INCH-POUND

MIL-G-001298C (AR) AMENDMENT 2 30 September 1993 SUPERSEDING AMENDMENT 1 29 January 1990

#### MILITARY SPECIFICATION

GUN, MACHINE, CALIBER .50, BROWNING, M2, HEAVY BARREL

This amendment forms a part of MIL-G-001298C (AR) dated, 17 November 1981, is approved for use by the U.S. Army Armament, Munitions, and Chemical Command, and is available for use by all Departments and Agencies of the Department of Defense.

#### PAGE 1

- \* 1.1: Delete in its entirety and substitute the following:
  - "1.1 <u>Scope</u>. This specification covers an automatic, recoil-operated, alternate feed, link-belt fed, air-cooled, caliber .50, heavy barrel machine gun."
- \* 2.1.1. line 2: Delete "(see 6.2)" and substitute "(see 6.1.b)".
- Delete the specification number for Inspection Process, Magnetic Particle: "MIL-I-6868" and substitute "MIL-STD-1949".

#### PAGE 2

- \* 2.1.2, under Product and Packaging Drawings: Add the following:
  - "12002953 Machine Gun, Caliber .50: M2 Heavy Barrel, Turret Type (M48 and M48C) Series"
- \* 2.1.2, under Inspection Equipment Drawings:

  Delete "12003958" and substitute "12003958 or 5351211".

  Delete "12003959" and substitute "12003959 or 5351213 and 5351214".

**FSC** 1005

AMSC N/A

# PAGE 3

- \* 3.2, line 4: After "....Drawing 7265636" add "or 12002953".
- \* 3.2.1, line 3: Delete "...to insure engagement of the hook of the extension to the hook of the sear" and substitute "...to insure engagement of the hook of the extension with the hook of the sear".
- \* Add new paragraph 3.2.5 as follows:
  - "3.2.5 <u>Bar code label</u>. A bar code label shall be firmly affixed to the receiver assembly."

- \* 3.3.2: Delete in its entirety and substitute the following:
  - "3.3.2 <u>Firing pin indent</u>. The firing pin indent shall be within the range of 0.017 to 0.040 inches and shall not be off center by more than one-half the diameter of the indent. Testing shall be as specified in 4.5.3.3."
- \* 3.3.3: Delete in its entirety and substitute the following:
  - "3.3.3 <u>High pressure resistance</u>. The machine gun shall be capable of withstanding the firing of one high pressure test (proof) round. Bolt subassemblies, barrel extension assemblies, and barrel assemblies may be proof tested, inspected and marked individually in accordance with the applicable product drawings. If components are proof tested individually, and then assembled into a complete machine gun, they shall be reproof tested and inspected with the complete machine gun. After firing, the machine gun shall be free from cracks, seams, or other injurious defects. The barrel assembly, barrel extension assembly and bolt subassembly shall be magnetic particle inspected and marked in accordance with the applicable drawing except those assemblies which receive a second proof round shall be marked with a prefix "2" at the previous marking."
- \* 3.3.8, Table I: Delete "correctible" and substitute "correctable" (two places).

#### PAGE 6

\* 3.5: Delete the last sentence and substitute the following:

"Each machine gun shall be identified by a serial number which shall appear on both the top plate of the receiver assembly and on the bar code label. The serial number shall be assigned by the procuring activity (see 6.1)."

#### PAGE 7

4.1.4, line 5: Delete "responsbilities" and substitute "responsibilities".

- \* 4.5.3.5.1: Delete in its entirety and substitute the following:
  - "4.5.3.5.1 Right hand feed function testing. When 500 consecutive machine guns meet the specification requirement, the number of machine guns to be tested each month of production shall be reduced to two or 5% of the total monthly production rounded up to the next higher whole number, whichever is greater. Reduced testing shall apply to subsequent contracts provided production has been uninterrupted."
  - 4.5.3.6: Delete in its entirety and substitute the following:
    - "4.5.3.6 <u>Belt pull testing</u>. Each machine gun shall be tested for belt pull (see 3.3.5) using the test method specified in 4.6.5. Machine guns which fail to meet these requirements shall be subject to the provisions of paragraph 4.5.3.1. They may then be mechanically gymnasticated for a period not longer than ten minutes, and then retested as specified in 4.6.5. Failure of the retest to meet the requirements shall be cause for rejection of the machine gun."
- \* Add new paragraph 4.5.3.6.1 as follows:
  - "4.5.3.6.1 Right hand feed belt pull testing. When 500 consecutive machine guns meet the specification requirement the number of machine guns to be tested each month of production shall be reduced to two or 5% of the total monthly production rounded up to the next higher whole number, whichever is greater. Reduced testing shall apply to subsequent contracts provided production has been uninterrupted."
- \* 4.5.3.9, line 4: Delete "falure" and substitute "failure".

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- \* 4.5.5, line 4: Delete "docoumentation" and substitute "documentation".
- \* 4.6.2, line 2: Delete "cyclinders" and substitute "cylinders".
- \* 4.6.3, last line: Delete "MIL-I-6858" and substitute "MIL-STD-1949".

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- \* 4.6.4: Delete "maching" and substitute "machine".
- \* 4.6.4: Add the following to the end of the paragraph:

"Machine guns which fail to fire the 50-round right hand feed test may be retested and accepted if two subsequent consecutive firings are successful."

# 4.6.5: Add the following to the end of the paragraph:

"Machine guns which fail to fire the initial ten-round burst right hand feed may be retested and accepted if two subsequent consecutive firings are successful."

\* 4.6.7: Delete in its entirety and substitute the following:

"Targeting and accuracy test. Machine Gun Caliber .50: M2
Heavy Barrel, Flexible. The machine gun shall be mounted in a
firing fixture conforming to Drawing 8440929 or an approved
equivalent. With the leaf of the rear sight in the folded-down
position and the windage scale adjusted to zero, the sights
shall be aligned at 6 o'clock on the sighting image of the
targeting and accuracy diagram D7266955 and a 10-round
continuous burst fired."

4.6.7.1: Add new paragraph 4.6.7.1 as follows:

"Targeting and accuracy test. Machine Gun Caliber .50: M2
Heavy Barrel, Turret Type (M48 and M48 Series). The machine
gun shall be mounted in a firing fixture conforming to Drawing
8440929 or an approved equivalent. Boresight the gun to bring
the point of aim to the center of the target (reference Drawing
7266955) at a range of 100 feet. A 10-round continuous burst
shall be fired and all shots shall group within or cut the edge
of an 8.0 inch diameter circle."

4.6.8: Delete "...During the interrupted burst firing, the bolt latch release shall be released at least twice to stop the firing and the trigger shall be released at least three times to stop firing..." and substitute "...During the interrupted burst firing, the bolt latch release (if applicable) shall be released at least twice to stop the firing and the trigger shall be released at least three times to stop firing...".

#### PAGE 14

- 4.6.8.2, line 2: Delete "(see 3.3.9.1)" and substitute "(see 3.3.8.1)".
- 4.6.9.1.1, line 1: Delete "Machine guns. Machine guns shall be tested..." and substitute "Machine guns, Caliber .50: M2 Heavy Barrel, Flexible. Machine guns shall be tested...".

#### PAGE 15

Delete "Groups of Nonmating Parts" and substitute "Groups of Nonmating Parts (Flexible)".

#### PAGE 16

- In Group V: Delete "Shaft Assembly, Cover Latch 7312723".
- \* In Group VII: Delete "Washer, Thrust 5013545".
- \* In Group VIII: Delete "Cover Subassembly 5504081".

- \* In Group X: Delete "Support, Barrel 5504091".
- \* Add new paragraph 4.6.9.1.1.1 as follows:
  - "4.6.9.1.1.1 Machine Guns, Caliber .50: M2, Heavy Barrel, Turret Type (M48 and M48 Series). Machine guns shall be tested for interchangeability by disassembling and then reassembling parts using the parts and prearranged system specified below: Interchange of parts shall be accomplished by dividing the parts of each machine gun into 10 groups of nonmating parts as shown below and distributing the groups into 10 different trays until each tray contains parts for a complete machine gun. Groups of parts from the first machine gun shall be taken in order and placed in trays 1 through 10; groups of parts from the second machine gun shall be taken in order and placed in

trays 2 through 10 to 1; groups of parts from the third machine gun shall be taken in order and placed in trays 3 through 10 to 2, etc. Commercial parts such as screws, spring pins, etc., shall be placed in the same tray as their mating or associate part. Any commercial part rendered unserviceable by disassembly shall be replaced without penalty to the interchangeability test. The machine guns shall be reassembled using only those parts which are in the same tray."

 Add Listing of Nonmating Parts for Turret Type interchange as follows:

# "GROUPS OF NONMATING PARTS (TURRET TYPE)

#### GROUP IB

Bar, Trigger - 6257592
Barrel Assy - 7266131
Extension Assy, Firing Pin - 6008976
Extractor Assy - 6008959
Pin, Cocking Lever - 7312078
Spring, Cover Latch - 6008931
Cam, Lock, Breech - 6147583
Cover, Top Plate - 6008939
Cover, Trunnion Block - 5013588
Spring, Switch - 6008493

GROUP IIIB

Slide, Sear - 5351220
Switch, Bolt - 5504062
Tube, Barrel Buffer - 9340486
Pin Assy, Belt Feed Pawl - 6008962
Spring, Helical Compression - 5013516
Plunger, Adjusting Screw - 5152839
Spacer, Back Plate - 5013583
Screw, Trigger Safety - 5152897
Stop Assy, Adjustable, Trigger Bar - 7265212

#### **GROUP IIB**

Bolt Subassembly - 6147463
Rod Assy, Oil Buffer Piston - 6008763
Pin, Locking - 7312970
Spring, Cover Extractor - 6009741
Pawl, Cover Detent - 7313069
Pin Assy, Breech Lock - 6008784
Pin Assy, Trigger Bar - 7313106
Spring, Helical, Comp - 5013693
Safety, Trigger - 6147511

# **GROUP IVB**

Lever, Cocking - 6009718

Sear - 5504067

Stop, Accelerator - 7161301

Spring, Helical Compression - 6009832

Plunger, Belt Feed Lever - 5013515

Spring, Trigger Safety - 5152896

Lever, Retracting Slide - 6147085

Stop, Front, Cartridge - 5013539

# GROUP VB

Lock, Accelerator Stop -7161300 Spring, Helical Compression -Guide Assy, Buffer Spring -6008782 Trigger - 6008918 Spring, Helical Compression -5009351 Pawl Assy, Belt Holding -Sleeve, Buffer Tube - 7265562 Rod Assy, Driving Spring -5564305 Stop, Rear, Cartridge -5013540 Spring, Helical Compression -5013525

# GROUP VIB

Accelerator, Oil Buffer - 5508141
Slide Assy, Belt Feed - 6261110
(3) Pin, Locking - 7312517
Nut, Slotted, Hexagon - 5152939
Screw, Externally Relieved Body - 7312028
Stud Assembly, Bolt - 7268490
Plate, Back - 6535475
Washer, Thrust - 5013697
Stripper, Link - 5013541

# GROUP VIIB

Body Assy, Barrel Buffer - 7266835
Arm, Belt Feed Pawl - 6008914
(2) Pin, Headed - 5152854
Lock, Back Plate Latch - 11010453
Plate, Buffer - 5152869
Screw, Adjusting - 5152834
Spring, Helical Compression - 5009352
Switch, Extractor - 6147461
Stop Assy, Cartridge,
Rear RH - 5577409

# GROUP VIIIB

Pin Assy, Accelerator 6008790
Piece Filler - 5152750
Disk, Buffer, Fiber - 5152835
Latch, Back Plate - 6008949
Pin, Locking - 7312517
Spring, Locking, Elevating
Mechanism - 5140428
Spring, Helical Compression 7160628
Plunger, Bolt Latch - 5013524
Spring, Helical Compression 5009300

#### **GROUP IXB**

Lever, Belt Feed - 5564278
Lock, Breech - 7161302
Pin, Straight, Headed - 5013581
Pin, Belt Holding Pawl - 7162872
Spring, Back Plate Latch Lock - 6243607
(3) Screw, Machine, MS35266-68(2)
Spring, Helical Compression - 7313068
Pin, Firing - 7310080

# **GROUP XB**

Nut, Buffer Piston Head -9340485 Pawl Assy, Belt Feed -6008961 Extension Assy, Barrel -5504082 Nut, Slotted, Hexagon -5013556 Pin, Straight, Headless -5009275 Spring, Helical Compression -5009356 Pin, Straight, Headed -5009271 Screw, Machine, Flat Csk Head - 5153191 Charger, M10 - 7267982

- 5.3: Delete "...in accordance with the Packaging Data Sheet..." and substitute "...in accordance with the applicable Packaging Data Sheet...".
- 6.1.b: Delete "List of drawings, specifications and publications pertinent to the machine gun, showing applicable revision dates" and substitute "List of drawings, specifications and publications pertinent to the machine gun, showing applicable revision and dates".

#### PAGE 19

6.1: Add new paragraph as follows:

"m. Bar code marking requirements."

The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

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