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AN 11-10-25

*HANDBOOK OF INSTRUCTIONS
WITH PARTS CATALOG*

FOR

**SINGLE ADAPTERS
FOR CALIBER .50
MACHINE GUNS**

TYPES E-11 and E-13

Published under joint authority of the Commanding General, Army Air Forces, the Chief of the Bureau of Aeronautics, and the Air Council of the United Kingdom.

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20 NOVEMBER 1944
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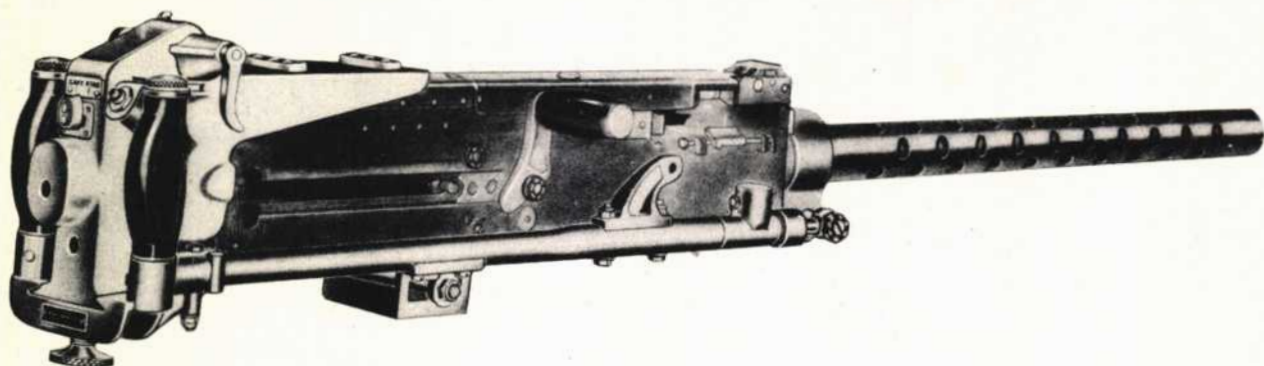
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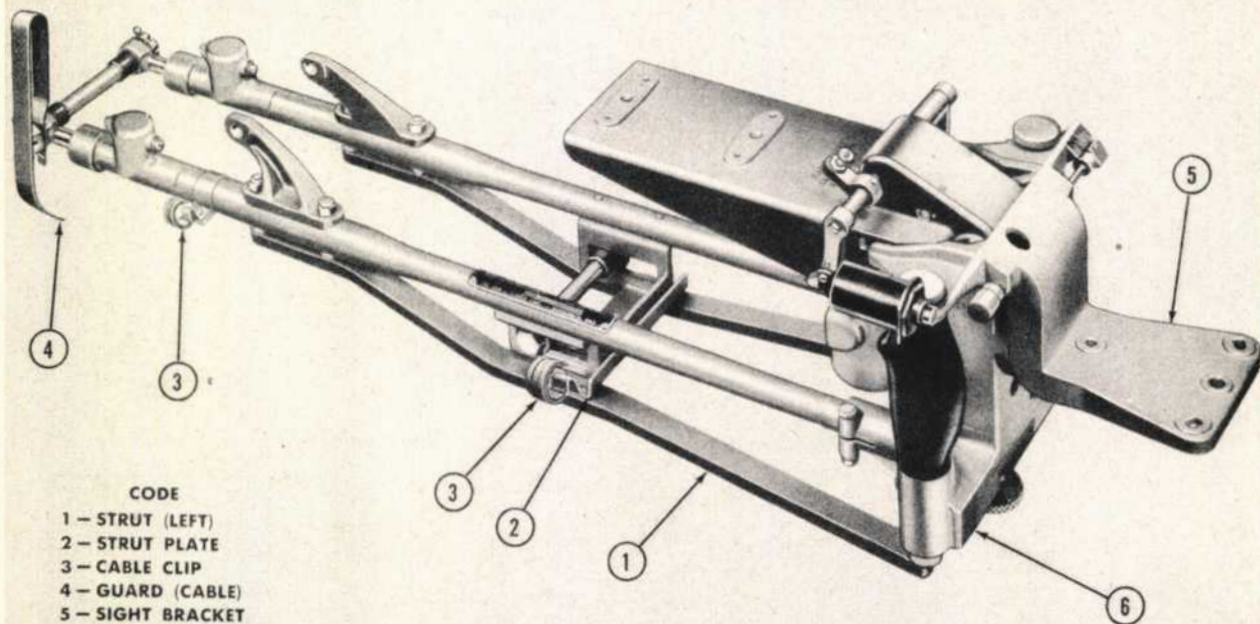
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(1 of 2) Type E-11 Single Caliber .50 Adapter With Guns



(2 of 2) Type E-13 Single Caliber .50 Adapter Without Guns

Figure 1—Types E-11 and E-13 Single Adapters for Caliber .50 Machine Guns

SECTION I INTRODUCTION

1. This Handbook is issued as the basic Technical Order for the equipment involved.
2. This handbook contains descriptive data and instructions for the Operation, Maintenance, and Overhaul of the Types E-11 and E-13 Shock Absorbing Adapters for Single Caliber .50 Machine Gun, manufactured by the Bell Aircraft Corporation, Ordnance Division, Burlington,

ton, Vermont, and John C. Turner Corporation, Wapakoneta, Michigan, respectively.

3. The Type E-11 adapter is manufactured in accordance with Bell Aircraft Corporation Drawing No. 03-043-012, and is designated as the Bell Model No. 32A.

4. The Type E-13 adapter is manufactured in accordance with John C. Turner Corporation Drawing No. 7-44-6631.

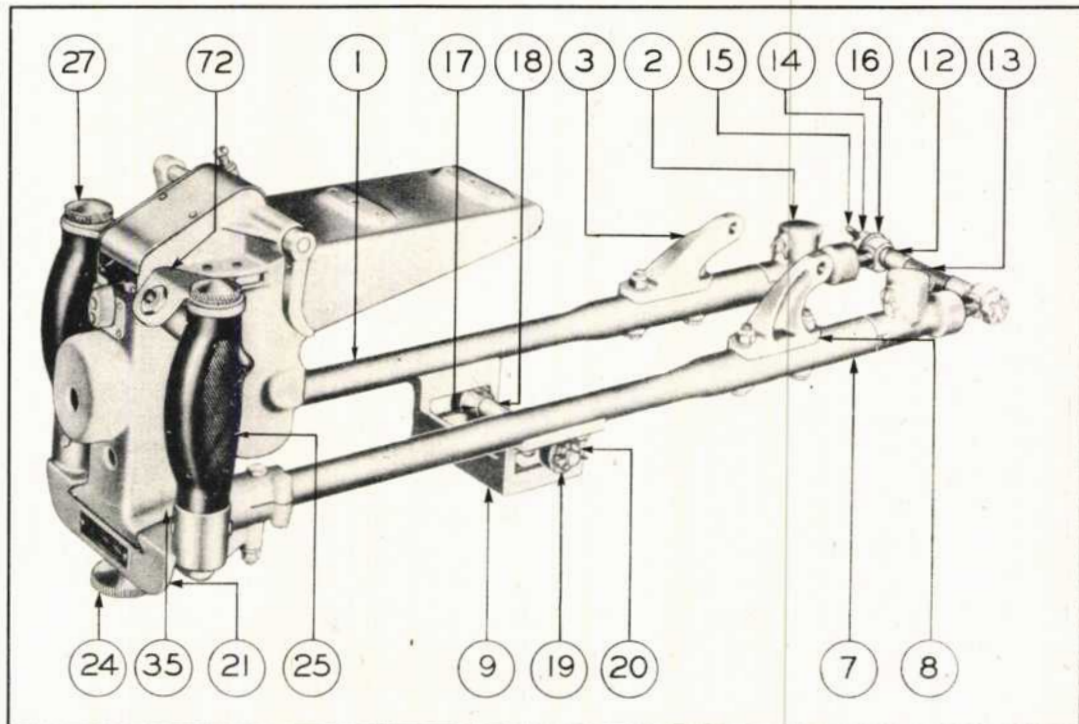


Figure 2—Type E-11 Single Caliber .50 Adapter Less Guns

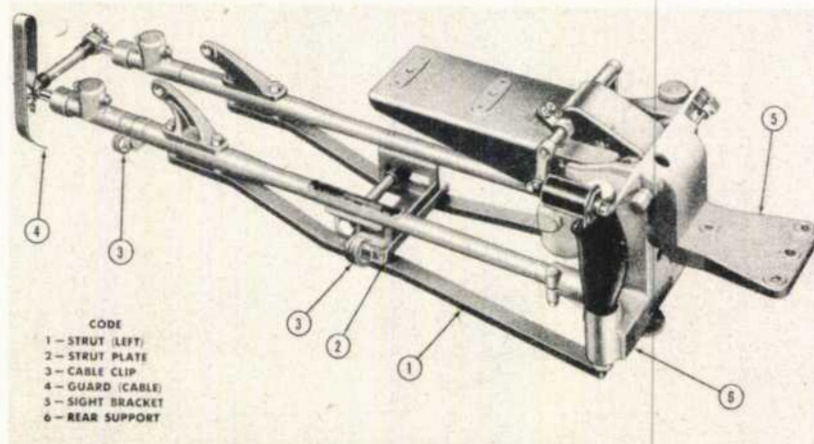


Figure 3—Type E-13 Adapter—Complete

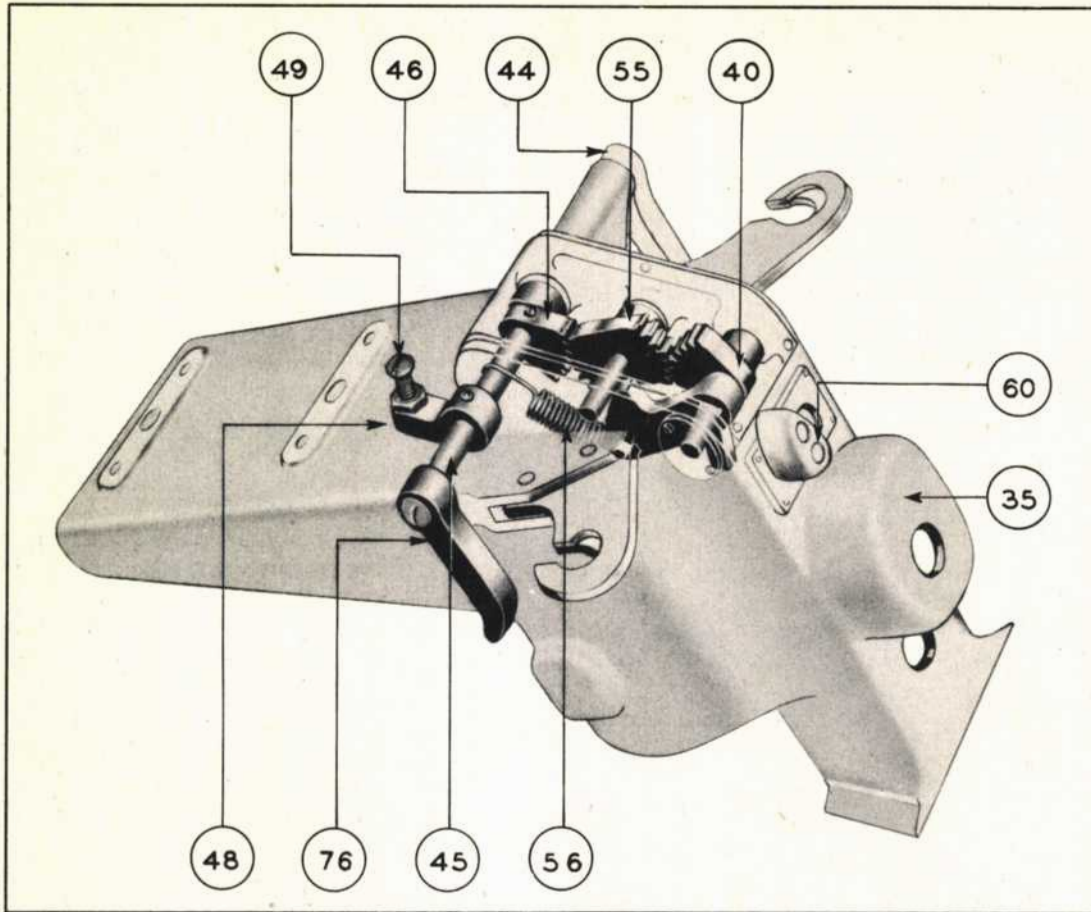


Figure 4—Back Guard Assembly

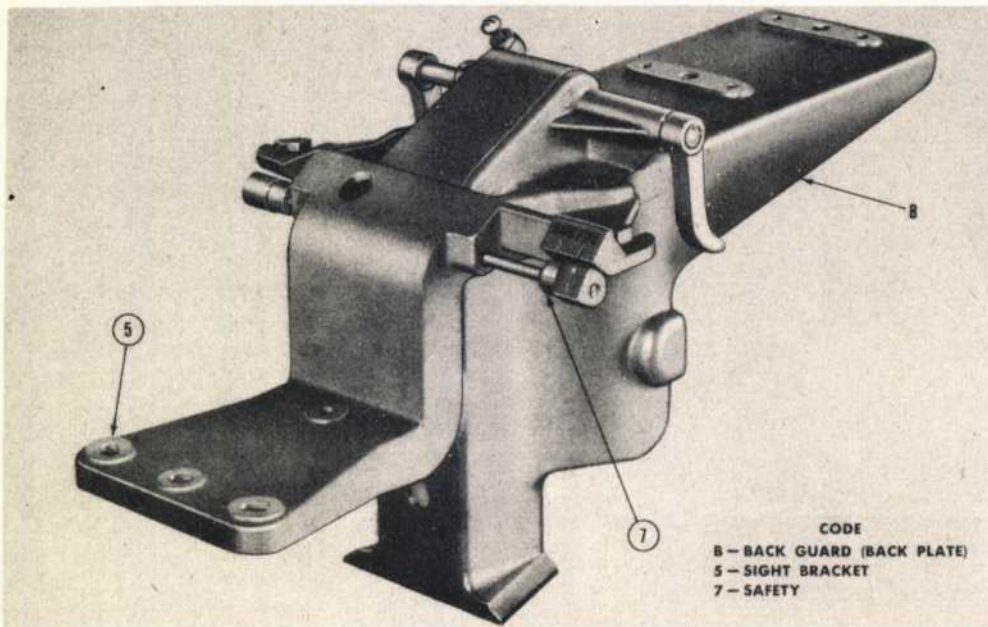


Figure 5—Back Guard (E-13 Backplate) With Sight Bracket

SECTION II DESCRIPTION

1. GENERAL.

a. The type E-11 single adapter for caliber .50 machine guns is a flexible type adapter designed to be fired by either or both hands. (See figure 1.) Recoil shock is absorbed through the utilization of hydraulic shock units. Provision is made for mounting a standard telescopic sight bracket. The safety is conveniently located in the rear of the back guard and a microphone switch is provided. The back guard unit may be removed, providing access to gun components without the necessity of removing gun from adapter.

b. The type E-13 adapter is in all respects similar to the type E-11, with the exception that provisions and necessary changes are made for the mounting of a type K-13 compensating gun sight. (See figure 3.)

2. DETAILED.

a. ADAPTER.

(1) THE TYPE E-11. (See figure 2.)—The adapter frame is made up of two parallel bearer assemblies (1) and (7) with the shock unit assemblies (2) mounted in their forward ends. The rear support assembly (21) forms the rear cross member of the adapter; a rear trunnion support (9) is bolted to the bearer assemblies; and the front trunnion bolt (13), assembled in the eyes of the shock units, forms the front cross member of the assembly. Yoke mounts (3) and (8) are bolted to the bearer assemblies.

(2) THE TYPE E-13. (See figure 3.)—The type E-13 adapter consists of an E-11 adapter with the addition of two struts (1) and strut plate (2), cable clips (3), guard (4), and bracket (5) for the type K-13 sight. The rear support for the handgrips of the type E-11 adapter has been replaced by a widened rear support (6) on the E-13 adapter to accommodate the type K-13 gun sight and bracket without interference to the easy operation of the gun.

b. BACK GUARD UNIT.

(1) GENERAL.—The back guard assembly may be readily removed from either adapter by loosening the back guard release knob (24, figure 2) in the rear support, and the handgrip release screws in the handgrips, thus providing easy access to the gun for servicing.

(2) THE TYPE E-11.—The back guard assembly (35, figure 4) houses safety (60), triggers (44) and (76) mounted on trigger shaft (45) which fire guns through upper trigger gear (46) intermediate trigger gear (55) and lower trigger gear (40). Control and adjustment of firing triggers is accomplished by means of screw (49) in the trigger adjustment stop (48). Rapid return of triggers to normal position is assured through the use of the trigger return spring (56).

(3) THE TYPE E-13.—The type E-13 adapter back guard, consists of an E-11 back guard assembly upon which a bracket has been placed to accommodate the type K-13 gun sight. A safety linkage (7, figure 5) is provided for the reason that the original safety is rendered inaccessible by the addition of the sight bracket.

c. HYDRAULIC SHOCK UNIT.

(1) FUNCTION.—The purpose of the hydraulic shock unit is to reduce recoil shock produced by gun fire. This is accomplished by combining the functioning of an hydraulic piston with the reaction of a specially designed recoil spring. When firing with gun in level position, the major portion of the recoil shock is absorbed by the action of the hydraulic piston, the spring serving to return the gun to normal after recoil. Firing the gun at a declined angle, recoil is counteracted by

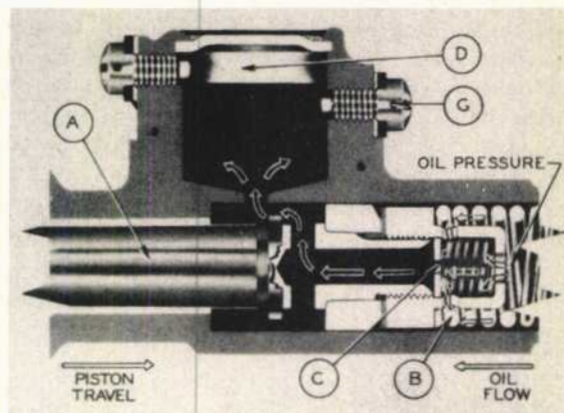


Figure 6—Hydraulic Shock Unit Recoil Stroke

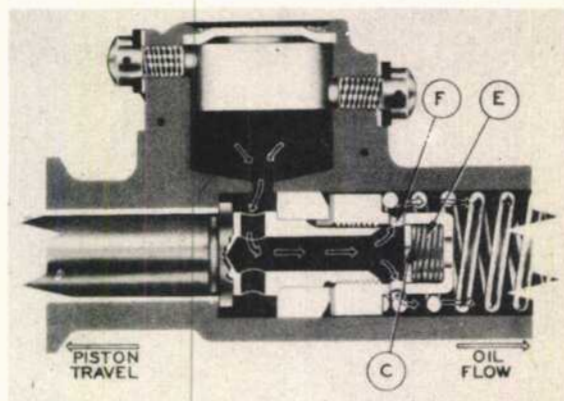


Figure 7—Hydraulic Shock Unit Counterrecoil Stroke

the hydraulic piston and weight of the gun. With the gun in an inclined position, the spring offsets the weight of the gun and recoil shock is absorbed by the hydraulic piston.

(2) RECOIL STROKE.—The gun recoil (figure 6) actuates piston (A), which compresses the special recoil spring (B) and develops oil pressure behind the

piston. This pressure forces fluid through metered disc (C) and into oil chamber (D).

(3) COUNTERRECOIL STROKE.—On return stroke (figure 7) pressure of fluid overcomes resistance of disc retaining spring (E) and forces the metered disc (C) from its seat, facilitating the return flow of oil through orifices (F).

SECTION III INSTALLATION

1. GUN CONVERSION.

- a. Remove gun backplate.
- b. Remove backplate filler piece (figure 8) by driving out backplate filler piece pin.
- c. Insert bell crank (69, figure 9), bell crank spacer (70) and bell crank spring (71). Reassemble backplate filler piece pin.
- d. Replace gun backplate.

2. INSTALLING GUN IN ADAPTER.

- a. Remove back guard (35, figure 2) by loosening back guard release knob (24) in rear support assembly (21) and handgrip release screws (27) in handgrip and pin assembly (25). After loosening handgrip release screws, remove microphone switch bracket assembly (72) holding the microphone switch assembly in place.
- b. Remove rear trunnion bolt (18, figure 2) nut (19) and cotter (20).
- c. Remove front trunnion bolt (13, figure 2) nut (14), cotter (15), washer (16), and front trunnion spacers (12).

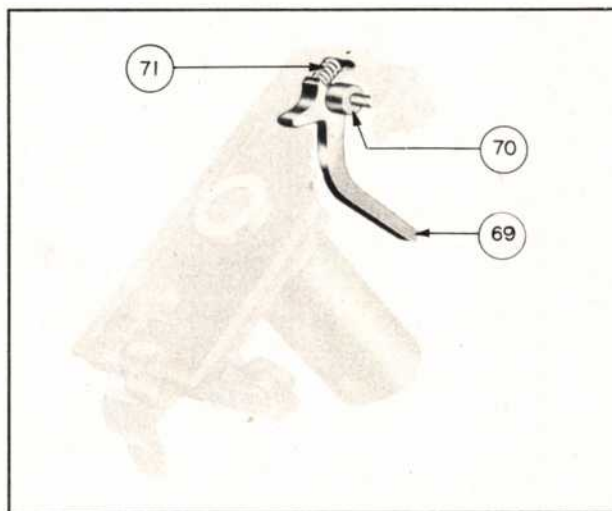


Figure 9—Inserting Bell Crank, Spacer and Spring

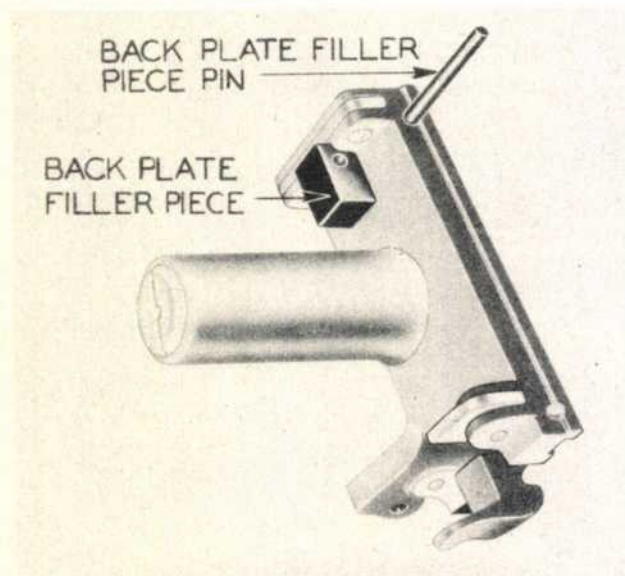


Figure 8—Removing Backplate Filler Piece

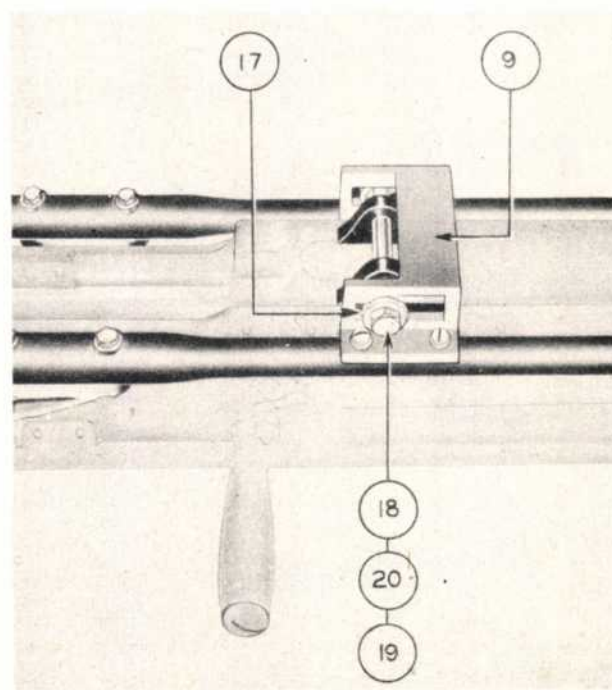


Figure 10—Assembling Rear Trunnion Bolt

Note

Observe correct positions of washers and spacers to insure correct reassembly after gun is installed.

- d. Place gun in an inverted position.
- e. Invert the adapter and place it on the gun, keeping rear trunnion slides (17, figure 10) in place.

CAUTION

Care should be exercised with the rear trunnion slides (17) as they are held in position with the rear trunnion bolt. If they should drop out of the slot, be sure that they are replaced before assembling rear trunnion bolt.

- f. Align shock unit eyes with holes in gun trunnions. (See figure 11.) Insert front trunnion spacers (12). Assemble front trunnion bolt (13), washer (16), nut (14), and cotter pin (15).

- g. Assemble rear trunnion bolt (18), nut (19), and cotter pin (20). (See figure 10).

- b. Reassemble back guard unit.

CAUTION

When assembling back guard, it is recommended that screw in under side of back guard support be drawn up first, and that it properly engage drilled cup in under side of back guard.

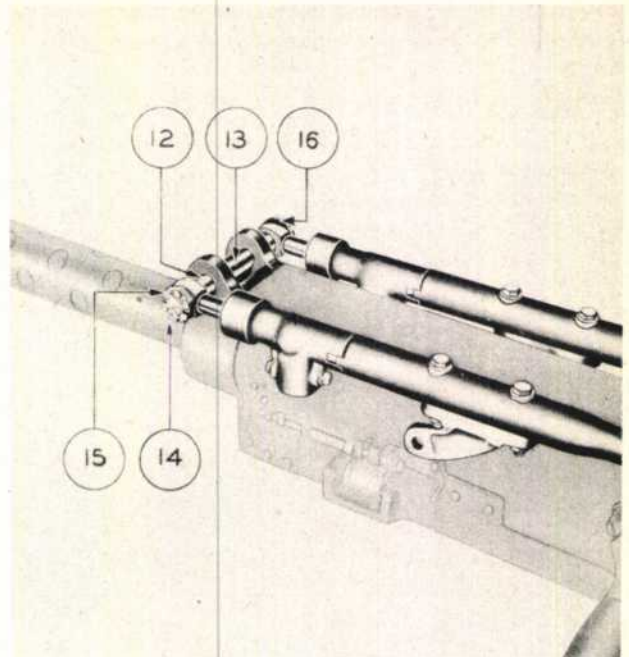


Figure 11—Assembling Front Trunnion Bolt

**SECTION IV
OPERATION**

1. PRINCIPLES OF OPERATION.

The type E-11 and E-13 single adapters make possible accurate control of gun fire by eliminating the disturbing effects of gun recoil through the utilization of hydraulic shock units.

2. OPERATING INSTRUCTIONS.

To operate mount, proceed as follows:

- a. Insure that front and rear trunnion bolts are securely fastened.

- b. Check that bell crank in gun is in proper position in respect to roller; ie, bell crank should engage below rollers.

- c. Adjust trigger stop so that lever roller in back guard will not ride off end of bell crank.

- d. Place safety on "FIRE."

- e. Depress triggers, using either or both hands.

Note

As long as triggers are depressed gun will continue to fire.

SECTION V

SERVICE INSPECTION, MAINTENANCE, AND LUBRICATION

1. SERVICE TOOLS REQUIRED.

There are no special service tools required.

2. SERVICE INSPECTION.

- a. Check trigger return spring (56, figure 21) on back guard.

- b. Check eyes of shock unit assemblies for possible fracture.

- c. Check front trunnion bolts (13, figure 11) for fracture; replace if necessary.

- d. Check rear trunnion bolt (18), rear trunnion slide (17) and rear trunnion support. (See figure 10.) If any of component parts are damaged, make necessary repairs.

- e. Check back guard assembly when secured to the adapter rear support by means of the two handgrip release screws and the back guard release knob. A minimum of motion or play should be permitted.

- f. Check hydraulic shock units for visual indications of fluid leakage after firing with the adapter.

3. MAINTENANCE.

No adjustments are necessary on the adapters. The design of the shock units compensates for temperature changes and angular firing positions.

4. LUBRICATION.

a. Should it become necessary to replenish oil supply in shock units, use hydraulic fluid, Specification No. AN-VV-O-366b. To add oil, remove filler plug (G, figure 6) at rear of oil reservoir and using a common oil can, add fluid to overflow level.

Note

Shock units should be level when refilling.

b. Using grease, Specification No. AN-G-3, apply directly to shock unit piston (figure 12) and to faces of the slots in the rear trunnion support.

5. SERVICE TROUBLES AND REMEDIES.

There are no instructions applicable to service troubles and remedies for this adapter.

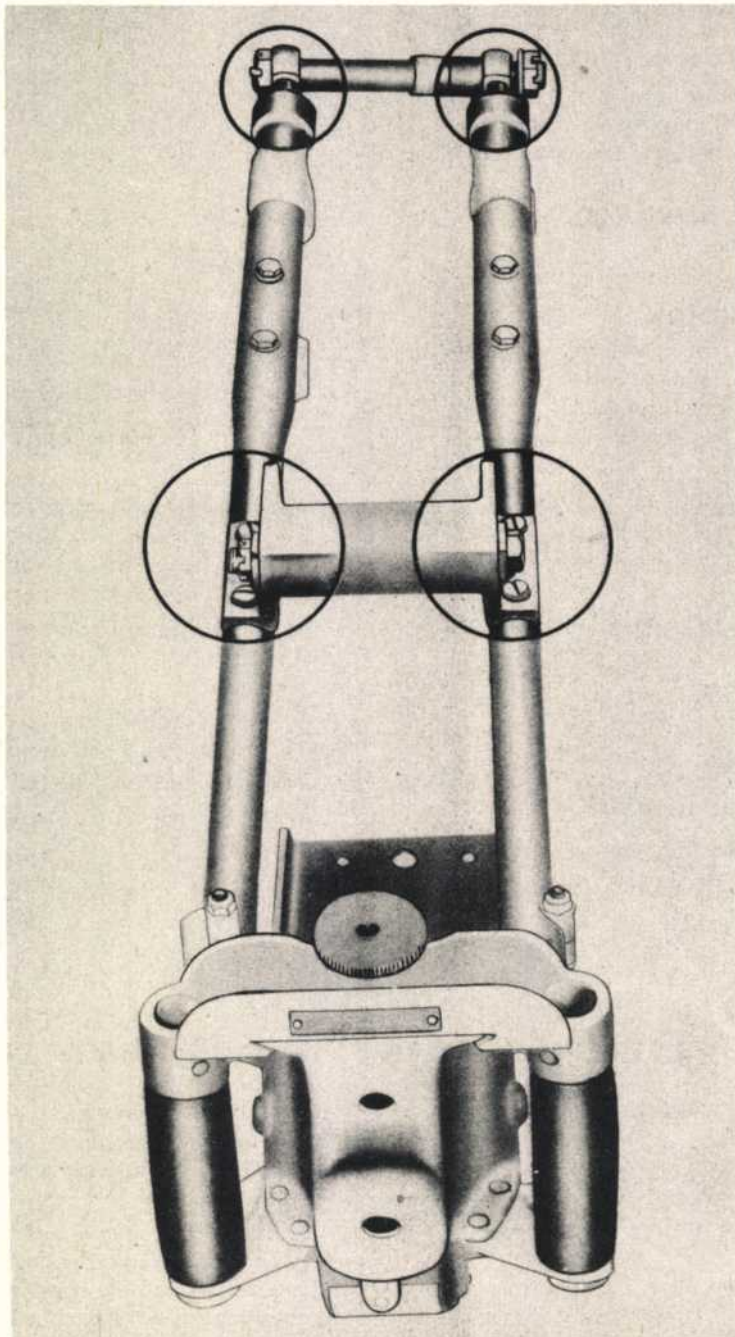


Figure 12—Lubrication Chart

SECTION VI DISASSEMBLY, REASSEMBLY, TESTING, INSPECTION AND REPAIR

1. OVERHAUL TOOLS REQUIRED.

There are no special overhaul tools required for these adapters.

2. DISASSEMBLY.

a. Remove back guard, following procedure outlined under section III, paragraph 2.a.

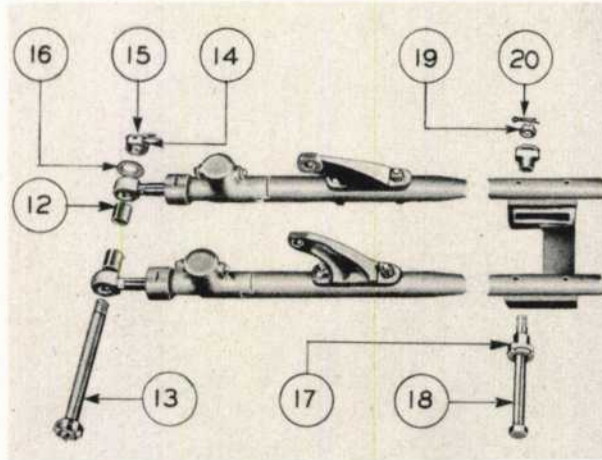


Figure 13—Disassembling Front and Rear Trunnion Bolts

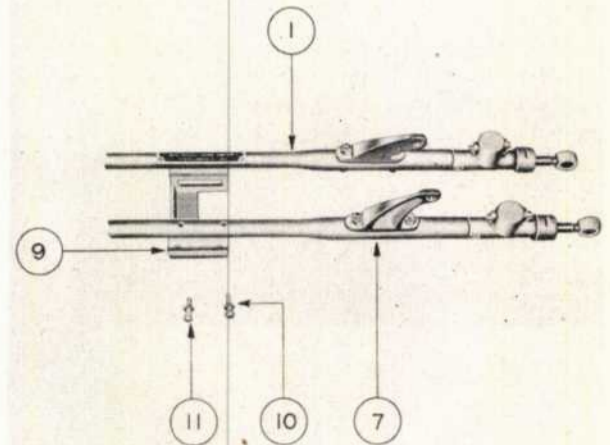


Figure 15—Disassembling Right and Left Bearer Assemblies

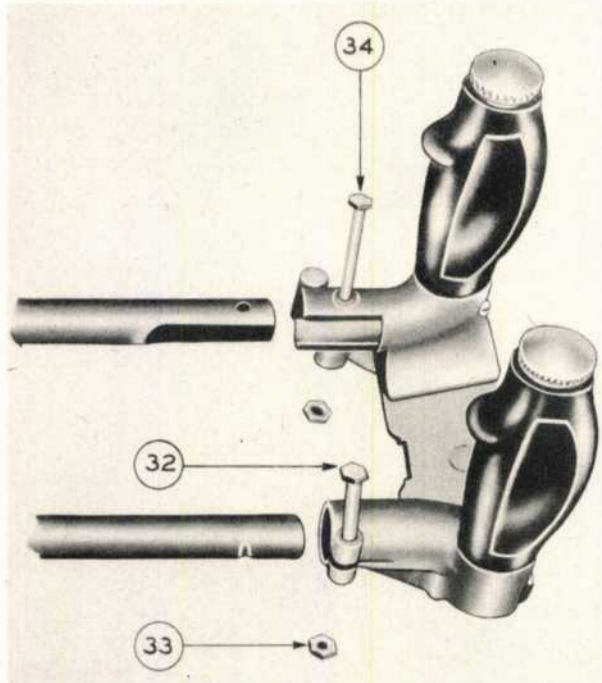


Figure 14—Disassembling Rear Support Assembly—Type E-11

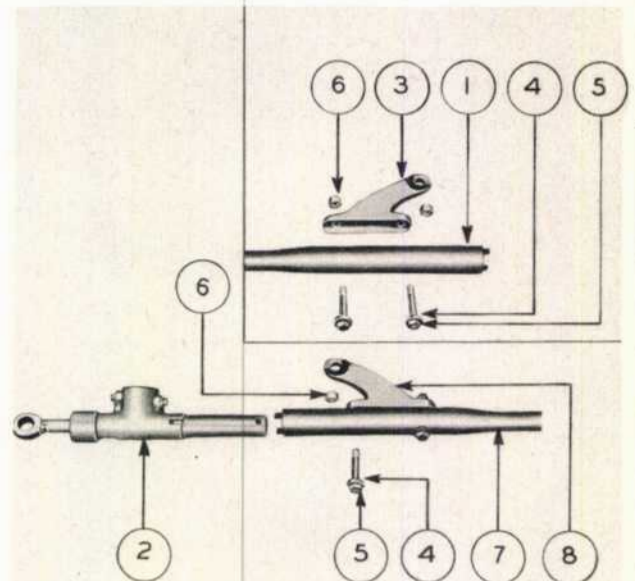


Figure 16—Removing Shock Unit Assemblies and Yoke Mounts From Bearers

Section VI
Paragraph 2

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b. Remove cotter pin (15, figure 13), nut (14), front trunnion bolt (13), front trunnion spacers (12), and washer (16); also cotter (20), nut (19), rear trunnion bolt (18), and rear trunnion slides (17).

c. Disassemble rear support assembly (figure 14) by removing nuts (33), bolt (34) and bolt (32). Remove screws holding struts to disassemble the E-13.

d. To disassemble left bearer assembly (1, figure 15) and right bearer assembly (7) from rear trunnion support (9), remove lock washers (10) and support screws (11).

e. To disassemble shock unit assembly (2, figure 16) from bearer assembly, remove nut (6), bolt (5) and yoke mount supporting block (4).

f. Disassemble left yoke mount (3, figure 16) from left bearer assembly (1) by removing nut (6), yoke mount supporting block (4) and bolt (5). Disassemble right yoke mount (8) from right bearer assembly (7) by removing nut (6), yoke mount supporting block (4) and bolt (5).

Note

Yoke mounts are right and left parts. When disassembling, note relative positions to insure correct reassembly.

g. Handgrip and pin assembly (figures 17 and 18) is disassembled by removing hand grip retaining screw (26).

b. Where replacements are required in the back guard it is recommended that the complete back guard as-

sembly (figure 4) be ordered. However, should it become necessary to disassemble this unit, proceed as follows:

Note

Sight bracket (5, figure 5) is riveted to the back guard on the type E-13 adapter to within .0001 limits and should not be removed in any case. This bracket will limit the extent to which the following procedure can be applied to the E-13 back guard.

(1) Remove instruction plate (67, figure 19) which is held in place by six screws (66). Remove four screws (43, figure 20) holding safety assembly.

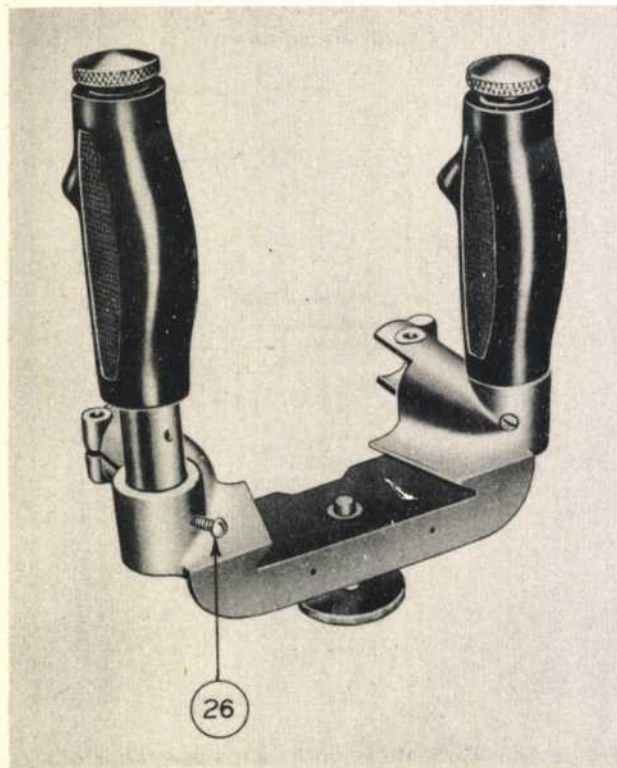


Figure 17—Disassembling Handgrips

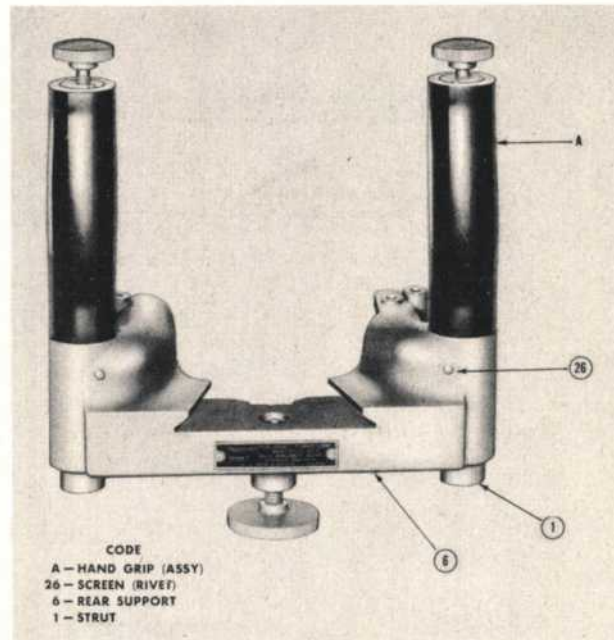


Figure 18—Rear Support (Type E-13) With Grips

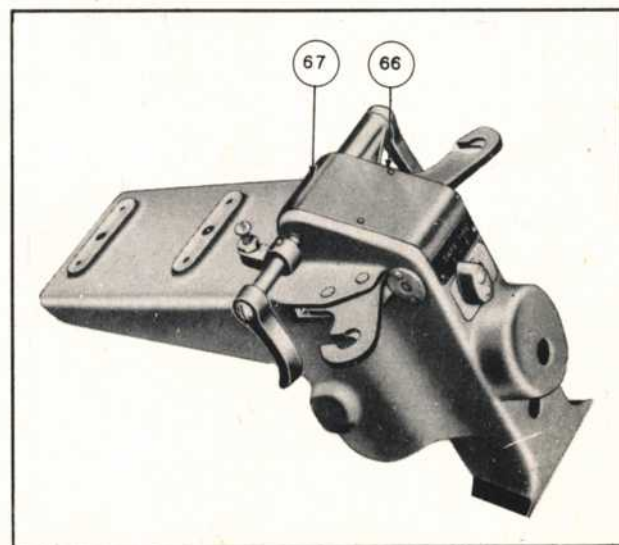


Figure 19—Removing Instruction Plate—Type E-11

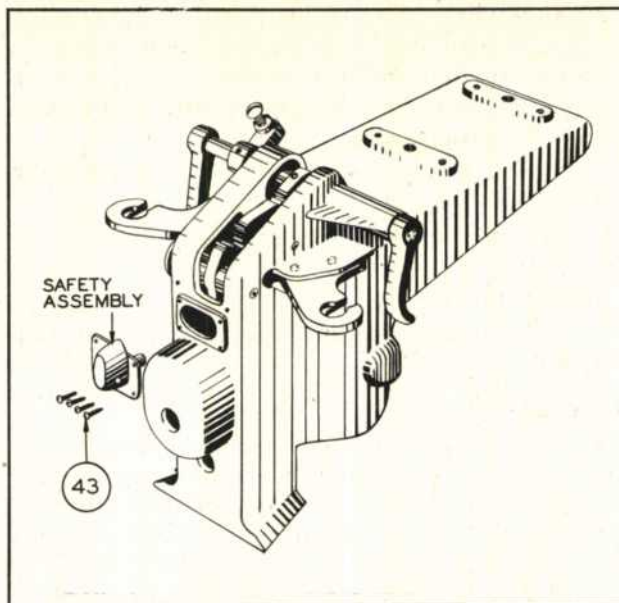


Figure 20—Removing Safety Assembly From Back Guard—Type E-11

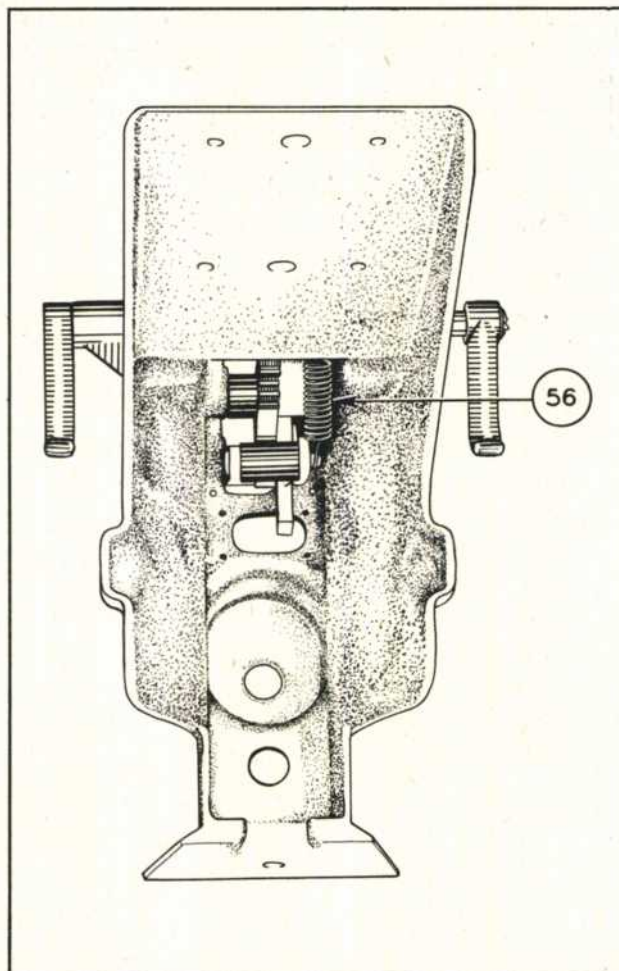


Figure 21—Removing Trigger Return Spring

(2) Remove trigger return spring. (See 56, figure 21.)

(3) Remove screw (51, figure 22), pins (47), left finger trigger (76) and trigger adjustment stop (48). Draw out trigger and shaft assembly, which will permit removal of upper trigger gear (46) and upper trigger gear spacer (52).

Note

Before removing gears, be sure to note relative positions of punch marks to insure correct reassembly.

(4) Intermediate trigger gear (55, figure 23) and trigger gear spacer (54) may be removed by driving out trigger gear shaft (53).

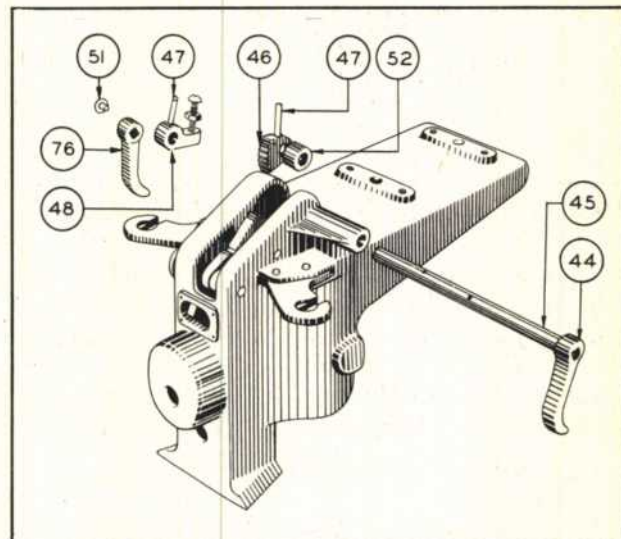


Figure 22—Removing Upper Trigger Gear

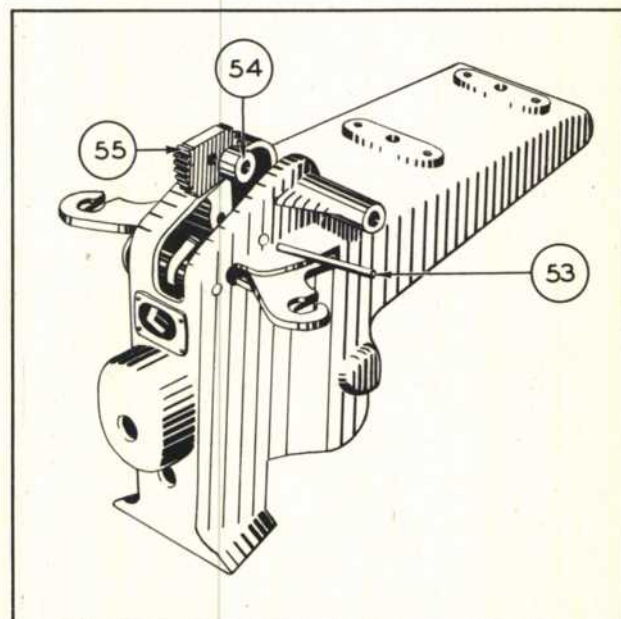


Figure 23—Removing Intermediate Trigger Gear

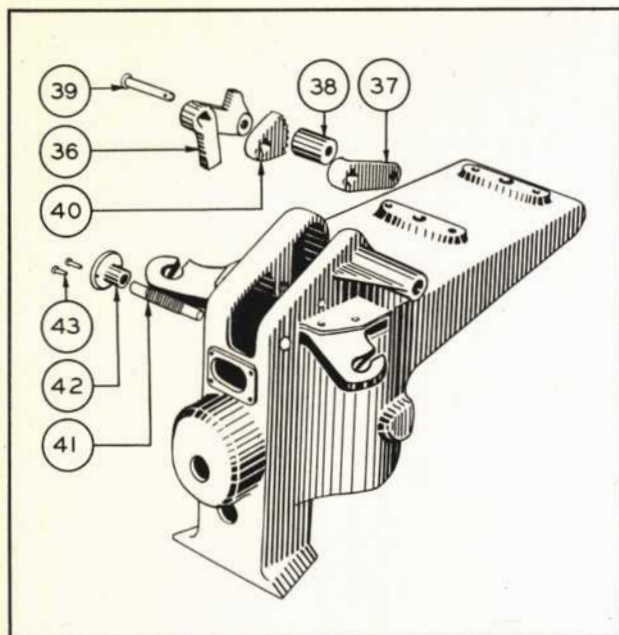


Figure 24—Disassembling Trigger Components

(5) Remove screws (43, figure 24) holding trigger gear shaft bushing (42) in left side of back guard. Gear shaft (41) may then be removed through opening in back guard, releasing trigger parts composed of: right trigger lever (37), left trigger lever (36), trigger lever roller (38), pin (39), and lower trigger gear (40).

3. CLEANING, INSPECTION, TESTING, AND REPAIR.

a. CLEANING AND INSPECTION.

(See figure 25.)

b. TESTING.

(1) Operate triggers. Make sure spring tension is sufficient to return triggers to normal.

(2) Test rear slide. It should operate freely in slot of rear support.

(3) Insure that back guard is fastened securely to adapter.

(4) Install gun in adapter as outlined in section III, paragraph 2.

c. REPAIR.

There are no instructions covering repair of these adapters.

4. REASSEMBLY.

a. To reassemble the back guard unit (figure 24), first assemble lever parts; ie, lower trigger gear (40), pins (39), trigger roller lever (38), left trigger lever (36) and right trigger lever (37). Assemble these lever parts to back guard with gear shaft (41), trigger gear shaft bushing (42) and screws (43). Next insert trigger shaft (45, figure 22) and right finger trigger (44) in back guard unit, holding upper trigger gear (46) and trigger gear spacer (52) in line with shaft as it is driven through bosses. Replace trigger adjustment stop (48), and fasten gear and stop to shaft with pins (47). Left finger trigger (76) should then be assembled to shaft with screw (51). (After assembly, screw should be staked securely in place.) Assemble intermediate trigger gear (55, figure 23), trigger gear spacer (54) and trigger gear shaft (53). (Following this procedure simplifies the operation of matching punch marks on gears. Trigger gear shaft should be staked in back guard at both ends.) Attach trigger return spring (56, figure 21) onto trigger and shaft assembly and lever assembly.

b. Reassemble safety assembly.

Index No.		Existing Tolerance	Wear Tolerance
17	GM749-947 Rear Trunnion Slide	$\frac{.562}{.561}$	$\frac{.561}{.559}$
9	GM749-927-1 Rear Trunnion Support	$\frac{.565}{.563}$	$\frac{.568}{.565}$
2	QA069-1 Shock Unit Assembly	$\frac{.5630}{.5625}$	$\frac{.563}{.566}$

Figure 25—Tolerance Chart

c. Reassemble left yoke mount (3, figure 16) in left bearer assembly (1) and right yoke mount (8) in right bearer assembly (7) by replacing supporting block (4), bolt (5) and nut (6).

Note

When reassembling shock unit assembly in right bearer (7), position of shock unit assembly must be correct in relation to flat surface (A) on bearer assembly. (See figure 26.)

d. Reassemble shock unit assembly (2, figure 16) to bearer assembly by replacing supporting block (4), bolt (5) and nut (6).

e. Reassemble left bearer assembly (1, figure 15) and right bearer assembly (7) to rear trunnion support (9) by replacing lock washer (10) and support screws (11).

f. Assemble handgrip and pin assembly to rear support. (See figure 17.)

g. Reassemble rear support assembly by replacing bolt (32, figure 14) in left bearer, bolt (34) in right bearer, and nuts (33).

b. Replace rear trunnion slides (17, figure 13), rear trunnion bolt (18), nut (19) and cotter (20).

i. Replace back guard assembly in adapter. Assemble microphone switch assembly (72, figure 27) under right handgrip retaining screw. Tighten handgrip retaining screws (27, figure 27) and rear support release knob (24) in rear support.

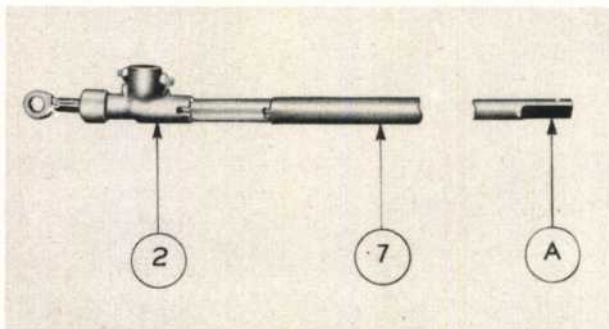


Figure 26—Showing Alignment of Shock Unit Assembly and Bearer Tube

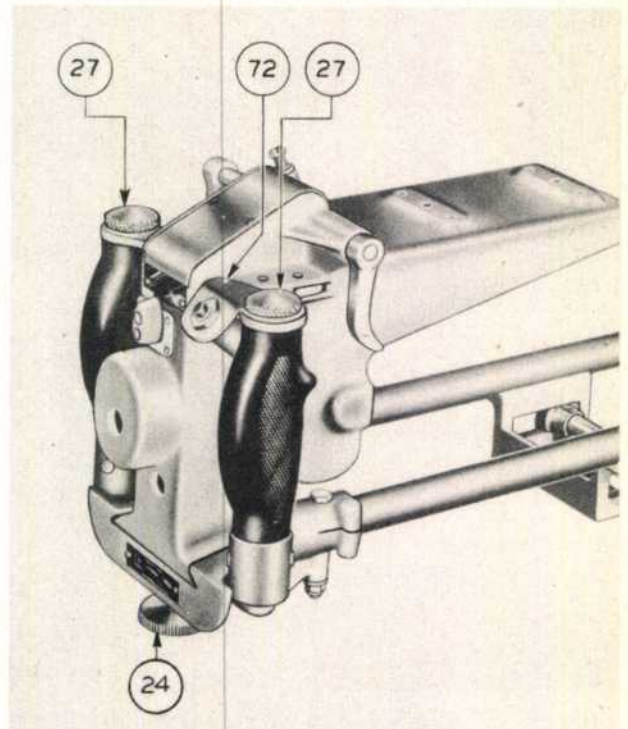


Figure 27—Replacing Microphone Switch

SECTION VII PARTS CATALOG INTRODUCTION

1. This Catalog lists the procurable parts contained in the Types E-11 and E-13 Single Adapters for Caliber .50 Machine Guns, manufactured by Bell Aircraft Corporation, Ordnance Division, Burlington, Vermont and the John C. Turner Corporation, Wapakoneta, Michigan.
2. Section VIII, Group Assembly Parts List, lists and illustrates in assembly sequence all serviceable parts used in the equipment involved.
3. Section IX, Numerical Parts List, contains the part numbers, numerically arranged, which are shown in the Group Assembly Parts List, with the exception of the standard parts. This section also shows the page in the Group Assembly Parts List where each item is listed.
4. Section X, Standard Parts List, contains all standard parts, numerically arranged, which are shown in the Group Assembly Parts List.
5. The asterisk (*) used in the Group Assembly Parts List denotes nonprocurable parts.

Note

The Group Assembly, Numerical, and Standard Parts Lists for the types E-11 and E-13 adapters are listed separately.

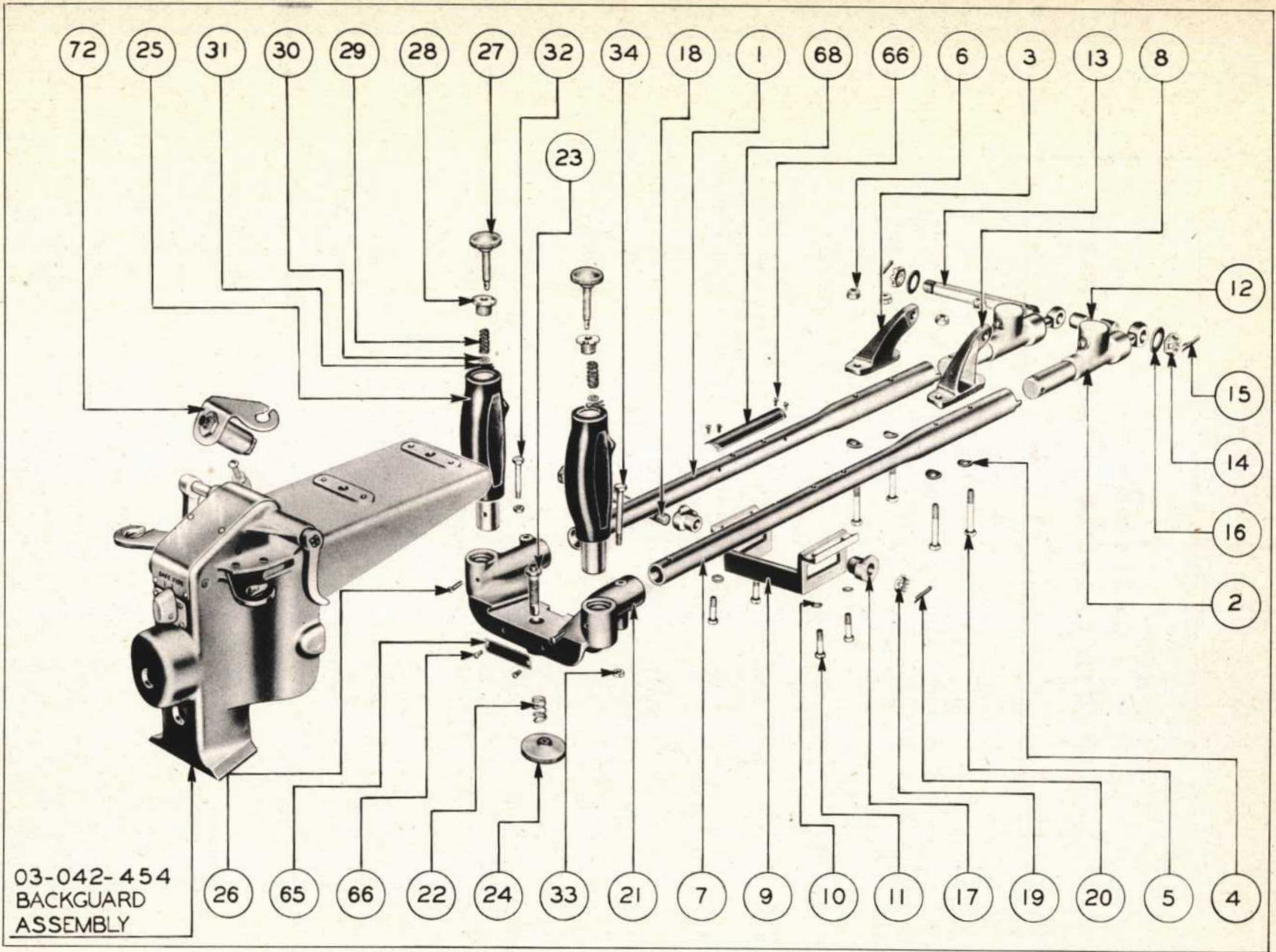


Figure 28—Type E-11 Single Caliber .50 Adapter—Exploded View

**SECTION VIII
GROUP ASSEMBLY PARTS LISTS**

Fig. No.	Index No.	Part No.	Nomenclature	Units Per Assy	Property Classification		
					U. S. Navy	U. S. Army	British
Caliber .50 Adapter Assembly—Type E-11							
28		03-043-012	Caliber .50 Adapter Assembly—Type E-11	1		11-B	150J
28		03-042-648	Bearer and Support Assembly	1		11-B	150J
28		03-042-457	Bearer and Shock Unit Assembly—Left	1		11-B	150J
28	1	GM749-641L	Bearer Assembly—Left	1		11-B	150J
28		*QA186-7L	Tube—Bearer, left	1		11-B	150J
28		*QA175	Tapping Block—Bearer tube	1		11-B	150J
28	2	QA069-1	Shock Unit Assembly	1		11-B	150J
28	3	GM749-781L	Mount—Yoke, left	1		11-B	150J
28	4	QA166	Block—Yoke mount supporting	2		11-B	150J
28	5	AN4-15A	Bolt	2		04-A	128
28	6	AC365-428	Nut	2		04-A	128
28		03-042-458	Bearer and Shock Unit Assembly—Right	1		11-B	150J
28	7	GM749-641R	Bearer Assembly—Right	1		11-B	150J
28		*03-042-496	Tube—Bearer, right	1		11-B	150J
28		*QA175	Tapping Block—Bearer tube	1		11-B	150J
28	2	QA069-1	Shock Unit Assembly	1		11-B	150J
28	8	GM749-781R	Mount—Yoke, right	1		11-B	150J
28	4	QA166	Block—Yoke mount supporting	2		11-B	150J
28	5	AN4-15A	Bolt	2		04-A	128
28	6	AC365-428	Nut	2		04-A	128
28	9	GM749-927-1	Support—Rear trunnion	1		11-B	150J
28	10	AN935-416L	Washer—Lock	4		29	128
28	11	QA259-2	Screw—Special	4		11-B	150J
28	12	QA396	Spacer—Front trunnion	2		11-B	150J
28		03-042-071-1	Bolt Assembly—Front trunnion	1		11-B	150J
28	13	03-042-071-2	Bolt—Front trunnion	1		11-B	150J
28	14	AN320-9	Nut	1		04-A	128
28	15	AN380-C4-4	Cotter	1		29	128
28	16	AN960-916	Washer	2		04-A	128
28	14	AN320-9	Nut	1		04-A	128
28	15	AN380-C4-4	Cotter	1		29	128
28	17	GM749-947	Slide—Rear trunnion	2		11-B	150J
28	18	03-042-022-1	Bolt—Rear trunnion	1		11-B	150J
28	19	AN320-7	Nut	1		04-A	128
28	20	AN380-C3-3	Cotter	1		29	128
28		03-042-456	Support Assembly—Rear	1		11-B	150J
28		03-042-682	Support and Grip Assembly	1		11-B	150J
28		03-042-455	Support and Knob Assembly—Rear	1		11-B	150J
28	21	GM749-604	Support Assembly—Rear	1		11-B	150J
28		*GM749-604C	Casting	1		11-B	150J
28		*AN315-5R	Nut	1		04-A	128
28	22	GM749-219	Spring—Back guard release	1		11-B	150J
28	23	QA426	Pin—Back guard release	1		11-B	150J
28	24	GM749-189	Knob—Back guard release	1		11-B	150J
28	25	GM749-763	Grip and Pin Assembly—Hand	2		11-B	150J
28		*GM749-763-1	Grip—Hand	1		11-B	150J
28		*GM749-558	Pin Assembly—Handgrip	1		11-B	150J
28		*GM749-558-1	Pin—Handgrip	1		11-B	150J

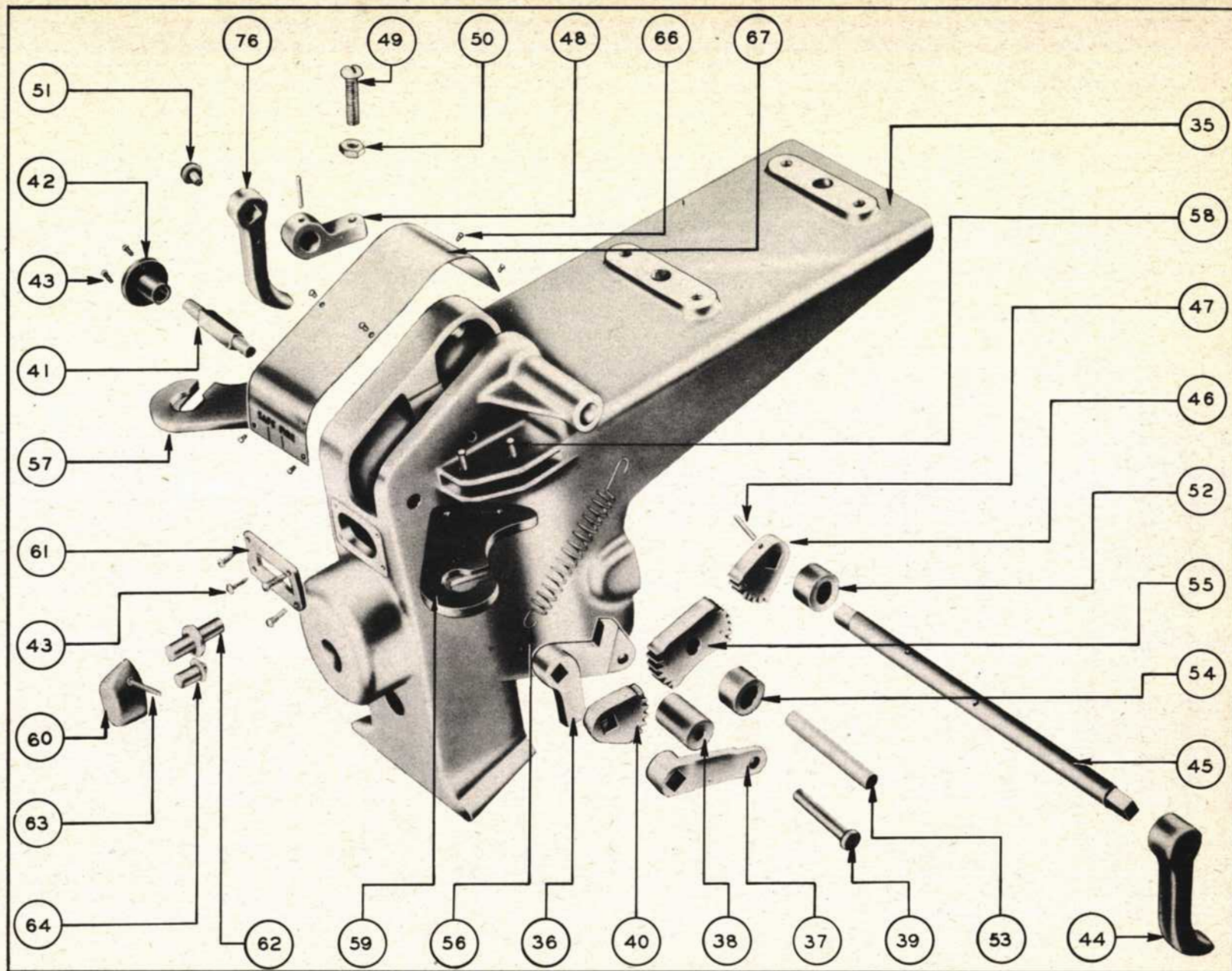


Figure 29—Back Guard Assembly—Exploded View

Fig. No.	No. Index	Part No.	Nomenclature	Units Per Assy	Property Classification		
					U. S. Navy	U. S. Army	British
Caliber .50 Adapter Assembly—Type E-11							
28		*03-042-334	Plug—Handgrip pin	1		11-B	150J
28	26	03-042-684	Screw—Handgrip retaining	1		11-B	150J
28		03-042-445	Screw Assembly—Handgrip release	2		11-B	150J
28	27	QA442	Screw—Handgrip release	1		11-B	150J
28	28	QA432	Bushing—Handgrip release	1		11-B	150J
28	29	QA287	Spring—Handgrip release	1		11-B	150J
28	30	AN960-8	Washer	1		04-A	128
28	31	AN380-C2-2	Cotter	1		29	128
28	32	AN3-12A	Bolt	1		04-A	128
28	33	AN364-1032	Nut	1		04-A	128
28	34	AN3-17A	Bolt	1		04-A	128
28	33	AN364-1032	Nut	1		04-A	128
29		03-042-454	Back Guard Assembly	1		11-B	150J
29	35	GM749-605	Back Guard	1		11-B	150J
29		03-042-453	Lever Assembly—Trigger	1		11-B	150J
29	36	03-042-317	Lever—Trigger, left	1		11-B	150J
29	37	03-042-316	Lever—Trigger, right	1		11-B	150J
29	38	03-042-318	Roller—Trigger lever	1		11-B	150J
29	39	AN393-33	Pin	1		04-A	128
29	40	GM749-648	Gear—Trigger, lower	1		11-B	150J
29	41	GM749-655	Shaft—Trigger, gear	1		11-B	150J
29	42	GM749-642	Bushing—Trigger, gear shaft	1		11-B	150J
29	43	AC530-2-6	Screw	2		29	128
29		03-042-681	Trigger and Shaft Assembly	1		11-B	150J
29		03-042-163	Trigger Assembly	1		11-B	150J
29	44	GM749-809	Trigger—Finger, right	1		11-B	150J
29	45	03-042-162	Shaft—Trigger	1		11-B	150J
29	46	03-042-161	Gear—Trigger, upper	1		11-B	150J
29	47	AC385-30-6	Pin	1		29	128
29		03-042-452	Stop Assembly—Trigger	1		11-B	150J
29	48	03-042-315	Stop—Trigger adjustment	1		11-B	150J
29	49	AN515-10-14	Screw	1		29	128
29	50	AN340-10	Nut	1		29	128
29	47	AC385-30-6	Pin	1		29	128
29	76	GM749-809-1	Trigger—Finger, left	1		11-B	150J
29	51	AN526-832-4	Screw	1		29	128
29	52	GM749-656-1	Spacer—Trigger gear, upper	1		11-B	150J
29	53	GM749-643	Shaft—Trigger gear	1		11-B	150J
29	54	GM749-656-2	Spacer—Trigger gear, upper	1		11-B	150J
29	55	GM749-647	Gear—Trigger, intermediate	1		11-B	150J
29	56	03-042-319	Spring—Trigger return	1		11-B	150J
29	57	GM749-610L	Support—Handgrip, left	1		11-B	150J
29	58	AN442-AD4-10	Rivet	2		11-B	150J
29	59	GM749-610R	Support—Handgrip, right	1		11-B	150J
29	58	AN442-AD4-10	Rivet	2		29	128
29		03-042-450	Safety Assembly	1		11-B	150J
29	60	QA428	Safety	1		11-B	150J
29	61	QA443-1	Plate—Safety	1		11-B	150J
29	62	GM749-378-1	Pin—Safety	1		11-B	150J
29	63	36R1-N2-10	Rivet	1		01-T	150J
29	64	682	Bullet Catch (20C1-1) Weber and Knapp	1		29	150J
29	43	AC530-2-6	Screw	4		29	128
29	67	GM749-609	Instruction Plate	1		11-B	150J
29	66	AN535-2-2	Screw	6		29	128

Section VIII
Group Assembly Parts List

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Fig. No.	Index No.	Part No.	Nomenclature	Units Per Assy	Property Classification		
					U. S. Navy	U. S. Army	British
Caliber .50 Adapter Assembly—Type E-11							
28	72	44B11230	Microphone Switch Assembly	1		11-B	150J
28	65	03-042-276	Name Plate—Patent	1		11-B	150J
28	66	AN535-2-2	Screw	2		29	128
28	68	03-142-174	Name Plate	1		11-B	150J
28	66	AN535-2-2	Screw	4		29	128
Loose Parts Furnished with Adapter							
28	69	03-042-294	Bell Crank	1		11-B	150J
28	70	03-043-014	Spacer—Bell crank	1		11-B	150J
28	71	03-043-015	Spring—Bell crank	1		11-B	150J
Caliber .50 Adapter Assembly—Type E-13							
	7-44-6631		Caliber .50 Adapter Assembly—Type E-13	1		—	150J
	03-042-648		Bearer and Support Assembly	1		11-B	150J
	03-042-457		Bearer and Shock Unit Assembly—Left	1		11-B	150J
	GM749-641L		Bearer Assembly—Left	1		11-B	150J
	QA175		Tapping Block—Bearer tube	1		11-B	150J
	T-QA-176		Plug—Wood	1		—	150J
	QA069-1		Shock Unit Assembly	1		11-B	150J
	GM749-781L		Mount—Yoke, left	1		11-B	150J
	QA166		Block—Yoke mount supporting	2		11-B	150J
	AN4-15A		Bolt	2		04-A	128
	AC365-428		Nut	2		04-A	128
	03-042-458		Bearer and Shock Unit Assembly—Right	1		11-B	150J
	GM749-641R		Bearer Assembly—Right	1		11-B	150J
	QA175		Tapping Block—Bearer tube	1		11-B	150J
	T-QA-176		Plug—Wood	1		11-B	150J
	QA069-1		Shock Unit Assembly	1		11-B	150J
	GM749-781R		Mount—Yoke, right	1		11-B	150J
	QA166		Block—Yoke mount supporting	2		11-B	150J
	AN4-15A		Bolt	2		04-A	128
	AC365-428		Nut	2		04-A	128
	GM749-927-1		Support—Rear trunnion	1		11-B	150J
	AN935-416L		Washer—Lock	4		29	128
	QA259-2		Screw—Special	4		11-B	150J
	QA396		Spacer—Front trunnion	2		11-B	150J
	03-042-071-1		Bolt Assembly—Front trunnion	1		11-B	150J
	03-042-071-2		Bolt—Front trunnion	1		11-B	150J
	AN320-9		Nut	1		04-A	128
	AN380-C4-4		Cotter	1		29	128
	7-44-66322		Guard—Cable	1		—	150J
	AN960-916		Washer	1		04-A	128
	AN320-9		Nut	1		04-A	128
	AN380-C4-4		Cotter	1		29	128
	GM749-947		Slide—Rear trunnion	2		11-B	150J
	03-042-022-1		Bolt—Rear trunnion	1		11-B	150J
	AN320-7		Nut	1		04-A	128
	AN380-C3-3		Cotter	1		29	128
	7-44-66320		Clip	1		11-B	150J
	7-44-66321		Clip—Cable clamp	2		11-B	150J
			Cap Screw—Clip	1		—	150J
			Nut—Clip	1		—	150J
			Washer—Lock	1		—	150J
	7-44-6634		Strut Assembly	1		11-B	150J
	7-44-66311 R		Strut	1		11-B	150J

Fig. Index
No. No.

Part No.

Nomenclature
1 2 3 4 5 6

Units Per Assy
Property Classification
U. S. Navy U. S. Army British

Caliber .50 Adapter Assembly—Type E-13

7-44-66311 L	Strut	1			11-B	150J
7-44-66312	Plate—Strut	1			11-B	150J
AN441-6-6	Rivet—Strut plate	4			29	128
AN515-416-14	Screw—Strut	2			29	128
AN935-416 L	Washer—Lock, strut screw	2			29	128
AN3-4A	Bolt—Strut plate	3			04-A	128
AN365-1032	Nut—Strut plate	3			04-A	128
AN960-10	Washer	2			04-A	128
7-44-6633	Support Assembly—Rear	1			11-B	150J
7-44-6632	Support and Knob Assembly—Rear	1			11-B	150J
7-44-66313	Support—Rear	1			11-B	150J
AN315-5R	Nut—Support	1			04-A	128
GM749-189	Knob—Back guard release	1			11-B	150J
GM749-219	Spring—Back guard release	1			11-B	150J
QA-426	Pin—Back guard release	1			11-B	150J
GM749-606	Handgrip Assembly	2			11-B	150J
7-44-66315	Handgrip	1			11-B	150J
7-44-6635	Pin Assembly—Grip	1			11-B	150J
7-44-66314	Pin—Grip tube	1			11-B	150J
7-44-66316	Plug—Grip tube	1			11-B	150J
03-042-445	Screw Assy—Handgrip release	2			11-B	150J
QA-442	Screw	1			11-B	150J
QA-432	Bushing	1			11-B	150J
QA-287	Spring	1			11-B	150J
AN960-8	Washer	1			04-A	128
AN380-C2-2	Cotter	1			29	128
AN441-4-20	Rivet	2			29	128
AN3-13A	Bolt—Rear support	3			04-A	128
AN365-1032	Nut—Rear support	2			04-A	128
AN364-1032	Nut—Rear support	1			04-A	128
	Back Guard Assembly	1				
GM749-605	Guard—Grip	1			11-B	150J
03-042-453	Lever Assembly—Trigger	1			11-B	150J
03-042-317	Lever—Trigger, left	1			11-B	150J
03-042-316	Lever—Trigger, right	1			11-B	150J
03-042-318	Roller—Trigger lever	1			11-B	150J
AN393-33	Pin	1			04-A	128
GM749-648	Gear—Trigger, lower	1			11-B	150J
GM749-655	Shaft—Trigger, gear	1			11-B	150J
GM749-642	Bushing—Trigger, gear shaft	1			11-B	150J
AC530-2-6	Screw	2			29	128
03-042-681	Trigger and Shaft Assembly	1			11-B	150J
03-042-163	Trigger Assembly	1			11-B	150J
GM749-809	Trigger—Finger, right	1			11-B	150J
03-042-162	Shaft—Trigger	1			11-B	150J
03-042-161	Gear—Trigger, upper	1			11-B	150J
AC385-30-6	Pin	1			29	128
03-042-452	Stop Assembly—Trigger	1			11-B	150J
03-042-315	Stop—Trigger adjustment	1			11-B	150J
AN515-10-14	Screw	1			29	128
AN340-10	Nut	1			29	128
AC385-30-6	Pin	1			29	128
GM749-809-1	Trigger—Finger, left	1			11-B	150J
AN526-832-4	Screw	1			29	128
GM749-656-1	Spacer—Trigger gear, upper	1			11-B	150J

Section VIII
Group Assembly Parts List

RESTRICTED
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Fig. No.	Index No.	Part No.	Nomenclature	Units Per Assy	Property Classification		
					U. S. Navy	U. S. Army	British
Caliber .50 Adapter Assembly—Type E-13							
		GM749-643	Shaft—Trigger gear	1		11-B	150J
		GM749-656-2	Spacer—Trigger, gear, upper	1		11-B	150J
		GM749-647	Gear—Trigger, intermediate	1		11-B	150J
		03-042-319	Spring—Trigger return	1		11-B	150J
		806210-D	Bracket Assembly, Sight	1		11-B	150J
		AN442-AD4-10	Rivet	4		11-B	128
		AN441-6-8	Rivet—Bracket	1		29	128
		7-44-66319	Shim—Bracket	2		11-B	150J
		03-042-130	Decal—Backplate	1		11-B	150J
		03-042-450	Safety Assembly	1		11-B	150J
		QA428	Safety	1		11-B	150J
		QA443-1	Plate—Safety	1		11-B	150J
		GM749-378-1	Pin—Safety	1		11-B	150J
		36R1-N2-10	Rivet	1		01-T	150J
		682	Bullet Catch (20C1-1) Weber and Knapp	1		29	150J
		AN425-AD2-5	Rivet	4		29	128
		GM749-609	Instruction Plate	1		11-B	150J
		AN535-2-2	Screw	6		29	128
		TO3-042-278-3	Bracket Assembly, Switch	1		11-B	150J
		TO3-042-277-2	Bracket	1		11-B	150J
		TO3-042-278-2	Fitting	1		11-B	150J
		TO3-042-276	Plate—Mfg. and Patent	1		11-B	150J
		AN535-2-2	Screw	2		29	128
		7-44-66318	Name Plate	1		11-B	150J
		AN535-2-2	Screw	4		29	128
Loose Parts							
		03-042-294	Trigger—Bell crank	1		11-B	150J
		03-043-014	Spacer—Trigger	1		11-B	150J
		03-043-015	Spring—Trigger	1		11-B	150J
		AN380-C3-3	Cotter	1		29	128
		AN380-C4-4	Cotter	1		29	128

**SECTION IX
NUMERICAL PARTS LIST**

Part No.	Group List Page Numbers	Total Quantity	Part No.	Group List Page Numbers	Total Quantity	Part No.	Group List Page Numbers	Total Quantity
TYPE E-11 ADAPTER			03-042-319	17	1	QA428	20	1
GM749-189	15	1	03-042-334	17	1	QA432	19	1
GM749-219	15	1	03-042-445	17	2	QA442	19	1
GM749-378-1	17	1	03-042-450	17	1	QA443-1	20	1
GM749-558	15	1	03-042-452	17	1	TQA176	18	2
GM749-558-1	15	1	03-042-453	17	1	TO3-042-276	20	1
GM749-604	15	1	03-042-454	17	1	TO3-042-277-2	20	1
GM749-604C	15	1	03-042-455	15	1	TO3-042-278-2	20	1
GM749-605	17	1	03-042-456	15	1	TO3-042-278-3	20	1
GM749-609	17	1	03-042-457	15	1	03-042-022-1	18	1
GM749-610L	17	1	03-042-458	15	1	03-042-071-1	18	1
GM1749-610R	17	17	03-042-496	15	1	03-042-071-2	18	1
GM749-641L	15	1	03-042-648	15	1	03-042-130	20	1
GM749-641R	15	1	03-042-681	17	1	03-042-161	19	1
GM749-642	17	1	03-042-682	15	1	03-042-162	19	1
GM749-643	17	1	03-042-684	17	1	03-042-163	19	1
GM749-647	17	1	03-043-012	15	1	03-042-294	20	1
GM749-648	17	1	03-043-014	18	1	03-042-315	19	1
GM749-655	17	1	03-043-015	18	1	03-042-316	19	1
GM749-656-1	17	1	03-142-174	18	1	03-042-317	19	1
GM749-656-2	17	1	20C1-1	17	1	03-042-318	19	1
GM749-763	15	2	36R1-N2-10	17	1	03-042-319	20	1
GM749-763-1	15	1	44B11230	18	1	03-042-445	19	2
GM749-781L	15	1				03-042-450	20	1
GM749-781R	15	1				03-042-452	19	1
GM749-809	17	1	TYPE E-13 ADAPTER			03-042-453	19	1
GM749-809-1	17	1	GM749-189	19	1	03-042-457	18	1
GM749-927-1	15	1	GM749-219	19	1	03-042-458	18	1
GM749-947	15	2	GM749-378-1	20	1	03-042-648	18	1
QA069-1	15	2	GM749-605	19	1	03-042-681	19	1
QA166	15	4	GM749-606	19	2	03-043-014	20	1
QA175	15	2	GM749-609	20	1	03-043-015	20	1
QA186-7L	15	1	GM749-641L	18	1	20C1-1	20	1
QA259-2	15	4	GM749-641R	18	1	36R1-N2-10	20	1
QA287	17	1	GM749-642	19	1	7-44-6631	18	1
QA396	15	2	GM749-643	20	1	7-44-66311L	19	1
QA426	15	1	GM749-647	20	1	7-44-66311R	18	1
QA428	17	1	GM749-648	19	1	7-44-66312	19	1
QA432	17	1	GM749-655	19	1	7-44-66313	19	1
QA442	17	1	GM749-656-1	19	1	7-44-66314	19	1
QA443-1	17	1	GM749-656-2	20	1	7-44-66315	19	1
03-042-022-1	15	1	GM749-781L	18	1	7-44-66316	19	1
03-042-071-1	15	1	GM749-781R	18	1	7-44-66318	20	1
03-042-071-2	15	1	GM749-809	19	1	7-44-66319	20	2
03-042-161	17	1	GM749-809-1	19	1	7-44-6632	19	1
03-042-162	17	1	GM749-927-1	18	1	7-44-66320	18	1
03-042-163	17	1	GM749-947	18	2	7-44-66321	18	2
03-042-276	18	1	QA069-1	18	2	7-44-66322	18	1
03-042-294	18	1	QA166	18	4	7-44-6633	19	1
03-042-315	17	1	QA175	18	2	7-44-6634	18	1
03-042-316	17	1	QA259-2	18	4	7-44-6635	19	1
03-042-317	17	1	QA287	19	1	806210D	20	1
03-042-318	17	1	QA396	18	2			
			QA426	19	1			

**SECTION X
STANDARD PARTS LIST**

Type E-11 Adapter

<i>Part Number</i>	<i>Nomenclature</i>	<i>Total Quantity</i>	<i>Part Number</i>	<i>Nomenclature</i>	<i>Total Quantity</i>
AC364-1032	Nut	2	AN380C2-2	Cotter	1
AC365-428	Nut	4	AN380C3-3	Cotter	1
AC385-30-6	Pin	2	AN380C4-4	Cotter	2
AC530-2-6	Screw	6	AN393-33	Pin	1
AN3-12A	Bolt	1	AN442-AD4-10	Rivet	4
AN3-17A	Bolt	1	AN515-10-14	Screw	1
AN4-15A	Bolt	4	AN526-832-4	Screw	1
AN315-5R	Nut	1	AN535-2-2	Screw	12
AN320-7	Nut	1	AN935-416L	Washer—Lock	4
AN320-9	Nut	2	AN960-8	Washer	1
AN340-10	Nut	1	AN960-916	Washer	1

Type E-13 Adapter

<i>Part Number</i>	<i>Nomenclature</i>	<i>Total Quantity</i>	<i>Part Number</i>	<i>Nomenclature</i>	<i>Total Quantity</i>
AC364-1032	Nut	2	AN4-15A	Bolt	4
AC365-428	Nut	4	AN4-15A	Bolt	4
AC385-30-6	Pin	2	AN425AD2-5	Rivet	4
AC530-2-6	Screw	2	AN441-4-20	Rivet	2
AN3-13A	Bolt	3	AN441-6-6	Rivet	4
AN3-4A	Bolt	3	AN441-6-8	Rivet	1
AN315-5R	Nut	1	AN442AD4-10	Rivet	4
AN320-7	Nut	1	AN515-10-14	Screw	1
AN320-9	Nut	2	AN515-416-14	Screw	2
AN340-10	Nut	1	AN526-832-4	Screw	1
AN364-1032	Nut	1	AN535-2-2	Screw	12
AN365-1032	Nut	5	AN935-416L	Washer—Lock	6
AN380C2-2	Cotter	1	AN960-10	Washer	2
AN380C3-3	Cotter	2	AN960-8	Washer	1
AN380C4-4	Cotter	3	AN960-916	Washer	1
AN393-33	Pin	1			