

This set of second world war skirmish rules has been continually tried and tested over a period of thirty years. They are intended to be used mainly in infantry actions with limited armour and artillery support and give a very enjoyable 'scrap' if so used.

SCALE: 1 figure = 1 man
 1 model = 1 vehicle
 1 cm = 5 yards

INITIATIVE – Both commanders throw 1d10, the allied commander gains the initiative if he rolls a higher score otherwise the axis commander has the initiative. At the start of the movement sequence the army with the initiative decides whether to move first or second.

SEQUENCE OF PLAY

1. Initiative
2. Radio communications, etc.
3. Movement, Small Arms and all other Direct fire.
 - a) Movement of first army. Opposition may fire at moving targets.
 - b) Movement of opposing army. First side may fire at moving targets.
 - c) All other direct and small arms fire.
 (Always remember that firing can take place at any point during the movement sequence)
4. Indirect artillery and mortar fire.
5. Morale

VISIBILITY AND TERRAIN EFFECTS

Visibility can vary depending on weather, etc.

Throw one d10 and consult the table below. This gives the maximum visibility for the battle unaided and with binoculars.

Visibility in cm	Unaided	Aided
Dice Score		
1	75	150
2 to 6	100	200
7 to 10	150	300

Line of sight is blocked by buildings, woods, vehicles, etc. unless observer is on higher ground.

Smoke totally blocks line of sight for all troops. However, all types of MG may fire defensive fire through smoke.

Any man / weapon behind or in cover becomes visible the moment he / it fires or moves into view.

Examples of hard cover are : Walls, buildings, earthworks, open topped AFV's, etc.

Vehicles and guns do not count as being in cover or hull down unless over half the vehicle or gun is behind it.

Examples of soft cover are : Hedges, bushes, fencing, woods, etc.

TOTAL COVER : Men, weapons or vehicles behind or in hard cover neither firing nor observing are totally protected from all types of direct fire.

Troops may observe from the edge of woods without being seen unless enemy are within 5cm. Visibility inside a wood is limited to 10cm. Wheeled vehicles and towed guns can enter a wood far enough to become invisible from normal view. They must always leave the same way as they went in.

RADIOS, COMMUNICATION, ETC.

Verbal orders and instructions can be heard up to a distance of 30cm.

When using radios, only trained users, i.e. radio operators, officers, observers, etc. can use them.

Radio use must conform to the command structure of the unit. i.e. Platoon to Company one turn, Company to Brigade next turn.

Only one message may be sent by each radio operator per turn, any number can be received. Observers must be linked to guns by radio. When calling down fire the observer contacts the battery commander, the battery resights its guns ready next turn to fire at the requested target area.

MOVEMENT

The following are the maximums that troops may move in a turn

Men	Road	X-country
Normal	10cm	8cm
Running	15cm	12cm
Crawling	5cm	4cm

A run move can only be carried out on alternate turns.

No one can run carrying anything heavier than a LMG.

Walls, hedges, etc. less than a man's height can be crossed without pause.

Walls, etc., higher than a man can only be climbed with assistance losing 1/2 a move allowance.

Streams (NOT rivers) are waded at 1/2 normal speed.

Barbed wire may be crossed a normal speed but 1/2 a move's allowance is lost. Men may enter buildings by doors or windows except where these are defended.

Men inside a building may position themselves anywhere within the building the turn after they enter the building.

Men cannot run through smoke.

HMG's, mortars, etc. need a minimum of 2 men to carry and fire them; they cannot make a run move and they require one turn to set up, dismount or shift (e.g. HMG to another window of a house).

Men can embark or disembark from vehicles and move 1/2 a normal move. Standing from a prone position takes 5cm from the movement allowance.

Vehicle	Road	X-country
*Jeep, Motorcycle	60cm	30cm
*Lorry	50cm	20cm
*A/Car	50cm	30cm
*1/2 track, carrier	40cm	30cm
Tanks : Fast	40cm	30cm
Medium	30cm	20cm
Slow	20cm	15cm

Any vehicle can make a 1/2 move, spending the first or second half picking up or unloading men and equipment.

All movement turning into or out of position counts as part of the move distance.

All vehicles may reverse at half speed.

All vehicles move at cross-country speed when moving through smoke.

Fully tracked vehicles (except carriers) can go through walls less than their own height losing 1/2 a turns movement while doing so.

Vehicles marked * may not cross walls, etc. Such vehicles may move into but not through woods except solo motorcycles which may weave through woods at 1/2 cross-country speed.

Guns may be towed by the appropriate vehicles at 3/5 normal speed.

In emergencies alternative vehicles may tow guns at 1/2 normal speed.

Once a towing vehicle has stopped it takes 2 turns to prepare a wheeled gun for firing; one move to unhitch and position, one to load and aim.

It takes 1 turn to hitch up a gun for towing and getting the crew on board the towing vehicle.

Unless ammunition is dumped the towing vehicle must stay within 10cm of gun to supply it.

It takes 1 turn for a SP or AA gun to open up ready for firing once it is in position. One move is required to close down ready to move off again.

Tanks can go through hedges and woods at cross-country speed. They can cross ditches and streams less than half their own length wide at 1/2 speed.

A gun crew can manhandle a gun 5cm in 1 turn.

Guns may never be moved and fire in the same turn.

No vehicle can be rammed unless it is stationary. Tanks can ram and destroy wheeled vehicles, half-tracks and carriers without damage to themselves. Other vehicles can ram and wreck only smaller vehicles but only by immobilising themselves. Occupants of wrecked vehicles have a 50% chance of escaping or being killed.

Any vehicle (except motorcycles) can run over and wreck a HMG, mortar, etc. The gun crew will always jump clear and men may never be run over.

Tanks can push any wheeled or half-tracked vehicle, wrecked or otherwise, off the road at 5cm per turn; tanks cannot push other tanks.

INFANTRY WEAPONS

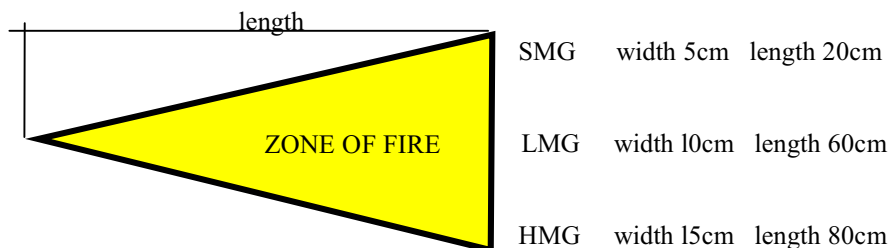
In general every man is assumed to be competent with every infantry weapon (pistol, grenade, rifle, all MG's, mortars and bazooka type weapons) so any man may replace any other who becomes a casualty. This does NOT apply to A/T or larger guns.

Infantry may fire small arms from a moving vehicle but can not throw grenades or fire hand held anti-tank weapons.

Infantry weapons may be destroyed but only by a hit from a mortar or larger shell (40% chance of destruction if hit), or by running over by a vehicle.

Machine-guns zone of fire

Each machine gun type has a zone of fire within which any man or soft vehicle has a chance of being hit. Zone areas for each type are given below. NOTE: the length of the zone is curtailed by fire hitting hard cover, a vehicle, or 10cm depth of wood, etc.



Firing small arms

When firing small arms the target must first be hit before checking to see if it suffers injury or damage. Throw 1 d10. If the score is greater or equal to the modified hit number on the small arms hit table then the target has been hit.

SMALL ARMS TABLE

Weapon	Number required to achieve hit				
	0-10	-20	-40	-60	-80
Pistol	4	-	-	-	-
SMG	3	6	-	-	-
Rifle	4	7	9	10	-
LMG	3	6	8	10	-
HMG	3	5	7	9	10

Modifiers

Firer not moving this turn	-2
Fired at same target last turn	-1
Firer crack or veteran	-1
Firing if running this turn	+2
Firing if walking this turn	+1
Target prone or moved over 10cm	+1 (do not take this into account at ranges under 5cm)
Target moved into or out of sight this turn	+1
Firing from moving vehicle	+1

If a hit is achieved then throw 1 d10 and consult the hit effect table below

Hit Effect Table

Target in	Near miss	Dead / Critical wound
open	1 to 5	6 to 10
soft cover	1 to 7	8 to 10
hard cover	1 to 9	10

All troops suffering a near miss cannot move or fire next turn, they may duck back out of sight or 'hit the dirt' (prone) as appropriate.

GRENADES

These should be limited to men carrying rifles or SMG's. Range is 10cm and a burst circle of 2.5cm diameter is used. Troops under this burst circle are automatically hit and throw for Hit Effect as if in the open. To determine the accuracy of a thrown grenade roll 1 d10.

- 1 or 2 Falls short
- 3 or 4 Falls to left
- 5 or 6 Falls long
- 7 or 8 Falls to right
- 9 or 10 Direct hit on chosen target

If a grenade misses throw 1 d10 and multiply score by 0.5cm to determine the distance shot misses by. Grenades thrown through windows or doors at a range of 5cm or pillbox slits at a range of 1 cm do not roll dice for misses and are assumed to enter the building. However, in a confined space (no need to use a burst circle, use area of room instead) they are more deadly so add +1 to every die roll when dicing on the Hit Effect table.

All soft vehicles hit by small arms fire or grenades suffer damage as follows. Throw 1 d 10 adding 1 to its score if HMG or grenade.

- 1 to 4 slight damage. no noticeable effect
- 5 to 8 Vehicle immobilized, crew and passengers suffer hits for soft cover on Hit Effects Table.
- 9 or 10 Vehicle destroyed. Crew and passengers have 50% chance of jumping clear. If successful they then suffer hits for soft cover row on Hit Effects Table.

Armoured vehicles hit by small arms fire are forced to close hatches.

ARTILLERY AND MORTAR FIRE

Gun and mortar ranges and burst circles are given below. Indirect artillery fire will arrive on the turn after the request. Guns and mortars firing HE

	MIN RANGE cm	MAX RANGE cm	BURST DIAM cm
BRITISH			
4.5"	15	3500	10
25 pdr	15	2500	10
GERMAN			
75mm	15	1750	7.5
88mm	15	3000	10
105mm	15	2000	10
AMERICAN			
75mm	15	1750	7.5
4.5"	15	4500	10
105mm	15	3000	10
RUSSIAN			
76mm	15	2500	7.5
85mm	15	3000	10
122mm	15	3500	10

MORTARS		MIN RANGE cm	MAX RANGE cm	BURST DIAM cm
BRITISH				
	2"	30	100	2.5
	3"	50	500	5
GERMAN				
	50mm	30	100	2.5
	80mm	50	475	5
	120mm	200	1200	7.5
AMERICAN				
	60mm	30	350	2.5
	81mm	50	600	5
RUSSIAN				
	50mm	30	150	2.5
	82mm	50	200	5
	120mm	200	1200	7.5

FALL OF SHOT

To determine the fall of shot roll 1 d10 for each gun in a battery.

- 1 or 2 Falls short
- 3 or 4 Falls to left 5 or 6 Falls long
- 7 or 8 Falls to right
- 9 or 10 Direct hit on chosen target

If shot misses throw 1 d10 and multiply score by 3cm to determine the distance shot misses by. If in touch with an observer he can adjust the fall of shot. On second round of fire on a target if shot misses again the d10 score is multiplied by 1cm when working out the miss distance thus reducing error. Once observed fire hits its target i.e. a 9 or 10 is thrown, then the observer can keep fire on this point.

Map fire must always have a geographical point of aim.

All troops / vehicles under a burst circle have a chance of being hit.

Infantry / crews; suffer injury as per the small arms hit table. Guns over 100mm add 1 to die roll when dicing for effect.

Soft vehicles/ Guns; throw on d 10

- 1 or 2 undamaged
- 3 to 6 immobilised
- 7 to 10 destroyed

A/cars, open topped AFV's and half tracks; throw 1 d10

- 1 to 5 undamaged
- 6 to 8 immobilised
- 9 or 10 destroyed

Tanks (mortars and guns up to 82mm have no chance of causing serious damage)

1 to 7 undamaged
 8 or 9 immobilised
 10 destroyed

In all cases guns over 100mm add 1 to the die roll when dicing for effect. All armoured vehicles covered by any burst circle (even one not capable of causing damage) must close hatches.

Crews and passengers on destroyed vehicles are killed.

Crews and passengers in immobilised soft vehicles and open topped AFV's and half-tracks suffer injury on the small arms effect table. Surviving passengers must abandon the immobilised soft vehicle as fast as possible.

DIRECT HE FIRE

This is done in a similar manner to observed fire i.e. miss distances are 1 d10 x lcm. Even if a direct hit is achieved it is still possible to miss again the next turn i.e. 1 d10 cm miss distance is thrown for every turn that a shot is fired at any target.

SMOKE

Smoke is allowed for all guns which can fire it. It falls in a similar way too indirect or direct HE fire each gun / mortar drops smoke that covers an area the same size as its burst circle. Smoke lasts 2 full turns after the one in which it falls.

EQUIPMENT DATA

ARMOUR DEF. VALUE

VEHICLE	ARMAMENT	SPEED	CREW	FRONT	SIDE	REAR
ALLIED						
Challenger	17pdr, Coax mg	Fast	5	14	7	8
M4 Sherman Firefly	17pdr, Coax mg, pt Hmg	Avg	4	11	9	8
M4A 1 Sherman	75mm L40, Coax mg b mg, pt Hmg	Avg	4	11	9	8
M4A3 Sherman	75mm L40, Coax mg b mg, pt Hmg	Avg	4	14	12	9
Churchill IV	6pdr, Coax mg b mg	Slow	5	16	15	15
Valentine V	40mm, Coax mg	Slow	4	9	11	13
M24 Chaffee	75mm L40, Coax mg, pt Hmg	Fast	4	8	5	5
M18 Hellcat	76mm L53, pt mg	Fast	4	4	3	3
M7 Priest	105mm L22, pt mg	Avg	7	10	9	8
Humber Mk II-III	15mm Hmg, Coax mg		3	2	2	1
Humber Mk IV	37mm, Coax mg		3	6	4	3
Daimler Mk II	2pdr, Coax mg		3	7	2	1
M3 1/2 track	various		2+11	2	2	2
Bren Carrier	various		5	2	2	2
GERMAN						
Tiger I	88mm L56, Coax mg b mg	Avg	5	17	16	16
Tiger II	88mm L71, Coax mg b mg, pt mg	Avg	5	27	18	18
Panther	75mm L70, Coax mg b mg, pt mg	Avg	5	18	11	11
JagdPanther	88mm L71, b mg	Avg	5	20	11	9
Pz IV G	75mm L48, Coax mg b mg	Avg	5	9	7	6

ARMOUR DEF. VALUE

VEHICLE	ARMAMENT	SPEED	CREW	FRONT	SIDE	REAR
Pz III M	50mm L60, Coax mg, b mg	Avg	5	11	6	7
Pz II J	20mm, Coax mg	Avg	3	5	4	3
STuG III G	75mm L48, pt mg	Avg	4	12	6	7
Sdkfz 231 A/C	20mm, Coax mg	-	4	3	2	2
Sdkfz 234/2 A/C	50mm L60, Coax mg	-	4	7	2	2
Wespe SPG	105mm L28, pt mg	Avg	5	3	3	2
Sdkfz 251 1/2 track	various	-	2 to 4 + 10	2	2	2
Sdkfz 7 1/2 track	various	-	2 + 6	2	2	2
RUSSIAN						
JS II	122mm L46, Coax mg b mg, pt Hmg	Avg	4	19	19	17
KV85	85mm L53 Coax mg b mg, r mg	Avg	5	17	15	15
SU85	85mm L53, Coax mg b mg, r mg	Fast	4	15	9	10
T34/85	85mm L53, Coax mg, b mg	Fast	4	14	14	12
T34/76	76mm L42, Coax mg, b mg	Fast	4	12	11	11
SU76	76mm L42	Fast	4	6	2	2
T-70	45mm, Coax mg	Fast	2	12	7	6
BA32	45mm, b mg	-	4	2	2	2
BA64	Hmg	-	2	2	1	1

DIRECT FIRE ANTI TANK WEAPONS

When firing at vehicles we must first determine if a hit is scored. If it is then determine if it penetrates the vehicle's armour.

Throw 1 d10. If score is greater than or equal to the modified hit number on the AP hit table then the target has a chance of being hit.

AP HIT TABLE

Range	(Number required to score a hit)
0 to 20cm	4
20 to 60cm	6
60 to 90cm	8
90 to 200cm	10

Modify the hit number by the following relevant factors

Firer not moved or moving this turn	-2
Firers are crack or veteran	-1
Fired at same target last turn	-1
AFV forced to close hatches last turn	+1
Target moved into or out of sight	+1
Target moving at 21 to 30 cm speed this turn	+1
All infantry A/T weapons at moving target	+1
Target moving at over 30cm speed this turn	+2

If a target has been successfully hit consult the Attack Value Table. Throw 1 d10 and add this to the attack value, compare this total with the target's defence value. If attack value is greater then move on to the AP Effect Table to find out the damage caused on the target.

Attack Value Table

Weapon	Range in cm			
	0-20	-60 .	-90	-200
German 88mm L71	20	18	15	11
Russian 122mm L46	16	14	11	7
German 75mm L70	16	14	11	7
British 17pdr	16	14	11	7
American 76mm L53	15	13	10	6
German 88mm L56	15	13	10	6
Russian 85mm L53	14	12	9	5
German 75mm L48	13	11	8	4
British 6pdr	13	11	8	4
German 50mm L60	12	10	7	3
British 25pdr	12	10	7	3
Russian 76mm L42	11	9	6	2
American 75mm L40	11	9	6	2
Artillery > 105mm	15	11		
Artillery up to 105mm	13	9		
A/T guns under 50mm	8	6	3	
HMG's	2	1		
Pz'Schreck/Bazooka	12			
PIAT/Pz'Faust	10 (max range 10cm)			
Stick Bomb or similar	14 (max range of 1cm)			

Throw 1 d10 to determine what area shell hits; score 1 to 6 – hull, score 7 to 10 - turret

Target's that are hull down may not be hit on the hull, if score of 1 to 6 is thrown then it counts as a near miss.

Target's with no turret always suffer hits to the hull therefore the d10 need not be thrown. All vehicles suffering a hit or near miss must close hatches.

AP EFFECT TABLE

Attack Value greater	Hit Location	
	Turret	Hull
by 1 to 3	Near miss	Near miss
by 4 to 6	Main gun destroyed	Vehicle immobilised
by 7 to 9	Turret destroyed	Vehicle wrecked
by 10 or more	Tank destroyed	Vehicle destroyed

Explanation of effects:

Main gun destroyed: Main gun out of action for rest of battle.

Vehicle immobilised: Vehicle may not move again.

Vehicle wrecked: Vehicle on fire – all crew and passengers have a 60% chance of escaping.

Turret destroyed: Turret blown apart - all crew in turret killed, rest of crew have 50% chance of survival. Wreck can limp along at 1/2 speed if driver survives.

Tank/Vehicle destroyed: Tank or vehicle blows apart - all crew and passengers are killed.

ARC OF FIRE FOR A/T, SP GUNS, ETC.

A hull mounted gun fires in an arc of only 45° (22.5° either side of the direction the AFV is heading).

An A/T or field gun also has a 45° arc of fire.

Tank mounted MG's have an arc of fire of 45° except if pivot mounted where they may fire all round.

Firing all weapons from windows, doors, pillbox slits, etc. is limited to an arc of fire of 90° (45° either side of straight ahead).

MORALE

The morale of sections must be tested if any of the following circumstances occur :

Section leader killed
50% of section killed
If forced to evacuate damaged transport
If trying to recover from bad morale

Throw 1 d10 and adjust its score using the morale rating modifiers. A score of 1 or better and the section has passed the morale check and will carry on as normal. A score of 0 or worse and the unit fails its morale check.

When a section leader is lost, 2 turns must elapse before the next in command can take over and during this period, if it passes its morale check, the section must remain halted. It may, however, if engaged by the enemy, continue in action.

Morale Rating Modifiers:	
At present suffering bad morale	-2
Section leader killed (may be replaced)	-2
Most of section in open	-1
Every 2 'other ranks' killed	-1
Own transport vehicle destroyed	-1
Section out of contact with higher command	-1
Crack or veteran troops	+1
Most of section in or behind cover	+1

Effects of bad morale

When a section fails its morale check suffering a bad morale rating then it must remain halted next turn in its present position. It must try next turn to recover.

2 successive bad morale checks results in the section retiring a minimum of 10cm next turn from its present position.

3 successive bad morale checks results in the section running to the rear leaving all heavy weapons behind during the next turn move. It may attempt to recover every turn until it leaves the battlefield. Once a section leaves the field it disperses and all men are effectively lost.

PRISONERS

Troops coming to within 1cm of enemy who cannot move or fire that turn i.e. forced to 'hit the dirt' last turn automatically capture them. Prisoners must be guarded and sent to the rear.