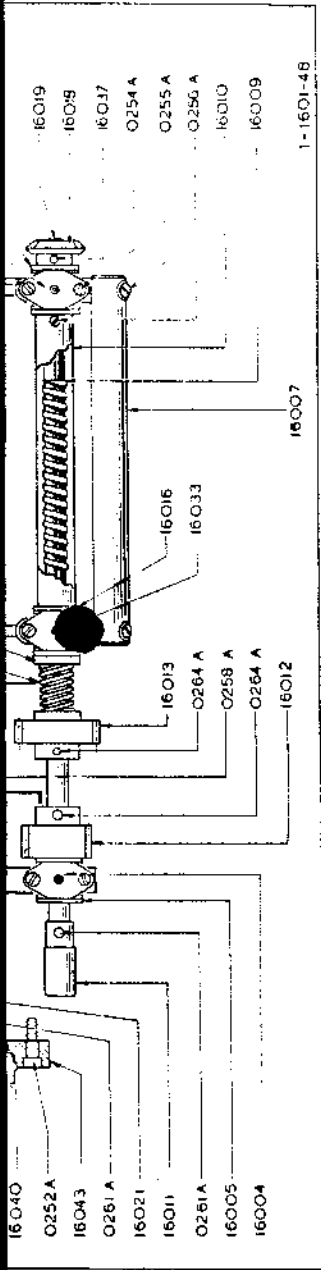


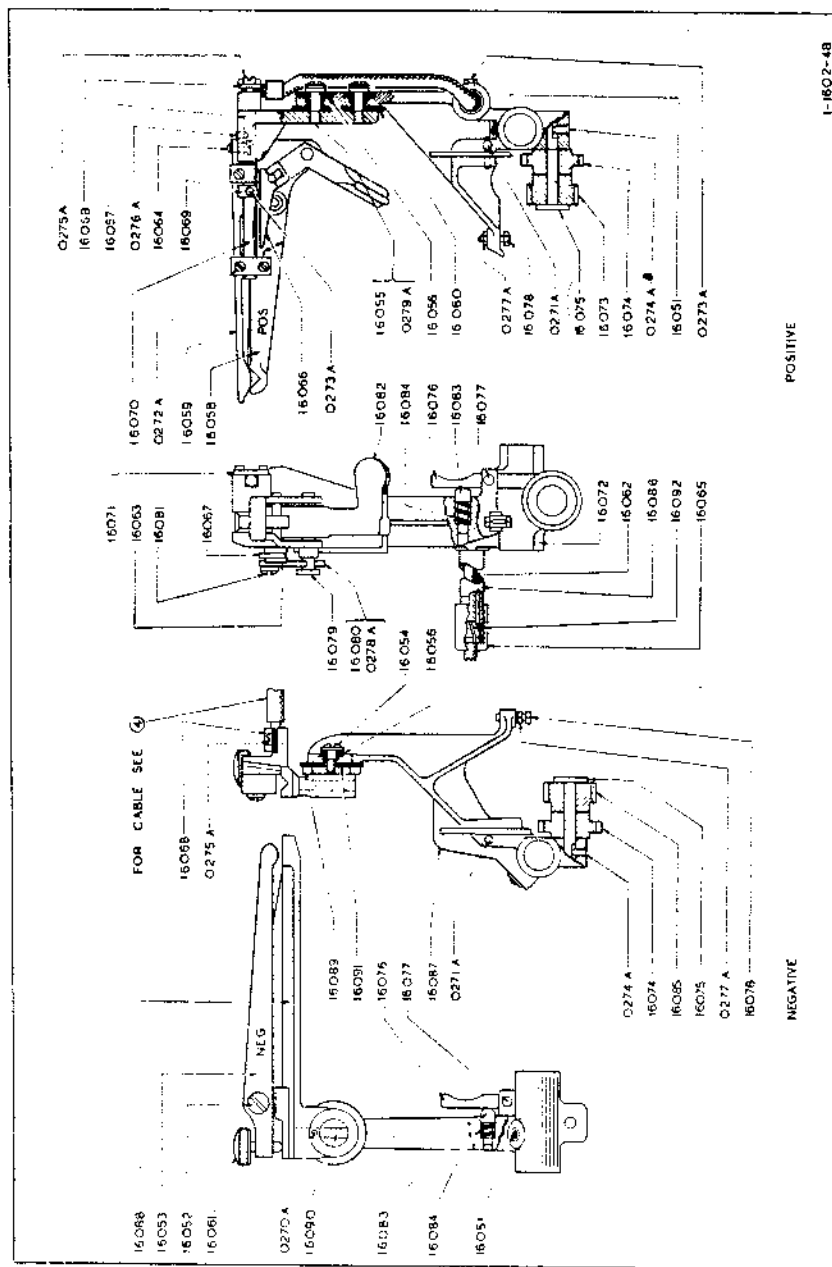
PLATE No 1

PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16001	Spring, Compression, Positive Feed	16015	Collar, Loose, Negative Lead Screw	16029	Gear, Driven, Positive Clutch
16002	Tachometer	16016	Bush, Negative Lead Screw	16030	Collar, Fixed, Positive Clutch
16003	Spring, Tachometer Drive	16017	Bush, Negative Lead Screw Front Bearing	16031	Bush, Positive Extension Bar
16004	Plate, Clamping, Negative Feed Rear Bearing	16018	Gear, Mire	16032	Collar, fixed for 16028
16005	Bush, Negative Lead Screw	16019	Screw, Mire Gear Stop	16033	Plate, Clamping, for Bearings
16006	Washer, Key, Positive Extension	16020	Spring, Compression, Hand Drive	16034	Carriage, Negative, and Motor Drive Platform
16007	Tube, Negative Support	16021	Gear, 30 Teeth Spur	16036	Screw, Locating Automatic Feed
16008	Bar, Slide, Negative	16022	Stud, Idler Gear	16037	Pin, Driving
16009	Screw, Negative Lead	16023	Gear, Idler, Hand Drive	16038	Bearing, Loose Gear
16010	Cover, Negative Lead Screw	16024	Gear, Positive Hand Drive	16039	Spindle, Loose Gear
16011	Knob, Striker	16025	Screw, Adjusting, Negative Feed	16040	Bush, Loose
16012	Gear, Hand Drive	16026	Bar, Positive Extension	16041	Locknut, Positive Extension
16013	Gear, Driven, Negative Feed	16027	Nut, Friction Adjusting	16042	Adapter, Tachometer Drive
16014	Spring, Compression, Negative Feed	16028	Disc, Friction	16043	Panel, Tachometer

WASHERS, PINS AND SCREWS

0250A	Screw fixing	16022, 16024	0259A	Screw fixing	16008
0251A	"	10642	0280A	"	16002
0252A	"	16043	0261A	Taper Pin	16011, 16021
0253A	"	Motor Adapter Plate	0262A	"	16032
			0263A	"	16030
			0264A	"	16012, 16013

PLATE No. 2. POSITIVE AND NEGATIVE CARBON HOLDERS



PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16068	Oiler, 1" Spring Ball	16086	Wedge, Assembly	16079	Spindle, Trigger
16053	Pivot, Negative Clamping Arm	16067	Catch, for 16063	16080	Catch, for 16079
16052	Arm, Negative Clamping	16068	Clamp, Cable	16081	Screw, Pivot
16054	Screw, fixing 16088	16069	Collar, Pivot Rod	16082	Weight, Bob and Crank
16055	Screw, fixing 16057	16070	Rod, Pivot	16083	Plunger, Spring
16056	Bush, Insulating			16084	Spring, for 16083

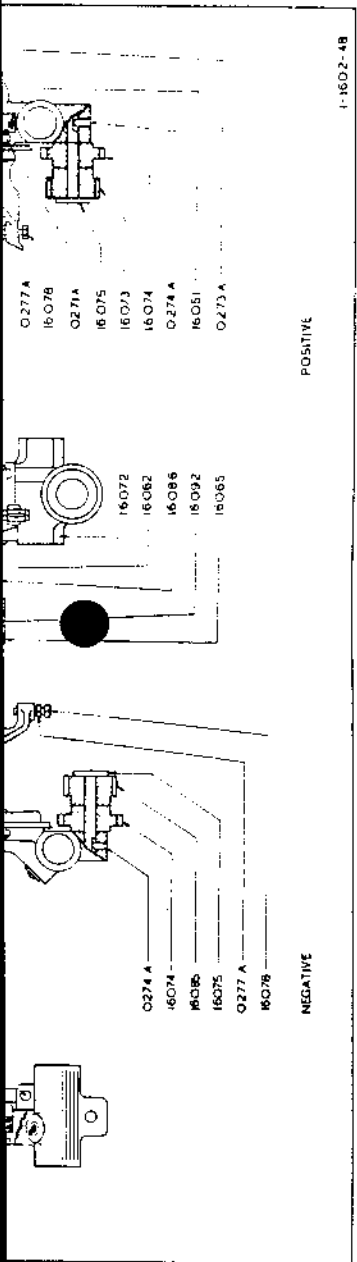


PLATE # 2

PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16051	Oiler, 1/2" Spring Ball	16066	Wedge, Assembly	16079	Spindle, Trigger
16052	Pivot, Negative Clamping Arm	16067	Catch, for 16063	16080	Catch, for 16079
16053	Arm, Negative Clamping	16068	Clamp, Cable	16081	Screw, Pivot
16054	Screw, fixing 16088	16069	Collar, Pivot Rod	16082	Weight, Bob and Crank
16055	Screw, fixing 16057	16070	Rod, Pivot	16083	Plunger, Spring
16056	Bush, Insulating	16071	Strip Clamping	16084	Spring, for 16083
16057	Bracket, Positive Pivot	16072	Bracket, Positive Slide	16085	Wheel, Worm, Negative
16058	Arm, Positive Support	16073	Wheel, Worm, Positive	16086	Guide, Positive, Lead
16059	Arm, Positive Clamping	16074	Gear, Locking, Positive and Negative	16087	Bracket, Negative
16060	Insulation, Positive	16075	Spindle, Locking Gear	16088	Arm, Negative Support
16061	Screw, Negative Clamping	16076	Lever, Quick Release	16089	Base, Negative Support Arm
16062	Lead, Positive	16077	Pin, Pivot	16090	Stud, Negative Pivot
16063	Spindle, Clamp	16078	Stud, Bearing	16091	Insulation, Negative Slide
16064	Screw, Stop			16092	Collet, Positive Lead
16065	Bush, Positive Lead Guide				

WASHERS, PINS AND SCREWS

0270A	Screw fixing	16090	0277A	Locknut for	16078
0271A	"	16077	0278A	Washer for	16081
0272A	"	16071	0279A	"	16055
0273A	"	16069, 16086			

PLATE No. 3. POSITIVE AND NEGATIVE CRUTCHES

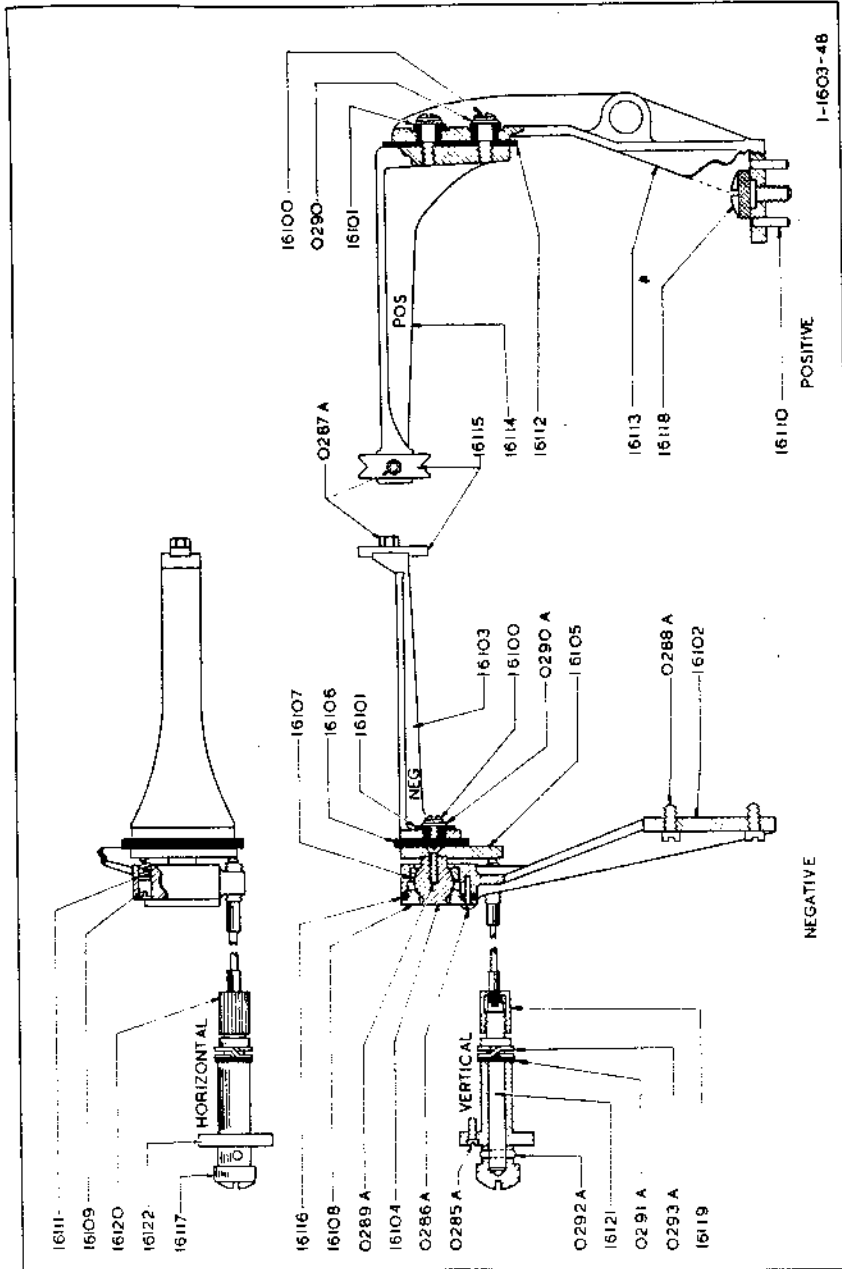


PLATE NR 3

PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16100	Screw, fixing 16103	16108	Plate, End	16116	Shim, Packing
16101	Bush, Insulating	16109	Plug for Spring	16117	Knob, Control

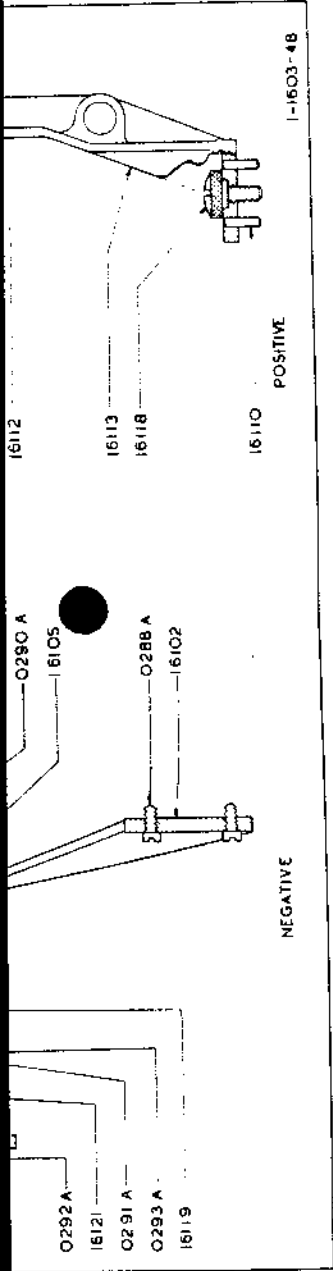


PLATE NO 3

PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16100	Screw, fixing 16103	16108	Plate, End	16116	Shim, Packing
16101	Bush, Insulating	16109	Plug for Spring	16117	Knob, Control
16102	Bracket, Negative Crutch	16110	Dowel, fixing 16113	16118	Screw, fixing 16113
16103	Arm, Negative Crutch	16111	Spring, Negative Crutch	16119	Crutch, Negative, Vertical Tilt Assembly
16104	Swivel, Negative Crutch	16112	Insulation, Positive	16120	Crutch, Negative, Horizontal Tilt Assembly
16105	Base, Negative Crutch	16113	Bracket, Positive Crutch	16121	Spindle, Negative Crutch Control
16106	Insulation, Negative Crutch	16114	Arm, Positive Crutch	16122	Bearing, Negative Alignment
16107	Ring, Retaining	16115	Fork, Crutch		

WASHERS, PINS AND SCREWS

0285A	Screw fixing	16112		0291A	Washer for	16122
0286A	"	16108		0292A	Taper Pin fixing	16117
0287A	"	16115		0293A	Spring Washer for	16117

PLATE No. 4 COMPLETE MIRROR HOLDER AND CONTROLS

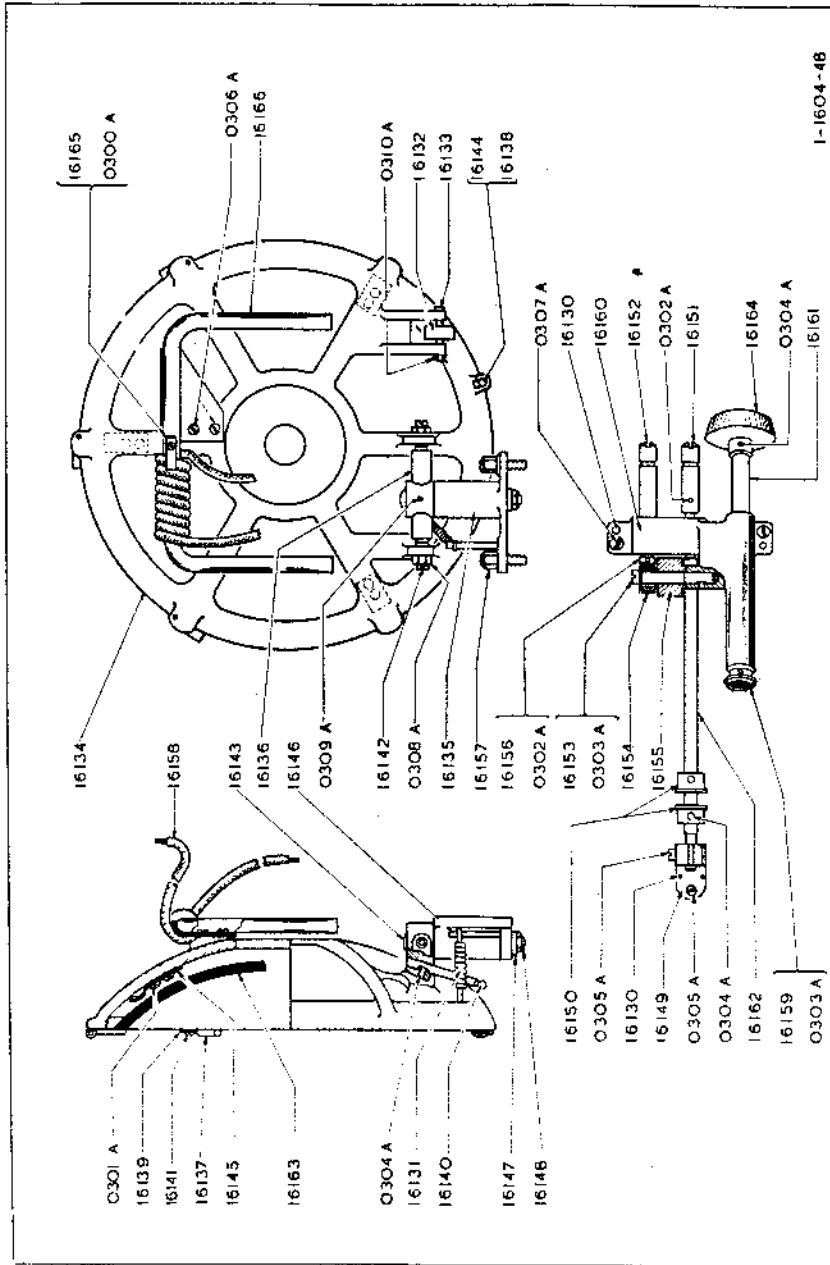


PLATE No. 4

PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16130	Dowel, fixing 16149, 16160	16143	Pivot, Vertical, Mirror Holder	16155	Cam, Mirror Control
16131	Spring, Mirror Return	16144	Clip, Fixed, Mirror Holder	16156	Worm, Mirror Control
16132	Roller, Mirror Control	16145	Spring, Mirror Holder	16157	Screw, Locating Mirror
16133	Spindle Roller, Mirror Control	16146	Pin, Mirror Return Spring	16158	Lead, Negative and Magnet
16134	Holder, Mirror	16147	Washer, Mirror Pivot	16159	Gear, Mire, Negative Hand Feed

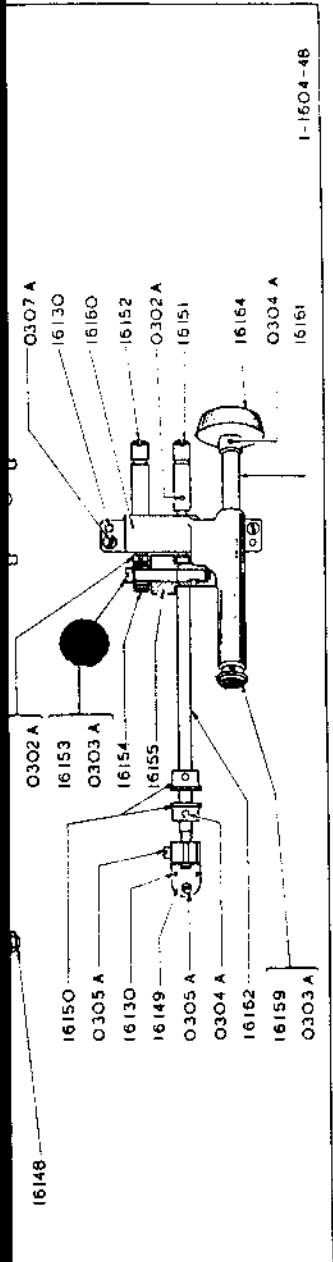


PLATE Nº 4

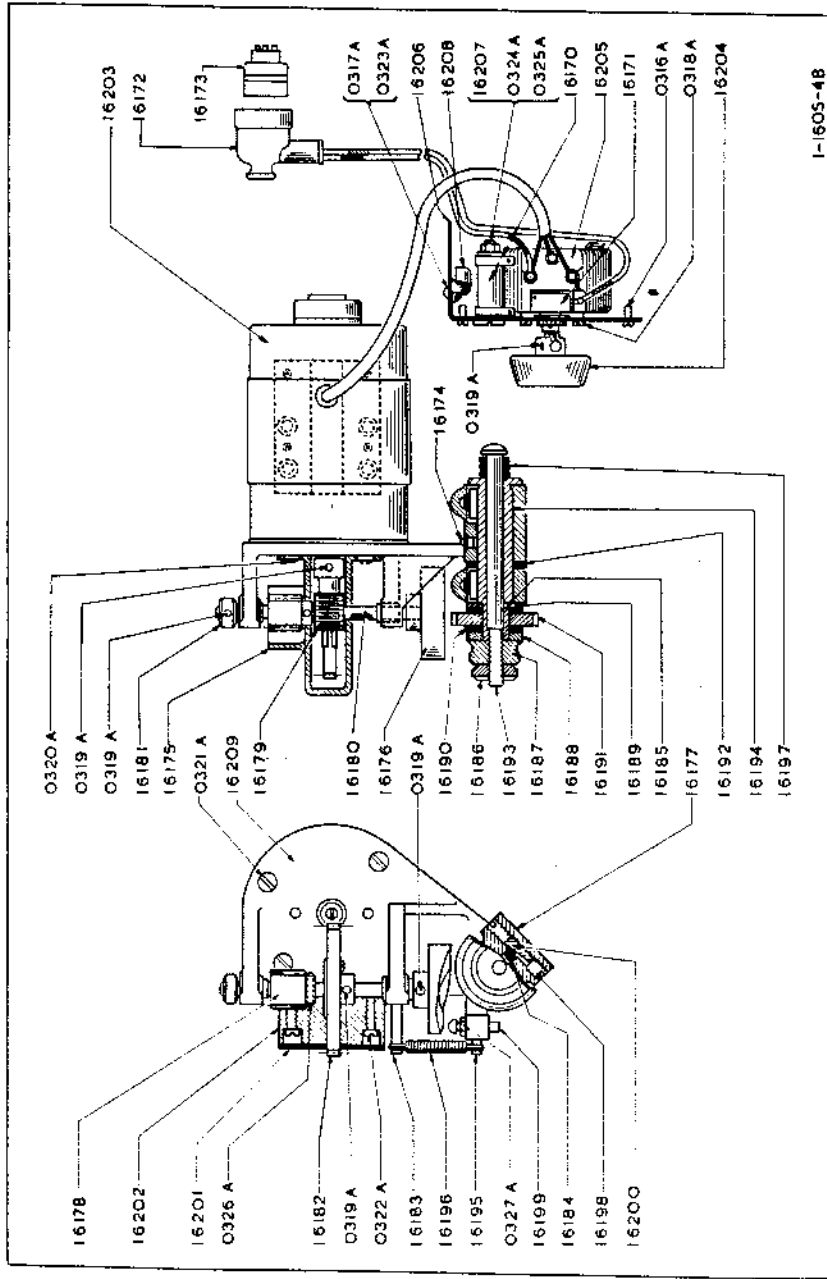
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PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16130	Dowel, fixing 16149, 16160	16143	Pivot, Vertical, Mirror Holder	16155	Cam, Mirror Control
16131	Spring, Mirror Return	16144	Clip, Fixed, Mirror Holder	16156	Worm, Mirror Control
16132	Roller, Mirror Control	16146	Pin, Mirror Return Spring	16157	Screw, Locating Mirror
16133	Spindle Roller, Mirror Control	16147	Washer, Mirror Pivot	16158	Lead, Negative and Magnet
16134	Holder, Mirror	16148	Screw, Mirror, Pivot Washer	16159	Gear, Mitre, Negative Hand Feed
16135	Bracket, Mirror Holder	16149	Bracket, Support, Mirror Control	16160	Bracket, Mirror Control
16136	Pivot, Mirror Holder	16150	Collar, Fixed, Mirror Control	16161	Spindle, Negative Hand Feed
16137	Clip Spring, Mirror Holder	16151	Knob, Mirror Control	16162	Screw, Adjusting, Mirror
16138	Screw, fixing 16144	16152	Spindle, Mirror Control Worm	16163	Mirror, 1 1/2" diameter
16139	Washer for 16137	16153	Spindle, Mirror, Control Cam	16164	Knob, Negative Hand Feed
16140	Pin, Stop, Mirror Pivot	16154	Wheel, Worm, Mirror Control	16165	Clip, Cable
16141	Screw, fixing 16137			16166	Magnet, Core, complete
16142	Screw, Mirror Pivot				

WASHERS, PINS AND SCREWS

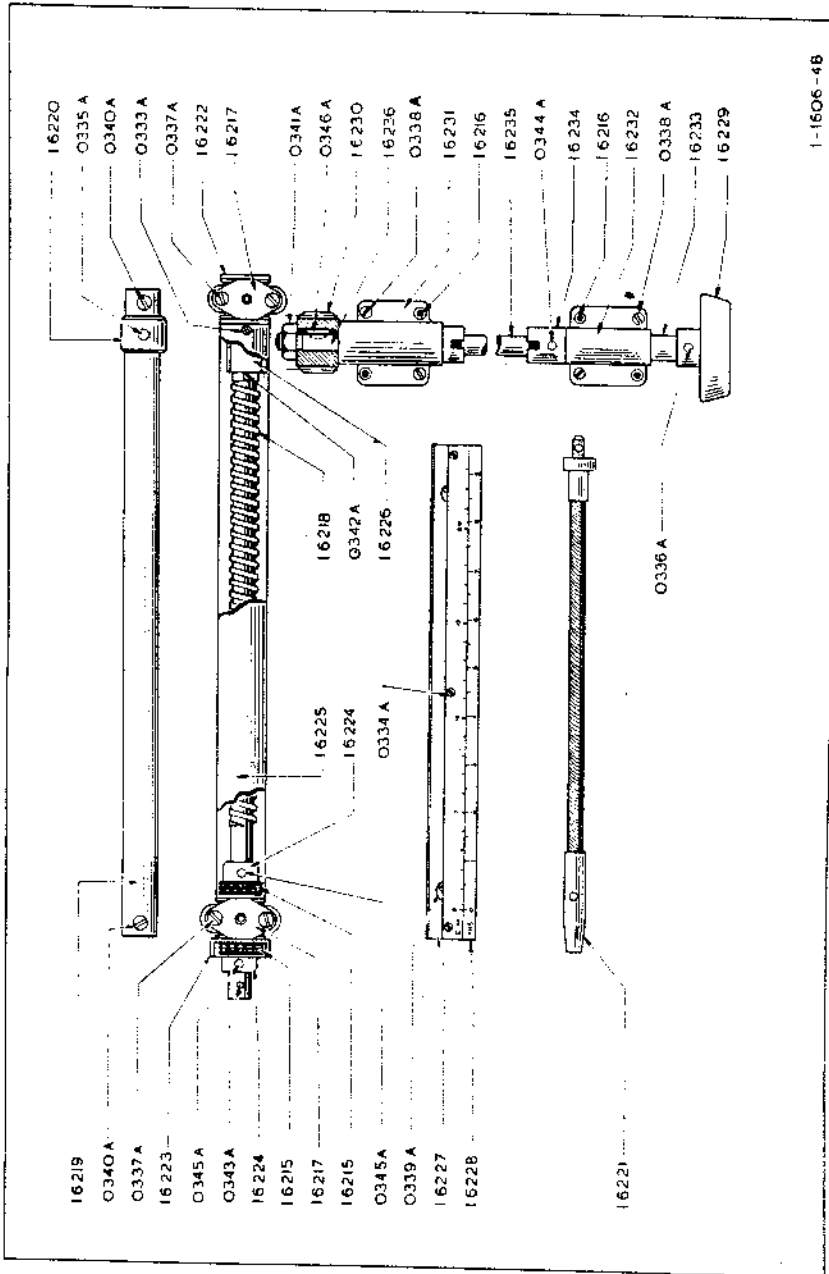
0300A	Screw fixing	16165		0307A	Screw fixing	16160
0301A	"	16145		0308A	Locknut fixing	16142
0302A	"	16151, 16156		0309A	Taper Pin fixing	16136
0303A	"	16153, 16159		0310A	Split Pin fixing	16133

PLATE No. 5. MOTOR DRIVE ASSEMBLY

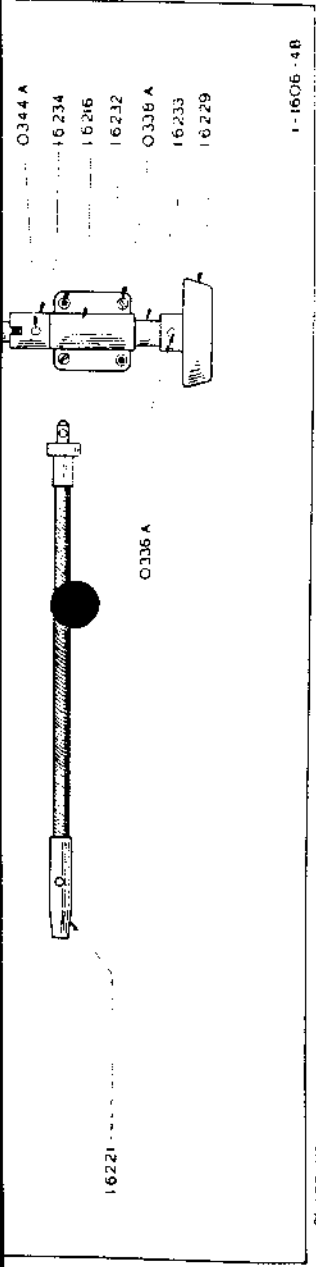


PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16170	Resistance, Fixed	16184	Roller, Feed Arm	16197	Spring, Compression
16171	Switch, Motor	16185	Pin, Driving	16198	Plug for Wedge
16172	Plug, 3-pin	16186	Locknut, Tension	16199	Tappet, Feed Arm
16173	Socket, 3-pin	16187	Nut, Tension	16200	Wedge, Feed Arm
16174	Oiler, 1/2" Spring Ball	16188	Ring, Thrust	16201	Shim, Packing
16175	Guard, Worm and Wheel	16189	Washer, Thrust	16202	Plate, Adapter

PLATE No. 6. POSITIVE LEADSCREW AND DETAILS



PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16215	Bearing, Thrust	16223	Bearing, Rear, Positive Lead Screw	16231	Bearing, Positive Hand Feed
16216	Dowel, fixing 16231 and 16232	16224	Collar, Positive Lead Screw	16232	Bearing, Rear, Positive Hand Feed
16217	Plate, Clamping Bearing	16225	Cover, Positive Lead Screw	16233	Spindle, Rear Bearing, Positive



PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16215	Bearing, Thrust	16223	Bearing, Rear, Positive Lead Screw	16231	Bearing, Positive Hand Feed
16216	Dowel, fixing 16231 and 16232	16224	Collar, Positive Lead Screw	16232	Bearing, Rear, Positive Hand Feed
16217	Plate, Clamping Bearing	16225	Cover, Positive Lead Screw	16233	Spindle, Rear Bearing, Positive Hand Feed
16218	Screw, Positive Lead	16226	Gear, Spiral, Positive Lead Screw	16234	Collar, Retaining Rear Bearing Spindle
16219	Tube, Positive Support	16227	Plate, Positive Support	16235	Shaft, Drive, Positive Hand Feed
16220	Collar, Positive Stop	16228	Strip, Positive Carbon, Indicator	16236	Shaft, Pinion, Positive Hand Feed
16221	Drive, Flexible, Positive Lead Screw	16229	Knob, Moulded, 2 1/4" diameter		
16222	Bearing, Front, Positive Lead Screw	16230	Gear, Spiral, Positive Hand Feed		

WASHERS, PINS AND NUTS

0333A	Screw fixing	16225	0339A	Screw fixing	16231, 16232	0343A	Taper Pin fixing	16221
0334A	"	16228	0339A	"	16227	0344A	"	16234
0335A	"	16220	0340A	"	16219	0345A	Taper Pin for	16224
0336A	"	16229	0341A	Nut fixing	16230	0346A	Key fixing	16230, 16236
0337A	"	16217	0342A	Taper Pin for	16226			

PLATE No. 7. LAMPHOUSE DETAILS

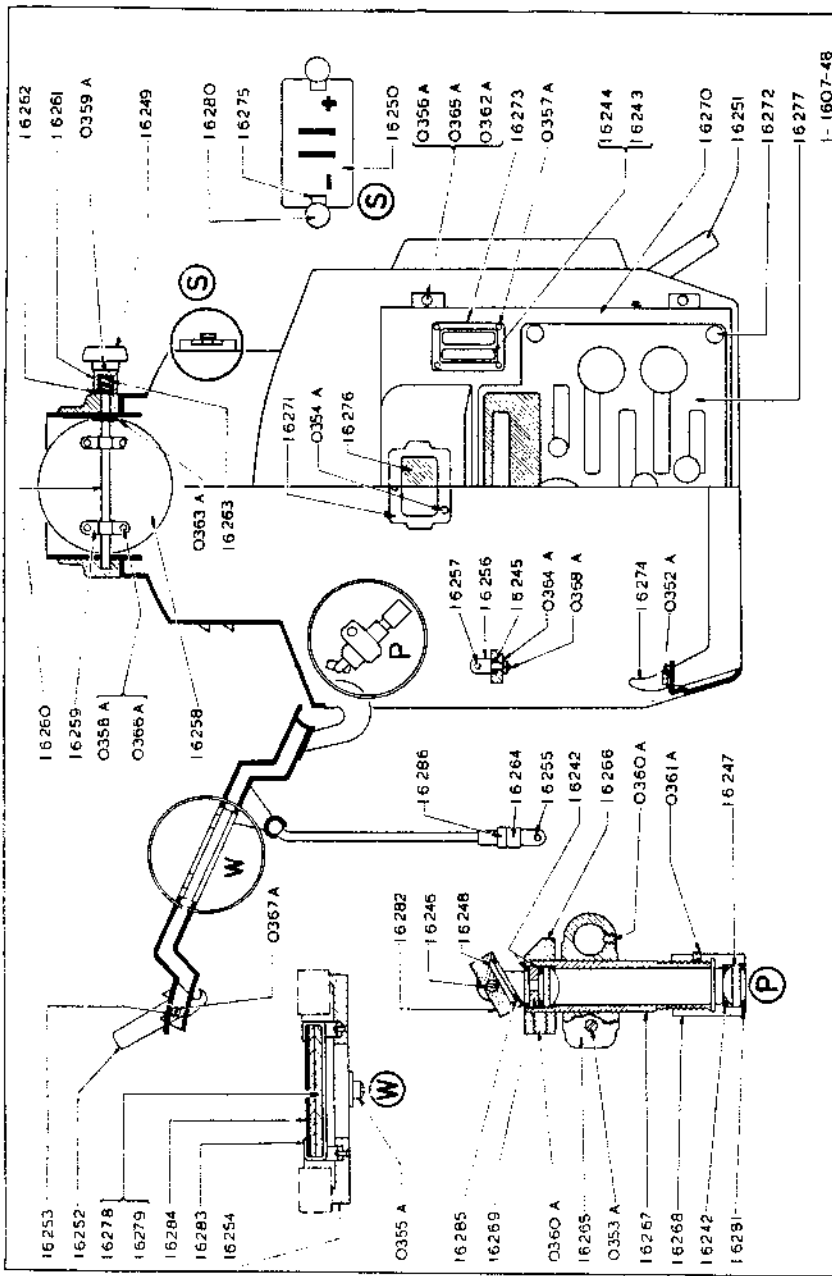


PLATE No 7

PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16242	Washer, Packing for 16247	16258	Damper, Chimney	16273	Panel, Fuse
16243	Fuse, 2-ampere Cartridge	16259	Clip, Chimney Damper	16274	Catch, Door
16244	Fuseholder	16260	Spindle, Chimney Damper	16275	Clip, Spring, Arc Image
16245	Race, Thrust, Door Support Rod	16261	Housing for Spring	16276	Glass, Rear Window
16246	Screw, fixing 16282	16262	Washer, Special, for Damper Spindle	16277	Panel, Loose, complete
16247	Lens, Periscope, Front and Rear	16263	Spring for Damper	16278	Glass, Wide Window, Lamphouse Door
16248	Mirror, Periscope				

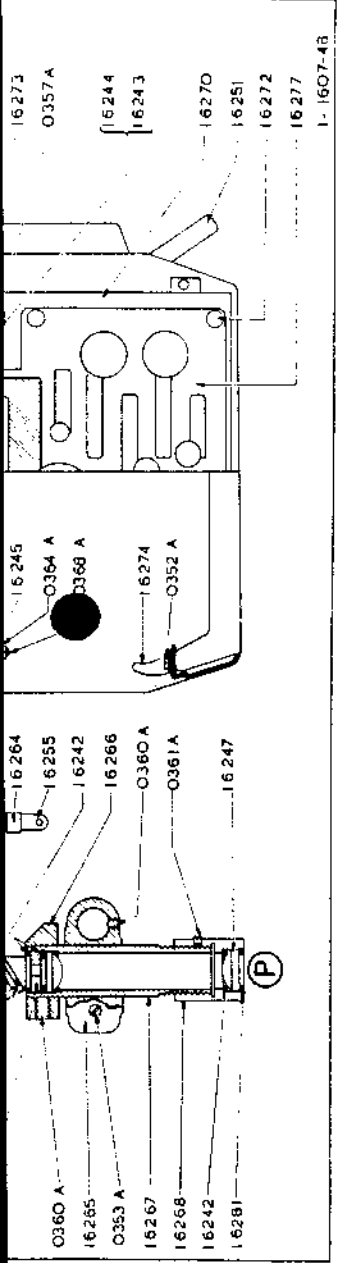


PLATE No 7

PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16242	Washer, Packing for 16247	16258	Damper, Chimney	16273	Panel, Fuse
16243	Fuse, 2-ampere Cartridge	16259	Clip, Chimney Damper	16274	Catch, Door
16244	Fuseholder	16260	Spindle, Chimney Damper	16275	Clip, Spring, Arc Image
16245	Race, Thrust, Door Support Rod	16261	Housing for Spring	16276	Glass, Rear Window
16246	Screw, fixing 16282	16262	Washer, Special, for Damper Spindle	16277	Panel, Loose, complete
16247	Lens, Periscope, Front and Rear	16263	Spring for Damper	16278	Glass, Wide Window, Lamphouse Door
16248	Mirror, Periscope	16264	Locknut, Door Support Rod	16279	Glass, Narrow Window, Lamphouse Door
16249	Knob, Moulded, 1 1/2" diameter	16268	Block, Support, Periscope	16280	Screw, Securing 16275
16250	Screen, Arc Image	16266	Bracket, for Periscope	16281	Ring, Spring, for Barrel
16251	Handle, Door, Right Hand	16267	Barrel, Periscope, Male	16282	Holder, Mirror
16252	Handle, Door, Left Hand	16268	Barrel, Periscope, Female	16283	Slide, Window
16253	Pin, Door Handle	16269	Washer for 16247	16284	Gauze, Window
16254	Plate, Back, and Spring Window	16270	Panel, Fixed, Rear	16285	Ring, Spring, Mirror Holder
16255	Fork, End, Door Support Rod	16271	Frame, Window, Rear	16286	Rod, Ball, and Collar, complete
16256	Pivot for Door, Support Rod	16272	Screw securing 16277		
16257	Pin for Pivot, Door Support Rod				

WASHERS, PINS AND SCREWS

0352A	Screw fixing	16274	0398A	Screw fixing	16259	0364A	Washer for	16256
0353A	"	16265	0399A	"	16249	0365A	Spring Washer for	16270
0354A	"	16276	0360A	"	16265, 16267	0366A	Nut fixing	16259
0355A	"	16254	0361A	"	16268	0367A	Split Pin fixing	16253
0356A	"	16270	0362A	Nut fixing	16270	0368A	Nut retaining	16256
0357A	"	16273	0363A	Washer for	16268			

PLATE No. 8. DOWSER AND LIGHT CUT-OFF ASSEMBLIES

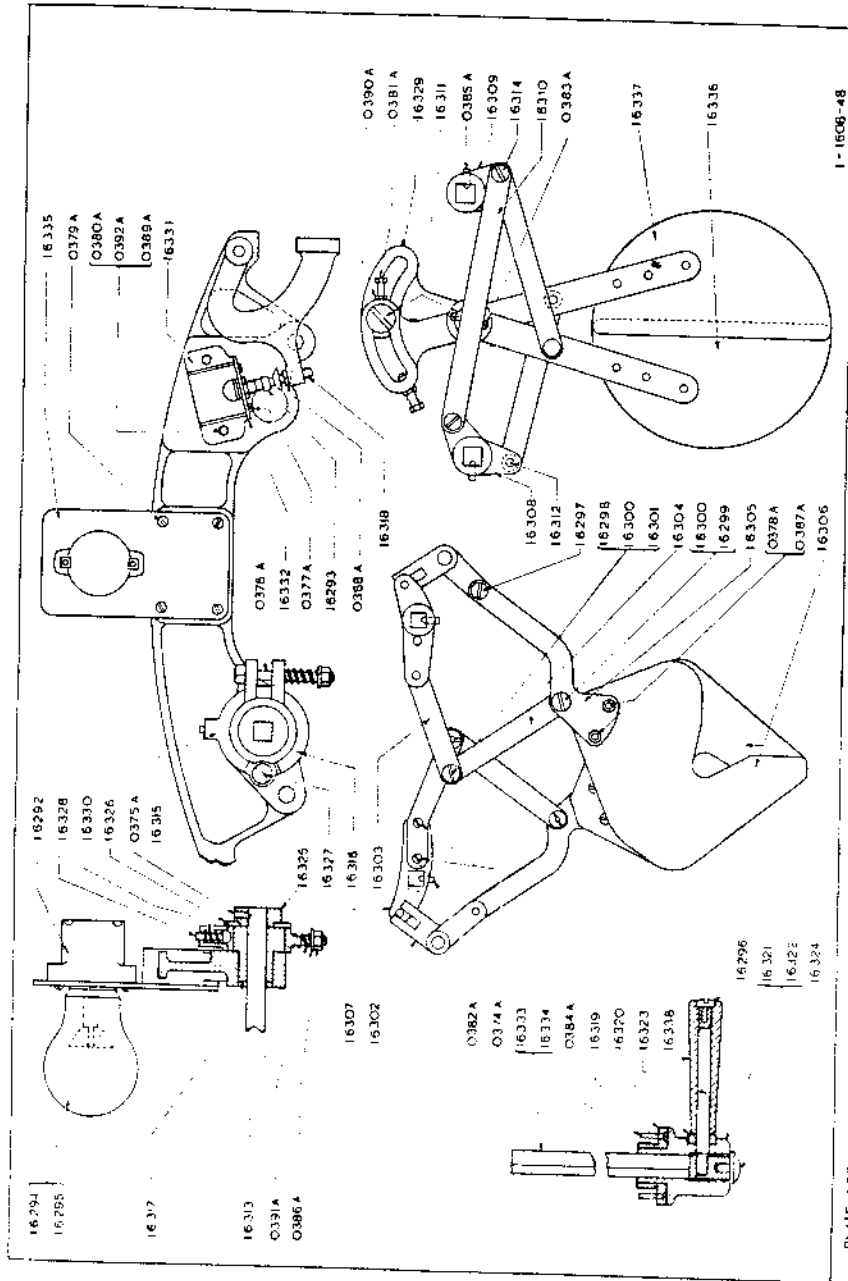


PLATE 8

PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16292	Lampholder Seecl, Type E.S.	16309	Pivot, Light Cut-off, Non-operating Side	16324	Screw, Cap, Dowser Handle
16293	Switch, Push-off	16310	Link, Connecting Pivots 16308, 16309	16325	Collar, Dowser Rod
16294	Lamp, Pilot, 210 volts, 60 watts	16311	Screw, Pilot, 210 volts, 60 watts	16326	Washer, Retaining Brake Mechanism
16295	Lamp, Pilot, 115 volts, 5 watts	16312	Screw, Pilot, 115 volts, 5 watts	16327	Pin, Pivot, for Brake Shoes
16296	Screw, fixing 16398	16313	Screw, Pivot, Dowser Crank	16328	Pin, Locating, 16317
16297	Screw, Pivot, Dowser Crank	16314	Spring, Brake	16329	Housing, Blade Arm
16298	Nut, Pivot (Short), Dowser	16315	Screw, Pivot, for 16309	16330	Pin, Locating Spring, Brake Mechanism
16299	Nut, Pivot (Long), Dowser	16316	Pin, Pivot, for 16309	16331	Pin, Locating Spring, Brake Mechanism

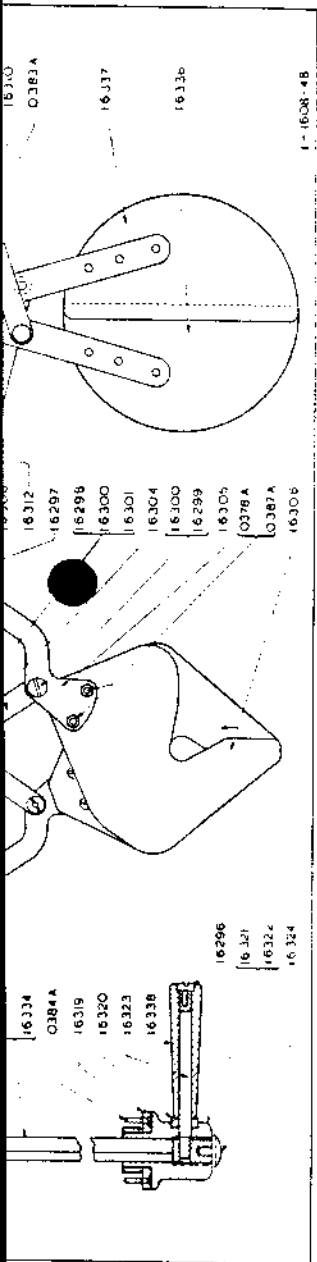


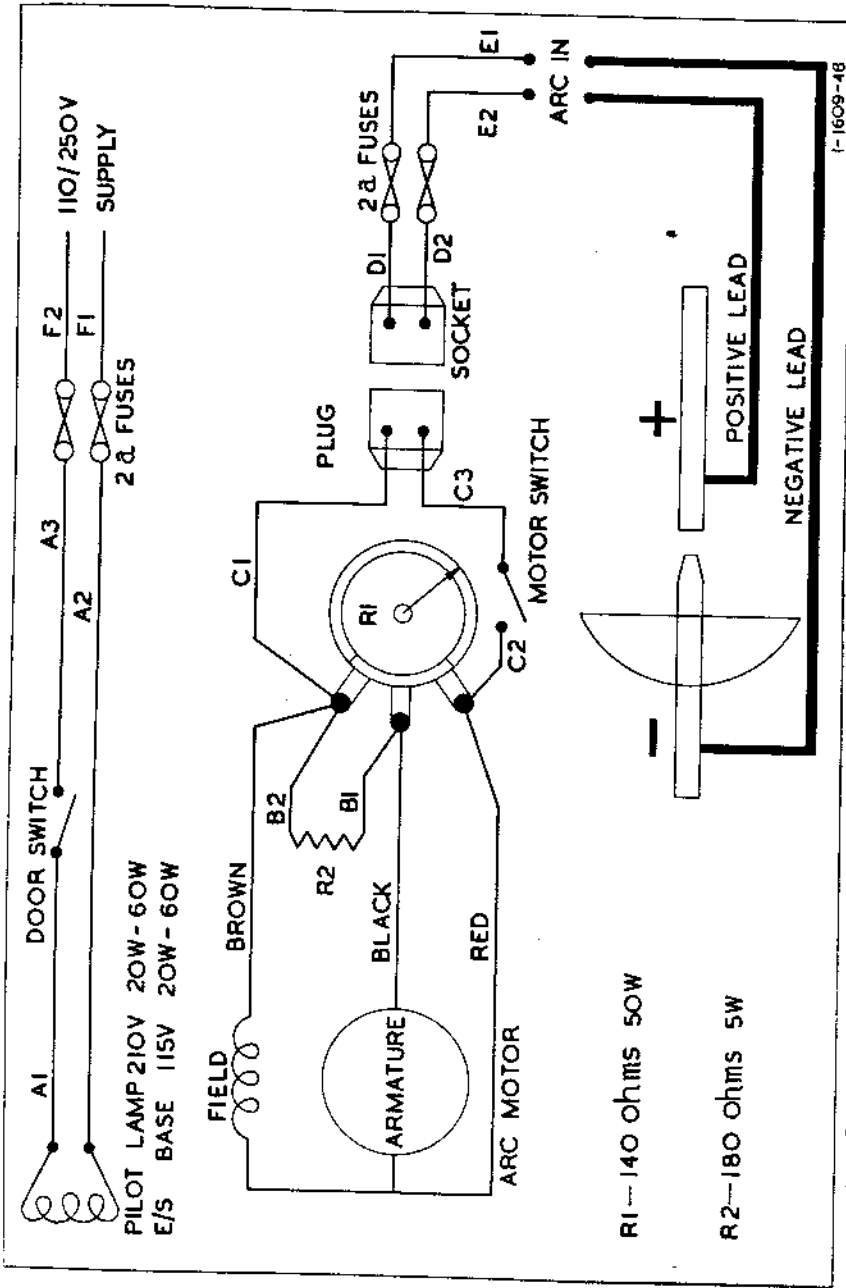
PLATE NR 8

PART No.	DESCRIPTION	PART No.	DESCRIPTION	PART No.	DESCRIPTION
16292	Lampholder Seccol, Type E.S.	16309	Pivot, Light Cut-off, Non-operating Side	16324	Screw, Cap, Dowser Handle
16293	Switch, Push-off	16310	Link, Connecting Pivots 16308, 16309	16325	Collar, Dowser Rod
16294	Lamp, Pilot, 210 volts, 60 watts	16311	Screw, Pivot	16326	Washer, Retaining Brake Mechanism
16295	Lamp, Pilot, 115 volts, 5 watts	16312	Screw, Pivot, for 16308	16327	Pin, Pivot, for Brake Shoes
16296	Screw, fixing 16338	16313	Spring, Brake	16328	Pin, Locating, 16317
16297	Screw, Pivot, Dowser Crank	16314	Screw, Pivot, for 16309	16329	Housing, Blade Arm
16298	Nut, Pivot (Short), Dowser	16315	Shoe, Top Brake	16330	Pin, Locating Spring, Brake Mechanism
16299	Nut, Pivot (Long), Dowser	16316	Shoe, Bottom Brake	16331	Switchbox
16300	Screw, Pivot, Dowser	16317	Bush, Locating, Dowser Rod	16332	Plate, Switch
16301	Tube, Spacing, Dowser	16318	Screw, Adjusting, Switch Crank	16333	Rod, Dowser, Operating Side
16302	Crank, Slotted, Dowser	16319	Bearing, Front, Dowser Rod	16334	Rod, Dowser, Non-operating Side
16303	Arm, Actuating, Dowser	16320	Washer, Dowser Handle Boss	16335	Bracket, Lampholder
16304	Link, Dowser	16321	Boss, Dowser Handle, Operating	16336	Blade, Assembly Arm and Link, Non-operating Side
16305	Arm, Blade, Dowser	16322	Boss, Dowser Handle, Non-operating Side	16337	Blade, Assembly Arm and Link, Operating Side
16306	Blade, Dowser	16323	Spindle, Dowser Handle	16338	Handle, Cut-off
16307	Crank, Actuating, and Pin, Dowser				
16308	Pivot, Light Cut-off, Operating Side				

WASHERS, PINS AND SCREWS

0374A	Screw fixing	16303		0387A	Nut fixing	16305
0375A	"	16325		0388A	"	16318
0376A	Bolt for	16315, 16316		0389A	"	16331
0377A	Screw fixing	16332		0390A	"	0381A
0378A	"	16305		0391A	Washer for	0376A
0379A	"	16335		0392A	Spring Washer for	16331
0380A	Bolt for	16331				

PLATE No. 9. WIRING DETAILS



R1—140 ohms 50W

R2—180 ohms 5W

PLATE No. 9

1-1609-48

A GAUMONT-KALEE PRODUCT

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