

APPENDIX B

INFANTRY PLATOON REFERENCE GUIDE

To succeed in combat, infantrymen must be experts in employing their organic and supporting weapons and in employing mines.

B-1. ORGANIC WEAPONS

Organic weapons are weapons that are assigned to the platoon over which the platoon leader has direct control. All leaders must know how to employ these weapons effectively in all tactical situations (Figure B-1). The infantry platoon routinely uses antiarmor weapons (Figure B-2) and hand grenades and mines (Figure B-3).

	M9 Pistol	M16A2	M249 MG	M203	M60
WEIGHT (lbs)	2.6	8.7	15.5	11	23
LENGTH (in)	8.5	39	41.1	39	43
MAX RANGE (m)	1,800	3,600	3,600	400	3,750
ARMING RANGE (m)	N/A	N/A	N/A	14	N/A
MIN SAFE RANGE (m)	N/A	N/A	N/A	31	N/A
RATE OF FIRE					
CYCLIC (rpm)	N/A	700-800	600	N/A	550
RAPID (m)	N/A	N/A	200'	35	200*
SUSTAINED	60	16	85	35	100
EFFECTIVE RANGE					
AREA (m)	N/A	800	800	350	1,100
POINT	50	580	600	160	600
MOVING (m)	N/A	200	N/A	N/A	N/A
AMMUNITION					
TYPE	BALL	BALL, TRACER, DUMMY, PRACTICE, and BLANK	BALL, TRACER, DUMMY, PRACTICE, and BLANK,	HE, WP CS, ILLUM, TP and BUCK- SHOT	BALL, TRACER and BLANK
EXAMPLE LOAD (rds)	30	210	600		
*With barrel change.					

Figure B-1. Organic weapons.

	M72 LAW	M136 AT4	M47 DRAGON
WEIGHT (lbs)	4.7	14.8	68.5
LENGTH (in)	22/35	40	44
MAX RANGE (m)	1,000	2,100	1,000
ARMING RANGE (m)	10	30	65
MIN SAFE RANGE (m)	30	30	65
EFFECTIVE RANGE			
STATIONARY (m)	200	300	1,000
MOVING (m)	125	300	100
BACKBLAST (m)	50	60	50

Figure B-2. Antiarmor weapons.

	FRAG	WP	THERMITE	CONCUSS
WEIGHT (lbs)	1	2	2	1
RANGE (m)	40	30	25	40
	(Thrown by average soldier)			
PACKING (box)	30	N/A	16	20
BURST RADIUS (m)	15	17		2
		60-sec burn	40-sec burn	
	M21 ANTITANK MINE	M14 APERS MINE (Toe Popper)	M16A1 APERS MINE (Bouncing Betty)	M1 8A1 APERS MINE (Claymore)
WEIGHT (lbs)	18	3.6	8.3	3.5
PACKING (box)	4 mines 4 fuzes	90 ea mines and deton	4 fuzes tripwire	6 mines w/accy
BURST RADIUS	1 tank	1 indiv	30 meters	50 meters (eff) 250 meters (max)

Figure B-3. Hand grenades and mines.

B-2. SUPPORTING WEAPONS

Supporting weapons provide the platoon and squad leaders additional fire-power. They must know how to effectively integrate the fires of these weapons with the fires of their organic weapons. See Figures B-4 through B-7.

	M2 (.50 CAL)	MK 19	M202 FLASH	M3 RAAWS
WEIGHT (lbs)	64	76	26.7	22
LENGTH (in)	66	43	34.7	42.6
MAX RANGE (m)	6,765	2,212	N/A	
ARMING RANGE (m)	N/A	18	N/A	
MIN SAFE RANGE (m)	N/A	28	20	50 (HEAT) 500 (illum) 250 (HE) 50 (SMOKE) 50 (TNG)
RATE OF FIRE				
CYCLIC (rpm)	500	375	N/A	
RAPID (rpm)	40*	60	N/A	
SUSTAINED (rpm)	40*	40	N/A	6
EFFECTIVE RANGE				
AREA (m)	1,830	2,212	750	
POINT (m)	1,200	1,500	200	
STATIONARY (m)	N/A	N/A	N/A	700 (HEAT)
MOVING (m)	N/A	N/A	N/A	250
BACKBAST (m)			50	60
BURST RADIUS (m)			20	
AMMUNITION				
TYPE	BALL, AP TRACER, API API-T, INCEN and BLANK	HEDP HE TP, and BUCKSHOT		HEAT, ILLUM HE, SMOKE, TNG
*With barrel change				

Figure B-4. Supporting weapons.

WEAPON	AMMUNITION MODEL TYPE		METERS		RATE OF FIRE
			MIN RANGE	MAX RANGE***	
M224 60-mm	M720/M888	HE	70	3,500*	30 rounds per minute for 4 minutes**, then 20 rounds per minute, sustained.
	M722	WP	70	3,500	
	M721	ILLUM	200	3,200	
	M302A1	WP	33	1,625	
	M63A3	ILLUM	725	950	
	M49A4	HE	45	1,925	
M29A1 81-mm	M374A2	HE	70	4,600	12 rounds per minute for 2 minutes, then 5 rounds per minute, sustained
	M374A3	HE	73	4,725	
	M375A2	WP	73	4,775	
	M301A3	ILLUM	100	2,950	
M252 81-mm	M821/M889	HE	83	5,600	30 rounds per minute for 2 minutes, then 15 rounds per minute, sustained.
	M374A3	HE	73	4,775	
	M819	RED P	300	4,875	
	M375A3	WP	73	4,775	
	M853A1	ILLUM	300	5,050	
	M301A1	ILLUM	100	2,950	
M30 107-mm	M329A2	HE	770	6,850	18 rounds per minute for 1 minute, then 9 rounds per minute for 5 minutes, then 3 rounds per minute, sustained
	M328A1	WP	720	5,650	
	M335A2	ILLUM	400	5,500	
M120 120-mm	M57	HE	200	7,200	15 rounds per minute for 1 minute, then 4 rounds per minute, sustained
	M68	SMOKE	200	7,200	
	M91	ILLUM	200	7,100	
*Biped mounted, charge 4 maximum range handheld is 1.300 meters.					
**Charge 2 and above, 30 rounds per minute can be sustained with charge 0 or 1.					
***Rounded to nearest 25 meters.					

Figure B-5. Type and characteristics of mortars.

	M102	M119	M198
CALIBER	105-mm	105-mm	155-mm
MAX RANGE (For HE) (m)	11,500	14,000	18,100
LANNING RANGE (m)	11,500	11,500	14,600
MIN RANGE (m)	DIRECT FIRE	DIRECT FIRE	DIRECT FIRE
DANGER CLOSE RANGE	600	600	800
RATE OF FIRE			
MAXIMUM (rpm)	10	10	4
USTAINED (rpm)	3	3	2
PROJECTILE			
TYPE	HE, WP, ILLUM, HEP-T, APICM, CHEM, APERS, RAP	HE, M760, ILLUM, HEP-T, APICM, CHEM, RAP	HE, WP, ILLUM, SMOKE, CHEM, NUC, RAP, FASCAM, CPHD AP/DPICM
FUZES			
TYPE	PD, VT MT, MTSQ, CP, DELAY	PD, VT, MT, MTSQ, CP, DELAY	PD, VT, CP, MT, MTSQ, DELAY
LEGEND:			
AP —Armor-piercing	HEP-T —High-Explosive Plastic Tracer		
APERS —Antipersonnel	ILLUM —Illumination		
APICM —Antipersonnel Improved Conventional Munitions	MT —Mechanical Time		
CHEM —Chemical	MTSQ —Mechanical Time Super Quick		
CP —Concrete Piercing	NUC —Nuclear		
CPHD —Copperhead	PD —Point Detonating		
DPICM —Dual Purpose Improved Conventional Munitions	RAP —Rocket Assisted Projectile		
FASCAM —Family of scatterable Mines	VT —Variable Time		
	WP —White Phosphorus		

Figure B-6. Types and characteristics of field artillery.



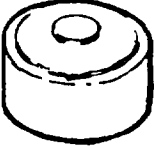
ANTIPERSONNEL	SYSTEM	CASUALTY RADIUS	ACTUATION
	GEMSS GATOR MOPMS VOLCANO	10-15 meters	Tripwire (20-40 feet)
	ADAM	6-10 meters	Tripwire
ANTITANK	SYSTEM	TYPE OF KILL	ACTUATION
	GEMSS GATOR MOPMS VOLCANO RAAMS	Crew Kill	Magnetic Influence
<p>LEGEND: RAAMS —Remote Antiarmor Mine System ADAM —Artillery-Delivered Antipersonnel Mine GEMSS —Ground-Emplaced Mine Scattering System GATOR —Aircraft-Delivered System MOPMS —Modular Packed Mine System</p>			

Figure B-7. Family of scatterable mines.


WARNING _____

Scatterable mines are above ground and have delay as well as immediate fuzes. Soldiers and leaders must treat scatterable mines as active mines. Scatterable mines should not be moved, gathered, or tampered with in any way.

B-3. MINES

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Mines are one of the most effective tank and personnel killers on the battlefield, especially in the close-in battle. Mines not only have the capability to disrupt the enemy but also to destroy him. Mines are especially useful when combined with direct and indirect fires. (Figures B-8 and B-9.)



M14 ANTIPERSONNEL MINE (BLAST)

Weight 3.33 oz


Explosive 1 oz TETRYL

Fuze Integral
(With Belleville spring)

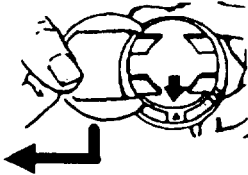
Functioning 20 to 35 lbs

Penetrate boot and foot

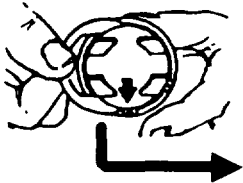
1 Unscrew shipping plug from bottom of mine. Turn pressure plate to ARMED position with arming tool.




2 Remove safety clip. Check for malfunctions.




3 Replace safety clip.



4 Screw detonator into detonator well.



5 Bury mine and remove safety clip.



TO BURY: Pressure plate should be slightly above ground.

TO DISARM: Insert safety clip and remove detonator.

CAUTION
Repeated turning of arming dial may cause excessive wear.

Figure B-8. Antipersonnel mines.

B-7

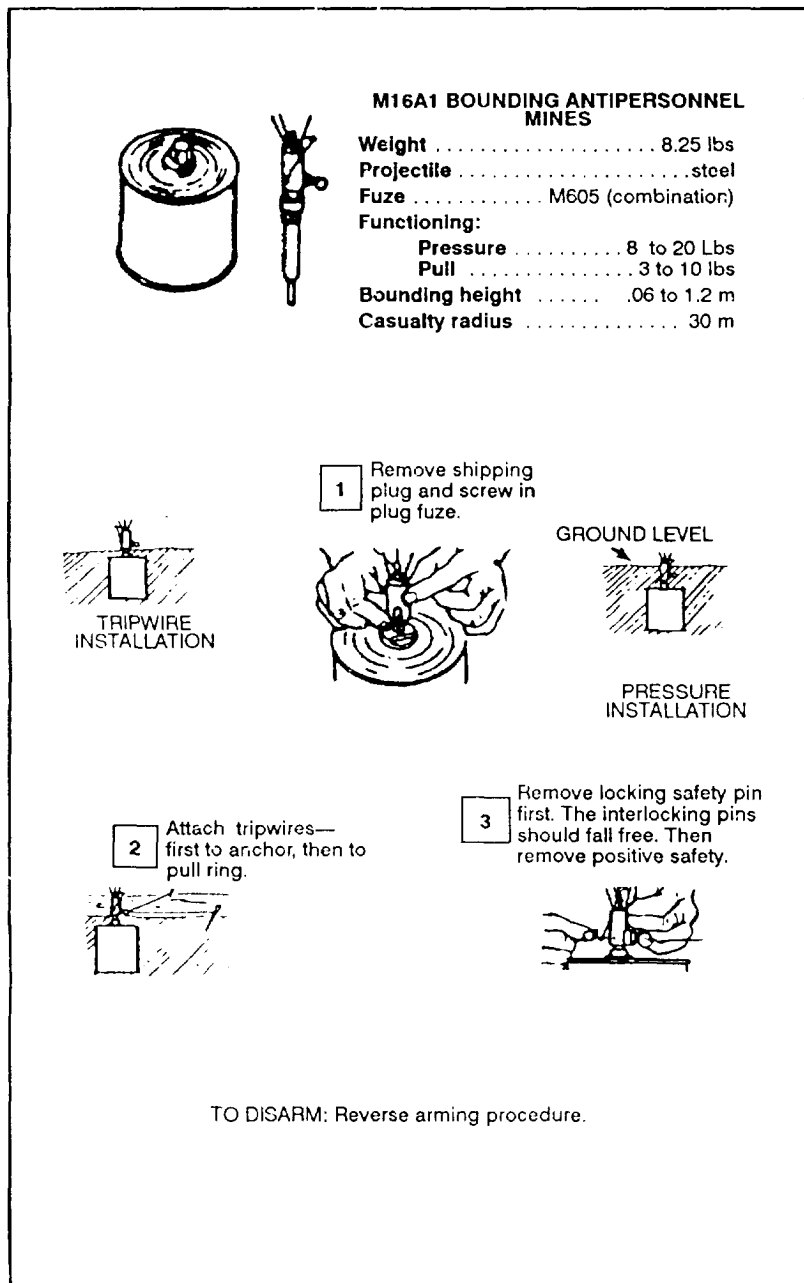


Figure B-8. Antipersonnel mines (continued).

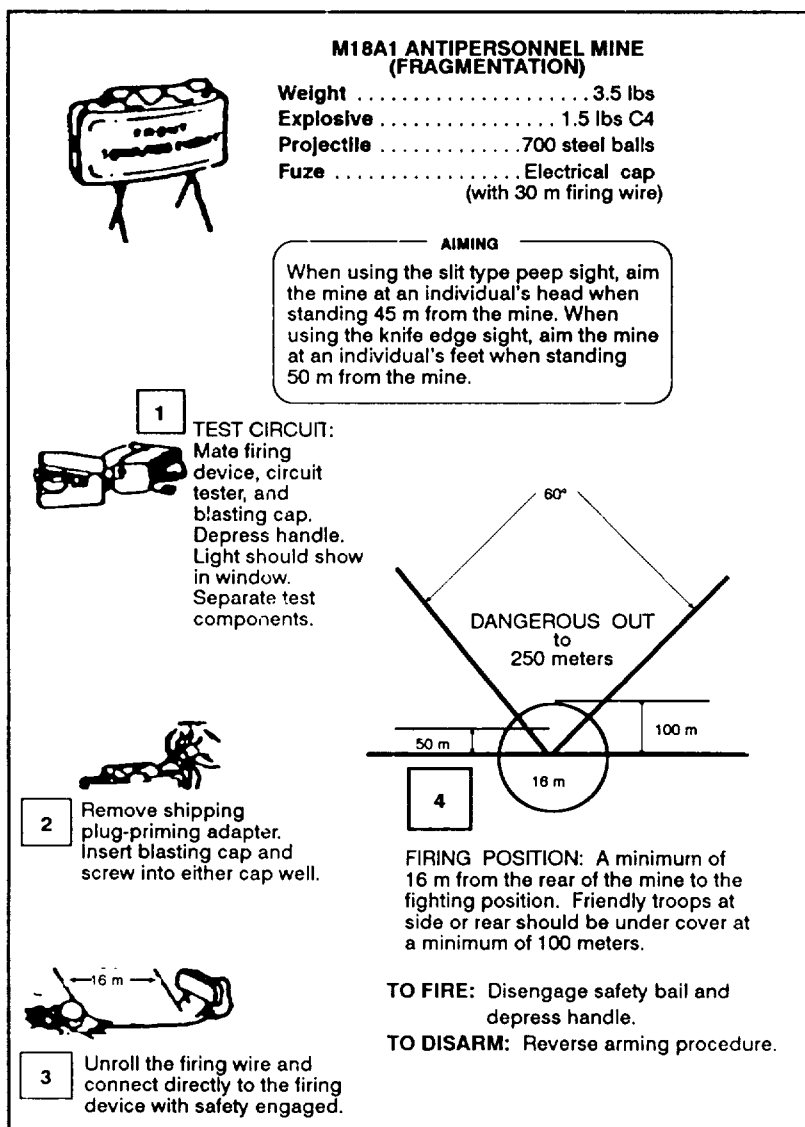
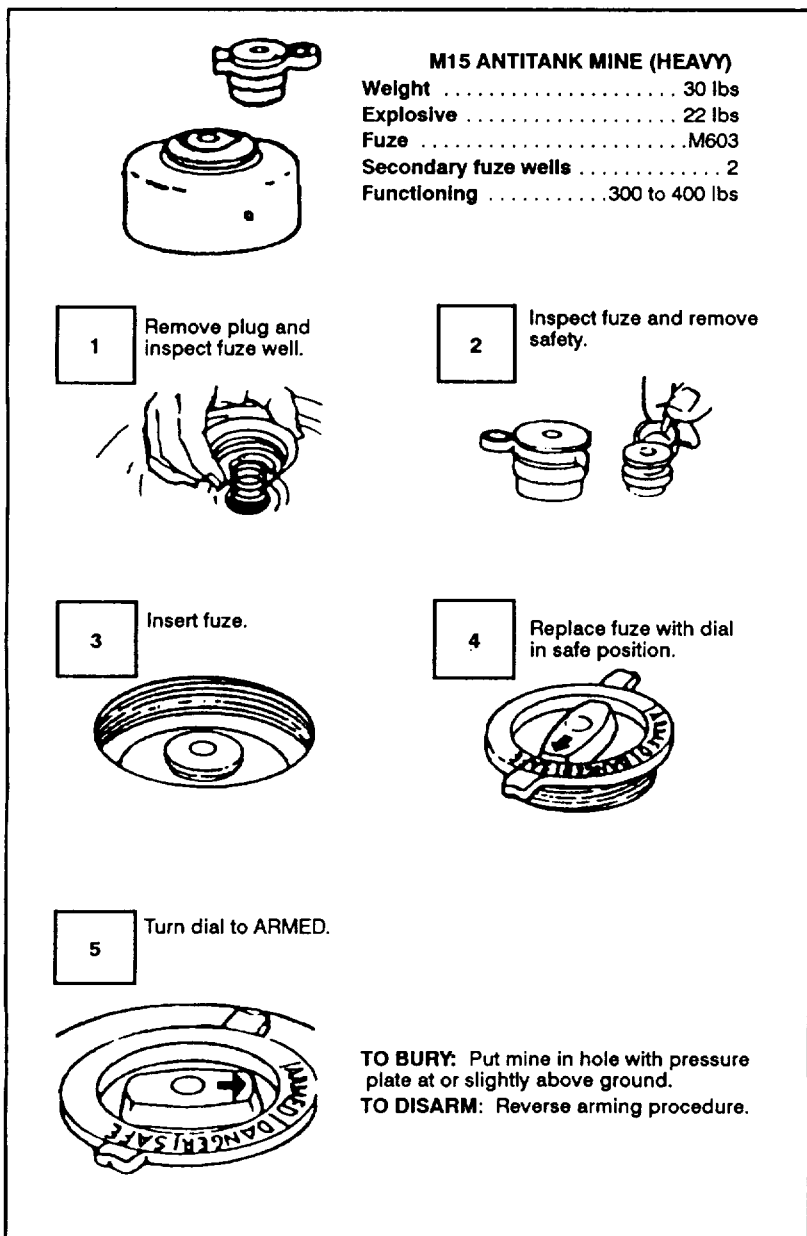
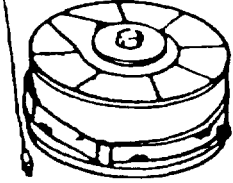


Figure B-8. Antipersonnel mines (continued).




Figuer B-9. Antitank mines.




**M21 METALLIC ANTITANK MINE
(KILLER)**

Weight 18 lbs
Explosive 10.5 lbs
Fuze M607
Functioning 290 lbs
 (Pressure on pressure ring or
 20-degree deflection of tilt rod).

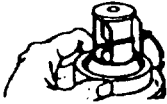
1 Remove closing plug, insert M120 booster in bottom, and replace closing plug.



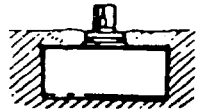
2 Remove closure assembly from fuze.



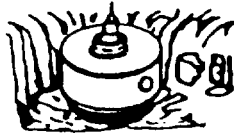
3 Remove shipping plug from mine and screw in tilt rod extension.



4 Bury mine.



5 Remove safety (pull-ring assembly) and complete camouflage.



TO BURY:
 —For pressure type mines, bury with fuze cap flush with ground surface.
 —Tilt-rod mines should be seated firmly in a snug-fitting hole. Most effective in tall brush or grass.

TO DISARM: Reverse arming procedure.

Figure B-9. Antitank mines (continued).

