

# 1. STOCKING

## 1.1 GENERAL

The stock should be free from splits, dents and abrasions. Repairs should conform to original contours and be finished smooth with a reasonable colour match. Where a patch is inserted to repair a damaged area, it should be dove-tailed, glued and pegged in position. The number of patches inserted is immaterial providing the strength of the stock is not affected.

## 1.2 ADJUSTMENT OF BUTT LENGTH

1.2.1 The length of 'pull' (trigger to butt plate) is adjustable to allow the user to obtain correct eye relief.

1.2.2 Six .39" (10mm) spacers are fitted when the weapon is issued, these may be removed to suit individual firer's requirements. A 3/16 inch AF hexagon key is required in order to remove the two screws securing the recoil pad.

## 1.3 SCREW HOLES

The screws for the recoil pad retaining plate, rear swivel and handstop track should assemble and tighten under firm hand pressure without slipping. Where the screw hole has stripped it should be repaired by drilling out to a suitable oversize and securing a dowel in position using epoxide adhesive. After the adhesive has cured the dowel should be filed down to conform to the original contour, and drilled with a clearance hole to suit the particular screw.

## 1.4 BEDDING

1.4.1 The underside of the body is fully bedded to the stock using an aluminium epoxide putty. Two recoil-bolts passing through the stock are each secured by two nuts, and are also bonded in position by the bedding material.

1.4.2 It is imperative for consistent accuracy that the stock is retained to the parent body/barrel assembly. For this reason the flat of the grip is marked with the full serial number of the weapon.

1.4.3 No attempt should be made to adjust the bedding material by adding or removing the aluminium putty, or to remove the recoil bolts.

1.4.4 Where the stock is found to be unserviceable due to damage, or the bedding is suspect due to poor accuracy a new stock should be fitted.

- 1.4.5 To ensure optimum accuracy the barrel is free-floating within the stock. A clearance of 0.060 inch (1.55mm) min should be maintained forward of the barrel reinforce. This clearance may be checked by using a suitable piece of card approximately 6" x 1" of the correct thickness. Where the clearance does not exist due to distortion or bowing, carefully remove wood from the barrel seating using a chisel until the correct clearance is obtained.

## 1.5 TREATMENT OF WOODWORK

- 1.5.1 To obtain a uniform colour after repair the stock should be treated with a suitable wood stain.
- 1.5.2 Sand the stock, working through the main grades of sandpaper, finishing with a fine grade to remove scratches and the old surface finish. Shallow dents or bruises in the wood may be lifted by applying a piece of wet felt over the dent and pressing a heated soldering iron onto the area for a few seconds.
- 1.5.3 Apply the stain/oil solution to the stock liberally with a pad or soft cloth and allow it to stand for approximately 1 hour.
- 1.5.4 Remove any surplus stain solution using a soft cloth.
- 1.5.5 To maintain the appearance and condition of the stock the user should be encouraged to periodically apply a very small quantity of boiled linseed oil to the stock. This should be rubbed well into the stock by hand.

### **CAUTION**

On no account should linseed oil be applied to the bore, mechanism or exterior of the weapon.

## **2. BARREL**

- 2.1 Where after cleaning doubt exists as to the serviceability, the weapon should be tested for accuracy.
- 2.2 Weapons with loose, bent or bulged barrels or weapons that fail the accuracy test should be returned for overhaul.

## **3. BODY**

- 3.1 No repairs are envisaged or recommended, burrs may be removed by careful stoning. The components of the ejector box may be exchanged when worn or damaged. All other wear or damage must involve the weapon being returned for overhaul.

## **4. TRIGGER MECHANISM**

### **4.1 GENERAL**

The trigger is the double pull type and can be adjusted to give pull-off weights of 2.0 lbs (0.90 kg) min to 5.0 lbs (2.2 kg) maximum. Adjusting screws are also provided to enable any creep and overtravel to be rectified between the sear and trigger.

4.1.1 On initial issue the mechanism is preset to give a pull-off between 3.5 lbs (1.5 kg) to 4.5 lbs (2.0 kg).

4.1.2 Stripping of the trigger mechanism is not recommended. Where the pull-off cannot be adjusted within the laid down limits, or where the mechanism fails the safety checks, the trigger mechanism should be replaced as a complete sub-assembly.

### **4.2 SAFETY CHECKS**

To carry out the safety checks the stock must be removed as previously detailed.

**NOTE** The safety catch must only be applied with the bolt locked and the firing mechanism in the cocked position.

4.2.1 Check that the safety catch is positively retained in both the 'ON' and 'OFF' position by the spring loaded ball engaging the two holes in the side of the catch.

4.2.2 Check that the long arm of the safety catch engages the recess in the underside of the bolt and prevents rotation of the bolt.

4.2.3 Check that the trigger is positively blocked by the stop of the safety catch engaging over the step at the rear of the trigger.

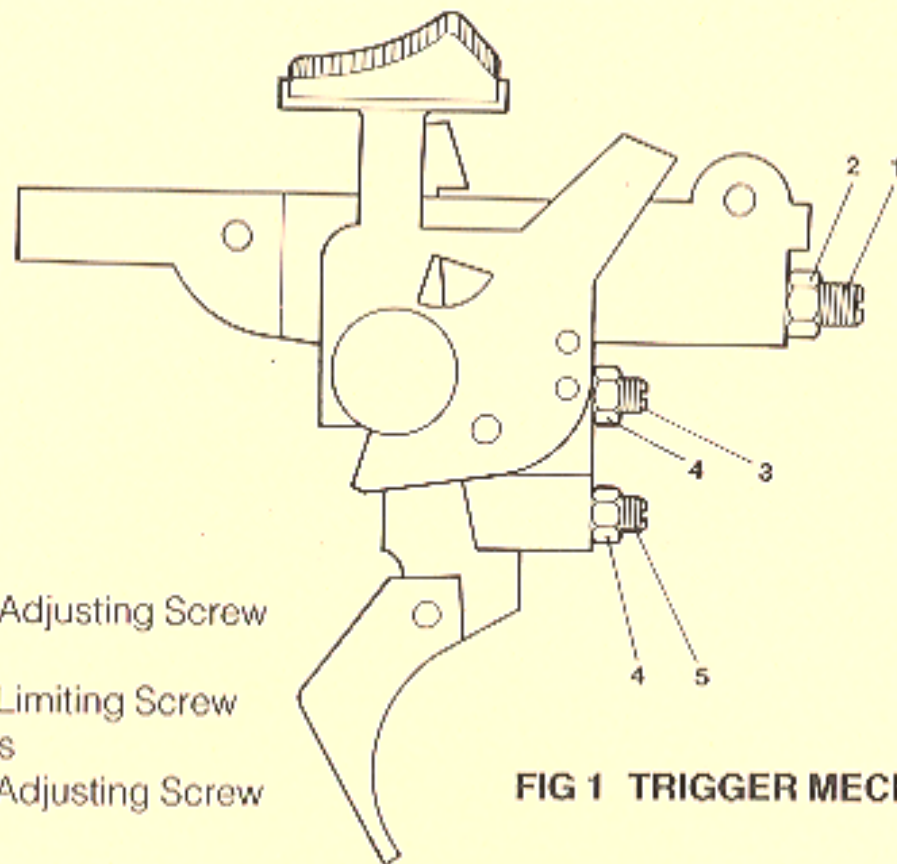
4.2.4 Check that the sear stop on the safety catch moves below the sear and lifts it clear of the trigger bent.

### **4.3 TO ADJUST PULL-OFF (Fig 1)**

4.3.1 Unlock the lock-nut from the pull-off adjusting screw.

4.3.2 To increase the weight of the pull-off, turn the adjusting screw clockwise to obtain the maximum weight of 5.0 lbs. To decrease the weight to the minimum permissible pull-off of 2.0 lbs, rotate the screw anti-clockwise.

4.3.3 Having obtained the required weight of pull-off, hold the adjusting screw to prevent rotation and carefully tighten the locknut.



**KEY**

- 1. Pull-Off Adjusting Screw
- 2. Locknut
- 3. Trigger Limiting Screw
- 4. Locknuts
- 5. Trigger Adjusting Screw

**FIG 1 TRIGGER MECHANISM**

**4.4 TRIGGER CREEP AND TOTAL MOVEMENT**

4.4.1 The trigger adjusting screw controls the amount of engagement between the trigger and sear. Where this engagement is excessive the trigger will have considerable movement or creep before the sear is released and the action fires.

4.4.2 The trigger adjusting screw bears on the front of the trigger, below its axis pin. Clockwise or anti-clockwise rotation of the screw decreases or increases respectively the amount of engagement between the trigger bent and the underside of the sear.

4.4.3 The trigger limiting screw bears on the trigger above its axis pin and limits the rearward movement of the trigger.

4.5 Where the weight of pull-off, creep and total movement all require adjustment. The creep and total movement should be adjusted first, followed by adjustment of the pull-off.

4.5.1 To adjust the creep and overall trigger movement proceed as follows:

4.5.1.1 Release the locknuts of the limiting and adjusting screws and rotate the limiting screw two complete turn anti-clockwise.

- 4.5.1.2 Cock the firing mechanism by opening and closing the bolt.
- 4.5.1.3 Slowly rotate the adjusting screw clockwise until the bent on the trigger clears the sear and the action fires.
- 4.5.1.4 Rotate the adjusting screw 1/8th turn anti-clockwise, recock the firing mechanism by operating the bolt and check to ensure the cocking piece is retained in the cocked position.
- 4.5.1.5 Finely adjust the screw so that the firing mechanism cocks consistently with minimum creep of the trigger. When this condition is achieved, hold the screw to prevent rotation and tighten the locknut.
- 4.5.1.6 Carefully rotate the trigger limiting screw in a clockwise direction until it is felt to contact the trigger. On no account apply any force as the screw contacts the trigger or damage to the mechanism will result.
- 4.5.1.7 Having contacted the trigger, rotate the limiting screw back 1/4 turn anti-clockwise. Hold the screw to prevent rotation and tighten the lock-nut. Adjust the pull-off as detailed in paragraph 4.3.

**NOTE**

Should the limiting screw be maladjusted so that there is insufficient overall trigger movement, the sear will bind on the face of the trigger and slow its fall. It may well also jam in the down position preventing cocking of the firing mechanism.

**4.6 REASSEMBLY**

After reassembly of the stock recheck the pull-off and trigger adjustment, ensuring that the trigger is not frictioning on either side of the trigger guard. Slight sideways movement should be evident in the trigger when tested by finger pressure with the stock screws tightened fully.

## **5. BOLT ASSEMBLY**

- 5.1 Repairs to the bolt are limited to the removal of burrs and the exchange of worn or damaged parts. Fractured, damaged or worn bolts involve the weapon being returned for overhaul.
- 5.2 Strikers that are slightly bent may be straightened but where protrusion is outside the limits 0.055" – 0.065" a new striker is to be fitted.

## **6. HEADSPACE**

Headspace is not adjustable. Where headspace is outside the gauge limits the weapon should not be fired and should be returned for overhaul.

## **7. RUSTPROOFING**

On initial issue the protective finish on the exterior of steel components of this weapon is a chemically applied blacking process together with a thin film of oil. The oil film should be regularly renewed by wiping over the steel components with a lightly oiled cloth.

## **8. LUBRICATION AND PRESERVATION**

Lubrication and preservation of the weapon is as follows:

- 8.1 The weapon is to be lubricated and preserved using a suitable oil.
- 8.2 All working parts are to be lubricated at all times prior to firing. Care should be taken to ensure that the stock is kept free from lubricants and preservatives.
- 8.3 Prior to firing, all gas affected parts, ie. bore, chamber, and bolt face are to be dry cleaned.

# Chapter 3

## FUNCTIONING AND ACCURACY STANDARDS

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## 1. GENERAL

- 1.1 Weapons are to be range tested for functioning (operating efficiency) and accuracy (weapon's capabilities) in accordance with Table 2 when the repairs or replacements listed in Table 1 have been carried out, or when any doubt is expressed by the user as to the functioning or accuracy of the weapon.
- 1.2 Prior to test firing the weapon should be prepared for firing by dry cleaning of the bore and breech bolt face.

| Serial | Repair or condition                          | Type of test firing | Remarks  |
|--------|--|---------------------|--|
| 1      | Repair/replacement of foresight or backsight | Re-Zero             |  |
| 2      | Barrel-Bends, cuts or pitting                | Accuracy            | Providing gauge plug<br>0.2975" runs                     |
| 3      | Chamber – suspect                            | Functioning         | Test for hard extraction and/or deforming of fired case. |
| 4      | Stock repaired or replaced                   | Accuracy            |  |

Table 1 – Test firing data



## 2. FUNCTIONING

Weapons should feed, lock, fire, extract and eject all rounds and spent cases without failure. Weapons failing function tests should be checked for serviceability of components. Once rectified, they should be re-tested. Where a weapon still fails to function correctly it should be returned for overhaul.

## 3. SENTENCING

Weapons that fail the accuracy standard detailed at Table 2 should be returned for overhaul.

| Condition           | Detail/Standard   |
|---------------------|---|
| Range               | 100m  |
| Sight Setting       | 100m  |
| Group Size          | Circle 38mm dia. All shots to be within the circle.   |
| Means of Adjustment | <u>Foresight</u><br>Lateral: By adjustment of windage screws<br>Vertical: By adjustment of bead             |
| No. of Rounds       | Warmers followed by 5 rounds onto the target.   |
| Conditions          | Weapon to be fired from the shoulder, prone or bench rest. Sniper or target standard ammunition to be used. |

Table 2 – Accuracy data

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