SECRET

C. I. S. A.

TECHNICAL REPORT NO. J-28

ON

8 M/M UNKNOWN TYPE JAPANESE

MACHINE CARBINE.

M.I.10A/M5542

Whitehall 9400 Ext 814.

The War Office (M.I.10a)
Whitehall,
London, S.W.1.

8th April 1946.

C.E.A.D., Cheshunt.

You may care to see attached C.I.S.A. (India) Report No J-28 on 8 mm. Unknown Type Japanese Machine Carbine. Please retain.

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B.A.S.,Washington.

ARMAMENTS DESIGN DEPARTMENT
169.
10 APR 1946
CHESHUNT

RJHC Ross
Capt
for Colonel, G.S.

Note - Seen by
CA Edwards
12/4/46

S E C R E T

C.I.S.A.(INDIA)
TECHNICAL REPORT J-28.
DATE: FEBRUARY 1946.

E N E M Y E Q U I P M E N T

J A P A N E S E

8 MM. UNKNOWN TYPE MACHINE CARBINE

COLONEL,
CHIEF INSPECTOR OF SMALL ARMS.
ICHAPUR, B.A. RAILWAY.
BENGAL.

JAPANESE 8 MM. UNKNOWN TYPE MACHINE CARBINE.

1. GENERAL FEATURES.

The carbine is operated by case projection and is fired from an open bolt.

A one piece wooden stock extends to the muzzle. This stock is deep enough to form the trigger guard and also shroud the magazine opening (on the underside in front of the trigger opening).

Neither bayonet or sling fixtures are provided. Possibly the plate on the right side of the stock can be used with some type of carrying harness.

It is reasonable to assume that the specimen examined is either a 'Pilot' or experimental model, possibly the product of a private enterprise. The standard of workmanship is above that normally found in Japanese small arms.

The positioning of the return spring around the barrel, the addition of the weight of t he barrel casing to the reciprocating parts, has been employed effectively to reduce the length of the action, in rear of the chamber. Hence a longer barrel and shorter overall length is obtained than would be possible with a more conventional arrangement.

The trigger mechanism with tubular sear is typically Japanese. An unusual feature is the engagement of the sear on t he face of the feed horn.

2. PHOTOGRAPHS.

Fig.I.
CARBINE assembled with
Magazine Pouch.

2. PHOTOGRAPHS - Contd.

FIG. 2
Carbine Stripped for Cleaning.

FIG. 3
Exploded View.

1. Stock.
2. Body screw front.
3. Guard Plate.
4. Guard plate front screw.
5. Guard plate rear screw.
6. Guard plate middle screw.
7. Barrel bearing front.
8. Body locking pin.
9. Body & Barrel assembled.
10. Buffer housing locking pin.
11. Buffer housing.
12. Buffer housing end cap.
13. Spring casing.
14. Cotter pin.
15. Breech block.
16. Ammunition.
17. Return Spring.

3. LIST OF COMPONENTS.

Body and Barrel Group.

Body assembled.
Barrel.
Spring casing.
Return spring.
Barrel bearing front.
Buffer housing.
Buffer housing end cap.
Buffer housing locking pin.
Plunger.
Backsight assembled.
Safety catch.
Trigger.
Sear.
Sear spring.
Ejector.
Magazine catch.
Magazine catch spring.
Magazine catch locking nut.

Stock Group.

Stock.
Guard plate and screws.
Front cap and screws.
Side plate and screws.
Butt plate and screws.

Breech Block Group.

Breech block.
Firing pin plug.
Extractors with springs.
Plunger catch with spring.
Cotter pin.

4. MECHANISM.

Forward Action. When the sear is depressed by the trigger, the breech block is pulled forward by the return spring and casing. A round is stripped from the magazine by the feed-piece (on the underside of the breech block) and driven into the chamber. Owing to the feed-piece projecting into the cartridge face, the nipple is prevented from striking the cap until the feed-piece is depressed clear of the face by the extension arm at t he upper breech end of the barrel. This action cannot take place until the round is safely seated in the chamber.

As the breech block travels forward, the plunger catch draws forward the fire control plunger for approximately 1" when it is released by riding up from the clearance slot in the body. There are 5 holes of different sizes in the cap of the buffer housing. The rate of fire could be varied by the amount of air sucked into the plunger housing or the plunger could act as a buffer on t-he rearward movement of the breech block. The designer does not seem to have made up his mind which function to use.

Backward Action. The breech block is not locked, and is operated by case projection. The empty case is held by the extractor until it strikes the ejector located on the left of the magazine housing, and is ejected to the right.

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4. MECHANISM - Contd.

Empty Magazine. There is no holding open device.

Applied Safety. A safety catch on the left on the body acts in two ways:-

(1) Weapon in fired position - prevents the action being cocked, and locks the trigger.

(2) Weapon in cocked position - locks the trigger.

Mechanical Safety. See para.4.

5. STRIPPING AND ASSEMBLING COMPLETE.

A combination tool is provided.

(1) Rotate the buffer housing locking pin (10) a quarter of a turn forward withdraw to the left.

(2) Remove the buffer housing to the rear.

(3) Cock the action, depress the catch barrel bearing front and remove the barrel bearing (7).

(4) Hold the action fully to the rear and remove the cotter pin (14) from right to left. Allow the spring casing (13) to go forward under control and remove.

(5) Remove the breech block (15) to the rear.

(6) Remove the body locking pin (8), Magazine catch, guard plate (3), and remove the body and barrel assembly (9) from the stock (1).

(7) Remove the barrel locking screws on the underside of the body and withdraw the barrel to the front.

(8) Unscrew the breech face from the breech block.

(9) Remove trigger axis pin and trigger.

(10) Rotate the safety catch to line-up the key with the key-way and withdraw the safety catch to the left.

(11) Unscrew (anti-clockwise) the buffer housing end cap and remove the plunger.

ASSEMBLING. Reverse order.

6. MAINTENANCE IN THE FIELD.

Any dirt, corrosion or lack of lubrication sufficient to impede free movement of the reciprocating parts, will cause stoppages during firing, therefore cleaning and oiling must be carried out regularly.

Points to be attended to before firing.

(1) All working surfaces should be thoroughly oiled with Oil S.A. (or suitable substitute).

(2) Before assembling the springs ensure the recoiling parts work freely.

.....Contd.....

(3) Thoroughly dry the bore of the barrel.

(4) Examine the magazine for dirt or damage.

Points to be attended to during firing.

(1) See that a sufficient quantity of ammunition is always available.

(2) During a temporary cessation of fire, oil all the working surfaces.

Points to be attended to after firing.

(1) See that the gun is unloaded.

(2) See that the bore and breech face are well oiled immediately after firing.

(3) Ensure that all unfired ammunition is collected.

Stripping for Cleaning.

(1) Rotate the buffer housing locking pin (10) a quarter of a turn forward withdraw to the left.

(2) Remove the buffer housing to the rear.

(3) Cock the action, depress the catch barrel bearing front and remove the barrel bearing (7).

(4) Hold the action fully to the rear and remove the cotter pin (14) from right to left. Allow the spring casing (13) to go forward under control and remove.

(5) Remove the breech block (15) to the rear.

Cleaning and Lubricating.

(1) Thoroughly clean all the moving parts and the bore.

(2) Examine all the parts for burrs, remove with an oil-stone.

(3) Lightly oil all the parts with Oil S.A. or other suitable substitute.

Assembly. Reverse order.

7. DETAIL.

1. Weapon	8 MM. Machine Carbine.
Type	Unknown.
Make	Due to lack of positive identification, it is not certain that this carbine is of Japanese manufacture. It was found in Japanese HQ. Singapore.
Date of manufacture	Not known.
Markings	"37" on all components, nothing else.

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7. DETAIL - Contd.

2.	Calibre	
	Nominal in inches	.31496
	Nominal in MM.	8
	Actual in inches	.3145
	Actual in MM.	7.99
3.	System of operation.	Blow back.
4.	System of feed	Vertical box magazine.
5.	Locking system	Being a blow back action, no locking is provided.
6.	Breech open or closed on ceasing fire.	Closed.
7.	Provision for single shot & automatic.	Automatic only.
8.	Rate of fire	820.
9.	Muzzle velocity	Unknown.
10.	Weight of carbine complete	6.25 lbs.
11.	Length overall	26 inches.
12.	Method of filling magazine	Same as for the Bren.
13.	Barrel	
	Weight	.65 lbs.
	Length	9½ inches.
14.	Bore	
	No. of grooves	6
	Groove width	.125"
	Groove depth	.006"
	Pitch	1 turn in 10"
	Direction of twist	Right hand.
	Form	Segmental.
15.	Feed opening location	Bottom of body and stock.
16.	Ejection opening location	Right side of body.
17	Safety devices - Applied	A safety catch on the left of the body.
	Mechanical	The firing nipple cannot strike the round until it is seated fully into the chamber.
18.	Sights	
	Backsight	Tangent aperture graduated to 600 metres, windgauge with screw adjustment.
	Foresight	Inverted "V", provided with lateral adjustment.
19.	Flash Eliminator	None.
20.	Accessories.	(1) Canvas cover with zip fastener and two carrying handles.
		(2) Magazine carrier with pockets for five magazines.
		(3) Combination tool.
21.	Ammunition -	See D.of A.(India) Japanese Ammunition Leaflets - Section B - Leaflet B.9.