INSTRUCTION MANUAL



Heckler & Koch GMBH Oberndorf-Neckar Alemania



GEWEHR-3 German Service Rifle

The automatic rifle G3, cal. 7,62 mm x 51 NATO, is a weapon developed in accordance with the most modern production methods. It is used as a semi-automatic, with or without bipod, with fixed or retractable butt stock.

The G3 is a recoil operated, self-loading weapon with fixed barrel and semi-rigid bolt, i. e. a new type of delayed blow-back mechanism. The cartridges are fed by a 20-round magazine.

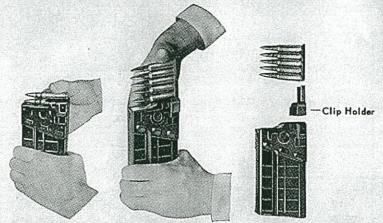


Golden State Arms Corporation 386 West Green Street • Pasadena, California 91105 Phone: (213) 681-7648 681-5038

HANDLING AND OPERATION

Loading of magazine . . .

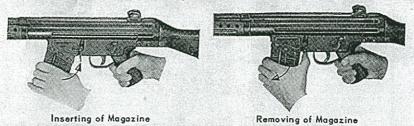
The cartridges are pressed down into the magazine by hand or by means of a clip. When loading the magazine by means of a clip, a clip holder has to be mounted on the magazine.



Inserting and Removal of Magazine . . .

The magazine is inserted into the weapon from below, until the magazine catch engages audibly.

For removal of the magazine, the magazine catch must be pushed with the thumb towards the magazine.



SAFETY

How to put the safety on . . .

Set the safety lever at "S". Now, it is impossible to operate. However, the rifle can be loaded while in "safe" position.

Firing . . .

Set safety lever at "E".

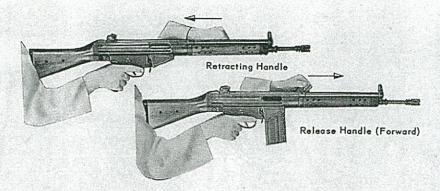
Loading the rifle in "safe" condition . . .

Retract the loading handle with the left hand and lock it in rearward position at the spring tube by turning it to the right.

Insert the full magazine into the rifle (Safety Lever at "S") until the magazine catch engages audibly.

Release the loading handle from its rearmost position and let it snap forward.

The weapon is now loaded and "safe".



DISASSEMBLY OF WEAPON

First put the safety on

Remove the magazine.

Unload, retract the loading handle, make sure that the chamber is free, then let the handle snap forward.

Remove both locking pins and store them in the tubular rivets of the fixed butt stock or in the holes of the retractable butt stock.

Detach the butt stock with recoil spring; hinge down or remove the grip assembly.

Retract bolt by means of the handle and remove the bolt to the rear.



Disassembly of Bolt . . .

Remove the bolt head from the bolt assembly by turning it 180° to the left. (During this operation the rear face of the bolt head must rest against the bolt head carrier.)

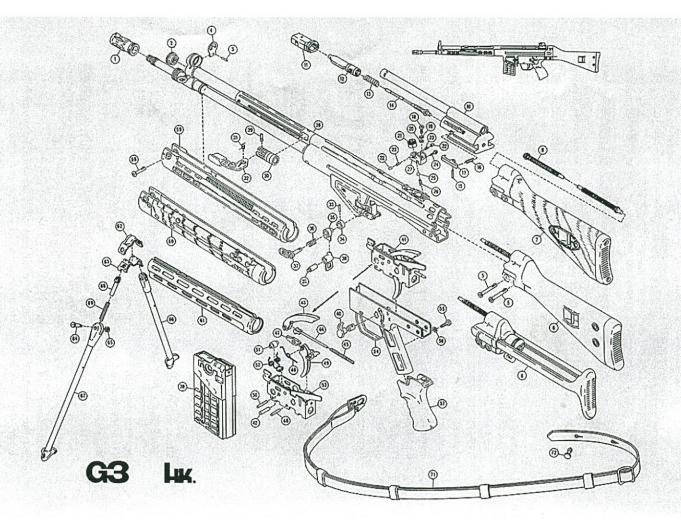
Turn the locking piece 90° to the left and withdraw it.

Reassembly of Bolt . . .

Before inserting the bolt into the rifle, the bolt head must rest against the front face of the bolt head carrier. (Turn 45° o-clock-wise, contact the front face and turn back to the original position.)

Disassembly of Grip with trigger mechanism . . .

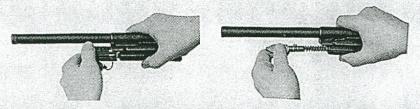
Set the selective fire lever to point vertically upwards, then pull the lever out. Remove the grip assembly. Further disassembly should only be done by Ordnance Personnel. If grip assembly is extremely fouled, it should be washed out with a cleaning solvent.



III. No.	Stock No.	Item	Price		Stock No.	tem	Price	III. No.	Stock No.	ltem	Price
1	141R1	Muzzle Brake	\$ 6.95	25	141R25	Ball	\$.75	49	141R49	Trigger	\$ 5.00
2	141R2	Receiver Cap	1.75	26	141R26	Pressure Spring	.50	50	141R50	Sear Spring Pin	1.00
3	141R3	Front Sight Pin	.35	27	141R27	Rear Sight Base	7.00	51	141R51	Sear Spring Roller	2.50
4	141R4	Front Sight	1.25	28	141R28	Receiver and Barrel Assem	75.00	52	141R52	Sear Spring	2.50
5	141R5	Butt Stock Retaining Pin (2)	2.00	29	141R29	Cocking Handle Pin	1.75	53	141R53	Trigger Housing w/Ejec. Assem	. 15.00
6	141R6	Butt Stock (Plastic)	25.00	30	141R30	Cocking Handle Support	2.50	54	141R54	Pistol Grip	10.00
7	141R7	Butt Stock (Wood)	35.00	-31	141R31	Cocking Handle Spring	1.25	55	141R55	Grip Screw	.75
8	141R8	Butt Stock (Retractable)	49.95	32	141R32	Cocking Handle	5.50	56	141R56	Grip Screw Lock Washer	.50
9	141R9	Recoil Spring Assembly	8.00	33	141R33	Magazine Catch Retain Pin	.75	57	141R57	Grip	3.00
10	141R10	Bolt Carrier	35.00	34	141R34	Magazine Catch Button	1.50	58	141R58	Forearm Retaining Pin	2.00
11	141R11	Bolt Head	15.00	35	141R35	Magazine Catch Cam	3.00	59	141R59	Forearm (Plastic)	10.00
12	141R12	Locking Piece	7.00	36	141R36	Magazine Catch Spring	1.00	60	141R60	Forearm (Wood)	15.00
13	141R13	Firing Pin Spring	1.50	37	141R37	Magazine Catch	2.50	61	141R61	Forearm (Metal)	7.00
14	141R14	Firing Pin	5.00	38	141R38	Magazine Catch Lever	3.50	62	141R62	Bipod Body (Upper)	1.50
15	141R15	Bolt Locking Lever Pin	1.00	39	141R39	Magazine Catch Lever Pin	2.00	63	141R63	Bipod Body (Lower)	1.50
16	141R16	Bolt Locking Lever Spring	1.00	40	141R40	Safety Lever	5.00	64	141R64	Leg Screw	.50
17	141R17	Bolt Locking Lever	3.00	41	141R41	Trigger Group Assembly	43.00	65	141R65	Leg Not	.50
18	141R18	Rear Sight Screw	1.00	42	141R42	Hammer Pin	1.50	66	141R66	Leg (Right)	5.00
19	141R19	Rear Sight Lock Washer	.50	43	141R43	Hammer	4.50	67	141R67	Leg (Left)	5.00
20	141R20	Rear Sight Washer	.50	44	141R44	Plunger	2.50	68	141R68	Cam Foller	1.00
21	141R21	Rear Sight	4.50	45	141R45	Plunger Spring	1.75	69	141R69	Cam Follower Spring	.50
22	141R22	Rear Sight Arresting Pin	1.50	46	141R46	Trigger Pin	.75	70	141R70	Magazine	9.95
23	141R23	Rear Sight Arresting Pin Spring	.75	47	141R47	Sear	4.50	71	141R71	Sling	3.55
24	141R24	Rear Sight Adjusting Screw	1.75	48	141R48	Trigger Spring	1.50	72	141R72	Sling Pin	.40

4

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Disassembly of Bolt Extracting of Locking Pin and Firing Pin with Firing Pin Spring

Reassembly of Rifle ...

Set safety lever on grip assembly at "S".

Push assembly bolt into receiver (locking rollers must rest inside the bolt head).

Attach grip assembly

Attach butt stock with back plate.

Check correct assembly by carrying out loading operation.



Reassembly of Rifle

CARE OF YOUR G3 SEMI-AUTO RIFLE

Neglect is the prime spoiler of firearms. Snow, rain and dampness are constant threats to all metal parts. Salty perspiration from your hands is a major cause of exterior rust. Proper care and equipment will prevent this damage and insure a lifetime of trouble free service.

Your gun care equipment should consist of cleaning rod, bristle or brass brush of proper caliber size, powder solvent, gun oil, patches, a soft cloth and a screw driver.

After use, the bore of your G3 Rifle should be wiped out with powder solvent and then a thin film of oil applied to the bore and all exposed surfaces.

The action should be cleaned after use, removing any foreign material from the face of bolt and lip of extractor. A light film of oil should be applied to assure adequate protection and continued smooth operation.

Storage: If your G3 Rifle is not to be used for an extended period of time, apply gun grease to the interior of the barrelandall metal parts. Do not plug the barrel, store in a dry place. Before firing remove all grease, especially from the barrel and chamber.

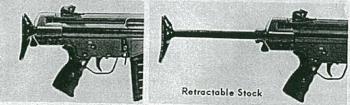
By following these few simple rules you are guaranteed years of trouble free service from your G3 Rifle — America's finest firearm.

G ACCESSORIES



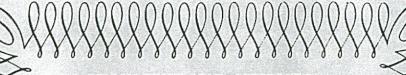






LIST PRICES

Lightweight Magazines ea. Bipod and Forearm Assembly Retractable Stock Assembly Sling, ea. OBERNDORF Cleaning Kit	B-117 B-116 B-146 B-124 B-147	\$9.95 ea. \$24.95 ea. \$49.95 ea. \$3.95 ea. \$7.95 ea.
Magazine Loader	B-147 B-148	\$7.95 ea. \$3.95 ea.



GOLDEN STATE ARMS CORPORATION

Warranty

The manufacturer warrants this product to be free of defects in workmanship and material.

At any time within one year from the date of delivery to the original purchaser, the manufacturer will repair the product, without cost to the owner if found defective in material or workmanship.

This warranty does not cover abuse, neglect, improper operation, tampering by unauthorized personnel or damage inadvertently caused by the user. In all cases of in-transit damage, a claim must be filed with the carrier.

SERVICING

If a rifle requires factory servicing, do not ship rifle. Write describing nature of problem. An Authorized Return Label will be furnished when factory repair is required. All rifles must be shipped prepaid. The cost of repairs, if any, will be confirmed prior to initiating servicing.

PARTS ORDERS

List part name and number and include with your order a check or money order for the full amount. We maintain a full Custom Gunsmithing Servicing department. Please feel free to contact us on any special gunsmithing service you may require.

FOR SERVICING AND/OR PARTS, Write:



GOLDEN STATE ARMS CORP. ATTN: CUSTOMER SERVICE DEPT. 386 WEST GREEN ST. PASADENA, CALIF. 91105



Civilian target and sporting model of the world famous

GEWEHR-3 German Service Rifle



Geologists, Explorers, Boatmen, Prospectors, Brush Pilots

For those whose existence depends on meeting the challenge of the wilderness . . . when compactness is essential . . . where every ounce is important . . . when reliability is the key to survival . . . the G-3 is the only choice.

. . . when unquestioned functioning is required regardless of extremes of temperature or climatic conditions . . . when fragile conventional rifles cannot meet the challenge of constant abuse and hard service . . . when RELIABILITY is the ULTIMATE factor there is only one rifle . . . the OBERNDORF G-3.

Target Shooters

An officially recognized NATO weapon for use in registered .30 caliber matches. Precision hammer forged high alloy steel barrels.

Collectors

Here are features and design characteristics revolutionary in gun design . . . roller bearing locking lugs . . . fluted chambers . . . intricate pressed steel construction.

SPECIFICATIONS

Model: Oberndorf G-3
Type: Semi-Auto
Caliber: .308 Winchester

(7.62mm NATO)

Mag. Capacity: 20 Rounds Barrel Length: 173/4"

Length O.A.: 40" Weight: 8 Lbs.

Sights Rear: Rotary, Peep, Adjustable for Elevation and Windage

Sights Front: Fully Protected Post Stocks: High Impact Plastic



FOLDING BIPOD AND HAND GUARD ASSEMBLY

When the chips are down . . . when every mechanical assistance is necessary to assure maximum long range accuracy . . . when the downing of game becomes a matter of daily sustenance . . . only then can the merits of the bipod assembly be fully realized.

RETRACTABLE STOCK

RETRACTABLE STUCK
The addition of this accessory creates a unit capable of maximum efficency, in either the retracted or extended positions. The perfect answer to cramped storage space problem on boats, light aircraft, pack horses, cance, or back packs. Retracting the stock drops the overall length to a compact 32 inches. A precious 20% space reduction.

SCOPE ASSEMBLY

The final requirement of maximum shooting accuracy. A must for difficult shooting in the poor light of dawn and dusk, and indispensible for identifying and safe taking of game at long ranges. Designed for the rigor of constant use, the quick detachable feature makes it possible to store the scope separately, yet have the security of "Instant Zero."

MAGAZINE

Ultra lightweight . . . weighs less than 5 rounds of ammunition. The perfect way to carry spare ammunition. Always ready for use, while fully protecting ammunition from dirt or abuse.

Broad, beavy duty, genuine leather sling specifically designed to fit the G-3.

CLEANING KIT

Lightweight, self-contained cleaning kit. Designed to fulfill all the cleaning requirements of the G-3 Rifle with a minimum of space and weight.

MAGAZINE LOADER

Utilization of this device enables magazine to be easily loaded to full twenty round capacity from standard five round NATO clips.









LIST PRICES

OBERNDORF G-3
(Basic rifle with one magazine) R-141 \$225.00 ea. OBERNDORF G-3 (Deluxe rifle with one magazine and wood butt stock and forearm ass'y.) R-141WS \$245.00 ea. Lightweight Magazines ea. B-117 \$9.95 ea. Bipod and Forearm Assembly \$24.95 ea. B-116 \$49.95 ea. Retractable Stock Assembly B-146 Sling, ea. B-124 \$3.95 ea. **OBERNDORF Cleaning Kit** B-147 \$7.95 ea. Telescope and Mount (availablity, February 1966) B-115 To be announced Magazine Loader B-148 \$3.95 ea.

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1963 SANTA FE

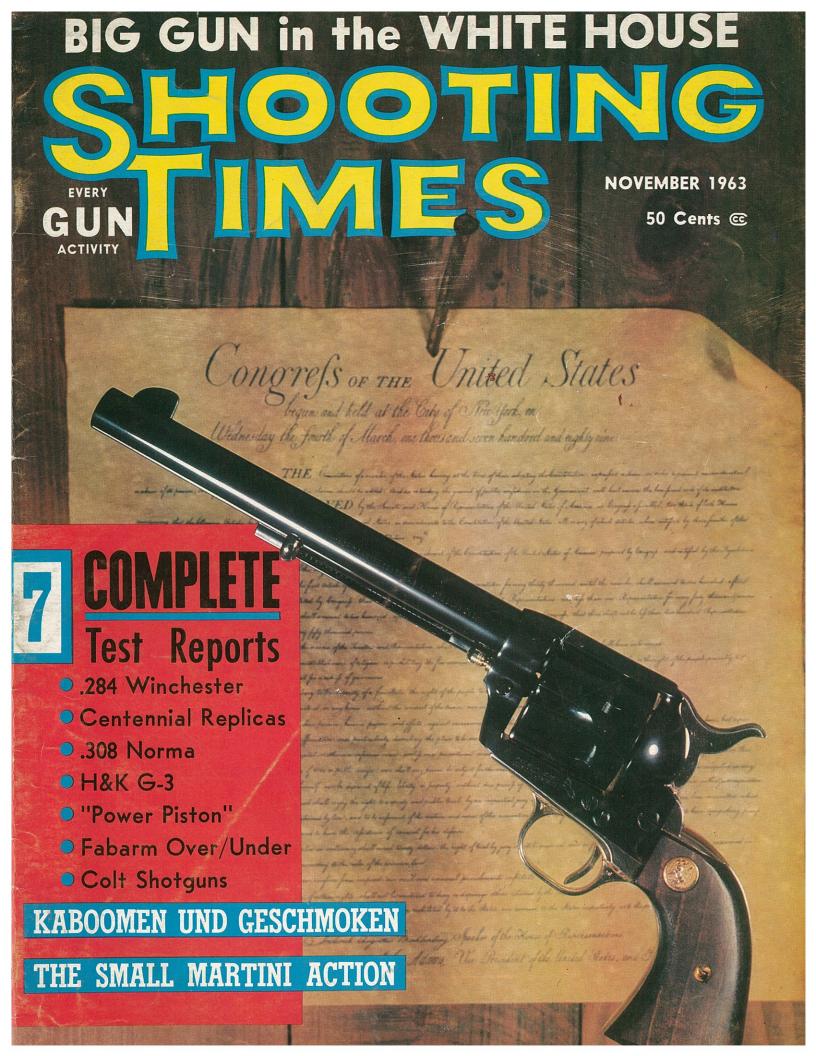
SPORTING RIFLES

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GOLDEN STATE ARMS CORPORATION

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■ ITLER FOULED things up. The more we learn about the latter days of World War II, the more we realize that without Mr. Schicklegruber the German CAPT. war machine might have gone on longer than it did. The St.G. 45M is a good example. Fortunately, Hitler did not press for produc-GEORGE tion of this fine military rifle. C. Back in the latter days of the war, E. Vorgrimmler, of the famed Mauser Werke, came up with an unusual hesitation-locked design for an economically produced NONTE military automatic rifle. But it never got into German production. A few years later, it appeared (along with Herr Vorgrimmler) in Spain as the CETME Assault Chambered for a pair of special CETME 7.62mm and 7.92mm cartridges, it was TECHNICAL EDITOR tested by various countries but not adopted. The cartridges utilized were very long, sharply pointed, aluminum bullets which were partially covered with copper alloy jackets to engage the rifling. They were necessarily light and possessed marginal Standardization of the 7.62mm NATO cartridge by western powers killed any future the CETMES may have had, and the gun was redesigned for the NATO round. It was eventually adopted in this form as the standard Spanish infantry rifle. West Germany, in the market for a modern assault rifle to arm its growing army, tested a number of new designs. These included the FN and the CETME. The CETME won out after extensive field tests and is now manufactured for the German government by Heckler & Koch, Oberndorf/Neckar. Thus, oddly enough, the old StG. 45M comes home almost 20 years later to the country of its origin and to the site (Oberndorf) of the great Mauser plant that spawned it. The West German government has allowed Heckler & Koch to manufacture a limited quantity of these rifles for commercial sales. It is designated the H&K G-3 and has been redesigned for semi-automatic fire only. Aside from this change, it is identical to the standard selective-fire model used by the Germans. Basically, the H&K G-3 is a fixed barrel, delayed blow-back, reciprocating bolt, A full report on the commercial version of West Germany's assault rifle--the CETME NONTE TESTS THE H&K G-3



detachable box magazine, semi-automatic military rifle with raised line of sight and two-piece stock. Basic structures—receiver, back plate, loading mechanism housing, trigger housing and magazine—are welded assemblies composed of steel stampings.

Many other small parts are stampings and castings to reduce production costs. Less than 20 parts require any machining. Wire springs are used throughout. Field disassembly is accomplished with only a loaded (or dummy) cartridge.

The G-3 action is an unusual choice for a full-power military cartridge because it is not positively locked in the usual meaning of the term. Locking is by two small rollers housed in the bolt head, cammed outward into recesses in the barrel extension. The rollers are held in this position by a wedge-shaped locking piece attached to the bolt carrier riding inside the hollow bolt.

This sytem functions as follows: At the instant of firing, the rollers are held solidly in barrel extension recesses by the locking piece, locking the bolt. As chamber pressure builds up, the case head exerts pressure on the bolt face, transmitting this thrust to the rollers. The rollers seat on inclined planes and tend to move rearward and into the bolt un-

Test Report

der this pressure, but are prevented from doing so immediately by the locking piece which sticks down between them.

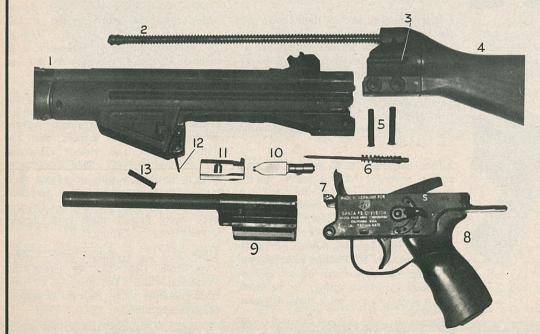
The shape of this piece forms cam surfaces with a specific relationship to inclined planes in the barrel extension. This relationship is such that pressure on the bolt causes the rollers first to force the locking piece rearward, which then leaves a path clear by which the rollers move rearward and into the bolt. Once the rollers have cleared the barrel extension recesses, the bolt and carrier are free to move back.

Since the locking piece is attached to the heavy bolt carrier, considerable inertia must be overcome before the rollers are free. The carrier must move approximately 3/16 to 1/4 inch before the bolt can unlock. Overcoming the resistance of the various planes, movement of the rollers, locking piece and carrier consume sufficient time for the bullet to leave the barrel before the bolt is free to travel rearward. Residual chamber pressures and the inertia of the already moving carrier supply energy for extraction, cocking, ejection and compression of the recoil spring.

This type of action provides no slow starting primary extraction to loosen the case in the chamber. The empty case is literally jerked from the chamber while residual pressure is still fairly high. Unless compensation for this rough treatment is provided, cases are likely to develop torn-off rims and separations. The CETME design overcomes this by the use of a fluted chamber.

Longitudinal grooves are formed in the chamber walls. They are deepest at the neck, fading out completely about 5/16 inches from the case rim. Powder gas flows back along these grooves to form

(Turn Page)



- 1. Receiver
- 2. Recoil spring
- 3. Back plate
- Butt stock
 Back plate
- retaining pins
- 6. Firing pin and spring
- 7. Hammer
- 8. Trigger housing group
- 9. Bolt carrier
- 10. Locking piece
- 11. Bolt
- 12. Magazine catch
- 13. Trigger housing

retaining pin

November, 1963