
This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.

Google™ books

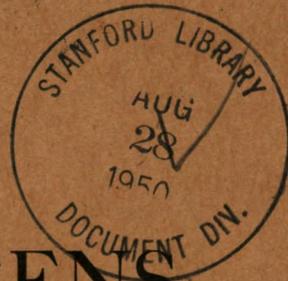
<https://books.google.com>



D101.11.11-2329

TM 11-2329

DEPARTMENT OF THE ARMY TECHNICAL MANUAL



SCREENS PH-358-C, PH-358-D AND PH-358-E

DEPARTMENT OF THE ARMY • JULY 1950



DEPARTMENT OF THE ARMY TECHNICAL MANUAL
TM 11-2329

This manual supersedes TM 11-2329, 24 May 1948, including C1, 8 February 1949

SCREENS
PH-358-C, PH-358-D
AND
PH-358-E



DEPARTMENT OF THE ARMY

JULY 1950

*United States Government Printing Office
Washington: 1950*

DEPARTMENT OF THE ARMY

WASHINGTON 25, D. C., 19 July 1950

TM 11-2329 is published for the information and guidance of all concerned.

[AG 413.53 (31 May 50)]

BY ORDER OF THE SECRETARY OF THE ARMY:

OFFICIAL:

EDWARD F. WITSELL
Major General, USA
The Adjutant General

J. LAWTON COLLINS

Chief of Staff, United States Army

DISTRIBUTION:

Tech Sv (2) except 11 (50); Arm & Sv Bd (1); AFF Bd (ea Sv Test Sec) (1); AFF (5); OS Maj Comd (5); Base Comd (3); MDW (5); A (20); CHQ (2); FC (2); Sch (2) except 11 (10); Gen Dep (2); Dep 11 (5); Tng Div (2); PE (10), OSD (2); Lab 11 (2); 4th & 5th Ech Maint Shops 11 (2); Two (2) copies to each of the following T/O&E's: 11-47; 11-107; 11-127; 11-587; 11-592; 11-597. SPECIAL DISTRIBUTION.
For explanation of distribution formula, see SR 310-90-1.

CONTENTS

	<i>Paragraph</i>	<i>Page</i>
CHAPTER 1. INTRODUCTION		
<i>Section I. General</i>		
Scope -----	1	1
Forms and records -----	2	1
<i>II. Description and data</i>		
General description -----	3	1
Table of components -----	4	3
Screen assembly -----	5	3
Tripod assembly -----	6	5
Screen-handle assembly -----	7	9
Carrying bag -----	8	10
Packaging data -----	9	10
CHAPTER 2. OPERATING INSTRUCTIONS		
<i>Section I. Service upon Receipt of Equipment</i>		
Service upon receipt of new equipment -----	10	11
Service upon receipt of used or reconditioned equipment -----	11	12
Locating equipment -----	12	12
<i>II. Preparation for Use</i>		
Screen PH-358-C -----	13	12
Screen PH-358-D -----	14	14
Screen PH-358-E -----	15	17
CHAPTER 3. MAINTENANCE INSTRUCTIONS		
<i>Section I. Preventive Maintenance</i>		
Meaning and importance of preventive maintenance -----	16	21
Itemized preventive maintenance -----	17	21
<i>II. Weatherproofing</i>		
General -----	18	21
Tropical maintenance -----	19	22
Winter maintenance -----	20	22
Desert maintenance -----	21	22
CHAPTER 4. FIELD MAINTENANCE INSTRUCTIONS		
<i>Section I. Screen PH-358-C</i>		
Screen assembly -----	22	23
Tripod assembly -----	23	27
Screen-handle assembly -----	24	27
Extension rod and lock plate assembly -----	25	28
<i>II. Screen PH-358-D</i>		
Tripod assembly -----	26	30
Screen assembly -----	27	32
<i>III. Screen PH-358-E</i>		
Tripod assembly -----	28	35
Screen assembly -----	29	38

	<i>Paragraph</i>	<i>Page</i>
CHAPTER 5. SHIPMENT AND STORAGE AND DEMOLITION TO PREVENT ENEMY USE		
<i>Section I. Shipment and Storage</i>		
Packaging -----	30	41
Packing -----	31	41
<i>II. Demolition to Prevent Enemy Use</i>		
General -----	32	41
Methods of demolition -----	33	41
Destruction of components -----	34	42
APPENDIX I. REFERENCES -----	--	43
II. IDENTIFICATION TABLE OF PARTS -----	--	45
INDEX -----	--	52

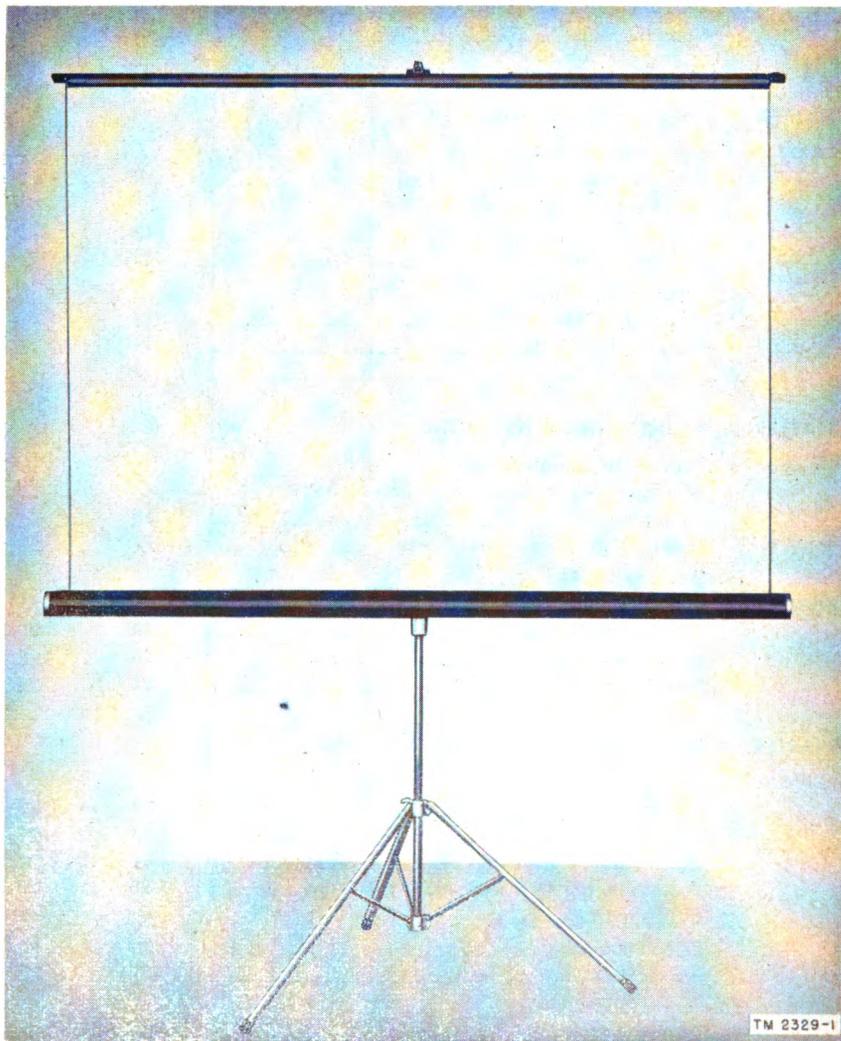


Figure 1. Serca PH 358-C.

CHAPTER I

INTRODUCTION

Section I. GENERAL

1. Scope

a. These instructions are published for the information and guidance of the personnel to whom this equipment is issued. They contain information on operation and organizational and field maintenance of the equipment. They apply only to Screens PH-358-C, PH-358-D, and PII-358-E.

b. Appendix I contains a list of current references, including supply catalogs, technical manuals, and other available publications applicable to the equipment. Appendix II contains an identification table of parts.

2. Forms and Records

a. The following forms will be used for reporting unsatisfactory conditions of equipment:

- (1) DD Form 6 (Report of Damaged or Improper Shipment) will be filled out and forwarded as prescribed in SR 745-45-5 or AFR 71-4.
- (2) DA AGO Form 468 (Unsatisfactory Equipment Report) will be filled out and forwarded to the Office of the Chief Signal Officer as prescribed in SR 700-45-5.
- (3) AF Form 54 (Unsatisfactory Report) will be filled out and forwarded to Commanding General, Air Matériel Command, Wright-Patterson Air Force Base, Dayton, Ohio, as prescribed in SR 700-45-5 and AFR 65-26.

b. Use other forms and records as authorized.

Section II. DESCRIPTION AND DATA

3. General Description

Screens PH-358-C, PH-358-D, and PII-358-E are medium size, portable, roll-type projection screens for use in motion picture or still projection. Each consists of a screen assembly, a tripod assembly, and a carrying bag. The screens are primarily intended for indoor use and have viewing areas of 50 by 67 inches (Screens PH-358-C and PII-358-D) or $50\frac{3}{4}$ by $69\frac{3}{4}$ inches (Screen PH-358-E). They may be adjusted in height through a range of approximately 2 feet for Screen PH-358-C, $1\frac{1}{3}$ feet for Screen PII-358-D, or $9\frac{1}{2}$ inches for Screen PII-358-E, within the limits of the screen-handle stops.

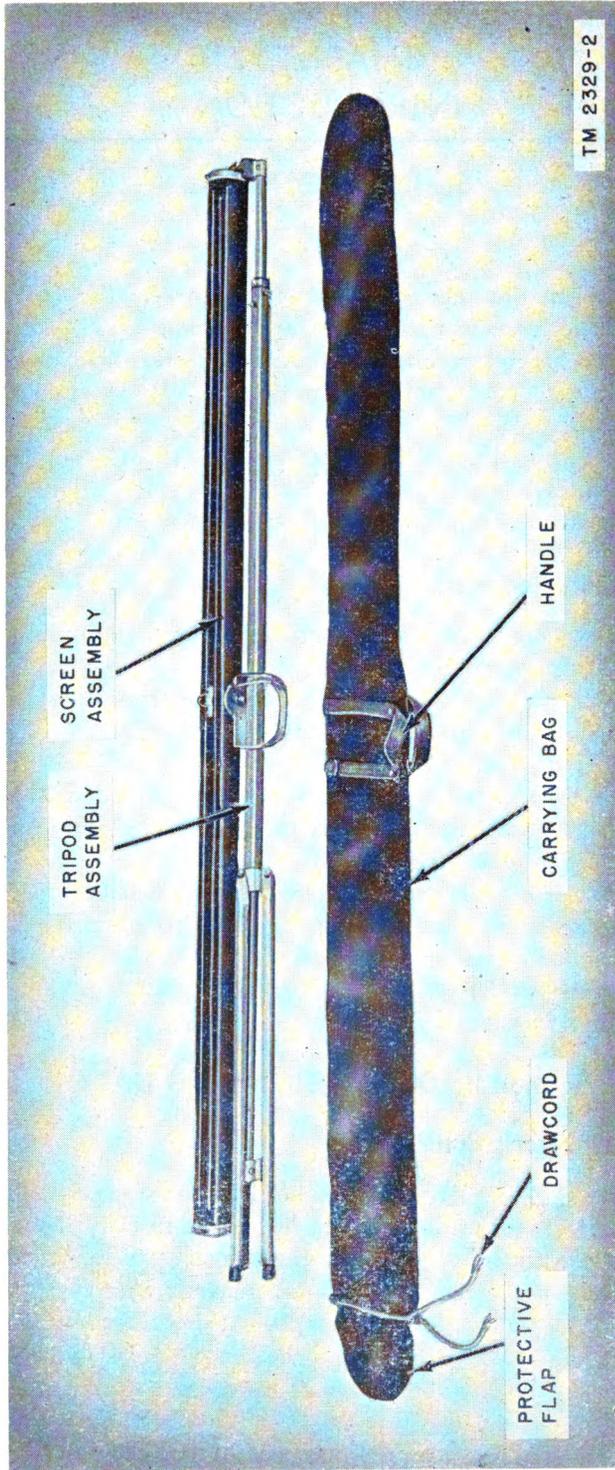


Figure 2. Screen PH-358-C, components.

4. Table of Components

Quantity	Name of component	Dimensions (in.)			Unit weight (lb.)
		Height	Width	Length	
1	Carrying bag (including screen and tripod assembly) for:				
	PH-358-C -----	3	7	78	20 $\frac{5}{8}$
	or PH-358-D -----	5 $\frac{1}{4}$	6 $\frac{3}{4}$	75	24
	or PH-358-E -----	5 $\frac{1}{4}$	3 $\frac{1}{4}$	80	20 $\frac{1}{4}$
1	Screen assembly for:				
	PH-358-C -----	2 $\frac{3}{4}$	3 $\frac{1}{4}$	71	11 $\frac{1}{2}$
	or PH-358-D -----	5	3 $\frac{1}{4}$	71 $\frac{1}{4}$	14
	or PH-358-E -----	4	2 $\frac{3}{4}$	72 $\frac{5}{8}$	14
1	Tripod assembly for:				
	PH-358-C -----	3	3	75	8
	or PH-358-D -----	2 $\frac{5}{8}$	3 $\frac{1}{4}$	71 $\frac{1}{4}$	8
	or PH-358-E -----	3	2 $\frac{5}{8}$	75 $\frac{5}{8}$	5 $\frac{1}{8}$

Note. This list is for general information only. See appropriate publications for information pertaining to requisition of spare parts.

5. Screen Assembly

The screen assembly consists of a screen fabric, a hanger assembly, a spring roller, and a screen housing.

a. SCREEN FABRIC. The projection screen is made of durable fabric treated on the viewing side with a special plastic compound to provide a clear white reflecting surface (fig. 1). The reverse side of the screen fabric is black.

- (1) *Screen PH-358-C.* The upper end of the screen fabric on Screen PH-358-C is provided with a casing to accommodate the hanger tube. Nine metal clamps are secured to the lower end of the screen fabric for attaching the screen fabric to the spring roller.
- (2) *Screen PH-358-D.* On Screen PH-358-D, the upper end of the screen fabric is stapled to a wooden slat which is inclosed in a metal batten strip. The lower end of the screen

fabric is cemented to a wire rod for attachment to the screen roller.

- (3) *Screen PH-358-E*. On Screen PH-358-E, the upper end of the screen fabric is provided with a casing to accommodate the hanger tube; the lower end is stapled to the spring roller.

b. HANGER ASSEMBLY. The hanger assembly provided for Screen PH-358-C and PH-358-E consists of a support ring attached at the center of the hanger tube. On Screen PH-358-D, the hanger assembly consists of a metal hook attached at the center of the batten strip.

c. SCREEN ROLLER. The metal screen roller (figs. 10 and 15) provided with Screens PH-358-C and PH-358-D contains a groove which extends the full length of the roller and which is used to attach the screen fabric. The screen roller for Screen PH-358-E (fig. 18) is made of wood. In all models, the roller is equipped with a fixed cylindrical spindle at one end and a flattened rotatable spindle at the other end. The flattened spindle is attached to a spring within the roller and is anchored to the roller at the inner end of the spring.

d. SCREEN HOUSING (figs. 10, 15, and 18).

- (1) *Screen PH-358-C*. The screen housing for Screen PH-358-C is made of tubular steel with a black wrinkle finish. Two caps are attached to the housing by screws, one cap at each end. One cap has a circular cut-out and the other has a rectangular cut-out; each cut-out is located at the respective cap center. A 1-inch opening extends the full length of the housing. A metal bracket is attached at the center of the housing and is provided with a threaded bolt, washers, and a locknut for securing the screen assembly to the tripod assembly.
- (2) *Screen PH-358-D*. On Screen PH-358-D, the screen housing is made of rectangular-shaped steel tubing, with a black wrinkle finish. Two caps, one with a circular cut-out and the other with a rectangular cut-out, are attached to the housing by screws, one cap at each end. The cut-outs are located near the centers of the respective caps. A 1-inch opening extends the full length of the housing. A retaining spring is attached at one end of the housing to hold the tripod legs securely together when folded, to prevent the metal batten strip from falling out of the housing, and to keep the housing and tripod parallel when the equipment is being carried. A screen-handle assembly (par. 7*b*) is riveted to the center of the screen housing in such a manner that the assembly will rotate on the housing.
- (3) *Screen PH-358-E*. Screen PH-358-E is provided with a screen housing of octagonal-shaped steel tubing with a black wrinkle finish. Two caps, one with a circular cut-out and one

with a rectangular cut-out, are attached to the housing by screws, one cap at each end. The cap with the rectangular cut-out also has a circular hole located near the outer rim to receive the lower extension of the extension rod hook when the screen housing is locked in the carrying position. A 1-inch opening extends the full length of the housing. A screen-handle assembly (par. 7c) is riveted to the center of the screen housing so that the assembly will rotate on the housing.

6. Tripod Assembly

A tripod and an extension rod comprise the tripod assembly for Screens PII-353-C, PII-358-D, and PH-358-E.

a. TRIPOD. Three legs, fitted with rubber tips, are riveted to an upper bracket (figs. 3, 4, and 5). Three braces, one riveted to each leg, are riveted to a lower bracket. Each of these joints permits freedom of movement. On Screen PH-358-C only, a handle is attached to the upper bracket by means of a screw. A tripod column—a square steel tube passing through the upper bracket and fastened to the lower bracket—is the main support structure.

- (1) On Screen PH-358-C, the tripod column (fig. 11) is attached to the lower bracket by means of a roundhead machine bolt and locknut. A locking device is located near the upper end of the tripod column. There are three stops mounted on the tripod column. Each stop consists of a screw and two washers. A cap, with a square cut-out, fits over the upper end of the tripod column and is attached to it by two roundhead screws.
- (2) The tripod column (fig. 14) of Screen PH-358-D is attached to the lower bracket by means of a roundhead self-tapping screw. A thumbscrew locking device is located at the upper end of the tripod column. There are three stops mounted on the tripod column. The two upper stops each consist of a screw and two washers. The lower stop is a screw. A cap with a square cut-out fits over the upper end of the tripod column and is attached to the column by a roundhead screw. The thumbscrew locking device forms a part of this cap.
- (3) The tripod column in Screen PH-358-E (fig. 17) is attached to the lower bracket by means of a hexagonal bolt and locknut. A screen-handle stop is located a little below and on the same face of the tripod column as an engaging plunger slot. This engaging plunger slot is $1\frac{3}{4}$ inches long and three-sixteenths inch wide except at its top where it is made wider to admit the engaging plunger. The engaging plunger is approximately one-half inch long and three-eighths inch

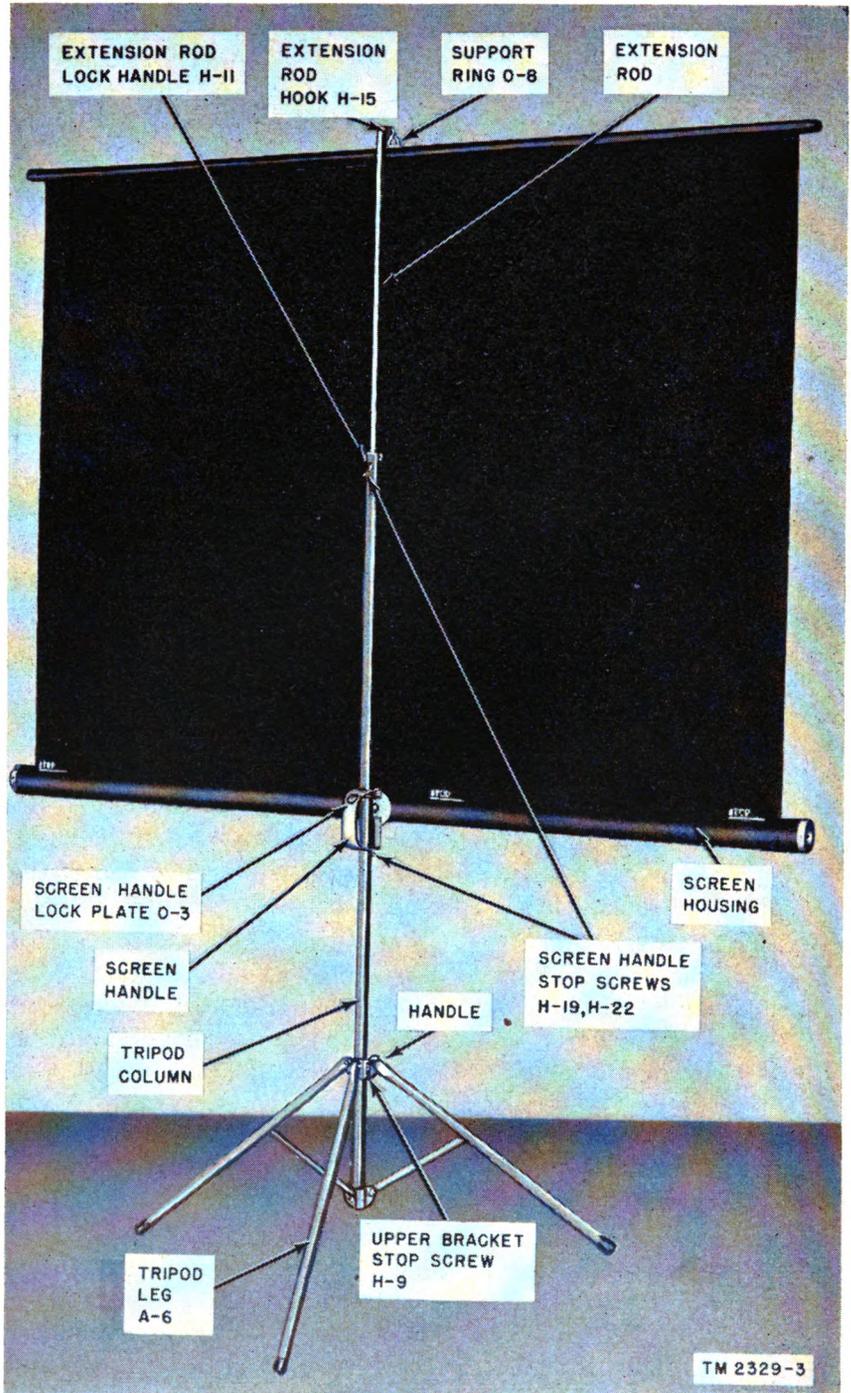


Figure 3. Screen PH-358-C, rear view.

wide. There are cut-outs in each of the longer sides of the plunger, near one end. The other end is slightly beveled. Above the plunger slot and near the top of the column is a

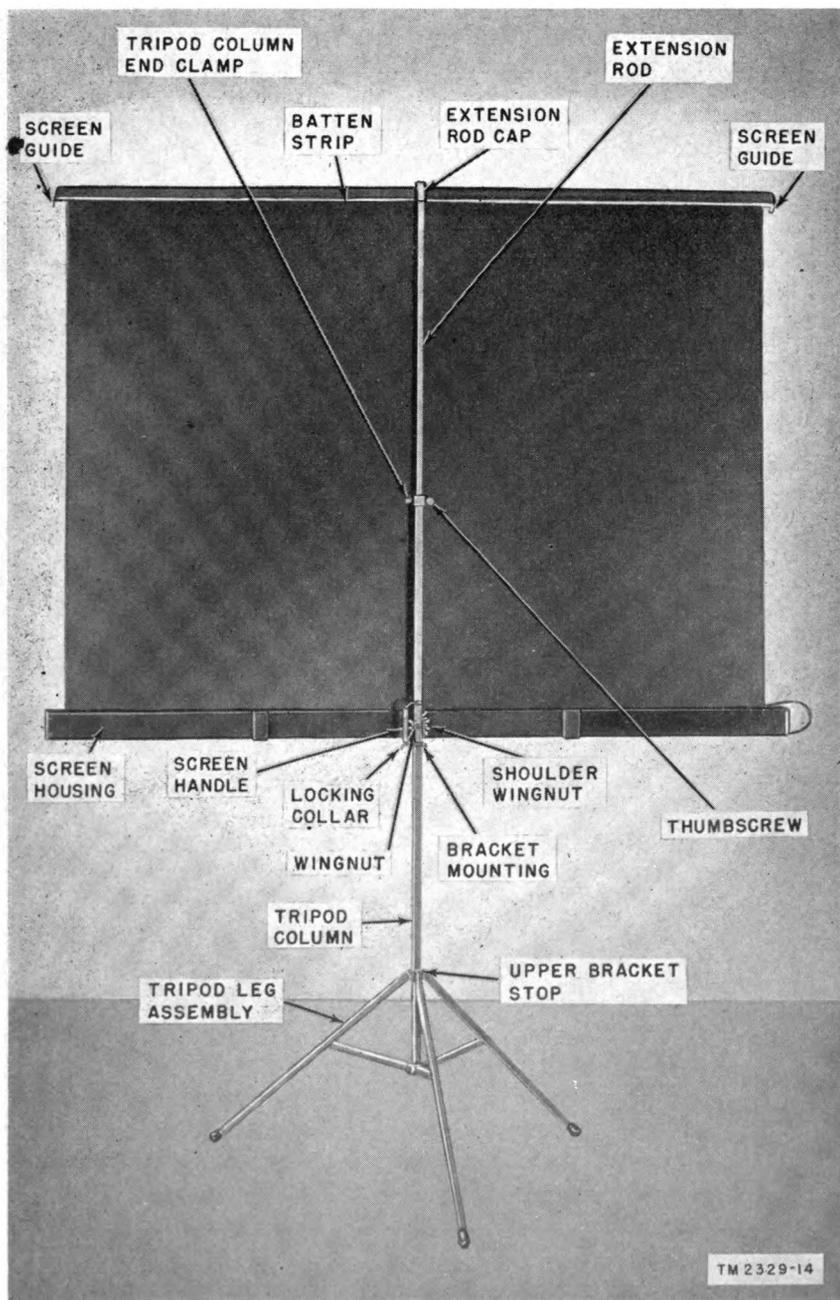


Figure 4. Screen PH-385-D, rear view.

nine-thirty-second-inch hole. A spring plate, approximately 2¼ inches long and one-half inch wide, fits inside the top of the tripod column between the extension rod and one of the inner walls of the column. A cap with a square cut-out fits over the upper end of the tripod column. One face has a nine-thirty-second-inch hole to aline with the hole in the top of the tripod column. A spring stop-pin clamp snaps around

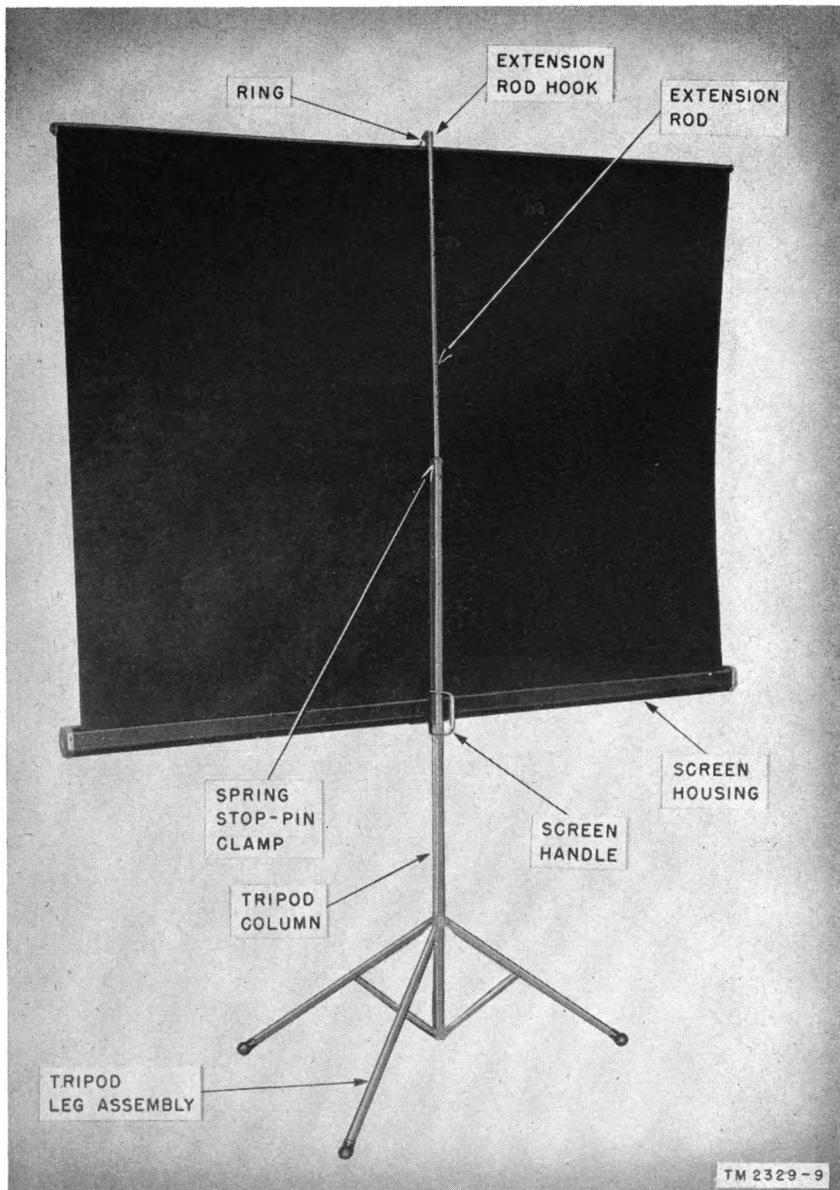


Figure 5. Screen PH-358-E, rear view.

the tripod column cap so that the stop pin passes through the alined holes in the cap and column, respectively.

b. EXTENSION ROD.

- (1) In Screen PH-358-C, the extension rod (fig. 6) is a solid, square, steel rod which passes through the cut-out in the tripod column cap and down through the entire length of the tripod column. A square guide plate is attached to the lower end of the extension rod by a screw threaded into the lower end of the extension rod. A hook is riveted to the upper end of the extension rod.
- (2) The extension rod in Screen PH-358-D (fig. 14) is hollow. The lower end of the extension rod is split at the angled edges and flared sufficiently to bear against the inside of the tripod column, thus serving as a guide for the extension rod. A square cap is bolted to the upper end of the extension rod and a stop pin is attached to the rod to limit its withdrawal from the tripod column.
- (3) In Screen PH-358-E, the extension rod (fig. 9) is a hollow, square tube. A guide and plunger engaging plate is riveted to the lower end. In one face of the extension rod there are four nine-thirty-second-inch stop-pin holes spaced 13, $17\frac{3}{4}$, $22\frac{1}{2}$, and $40\frac{1}{2}$ inches, respectively, from the lower end. A stop is located just below the lowest hole and on an adjacent side of the extension rod. An extension rod hook is attached to the top of the extension rod by means of a self-tapping screw. The under portion of the hook is also provided with a locking extension.

7. Screen-handle Assembly

a. The screen-handle assembly for Screen PH-358-C (fig. 12) is part of the tripod assembly. It consists of a handle, a mounting plate, a lock plate, and a spring. Square cut-outs are located in the top and bottom of the screen handle and also in the lock plate. The screen-handle mounting plate also contains two cut-outs; one cut-out is circular and the other is rectangular. The assembly is attached to the screen housing by means of the threaded bolt, washers, and locknut provided on the screen housing.

b. In Screen PH-358-D, the screen-handle assembly (fig. 7) is part of the screen housing. It consists of a handle, a mounting bracket, and a locking collar. Square cut-outs in the top and bottom of the mounting bracket and also in the locking collar are provided so that the handle assembly may pass over the tripod column. The assembly is riveted to the screen housing so that it will rotate on the housing.

c. In Screen PH-358-E, the screen-handle assembly (fig. 16) con-

sists of a carrying handle hinge-riveted to a mounting bracket. Square cut-outs are provided in the mounting bracket so that the handle assembly may pass over the tripod column. A smaller cut-out is also provided in the mounting bracket to accommodate the engaging plunger.

8. Carrying Bag

(fig. 2)

The carrying bag is made of water-repellant canvas. It is equipped with a webbing handle which encircles the carrying bag. A protective flap is attached to the bag at the open end. In Screen PH-358-C, the mouth of the bag is equipped with a drawcord. In Screen PH-358-D, the mouth of the bag is equipped with a webbing strap and buckle. In Screen PH-358-E, the carrying bag is provided with a zipper to open and close the inner section over the protective flap, and with an outer flap which is held closed by snap fasteners.

9. Packaging Data

Each screen is inclosed in a 200-pound test, corrugated carton $76\frac{1}{2}$ inches long, 7 inches wide, and $3\frac{3}{8}$ inches high. Two corrugated fillers, placed one at each end, form collars for the respective ends of the screen and provide added cushioning. The gross weight of this package is approximately 28 pounds.

a. OVERSEA SHIPMENT. The screens are packed for oversea shipment as follows:

- (1) Each screen is placed in a corrugated carton as described above. The carton is then wrapped in waterproof paper which is sealed thoroughly with a waterproof glue.
- (2) Two screens, packaged as described in (1) above, are packed in a wooden box $79\frac{1}{2}$ inches long, $16\frac{1}{4}$ inches wide, and 6 inches high. The gross weight of this package is approximately 95 pounds.

b. DOMESTIC SHIPMENT. For domestic shipment, four screens, each contained in a corrugated carton as described above, are strapped together with three $\frac{1}{2}$ -inch metal straps evenly spaced. Corrugated fiberboard strips are placed under the strapping to prevent the cartons from crushing at the corners. The gross weight of this package is approximately 115 pounds.

CHAPTER 2

OPERATING INSTRUCTIONS

Section I. SERVICE UPON RECEIPT OF EQUIPMENT

10. Service Upon Receipt of New Equipment

Caution: If the equipment is subjected to any marked temperature change immediately before it is to be unpacked, allow it to remain in the waterproof paper until the equipment has attained the temperature of the warmer location. When unpacking, handle the equipment carefully. Do not drop it. Do not attempt to manipulate any part of the equipment until this manual has been read thoroughly.

a. UNPACKING. Be careful when unpacking Screen PH-358-C, PH-358-D, and PII-358-E. Observe all precautions.

(1) *Oversea shipment.*

- (a) Cut metal straps with a suitable cutting device or twist them with pliers until the straps break.
- (b) With a nail puller, remove the nails from the top boards of the shipping box. *Prying may damage the equipment.*
- (c) Remove the top boards from the shipping box.
- (d) Remove the waterproofed packages from the box and the waterproof paper from the cartons.
- (e) Open one end of the carton, remove the filler, and withdraw the screen. Return the filler to the carton for future use.

(2) *Domestic shipment.*

- (a) Cut the metal straps with a suitable cutting device or twist them with pliers until the straps break.
- (b) Remove the corrugated strips from the corners of the cartons.
- (c) Remove the screens from the cartons in the same manner as that used for oversea shipment (a(1)(e) above).

b. OPENING CARRYING BAG. On Screens PH-358-C and PII-358-D, loosen the drawcord or strap at the mouth of the carrying bag. On Screen PII-358-E, loosen the snap fasteners and open the zipper on the inner cover. Pull out the protective flap. Pull the carrying bag off the unit. Be sure to grasp the end of the entire unit while stripping off the carrying bag.

c. CHECKING. When the equipment is unpacked and removed from the carrying bag, examine it for missing or damaged parts. After checking, replace the equipment in the carrying bag.

11. Service Upon Receipt of Used or Reconditioned Equipment

Used or reconditioned equipments are packed in the same manner as new equipment.

Used or reconditioned equipment may be treated in the same manner as that prescribed for new equipment (par. 10).

12. Locating Equipment

Select a room which can be darkened. The darker the room the better the projection. Locate the screen in the center of one end of the room in a position which will afford the best view to the entire audience. Be sure the lower edge of the screen is at least above eye level. The size of the projected image upon the screen depends on the distance between the screen and the projector, and on the projection lens used. If the projector is easy to move, place the screen in the desired location and position the projector accordingly; otherwise place the screen in the most suitable position in relation to the projector.

Section II. PREPARATION FOR USE

13. Screen PH-356-C

a. SETTING UP EQUIPMENT.

- (1) Remove the equipment from the carrying bag (par. 10*b*).
- (2) Hold the unit vertically so that the tripod legs touch the floor. Then press downward on the handle attached to the upper bracket of the tripod leg assembly until the legs of the tripod are firmly seated and until the lower edge of the upper bracket rests upon the upper bracket stop (fig. 3) mounted on the tripod shaft.
- (3) The screen housing is held in place by the extension rod hook at the top of the extension rod (fig. 6). Working from the back of the screen, free the screen housing by slightly raising the extension rod. To raise the extension rod, press the extension rod lock handle and lift upward on the extension rod.
- (4) Rotate the screen housing counterclockwise from the vertical to the horizontal position. Grasp the support ring and partially withdraw the screen fabric from the housing until it is possible to hook the support ring into the slot in the extension rod hook.

b. ADJUSTING HEIGHT OF SCREEN. Grasp the screen handle and press the screen-handle lock plate (fig. 12). Raise the screen housing to the desired viewing height. Since the lower end of the viewing

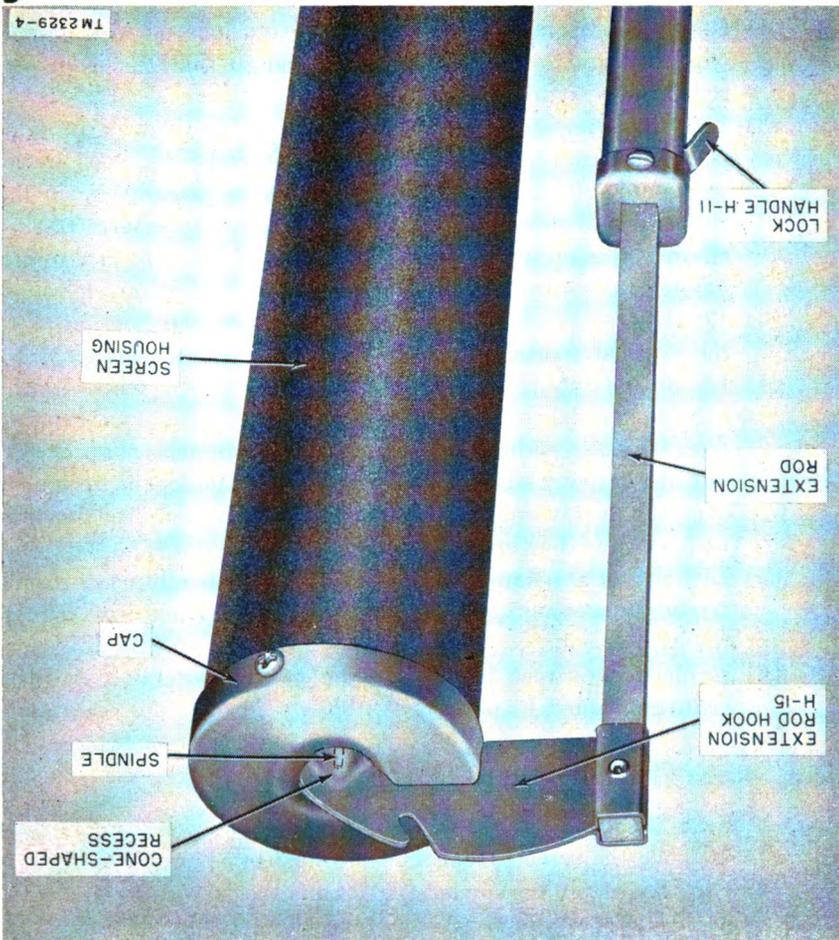


Figure 6. Screen PH-358-C, screen housing locked in vertical position.

area will be approximately at the level of the screen housing, the screen housing should be positioned where it will be visible to all viewers. The screen handle may be positioned anywhere between the upper and lower stop screws on the tripod column which permit vertical adjustment through a range of approximately 2 feet.

c. **ADJUSTING SCREEN VIEWING AREA.** Grasp the extension rod firmly, press the extension rod lock handle (fig. 13), and lift the extension rod until the word STOP appears near the bottom of the reverse side of the screen fabric. While still holding the extension rod firmly, release the extension rod lock handle to lock the extension rod in place.

Caution: Be sure to hold the extension rod firmly before depressing the extension rod lock handle, to prevent the extension rod from falling with considerable force.

d. REPACKING.

- (1) Grasp the extension rod, press the extension rod lock handle (fig. 13), and lower the extension rod so that the extension rod hook is within reach.
- (2) Lift the screen hanger tube sufficiently to remove the support ring from the slot in the extension rod hook. Allow the screen to return slowly into the screen housing until the rubber tips on the ends of the hanger tube are resting against the screen housing. *Be sure to grasp the screen hanger tube firmly to control the action of the screen roller.*
- (3) Rotate the screen housing clockwise from the horizontal to the vertical position.
- (4) Lower the extension rod until the cone-shaped recess in the extension rod hook covers the cylindrical spindle protruding from the screen-housing cap. The irregularly shaped cut-out in the lower edge of the extension rod hook will fit snugly over the screen-housing cap when the extension rod hook is in its proper locking position (fig. 6).
- (5) Lift up on the handle mounted on the upper bracket of the tripod leg assembly (fig. 3) to collapse the tripod legs against the tripod column.
- (6) Replace the screen in its carrying bag by reversing the procedure outlined in paragraph 10b.

14. Screen PH-358-D

a. SETTING UP EQUIPMENT.

- (1) Remove the screen from its carrying bag (par. 10b).
- (2) Slip the retaining spring (fig. 8) off the tripod legs.
- (3) Hold the unit vertically so that the tripod legs touch the floor. Then press downward on the upper bracket of the tripod leg assembly until the legs of the tripod are firmly seated and until the lower edge of the upper bracket rests upon the upper-bracket stop (fig. 4) mounted on the tripod shaft.
- (4) Work from the back of the tripod with the carrying handle turned to the extreme left, unlocked position, and with the wingnut loosened. Raise the housing vertically on the tripod column. The mounting bracket automatically locks itself to the tripod column when pressure is removed. Rotate the screen housing counterclockwise to the horizontal position. Lower the screen housing to its lowest position on the tripod column by raising and holding the locking collar (fig. 7). *Be sure to support the housing with the free hand to prevent the housing from dropping suddenly.* Release the locking collar. Turn the screen handle $\frac{1}{4}$ turn counterclockwise.

This locks the locking collar (fig. 7). Tighten the wingnut on the tripod column clamp.

Caution: Keep the thumbscrew in the tripod column end clamp (fig. 4) tightened, except when the height of the extension rod is being adjusted.

- (5) Grasp the flat, metal batten strip with both hands and partially withdraw the screen fabric from the housing until it is possible to place the batten-strip hook into the open end of the cap at the top of the extension rod.

b. ADJUSTING HEIGHT OF SCREEN. Place the screen handle in the unlocked position (fig. 7) and loosen the wingnut. Place the hands under the screen housing on opposite sides of the tripod column and raise the screen housing to the desired viewing height. The housing will be automatically held in place when upward pressure on the screen housing is released. Turn the screen handle one-fourth turn counterclockwise and tighten the wingnut to lock the screen housing in place. Since the lower edge of the viewing area will be approximately at the level of the screen housing, the screen housing should be positioned where it will be visible to all viewers. The screen handle may be positioned anywhere between the upper and lower stop screws on the tripod column which permit vertical adjustment through a range of approximately 16 inches.

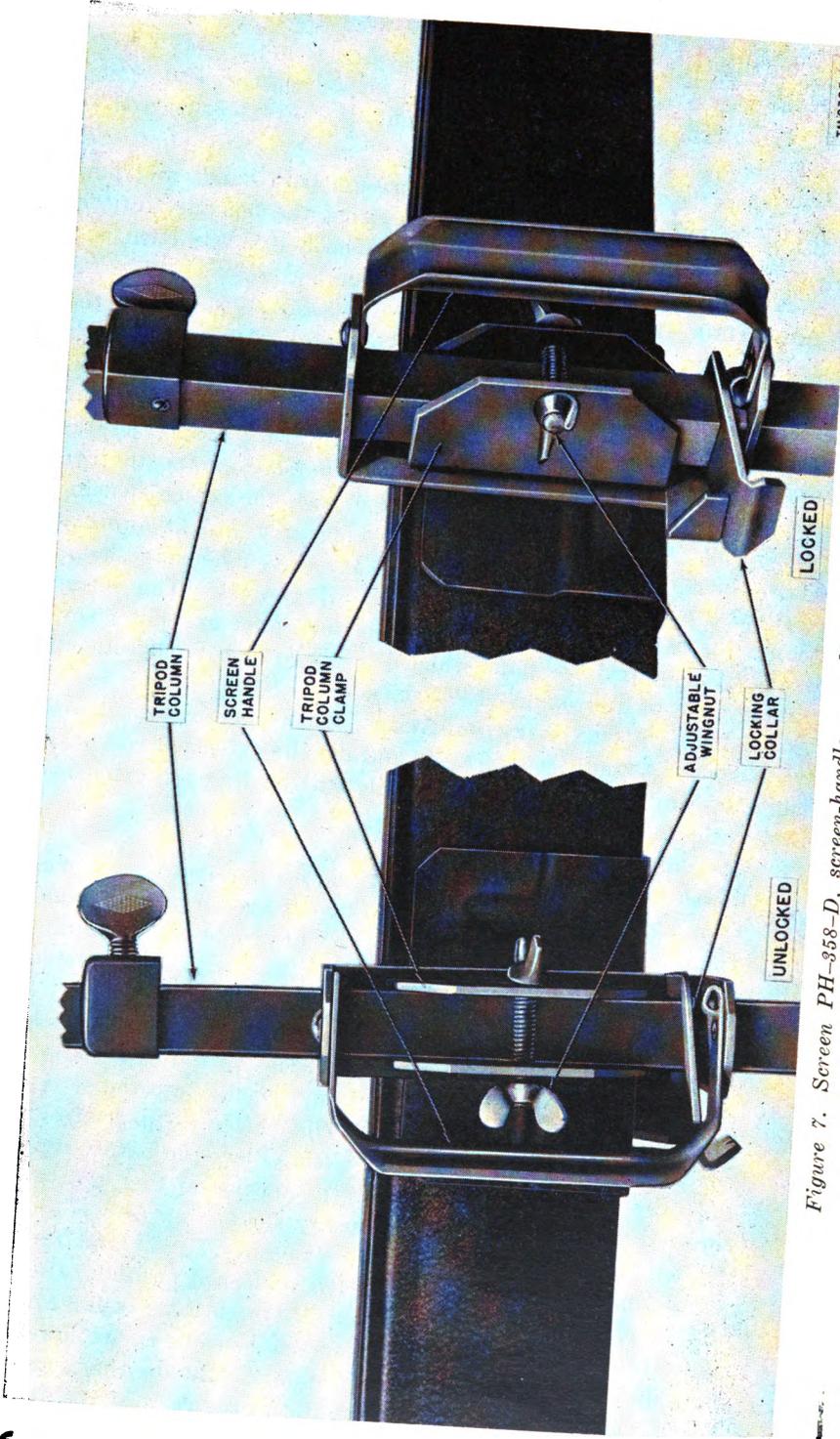
c. ADJUSTING SCREEN VIEWING AREA. Grasp the extension rod firmly, loosen the thumbscrew (fig. 4), and lift the extension rod until the fabric screen is fully extended. While still holding the extension rod firmly, tighten the thumbscrew to lock the rod in place.

d. REPACKING.

- (1) Loosen the thumbscrew in the tripod column end clamp (fig. 4) and lower the extension rod so that the rod is within reach.

Caution: Be sure to hold extension rod firmly before loosening thumbscrew, to prevent extension rod from falling with considerable force.

- (2) Lift the metal batten strip sufficiently to remove the hook from the opening in the top of the extension rod cap. Allow the screen fabric to return slowly and evenly into the screen housing. *Be sure to grasp the metal batten strip firmly, to control the action of the screen roller.* Place the batten strip flat over the opening of the screen housing so that the two screen guides are inside the housing slot.
- (3) Loosen the tripod column clamp wingnut (fig. 7) and turn the screen handle to the extreme left, unlocked position. Hold the screen housing with one hand, lift the locking collar with the other hand, and lower the screen housing to its lowest possible position on the tripod column. Rotate the screen housing clockwise from the horizontal to the vertical position.



TM 3-369-17

Figure 7. Screen PH-358-D, screen-handle assembly, locked and unlocked positions.

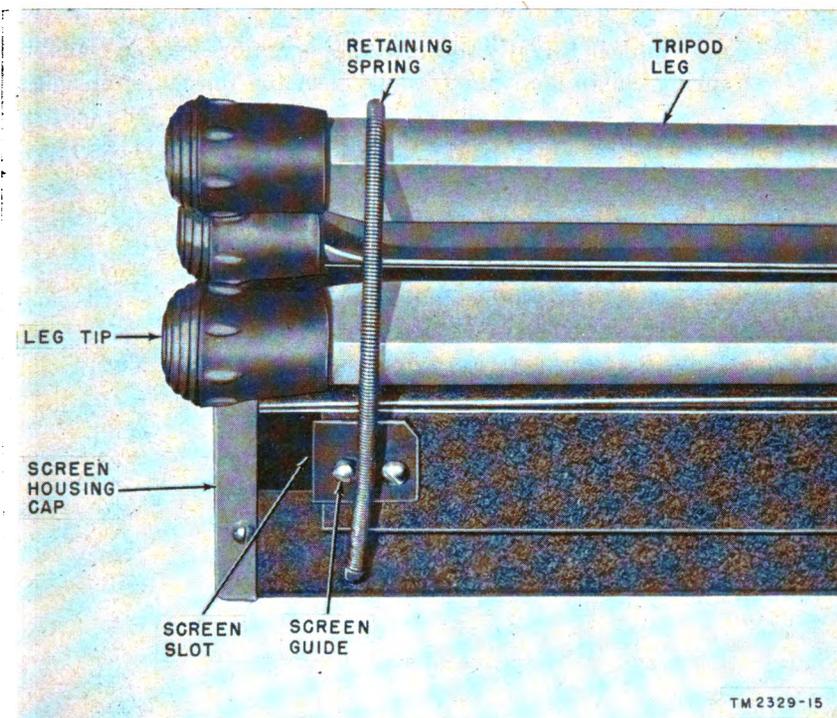


Figure 8. Screen PH-358-D, screen housing and tripod legs held together by spring.

- (4) Hold the extension rod, loosen the thumbscrew (fig. 4), and lower the extension rod until its uppermost part is even with the upper end of the screen housing. Tighten the thumbscrew.
- (5) Tip the entire assembly from the vertical position until it rests on one of the tripod legs. Fold the legs snugly together and pull the retaining spring over the lower portions of the legs and over the metal batten strip (fig. 8).
- (6) Replace the screen in its carrying bag by reversing the procedure outlined in paragraph 10b.

15. Screen PH-358-E

a. SETTING UP EQUIPMENT.

- (1) Remove the screen from its carrying bag (par. 10b).
- (2) Hold the unit vertically so that the tripod legs touch the floor. Tilt the equipment so that its weight rests on only one of the tripod legs. Steady the unit with one hand and, with the other hand, spread the tripod legs sufficiently to support the unit firmly. Allow the unit to rest on the tripod legs.
- (3) Work from the back of the tripod. Grasp the tripod column

with one hand. With the other hand, grasp the extension rod, pull it slightly toward the operator to disengage the spring clamp stop pin (fig. 9) from the top stop-pin hole in

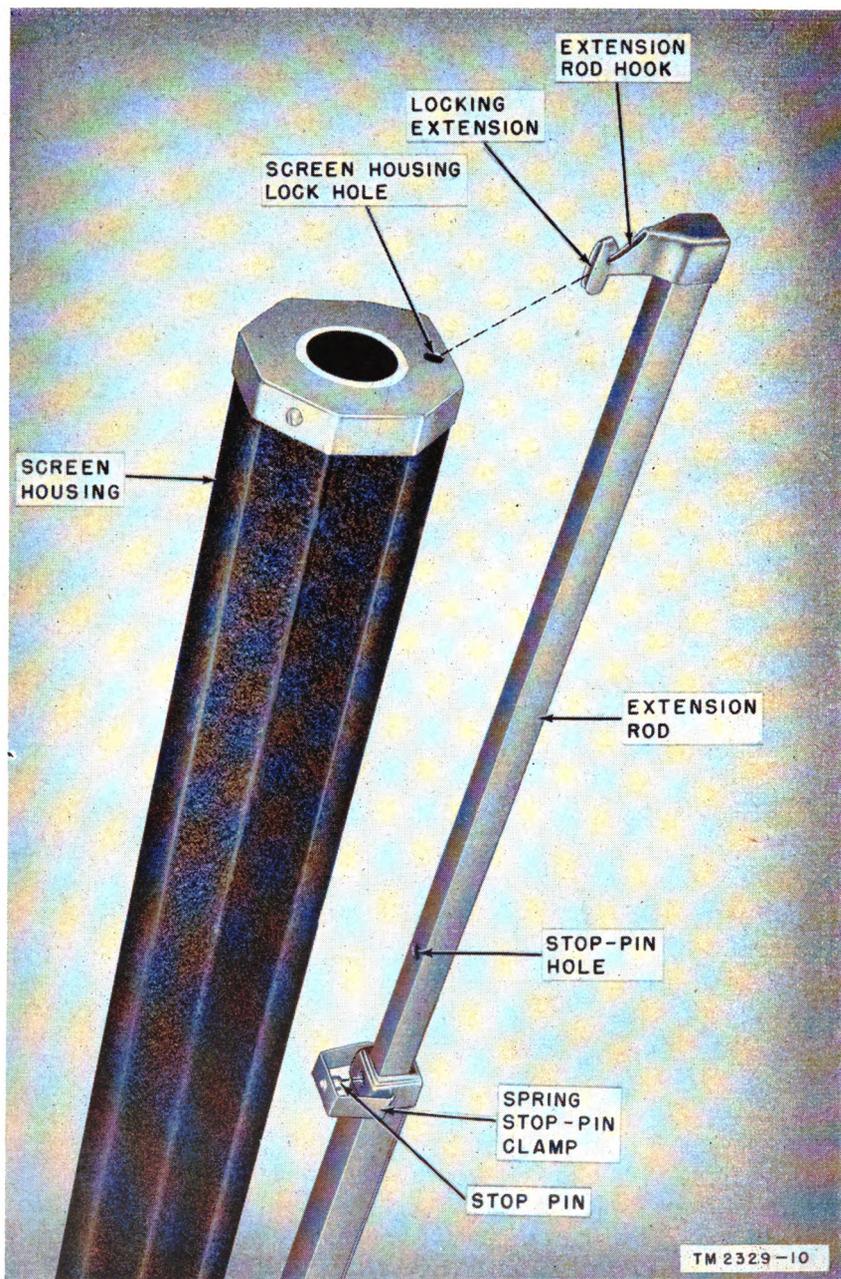


Figure 9. Screen PH-358-E, extension rod hook used to lock screen housing in vertical position.

the extension rod, and raise the extension rod slightly. This operation disengages the locking extension of the extension rod hook from the screen-housing lock hole.

- (4) Swing the screen housing counterclockwise to the horizontal position.
- (5) Lower the extension rod until the stop pin re-enters the top stop-pin hole in the extension rod.
- (6) Grasp the screen hanger tube with both hands, raise it, and place the ring over the extension rod hook.

b. **ADJUSTING SCREEN VIEWING AREA.** Work from the back of the tripod. Grasp the tripod column with one hand. With the other hand, grasp the extension rod and pull it slightly toward the operator to disengage the spring clamp stop pin (fig. 9) from the top stop-pin hole in the extension rod. Raise the extension rod until the stop pin engages the uppermost of the three lower extension rod stop-pin holes (fig. 17). The full screen viewing area is now visible and at its lowest position.

c. **ADJUSTING HEIGHT OF SCREEN.** Since the lower edge of the viewing area will be approximately at the level of the screen housing, the screen housing should be positioned where it will be visible to all viewers. The viewing area may be raised by repeating the operation described in *b* above and by raising the extension rod until the stop pin engages the center or lowest extension rod stop-pin holes. This raises the viewing area $4\frac{3}{4}$ inches or $9\frac{1}{2}$ inches, respectively.

Note. The guide and plunger engaging plate on the lower end of the extension rod contacts the engaging plunger and raises the screen housing when the extension rod is elevated above the third stop-pin hole from the lower end of the extension rod. Within the tripod column, a stop limits the upward movement of the extension rod when the lowest stop-pin hole is engaged.

d. **REPACKING.**

- (1) Work from the back of the tripod. Grasp the extension rod, pull the rod slightly toward the operator to disengage the stop pin, and lower the extension rod until the stop pin engages the top stop-pin hole in the extension rod.
- (2) Lift the screen hanger tube and free the ring from the extension rod hook. Allow the screen fabric to rewind slowly and evenly into the screen housing. *Be sure to grasp the screen hanger tube firmly to control the action of the screen roller.*
- (3) Raise the extension rod slightly (*b* above) and rotate the screen housing clockwise to the vertical position.
- (4) Lower the extension rod and guide the locking extension of the extension rod hook into the screen-housing lock hole. *Be sure that the stop pin simultaneously engages the stop-pin hole in the extension rod.*

- (5) Tilt the equipment so that it rests on one leg of the tripod and collapse the tripod legs.
- (6) Replace the screen in the carrying bag, reversing the procedure outlined in paragraph 10*b*.

CHAPTER 3

MAINTENANCE INSTRUCTIONS

Section I. PREVENTIVE MAINTENANCE

16. Meaning and Importance of Preventive Maintenance

Preventive maintenance means making systematic checks and adjustments at regular intervals to keep the equipment operating at top efficiency. Preventive maintenance is of utmost importance. The usefulness of this equipment depends on its condition when needed. It is vitally important that operators and repairmen of this equipment maintain it properly. Preventive maintenance for Screens PH-358-C, PH-358-D, and PH-358-E consists of inspecting and cleaning the equipment before and after each use.

Note. Lubrication is not required for Screens PH-358-C, PH-358-D, and PH-358-E.

17. Itemized Preventive Maintenance

- a. Perform the following steps *before* each use of the equipment:
 - (1) Tighten or replace all loose or missing nuts, bolts, washers, and screws.
 - (2) Straighten or replace all bent or broken metal parts.
 - (3) On Screen PH-358-E, check to see that the spring stop-pin clamp (fig. 9) is properly seated.
 - (4) If necessary, clean the screen fabric with a cloth dampened in water. *Do not use any liquid or solvent for cleaning, except water.*
- b. Perform the following steps *after* each use of the equipment:
 - (1) Repeat the items listed in *a* above.
 - (2) Wipe the equipment with a clean cloth.
 - (3) Store the equipment in the canvas carrying bag.

Section II. WEATHERPROOFING

18. General

Signal Corps equipment, when operated under severe climatic conditions such as prevail in tropical, arctic, and desert regions, requires special treatment and maintenance. Fungus growth, insects, dust, corrosion, salt spray, excessive moisture, and extreme temperatures are harmful to most materials.

19. Tropical Maintenance

a. A special moistureproofing and fungiproofing treatment has been devised, which if properly applied, provides a reasonable degree of protection. This treatment is fully explained in TB SIG 13 and TB SIG 72.

b. During manufacture, Screens PH-358-C, PH-358-D, and PH-358-E are treated for moistureproofing and fungiproofing. No further treatment is necessary unless the coating has been damaged.

c. If the coating of protective varnish has been punctured or broken during repair and if a complete treatment is not needed to reseal the equipment, apply a brush coat to the affected part. Be sure the break is completely sealed.

20. Winter Maintenance

a. Special precautions necessary to prevent poor performance or total operational failure of equipment in extremely low temperatures are fully explained in TB SIG 66.

b. Screens PH-358-C, PH-358-D, and PH-358-E are intended for use in mild temperatures and therefore no special precautions are necessary when used in these temperatures. However, when the equipment has been stored outdoors, or in an unheated shelter where extremely cold temperatures are encountered, take the following precautions before setting up the equipment:

- (1) Transfer the equipment from the cold to the warmer temperature and allow it to remain in the room for approximately 6 hours before removing the equipment from the carrying bag.
- (2) Do not remove the screen from its canvas carrying bag until the equipment has reached room temperature. This will decrease the possibility of water condensing on the equipment.
- (3) Do not unroll the screen while the equipment is very cold. The screen reflecting surface may have hardened because of the extreme cold and may crack upon unrolling, thus causing permanent damage to the equipment.

21. Desert Maintenance

Special precautions are necessary to prevent equipment failure in areas subject to extremely high temperatures, low humidity, and excessive sand and dust. These precautions are fully explained in TB SIG 75.

CHAPTER 4

FIELD MAINTENANCE INSTRUCTIONS

Note. The repair instructions that follow are primarily for field maintenance personnel and are applicable for all purposes of repair through and including rebuilding. The amount of repair to be performed by any particular unit having field maintenance will be limited only by the tools and by the skill of the assigned personnel.

Section I. SCREEN PH-358-C

22. Screen Assembly (fig. 10)

a. DISASSEMBLY.

- (1) Raise the extension rod to free the screen housing from its locked position.
- (2) Remove the locknut and washer from the screen-housing bolt and remove the screen assembly from the tripod assembly.
Note. There are also two washers on the screen-housing bolt between the screen housing and the tripod assembly.
- (3) Place the screen-housing assembly on a flat, clean surface so that the hanger tube faces up. Withdraw the screen fabric from the screen housing so that the pawl on the screen roller engages the roller-spring cam. The engaged pawl prevents the roller spring from unwinding when the housing caps are removed. Remove the three screws which secure the cap through which the flattened spindle protrudes. Gently remove the cap, taking care not to disturb the pawl on the roller. Remove the three screws holding the other cap and remove it from the screen housing.
- (4) Slip the roller and screen fabric from the screen housing. The hanger assembly is attached to the screen fabric.
- (5) To disassemble the screen hanger assembly, remove the rubber tips from the ends of the screen hanger tube. Remove the two screws holding the support ring bracket and remove the bracket. Slip the hanger tube from the screen fabric casing.
- (6) To remove the screen fabric from the roller, carefully unroll the fabric from the roller, at the same time, for ease of handling, reroll the unrolled portion, beginning at the top. The fabric is attached to the roller by means of small metal clamps slipped over the fabric edge and wedged into a groove in the roller. Remove the nail, which anchors the screen fabric to the roller, from the clamp near the cylindrical spindle end of the roller. The groove in the roller is offset

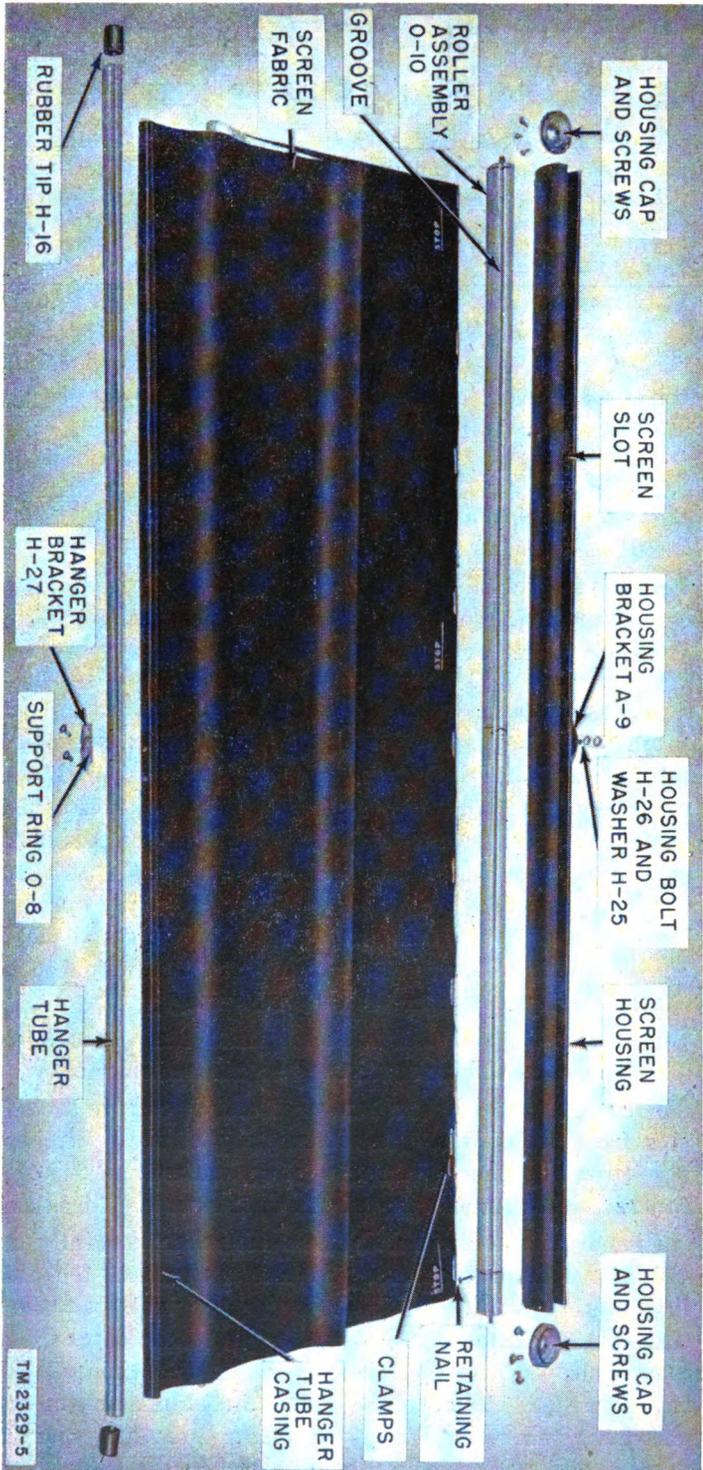
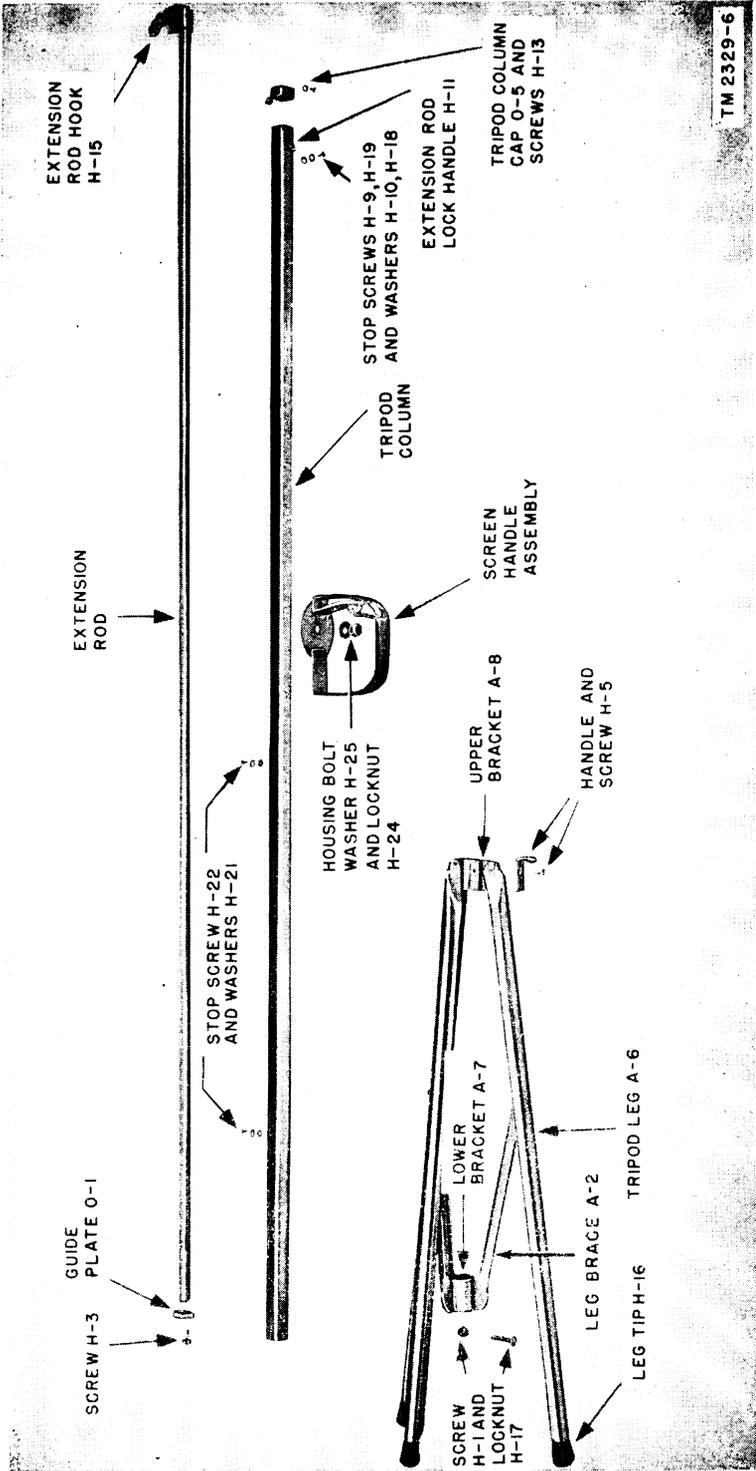


Figure 10. Screen PH-358-C, screen assembly disassembled.

at its base on one side. Working from the other side of the groove, carefully slip a screw driver under each metal clamp in turn and with a slight twist of the screw driver, pry each clamp up from its wedged position. Remove the clamps from the edge of the screen fabric.

b. REASSEMBLY.

- (1) Use the end of the screen fabric bearing the word STOP and mount to the roller as follows: Lay the fabric, white side up, on a flat surface with this end away from the operator. Lay the roller on the fabric with the cylindrical spindle to the left; be sure that the roller extends equally beyond the screen fabric on each side. Place the clamp with the nail hole in it over the edge of the screen fabric and insert the clamp into the roller groove offset. Aline the hole in the clamp with that in the roller. Place the anchor nail through the clamp and the screen fabric and into the hole in the roller. Drive the nail into the roller and at the same time wedge the clamp into the groove until both are firmly seated. Space the remaining clamps so that they are equally distant from each other and wedge them into the groove in the roller. Roll the screen fabric onto the roller.
- (2) Slip the hanger tube into the screen fabric casing. Replace the support ring bracket. Replace the rubber tips on the ends of the screen hanger tube.
- (3) Lay the screen housing on a flat surface with the housing bolt toward the operator and with the screen slot up. Replace the screen-housing cap with the circular cut-out on the left-hand end of the screen housing. Aline the screw holes and insert and tighten the three screws.
- (4) Insert the cylindrical spindle end of the roller about half-way into the screen housing but with the hanger assembly outside the screen housing. Be careful not to damage the screen fabric by scraping it along the edge of the screen-housing slot.
- (5) Place the other cap over the flattened spindle of the roller. If the roller spring has been released, rewind it by holding the roller and turning the cap clockwise 30 full turns. Be sure the pawl engages the cam. Slide the roller, screen, and hanger assembly toward the cap attached to the housing and insert the cylindrical spindle of the roller into the circular cut-out in the screen-housing cap. Slip the other cap over the screen housing, aline the screw holes, and insert and tighten the three screws.
- (6) Replace the screen assembly on the tripod assembly by reversing the procedure outlined in *a*(1) and (2) above.



TM 2329-6

Figure 11. Screen PH-358-C, tripod assembly disassembled.

23. Tripod Assembly

(fig. 11)

a. To remove the tripod leg assembly from the tripod column, remove the stop screw and two washers on the tripod column below the upper bracket of the tripod leg assembly. Remove the lockout and bolt that hold the tripod column within the lower bracket of the tripod leg assembly. Slide the tripod leg assembly off the tripod column. To remove the handle attached to the upper bracket of the tripod leg assembly, remove its retaining screw.

b. To replace the tripod leg assembly on the tripod column, reverse the operations outlined in *a* above.

24. Screen-handle Assembly

(fig. 12)

a. DISASSEMBLY.

- (1) Remove the screen assembly from the tripod assembly (par. 22*a*(1) and (2)).
- (2) Remove the tripod leg assembly (par. 23*a*).
- (3) Remove the stop screw and two washers from the tripod column below the screen handle.
- (4) Press the screen-handle lock plate and slide the screen-handle assembly down off the lower end of the tripod column.
- (5) Free the lock plate from its position in the screen-handle mounting plate and remove the spring.
- (6) Remove the lock plate.

b. REASSEMBLY.

- (1) Replace the lock plate in the screen handle but do not seat the tip of the lock plate into the rectangular cut-out in the screen-handle mounting plate.
- (2) Replace the spring between the spring support and the lock plate. Be sure that the ends of the spring are entered into the two circular cut-outs of the lock plate.
- (3) Work the lock plate tip into the rectangular cut-out in the screen-handle mounting plate.
- (4) Press the screen-handle lock plate and slide the screen-handle assembly onto the lower end of the tripod column. Be sure that the lock plate handle is on the same side of the tripod column as is the extension rod lock plate handle.
- (5) Replace the stop screw and two washers in the tripod column.
- (6) Replace tripod leg assembly and the screen assembly.

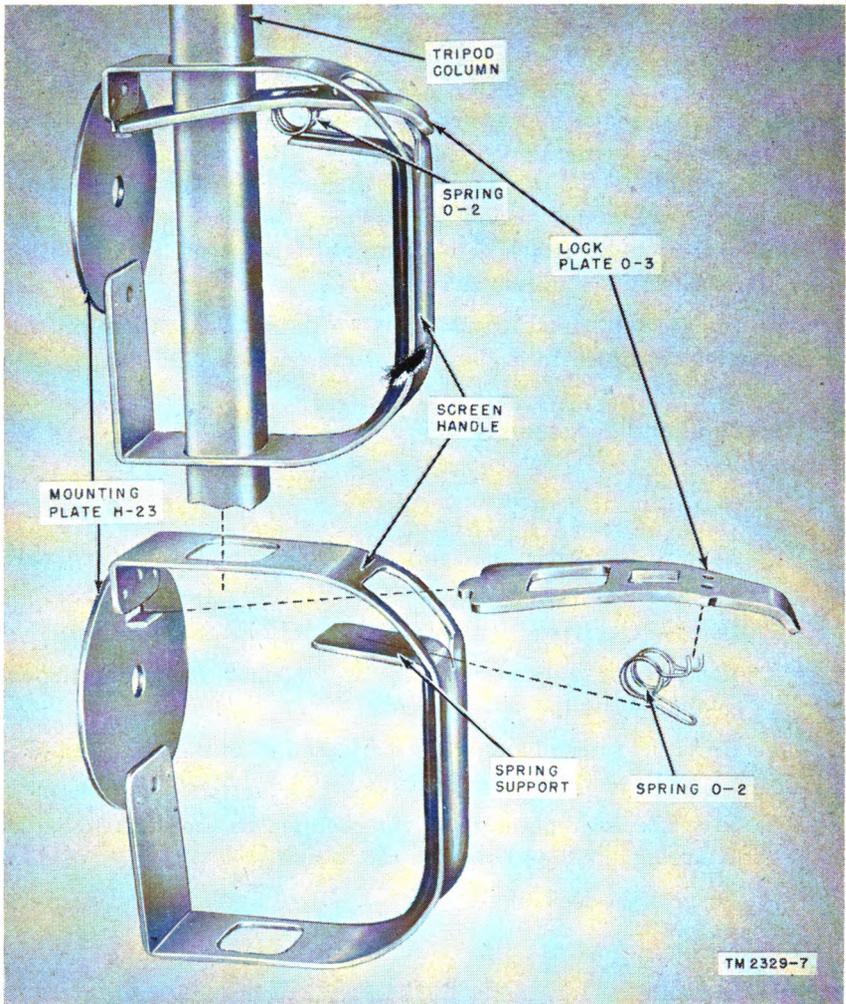


Figure 12. Screen PH-358-C, screen-handle assembly disassembled.

25. Extension Rod and Lock Plate Assembly

(fig. 13)

a. DISASSEMBLY.

- (1) Remove the screen assembly (par. 22a(1) and (2)) and the tripod leg assembly (par. 23a) from the tripod assembly.
- (2) Remove the two screws from the tripod column cap. Slide the cap up on the extension rod and remove the spring.
- (3) Lower the extension rod until it protrudes from the lower end of the tripod column. Remove the screw and guide plate from the lower end of the extension rod.
- (4) Remove the extension rod from the upper end of the tripod

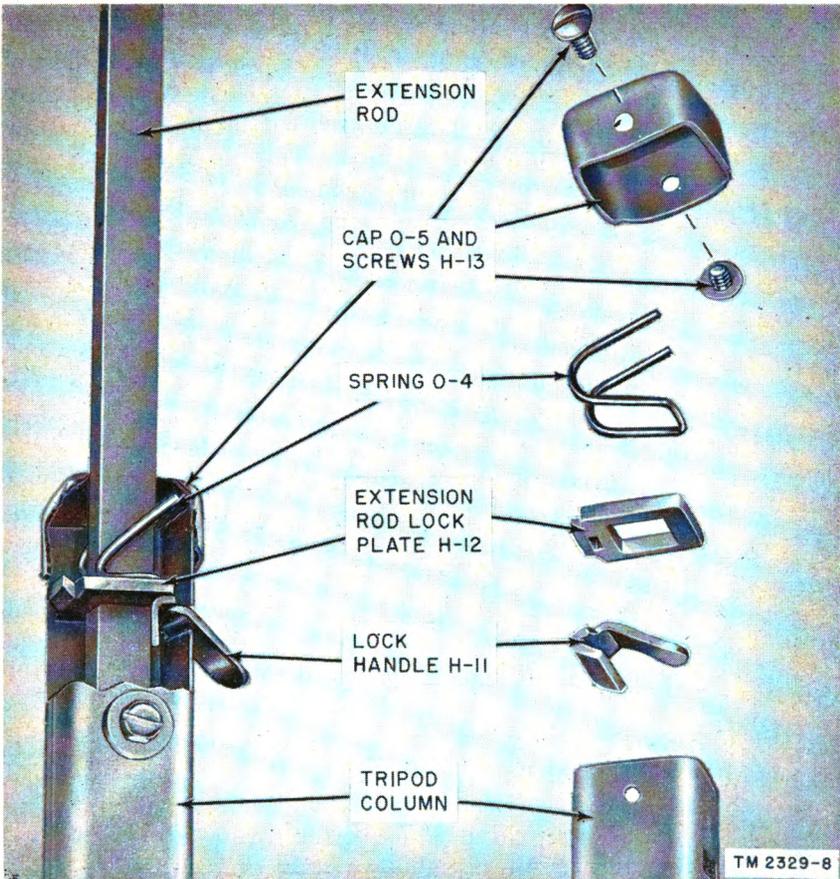


Figure 13. Screen PH-358-C, disassembly of extension rod lock assembly.

column. Slide the tripod column cap off the extension rod. Remove the extension rod lock plate and lock handle from the tripod column.

b. REASSEMBLY.

- (1) There are two screw holes in the tripod column cap. Slide the cap up on the extension rod so that neither screw hole is on the same side of the extension rod as is the screen hanger hook.
- (2) Place the lock handle inside the tripod column and guide the rounded end of the lock handle through the cut-out in the tripod column so that it extends downward toward the lower end of the tripod column. Hold the lock handle in position from the outside of the tripod column. Insert the lock plate into the tripod column and guide the small tip of the lock plate through the cut-out in the tripod column which is opposite the lock handle cut-out. Although the lock handle

will pass through either cut-out in the tripod column, the lock-plate tip will fit into only one of these cut-outs. Therefore, before starting reassembly of this portion of the equipment, try the lock-plate tip in each cut-out to determine the one into which it is to be seated. This check may be made from the outside of the tripod column.

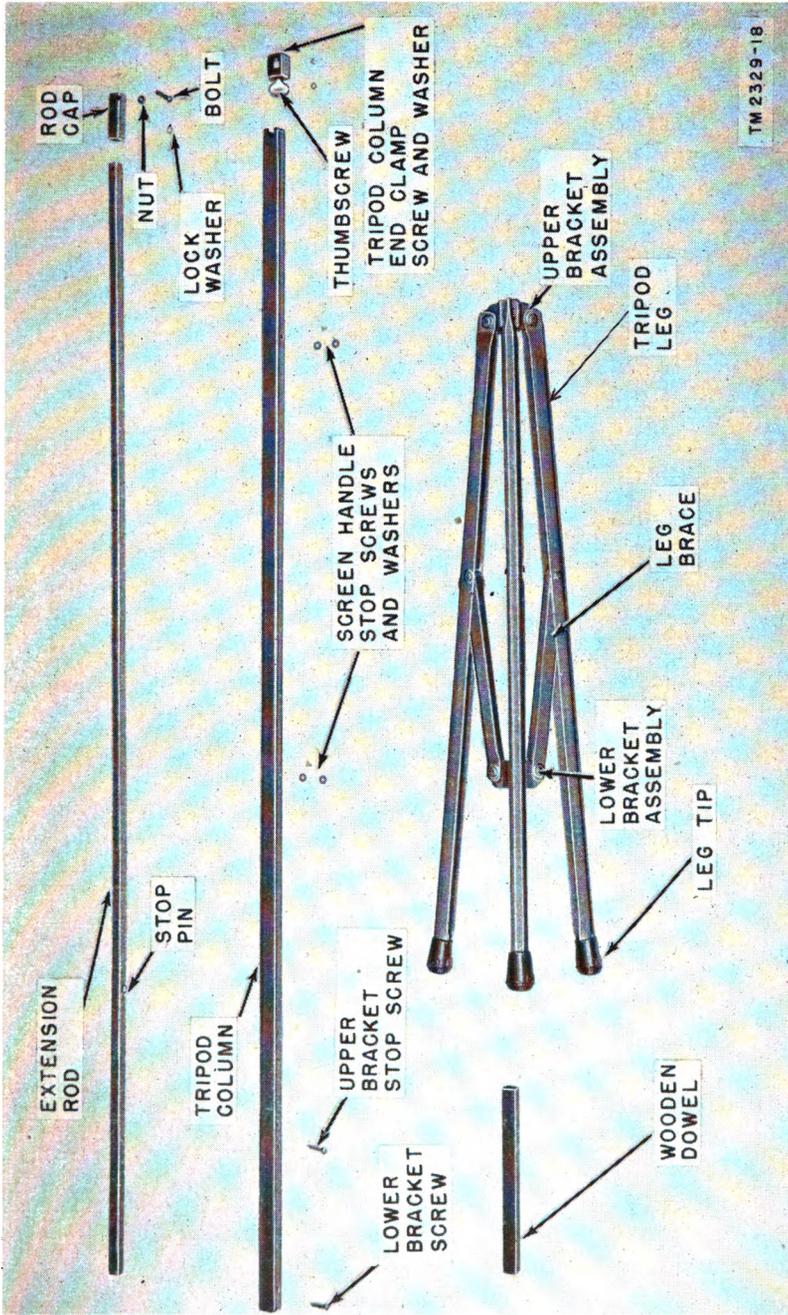
- (3) Guide the extension rod, with the tripod column cap on it, into the tripod column and through the square cut-out in the lock plate. Be sure that the extension rod hook is on the opposite side of the tripod column from the lock handle. Lower the extension rod through the tripod column until it protrudes from the lower end of the tripod column. Attach the guide plate to the extension rod with the screw in such a position that the cut-out on the outer edge of the guide plate will permit it to pass over the inside seam of the tripod column. Draw the extension rod up into the tripod column.
- (4) Replace the tripod leg assembly reversing the procedure outlined in paragraph 23a.
- (5) Insert the extension rod lock plate spring into the tripod column with the closed end of the spring resting on the extension rod lock plate and toward the lock-handle side of the tripod column.
- (6) Replace the tripod column cap on the tripod column and insert and tighten the two screws. It will be necessary to hold the cap down on the tripod column until the screws are in place because of the action of the spring against the cap.
- (7) Replace the screen assembly reversing the procedures outlined in paragraph 22a(1) and (2).

Section II. SCREEN PH-358-D

26. Tripod Assembly (fig. 14)

a. DISASSEMBLY.

- (1) Remove the retaining spring from its position over the rubber tips of the tripod legs.
- (2) Loosen the thumbscrew located in the tripod column end clamp. Remove the screw and washer which attach the end clamp to the tripod column. Pull the end clamp from the tripod column end onto the extension rod. Withdraw the extension rod from the tripod column.
- (3) Loosen the wingnut in the screen handle. Be sure the screen handle is in the unlocked position. Slip the screen-housing assembly, with the screen handle attached, from the tripod column.



TM 2329-18

Figure 14. Screen PH-358-D, tripod assembly disassembled.

- (4) Remove the nut and bolt which hold the extension rod cap in place and slip the cap off the extension rod. The tripod column end clamp may now be slipped off the extension rod.
- (5) To remove the tripod leg assembly from the tripod column, remove the stop screw on the tripod column below the top bracket of the tripod leg assembly. Remove the screw that holds the tripod column within the lower bracket of the leg assembly. Slide the leg assembly off the column. The wooden dowel, used as a stop within the lower end of the tripod column, is now free and can be removed.

b. **REASSEMBLY.** Reassemble the tripod assembly by reversing the procedures outlines in *a* above.

27. Screen Assembly (fig. 15)

a. **DISASSEMBLY.**

- (1) Remove the screen-housing assembly from the tripod assembly (par. 26a(1) through (3)).
- (2) Place the screen-housing assembly on a flat, clean surface so that the batten strip faces up and the mounting bracket and handle face away from the operator. Withdraw the screen fabric from the screen housing about 5 inches so that the pawl on the roller falls into place. The engaged pawl prevents the roller spring from unwinding suddenly when the screen-housing caps are removed. On the operator's right, remove the four screws that attach the cap to the screen housing. Gently remove the cap, taking care not to disturb the pawl on the roller. *Be sure to observe the position of the spacers which fit over the spindle at each end of the roller, so that they may be replaced properly when the screen housing is reassembled.* Remove the four screws and cap from the other end of the screen housing.
- (3) Slip the roller assembly from the screen housing. *Be sure that the screen fabric does not come in contact with the screen housing or any other surface that will mar the screen fabric.*
- (4) To disassemble the screen hanger assembly, remove the two screws from one of the screen guides on the ends of the metal batten strip and slide the strip off the wooden slat. Remove the screws from the other screen guide.
- (5) To remove the screen fabric from the roller, carefully unroll the fabric from the roller; at the same time, for ease of handling, reroll the fabric loosely around the wooden slat, beginning at the top of the screen fabric. The screen fabric

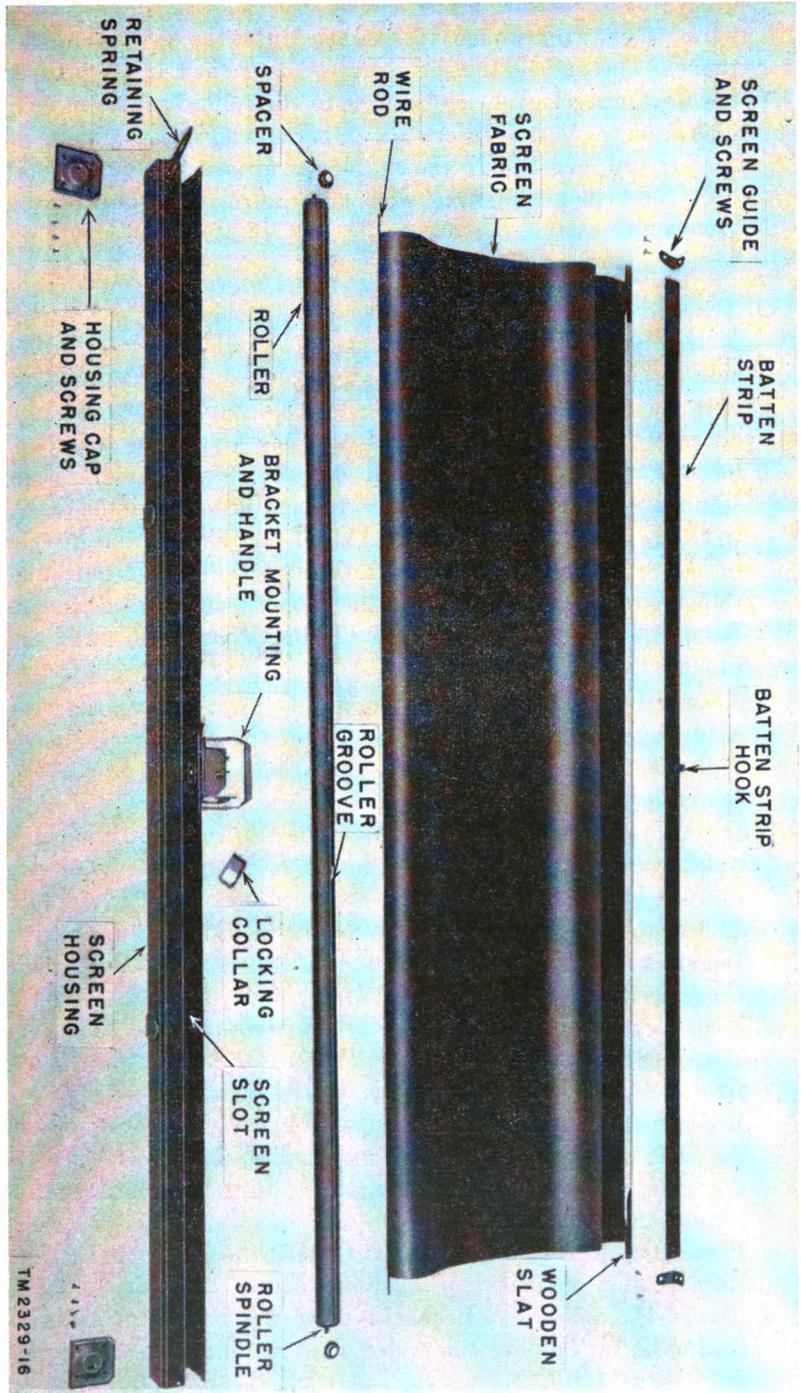


Figure 15. Screen PH-358-D, screen assembly disassembled.

TM 2329-16

is attached to the roller by means of a wire inserted into the groove of the roller. The screen fabric is cemented to the wire. The wire wedges the fabric into the groove in the roller. The end of the metal groove is turned in slightly to anchor the screen fabric and wire in the roller and to prevent lateral movement. Insert the tapered end of a punch, or similar tool, gently into the end of the groove, bend the metal back, and then slide the wire and fabric edge out of the groove.

b. REASSEMBLY.

- (1) The end of the screen fabric which is cemented to the wire is to be mounted on the roller. Loosely roll the fabric, white side in, on the wooden slat. Lay the fabric on a flat surface with the unrolled bottom end, white side up, away from the operator. Lay the roller on the working area near this edge, but to one side of the screen fabric, with the cylindrical spindle pointing to the right. Insert the end of the wire, with the screen fabric attached, into one end of the groove in the roller and draw the wire through the groove until the roller extends equally beyond the screen fabric on each side. Bend up the end of the groove. Roll the fabric onto the roller with the white side in.
- (2) Reassemble the screen hanger assembly by reversing the procedures outlined in *a(4)* above. *Be sure the screen fabric covers both sides and the top edge of the wooden slat before inserting the slat and screen fabric into the batten strip.*
- (3) Lay the screen housing on a flat surface so that the mounting bracket and handle are away from the operator and the screen slot is up. Place a spacer over each spindle of the roller so that the larger end of the spindle is adjacent to the roller. Insert the cylindrical-spindle end of the roller, with the screen fabric rolled thereon, about halfway into the right end of the screen housing but with the batten strip outside the screen Housing. *Be careful not to damage the screen fabric by scraping it along the edge of the screen housing slot.*
- (4) Replace the screen-housing cap with the circular cut-out on the left end of the screen housing. Aline the screw holes in the cap with those in the screen housing and insert and tighten the four screws.
- (5) Place the other cap over the flattened spindle of the roller. Be sure that the notch in the shoulder of the spindle faces toward the operator. If the roller spring has been released, rewind it by holding the roller and turning the cap clockwise about 7 full turns. Be sure that the pawl falls firmly into the notch. Slide the roller, screen, and batten strip

assembly toward the cap at the left end of the screen housing and insert the cylindrical spindle of the roller into the circular cut-out in the screen-housing cap. Position the other cap over the right end of the screen housing. Aligne the screw holes in the cap with those in the screen housing and insert and tighten the four screws.

- (6) Working from the rear of the tripod column and with the column in an upright position, replace the screen-housing assembly on the column by reversing the operations given in paragraph 25a(1) through (3). Be sure to place the locking collar over the tripod column just above the lower offset of the mounting bracket, with the bent end of the locking collar to the left and facing downward.

Section III. SCREEN PH-358-E

28. Tripod Assembly (figs. 16 and 17)

a. DISASSEMBLY.

- (1) Lay the equipment on a flat surface with the tripod assembly away from the operator and with the screen hanger tube facing up.
- (2) Remove the spring stop-pin clamp from the top of the tripod column.
- (3) Withdraw the extension rod from the tripod column until it offers resistance. A sharp pull on the extension rod will free the tripod column cap from the tripod column. (The stop on the extension rod engages the tripod column cap.)
- (4) Press down on the engaging plunger (fig. 16) and slide the screen housing toward the top of the tripod column until the engaging plunger is alined with the widened portion of the plunger slot in the tripod column. Slightly rotate the screen housing to permit grasping the engaging plunger. Withdraw the engaging plunger. *Be sure not to mislay the engaging plunger.*
- (5) Withdraw the extension rod from the tripod column. The spring plate will be ejected from the tripod column. *Be sure not to mislay the spring plate.*
- (6) Slide the screen-handle bracket off the top of the tripod column.
- (7) To remove the extension rod hook from the extension rod, remove the self-tapping retaining screw.
- (8) To remove the tripod leg assembly from the tripod column,

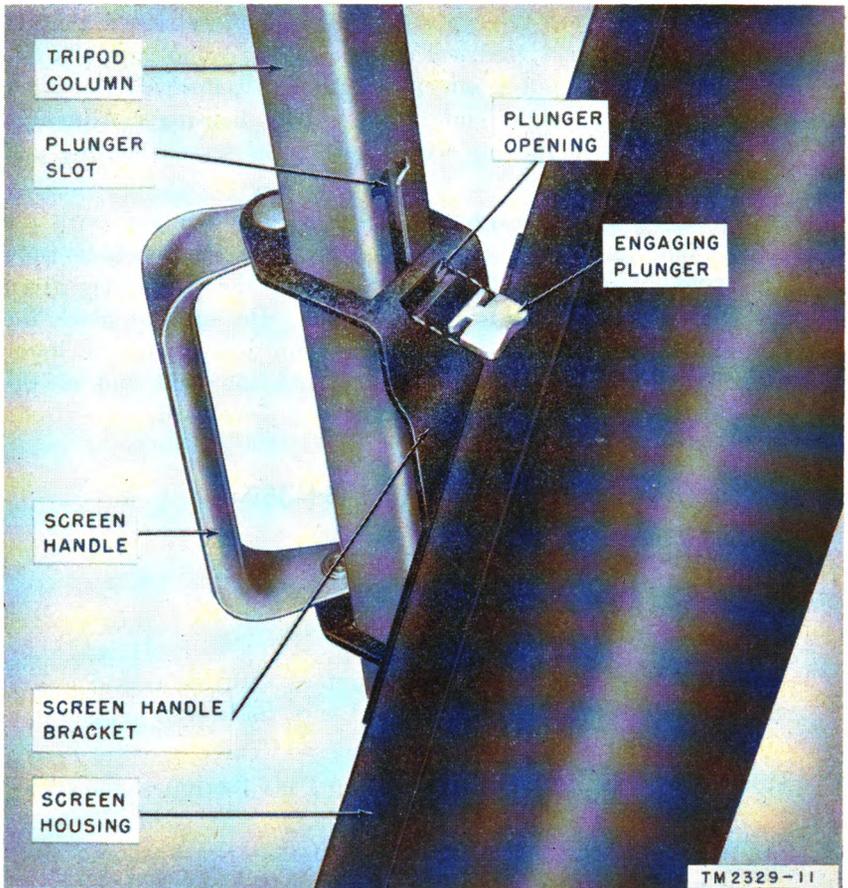


Figure 16. Screen PH-358-E, engaging plunger removed.

remove the hexagonal bolt and locknut which hold the tripod leg assembly in position. Slip the leg assembly off the lower end of the tripod column.

b. **REASSEMBLY.** Reassemble the equipment, reversing the operations outlined in *a* above. Observe the following precautions:

- (1) When attaching the tripod leg assembly to the lower bracket, be sure to apply the locknut to the hexagonal bolt in such a manner that its edges bind on the inner walls of the tripod column to facilitate tightening the locknut.
- (2) Be sure to replace the spring plate between the extension rod and tripod column so that the side of the extension rod, with the stop-pin holes, is forced against the side of the tripod column in which the plunger slot is located. Insert the long end of the angled spring plate first so that this end bears against the extension rod.

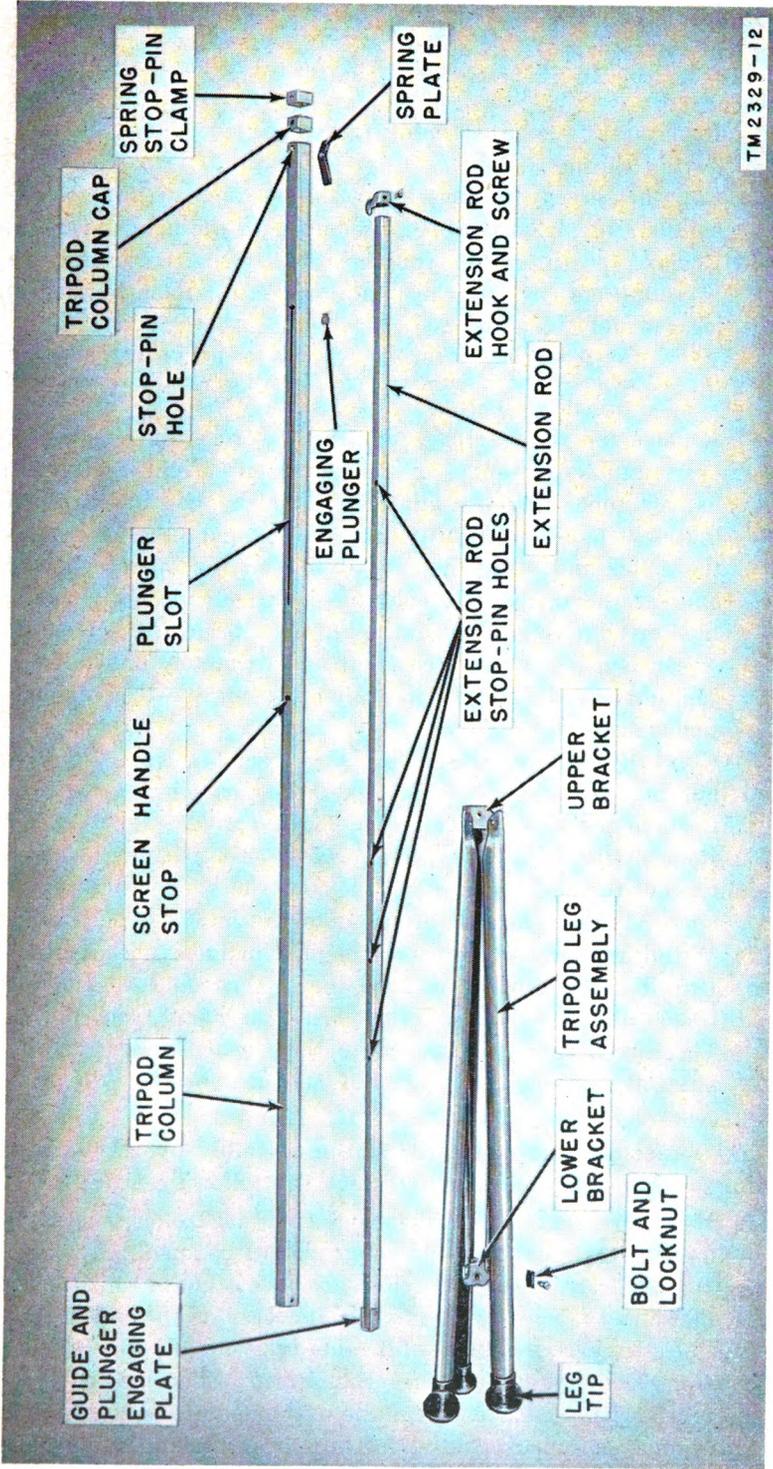


Figure 17. Screen PH-358-E, tripod assembly disassembled.

29. Screen Assembly (fig. 18)

a. DISASSEMBLY.

- (1) Remove the screen assembly from the tripod assembly (par. 28a(1) through (6)).
- (2) Lay the screen assembly on a flat surface with the screen handle away from the operator and with the hanger tube up.
- (3) Remove the three self-tapping screws from the housing cap (circular cut-out) at the operator's left. Remove the cap. leg assembly in position.

Note. When removing this cap, be sure that the flattened spindle at the other end of the roller is not disengaged from the rectangular cut-out in the cap at the other end of the housing.

- (4) Remove the three self-tapping screws from the housing cap (rectangular cut-out) at the operator's right. Hold the hanger tube with the left hand and the housing cap with the right hand. Carefully move the hanger tube (this moves the roller and screen assembly) toward the operator's right and, at the same time, hold the housing cap firmly against the screen roller. When the cap has been freed from the screen housing, slowly release it approximately one-half turn counterclockwise until the roller spring pawl is engaged. Remove the cap.
- (5) Carefully remove the screen fabric assembly from the screen housing. *Be sure not to damage the screen fabric by scraping it along the edge of the screen-housing slot.*
- (6) Remove the two self-tapping screws that attach the hanger bracket to the hanger tube. Remove the hanger bracket and ring. The ring is not attached to the bracket.
- (7) Withdraw the hanger tube from the hanger tube casing.
- (8) Unroll the screen fabric from the screen roller, at the same time rolling the screen fabric back on itself from the top. The screen fabric is stapled to the wooden roller. If it is necessary to replace either the screen fabric or the roller, remove the staples.

b. REASSEMBLY. Reassemble the screen assembly by reversing the procedures outlined in *a* above. Observe the following:

- (1) If the screen fabric is detached from the roller, the staples used to reattach it to the roller should be spaced $2\frac{1}{2}$ inches apart. A groove in the roller provides a guide for attaching the screen fabric so that it will roll evenly on the screen roller. Place the screen fabric, white side up, with the top end away from the operator. Place the screen roller on the screen fabric with the flattened spindle to the operator's right. Bring the screen fabric up and forward over the roller, and aline

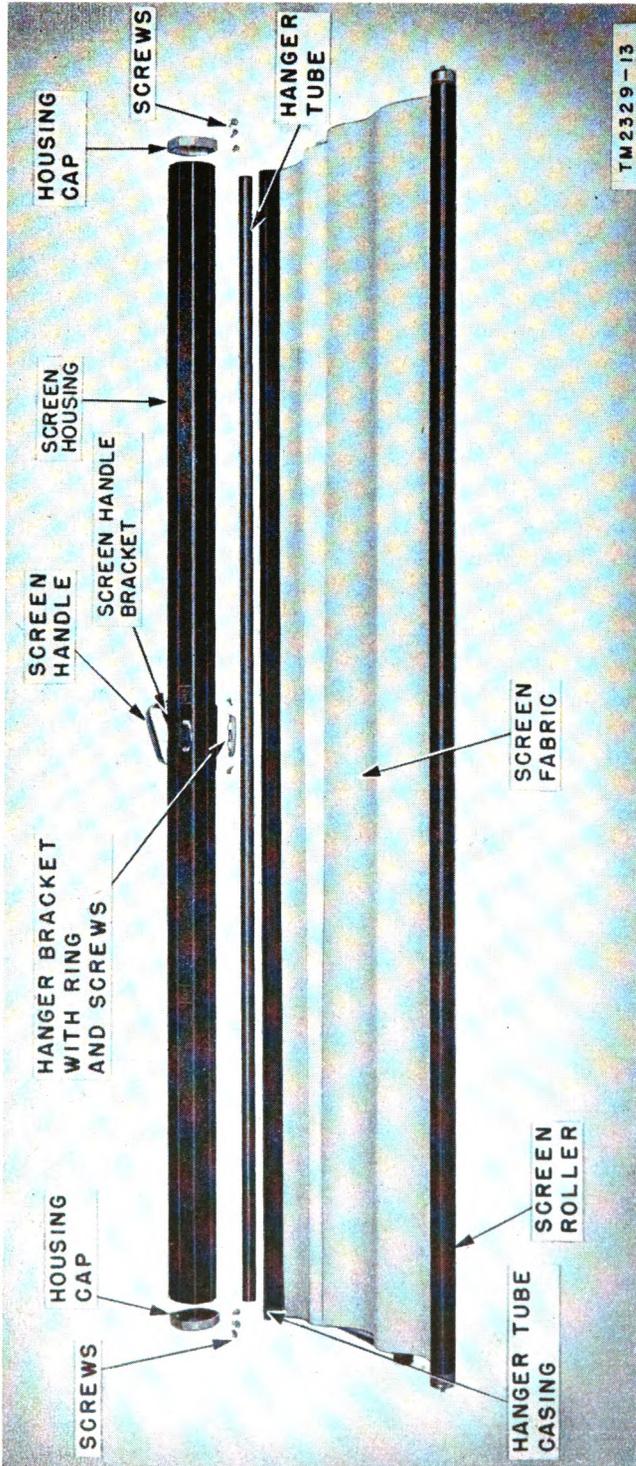


Figure 18. Screen PH-358-E, screen assembly disassembled.

the edge of the fabric with the roller guide groove. Center the roller. Staple the fabric to the roller.

- (2) The hanger bracket for the hanger ring has a deeper cut-out on one side. Attach the bracket to the hanger tube with the deeper cut-out toward the operator.
- (3) If the spring roller tension has been released, return the screen fabric assembly to its position in the screen housing with approximately 2 inches of the assembly protruding from the right end of the housing. Place the cap with the rectangular cut-out over the flattened spindle. Turn the cap clockwise until the screen fabric is rolled tightly on the roller. The hanger tube acts as a stop when it is snug against the screen housing. Continue to turn the screen housing cap 25 full turns clockwise. Slowly release the cap counterclockwise until the spring roller pawl is engaged.
- (4) When reassembling the cap with the rectangular cut-out on the screen housing, turn it clockwise until the screw holes are aligned. This increases the roller spring tension.
- (5) When reassembling the cap with the circular cut-out on the screen housing, slightly raise the hanger tube to guide the cylindrical spindle into the circular cut-out of the cap.

CHAPTER 5

SHIPMENT AND STORAGE AND DEMOLITION TO PREVENT ENEMY USE

Section I. SHIPMENT AND STORAGE

30. Packaging

- a. Place the screen in the carrying bag.
- b. Place the carrying bag in the original carton. If the original carton is not available, a carton 76½ inches long, 7 inches wide, and 3¾ inches deep may be made from 200-pound test corrugated paper, stapled along the open edge and at the end. Insert two fillers, one at each end, to form collars for the respective ends to support the equipment in the carton, and to provide added cushioning at the ends. Seal the open end with gummed Kraft tape.

31. Packing

Screens may be packed singly, as described in paragraph 30, or in groups of two or four units. If two or four units are packed together, place each unit in a corrugated carton (par. 30). Strap the units together with three ½-inch metal straps evenly spaced along the cartons. Place corrugated fiberboard strips under the straps to prevent crushing at the corners.

Section II. DEMOLITION TO PREVENT ENEMY USE

32. General

The demolition procedures outlined in paragraphs 33 and 34 will be used to prevent the enemy from using or salvaging this equipment. Demolition of equipment will be accomplished *only* upon order of the commander.

33. Methods of Demolition

- a. *Smash.* Use sledges, axes, handaxes, pickaxes, hammers, crowbars, heavy tools.
- b. *Cut.* Use axes, handaxes, machetes.
- c. *Burn.* Use gasoline, kerosene, oil, flame throwers, incendiary grenades.
- d. *Explode.* Use firearms, grenades, TNT.
- e. *Dispose.* Bury in slit trenches, fox holes, other holes. Throw in streams. Scatter.

f. Other. Use anything immediately available for destruction of this equipment.

34. Destruction of Components

a. Smash the screen-housing assembly, screen hanger tube, and tripod assembly.

b. Cut the screen fabric and carrying bag.

c. Burn the screen fabric, the carrying bag, and all instruction books.

d. Bury or scatter all remaining parts of the equipment.

e. Destroy everything.

APPENDIX I

REFERENCES

Note. For availability of items listed, check SR 310-20-3, SR 310-20-4, and Department of the Army Catalog SIG 1.

1. Army Regulations

AR 380-5 Safeguarding Military Information.

2. Supply Publications

SB 11-47 Preparation and Submission of Requisitions for
Signal Corps Supplies.

SB 11-76 Signal Corps Kit and Materials for Moisture-
and Fungi-Resistant Treatment.

SB 11-124 Repair of Photographic Equipment.

3. Technical Manuals

TM 11-401 Training Film and Film Strip Projection.

TM 11-2324 Fundamentals of Photography.

TM 11-2325 Specialized Photography.

TM 28-410 Projectionists Manual: Army Motion Picture
Service.

TM 38-650 Basic Maintenance Manual.

4. Technical Bulletins

TB SIG 13 Moistureproofing and Fungiproofing Signal
Corps Equipment.

TB SIG 66 Winter Maintenance of Signal Equipment.

TB SIG 72 Tropical Maintenance of Ground Signal Equip-
ment.

TB SIG 75 Desert Maintenance of Ground Signal Equip-
ment.

TB SIG 123 Preventive Maintenance Practices for Ground
Signal Equipment.

TB SIG 149 Tropicalization of Photographic Equipment.

TB SIG 211 Still and Motion Picture Data and Formulary.

5. Joint Army-Navy Packaging Specifications

JAN-P-100 General Specifications.

JAN-P-116 Preservation, Methods of.

JAN-P-125 Barrier-Materials, Waterproof, Flexible.

JAN-P-131 Barrier-Material, Moisture-Vaporproof, Flexible.

6. U. S. Army Specifications

- 100-2E Marking Shipments by Contractors (and Signal
 Corps Supplement thereto).
100-14A Army-Navy General Specification for Packag-
 ing and Packing for Oversea Shipment.

7. Signal Corps Instructions

- 720-7 Standard Pack.
726-15 Interior Marking.

8. Special Regulations

- SR 750-405-6 Maintenance of Supplies and Equipment—Sig-
 nal Maintenance Facilities.

APPENDIX II

IDENTIFICATION TABLE OF PARTS

Note. The fact that an item appears in this technical manual is not sufficient basis for requisitioning it. Requisitions must cite an authorized basis, such as T/O&E's, TA's, T/BA's, SIG 6, SIG 7, SIG 8, SIG 7&8, SIG 7-8-10, SIG 10, list of allowances of expendable material, or another authorized supply basis. The Department of the Army Supply Catalog applicable to the equipment covered in this manual is listed in paragraph 1 below.

1. Department of the Army Supply Catalog Reference

The following information was compiled on 17 November 1949. The appropriate Department of the Army Supply Catalog for Screens PH-358-C, PH-358-D, and PH-358-E is—

*Organizational Maintenance Allowances
and Field and Base Maintenance
Stockage Guide, SIG 7&8-PH-358.*

2. Screen PH-358-C

Ref. symbol	Name of part and description	Function of part	Signal Corps stock No.
Fig. 2	BAG: carrying; duck, olive drab; 76" lg x 10" wd overall; draw string closing on one end; olive drab webbing handle.	Provides means of carrying screen and protects screen.	8F235-1
H-26	BOLT, machine: welding, type H-1; steel; $\frac{5}{16}$ "-18; $\frac{5}{8}$ " lg.	Attaches screen assembly to tripod assembly.	6L605-.6
A-2	BRACE, leg: U-shaped; steel, zinc pl; $9\frac{5}{16}$ " lg x $\frac{5}{16}$ " wd x $\frac{1}{16}$ " h overall.	Braces tripod leg.	8F400
A-9	BRACKET: steel; $2\frac{1}{32}$ " lg x $2\frac{3}{4}$ " wd x $2\frac{3}{8}$ " h overall.	Provides means of attaching screen housing to tripod assembly.	8F450
H-27	BRACKET: steel, zinc pl; 2" lg x $\frac{5}{8}$ " wd x 0.0478" thk overall.	Attaches ring to hanger tube.	8F450-1
A-8	BRACKET: upper; aluminum, anodized; approx $2\frac{3}{16}$ " lg x $2\frac{1}{8}$ " wd x $1\frac{3}{8}$ " h overall.	Provides means of attaching tripod legs to tripod column.	8F450-2
A-7	BRACKET: lower; aluminum, anodized; approx $2\frac{3}{16}$ " lg x $2\frac{1}{8}$ " wd x $1\frac{3}{8}$ " h overall.	Provides means of attaching leg braces to tripod column.	8F450-3
	CAM: pawl; steel; $\frac{5}{8}$ " diam x $\frac{5}{16}$ " thk; $\frac{3}{16}$ " x $\frac{1}{4}$ " hole through ctr; $\frac{3}{16}$ " tapered to $\frac{3}{32}$ " x $\frac{3}{32}$ " d notches 2 sides.	Receives pawl to control action of screen roller spring.	8F650
O-5	CAP: steel, zinc pl; 0.928" sq x $\frac{1}{2}$ " h overall.	Retains extension rod lock plate spring on tripod column.	8F716
H-11	HANDLE: steel, zinc pl; $\frac{1}{16}$ " lg x $\frac{5}{8}$ " wd x $\frac{1}{2}$ " h overall.	Locks extension rod.	8F4000
H-15	HOOK: extension rod; steel, zinc pl; $3\frac{3}{16}$ " lg x $1\frac{3}{8}$ " h x $\frac{1}{16}$ " w overall.	Supports projection area of screen.	8F4500
A-6	LEG, tripod: steel, zinc pl; U-shaped wall; $26\frac{3}{4}$ " lg x $\frac{1}{16}$ " wd x $2\frac{7}{32}$ " h overall.	Supports tripod column and assemblies attached thereto.	8F5500
H-17	NUT, lock: elastic stop nut type; steel; #10-32.	Holds lower bracket screw in place.	6L3610 32.4-TC
H-24	NUT, lock: elastic stop nut type; steel; $\frac{5}{16}$ "-18.	Attaches screen-housing bolt to screen-handle mounting plate.	6L3505 18.3S
	PAWL: ratchet, steel, brass pl; $\frac{5}{16}$ " lg x $\frac{5}{16}$ " wd x $\frac{3}{32}$ " thk; $\frac{5}{32}$ " diam mtg hole in one end.	Engages pawl cam to control action of screen roller spring.	8F5950
O-1	PLATE, guide: extension rod guide; aluminum, anodized; $\frac{3}{4}$ " lg x $\frac{3}{4}$ " wd x $\frac{1}{8}$ " thk overall.	Guides extension rod within tripod column.	8F6000
H-12	PLATE, lock: steel, zinc pl; $\frac{1}{16}$ " lg x $\frac{5}{8}$ " wd x 0.119" thk overall.	Locks extension rod.	8F6000-2
O-3	PLATE, lock: CRS, zinc pl; $3\frac{3}{32}$ " lg x $1\frac{17}{32}$ " wd x $\frac{1}{8}$ " thk overall.	Locks screen handle.	8F6000 3

Ref. symbol	Name of part and description	Function of part	Signal Corps stock No.
H-23	PLATE, mounting: steel; 2 ¹⁵ / ₁₆ " diam x 0.074" thk overall.	Mounts screen handle to screen housing.	8F6000-1
O-8	RING, support: steel, zinc pl; approx 1 ¹ / ₈ " lg x ¹ / ₈ " wd x 0.1205" thk overall.	Supports screen hanger tube on extension rod hook.	8F7400
	RIVET, solid: steel, brass pl; FH; ¹ / ₈ " diam; ¹ / ₄ " lg.	Attaches carrying handle to bracket mounting.	6L4302-.25
H-2, H-20	RIVET, tubular: steel; oval hd; ³ / ₁₆ " diam; ³ / ₈ " lg overall.	Attaches tripod brace to lower bracket and tripod leg to upper bracket.	6L4303-.37
H-4	RIVET, tubular: steel; oval hd; ³ / ₁₆ " diam; ¹ / ₈ " lg overall.	Attaches tripod braces to tripod legs.	6L4303-.87
H-14	RIVET, tubular: steel; oval hd; ⁵ / ₃₂ " diam; ⁹ / ₁₆ " lg overall.	Attaches hook to extension rod.	6L4303-.56
O-10	ROLLER ASSEMBLY, projection screen: 7 ¹ / ₈ " lg x 1 ¹ / ₂ " diam overall.	Provides means of rolling and unrolling screen fabric.	8F7500
	SCREEN, projection: portable; 67" lg x 52" wd; Matte-White vinylite fabric; unmounted, w/vinylite slat pocket 67" lg x 3 ¹ / ₂ " wd; ends cemented and metal stapled.	Provides reflecting area for projected images.	8F7701
H-1	SCREW, machine: RH; steel; #10-32; 1 ¹ / ₈ " lg.	Attaches lower bracket to tripod column.	6L7032-18.49S
H-3	SCREW, machine: RH; steel; ¹ / ₄ "-20; ³ / ₈ " lg.	Attaches guide plate to extension rod.	6L7920-4-6.1S
H-13	SCREW, self tapping: RH; steel; #6-18; ³ / ₁₆ " lg.	Attaches cap to tripod column.	6L18206-3.1S
H-5, H-9, H-19, H-22	SCREW, self tapping: hex hd; steel; #8-15; ¹ / ₄ " lg.	Attaches handle to upper bracket.	6L18208-4.81S
O-4	SPRING: loop type; 0.067" diam music wire; zinc pl; 1 ¹ / ₁₆ " lg x 1 ⁹ / ₃₂ " wd x 1 ⁵ / ₁₆ " h overall; U-shaped.	Provides spring tension on extension rod lock plate.	8F7900-1
O-2	SPRING: torsion type; 0.055" diam music wire; zinc pl; ¹ / ₂ " OD x ¹ / ₁₆ " h overall; approx 4 turns.	Provides spring tension on screen-handle lock plate.	8F7900
H-16	TIP, leg: rubber; 1 ⁵ / ₁₆ " OD x 1 ⁵ / ₁₆ " h overall; #16; Lavelle Rubber Co.	Minimizes tripod slippage.	8F8500
H-10, H-18, H-21	WASHER, flat: steel; round, 0.172" ID, ¹ / ₁₆ " OD, 0.051" thk.	Offsets stop screws in tripod column.	6L58023-9.1
H-25	WASHER, flat: steel; round, ³ / ₈ " ID, ¹ / ₈ " OD, 0.090" thk.	Separates screen-handle mounting plate from screen-housing bracket, and screen-housing bracket from nut on screen-housing bolt.	6L60005

3. Screen PH-358-D

Fig. Ref. symbol	Name of part and description	Function of part	Signal Corps stock No.
	BAG: carrying; canvas, olive drab; 75" lg x 8" diam; strap and buckle fastening; double loop webbing handle.	Provides means of carrying screen and protects screen.	8F235-2
14	BOLT, stove: slot drive; RH; steel; normal hardness; $\frac{1}{4}$ "-20; $\frac{3}{8}$ " lg.	Attaches screen housing to mounting bracket.	6L804-.7R
14	BRACE, leg: U-shaped; steel, cad pl; $9\frac{7}{16}$ " lg x $\frac{3}{16}$ " wd x $\frac{3}{16}$ " thk.	Braces tripod leg.	8F400-1
14	BRACKET ASSEMBLY: c/o ctr bracket, LH bracket, and RH bracket; steel, cad pl; $2\frac{5}{16}$ " lg x $1\frac{1}{16}$ " wd x $1\frac{3}{4}$ " h.	Attaches tripod leg assembly to lower end of tripod column.	8F450-4
14	CAP: steel, cad pl; 2" lg x $\frac{5}{8}$ " sq-----	Reinforces top of extension rod to support batten strip hook.	8F717-1
15	CAP: steel, cad pl; $2\frac{5}{8}$ " lg x $2\frac{5}{8}$ " wd x $\frac{1}{2}$ " h.	Covers left-hand end of housing and supports left-hand spindle of roller assembly.	8F717-2
15	CAP: steel, cad pl; $2\frac{5}{8}$ " lg x $2\frac{5}{8}$ " wd x $\frac{1}{2}$ " h.	Covers left-hand end of housing and supports left-hand spindle of roller assembly.	8F717
7	CLAMP: cad pl; one thumbscrew and one wingnut employed; $2\frac{1}{4}$ " lg x $1\frac{5}{8}$ " wd x $3\frac{1}{32}$ " thk.	Provides additional means of securing screen housing in desired position on tripod column.	8F965
14	CLAMP: steel, cad pl; one thumbscrew employed; $1\frac{1}{16}$ " lg x $\frac{7}{8}$ " wd x $1\frac{1}{16}$ " h.	Provides means of locking extension rod in desired position.	8F965-1
6	COLLAR, locking: 2" lg x $1\frac{1}{4}$ " wd x $\frac{5}{16}$ " d overall; one $\frac{3}{4}$ " sq hole $\frac{5}{16}$ " from one end, other end bent at 90° for $\frac{1}{2}$ ".	Locks mounting bracket in position on tripod column.	8F1100
15	GUIDE, projection screen: LH; steel, black crackle finish; L-shaped (90°) w/rounded corners; $1\frac{1}{2}$ " lg x $1\frac{1}{16}$ " wd x 1" d.	Guides batten strip into housing.	8F2400
15	GUIDE, projection screen: RH; steel, black crackle finish; L-shaped (90°) w/rounded corners; $1\frac{1}{2}$ " lg x $1\frac{1}{16}$ " wd x 1" d.	Guides batten strip into housing.	8F2400-1
6	HANDLE: carrying; steel, cad pl; 4" lg x $\frac{7}{8}$ " wd x $2\frac{1}{8}$ " h; $\frac{3}{4}$ " steel grip; locking, folds flat when not in use.	Provides means for grasping equipment for carrying and of holding locking collar in locked position.	8F4000-1
15	HOUSING: steel, black crackle finish; $71\frac{1}{8}$ " lg x $2\frac{5}{8}$ " wd x $2\frac{5}{8}$ " h.	Outer case of projection screen.	8F4525

Fig. Ref. symbol	Name of part and description	Function of part	Signal Corps stock No.
14	LEG, tripod: steel, cad pl; U-shaped; 23" lg x 1 $\frac{1}{16}$ " wd x 1 $\frac{1}{16}$ " thk. NUT, hexagon: steel, cad pl; 1 $\frac{1}{4}$ "-20; 1 $\frac{1}{32}$ " thk; 1 $\frac{1}{16}$ " wd across flats.	Supports tripod. Used in attaching screen housing to mounting bracket.	8F5500-1 6L3504-20Z
14	ROD, extension: steel, cad pl; 54" lg x 1 $\frac{1}{2}$ " wd x 1 $\frac{1}{2}$ " thk.	Adjusts height of viewing screen.	8F7475
15	ROLLER ASSEMBLY, projection screen: steel, black enamel finish; 71" lg x 1 $\frac{1}{2}$ " diam.	Provides means for rolling and unrolling projection screen.	8F7500-1
15	SCREEN, projection: 50" x 67"; vinyl coated fabric; solid, diffused surface; unmounted.	Provides reflecting surface for projected images.	8F7701-1
14 and 15	SCREW, self tapping: slot drive; RH; steel, cad pl; #6-18; 1 $\frac{1}{16}$ " lg.	Attaches caps to screen housing, screen guides to batten strip, lower bracket to tripod column, and wooden dowel within tripod column.	6L18206-8.49
14	SHAFT: steel, cad pl; 3 $\frac{1}{4}$ " sq tubing x 54 $\frac{1}{2}$ " lg.	Tripod column.	8F7800
15	SLAT, wood: oak; batten strip; 69" lg x 1 $\frac{1}{2}$ " wd x 3 $\frac{3}{8}$ " thk; planed; grade #1; kiln dried; treated for fungus resistance.	Provides means for attaching screen fabric to batten strip.	8F7825
8	SPRING: helical extension type; 0.033" diam music wire; 0.190" diam x 9 $\frac{1}{2}$ " lg; approx 280 turns.	Holds tripod legs against screen housing when collapsed for carrying or storing.	6E7900-2
15	STRIP, batten: steel, black crackle finish; 69 $\frac{1}{4}$ " lg x 1 $\frac{1}{8}$ " wd x 1 $\frac{1}{16}$ " thk.	Serves as mounting and support for top of screen fabric.	8F7925
14	SCREW, self tapping: RH; steel; #6-18, 1 $\frac{1}{16}$ " lg.	Attaches end clamp to tripod column and provides stops on tripod column to limit movement of screen housing.	6L18206-3.1S
8	TIP, leg: for sliding on ends of tripod legs; rubber; 5 $\frac{1}{8}$ " ID, 1 $\frac{1}{2}$ " lg; rubber crutch tip. WASHER, flat: steel, cad pl; round, 1" OD x 1 $\frac{1}{16}$ " ID.	Minimizes tripod slippage. Used with bolt attaching screen housing to mounting bracket.	8F8500-1 6L58027C
	WASHER, flat: steel, cad pl; round, 1 $\frac{3}{8}$ " diam with 1 $\frac{1}{4}$ " hole.	Used with bolt attaching screen housing to mounting bracket.	6L53024-33C
14	WASHER, flat: steel, cad pl; round, 1 $\frac{1}{8}$ " ID x 1 $\frac{1}{16}$ " OD x 1 $\frac{1}{32}$ " thk.	Used with stop screws on tripod column.	6L58014

4. Screen PH-358-E

Fig. ref.	Name of part and description	Function of part	Signal Corps stock No.
	BAG: carrying; canvas, olive drab . . .	Provides means of carrying screen and protects screen when not in use.	8P15-1-5
17	CAP: steel; sq; sq cut-out in top; hole in outer rim; w/self-tapping screw.	Provides guide for upper portion of extension rod within tripod column.	8P15-1-13
17	CAP (extension rod hook)	Provides means of suspending extended screen fabric. Locks housing in carrying position.	8P15-1-10
18	CAP: steel; octagonal; 3 holes in outer rim; circular hole ctr; w/3 screws.	Covers RH end of housing and supports RH spindle of roller assembly.	8P15-1-11
18	CAP: steel; octagonal; 3 holes in outer rim; rectangular hole ctr; circular hole near outer rim; w/3 screws.	Covers LH end of housing and supports LH rectangular spindle of roller assembly.	8P15-1-12
17	CLIP: spel spring; max opening approx $1\frac{5}{16}$ " ; (stop-pin clamp).	Provides means of regulating height of extension rod. Locks extension rod in carrying position.	8P15-1-20
17	COLUMN, projection screen	Provides frame upon which are assembled principal parts of equipment. Houses extension rod.	8P15-1-25
16	HANDLE: screen carrying; $4\frac{1}{16}$ " lg x 1" wd x $1\frac{3}{8}$ " h.	Provides means for grasping equipment for carrying.	8P15-1-40
18	HOUSING: projection screen housing.	Protects portion of screen fabric within housing.	8P15-1-50
17	NUT, lock: speed nut; #10-24; $\frac{3}{4}$ " lg.	Provides means for securing tripod column to tripod leg assembly.	6L3660-245
18	RING, support	Provides means of suspending extended screen fabric on extension rod cap.	8P15-1-70
17	ROD, extension	Provides means for adjusting height of viewing screen.	8P15-1-80
18	ROLLER ASSEMBLY, projection screen.	Provides means for rolling and unrolling screen.	8P15-1-90
18	SCREEN, projection: portable; 50" x 67".	Reflecting surface for projected images.	8P15-1-100
18	SCREW, self-tapping: slot drive; RH #6; $\frac{3}{8}$ " lg.	Secures housing caps to screen housing.	6L7024-8.87
17	SPRING: flat type; $2\frac{1}{4}$ " lg x $\frac{3}{4}$ " wd x $\frac{3}{8}$ " h x 0.016" thk.	Exerts pressure against extension rod within tripod column to maintain stop-pin positions in stop-pin holes of extension rod.	8P15-1-110

Fig. ref.	Name of part and description	Function of part	Signal Corps stock No.
17 18	TIP, leg: rubber----- TUBING: 1/8" OD-----	Minimizes tripod slippage. Provides mounting surface and support for top of screen fabric.	8F8500-1 8P15-1-130
18	TRIPOD: for projection screen; collapsible; 27" lg collapsed, 18" h when legs are extended.	Supports tripod column and provides means for setting up equipment.	8P15-1-120

INDEX

	<i>Paragraph</i>	<i>Page</i>
Adjusting:		
Height of screen:		
PH-358-C -----	13b	12
PH-358-D -----	14b	15
PH-358-E -----	15c	19
Screen viewing area:		
PH-358-C -----	13c	13
PH-358-D -----	14c	15
PH-358-E -----	15b	19
Bag, carrying:		
Description -----	8	10
Opening -----	10b	11
Carrying bag -----	8, 10b	10, 11
Checking -----	10c	11
Column, tripod, description -----	6a	5
Components, table -----	4	3
Demolition -----	32, 33, 34	41, 42
Description, general -----	3	1
Desert maintenance -----	21	22
Engaging plunger -----	15c, 28a (4)	19, 35
Extension rod:		
Description -----	6b	9
Removal and disassembly:		
PH-358-C -----	25a	28
PH-358-D -----	26a(2), (4)	30, 32
PH-358-E -----	28a(3)-(5), (7)	35
Replacement:		
PH-358-C -----	25b	29
PH-358-D -----	26b	32
PH-358-E -----	28b(2)	36
Fabric, screen:		
Description -----	5a	3
Removal:		
PH-358-C -----	22a(6)	23
PH-358-D -----	27a(5)	32
PH-358-E -----	29a(8)	38
Replacement:		
PH-358-C -----	22b(1)	25
PH-358-D -----	27b(1)	34
PH-358-E -----	29b(1)	38
Forms and records -----	2	1
Handle assembly		
Description -----	7	9
Disassembly and reassembly, PH-358-C -----	24	27
Hanger assembly:		
Description -----	5b	4

Hanger assembly—(Continued)

	<i>Paragraph</i>	<i>Page</i>
Removal:		
PH-358-C -----	22a (5)	23
PH-358-D -----	27a (4)	32
PH-358-E -----	29a (6)	38
Replacement:		
PH-358-C -----	22b (2)	25
PH-358-D -----	27b (2)	34
PH-358-E -----	29b (2)	40
Height, screen, adjusting -----	13b, 14b, 15c	12, 15, 19
Housing, screen:		
Description -----	5d	4
Disassembly		
PH-358-C -----	22a (3), (4)	23
PH-358-D -----	27a (2), (3)	32
PH-358-E -----	29a (2), (5)	38
Reassembly:		
PH-358-C -----	22b (3), (5)	25
PH-358-D -----	27b (3), (5)	34
PH-358-E -----	29b (4), (5)	40
Identification table of parts -----	App. II	45
Locating equipment -----	12	12
Maintenance:		
Desert -----	21	22
Preventive:		
Itemized -----	17	21
Meaning and importance -----	16	21
Tropical -----	19	22
Winter -----	20	22
Measurements -----	4, 9	3, 10
Packaging data -----	9	10
Plunger, engaging:		
Operation -----	15c	19
Removal -----	28a (4)	35
Preventive maintenance:		
Itemized -----	17	21
Meaning and importance -----	16	21
Records -----	2b	1
References -----	App. I	43
Repacking:		
PH-358-C -----	13d	14
PH-358-D -----	14d	15
PH-358-E -----	15d	19
Rod extension. (See Extension rod.)		
Roller, screen, description -----	5c	4
Scope -----	1	1
Screen:		
Assembly:		
Description -----	5	3

Screen—(Continued)	<i>Paragraph</i>	<i>Page</i>
Disassembly and reassembly:		
PH-358-C	22	23
PH-358-D	27	32
PH-358-E	29	38
Fabric. (<i>See</i> Fabric, screen.)		
Height, adjusting	13 <i>b</i> , 14 <i>b</i> , 15 <i>c</i>	12, 15, 19
Housing. (<i>See</i> Housing, screen.)		
PH-358-C;		
Adjusting	13 <i>b c</i>	12, 13
Components	4	3
Disassembly and reassembly	22-25	23
General description	3	1
Repacking	13 <i>d</i>	12
Setting up	13 <i>a</i>	12
PH-358-D:		
Adjusting	14 <i>b, c</i>	15
Components	4	3
Disassembly and reassembly	26, 27	30, 32
General description	3	1
Repacking	14 <i>d</i>	15
Setting up	14 <i>a</i>	14
PH-358-E:		
Adjusting	15 <i>b, c</i>	19
Components	4	3
Disassembly and reassembly	28, 29	35, 38
General description	3	1
Repacking	15 <i>d</i>	19
Setting up	15 <i>a</i>	17
Roller. (<i>See</i> Roller, screen.)		
Viewing area, adjusting	13 <i>c</i> 14 <i>c</i> , 15 <i>b</i>	13, 15, 19
Service upon receipt of—		
New equipment	10	11
Used or reconditioned equipment	11	12
Setting up equipment:		
PH-358-C	13 <i>a</i>	12
PH-358-D	14 <i>a</i>	14
PH-358-E	15 <i>a</i>	17
Shipment:		
Packaging data	9	10
Unpacking	10 <i>a</i> (1)	11
Shipment and storage:		
Packaging	30	41
Packing	31	41
Table of components	4	3
Table of parts, identification	App. II	45
Tripod assembly:		
Column	6 <i>a</i>	5
Description	6	5
Disassembly and reassembly		
PH-358-C	23	27
PH-358-D	26	30
PH-358-E	28	35
Tropical maintenance	19	22

	<i>Paragraph</i>	<i>Page</i>
Unpacking	10 <i>a</i>	11
Viewing area, screen, adjusting	13 <i>c</i> , 14 <i>c</i> , 15 <i>b</i>	13, 15, 19
Weatherproofing	18-21	21
Weights and measurements	4, 9	3, 10
Winter maintenance	20	22

Stanford University Libraries



3 6105 211 234 419

