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Suggested Lubrication Practices

for **TW-25B Lubricant/Protectant** on the

M240 Machine Gun

(7.62mm NATO, single-barrel)

TW25B is the preferred lubricant. TW25B is a light, semi-fluid grease that provides both lubrication and protection against corrosion. TW25B is available in a variety of packages to make application easier: bulk jar, grease gun cartridge, syringe (for precision placement), tube, and spray ("EP"). A companion product, MC2500, is a light, pourable/pumpable oil. Product descriptions and NSNs are listed on the last page.

Note

Before applying TW25B, the surface must be thoroughly cleaned: **all old oil and grease should be removed**, the surface should be cleaned and free of oil residues, and the surface should be dry. The EP spray can be used as needed on unpainted surfaces to quickly achieve effective corrosion protection.

SURFACE PREPARATION

The suggested method of preparation is:

- Clean with approved cleaning product
- Flush off all residue with isopropyl alcohol

APPLICATION

Conditions for applying TW25B

Conditions	Thickness	Visibility After Application	Applicators
1 - very close tolerances - sand or dust environments	very light	white grease is not visible	brush, cloth, patch, spray
2 - heavy load bearing - salt/fresh water corrosion - heat or high speed - long-term storage	light to moderate	white grease is slightly visible	brush, cloth, syringe, spray
3 - bearings, gears, grease fittings - extended extreme load - marine exposure	heavy	white grease is plentiful	brush, caulk or grease gun, bearing packer

General

1. **After cleaning each part, spray with EP to Condition 1 for immediate corrosion protection.**
2. Apply additional TW25B to Condition 2 as needed on parts in contact, or that slide or mesh.
3. Apply additional TW25B to Condition 3 as needed on parts where heavy load and/or gas pressure is experienced.
4. ***Where sand and/or dust accumulations would impede functioning, wipe off excess with a cloth.*** (The cloth can be used to apply a light coat to exterior surfaces of other parts.)

M240 Specific Parts and Assemblies

1. Completely disassemble the gun. Inspect for evidence of excessive wear, breakage, cracks, chips, bends, burrs, rolled edges, overheating, or other stress or fatigue. Repair or replace as indicated in inspection and maintenance procedures. Clean off all debris and lubricant residue using approved non-solvent cleaners or, if available, rinse with isopropyl alcohol.
2. Immediately after cleaning each component including the receiver, protect all surfaces against corrosion by spraying a thin coat of TW-25B to Condition 1 using the EP spray can.

CAUTION

Remove visibly wet or white excess lubrication from top of Breech Block (Bolt), Bolt face, Feed Pawls, front and rear Cartridge Guides and Feed Tray.

3. During re-assembly, ensure that TW-25B is applied to the following parts to the Condition indicated in the rightmost column of this table. (While all parts received TW-25B to Condition 1 in Step 2 above, Condition 1 is mentioned repeatedly to ensure that functional parts retain a coating during and after assembly.)

Assembly	Components to Lubricate	Lubricate to Condition
Receiver Assembly:	1. All flanges and rails inside the receiver housing	3
	2. Breech Lock locking shoulder; shiny forward-sloped surfaces NOTE: This is a CRITICAL heavy lubrication point!	3
	3. Lightening hole forward Receiver section and Access Cover	3
	4. Outside Access Cover and Charging Handle Rails	1
Feed Cover:	1. Pivot Posts and the inside roller channel of the Feed Lever	1
Feed Pawl Assembly:	1. Undersides of each Linkage Arm and the Feed Pawl Springs	1
Bolt and Operating Rod Assembly:	1. All shiny contact points of the Bolt and especially the rear Breech Lock	3
	2. All shiny or polished surfaces of Op Rod/Piston Extension	3
	3. The entire ejection slot body of Op Rod to Piston Extension	3
	4. Piston cup and on and in between the two gas tube ring seals	3
Breech Block (Bolt):	1. Feed Roller atop of Bolt	2
	2. Bolt Lock surface that mates with Receiver Lock NOTE: This is a CRITICAL heavy lubrication point!	3
	3. Linkage and Spring Pin between Bolt Assembly and Op Rod	2
Driving Spring Rod:	1. All surfaces	2
Buffer Assembly:	1. All surfaces	1
Barrel Assembly:	1. Gas Regulator Plug center hole and outside ribbed port facing gas tube	3
	2. Gas Regulator Collar facing Gas Regulator	3
	3. Barrel threads	2

If the weapon will be used in a environment of heavy sand and dust, reduce the amount of lubricant applied to the Feed Lever channel and in and around Charging Handle rails by wiping off excess with a cloth. Re-use the lubricant on the cloth to apply a thin coat on the exterior surfaces of other parts, such as the barrel.

MAINTENANCE & RE-LUBRICATION

1. After 2,500 rounds: inspect the weapon, remove any debris, and touch-up any points where lubricant is needed.
2. After 5,000 rounds: inspect the weapon, and remove any debris. If necessary, break down the gun, clean, and repeat the entire lubrication procedure.

REFERENCED PRODUCTS

	Mil-Comm Part Number	National Stock Number (NSN)
TW25B Grease Packages		
1.5 wt. oz. Tube	TW25B-1SP11	9150-01-439-0859
4.0 wt. oz. Tube	TW25B-4SP14	9150-01-439-1873
8 wt. oz. Can	TW25B-1JSL16	9150-01-439-0858
16.9 fl. oz. (500 ml) EP Spray	TW25B-CA16EP	9150-01-448-2298
0.5 wt. oz. Syringe	TW25B-1SY12	9150-01-448-2266
16 wt. oz. Cartridge, Zerk	TW25B-6NZ17	9150-01-439-0857
16 wt. oz. Cartridge, Caulk	TW25B-1NC17	9150-01-439-1864
MC2500 Oil Packages		
16 fl. oz. Bottle, oil	MC2500-16AP4	9150-01-439-1875
128 fl. oz. (1 Gal) Can, oil	MC2500-45AP5	9150-01-439-1887

Mil-Comm offers other packaging; contact your local representative or the Defense Logistics Agency.

Product Descriptions

TW25B Lubricant/Protectant and MC2500 are non-toxic, non-flammable, non-corrosive, harmless to wood, plastic, rubber, and composites. EP spray contains flammable isopropyl alcohol.

TW-25B LIGHT GREASE

TW25B-1SY12	SYRINGE	0.5 weight-ounce plastic syringe (14 grams). Designed for convenient application into small, recessed or otherwise hard to reach lubrication points, featuring a one inch, tapered plastic dispensing tip and a flow turn-off valve.
TW25B-1SP11	TUBE	1.5 weight-ounce plastic tube (43 grams) featuring a dispenser tip with a screw-on closure. Designed for individual, tool, or weapons maintenance kit.
TW25B-4SP14	TUBE	4 weight-ounce plastic tube (113 grams) having a dispenser tip with a screw-on closure. Designed for large tool or weapons maintenance kit.
TW25B-1JSL16	JAR	8 weight-ounce (227 grams) plastic jar featuring screw-on lid. Designed for shop or bench use.
TW25B-1NC17	CARTRIDGE	16 weight-ounce (454 grams) plastic caulk cartridge for larger lubrication points WITHOUT grease fittings.
TW25B-6NZ17	CARTRIDGE	16 weight-ounce (454 grams) cardboard ZERK cartridge for lubrication points WITH grease fittings.
TW25B-CA16EP	COMPRESSED-AIR PRESSURIZED SPRAY CAN ("EP") (NON-AEROSOL)	16.9 fluid-ounce (500 ml) non-aerosol pressurized aluminum EP spray can designed for convenient spray application into recessed or hard to reach points, and for quick application of initial corrosion protection layer. Features an angular extended nozzle with finger pushbutton actuator.

The EP spray contains isopropyl alcohol, which helps to loosen and flush residues and distribute the TW25B.

MC-2500 OIL

MC2500-16AP4	BOTTLE	16 fluid-ounce aluminum bottle (472 ml) with dispenser cap.
MC2500-45AP5	CAN	1 Gallon metal UN can (3.785 liters) with pour spout.