///// ALL ATTACKS /////

Stationary	+0
Walked (White Die)	+1
Ran (Black Die)	+2
Jumped (Red Die)	+3
Prone Biped Mech	+2 (w/o wpns in prop. arm)
Skidding	+1

Terrain

Light Woods/Jungle Heavy Woods/Jungle Water Depth 1 Water Depth 2 Partial Cover

Target

Prone	-2 adjacent / +1 other
Immobile	-4
Skidding	+2
Jumped	+1
Moved: 0-2	+0
3-4	+1
5-6	+2
7-9	+3
10-17	+4
18-24	+5
25+	+6
Stealth Armor	+1 medium / +2 long

+2

+1

+0

+1 +2

+3 +4

+1

-2 +1

+1

+1

+2

- (p.26 / 102)

+1 (p.26 /102)

+1 (Partial Cover p.26 / 102)

+4 (arm wpns, disreg. actuat.)

spotter AMM +1 or +2 if spot. att.

(arm weapons)

-1 (p. 114 / 143)

-1 for (C)luster ammo

-2 against flying (p. 97 / 114)

//// WEAPON ATTACKS /////

Attacker
Sensor Hit
Shoulder Hit
Arm Actuator
Heat: 0-7
8-12
13-16
17-23
24+
Indirect Fire Attack
Spotting
Targeting Computer
Pulse Laser
Heavy Laser
LB-X AC
MRM & Rocket L.
Flak

Range and Terrain

Range: Short	+0
Medium	+2
Long	+4
Minimum	Min - Range + 1 (p.27 / 109)
Intervening hex/lev	el
in same building	+1 per hex/level (p.72 / 175)

Target

2nd Target Forward +1 2nd Target Side/Rear +2

Weather

Heavy Fog	+1 to (P) and (DE)			
Light:	Reduced if target high heat!			
Dusk/Dawn	+1			
Full Moon Night	+2 (if target not illuminated)			
Moonless Night	+3 (if target not illuminated)			
Moderate/Heavy Rain	+1			
Torrential Downpour	+2			
Moderate/Heavy Snow				
Wind: Moderate Gale	+1 to (M)			
Strong Gale	+2 to (M) / +1 to (DB)			
Storm	+3 to (M) / +2 to (DB)			

///// PHYSICAL ATTACKS /////

Attacker	
Kick	-2
Punch	+0
Club	-1
Push	-1
Shoulder Hit	No pun, phy, club / +2 to push
Arm Actuator Hit	+2 to pun, phy, club
	half damage to punch
Hand Actuator Hit	No phy, club / +1 to punch
Hip Actuator Hit	No kick
Leg Actuator Hit	+2 and half damage to kick
Foot Actuator Hit	+1 to kick

Other Modifiers

Charging Attack Relative Pilot Skill (p.34 / 40) Relative Pilot Skill (p.34 / 40) DFA Rear Kick (quad only) +1 Unintentional Charge +3

Weather

Moonless Night

+1 (if target not illuminated)

///// CLUSTER HITS /////

	2	З	4	5	6	7	9	10	12	15	20	30	40
2	1	1	1	1	2	З	З	З	4	5	6	10	12
3	1	1	2	2	2	З	З	З	4	5	6	10	12
4	1	1	2	2	З	4	4	4	5	6	9	12	18
5	1	2	2	3	3	5	5	6	8	9	12	18	24
6	1	2	2	З	4	5	5	6	8	9	12	18	24
7	1	2	3	3	4	5	5	6	8	9	12	18	24
8	2	2	З	З	4	5	5	6	8	9	12	18	24
9	2	2	З	4	5	6	7	8	10	12	16	24	32
10	2	З	З	4	5	6	7	8	10	12	16	24	32
11	2	З	4	5	6	7	9	10	12	15	20	30	40
12	2	3	4	5	6	7	9	10	12	15	20	30	40

///// HIT LOCATIONS /////

	Left	Front-Rear	Right
2	LT Critical	CT Critical	RT Critical
3	LL / LRL	RA / RFL	RL / RRL
4	LA / LFL	RA / RFL	RA / RFL
5	LA / LFL	RL / RRL	RA / RFL
6	LL / LRL	RT	RL / RRL
7	LT	CT	RT
8	СТ	LT	СТ
9	RT	LL / LRL	LT
10	RA / RFL	LA / LFL	LA / LFL
11	RL / RRL	LA / LFL	LL / LRL
12	Н	Н	Н

///// CRITICAL HITS /////

2-7: 0 hits 8-9:1 hit 10-11: 2 hits 12: Limb blown off or 3 hits if Torso was hit

///// PUNCH LOCATIONS /////						
	Left	Front-Rear	Right			
1	LT	LA / LFL-LRL	RT			
2	LT	LT	RT			
3	СТ	CT	СТ			
4	LA / LFL	RT	RA / RFL			
5	LA / LRL	RA / RFL-RRL	RA / RRL			
6	Н	Н	Н			

///// KICK LOCATIONS /////					
	Left	Front-Rear	Right		
1-3	LL / LFL	RL / RFL-RRL	RL / RFL		
4-6	LL / LRL	LL / LFL-LRL	RL / RRL		

Page References: BMM / TW BattleTech Player Aid - v1.06 - gamesbyfelix.com

///// MOVEMENT COS	TS ////		
Terrain Cost			
Cost To Enter Any Hex	1		
Clear	+0		
Road/Paved/Bridge	+0		
Rough	+1		
Sand	+0	PSR +1	
Light Woods	+1		
Heavy Woods	+2		
Light Jungle	+2	PSR +1	
Heavy Jungle	+3	PSR +2	
Water Depth 1	+1	PSR -1	
Water Depth 2	+3	PSR +0	
Water Depth 3+	+3	PSR +1	
Level Change 1	+1		
Level Change 2	+2		
Rubble	+1	PSR +0	
Light Building	+1	PSR p. 6	
Medium Building	+2	PSR p. 6	
Heavy Building	+3	PSR p. 6	
Hardened Building	+4	PSR p. 6	67 / 166
Additional Movement			
	+1/hexs	ida	
Facing Change	+1/ nexs	siue	
Dropping to Prone	+1 2/att.	PSR +0	
Standing Up Lateral Shift (Quads)	2/att. +1	FOR FU	
Lateral Shirt (Quads)	τı		
Terrain Modifications			
lce	+1	PSR +3	(to all PSRs)
Mud/D.Snow/Swamp	+1	PSR +1	(to all PSRs)
Weather Conditions			
Light Fog	+1		
Heavy Fog	+2		
Full Moon Night			ve searchlight]
Moonless Night	+2 (un	less acti	ve searchlight)
///// PILOTING SKILL		////	
Damage to Mech			
20+ Points of Damage			+1
Involuntary Fusion Read	ctor Shu	itdown	+3
Leg/Foot Actuator Destroyed +1			+1
Hip Actuator Destroyed +2			+2
Gyro Hit			+3
Gyro Destroyed			Fall! Seatbelt+6
Leg Destroyed			Fall! Seatbelt+5
-			

Physical Attac Kicked or Push Sucessfully Ch	+0 +2	
Mech Actions Missed Kick Successful Charge Successful DFA Stand Up Attempt Entered Water Depth 1 Entered Water Depth 2 Entered Water Depth 3+ Entered Sand Hex Entered Light Jungle Hex Entered Heavy Jungle Hex Entered Rubble Hex Entered Rubble Hex Running + Facing Change on Pavem. Jumped with damaged gyro, leg, foot or hip actuators or destroyed leg Ran with damaged gyro or hip		+0 +0 +4 +0 -1 +0 +1 +1 +1 +1 +2 +0 p. 68 / 62 see preex. dmg see preex. dmg
Terrain Modifications Ice Mud/Deep Snow/Swamp		+3(to all PSRs) +1(to all PSRs)
Skidding Move Hexes moved:	ement 0-2 3-4 5-7 8-10 11-17 18-24 25+	-1 +0 +1 +2 +4 +5 +6
Building Movement Entering Light Building Hex Entering Medium Building Hex Entering Heavy Building Hex Entering Hardened Building Hex Hexes moved: 1-2 3-4 5-6 7-9 10-17 18-24 25+		+0 +1 +2 +5 +0 +1 +2 +3 +4 +5 +6

6

Seatbe Quad N Uninte Mech n Mech n	al Cases elt Check when Falling Mech with all Legs ntional Charge mounts AES in its Legs mounts Hardened Armor mounts small or mounted Cockpit	+1/per level >1 -2 +3 -2 +1 +1	
Preexisting Damage Per Leg/Foot Actu. prev. Destroyed Per Hip Actuator prev. Destroyed Gyro prev. Hit Leg prev. Destroyed			
/////	FACING AFTER FALL /// New Facing	Hit Location	
1	Same Direction	Front	
2	1 Hexside Right	Right Side	
3	2 Hexsides Right	Right Side	
4	Opposite Direction	Rear	
5	1 Hexside Left	Left Side	

	1	
6	^Maab ^	2
5	⁰Mech≎	з
	4	

Left Side

2 Hexsides Left

///// HEAT POINTS /	////
Activity	Heat Points
Walking	+1 per Turn
Running	+2 per Turn
Jumping	+1 per Hex (min. 3 per Turn)
Stand Up Attempt	+1 per Attempt
Weapons Fire	see Tables (p.120+ / 303+)
Equipment	see Tables (p.120+ / 303+)
Heat Sink	-1 per Heat Sink
	-2 per Double Heat Sink
	Double if underwater
	(max. 6 points)
First Engine Hit	+5
Second Engine Hit	+10 (total)

///// PROCEDURES /////

Run MP Calculation				
Run M	P = Wall	(MP x 1.5 (round up)		
E.g.:	Walk	Run		
	1	2		
	2	3		
	3	5		
	4	6		
	5	8		
	6	9		
	7	11		

Line of Sight* (p. 22 / 100)

Terrain along the LOS between two units intervenes if:

- The level of the terrain or feature is equal to or higher than the level of both units or ...

- The terrain or feature is adjacent to the attacker and equal to or higher than the attacker's level or ...

- The terrain or feature is adjacent to the target and equal to or higher than the target's level.

Partial Cover

Partial cover is negated when the attacker's level is higher than the target's level.

Partial cover from water is not negated by this however.

Underwater

The water surface always provides partial cover. A fully submerged target can only be attacked with submerged weapons, e.g. by underwater leg weapons or if the attacker is also fully submerged.

Attacking

- 1. Declare all Attacks (per initiative)
- 2. Resolve each Attack
 - a. Calculate GAT(O) for base value
 - b. Roll GATOR for each weapon
 - c. Roll Hit Locations & Apply Damage
 - d. Mark Ammo
- 3. Declare all Physical Attacks (per initiative)
- 4. Resolve each Physical Attack
 - a. Calculate & Roll PATOR
 - b. Roll Hit Location & Apply Damage
- 5. Mark Heat

Comparative Modifier

Attacker Piloting Skill - Target Piloting Skill

Damage Calculation

Fall: [Weight / 10*] x [Levels + 1] Punch: Weight / 10* Kick/Club: Weight / 5* Charge: [Att. Weight/10] x Hexes moved [excl. Tgt. Hex] -> Attacker Damage: Target Weight/10 Ammo Explosion: Pilot: 2 Damage Mech: Shots x Damage Value or Missiles x Shots x Damage Value Head: Always also 1 Damage to Pilot * round up

Damage Groups

SRM: 2 points/group (1 missile = 1 group) LRM: 5 points/group AC LB-X: 1 points/group Falling: 5 points/group DFA: 5 points/group

Death From Above (DFA)

- 1. Declare in Movement Phase
- 2. Spend Jump MP
- 3. Stop adjacent to Target
- 4. No Weapon Attacks
- 5. Target Damage: (Weight / 10) x 3*
- 6. 5 Damage/Group on Punch Locations
 - a. ... or Rear Hit Loc. if prone
- 7. Attacker Damage: [Weight / 5]
- 8. 5 Damage/Group on Front Kick Locations
- 9. Displace Target 1 Hex opposite Attacker

Falling

- 1. Fall PSR
- 2. Seat Belt Check PSR (w/ same modifiers as 1.) a. Fail: 1 Pilot Hit & Conscious Check
- 3. Roll Facing & Hit Location
- 4. Damage: (Weight / 10*) x (Levels + 1)

* round up

Standing Up

- 1. Declare Walk or Run
- 2. Spend 2 MP
- 3. Add 1 Heat (plus heat from movement)
- 4. PSR (no modifiers)
 - a. Fail: Roll a new fall (and try again)
 - b. Success: May continue Movement

* Check out the free GATOR & LOS Trainer app on gamesbyfelix.com (click on Battletech)