

34" SURGICAL LIGHTS
MODELS 6520 THRU 6528

(10/82)

P-751870-091

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TABLE OF CONTENTS

CHAPTER		PAGE	GRID
	Introduction	1	A-4
I	General Data	3	A-6
II	Operation	4	A-7
III	Maintenance	6	A-9
IV	Troubleshooting	9	A-12
V	Component Replacement	11	A-12
	Current Collector Ring Assembly	11	A-14
	Suspension Tube Replacement	11	A-14
	Filter and Heat Cylinder Replacement	11	A-14
	Fusible Link	12	A-14
VI	Parts List		
	General Assembly	13	B-1
	Mounting Arrangements	14	B-2
	Revolving Mechanism (For Equipment Shipped Before 3/73)	16	B-3
	Revolving Mechanism (For Equipment Shipped After 3/73)	18	B-5
	Ceiling Spider Assembly (For Equipment Shipped Before 3/73)	20	B-7
	Ceiling Spider Assembly (For Equipment Shipped After 3/73)	22	B-9
	Track Assembly (For Equipment Shipped Before 3/73)	24	B-11
	Track Assembly (For Equipment Shipped After 3/73)	26	B-13
	Carriage Assembly (For Equipment Shipped Before 3/73)	28	C-1
	Carriage Assembly (For Equipment Shipped After 3/73)	30	C-3
	Suspension Tube and Collar Detail	32	C-5
	Cross Section Through Fork and Swivel	33	C-7
	Fork, Swivel and Housing Assembly	34	C-8
	Yoke Assembly	36	C-9
	Reflector and Optical Assembly	38	C-11
	Standard Variable Intensity Control	40	C-13
	Variable Intensity Control	42	D-1
			D-3

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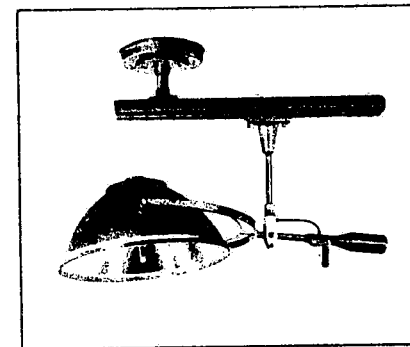
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INTRODUCTION

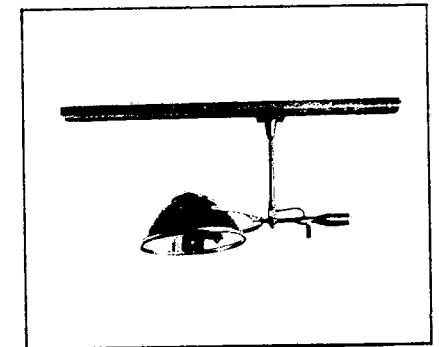
This manual provides information for the installation, operation, maintenance and repair of 34" diameter surgical lights manufactured by the American Sterilizer Company. It includes an il-

lustrated parts list for parts identification and replacement.

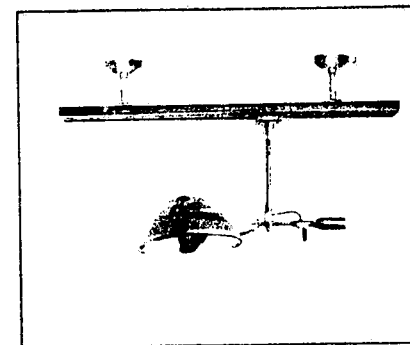
The 22" Surgical Light Maintenance Manual should be used in conjunction with this manual when servicing 34/22 light combinations.



MODEL 6520 - ROTATING TRACK



MODEL 6521 - SURFACE MOUNTED



MODEL 6522 - SUSPENSION MOUNTED

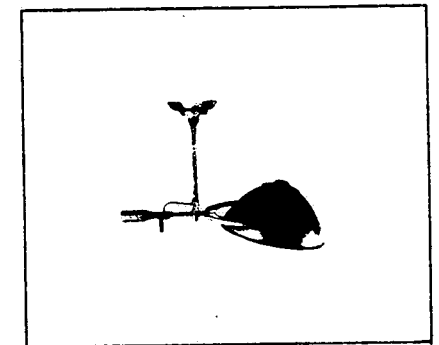


Figure 1 — Typical 34" Diameter Lights

GENERAL DESCRIPTION

These lights consist of a counterbalanced 34" diameter lighthead supported in a wishbone-type yoke and mounted on a movable carriage. The lighthead rotates without stop limitation on a suspension tube from this carriage. The carriage, which houses a current collector ring assembly, has linear movement on an extruded aluminum track designed so as to completely enclose the carriage wheels for maximum cleanliness.

The remote control arm permits fast, precise positioning from outside the sterile field and the sterilizable handle enables the surgeon to make his own adjustments from within the sterile field.

The aluminum reflector is of the open type to allow for easy cleaning and maintenance. A protective bumper (guard ring) is provided at the lower rim and extends into the inner surface of the reflector to serve as a directional trap against stray light.

The optical system utilizes a special medical lamp enclosed by two cylinders to provide proper beam color and heat absorption. The two-filament feature of this lamp allows one filament to precede the other in burnout to permit completion of an operation in the event of lamp failure.

The beam pattern at the operative site of approximately 42" from the rim of the reflector is approximately 10" in diameter, approximately 3500 foot-candles illumination and 4000° K color when the lamp is burning at rated voltage and 400 watts. With optional Variable Intensity Control, foot-candles are adjustable to approximately 6500 (maximum).

The Variable Intensity Control, wall mounted 5' above the floor, regulates input voltage of 120 volts from 85 to 135 volts to vary the light intensity as desired. A clearly calibrated voltmeter indicates output voltage of the unit to the fixture to allow

precise control of current. The control may be surface-mounted to the wall or recessed into it.

34R, 34S & 34 SERIES

Model 6520 utilizes a fixed suspension center and a 54" **rotating** track, which permits coverage of the operative site from virtually any angle. The lighthead may be moved anywhere within a 13'6" circle of the fixed suspension center.

Models 6521, 6522 and 6523 utilize fixed 9-foot aluminum track.

Model 6528 utilizes a fixed ceiling spider support (no track).

The following mounting arrangements are provided in this series.

Series	Model	Mounting Arrangement
34R	6520	Rotating Track (54")
34S	6521	Surface
34S	6522	Suspension
34S	6523	Recess
34	6528	Rotating (Fixed Ceiling Spider Support)

34/22 SERIES

These lights consist of a combination of a 34" diameter and 22" diameter lighthead mounted separately on 9-foot aluminum tracks which are hung parallel to each other.

The following mounting arrangements are provided in this series.

Model	Combination	Mounting Arrangement
6524	6521 & C-22-E	Surface
6525	6522 & C-22-E1	Suspension
6526	6523 & C-22-E2	Recess
6527		Central "X-Frame"

Chapter I GENERAL DATA

Weight	125 lbs. net (less track)
Degrees Rotation (About central suspension tube from carriage)	360
Maximum Degrees of Tilt — Forward	25
Backward	30
Laterally (Right)	15
Laterally (Left)	15
Electrical Requirements - 34R, 34S, 34	120 volt, 60 cycle, 400 watts
34/22	120 volt, 60 cycle, 550 watts
Approved Lamp — 34" Lights	150/400 Clear Medical Spotlight (General Electric or equivalent)
22" Lights	150 P25/2SB
Illumination Intensity	3500 foot-candles
(With <u>Optional</u> Variable Intensity Control)	1500-6500 foot-candles
Spectral Energy Rating	4000° Kelvin

TABLE OF LEADING PARTICULARS

Chapter II OPERATION

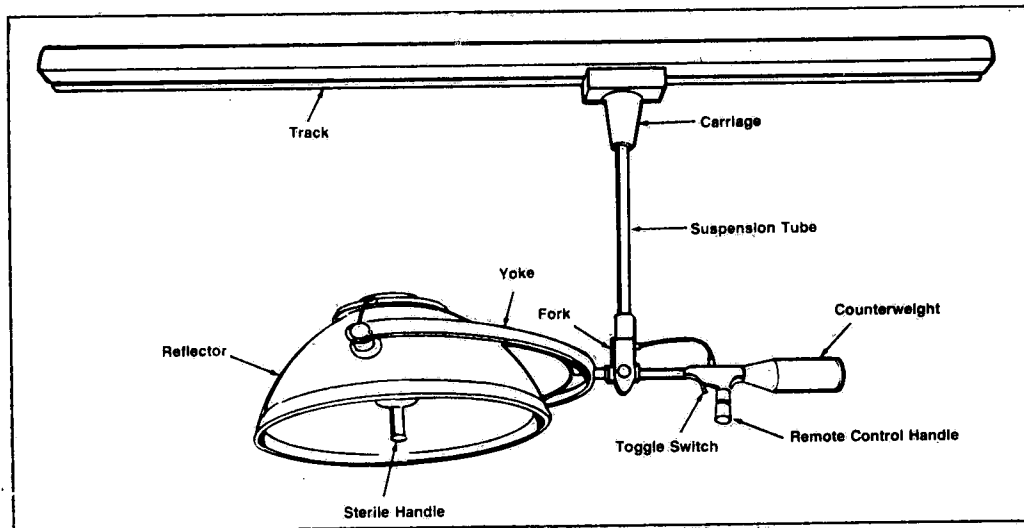


Figure 2 — Typical Track-Mounted Light Assembly.

WARNING

DO NOT OPERATE LIGHT UNLESS PROPER LAMP AND THE GLASS HEAT AND COLOR CYLINDERS ARE IN PLACE.

ALL MODELS (TRACK MOUNTED)

The lighthead can be rolled on its carriage the full length of the track; revolved in a complete circle about the suspension tube without stop limitation; rotated clockwise or counterclockwise about the horizontal crossarm (with stop limitation); tilted forward and backward in the yoke and raised or

lowered vertically by tilting about the suspension fork.

These movements can be accomplished by grasping the removable sterilizable handle on the lighthead or the black knurled remote control handle at the opposite end of the crossarm. If control is to be from the remote end, the vertical tilt adjustment can be more easily achieved by using leverage on the counterweight adjacent to the knurled handle.

Thus, the control of the lighthead may be achieved at the operative site by sterile personnel, or remotely by unsterile personnel.

MODEL 6520 (ROTATING TRACK)

In addition to the movements described above, the lighthead may be moved anywhere within a 13'6" circle of the fixed suspension center.

MODEL 6528 (ROTATING)

This light rotates without stop limitation from a fixed ceiling support, covering an area of a circle of approximately 7' in diameter.

The lighthead may be revolved, rotated, raised, lowered and tilted as described above.

VARIABLE INTENSITY CONTROL

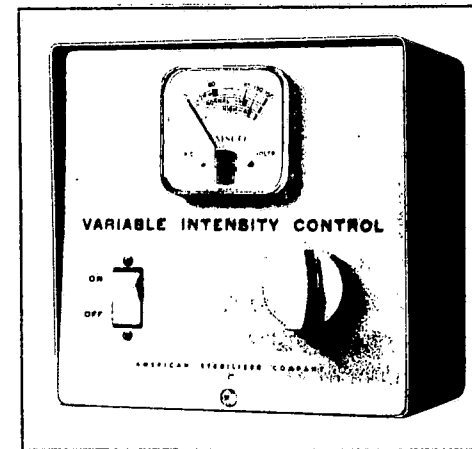


Figure 3 — Variable Intensity Control.

The Variable Intensity Control is designed to take incoming line voltage of approximately 120 volts and vary the output voltage which is supplied to the light fixture from it. The voltage supplied to the light fixture may be increased to 140 volts or reduced to 85 volts. This voltage increase or decrease may be observed as it registers on the voltmeter mounted on the front panel of the control. A decrease in voltage below the normal (120 volts) rating of the fixture will reduce the light intensity output and increase the life of the lamp. Where it is desirable to increase the intensity, the voltage supplied must be increased. Lamp life decreases when voltage supplied to the lamp is increased above the normal rating of the lamp. The rated life at normal voltage for the lamps in the fixture is 200 hours. An increase of five volts over normal will result in a decrease of lamp life of 40%. Ten volts over the rated voltage will decrease the lamp life by 60%. The maximum of 140 volts supplied to a 120 volt lamp will reduce life to 30 hours.

NOTE: The standard Variable Intensity Control is rated at 400 watts (maximum) while the optional Control is rated at 720 watts (maximum).

Operation

To operate Intensity Control, turn on power by pressing switch. Turning the control knob clockwise will provide an increase in voltage - counterclockwise, a decrease in voltage. The desired voltage can be observed on the meter.

An "On-Off" switch is provided at the rear of the crossarm to control the light at the operative site.

NOTE: The circuit breaker used as the "On-Off" switch on the optional Variable Intensity Control also provides protection for the transformer as well as the light circuit.

Chapter III MAINTENANCE

The AMSCO 34" diameter Surgical Lights will provide a beam pattern of maximum efficiency if the following conditions are noted:

1. The lamps provided are a mogul base, 120 volt, 150/400 watt, clear medical spotlight lamp.

Ordering by the designated lamp number 150/400 CL Medical Spotlight, with the addition of proper voltage, assures the user of obtaining the proper focus, which in turn assures the correct beam pattern at the operative site.

- a. The lamps used in these fixtures must be of the proper voltage, that is, of a voltage marking nearest to the supply voltage so as to assure rated life and maximum intensity for rated life. If the lamp used is of a voltage rating below the supply voltage, increased intensity will be obtained at a cost of shorter lamp life. The opposite is true if the lamp is of higher voltage rating than the supply voltage - reduced intensity and longer life.

- b. With the Intensity Control, the same conditions can be obtained with infinite variation and positive control. That is, by turning the knob on the Control clockwise - higher intensity can be obtained with higher voltage and shorter lamp life and lower intensity with lower voltage and longer lamp life if the knob is turned counterclockwise.

3. The reflector must be kept clean at all times to insure maximum specularity and, therefore, maximum intensity. For routine cleaning, dust

with a soft, dry cloth. Dust and dirt film may be easily removed by washing with a mild soap or detergent and water, followed by a thorough rinse with clean water. Dry thoroughly.

For tightly adhering soil it may be necessary to use paste type cleaners, gently and with caution. It is advisable to clean a sample spot before proceeding further. Rinse and dry. Do not use abrasive cleaning compounds. Clean filter and heat cylinders when necessary, using a slightly dampened cloth only. Be sure fixture is cool before attempting cleaning.

4. To obtain a proper pattern at the operative site, the light must be focused properly; that is, the rim of the reflector should be approximately 42" away from the operative site. At this distance, the sterilizable handle will be approximately arms length for an average height male (5'9").

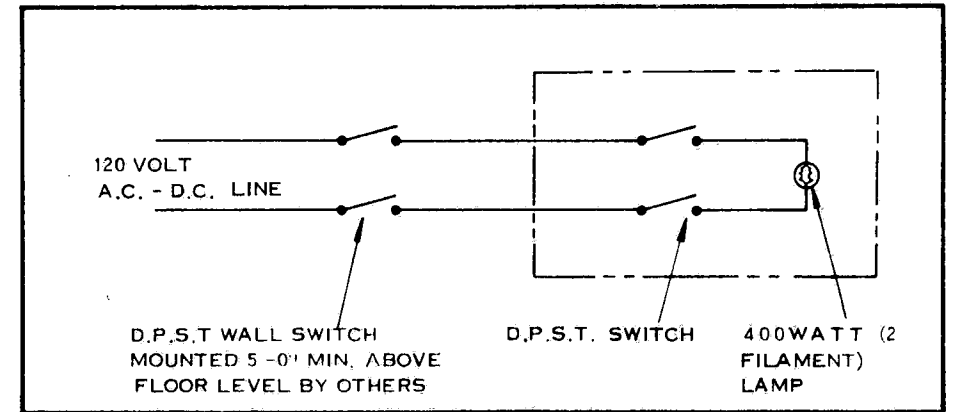
RELAMPING

For lamp replacement, unscrew the three knobs (26 Fig. 17) located inside the reflector at the base of the heat cylinders. This will permit disengagement of the complete sterile handle support and secondary reflector, exposing the lamp. The lamp can then be unscrewed and replaced. Make certain that the burned out lamp is cool before handling.

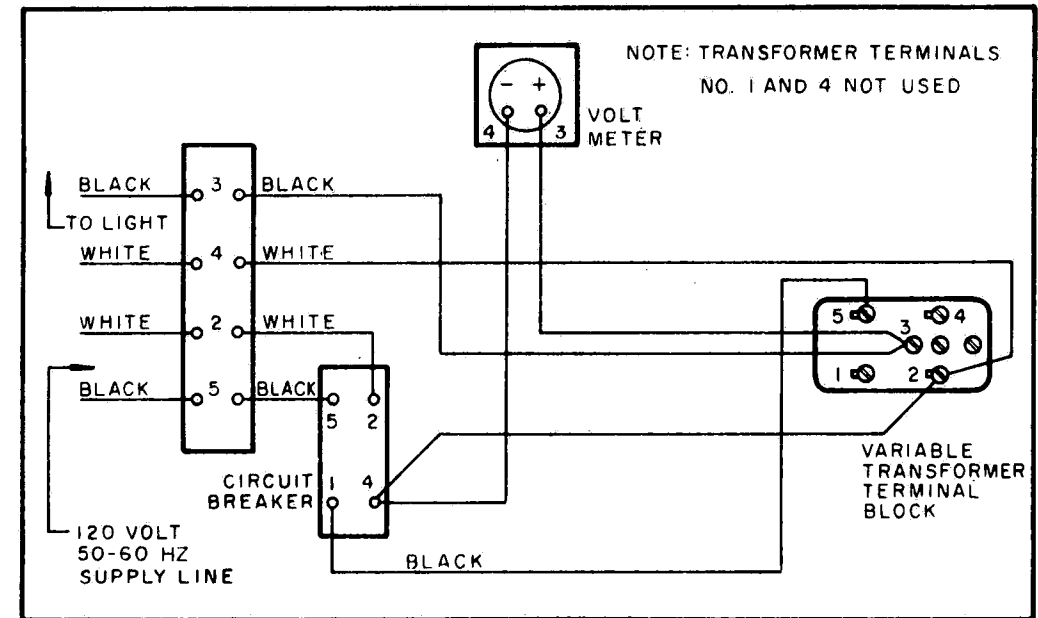
LUBRICATION

At least once a year, lubricate the carriage wheels (17, Fig. 10) with Type 630-AA Lubriplate* (AMSCO part number P-751454-091, 2-ounce tube) or equivalent non-drip lubricant.

*Flake Brothers Refining Co.

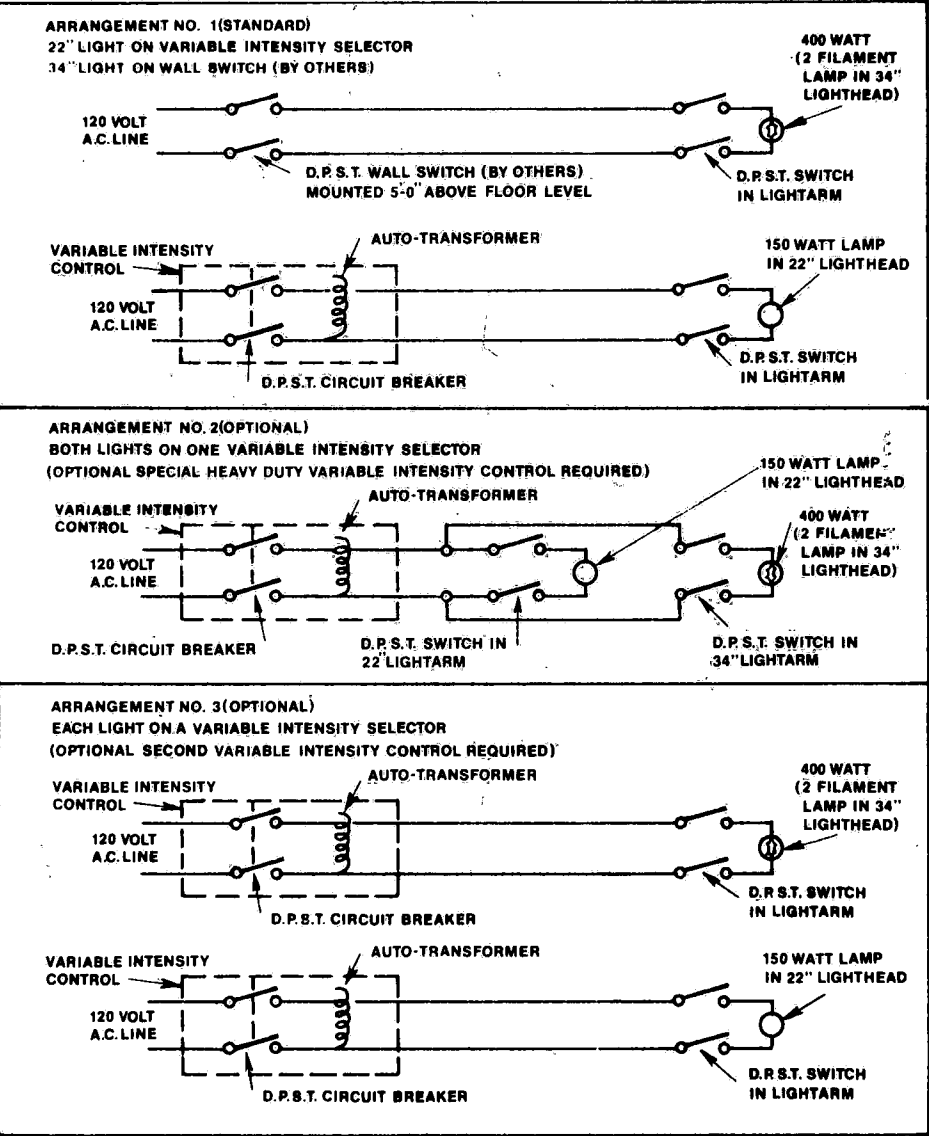


Standard (Without Variable Intensity Control).



Variable Intensity Control.

Figure 4 — Wiring Diagrams.



NOTE: VARIABLE INTENSITY CONTROL MUST BE MOUNTED 5'-0" ABOVE OPERATING ROOM FLOOR

Figure 5 — Wiring Diagrams (34/22 Combinations).

Chapter IV TROUBLE SHOOTING

TROUBLE	PROBABLE CAUSE	POSSIBLE REMEDY
Lighthead and arm assembly drifts.	Swivel loose.	Loosen set screws in large hex bolts of swivel and suspension fork. Tighten large hex bolts until desired friction has been obtained. Tighten set screws to lock hex bolt setting.
Lighthead rotates about cross arm out of balance	Swivel loose.	Tighten small hex head nuts below large hex bolts of swivel and suspension fork assembly.
Carriage drifts.	Track not level.	Level track by adjusting nuts above and below track on support studs. If this is not possible and drift persists, brake can be supplied to attach to carriage.
Light flickers.	Improper contact of current collector rings.	Check alignment of current wire brush and current collector ring assembly to make sure that contact is maintained continually throughout rotation of suspension tube. If contact is not maintained, shim wire brush block or bend wire brushes to insure continuous contact.
Insufficient light intensity or pattern.	Improper lamp. Old lamp. Dirty reflector or heat cylinders. Low voltage.	To insure maximum intensity of light output, there must be proper voltage supplied to the light. This must closely approximate to within a volt or two of the marked voltage of the lamp. Lamps are rated for 200 hours life but efficiency of light output is reduced as lamp ages. Reflectors and cylinders must be clean at all times. Correct type lamp must be used to produce maximum results.

(Not Used)

Chapter V

COMPONENT REPLACEMENT

CURRENT COLLECTOR RING ASSEMBLY IN CARRIAGE.

If it becomes necessary to replace a component of this assembly, the carriage must be removed from the track.

This is most easily accomplished on surface-mounted or open-mounted track models by removing the end plate cover (8, Fig. 11 or 11A) of the track at the end opposite the supply connection box.

Remove the angle stop (5, Fig. 11 or 11A) which is mounted to the track at this end. Before rolling carriage off the track, remove the lighthouse assembly from the carriage.

To remove the lighthouse assembly, remove the nameplate cover on the suspension fork and disconnect the two supply wires. Be sure supply current to the light is off before disconnecting wires.

The suspension forks have a finish collar (3 Fig. 13) which must be unscrewed and lifted to reveal a roll pin (5 Fig. 13) thru the fork and suspension tube. The light must be supported and the roll pin can be driven out with a drift pin, freeing the lighthouse assembly which can be dropped.

If the light is a recessed model, the carriage cannot be rolled off the end. After removing the lighthouse from the suspension tube of the carriage in the manner described above, the carriage may be removed in one of two ways.

1. Drop the complete track and carriage assembly by removing the trim and entire track. Remove carriage as above.
2. To remove the carriage from a recessed track without removing the complete track, roll the

the carriage to the stop. Remove one axle and wheel assembly from the carriage by removing the single socket head screw which holds the axles to the carriage. Carriage can now be tipped out.

NOTE: Make certain current contact trolley within bus current duct has been rolled out of the duct before attempting to tip out and drop the carriage.

SUSPENSION TUBE REPLACEMENT (See Fig. 13)

1. Remove the lighthouse assembly. Refer to instructions above for correct procedure.
2. To remove the suspension tube from the carriage or spider assembly, drive the two groove pins (2) out. Be careful as wires are in tube.
3. Insert a drift pin or rod into the hole in the suspension arm protruding out from the carriage or ceiling spider.
4. Grasp the rod while unscrewing the suspension tube with a strap wrench.
5. To reassemble suspension tube, proceed in reverse order.
 - a. Be sure to line up the holes in the suspension tube and arm before installing groove pins.
 - b. Be sure to install clamp ring (4) properly before retightening collar (3).

FILTER & HEAT CYLINDER REPLACEMENT (See Fig. 17)

1. Remove the three relamping knobs (26). The sterile handle and secondary reflector assembly (24) will come off.

2. Remove the lamp. Be sure it is cool.
3. Unscrew the three set screws (20) and remove the cylinder support ring (19) and cylinder assembly.
4. Remove the three screws (11), clips (12) and cylinder guard (14).
5. Remove the cylinder to be replaced.
6. Reassemble in the reverse order.

NOTE: Clean both cylinders with a slighted dampened cloth before replacing them.

FUSIBLE LINK (See Fig. 6)

Variable Intensity Controls which have the Ohmite VT4 Variable Transformer may not function after an overload or short circuit condition. This may be

due to the rupture of a protective fusible link which is found directly in back of the transformer terminal board.

To check this condition, it is necessary to remove the front control panel. Remove the white knob by loosening the set screw in the side which fastens the knob to the shaft. Remove the screw from the bottom of the front panel and slip the front panel down to free it from the box. This will expose the Ohmite VT4 Variable transformer.

Check for continuity between screws (A) and (3) of terminal board. If there is no continuity, fusible link has been ruptured and must be replaced.

The terminal board of the transformer can be removed by removing three screws marked (A), (B) and (C). The fusible link is found between screw (A) and terminal screw (3) within a short black insulating sleeve.

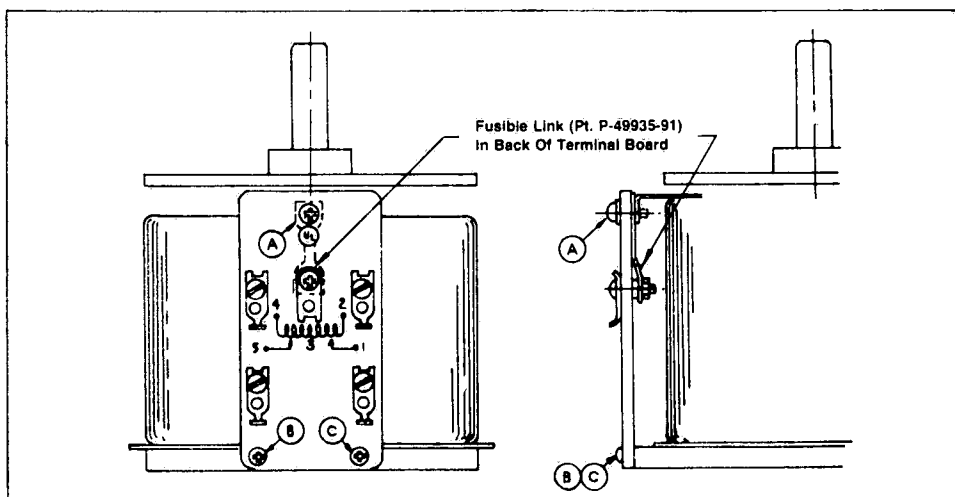


Figure 6 — Fusible Link Replacement.

Chapter VI PARTS LIST

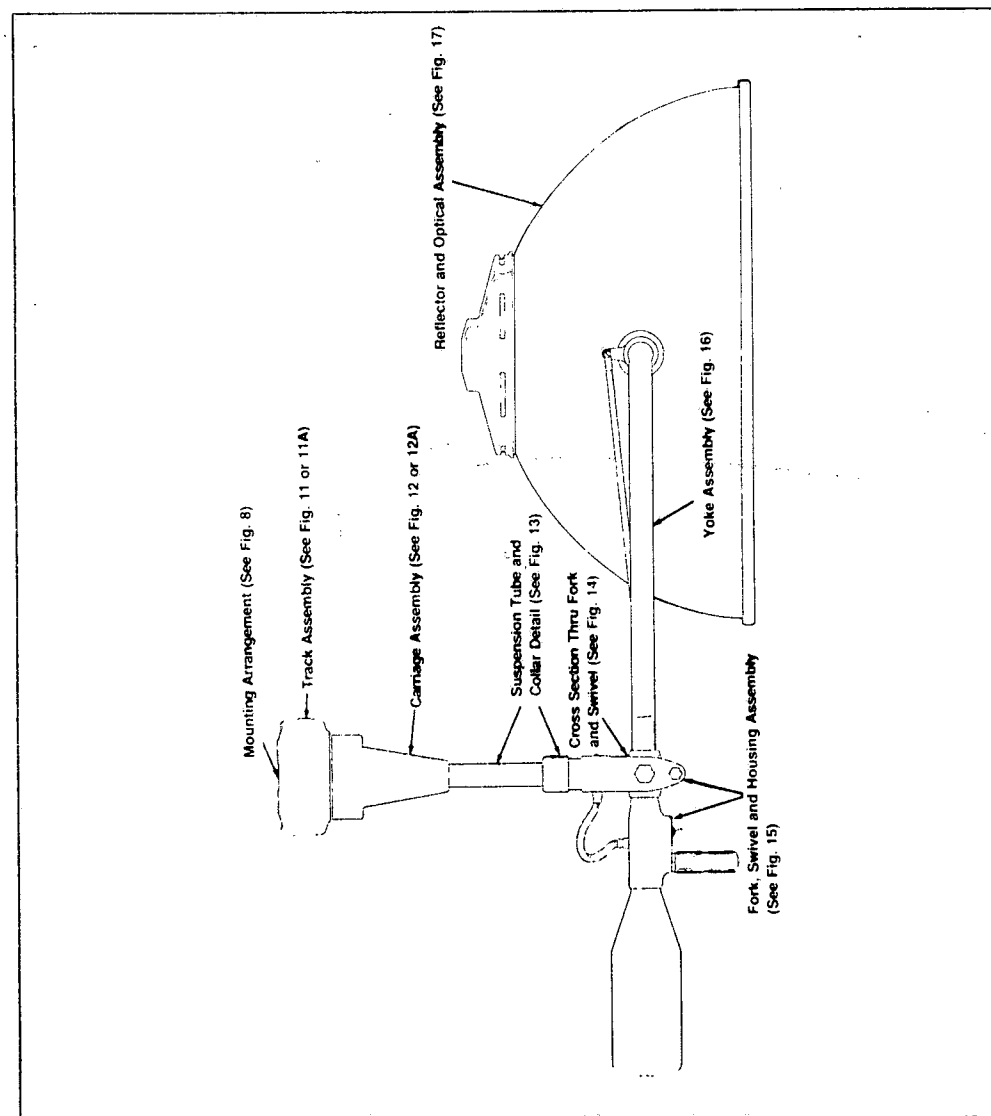


Figure 7 — General Assembly.

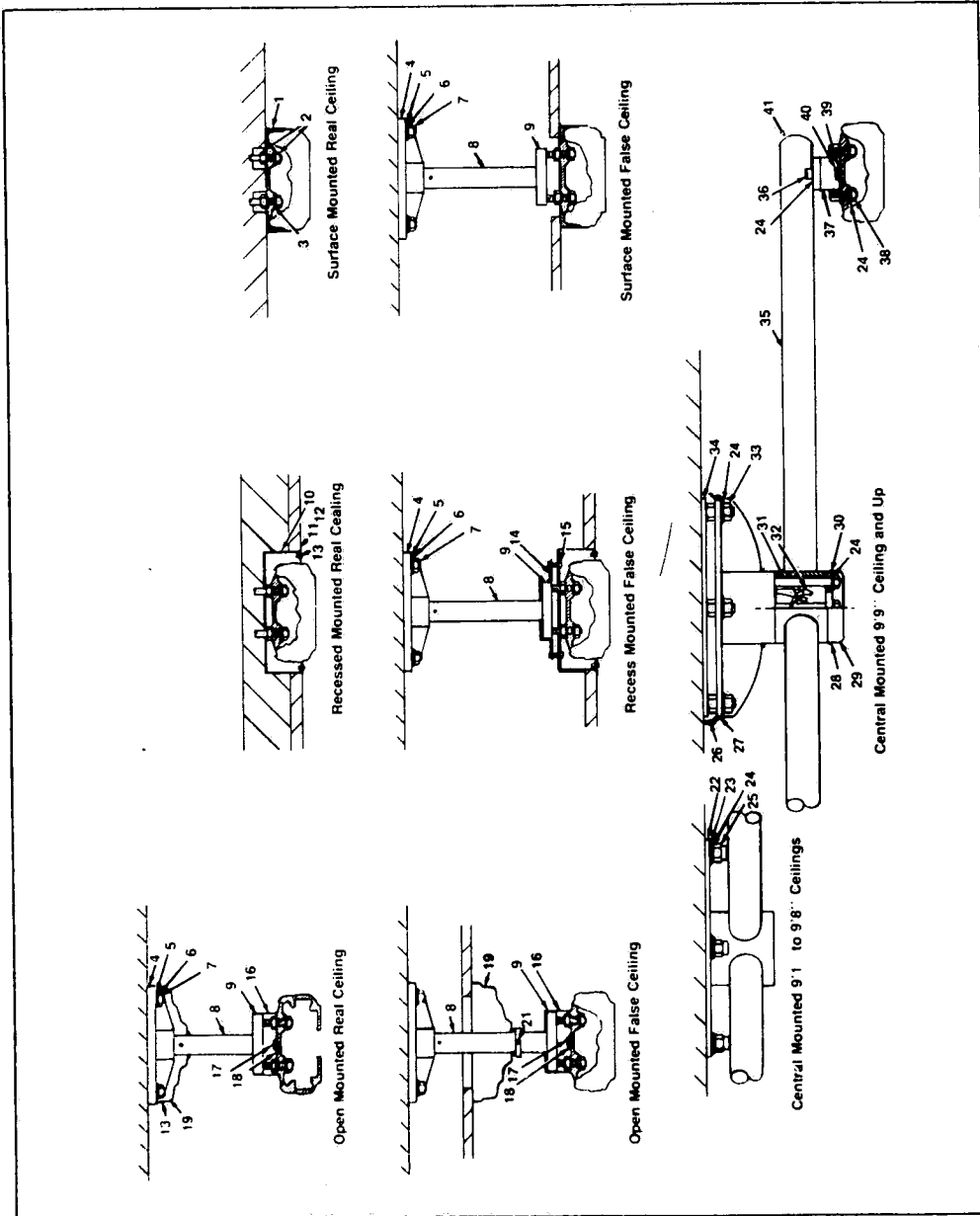


Figure 8 — Mounting Arrangements.

Figure and Index No.	Part No.	Description	Units Per Assembly
8-		Mounting Arrangements	Ref.
-1	46793-91	Gasket, Finishing	2
-2	3101-91	Nut, Hex - 1/2"-13	8
-3	19681-045	Lockwasher - 1/2"	4
-4	27426-010	Plate, Ceiling	2
-5	5505-041	Washer, Plain - 1/2"	8
-6	19681-045	Lockwasher - 1/2"	8
-7	3101-91	Nut, Hex - 1/2"-13	8
-8	NLA	Tube, Suspension (Length determined by ceiling height).	1
-9	41239-45	Pad, Mounting (Assembly)	2
-10	40809-010	Rough Box	1
-11	NLA	Trim, Side	2
-12	NLA	Trim, Side	2
-13	25400-41	Screw, Truss Head - No. 10-32 x 5/16"	14
-14	45018-45	Bracket	2
-15	3097-041	Nut, Hex - 1/4" - 20 N.C.	4
-16	41237-10	Cover	2
-17	11238-011	Shield, Wire	1
-18	3983-41	Screw, Round Head - No. 6-32 x 3/16"	6
-19	27430-10	Canopy	2
-20	27735-51	Collar, Canopy	2
-21	10585-041	Screw, Set - No. 10-32 x 1/4" Cup.	4
-22	26831-10	Plate, Ceiling	1
-23	5460-045	Washer, Plain - 5/8"	4
-24	19682-041	Lockwasher - 5/8"	24
-25	25833-48	Nut, Acorn - 5/8"	4
-26	32764-011	Canopy	1
-27	16063-42	Screw, Truss Head - No. 8-32 x 7/16"	4
-28	34585-41	Screw, Fillet Head - No. 5-40 x 1/4"	2
-29	26659-011	Cap.	1
-30	26661-45	Plate.	1
-31	26304-45	Capscrew, Hex Head - 5/8"-18 x 5 1/2"	4
-32	18538-91	Connector.	2
-33	3104-45	Nut - 5/8"	8
-34	21645-010	Leveling Plate	1
-35	NLA	Hanger Assembly	1
-36	32020-41	Screw, Socket Head - 5/8"-11 x 1 1/2"	8
-37	41241-011	Pad, Mounting	4
-38	4643-45	Capscrew, Hex Head - 1/2"-13 x 1 1/2"	8
-39	3983-41	Screw, Round Head - 5/8"-11 x 1 1/2"	12
-40	11238-011	Shield, Wire	2
-41	26557-10	Button, Plug.	4

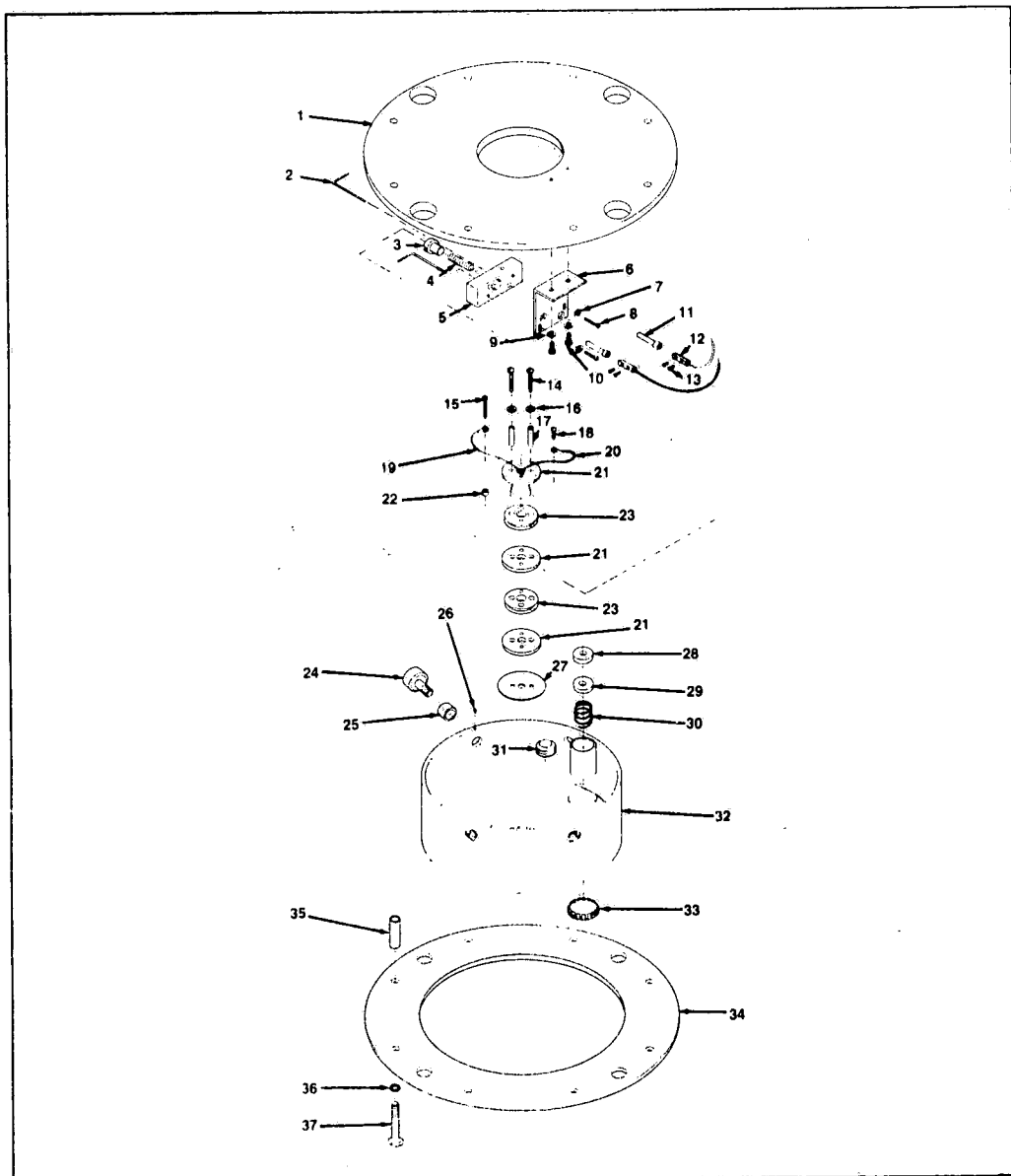


Figure 9 — Revolving Mechanism (For Equipment Shipped Before 3/73).

Figure and Index No.	Part No.	Description	Units Per Assembly
9-	97839-091	Revolving Mechanism (For Equipment Shipped Before 3/73)	Ref.
-1	20261-045	Plate, Upper	1
-2	40384-91	Brush, Wire	2
-3	81663-001	Cap	1
-4	12461-42	Spring	1
-5	81662-001	Retainer	1
-6	50047-45	Bracket	1
-7	19676-41	Lockwasher - No. 8	2
-8	11241-41	Screw, Round Head - No. 8-32 x 5/8"	2
-9	19677-41	Lockwasher - No. 10	2
-10	9298-41	Screw, Round Head - No. 10-32 x 1 1/2"	2
-11	40383-91	Sleeve, Wire	2
-12	40391-91	Connector	2
-13	3982-41	Screw, Round Head - No. 4-32 x 3/16"	4
-14	12341-41	Screw, Round Head - No. 10-32 x 1 1/2"	2
-15	8569-41	Screw, Round Head - No. 8-32 x 1"	1
-16	5508-41	Washer, Plain	2
-17	40382-91	Spool	2
-18	3986-41	Screw, Round Head - No. 8-32 x 1/2"	1
-19	74455-91	Wire, White	1
-20	74456-91	Wire, Black	1
-21	43611-91	Washer, Bakelite	2
-22	41926-91	Insulator	1
-23	40381-91	Ring, Collector	2
-24	50032-91	Follower, Bearing	2
-25	50050-45	Spacer, Follower	2
-26	NLA	Screw, Set - No. 10-32 x 3/16"	6
-27	43606-91	Insulator	1
-28	16510-91	Washer, Leather	1
-29	5503-45	Washer, Plain - 3/8"	1
-30	12267-61	Spring	1
-31	20271-91	Screw, Adjusting	1
-32	50011-011	Ring Assembly	1
-33	36700-56	Button, Plug	1
-34	20263-45	Plate, Lower	1
-35	NLA	Spacer	8
-36	19680-41	Lockwasher	8
-37	3905-91	Screw, Hex Head - 3/8"-16 x 1 3/4"	8

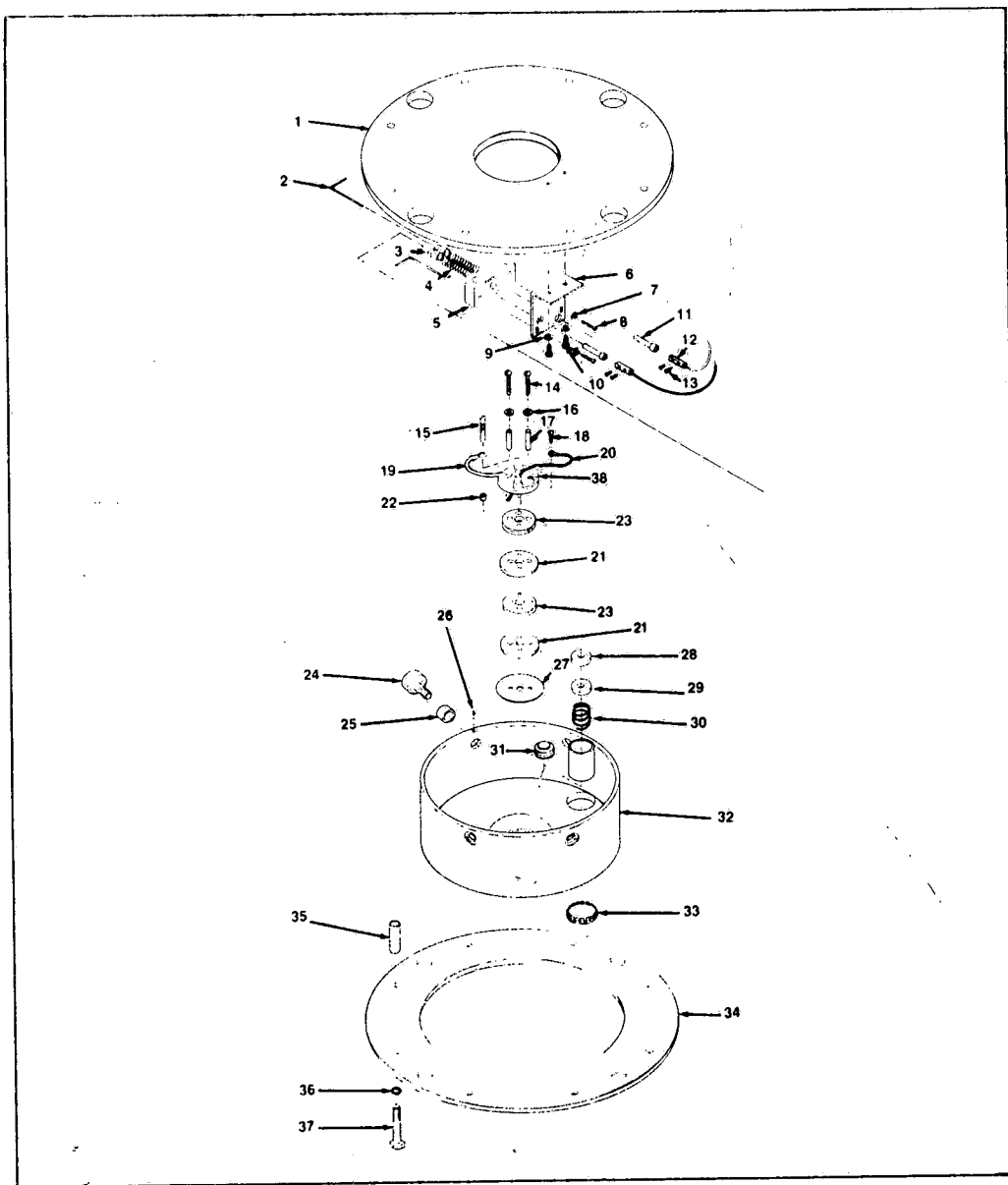


Figure 9A — Revolving Mechanism (For Equipment Shipped After 3/73).

Figure and Index No.	Part No.	Description	Units Per Assembly
9A-	97839-001	Revolving Mechanism (For Equipment Shipped After 3/73)	Ref.
	350579-091	Revolving Mechanism, Low Ceiling	A/R
-1	20261-045	Plate, Upper	1
-2	40384-91	Brush, Wire	2
-3	81663-001	Cap	2
-4	12461-42	Spring	2
-5	81662-001	Retainer	1
-6	50047-45	Bracket	1
-7	19676-41	Lockwasher - No. 8	2
-8	11241-41	Screw, Round Head - No. 8-32 x 5/8"	2
-9	19677-41	Lockwasher - No. 10	2
-10	9298-41	Screw, Round Head - No. 10-32 x 1/2"	2
-11	40383-91	Sleeve, Wire	2
-12	40391-91	Connector	2
-13	3982-41	Screw, Round Head - No. 4-32 x 3/16"	4
-14	12341-41	Screw, Round Head - No. 10-32 x 1 1/2"	2
-15	38569-41	Screw, Round Head - No. 8-32 x 1"	1
-16	5508-41	Washer, Plain	2
-17	40382-91	Spool	2
-18	3986-41	Screw, Round Head - No. 8-32 x 1 1/2"	1
-19	74455-91	Wire, White	1
-20	74456-91	Wire, Black	1
-21	43611-91	Washer, Bakelite	2
-22	41926-91	Insulator	1
-23	40381-91	Ring, Collector	2
-24	50032-91	Follower, Bearing	6
-25	50050-45	Spacer, Follower	6
-26	10853-91	Set screw - No. 10-32 x 3/16"	6
-27	43606-91	Insulator	1
-28	16510-91	Washer, Leather	1
-29	5503-45	Washer, Plain - 3/8"	1
-30	12267-61	Spring	1
-31	20271-91	Screw, Adjusting	1
-32	50044-011	Ring Assembly	1
-33	36700-56	Button, Plug	1
-34	20263-45	Plate, Lower	1
-35	20266-45	Spacer	8
-36	19680-41	Lockwasher	8
-37	3905-91	Screw, Hex Head - 3/8"-16 x 1 3/4"	8
-38	79968-001	Washer, Top	1

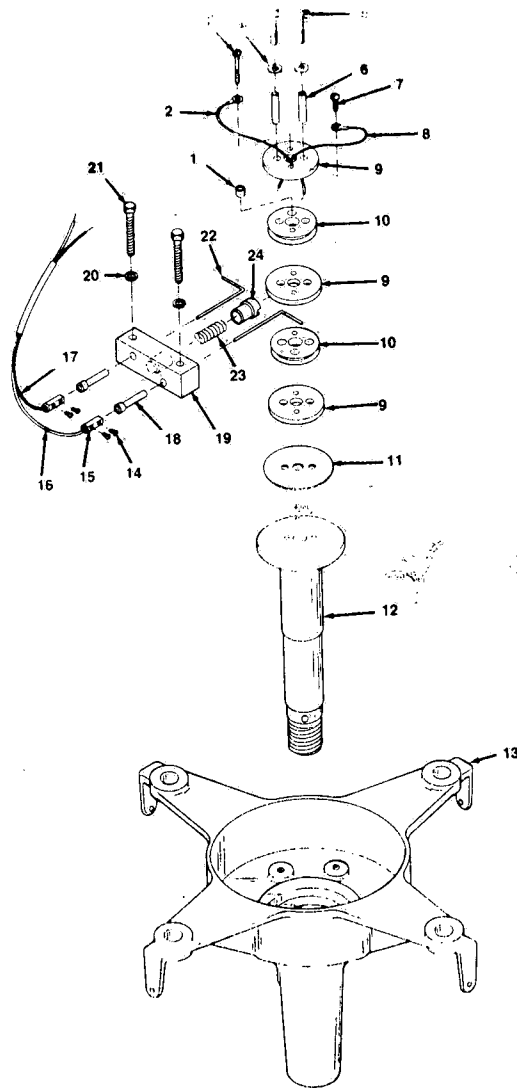


Figure 10 — Ceiling Spider Assembly (For Equipment Shipped Before 3/73).

REV. 5/77

Figure and Index No.	Part No.	Description	Units Per Assembly
10-	98753-91	Ceiling Spider Assembly (For Equipment Shipped Before 3/73)	Ref.
-1	41926-91	Insulator	1
-2	79349-91	Wire, White	1
-3	38569-41	Screw, Round Head - No. 8-32 x 1"	1
-4	5508-41	Washer	2
-5	12341-41	Screw, Round Head	2
-6	40382-91	Spool	2
-7	3986-41	Screw, Round Head - No. 8-32 x 1/2"	1
-8	79348-91	Wire, Black	1
-9	43611-91	Washer	2
-10	40381-91	Ring, Collector	2
-11	43606-91	Insulator	1
-12	40387-43	Arm, Suspension	1
-13	NLA	Spider, Ceiling	1
-14	3982-41	Set Screw	4
-15	40391-91	Connector	2
-16	40390-91	Wire, White	1
-17	40392-91	Wire, Black	1
-18	40383-91	Shoe, Wire	2
-19	43610-045	Retainer	1
-20	19686-61	Lockwasher	2
-21	4729-053	Screw, Hex Head 1/4 20 x 1 1/2"	2
-22	40384-91	Brush, Wire	2
-23	12461-42	Spring	1
-24	43609-091	Cap	1

REV. 8/79

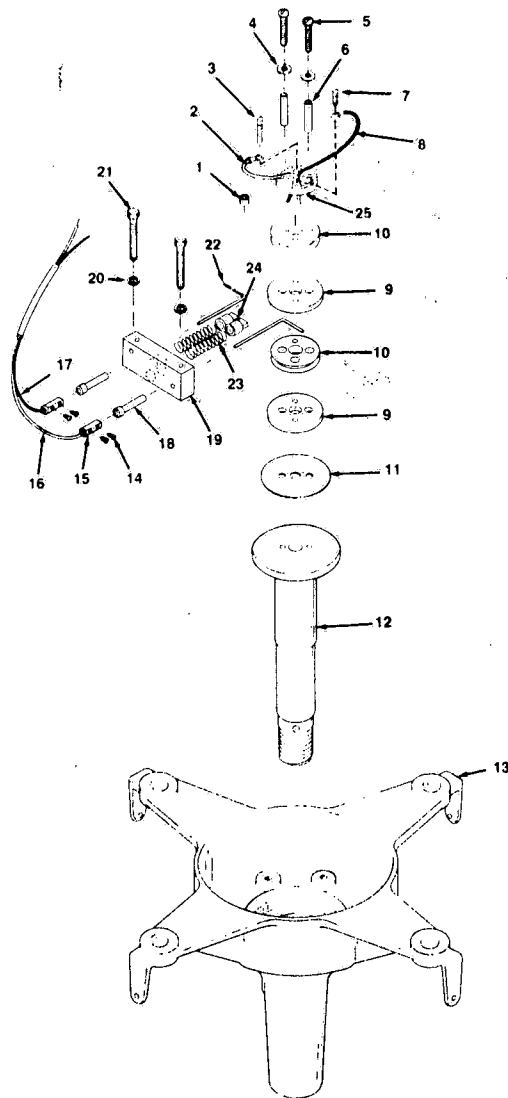


Figure 10A — Ceiling Spider Assembly (For Equipment Shipped After 3/73).

Figure and Index No.	Part No.	Description	Units Per Assembly
10A-	98752-91	Ceiling Spider Assembly (For Equipment Shipped After 3/73).	Ref.
-1	41926-91	Insulator	1
-2	79349-91	Wire, White	1
-3	38569-41	Screw, Round Head - No. 8-32 x 1".	1
-4	5508-41	Washer	2
-5	12341-41	Screw, Round Head.	2
-6	40382-91	Spool.	2
-7	3986-41	Screw, Round Head - No. 8-32 x 1/2".	1
-8	79348-91	Wire, Black	1
-9	43611-91	Washer	2
-10	40381-91	Ring, Collector	2
-11	43606-91	Insulator	1
-12	40387-43	Arm, Suspension	1
-13	98752-91	Spider, Ceiling	1
-14	3982-41	Set Screw	4
-15	40391-91	Connector.	2
-16	40390-91	Wire, White	1
-17	40392-91	Wire, Black	1
-18	40383-91	Sleeve, Wire.	2
-19	81660-001	Retainer	1
-20	19686-61	Lockwasher.	2
-21	4729-91	Screw, Hex Head 1/4 20 x 1 1/2".	2
-22	40384-91	Brush, Wire	2
-23	12461-42	Spring	2
-24	81663-001	Cap	2
-25	79968-001	Washer, Carriage	1

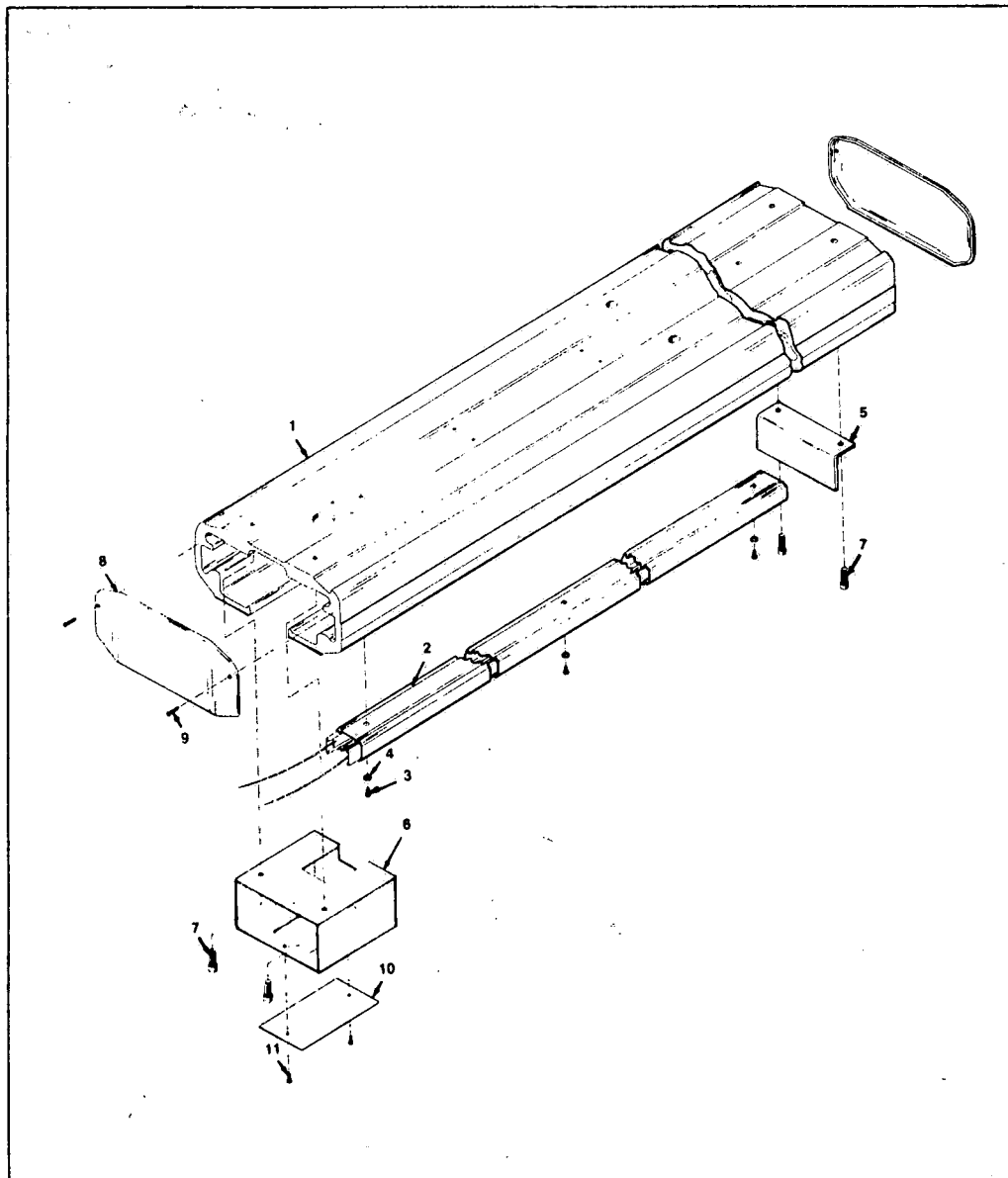


Figure 11 — Track Assembly (For Equipment Shipped Before 3/73).

Figure and Index No.	Part No.	Description	Units Per Assembly
11-	N/A	Track Assembly (Model 6520) (For Equipment Shipped Before 3/73)	Ref.
	N/A	Track Assembly (Models 6521-6526) (Model 6527 — 22" Light) (For Equipment Shipped Before 3/73)	Ref.
	N/A	Track Assembly (Model 6527 — 34" Light) (For Equipment Shipped Before 3/73)	Ref.
1	N/A	Track — 54" (Part of 97708)	1
	N/A	Track — 9" (Part of 97706)	1
	N/A	Track — 9" (Part of 98027)	1
2	758131-091	Kit, Low Leakage Light, 54" Track	1
	135830-001	• Trolley	1
	55974-001	• Assembly, Trolley Duct	1
	55987-001	• Strip, Ground	1
	74308-061	• Screw	7
	75776-091	• Instructions, Installation	1
	758312-091	Kit, Low Leakage Light, 108" Track	1
	135838-001	• Trolley	1
	92391-001	• Assembly, Trolley Duct	1
	92390-001	• Strip, Ground	1
	74308-061	• Screw	13
	75776-091	• Instructions, Installation	1
3	10859-041	Screw, Truss Head — No. 10-32 x 5/16"	7
4	10863-091	Lockwasher — No. 10 Shakeproof	3
5	43608-045	Stop	1
6	53133-045	Box, Supply	1
7	3847-042	Screw, Socket Head	4
8	40397-001	Plate, End	2
9	41923-041	Screw, Oval Head	4
10	46173-045	Cover	1
11	40357-045	Screw, Self Tapping	2
	75101-091	Sticker (Not Shown)	1

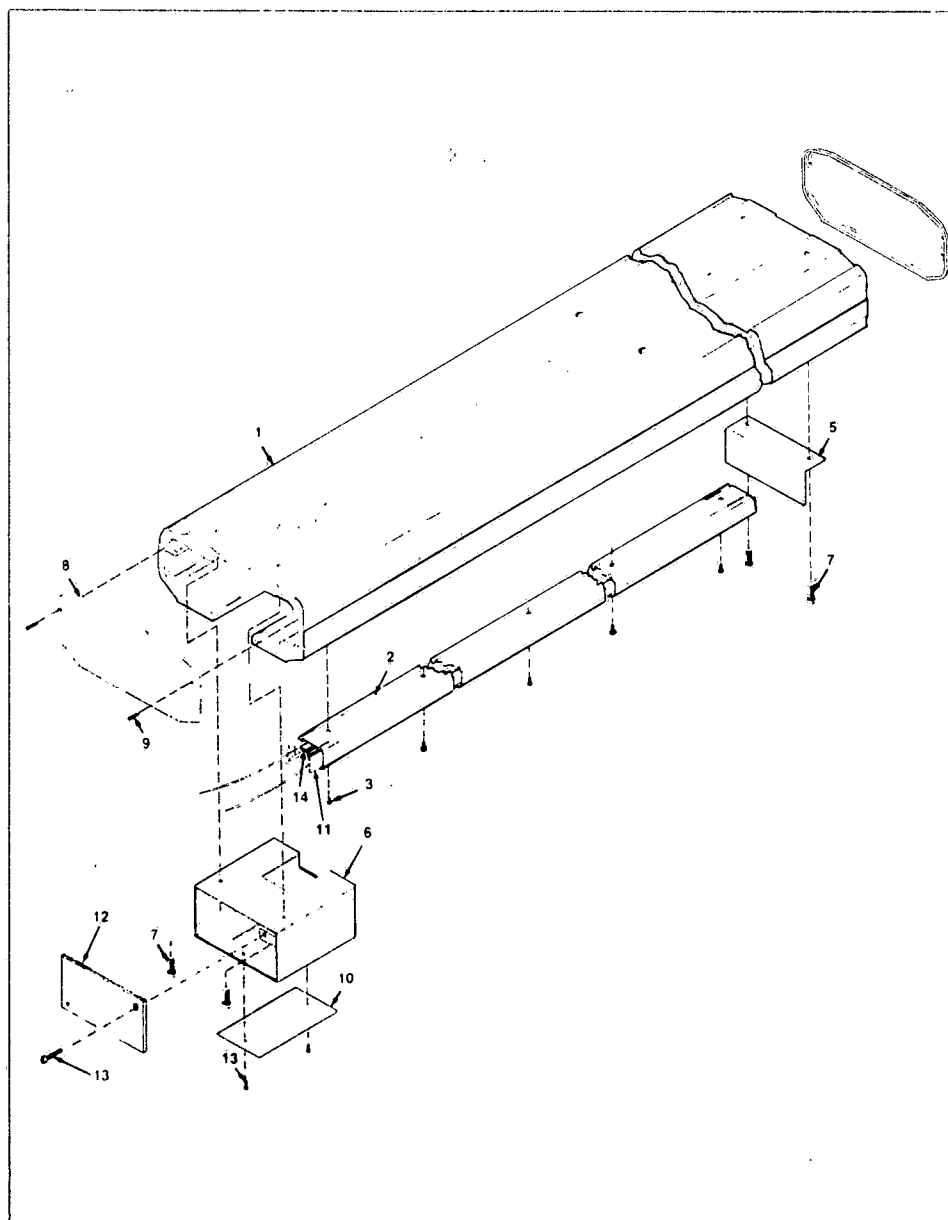


Figure 11A — Track Assembly (For Equipment Shipped After 3/73).

FIG. & INDEX NO.	PART NUMBER	DESCRIPTION	UNITS PER ASSEMBLY			
			Ref.			
11A-	B-79814-002	Track Assembly (Model 6520) — For Equipment Shipped After 3/73	Ref.			
	B-79816-002	Track Assembly (Models 6521, 6526 and 6527) — For Equipment Shipped After 3/73		Ref.		
-1	N-135839-004	Track — 54"	1			
	N-135839-003	Track — 9'		1		
-2	55974-001	Duct, Trolley — 54" Track	1			
	92391-001	Duct, Trolley — 9' Track		1		
-3	10859-041	Screw, Truss Head — No. 10-32x5/16"	7	13		
-4		Not Used				
-5	43608-045	Stop, Carriage	1	1		
-6	53133-045	Box, Supply	1	1		
-7	3847-042	Screw, Hex Head (1/4-20 x 5/8)	4	4		
-8	40397-001	Plate, End	2	2		
-9	41923-041	Screw, Oval Head	4	4		
-10	46173-045	Cover	1	1		
-11	80541-091	Strap, Ground 5"	1	1		
-12	79468-045	Plate, Cover	1	1		
-13	40357-045	Screw, Pan Head — #6-32x1/4"	4	4		
-14	55987-001	Strip, Ground — 54"	1	1		
	92390-001	Strip, Ground — 108"	1	1		
	82323-001	Nameplate (Black) — Not Shown	1	1		
	82324-001	Nameplate (White) — Not Shown	1	1		
	82349-001	Nameplate (Warning) — Not Shown	1	1		

REV. 10/82

27

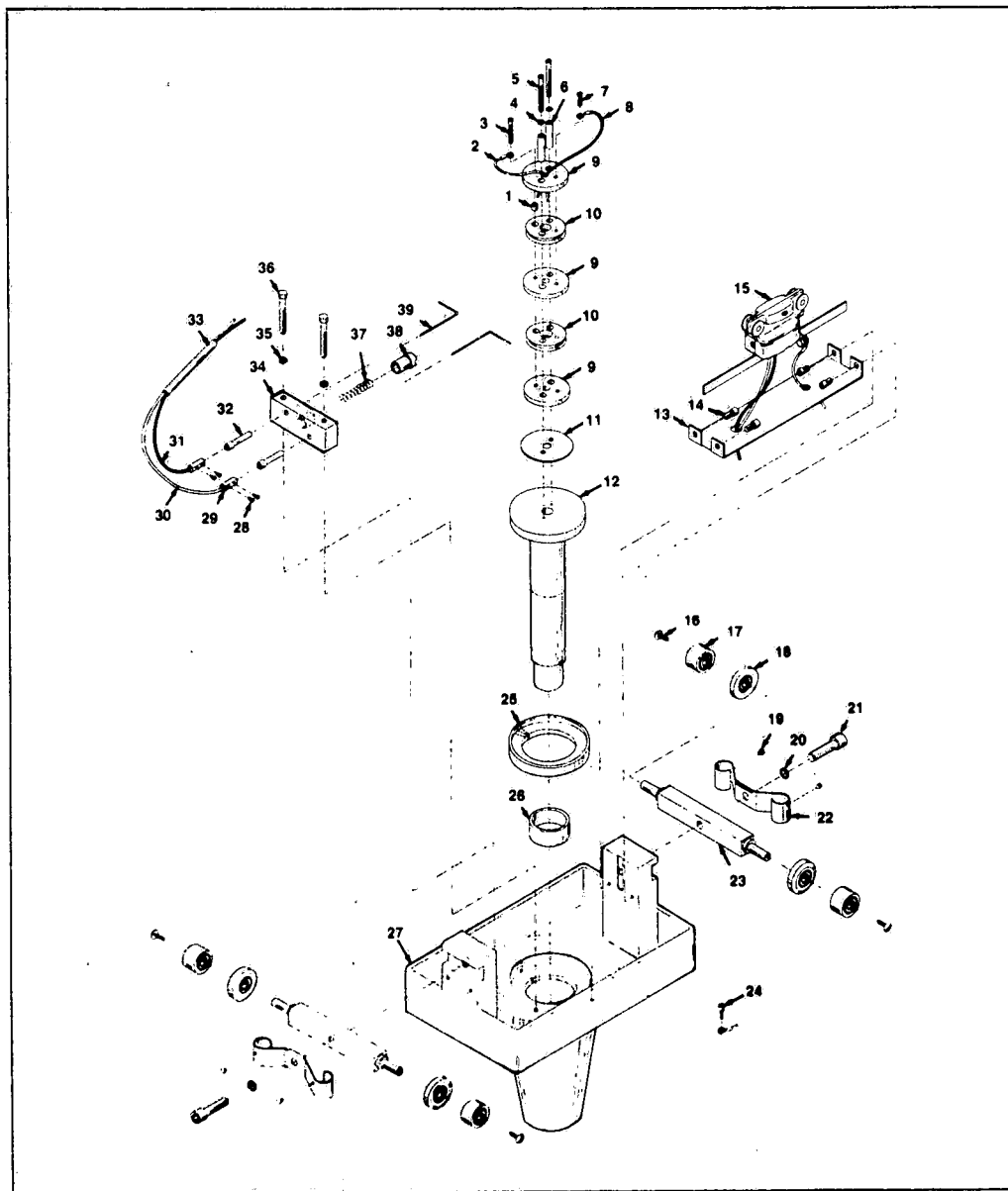


Figure 12 — Carriage Assembly (For Equipment Shipped Before 3/73).

Figure and Index No.	Part No.	Description	Units Per Assembly
12-	NLA	Carriage Assembly(For Equipment Shipped Before 3/73) (97705)	Ref.
-1	M-41926-91	Insulator.	1
-2	NLA	Wire, White.	1
-3	38569-041	Screw, Round Head - No. 8-32 x 1"	1
-4	5508-041	Washer, Plain - 3/16"	2
-5	12341-041	Screw, Round Head - No. 10-32 x 1 1/2"	2
-6	P-40382-91	Spool, Bakelite.	2
-7	3986-041	Screw, Round Head - No. 8-32 x 1/2"	1
-8	NLA	Wire, Black	1
-9	P-43611-91	Washer, Bakelite	3
-10	M-40381-91	Ring, Collector.	2
-11	P-43606-91	Insulator.	1
-12	40387-043	Arm, Suspension	1
-13	M-43607-45	Cover.	1
-14	23431-041	Screw, Socket Head - No. 10-32 x 3/8"	4
-15	NLA	Trolley (40338)	1
-16	P-10859-41	Screw, Truss Head	4
-17	40376-001	Wheel.	4
-18	40377-001	Guide, Wheel.	4
-19	P-34506-91	Bumper	4
-20	19687-061	Lockwasher - 3/8"	2
-21	15339-045	Screw, Socket Head - 3/8" - 16 x 1 1/4"	2
-22	P-49081-91	Bumper, Carriage	2
-23	M-40375-45	Shaft	2
-24	4777-091	Screw, Fillister Head - No. 8-32 x 3/8"	1
-25	P-40379-91	Bushing, Oilite.	1
-26	P-41506-91	Bearing	1
-27	134470-002	Carriage	1
-28	3982-041	Screw, Round Head - No. 4-32 x 3/16"	4
-29	M-40391-91	Connector	2
-30	M-40390-91	Lead, White	1
-31	M-40392-91	Lead, Black	1
-32	M-40383-91	Sleeve, Wire	2
-33	M-48648-91	Sleeve, Wire	1
-34	81660-001	Retainer.	1
-35	19686-061	Lockwasher - 1/4"	2
-36	4729-053	Screw, Hex Head - 1/4-20 x 1 1/2"	2
-37	P-40386-91	Spring.	1
-38	M-43609-91	Cap.	1
-39	M-40384-91	Brush, Wire	2

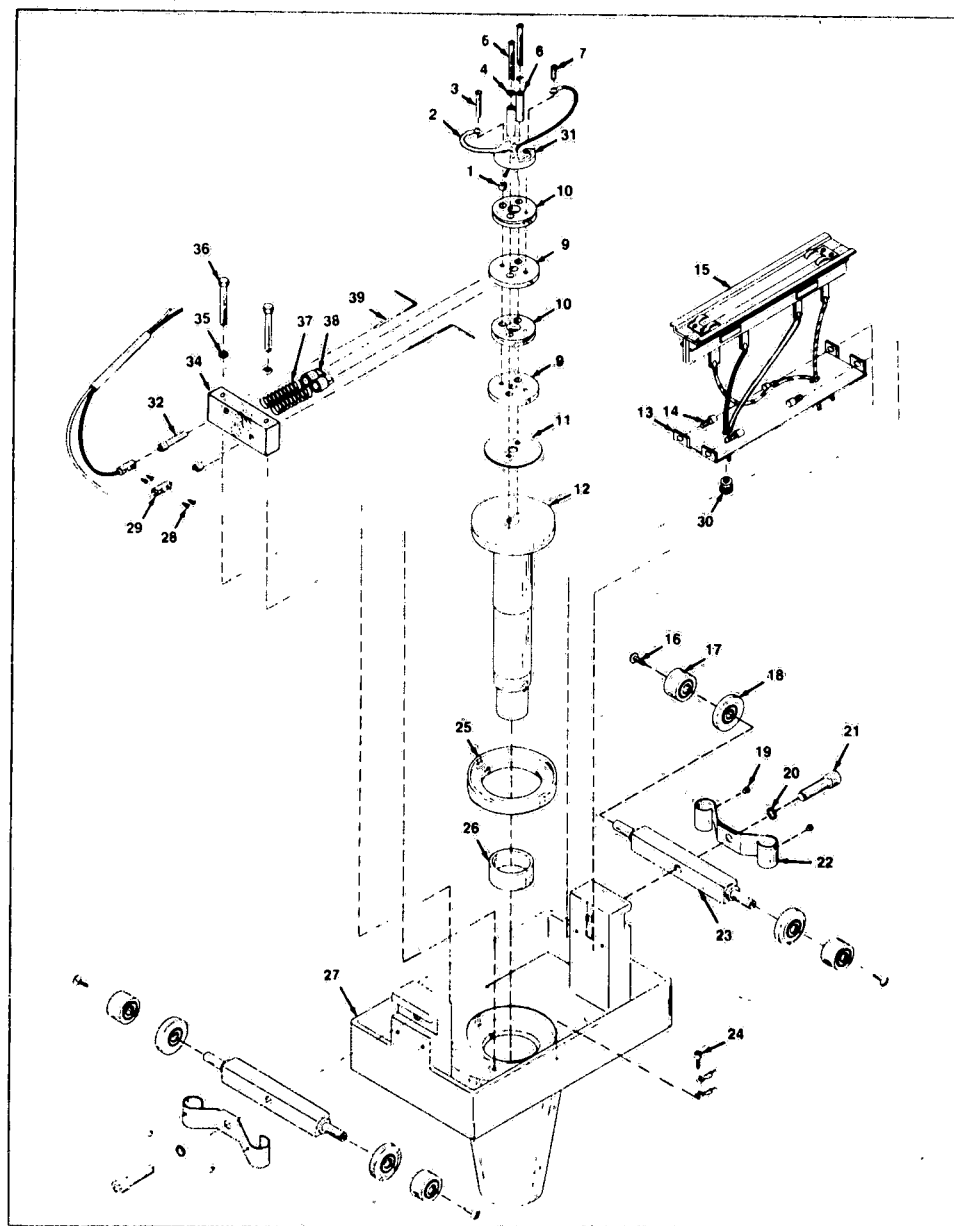


Figure 12A — Carriage Assembly (For Equipment Shipped After 3/73).

Figure and Index No.	Part No.	Description	Units, Per Assembly
12A-	135840-002	Carriage Assembly (For Equipment Shipped After 3/73)	Ref.
-1	M-41926-91	Insulator	1
-2	79972-001	Wire, Assembly	1
-3	38569-041	Screw, Round Head — #8-32 x 1"	1
-4	5508-041	Washer, Plain — 3/16"	2
-5	P-12341-041	Screw, Round Head — #10-32 x 1-1/2"	2
-6	P-40382-91	Spool, Bakelite	2
-7	3986-041	Screw, Round Head — #8-32 x 1/2"	1
-8			
-9	P-43611-91	Washer, Bakelite	2
-10	M-40381-91	Ring, Collector	2
-11	P-43606-91	Insulator	1
-12	40887-043	Arm, Suspension	1
-13	M-43607-45	Cover	1
-14	23431-041	Screw, Socket Head — #10-32 x 3/8"	4
-15	135838-001	Trolley	1
-16	P-10859-41	Screw, Truss Head	4
-17	40376-091	Wheel	4
-18	40377-091	Guide, Wheel	4
-19	P-34506-91	Bumper	4
-20	19687-061	Lockwasher — 3/8"	2
-21	15339-045	Screw, Socket Head — 3/8" — 16 x 1-1/4"	2
-22	P-49081-91	Bumper, Carriage	2
-23	M-40375-45	Shaft	2
-24	4777-091	Screw, Fillister Head — #8-32 x 3/8"	1
-25	P-40379-91	Bushing, Oilite	1
-26	P-41506-91	Bearing	1
-27	40373	Carriage (SUB: 134470-002)	1
-28	3982-041	Screw, Round Head — #4-32 x 3/16"	4
-29	M-40391-91	Connector	2
-30	150212-001	Bushing, Snap	1
-31	79968-001	Washer, Top	1
-32	M-40383-91	Sleeve, Wire	2
-33		Not Used	
-34	81660-001	Retainer	1
-35	19686-061	Lockwasher — 1/4"	2
-36	4729-053	Screw, Hex Head — 1/4-20 x 1-1/2"	2
-37	P-12461-42	Spring	2
-38	81663-001	Cap	2
-39	M-40384-91	Brush, Wire	2

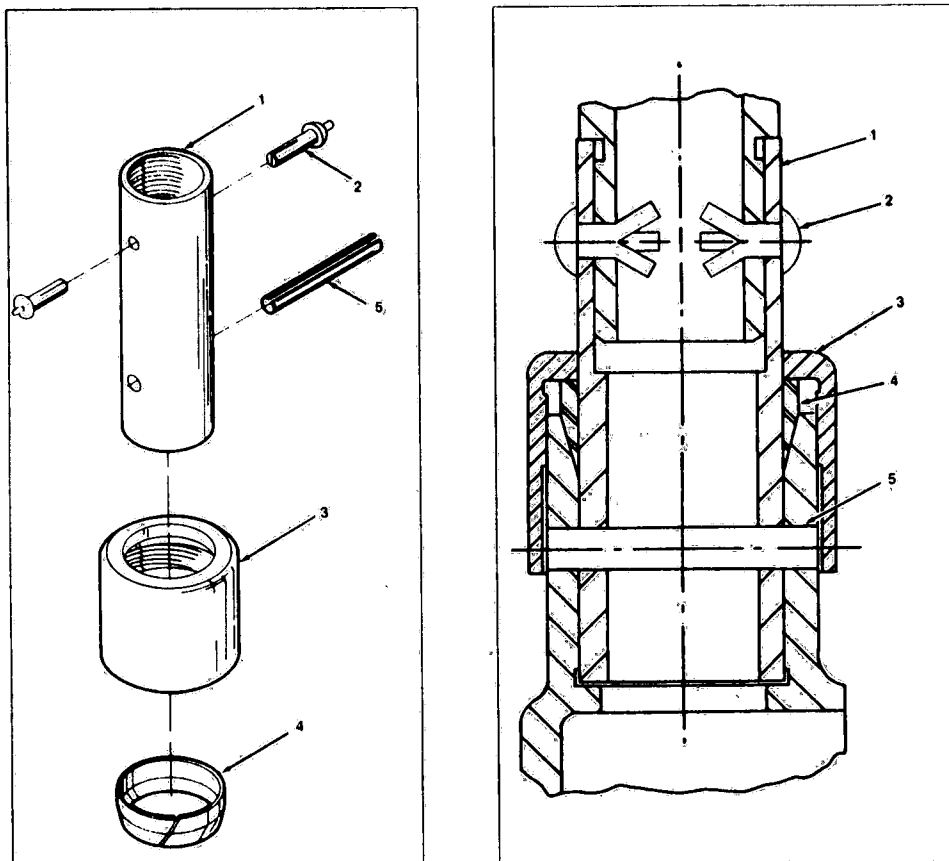


Figure 13 — Suspension Tube and Collar Detail.

Figure and Index No.	Part No.	Description	Units Per Assembly
13 -		Suspension Tube & Collar Detail	Ref.
-1	49728-056	Tube, Suspension	1
-2	P-82672-001	Rivet, Drive	2
-3	P-49219-56	Collar	1
-4	P-49220-45	Ring, Clump	1
-5	P-43225-61	Pin, Roll - 5/16" x 2"	1

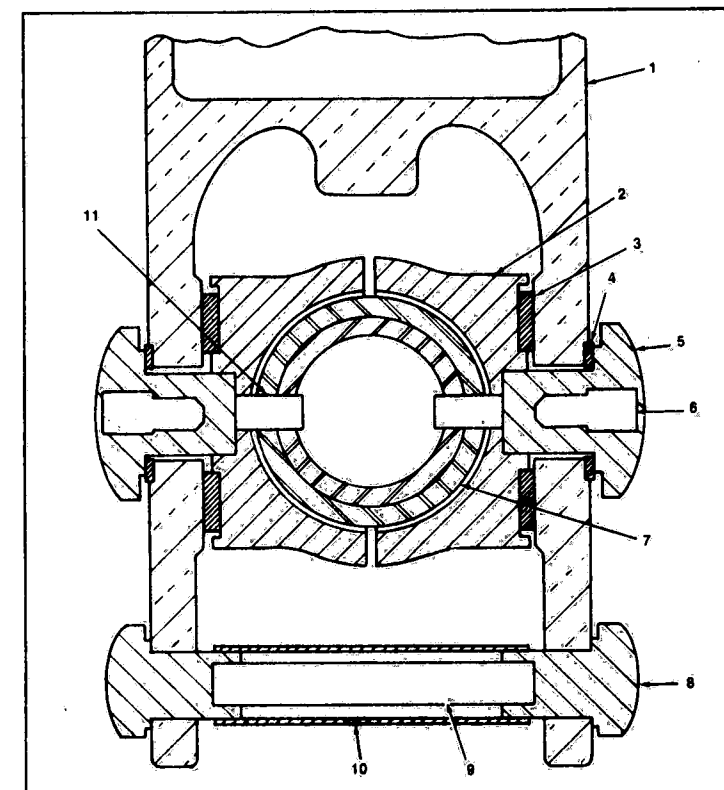


Figure 14 — Cross Section Through Fork and Swivel.

Figure and Index No.	Part No.	Description	Units Per Assembly
14 -		Cross Section Through Fork and Swivel	Ref.
-1	54099-56	Fork, Suspension	1
-2	17627-56	Swivel	1
-3	10497-91	Washer, Leather	2
-4	18880-91	Washer, Fiber	2
-5	17468-56	Nut	2
-6	18882-091	Set Screw	2
-7	28162-91	Ring, Swivel	1
-8	17629-56	Nut, Stop	2
-9	17630-91	Stud, Fork	1
-10	19171-56	Sleeve, Fork	1
-11	26696-61	Pin, Groove	2

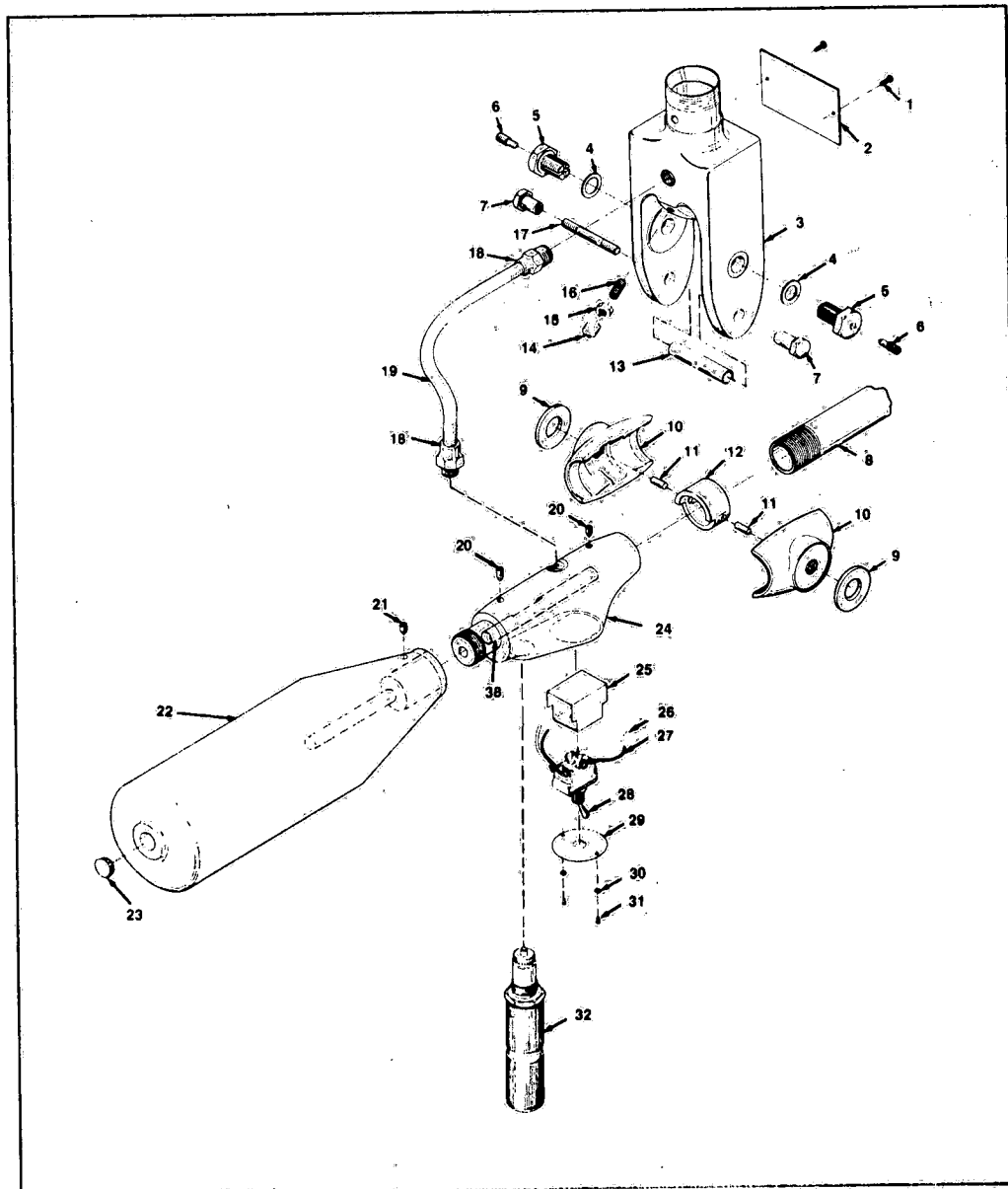


Figure 15 — Fork, Swivel and Housing Assembly.

Figure and Index No.	Part No.	Description	Units Per Assembly
15-		Fork, Swivel and Housing Assembly	Ref.
-1	3984-41	Screw, Round Head.	2
-2	46359-91	Nameplate	1
-3	54099-56	Fork, Suspension	1
-4	18880-91	Washer, Fiber	2
-5	17468-56	Nut	2
-6	18882-91	Set Screw.	2
-7	17629-56	Nut, Stop	2
-8	NLA	Yoke.	1
-9	10497-91	Washer, Leather	2
-10	17627-56	Swivel	1
-11	26696-61	Pin, Groove.	2
-12	28162-91	Ring, Swivel	1
-13	19171-56	Sleeve, Fork	1
-14	50024-91	Cap, Fork Stop	2
-15	2947-48	Nut, Jam - 5/16 - 18	1
-16	16572-091	Screw, Allen Set - 5/16-18 x 3/4"	2
-17	17630-091	Stud, Fork	1
-18	25158-56	Retainer, Conduit	2
-19	26698-63	Conduit.	1
-20	16918-41	Set Screw.	2
-21	4772-046	Set Screw - 1/4-20x1/4"	1
-22	NLA	Counterweight.	1
-23	24694-066	Button, Plug	1
-24	NLA	Housing, Switch	1
-25	50039-91	Insulator	1
-26	NLA	Wire, White	1
-27	NLA	Wire, Black	1
-28	37115-91	Switch, Toggle	1
-29	40443-61	Plate, Switch	1
-30	19684-61	Lockwasher.	2
-31	12451-41	Screw, Round Head - No. 6-32 x 1/4"	2
-32	78698-91	Handle Assembly	1
-33	74262-91	Tube, Shield	1

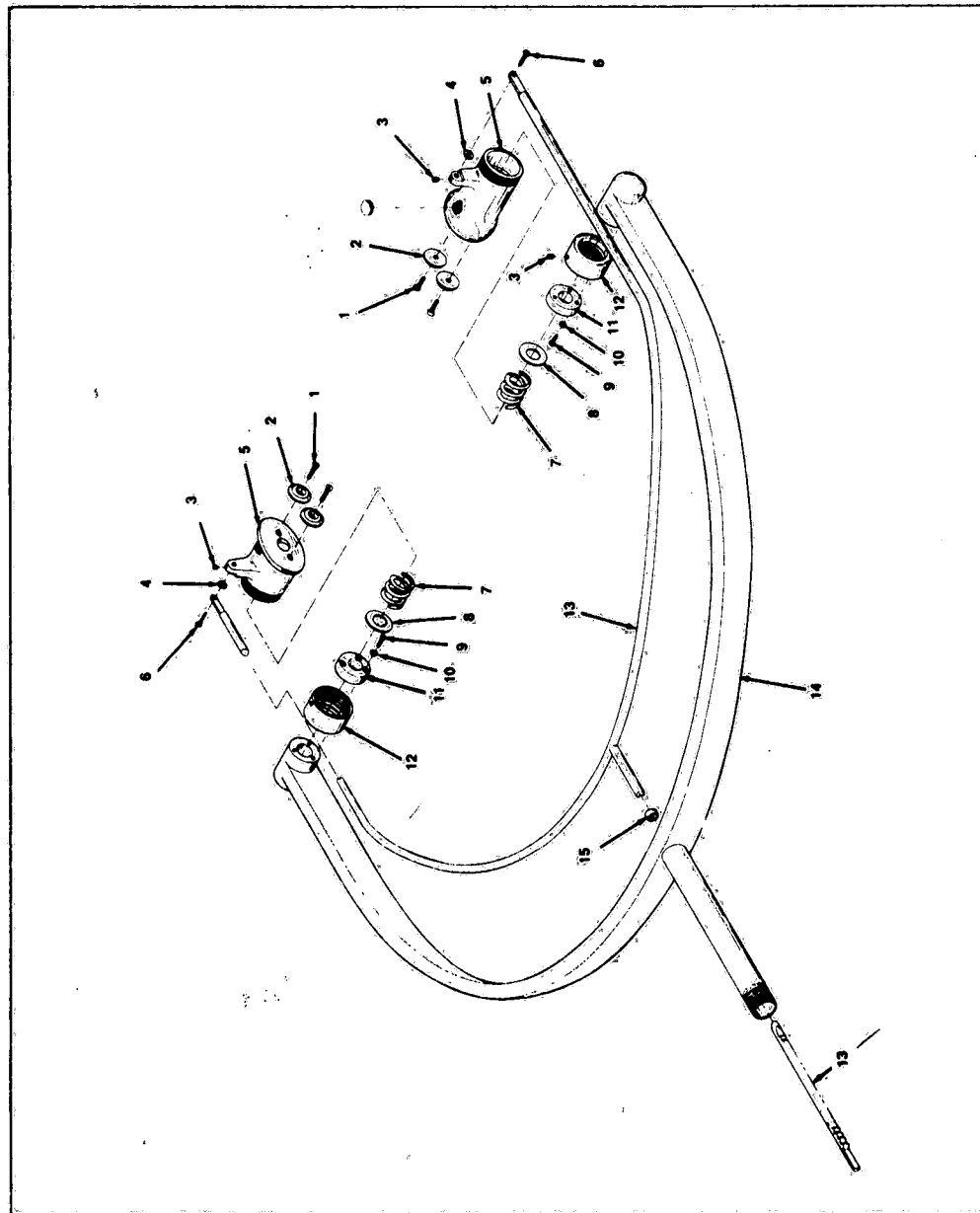


Figure 16 — Yoke Assembly.

Figure and Index No.	Part No.		Units Per Assembly
16-	NLA	Yoke Assembly.	Ref.
-1	46122-51	Screw.	4
-2	50027-51	Washer.	4
-3	10583-91	Set Screw.	4
-4	83461-001	Washer.	2
-5	NLA	Pad, Housing.	2
-6	3848-051	Screw - 1/4-20 x 3/4".	2
-7	11341-91	Spring, Friction.	2
-8	11342-91	Washer, Friction.	2
-9	9308-91	Screw, Fillister Head - No. 10-32 x 1/2".	6
-10	19677-41	Lockwasher - No. 10.	6
-11	17632-45	Plate, Bearing.	2
-12	17626-56	Nut, Housing Pad.	2
-13	54206-56	Yoke Assembly, Remote Control.	1
-14	50030-011	Yoke Assembly.	1
-15	50038-001	Bushing, Stop.	1

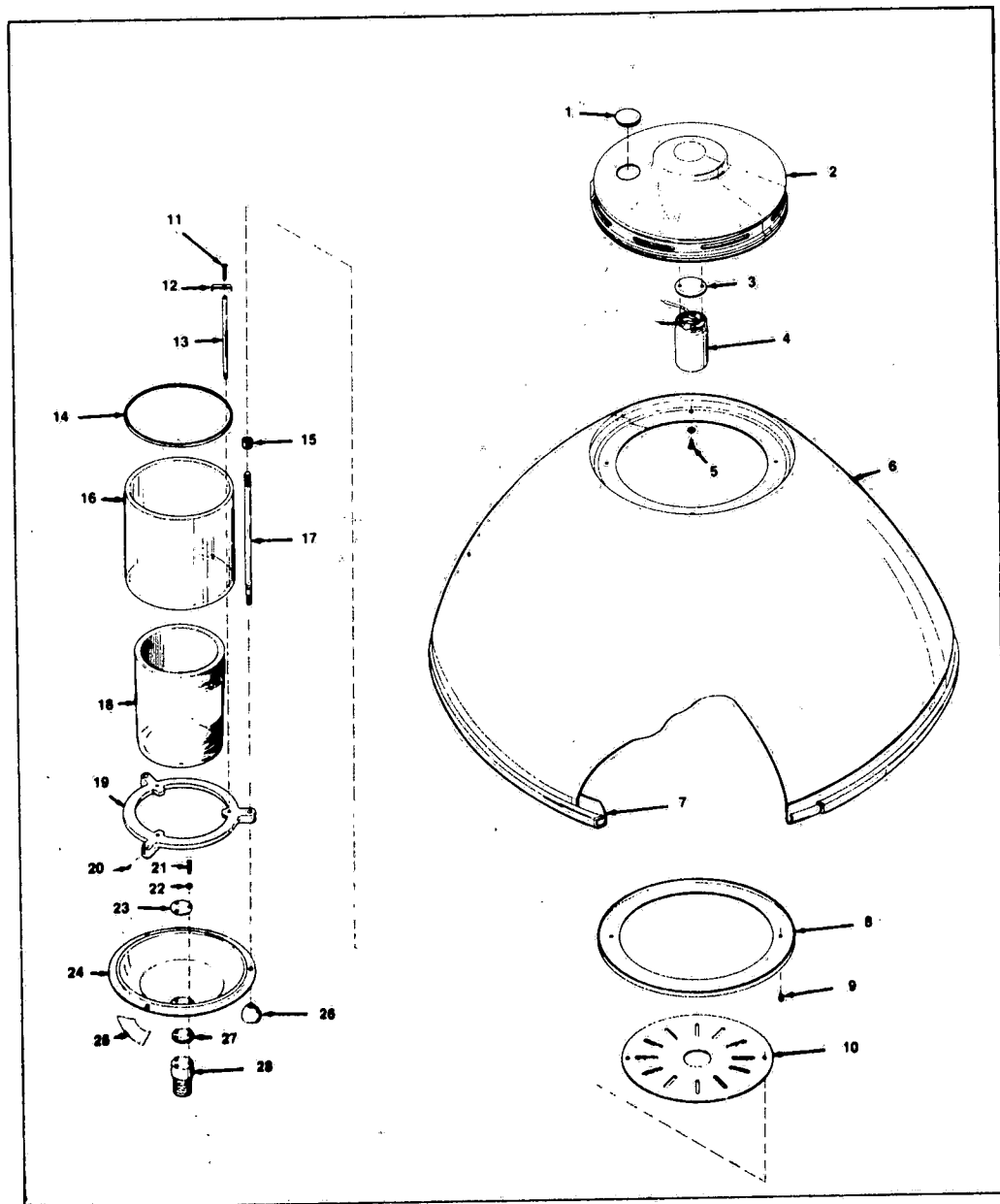


Figure 17 — Reflector and Optical Assembly

REV. 5/77

Figure and Index No.	Part No.	Description	Units Per Assembly
17-		Reflector and Optical Assembly	Ref.
-1	36700-56	Button, Plug.	1
-2	98896-091	Housing Cap	1
-3	24089-91	Gasket	1
-4	12460-91	Socket, Lamp Holder	1
-5	26812-41	Screw, Round Head - No. 10-24 x 3/8"	2
	19685-61	Lockwasher - No. 10	2
-6	NLA	Reflector.	1
-7	50042-91	Ring, Bumper	1
-8	54211-033	Ring, Cover.	1
-9	50347	Screw - No. 6-32 x 3/8" (SUB: 150824-132)	2
-10	54262-033	Baffle	1
-11	3967-41	Screw - No. 8-32 x 1/4"	3
-12	50038-061	Clip	3
-13	50037-056	Rod	3
-14	50623-083	Guard, Cylinder	1
-15	50033-43	Nut, Special.	3
-16	50036-91	Cylinder, Outer	1
-17	NLA	Rod, Suspension	3
-18	50043-91	Filter, Heat.	1
-19	54212-34	Ring, Cylinder Suspension	1
-20	10583-91	Screw, Set - No. 10-32 x 3/16"	3
-21	52022-45	Screw, Round Head - No. 10-24 x 3/4"	3
-22	19685-61	Lockwasher - No. 10	3
-23	52023-61	Plate, Reinforcing	1
-24	54903-083	Reflector, Secondary	1
-25	50096-91	Metal Cal.	1
-26	50035-91	Knob.	3
-27	49086-91	Insulator	1
-28	49101-91	Adaptor.	1
Not Shown	27183-33	Handle, Sterile Tilt	1
Not Shown	50344-91	Lamp, 120 volt (150/400 CL Spotlight).	1

REV. 10/82

39

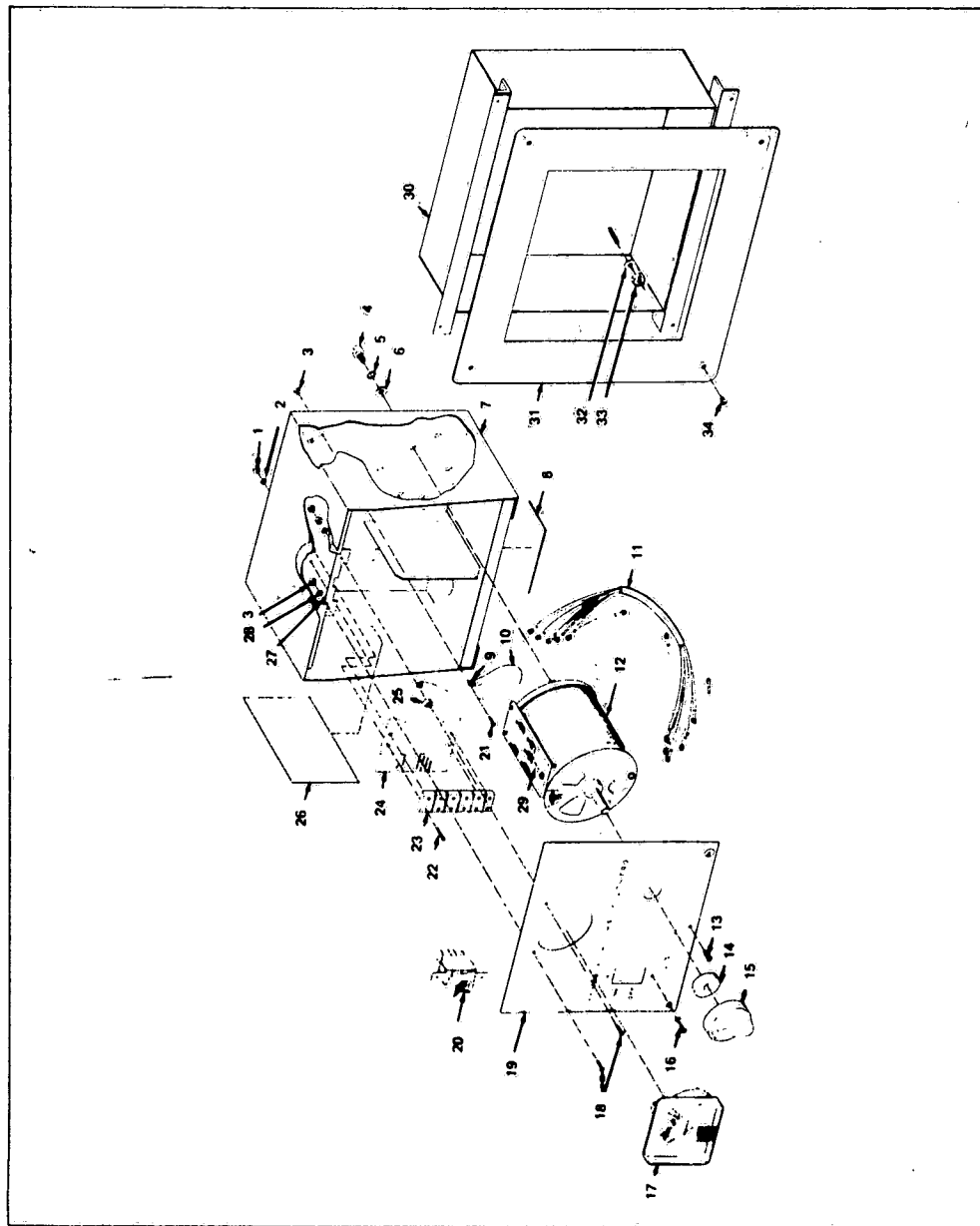


Figure 18 — Standard Variable Intensity Control.

Figure and Index No.	Part No.	Description	Units Per Assembly
18-	NLA	Variable Intensity Control (Open Mounted)	Ref.
	NLA	Variable Intensity Control (Recessed)	Ref.
-1	2959-41	Nut, Hex - No. 10-32	4
-2	19677-41	Lockwasher - No. 10.	4
-3	3037-41	Nut, Hex - No. 6-32	3
-4	3846-41	Capscrew - 1/4-20 x 1/2"	3
-5	19678-45	Lockwasher - 1/4"	3
7	53346-011	Box, Control	1
-8	NLA	Nameplate	1
-9	45527-91	Chain	1
-10	45526-91	Tubing	1
-11	NLA	Harness, Wire	1
-12	53357-91	Transformer - Omnite VT-4 3,5 AMP	1
-13	45307-41	Screw, Phillips - No. 8-32 x 1/4"	1
-14	45322-91	Washer, Felt	1
-15	45189-91	Knob	1
-16	NLA	Screw, Phillips - No. 4-10 x 3/8" Oval Head	2
	19676-41	Lockwasher - No. 8	2
	13794-41	Nut, Hex - No. 4-40	2
-17	53281-91	Voltmeter	1
-18	3961-41	Screw, Flat Head - No. 6-32 x 3/8"	2
-19	NLA	Plate, Cover	1
-20	45280-91	Switch, Rocker	1
-21	3984-41	Screw, Round Head - No. 6-32 x 3/8"	1
-22	9316-41	Screw, Round Head - No. 10-32 x 5/8"	4
-23	39091-91	Block, Terminal	1
-24	45957-91	Label, Terminal Block	1
-25	42460-91	Washer	2
-26	44284-91	Sticker, Wiring Diagram	1
-27	45838-045	Stop	1
-28	19675-41	Lockwasher - No. 6	2
-29	49935-91	Link, Fusible	1
	47182-91	Bushing, Snap (Not Shown)	2
-30	56346-001	Box, Rough	1
-31	24519-61	Flange	1
-32	19678-45	Lockwasher	3
-33	3097-41	Nut, Hex	3
-34	20821-061	Screw	4

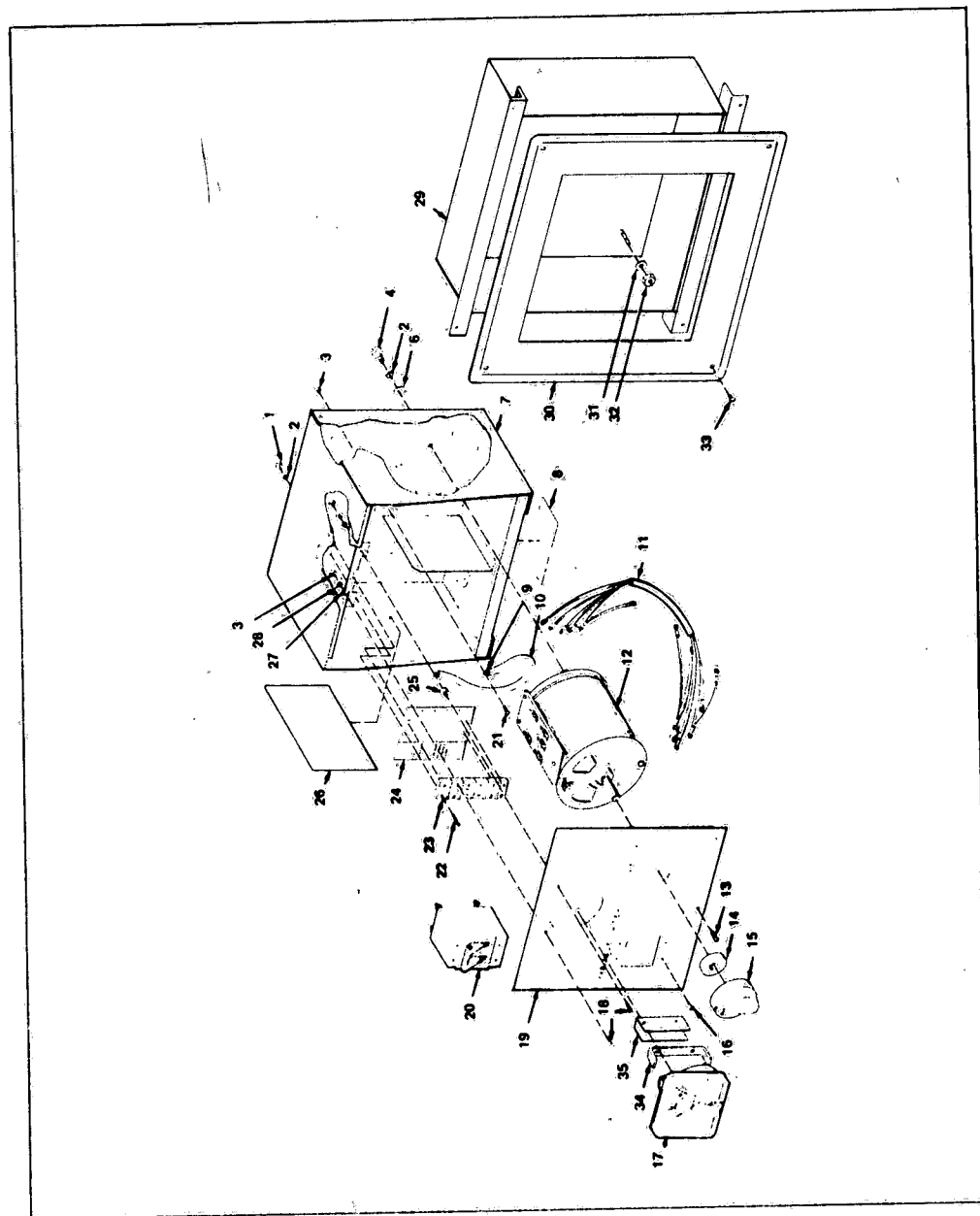


Figure 19 — Variable Intensity Control.

REV. 10/82

Figure and Index No.	Part No.	Description	Units, Per Assembly
19-	97710-001	Variable Intensity Control (Open Mounted)	Ref.
	761665-001	Variable Intensity Control (Recessed)	Ref.
-1	2959-41	Nut, Hex - No. 10-32	4
-2	19677-41	Lockwasher - No. 10.	7
-3	3037-41	Nut, Hex - No. 6-32	3
-4	15287-41	Screw, Rd. Hd. — No. 10-32 x 1/2"	3
-5		Not Used	
-6	5508-41	Washer.	3
-7	53346-011	Box, Control	1
-8	NLA	Nameplate	1
-9	45527-91	Chain	1
-10	45526-91	Tubing.	1
-11	54451-91	Harness, Wire.	1
-12	44325-91	Transformer - General Radio W-5 - 6 AMP	1
-13	45307-41	Screw, Slotted — No. 8-32 x 1/4"	1
-14	45322-91	Washer, Felt	1
-15	45189-91	Knob	1
-16	27741-41	Screw, Flat Head — No. 6-32 x 3/16"	4
-17	53281-91	Voltmeter	1
-18	3961-41	Screw, Flat Head - No. 6-32 x 3/8"	2
-19	92523-001	Plate, Cover.	1
-20	52262-91	Circuit Breaker	1
-21	3984-41	Screw, Round Head - No. 6-32 x 3/8"	1
-22	9316-41	Screw, Round Head — No. 10-32 x 3/4"	4
-23	39091-91	Block, Terminal.	1
-24	45957-91	Label, Terminal Block.	1
-25	42460-91	Washer.	2
-26	50095-91	Sticker, Wiring Diagram	1
-27	45838-045	Stop.	1
-28	19675-41	Lockwasher - No. 6.	2
-29	24513	Box, Rough (SUB: 56346-001)	1
-30	24519-61	Flange.	1
-31	19678-45	Lockwasher.	3
-32	3097-41	Nut, Hex	3
-33	20821-061	Screw	4
-34	50411-91	Insulator	1
-35	NLA	Brace	1

REV. 10/82



AMSCO
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34" SURGICAL LIGHTS
MODELS 6520 THRU 6528
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(10/82)

1 of 1

