# CLASSIC BATTLETECH

# TOTAL WARFARE TABLES

WK GAMES

FANPRO

# INNER SPHERE WEAPONS AND EQUIPMENT TABLE

| Item | Type* | Heat | Damage Value | Minimum Range | Short Range | Medium Range | Long Range | Ammo Per Ton | Attack Value†† | Aerospace Range‡ | To-Hit Modifier |
|------|-------|------|--------------|---------------|-------------|--------------|------------|--------------|----------------|------------------|-----------------|
| *Direct-Fire Ballistic Weapons†††* | | | | | | | | | | | |
| Autocannon/2 | DB, S | 1 | 2 | 4 | 1–8 | 9–16 | 17–24 | 45 | 2 | Long | 0 |
| Autocannon/5 | DB, S | 1 | 5 | 3 | 1–6 | 7–12 | 13–18 | 20 | 5 | Medium | 0 |
| Autocannon/10 | DB, S | 3 | 10 | 0 | 1–5 | 6–10 | 11–15 | 10 | 10 | Medium | 0 |
| Autocannon/20 | DB, S | 7 | 20 | 0 | 1–3 | 4–6 | 7–9 | 5 | 20 | Short | 0 |
| Light Gauss Rifle | DB, X | 1 | 8 | 3 | 1–8 | 9–17 | 18–25 | 16 | 8 | Extreme | 0 |
| Gauss Rifle | DB, X | 1 | 15 | 2 | 1–7 | 8–15 | 16–22 | 8 | 15 | Long | 0 |
| Heavy Gauss Rifle | DB, X, V | 2 | 25/20/10 | 4 | 1–6 | 7–13 | 14–20 | 4 | 25/20/10 | Long | 0 |
| LB 2-X AC | DB, C/S/F‡‡ | 1 | 2 | 4 | 1–9 | 10–18 | 19–27 | 45 | 2 | Extreme | 0, –1† |
| LB 5-X AC | DB, C/S/F‡‡ | 1 | 5 | 3 | 1–7 | 8–14 | 15–21 | 20 | 3 | Long | 0, –1† |
| LB 10-X AC | DB, C/S/F‡‡ | 2 | 10 | 0 | 1–6 | 7–12 | 13–18 | 10 | 6 | Medium | 0, –1† |
| LB 20-X AC | DB, C/S/F‡‡ | 6 | 20 | 0 | 1–4 | 5–8 | 9–12 | 5 | 12 | Medium | 0, –1† |
| Light AC/2 | DB, S | 1 | 2 | 0 | 1–6 | 7–12 | 13–18 | 45 | 2 | Medium | 0 |
| Light AC/5 | DB, S | 1 | 5 | 0 | 1–5 | 6–10 | 11–15 | 20 | 5 | Medium | 0 |
| Light Machine Gun | DB, AI§ | 0 | 1 | 0 | 1–2 | 3–4 | 5–6 | 200 | 1 | Short | 0 |
| Machine Gun | DB, AI§ | 0 | 2 | 0 | 1 | 2 | 3 | 200 | 2 | Short | 0 |
| Heavy Machine Gun | DB, AI§ | 0 | 3 | 0 | 1 | 2 | — | 100 | 3 | Short | 0 |
| Nail/Rivet Gun | DB, AI** | 0 | 0** | 0 | 1 | — | — | 300 | 0** | — | 0 |
| Rotary AC/2 | DB, R/C | 1/Sht | 2/Sht, R6 | 0 | 1–6 | 7–12 | 13–18 | 45 | 8 | Medium | 0 |
| Rotary AC/5 | DB, R/C | 1/Sht | 5/Sht, R6 | 0 | 1–5 | 6–10 | 11–15 | 20 | 20 | Medium | 0 |
| Ultra AC/2 | DB, R/C | 1/Sht | 2/Sht, R2 | 3 | 1–8 | 9–17 | 18–25 | 45 | 3 | Extreme | 0 |
| Ultra AC/5 | DB, R/C | 1/Sht | 5/Sht, R2 | 2 | 1–6 | 7–13 | 14–20 | 20 | 7 | Long | 0 |
| Ultra AC/10 | DB, R/C | 4/Sht | 10/Sht, R2 | 0 | 1–6 | 7–12 | 13–18 | 10 | 15 | Medium | 0 |
| Ultra AC/20 | DB, R/C | 8/Sht | 20/Sht, R2 | 0 | 1–3 | 4–7 | 8–10 | 5 | 30 | Medium | 0 |
| *Direct-Fire Energy Weapons* | | | | | | | | | | | |
| ER Large Laser | DE | 12 | 8 | 0 | 1–7 | 8–14 | 15–19 | — | 8 | Long | 0 |
| ER Medium Laser | DE | 5 | 5 | 0 | 1–4 | 5–8 | 9–12 | — | 5 | Medium | 0 |
| ER Small Laser | DE | 2 | 3 | 0 | 1–2 | 3–4 | 5 | — | 3 | Short | 0 |
| Flamer | DE, H, AI§ | 3 | 2§§ | 0 | 1 | 2 | 3 | — | 2§§ | Short | 0 |
| Flamer (Vehicle) | DE, H, AI§ | 3 | 2§§ | 0 | 1 | 2 | 3 | 20 | 2§§ | Short | 0 |
| Large Laser | DE | 8 | 8 | 0 | 1–5 | 6–10 | 11–15 | — | 8 | Medium | 0 |
| Medium Laser | DE | 3 | 5 | 0 | 1–3 | 4–6 | 7–9 | — | 5 | Short | 0 |
| Small Laser | DE | 1 | 3 | 0 | 1 | 2 | 3 | — | 3 | Short | 0 |
| Plasma Rifle | DE, H, AI | 10 | 10** | 0 | 1–5 | 6–10 | 11–15 | 10 | 10** | Medium | 0 |
| Light PPC | DE | 5 | 5 | 3 | 1–6 | 7–12 | 13–18 | — | 5 | Medium | 0 |
| PPC | DE | 10 | 10 | 3 | 1–6 | 7–12 | 13–18 | — | 10 | Medium | 0 |
| Heavy PPC | DE | 15 | 15 | 3 | 1–6 | 7–12 | 13–18 | — | 15 | Medium | 0 |
| ER PPC | DE | 15 | 10 | 0 | 1–7 | 8–14 | 15–23 | — | 10 | Long | 0 |
| Snub-Nose PPC | DE, V | 10 | 10/8/5 | 0 | 1–9 | 10–13 | 14–15 | — | 10/8 | Medium | 0 |
| *Pulse Weapons* | | | | | | | | | | | |
| Large Pulse Laser | P | 10 | 9 | 0 | 1–3 | 4–7 | 8–10 | — | 9 | Medium | –2 |
| Medium Pulse Laser | P | 4 | 6 | 0 | 1–2 | 3–4 | 5–6 | — | 6 | Short | –2 |
| Small Pulse Laser | P, AI§ | 2 | 3 | 0 | 1 | 2 | 3 | — | 3 | Short | –2 |
| *Missile Weapons‡‡‡* | | | | | | | | | | | |
| LRM 5 | M, C, S | 2 | 1/Msl, C5/5 | 6 | 1–7 | 8–14 | 15–21 | 24 | 3/4 | Long | 0 |
| LRM 10 | M, C, S | 4 | 1/Msl, C5/10 | 6 | 1–7 | 8–14 | 15–21 | 12 | 6/8 | Long | 0 |
| LRM 15 | M, C, S | 5 | 1/Msl, C5/15 | 6 | 1–7 | 8–14 | 15–21 | 8 | 9/12 | Long | 0 |
| LRM 20 | M, C, S | 6 | 1/Msl, C5/20 | 6 | 1–7 | 8–14 | 15–21 | 6 | 12/16 | Long | 0 |
| MML 3** | M, C, S | | | | | | | | | | |
|   LRM ammo | — | 2 | 1/Msl, C3/3 | 6 | 1–7 | 8–14 | 15–21 | 40 | 2/2 | Long | 0 |
|   SRM ammo | — | 2 | 2/Msl, C2/3 | 0 | 1–3 | 4–6 | 7–9 | 33 | 4/4 | Short | 0 |
| MML 5** | M, C, S | | | | | | | | | | |
|   LRM ammo | — | 3 | 1/Msl, C5/5 | 6 | 1–7 | 8–14 | 15–21 | 24 | 3/4 | Long | 0 |
|   SRM ammo | — | 3 | 2/Msl, C2/5 | 0 | 1–3 | 4–6 | 7–9 | 20 | 6/8 | Short | 0 |
| MML 7** | M, C, S | | | | | | | | | | |
|   LRM ammo | — | 4 | 1/Msl, C5/7 | 6 | 1–7 | 8–14 | 15–21 | 17 | 4/6 | Long | 0 |
|   SRM ammo | — | 4 | 2/Msl, C2/7 | 0 | 1–3 | 4–6 | 7–9 | 14 | 8/12 | Short | 0 |
| MML 9** | M, C, S | | | | | | | | | | |
|   LRM ammo | — | 5 | 1/Msl, C5/9 | 6 | 1–7 | 8–14 | 15–21 | 13 | 5/7 | Long | 0 |
|   SRM ammo | — | 5 | 2/Msl, C2/9 | 0 | 1–3 | 4–6 | 7–9 | 11 | 10/14 | Short | 0 |
| MRM 10 | M, C | 4 | 1/Msl, C5/10 | 0 | 1–3 | 4–8 | 9–15 | 24 | 6 | Medium | +1 |
| MRM 20 | M, C | 6 | 1/Msl, C5/20 | 0 | 1–3 | 4–8 | 9–15 | 12 | 12 | Medium | +1 |
| MRM 30 | M, C | 10 | 1/Msl, C5/30 | 0 | 1–3 | 4–8 | 9–15 | 8 | 18 | Medium | +1 |
| MRM 40 | M, C | 12 | 1/Msl, C5/40 | 0 | 1–3 | 4–8 | 9–15 | 6 | 24 | Medium | +1 |
| Narc Missile Beacon | M, E, S | 0 | ** | 0 | 1–3 | 4–6 | 7–9 | 6 | ** | ** | 0 |
| Improved Narc Launcher | M, E, S | 0 | ** | 0 | 1–4 | 5–9 | 10–15 | 4 | ** | ** | 0 |
| Rocket Launcher 10 | M, C, OS | 3 | 1/Msl, C5/10 | 0 | 1–5 | 6–11 | 12–18 | OS | 6 | Medium | +1 |
| Rocket Launcher 15 | M, C, OS | 4 | 1/Msl, C5/15 | 0 | 1–4 | 5–9 | 10–15 | OS | 9 | Medium | +1 |
| Rocket Launcher 20 | M, C, OS | 5 | 1/Msl, C5/20 | 0 | 1–3 | 4–7 | 8–12 | OS | 12 | Medium | +1 |
| SRM 2 | M, C, S | 2 | 2/Msl, C2/2 | 0 | 1–3 | 4–6 | 7–9 | 50 | 2/4 | Short | 0 |
| SRM 4 | M, C, S | 3 | 2/Msl, C2/4 | 0 | 1–3 | 4–6 | 7–9 | 25 | 4/6 | Short | 0 |
| SRM 6 | M, C, S | 4 | 2/Msl, C2/6 | 0 | 1–3 | 4–6 | 7–9 | 15 | 8/10 | Short | 0 |
| Streak SRM 2 | M, C** | 2 | 2/Msl, C2/2 | 0 | 1–3 | 4–6 | 7–9 | 50 | 4 | Short | 0 |
| Streak SRM 4 | M, C** | 3 | 2/Msl, C2/4 | 0 | 1–3 | 4–6 | 7–9 | 25 | 8 | Short | 0 |
| Streak SRM 6 | M, C** | 4 | 2/Msl, C2/6 | 0 | 1–3 | 4–6 | 7–9 | 15 | 12 | Short | 0 |
| *Equipment* | | | | | | | | | | | |
| A-Pod | PD, OS, AI | 0 | ** | — | — | — | — | OS | ** | — | — |
| B-Pods | PD, OS, AI | 0 | ** | — | — | — | — | OS | ** | — | — |
| Anti-Missile System | PD | 1 | ** | — | — | — | — | 12 | ** | — | — |
| Beagle Active Probe | E | — | — | — | — | — | 4 | — | — | ** | — |
| Guardian ECM Suite | E | — | — | — | — | — | 6 | — | — | ** | — |
| Machine Gun Array | T | ** | ** | ** | ** | ** | ** | ** | ** | ** | 0 |
| TAG | E | 0 | ** | — | 1–5 | 6–9 | 10–15 | — | ** | ** | — |

*See the Weapon and Equipment Types Table, p. 304, for abbreviation explanations, or *Weapons and Equipment,* p. 113, for complete details. If weapon types are separated by a slash, then those weapon types all apply at once. For example, an LB-X can either be fired as a Direct-Fire Ballistic Weapon, or as Cluster Weapon, which means it also has switchable ammo and is flak capable.

**See *Other Combat Weapons and Equipment,* p. 129; for aerospace units, see *Weapons and Equipment,* p. 236.

†When fired as a Cluster Weapon by non-aerospace units; aerospace units always apply the –1 to-hit modifier.

††For Missile Weapons, the number after the slash represents a missile weapon linked to Artemis IV FCS (see p. 130).

†††Rapid-Fire Weapons display their Damage Value uniquely; i.e. an Ultra AC/2 is "2/Sht, R2", meaning each shot that is fired deals 2 points of damage (2/Sht) and it can fire a total of two shots in a turn (R2).

‡Maximum range for weapons mounted on aerospace units; see *Range Modifier,* p. 235, in the *Aerospace Units* section.

‡‡May use Cluster Ammunition; see *LB-X Weapons* and *Cluster Ammunition,* pp. 120 and 141 respectively.

‡‡‡Missile Weapons display their Damage Value uniquely; i.e. an LRM 20 is "1/Msl, C5/20," meaning each missile does 1 point of damage (1/Msl), the largest Damage Value grouping is 5 (C5), and that 20 missiles are fired with each shot (/20).

§See Burst-Fire Weapon Damage Vs. Conventional infantry Table, either p. 217 or p. 309.

§§Against 'Mech/aerospace fighter/small craft targets only, every time the weapon is fired, before the to-hit roll is made, the player may announce he is applying the Damage Value as heat to the target, in place of damage (see *Heat-Causing Weapon,* p. 113).

# CLAN WEAPONS AND EQUIPMENT TABLE

| Item | Type* | Heat | Damage Value | Minimum Range | Short Range | Medium Range | Long Range | Ammo Per Ton | Attack Value†† | Aero Range‡ | To-Hit Modifier |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Direct-Fire Ballistic Weapons†††* | | | | | | | | | | | |
| LB 2-X AC | DB, C/S/F‡‡ | 1 | 2 | 4 | 1–10 | 11–20 | 21–30 | 45 | 1 | Extreme | 0, –1† |
| LB 5-X AC | DB, C/S/F‡‡ | 1 | 5 | 3 | 1–8 | 9–15 | 16–24 | 20 | 3 | Long | 0, –1† |
| LB 10-X AC | DB, C/S/F‡‡ | 2 | 10 | 0 | 1–6 | 7–12 | 13–18 | 10 | 6 | Medium | 0, –1† |
| LB 20-X AC | DB, C/S/F‡‡ | 6 | 20 | 0 | 1–4 | 5–8 | 9–12 | 5 | 12 | Medium | 0, –1† |
| AP Gauss Rifle | DB, X, AI§ | 1 | 3 | 0 | 1–3 | 4–6 | 7–9 | 40 | 3 | Short | 0 |
| Gauss Rifle | DB, X | 1 | 15 | 2 | 1–7 | 8–15 | 16–22 | 8 | 15 | Long | 0 |
| HAG 20 | DB, X, C, F | 4 | C5/20** | 2 | 1–8 | 9–16 | 17–24 | 6 | 16/12/12 | Long | 0 |
| HAG 30 | DB, X, C, F | 6 | C5/30** | 2 | 1–8 | 9–16 | 17–24 | 4 | 24/18/18 | Long | 0 |
| HAG 40 | DB, X, C, F | 8 | C5/40** | 2 | 1–8 | 9–16 | 17–24 | 3 | 32/24/24 | Long | 0 |
| Light Machine Gun | DB, AI§ | 0 | 1 | 0 | 1–2 | 3–4 | 5–6 | 200 | 1 | Short | 0 |
| Machine Gun | DB, AI§ | 0 | 2 | 0 | 1 | 2 | 3 | 200 | 2 | Short | 0 |
| Heavy Machine Gun | DB, AI§ | 0 | 3 | 0 | 1 | 2 | — | 100 | 3 | Short | 0 |
| Nail/Rivet Gun | DB, AI | 0 | 0** | 0 | 1 | — | — | 300 | 0** | — | 0 |
| Ultra AC/2 | DB, R/C | 1/Sht | 2/Sht, R2 | 2 | 1–9 | 10–18 | 19–27 | 45 | 3 | Extreme | 0 |
| Ultra AC/5 | DB, R/C | 1/Sht | 5/Sht, R2 | 0 | 1–7 | 8–14 | 15–21 | 20 | 7 | Long | 0 |
| Ultra AC/10 | DB, R/C | 3/Sht | 10/Sht, R2 | 0 | 1–6 | 7–12 | 13–18 | 10 | 15 | Medium | 0 |
| Ultra AC/20 | DB, R/C | 7/Sht | 20/Sht, R2 | 0 | 1–4 | 5–8 | 9–12 | 5 | 30 | Medium | 0 |
| *Direct-Fire Energy Weapons* | | | | | | | | | | | |
| ER Large Laser | DE | 12 | 10 | 0 | 1–8 | 9–15 | 16–25 | — | 10 | Extreme | 0 |
| ER Medium Laser | DE | 5 | 7 | 0 | 1–5 | 6–10 | 11–15 | — | 7 | Medium | 0 |
| ER Small Laser | DE | 2 | 5 | 0 | 1–2 | 3–4 | 5–6 | — | 5 | Short | 0 |
| ER Micro Laser | DE | 1 | 2 | 0 | 1 | 2 | 3–4 | — | 2 | Short | 0 |
| Flamer | DE, H, AI§ | 3 | 2§§ | 0 | 1 | 2 | 3 | — | 2§§ | Short | 0 |
| Flamer (Vehicle) | DE, H, AI§ | 3 | 2§§ | 0 | 1 | 2 | 3 | 20 | 2§§ | Short | 0 |
| Heavy Large Laser | DE | 18 | 16 | 0 | 1–5 | 6–10 | 11–15 | — | 16 | Medium | +1 |
| Heavy Medium Laser | DE | 7 | 10 | 0 | 1–3 | 4–6 | 7–9 | — | 10 | Short | +1 |
| Heavy Small Laser | DE | 3 | 6 | 0 | 1 | 2 | 3 | — | 6 | Short | +1 |
| Plasma Cannon | DE, H, AI | 7 | 0** | 0 | 1–6 | 7–12 | 13–18 | 10 | 0** | Medium | 0 |
| ER PPC | DE | 15 | 15 | 0 | 1–7 | 8–14 | 15–23 | — | 15 | Long | 0 |
| *Pulse Weapons* | | | | | | | | | | | |
| Large Pulse Laser | P | 10 | 10 | 0 | 1–6 | 7–14 | 15–20 | — | 10 | Long | –2 |
| Medium Pulse Laser | P | 4 | 7 | 0 | 1–4 | 5–8 | 9–12 | — | 7 | Medium | –2 |
| Small Pulse Laser | P, AI§ | 2 | 3 | 0 | 1–2 | 3–4 | 5–6 | — | 3 | Short | –2 |
| Micro Pulse Laser | P, AI§ | 1 | 3 | 0 | 1 | 2 | 3 | — | 3 | Short | –2 |
| *Missile Weapons‡‡‡* | | | | | | | | | | | |
| ATM 3** | M, C, S | 2 | 2/Msl, C5/3 | 4 | 1–5 | 6–10 | 11–15 | 20 | 4 | Medium | 0 |
| ATM 6** | M, C, S | 4 | 2/Msl, C5/6 | 4 | 1–5 | 6–10 | 11–15 | 10 | 8 | Medium | 0 |
| ATM 9** | M, C, S | 6 | 2/Msl, C5/9 | 4 | 1–5 | 6–10 | 11–15 | 7 | 14 | Medium | 0 |
| ATM 12** | M, C, S | 8 | 2/Msl, C5/12 | 4 | 1–5 | 6–10 | 11–15 | 4 | 20 | Medium | 0 |
| ATM ER Ammo | — | ** | 1/Msl, C5/** | 4 | 1–9 | 10–18 | 10–27 | ** | §§§ | Extreme | 0 |
| ATM HE Ammo | — | ** | 3/Msl, C5/** | 0 | 1–3 | 4–6 | 7–9 | ** | §§§ | Short | 0 |
| Narc Missile Beacon | M, E, S | 0 | ** | 0 | 1–4 | 5–8 | 9–12 | 6 | ** | ** | 0 |
| LRM 5 | M, C, S | 2 | 1/Msl, C5/5 | 0 | 1–7 | 8–14 | 15–21 | 24 | 3/4 | Long | 0 |
| LRM 10 | M, C, S | 4 | 1/Msl, C5/10 | 0 | 1–7 | 8–14 | 15–21 | 12 | 6/8 | Long | 0 |
| LRM 15 | M, C, S | 5 | 1/Msl, C5/15 | 0 | 1–7 | 8–14 | 15–21 | 8 | 9/12 | Long | 0 |
| LRM 20 | M, C, S | 6 | 1/Msl, C5/20 | 0 | 1–7 | 8–14 | 15–21 | 6 | 12/16 | Long | 0 |
| SRM 2 | M, C, S | 2 | 2/Msl, C2/2 | 0 | 1–3 | 4–6 | 7–9 | 50 | 2/5 | Short | 0 |
| SRM 4 | M, C, S | 3 | 2/Msl, C2/4 | 0 | 1–3 | 4–6 | 7–9 | 25 | 4/6 | Short | 0 |
| SRM 6 | M, C, S | 4 | 2/Msl, C2/6 | 0 | 1–3 | 4–6 | 7–9 | 15 | 8/10 | Short | 0 |
| Streak SRM 2 | M, C** | 2 | 2/Msl, C2/2 | 0 | 1–4 | 5–8 | 9–12 | 50 | 4 | Medium | 0 |
| Streak SRM 4 | M, C** | 3 | 2/Msl, C2/4 | 0 | 1–4 | 5–8 | 9–12 | 25 | 8 | Medium | 0 |
| Streak SRM 6 | M, C** | 4 | 2/Msl, C2/6 | 0 | 1–4 | 5–8 | 9–12 | 15 | 12 | Medium | 0 |
| *Equipment* | | | | | | | | | | | |
| A-Pod | PD, OS, AI | 0 | ** | — | — | — | — | OS | ** | — | — |
| B-Pods | PD, OS, AI | 0 | ** | — | — | — | — | OS | ** | — | — |
| Anti-Missile System | PD | 1 | ** | — | — | — | — | 24 | ** | — | — |
| Active Probe | E | — | — | — | — | — | 5 | — | — | ** | — |
| Light Active Probe | E | — | — | — | — | — | 3 | — | — | ** | — |
| ECM Suite | E | — | — | — | — | — | 6 | — | — | ** | — |
| Machine Gun Array | T | ** | ** | ** | ** | ** | ** | ** | ** | ** | 0 |
| TAG | E | 0 | — | 0 | 1–5 | 6–9 | 10–15 | — | — | ** | — |
| Light TAG | E | 0 | — | 0 | 1–3 | 4–6 | 7–9 | — | — | ** | — |

*See the Weapon and Equipment Types Table, below, for abbreviation explanations, or *Weapons and Equipment,* p. 113, for complete details. If weapon types are separated by a slash, then those weapon types all apply at once. For example, an LB-X can either be fired as a Direct-Fire Ballistic Weapon, or as Cluster Weapon, which means it also has switchable ammo and is flak capable.

**See *Other Combat Weapons and Equipment,* p. 129; for aerospace units, see *Weapons and Equipment,* p. 236.

†When fired as a Cluster Weapon by non-aerospace units; aerospace units always apply the –1 to-hit modifier.

††For Missile Weapons, the number after the slash represents a missile weapon linked to Artemis IV FCS (see p. 130).

†††Rapid-Fire Weapons display their Damage Value uniquely; i.e. an Ultra AC/2 is "2/Sht, R2", meaning each shot that is fired deals 2 points of damage (2/Sht) and it can fire a total of two shots in a turn (R2).

‡Maximum range for weapons mounted on aerospace units; see *Range Modifier,* p. 235, in the Aerospace Units section.

‡‡May use Cluster Ammunition; see *LB-X Weapons* and *Cluster Ammunition,* pp. 120 and 141 respectively.

‡‡‡Missile Weapons display their Damage Value uniquely; i.e. an LRM 20 is "1/Msl, C5/20", meaning each missile does 1 point of damage (1/Msl), the largest Damage Value grouping is 5 (C5), and that 20 missiles are fired with each shot (/20).

§See *Burst-Fire Weapon Damage Vs. Conventional infantry Table,* either p. 217 or p. 309.

§§Against 'Mech/aerospace fighter/small craft targets only, every time the weapon is fired, before the to-hit roll is made, the player may announce he is applying the Damage Value as heat to the target, in place of damage (see *Heat-Causing Weapon,* p. 113).

§§§Non-Bays: When using ER ammo, increase the range bracket to extreme and half the Attack Value (round up). When using HE ammo, reduce the range bracket to short and then multiply the Attack Value by 1.5 (round up). Bays: If all the ATMs in a given bay have at least one ton of each ammo type, the bay's short range bracket Attack Value is multiplied by 1.5 (round up), the medium range bracket remains the same, and it also has a long and extreme range brackets, with an Attack Value that is halve (round up) the standard value.

## WEAPON AND EQUIPMENT TYPES TABLE

See *Weapons and Equipment,* p. 113, for complete details of weapon and equipment types.

AE: Area-Effect Weapon
C: Cluster Weapon
DE: Direct-Fire Energy Weapon
DB: Direct-Fire Ballistic Weapon
H: Heat-Causing Weapon
M: Missile Weapon
R: Rapid-Fire (Multi-Firing) Weapon
V: Variable Damage
AI: Anti-Infantry
OS: One-Shot Weapon

P: Pulse Weapon
PD: Point-Blank Weapon
E: Electronics
CE: Counter-Electronics
T: Targeting System
PE: Performance Enhancement
F: Flak
X: Explosive Weapon

## AEROSPACE WEAPONS AND EQUIPMENT

| Item | Heat | Attack Value* | Aerospace Range‡ | To-Hit Modifier |
|---|---|---|---|---|
| Killer Whale | 20 | 4 | Extreme | 0 |
| White Shark | 15 | 3 | Extreme | 0 |
| Barracuda | 10 | 2 | Extreme | –2 |
| AR10 | † | † | † | † |
| Kraken-T‡ | 50 | 10 | Extreme | 0 |
| Killer Whale-T‡ | 20 | 4 | Extreme | 0 |
| White Shark-T‡ | 15 | 3 | Extreme | 0 |
| Barracuda-T‡ | 10 | 2 | Extreme | 0 |

*Capital-scale damage; see p. *Damage,* p. 238

†AR10 can fire Killer Whale, White Shark, or Barracuda missiles (but not tele-operated missiles) as long as the appropriate ammunition is available.

‡See *Tele-Operated Missiles,* p. 251.

## ADDITIONAL INNER SPHERE WEAPONS AND EQUIPMENT FOR BATTLE ARMOR

| Item | Type | Damage Value | Minimum Range | Short Range | Medium Range | Long Range | To-Hit Modifier |
|---|---|---|---|---|---|---|---|
| *Direct-Fire Ballistic Weapons* | | | | | | | |
| "Firedrake" Support Needler | DB, AI‡‡ | 1 | 0 | 1 | 2 | 3 | 0 |
| "David" Light Gauss Rifle | DB | 1 | 0 | 1–3 | 4–5 | 6–8 | 0 |
| "King David" Light Gauss Rifle | DB | 1 | 0 | 1–3 | 4–6 | 7–9 | 0 |
| Grand Mauler Gauss Cannon | DB | 1 | 0 | 1–2 | 3–4 | 5 | 0 |
| Magshot Gauss Rifle | DB | 2 | 0 | 1–3 | 4–6 | 7–9 | 0 |
| Tsunami Gauss Rifle | DB | 1 | 0 | 1–2 | 3–4 | 5 | 0 |
| Micro Grenade Launcher | DB, AI§ | 1 | 0 | 1 | 2 | — | 0 |
| Grenade Launcher | DB, AI§ | 1 | 0 | 1 | 2 | 3 | 0 |
| Light Mortar | DB, AI§ | 3 | 1 | 1 | 2 | 3 | 0 |
| Heavy Mortar | DB, AI§ | 3 | 2 | 1-2 | 3-4 | 5-6 | 0 |
| Light Recoilless Rifle | DB, AI§ | 2 | 0 | 1–2 | 3–4 | 5–6 | 0 |
| Medium Recoilless Rifle | DB, AI§ | 3 | 0 | 1–2 | 3–4 | 5–6 | 0 |
| Heavy Recoilless Rifle | DB, AI§ | 3 | 0 | 1–3 | 4–5 | 6–7 | 0 |
| *Direct-Fire Energy Weapons* | | | | | | | |
| Flamer | DE, H, AI§ | 2§§ | 0 | 1 | 2 | 3 | 0 |
| Man-Portable Plasma Rifle | DE | 2 | 0 | 1–2 | 3–4 | 5–6 | 0 |
| Support PPC | DE | 2 | 0 | 1–2 | 3–5 | 6–7 | 0 |
| *Missile Weapons* | | | | | | | |
| Compact Narc | M, E | ** | 0 | 1–2 | 3–4 | 5 | 0 |
| LRM 1 | M, C, S | 1/Msl, C5/‡ | 6 | 1–7 | 8–14 | 15–21 | 0 |
| LRM 2 | M, C, S | 1/Msl, C5/‡ | 6 | 1–7 | 8–14 | 15–21 | 0 |
| LRM 3 | M, C, S | 1/Msl, C5/‡ | 6 | 1–7 | 8–14 | 15–21 | 0 |
| LRM 4 | M, C, S | 1/Msl, C5/‡ | 6 | 1–7 | 8–14 | 15–21 | 0 |
| LRM 5 | M, C, S | 1/Msl, C5/‡ | 6 | 1–7 | 8–14 | 15–21 | 0 |
| MRM 1 | M, C, S | 1/Msl, C5/‡ | 0 | 1–3 | 4–8 | 9–15 | +1 |
| MRM 2 | M, C | 1/Msl, C5/‡ | 0 | 1–3 | 4–8 | 9–15 | +1 |
| MRM 3 | M, C | 1/Msl, C5/‡ | 0 | 1–3 | 4–8 | 9–15 | +1 |
| MRM 4 | M, C | 1/Msl, C5/‡ | 0 | 1–3 | 4–8 | 9–15 | +1 |
| MRM 5 | M, C | 1/Msl, C5/‡ | 0 | 1–3 | 4–8 | 9–15 | +1 |
| Rocket Launcher 1 | M, C | 1/Msl, C5/‡ | 0 | 1–3 | 4–7 | 8–12 | +1 |
| Rocket Launcher 2 | M, C | 1/Msl, C5/‡ | 0 | 1–3 | 4–7 | 8–12 | +1 |
| Rocket Launcher 3 | M, C | 1/Msl, C5/‡ | 0 | 1–3 | 4–7 | 8–12 | +1 |
| Rocket Launcher 4 | M, C | 1/Msl, C5/‡ | 0 | 1–3 | 4–7 | 8–12 | +1 |
| Rocket Launcher 5 | M, C | 1/Msl, C5/‡ | 0 | 1–3 | 4–7 | 8–12 | +1 |
| SRM 1 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| SRM 2 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| SRM 3 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| SRM 4 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| SRM 5 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| SRM 6 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| *Equipment* | | | | | | | |
| Light TAG | E | — | 0 | 1–3 | 4–6 | 7–9 | — |

## ADDITIONAL CLAN WEAPONS AND EQUIPMENT FOR BATTLE ARMOR

| Item | Type | Damage Value | Minimum Range | Short Range | Medium Range | Long Range | To-Hit Modifier |
|---|---|---|---|---|---|---|---|
| *Direct-Fire Ballistic Weapons* | | | | | | | |
| "Bearhunter" Superheavy AC | DB, AI‡‡ | 3 | 0 | 0 | 1 | 2 | +1 |
| Heavy Grenade Launcher | DB, C, AI§ | 1 | 0 | 1 | 2 | 3 | 0 |
| Light Recoilless Rifle | DB, AI§ | 2 | 0 | 1–2 | 3–4 | 4–6 | 0 |
| Medium Recoilless Rifle | DB, AI§ | 3 | 0 | 1–2 | 3–4 | 4–6 | 0 |
| Heavy Recoilless Rifle | DB, AI§ | 3 | 0 | 1–3 | 4–5 | 6–7 | 0 |
| *Direct-Fire Energy Weapons* | | | | | | | |
| Flamer | DE, H, AI§ | 2§§ | 0 | 1 | 2 | 3 | 0 |
| Support PPC | DE | 2 | 0 | 1–2 | 3–5 | 6–7 | 0 |
| *Missile Weapons* | | | | | | | |
| Compact Narc | M, E | ** | 0 | 1–2 | 3–4 | 5 | 0 |
| LRM 1 | M, C, S | 1/Msl, C5/‡ | 0 | 1–7 | 8–14 | 15–21 | 0 |
| LRM 2 | M, C, S | 1/Msl, C5/‡ | 0 | 1–7 | 8–14 | 15–21 | 0 |
| LRM 3 | M, C, S | 1/Msl, C5/‡ | 0 | 1–7 | 8–14 | 15–21 | 0 |
| LRM 4 | M, C, S | 1/Msl, C5/‡ | 0 | 1–7 | 8–14 | 15–21 | 0 |
| LRM 5 | M, C, S | 1/Msl, C5/‡ | 0 | 1–7 | 8–14 | 15–21 | 0 |
| SRM 1 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| SRM 2 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| SRM 3 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| SRM 4 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| SRM 5 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| SRM 6 | M, C, S | 2/Msl, C2/‡ | 0 | 1–3 | 4–6 | 7–9 | 0 |
| Advanced SRM 1† | M, C | 1/Msl, C2/‡ | 0 | 1–4 | 5–8 | 9–12 | 0 |
| Advanced SRM 2† | M, C | 1/Msl, C2/‡ | 0 | 1–4 | 5–8 | 9–12 | 0 |
| Advanced SRM 3† | M, C | 1/Msl, C2/‡ | 0 | 1–4 | 5–8 | 9–12 | 0 |
| Advanced SRM 4† | M, C | 1/Msl, C2/‡ | 0 | 1–4 | 5–8 | 9–12 | 0 |
| Advanced SRM 5† | M, C | 1/Msl, C2/‡ | 0 | 1–4 | 5–8 | 9–12 | 0 |
| Advanced SRM 6† | M, C | 1/Msl, C2/‡ | 0 | 1–4 | 5–8 | 9–12 | 0 |

*See the Weapon and Equipment Types Table, p. 306, for abbreviation explanations, or *Weapons and Equipment*, p. 113, for complete details.
**See *Other Combat Weapons and Equipment,* p. 129
†Add +1 to the die roll when rolling on the Cluster Hits Table.
‡See *Missile Attacks,* p. 218

‡‡Treat as Flamer on Burst-Fire Weapon Damage Vs. Conventional Infantry Table, see either p. 217 or p. 309.
§See Burst-Fire Weapon Damage Vs. Conventional infantry Table, either p. 217 or p. 309.
§§Against 'Mech/aerospace fighter/small craft targets only, every time the weapon is fired, before the to-hit roll is made, the player may announce he is applying the Damage Value as heat to the target, in place of damage (see *Heat-Causing Weapon,* p. 113).

## MOVEMENT COSTS TABLE

| Movement Action/ Terrain Cost | MP Cost Per Hex/Terrain Type | Prohibited Units |
|---|---|---|
| Cost to Enter Any Hex | 1 | |
| Terrain Cost When Entering Any New Hex | | |
| Clear | +0[6] | Naval vessel |
| Paved/Bridge | +0 | Naval vessel |
| Road | +0[3] | Naval vessel |
| Rough | +1 | Wheeled, Naval vessel |
| Light woods | +1[10] | Wheeled[9], Hover, VTOL[12], WiGE[12], Naval vessel |
| Heavy woods | +2[11] | Vehicles[12], Naval vessel |
| Water | | |
| Depth 0 | +0 | Naval vessel |
| Depth 1 | +1[1] (Level change MP cost not included) | Infantry[14], Vehicles[4,7] |
| Depth 2+ | +3[1] (Level change MP cost not included) | Infantry[14], Vehicles[4,7], IndustrialMechs[8] |

| Movement Action/ Terrain Cost | MP Cost Per Hex/Terrain Type | Prohibited Units |
|---|---|---|
| Level change (up or down) | | |
| 1 level | +1 ('Mechs, VTOLs, subs, ProtoMechs) +2 (infantry, ground vehicles) | — |
| 2 levels | +2 ('Mechs, VTOLs, subs) | Infantry, Ground Vehicles, WiGE[13], ProtoMechs |
| 3+ levels | +1/level (VTOLs, subs) | 'Mechs, ProtoMechs, Infantry, Ground Vehicles, WiGE[13] |
| Rubble | +1[1] | Wheeled, Naval vessel |
| Light building | +1[2] | VTOL, WiGE, Naval vessel |
| Medium building | +2[2] | VTOL, WiGE, Naval vessel |
| Heavy building | +3[2] | VTOL, WiGE, Naval vessel |
| Hardened building | +4[2] | VTOL, WiGE, Naval vessel |
| Additional movement actions | | |
| Facing change | 1/hexside[5] | |
| Dropping to the ground ('Mech only) | 1 | |
| Standing up ('Mech only) | 2/attempt | |

[1] MP cost to move along the bottom of a water hex; Piloting Skill Roll required to prevent falling.

[2] Piloting Skill Roll required to prevent damage; infantry pays only 1 MP (except mechanized infantry, which pays 2 MP) to enter any building hex.

[3] If traveling along road; otherwise cost of underlying terrain.

[4] Hovercraft may enter all water hexes along the surface and may enter such hexes using flanking movement.

[5] No cost for infantry.

[6] If a wheeled Support Vehicle lacks the Off-Road Vehicle Chassis and Controls modification, then movement costs 1 additional MP per hex.

[7] Wheeled or tracked Support Vehicles with the Amphibious Chassis and Controls modification can move through any water hex on the surface at a cost of 2 MP (see p. 56).

[8] IndustrialMechs *can* enter a Depth 2 or greater water hex. However, the IndustrialMechs must mount either a fuel cells, fission or fusion power plant *and* must mount the Environmental Sealing Chassis and Controls modification to do so. If the IndustrialMech does not meet those requirements, it is considered destroyed if they remain in a Depth 2 or greater water hex (or prone in a Depth 1 water hex) in the End Phase of the turn immediately following the turn in which they entered it.

[9] Wheeled Support Vehicles with either the Monocycle or Bicycle Chassis and Controls modification can enter a light woods hex.

[10] Infantry pays only 1 MP (except mechanized infantry, which pays 2 MP) to enter any light woods hex.

[11] Infantry pays only 2 MP (except mechanized infantry, which pays 3 MP) to enter any heavy woods hex.

[12] VTOL and WiGE vehicles can enter a woods hex provided their elevation is higher than the level of the woods in the hex.

[13] This only applies to WiGE units entering a hex whose level is higher than the unit's current hex; see *Wing-In-Ground-Effect*, p. 55, for rules governing entering hexes whose level is lower than the unit's current hex.

[14] Infantry can enter a water hex of Depth 1 or deeper if they are noted as having UMU MPs.

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## PILOTING/DRIVING SKILL ROLL TABLE

| Situation | Modifier |
|---|---|
| **Damage to 'Mech** | |
| 'Mech takes 20+ damage points in one phase | +1 |
| 'Mech fusion (or fission) reactor shuts down | +3[1] |
| Leg/foot actuator destroyed | +1 |
| Hip actuator destroyed | +2 |
| Gyro hit | +3 |
| Gyro destroyed | Automatic fall[2] |
| Leg destroyed | Automatic fall[3] |
| **Physical attacks against 'Mech** | |
| 'Mech was kicked | 0 |
| 'Mech was pushed | 0 |
| 'Mech was successfully charged/hit by death from above | +2 |
| **Unit's actions** | |
| 'Mech missed kick | 0 |
| 'Mech made a successful charging attack | +2 |
| 'Mech made death from above attack | +4[4] |
| 'Mech entered Depth 1 water hex | −1 |
| 'Mech entered Depth 2 water hex | 0 |
| 'Mech entered Depth 3+ water hex | +1 |
| 'Mech attempted to stand | 0 |
| 'Mech entered rubble hex | 0 |
| Running/flanking unit moved after facing change while on pavement | See *Skidding*, p. 62. |

| Situation | Modifier |
|---|---|
| Flanking VTOL/WiGE/Hover Vehicle moved after facing change | See *Sideslipping*, p. 67 |
| 'Mech jumped with damaged gyro or leg/foot/hip actuators | per Preexisting Damage, below |
| 'Mech jumped with destroyed leg | per Preexisting Damage, below |
| 'Mech ran with damaged hip or gyro | per Preexisting Damage, below |
| **Special cases** | |
| MechWarrior trying to avoid damage when his 'Mech is falling | +1/level fallen[8] |
| IndustrialMech trying to avoid critical damage when falling | +1/level fallen[8] |
| IndustrialMech with ICE power plant fails PSR (see *Piloting/Driving Skill Rolls*, p. 59) | 0 (no additional modifiers) |
| Four-legged 'Mech with intact legs | −2 |
| Unintentional charge | +3 |
| 'Mech mounts small cockpit | +1 |
| **Preexisting Damage** | |
| Per leg/foot actuator previously destroyed | +1 |
| Per hip actuator previously destroyed | +2[5] |
| Gyro previously hit | +3 |
| Leg previously destroyed | +5[6] |

| Situation | Modifier |
|---|---|
| **Skidding Movement** | |
| Hexes moved in turn | |
| 0–2 | −1 |
| 3–4 | 0 |
| 5–7 | +1 |
| 8–10 | +2 |
| 11–17 | +4 |
| 18–24 | +5 |
| 25+ | +6 |
| **Building Movement[7]** | |
| Unit entering/leaving light building hex | 0 |
| Unit entering/leaving medium building hex | +1 |
| Unit entering/leaving heavy building hex | +2 |
| Unit entering/leaving hardened building hex | +5 |
| Hexes moved in turn | |
| 1–2 | 0 |
| 3–4 | +1 |
| 5–6 | +2 |
| 7–9 | +3 |
| 10–17 | +4 |
| 18–24 | +5 |
| 25+ | +6 |

[1] Only during the phase that the reactor shuts down. If the MechWarrior must make a Piloting Skill Roll for a 'Mech with a shutdown reactor, the 'Mech automatically falls; in either case, if the 'Mech falls, the warrior automatically takes 1 point of damage (see *Falling Damage to the MechWarrior*, p. 69).

[2] The modifier for a destroyed gyro is +6 when making a Piloting Skill Roll to avoid damaging the MechWarrior during an automatic fall.

[3] The modifier for a destroyed leg is +5 when making a Piloting Skill Roll to avoid damaging the MechWarrior during an automatic fall.

[4] Automatic fall if death from above attack is unsuccessful.

[5] Ignore all modifiers from previous critical hits on that leg.

[6] Do not add modifiers for other damaged actuators in the leg.

[7] To avoid damage only. Does not result in a fall if Piloting Skill Roll fails. See *Buildings*, p. 166. Add an additional +1 modifier if unit is charging or being charged (in addition to the +2 modifier normally required in that situation).

[8] For the purposes of falling, a 'Mech only rises 1 level above the underlying terrain.

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## FACING AFTER FALL TABLE

| Die Roll (1D6) | 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 | 2 Hexsides Left | Left Side |
| 6 | 1 Hexside Left | Left Side |

## CLUSTER HITS TABLE

| Die Roll (2D6) | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 10 | 10 | 12 |
| 3 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 10 | 10 | 12 |
| 4 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 9 | 10 | 10 | 10 | 11 | 11 | 11 | 12 | 12 | 18 |
| 5 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 13 | 14 | 15 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 24 |
| 6 | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 6 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 13 | 14 | 15 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 24 |
| 7 | 1 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 13 | 14 | 15 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 24 |
| 8 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 13 | 14 | 15 | 16 | 16 | 17 | 17 | 17 | 18 | 18 | 24 |
| 9 | 2 | 2 | 3 | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 10 | 11 | 11 | 12 | 13 | 14 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 21 | 22 | 23 | 23 | 24 | 32 |
| 10 | 2 | 3 | 3 | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 10 | 11 | 11 | 12 | 13 | 14 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 21 | 22 | 23 | 23 | 24 | 32 |
| 11 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 40 |
| 12 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 40 |

*Weapon Size* is the top column header.

## ATTACK MODIFIERS TABLE

### All Attacks: Weapons and Physical

| | Modifier |
|---|---|
| **Attacker** | |
| *Movement (modifiers are cumulative)** | |
| Stationary | None |
| Walked/Cruised | +1 |
| Ran/Flanked | +2 |
| Jumped | +3 |
| Prone | +2 (does not apply to four-legged 'Mechs) |
| Skidding | +1 |
| **Terrain** *(modifiers are cumulative)* | |
| Light Woods | +1 per intervening hex; +1 if target in light woods |
| Heavy Woods | +2 per intervening hex; +2 if target in heavy woods |
| Water** | |
| Depth 1 | +1; see *Partial Cover*, p. 102 |
| Depth 2 | Underwater units cannot target units that are not underwater (see *Terrain Modifiers*, p. 108). |
| Partial Cover | +1; see *Partial Cover*, p. 102 |
| **Target** *(modifiers are cumulative)* | |
| Prone | –2 from adjacent hex; +1 from all others† |
| Immobile | –4 (Includes Grounded DropShips) |
| Skidding | +2 |
| Movement | |
| Moved 0–2 hexes | 0 |
| Moved 3–4 hexes | +1 |
| Moved 5–6 hexes | +2 |
| Moved 7–9 hexes | +3 |
| Moved 10–17 hexes | +4 |
| Moved 18–24 hexes | +5 |
| Moved 25+ hexes | +6 |
| Jumped/Airborne (non-aerospace units) | +1 additional |
| Battle armor unit (only applies to non-infantry attackers) | +1 |
| Airborne VTOL unit | +1 |
| Airborne aerospace unit at Altitude 1 (NOE) (attacker in attack/flight path) | +1 |
| Airborne aerospace unit at Altitude 1 (NOE) (attacker not in attack/flight path) | +3 |

### Weapon Attacks Only

| | Modifier |
|---|---|
| **Attacker** | |
| 'Mech Damage | |
| Sensor hit | +2 |
| Shoulder hit | +4 for weapons in arm, disregard other damaged actuators in arm |
| Upper or lower arm actuator (each) | +1 for weapons in arm |
| Heat | |
| 0–7 | None |
| 8–12 | +1 |
| 13–16 | +2 |
| 17–23 | +3 |
| 24+ | +4 |

### Weapon Attacks Only

| | Modifier |
|---|---|
| Making indirect LRM attack | +1 |
| Attacker is IndustrialMech*** | +1 |
| Grounded DropShip | –2 |
| **Range and Terrain** | |
| Range | |
| Short | None |
| Medium | +2 |
| Long | +4 |
| Minimum range | [Minimum] – [Target Range] +1 (see *Minimum Range Modifier*, p. 107) |
| Each Intervening Hex/Level between Attacker and Target (as well as target's hex) in same multi-hex building | +1 per hex/level (maximum +3); see *Combat Within Buildings*, p. 175 |
| **Target** | |
| Secondary target in forward arc | +1 |
| Secondary target in side or rear arc | +2 |
| Large Support Vehicle or Grounded Small Craft | –1 |

### Physical Attacks Only

| | |
|---|---|
| **Attacker** | |
| 'Mech Damage | |
| Shoulder hit | No punching or physical weapon attack with arm; no clubbing attacks; +2 to pushing attack (each) |
| Upper or lower arm actuator hit (each) | +2 to punching and physical weapon attack with arm; half damage for punching attack with arm; +2 to clubbing attacks |
| Hand actuator hit | +1 to punching attack with arm; no clubbing attacks; no physical weapon attack with arm |
| Hip actuator hit | No kicking attacks |
| Upper or lower leg actuator hit (each) | +2 and half damage to kicking attack with that leg |
| Foot actuator hit | +1 to kicking attack with that leg |
| **Target** | |
| Infantry | +3 to kicking and death from above attacks |
| Large Support Vehicle or Grounded Small Craft | –2 |
| **Other Modifiers** | |
| Charging attack: Modify for relative Piloting Skills (see p. 40) | |
| Death from above attack: Modify for relative Piloting Skills (see p. 40) | |

*Does not apply to infantry units.
**See *Terrain Modifiers*, p. 108, for exceptions.
***If the IndustrialMech mounts advanced fire control, this modifier does not apply.
† Does not necessarily apply to Four-legged 'Mechs (see *Firing When Down*, p. 113).

## 'MECH HIT LOCATION TABLE
**PAGE 119**

| Die Roll (2D6) | Biped (Four-legged) | | |
|---|---|---|---|
| | **Left Side** | **Front/Rear** | **Right Side** |
| 2* | Left Torso [critical] | Center Torso [critical] | Right Torso [critical] |
| 3 | Left Leg (Left Rear Leg) | Right Arm (Right Front Leg) | Right Leg (Right Rear Leg) |
| 4 | Left Arm (Left Front Leg) | Right Arm (Right Front Leg) | Right Arm (Right Front Leg) |
| 5 | Left Arm (Left Front Leg) | Right Leg (Right Rear Leg) | Right Arm (Right Front Leg) |
| 6 | Left Leg (Left Rear Leg) | Right Torso | Right Leg (Right Rear Leg) |
| 7 | Left Torso | Center Torso | Right Torso |
| 8 | Center Torso | Left Torso | Center Torso |
| 9 | Right Torso | Left Leg (Left Rear Leg) | Left Torso |
| 10 | Right Arm (Right Front Leg) | Left Arm (Left Front Leg) | Left Arm (Left Front Leg) |
| 11 | Right Leg (Right Rear Leg) | Left Arm (Left Front Leg) | Left Leg (Left Rear Leg) |
| 12 | Head | Head | Head |

*A result of 2 may inflict a critical hit. Apply damage to the armor in that section in the normal manner, but the attacking player also rolls once on the Determining Critical Hits Table, p. 124.

## PHYSICAL ATTACK MODIFIERS TABLE
**PAGE 144**

| Attack Type | Modifier |
|---|---|
| Charging | +0* |
| Clubbing | –1 |
| Death From Above (DFA) | +0*† |
| Kicking | –2 |
| Punching | +0 |
| Pushing | –1 |

*Whenever one unit charges another, compare their Piloting Skill Levels and use the difference between the two skill levels as a modifier to the to-hit number. If the target's skill level is lower, add the modifier to the to-hit number. If the attacker's Piloting Skill Level is lower, subtract the modifier from the to-hit number.

†All the normal attack modifiers apply, including the attacker's jumping movement, but the roll is not modified for terrain. For DFA attacks against infantry targets, apply an additional +3 to-hit modifier (because infantry units have no Piloting Skill, neither player needs to add a modifier for relative Piloting Skill Rating).

## TERRAIN FACTOR AND CONVERSION TABLE
**PAGE 112**

| Terrain Factor | Former Terrain | New Terrain |
|---|---|---|
| Heavy Woods: 90 | Heavy Woods | Light Woods |
| Light Woods: 50 | Light Woods | Rough |
| Rough: 0 | All others | No change |

## DETERMINING CRITICAL HITS TABLE
**PAGE 124**

| Die Roll (2D6)† | Effect |
|---|---|
| 2–7 | No Critical Hit |
| 8–9 | Roll 1 Critical Hit Location |
| 10–11 | Roll 2 Critical Hit Locations |
| 12 | Head/Limb Blown Off; Roll 3 Critical Hit Locations* |

*Roll 3 critical hit locations if the attack strikes the torso.
†When rolling for damage inflicted on an IndustrialMech, add +2 to the dice roll result. Treat a modified result of 13 as a 12. On a modified result of 14, the IndustrialMech's head or limb is blown off. If the hit struck a torso location, make four critical hit rolls.

## 'MECH PUNCH LOCATION TABLE
**PAGE 145**

| D6 Roll Result | Biped | | | D6 Roll Result | Four-Legged | | |
|---|---|---|---|---|---|---|---|
| | **Left Side** | **Front/Rear** | **Right Side** | | **Left Side** | **Front/Rear** | **Right Side** |
| 1 | Left Torso | Left Arm | Right Torso | 1 | Left Torso | Left Front Leg/ Left Rear Leg | Right Torso |
| 2 | Left Torso | Left Torso | Right Torso | 2 | Left Torso | Left Torso | Right Torso |
| 3 | Center Torso | Center Torso | Center Torso | 3 | Center Torso | Center Torso | Center Torso |
| 4 | Left Arm | Right torso | Right Arm | 4 | Left Front Leg | Right Torso | Right Front Leg |
| 5 | Left Arm | Right Arm | Right Arm | 5 | Left Rear Leg | Right Front Leg/ Right Rear Leg | Right Rear Leg |
| 6 | Head | Head | Head | 6 | Head | Head | Head |

## DIFFERENT LEVELS TABLE
**PAGE 150**

| Target is: | Allowed Physical Attack |
|---|---|
| Standing 'Mech 1 level higher | Charge, Punch (Kick Table), Club (Kick Table), Physical Weapon (Kick Table) |
| Standing 'Mech 1 level lower | Charge, Kick (Punch Table), Club (Punch Table), Physical Weapon (Punch Table) |
| Prone 'Mech, ProtoMech, Vehicle or infantry 1 level higher | Punch, Club, Physical Weapon |
| Prone 'Mech, ProtoMech, Vehicle or infantry 1 level lower | None |

Note: A 'Mech can always make a death from above attack if it has the necessary Jumping MP, provided the target is valid.

## UNIT HEIGHTS TABLE
**PAGE 99**

| Type | Heights* |
|---|---|
| 'Mech | 2 levels** |
| ProtoMechs, vehicles, infantry and fighters | 1 level |
| Submarines | 1 depth*** |
| Large Support Vehicles and small craft | 2 levels |
| Aerodyne DropShips | 5 levels |
| Spheroid DropShips | 10 levels |

*A unit's height levels (or elevations, if airborne) must be included in the level of the underlying hex for determining a unit's total height; the height of aerospace units for LOS purposes is irrelevant while airborne.
**Prone 'Mechs rise one level above the level of the underlying hex.
***A vessel on the surface rises 1 level above the level of the hex.

## 'MECH KICK LOCATION TABLE
**PAGE 147**

| D6 Roll Result | Biped | | |
|---|---|---|---|
| | **Left Side** | **Front/Rear** | **Right Side** |
| 1–3 | Left Leg | Right Leg | Right Leg |
| 4–6 | Left Leg | Right Leg | Right Leg |
| | **Four-legged** | | |
| 1–3 | Left Front Leg | Right Front Leg/ Right Rear Leg | Right Front Leg |
| 4–6 | Left Rear Leg | Left Front Leg/ Left Rear Leg | Right Rear Leg |

## HEAT POINT TABLE
**PAGE 159**

| Activity | Heat Points |
|---|---|
| Walking | +1 per turn |
| Running | +2 per turn |
| Jumping | +1 per hex (minimum of 3 per turn) |
| Attempting to stand | +1 per attempt |
| Weapons fire | Per Weapons and Equipment Tables, p. 303 |
| Heat-Causing Weapons | Per Weapons and Equipment Tables, p. 303, or Other Combat Weapons and Equipment, p. 129 |
| Heat sink | –1 per operational heat sink; –2 per operational double heat sink; –1 additional per operational single heat sink under water (maximum 6 points); –2 additional per operational double heat sink underwater (maximum 6 points) |
| First engine hit | +5 per turn |
| 2nd engine hit | +10 (total) per turn |

## PHYSICAL WEAPON ATTACKS TABLE
**PAGE 146**

| Weapon Type | To-Hit Modifier | Damage Value | To-Hit Location Table | Firing Arc** | Affected by TSM | To-Hit/Damage Value Affected by Actuator Damage |
|---|---|---|---|---|---|---|
| Backhoe | +1 | 6 | Standard | Arm | Yes | Yes/Yes |
| Chainsaw | +0 | 5 | Standard | Arm | No | Yes/No |
| Combine | –2 | 3† | Standard | Arm | No | Yes/No |
| Dual Saw | +0 | 7 | Standard | Arm | No | Yes/No |
| Hatchet | –1 | 1/per 5 tons†† | Standard* | Arm | Yes | Yes/Yes |
| Heavy-Duty Pile Driver | +2 | 9 | Standard | Forward | No | Yes/No |
| Mining Drill | –1 | 4 | Standard | Arm | No | Yes/No |
| Retractable Blade | –2 | 1/per 10 tons‡ | Standard* | Arm | Yes | Yes§§/Yes |
| Rock Cutter | +1 | 5 | Standard | Arm | No | Yes/No |
| Spot Welder | +0 | 5‡‡ | Punch | Arm | No | Yes/No |
| Sword | –2 | 1/per 10 tons +1‡ | Standard* | Arm | Yes | Yes/Yes |
| Wrecking Ball | +1 | 8§ | Standard | Forward | No | Yes/No |

*Roll normally on the 'Mech Hit Location Table. Alternatively, when the controlling player announces the physical weapon attack, he may also announce that he will use the Punch or Kick Hit Location Table to resolve damage if the attack succeeds, in which case apply a +4 modifier in addition to all the standard modifiers, including the standard to-hit modifier for the weapon (this modifier does not apply when attacking on a Punch/Kick Location Table due to attacks from different levels; see p. 150).
**Forward: the target of a physical weapon attack can only be in the 'Mech's forward arc. Arm: the target of a physical weapon attack can only be in the 'Mech's forward arc or in the side arc corresponding to the arm in which the equipment is mounted.
†1D6 against conventional infantry.
††A successful attack does 1 point of damage for every 5 tons that the attacking 'Mech weighs.

‡A successful attack does 1 point of damage for every 10 tons that the attacking 'Mech weighs (round up); +1 to that Damage Value for a sword.
‡‡Whenever the spot welder is used in a physical weapon attack, it generates 2 points of heat.
§ On any to-hit roll result of 2, the ball has successfully delivered a self-inflicted hit against the attacker rather than the target. Such a self-inflicted strike causes half the normal damage and is resolved using the Front Hit Location Table. Immediately after sustaining damage from a self-inflicted wrecking ball hit, the player must make a Piloting Skill Roll to avoid falling from being thrown off-balance by this critical failure.
§§Damage to the hand actuator (or the absence of a hand actuator) in the arm mounting this equipment does not modify the to-hit number of the attack.

## LARGE GROUND SUPPORT VEHICLE HIT LOCATION TABLE

| 2D6 Roll | Attack Direction | | | |
|---|---|---|---|---|
| | **Front** | **Rear** | **Front Side** | **Rear Side** |
| 2* | Front (critical) | Rear (critical) | Side (critical)§ | Side (critical)§ |
| 3 | Right Side† | Left Side† | Front† | Rear† |
| 4 | Front† | Rear† | Side† | Side† |
| 5 | Front† | Rear† | Side | Side |
| 6 | Front | Rear | Side | Side |
| 7 | Front | Rear | Side | Side |
| 8 | Front | Rear | Side (critical)* | Side (critical)* |
| 9 | Front† | Rear† | Side† | Side† |
| 10 | Turret | Turret | Turret | Turret |
| 11 | Turret | Turret | Turret | Turret |
| 12* | Turret (critical) | Turret (critical) | Turret (critical) | Turret (critical) |

*A result of 2 or 12 (or 8 if the attack strikes the side) may inflict a critical hit. For each such roll result, apply damage normally to the armor in that section. The attacking player then rolls once on the Ground Combat Vehicle Critical Hits Table, p. 194. A result of 12 on this roll may inflict a critical hit against the turret. If the vehicle has no turret, a 12 indicates the chance of a critical hit on the side corresponding to the attack direction.
†The vehicle may suffer motive system damage even if its armor remains intact. Apply damage normally to the armor in that section, but the attacking player also rolls once on the Motive System Damage Table, p. 193 (applying damage at the end of the phase in which the damage takes effect).
§If the attack hits the front right side, all Front Side results strike the front right side armor, while Rear Side results strike the rear right side armor. If the vehicle has no turret, a turret hit strikes the armor on the side attacked.

## PROTOMECH HIT LOCATION TABLE

| 2D6 Result | Hit Location |
|---|---|
| 2 | Main Gun |
| 3 | * Near Miss |
| 4 | Right Arm |
| 5 | Legs |
| 6 | Torso |
| 7 | Torso |
| 8 | Torso |
| 9 | Legs |
| 10 | Left Arm |
| 11 | * Near Miss |
| 12 | Head |

*A result of 3 or 11 inflicts no damage on the target. In the case of a kick attack from a 'Mech, a Near Miss on the ProtoMech Hit Location Table does not force the attacking 'Mech to make a Piloting Skill Roll.

## SPECIAL PROTOMECH HIT LOCATION TABLE

| 2D6 Result | Hit Location* |
|---|---|
| 2 | Main Gun |
| 3 | Legs |
| 4 | Legs |
| 5 | Right Arm |
| 6 | Torso |
| 7 | Torso |
| 8 | Torso |
| 9 | Left Arm |
| 10 | Legs |
| 11 | Legs |
| 12 | Head |

*Use Special ProtoMech Hit Location Table when determining damage under the following circumstances: area-affect weapons, building collapse, crashing aerospace units, falling and collisions with skidding units.

## PHYSICAL ATTACKS AGAINST VTOL VEHICLES TABLE

| Difference in Levels | Type of Physical Attack Allowed |
|---|---|
| –1 or lower | None |
| 0 | All except Punch |
| 1–2 | All except Kick |
| 3 | Club and Physical Weapons only |
| 4+ | None |

## GROUND COMBAT VEHICLE HIT LOCATION TABLE

| 2D6 Roll | Attack Direction | | |
|---|---|---|---|
| | **Front** | **Rear** | **Side§** |
| 2* | Front (critical) | Rear (critical) | Side (critical) |
| 3 | Front† | Rear† | Side† |
| 4 | Front† | Rear† | Side† |
| 5 | Right Side† | Left Side† | Front† |
| 6 | Front | Rear | Side |
| 7 | Front | Rear | Side |
| 8 | Front | Rear | Side (critical)* |
| 9 | Left Side† | Right Side† | Rear† |
| 10 | Turret | Turret | Turret |
| 11 | Turret | Turret | Turret |
| 12* | Turret (critical) | Turret (critical) | Turret (critical) |

*A result of 2 or 12 (or an 8 if the attack strikes the side) may inflict a critical hit on the vehicle. For each result of 2 or 12 (or 8 for side attacks), apply damage normally to the armor in that section. The attacking player then automatically rolls once on the Ground Combat Vehicle Critical Hits Table, p. 194. A result of 12 on the Ground Combat Vehicles Hit Location Table may inflict a critical hit against the turret; if the vehicle has no turret, a 12 indicates the chance of a critical hit on the side corresponding to the attack direction.
†The vehicle may suffer motive system damage even if its armor remains intact. Apply damage normally to the armor in that section, but the attacking player also rolls once on the Motive System Damage Table, at right. Apply damage at the end of the phase in which the damage takes effect.
§Side hits strike the side as indicated by the attack direction. For example, if an attack hits the right side, all Side results strike the right side armor. If the vehicle has no turret, a turret hit strikes the armor on the side attacked.

## MOTIVE SYSTEM DAMAGE TABLE

| 2D6 Roll | Effect* |
|---|---|
| 2–5 | No effect |
| 6–7 | Minor damage; +1 modifier to all Driving Skill Rolls |
| 8–9 | Moderate damage; –1 Cruising MP, +2 modifier to all Driving Skill Rolls |
| 10–11 | Heavy damage; only half Cruising MP (round fractions up), +3 modifier to all Driving Skill Rolls |
| 12+ | Major damage; no movement for the rest of the game. Vehicle is immobile. |

**Attack Direction Modifier:**

| | |
|---|---|
| Hit from rear | +1 |
| Hit from the sides | +2 |

**Vehicle Type Modifiers:**

| | |
|---|---|
| Tracked, Naval | +0 |
| Wheeled | +2 |
| Hovercraft, Hydrofoil | +3 |
| WiGE | +4 |

*All movement and Driving Skill Roll penalties are cumulative. If a unit's Cruising MP is reduced to 0, it cannot move for the rest of the game, but is not considered an immobile target. In addition, all motive system damage takes effect at the end of the phase in which the damage occurred. For example, if two units are attacking the same Combat Vehicle during the Weapon Attack Phase and the first unit inflicts motive system damage and rolls a 12, the –4 immobile target modifier would not apply for the second attacker. However, the –4 modifier would take effect during the Physical Attack Phase.

## VTOL COMBAT VEHICLE HIT LOCATION TABLE

| 2D6 Roll | Front | Rear | Side |
|---|---|---|---|
| 2* | Front (critical) | Rear (critical) | Side (critical) |
| 3 | Rotors† | Rotors† | Rotors† |
| 4 | Rotors† | Rotors† | Rotors† |
| 5 | Right Side | Left Side | Front |
| 6 | Front | Rear | Side |
| 7 | Front | Rear | Side |
| 8 | Front | Rear | Side (critical)* |
| 9 | Left Side | Right Side | Rear |
| 10 | Rotors† | Rotors† | Rotors† |
| 11 | Rotors† | Rotors† | Rotors† |
| 12* | Rotors (critical)† | Rotors (critical)† | Rotors (critical)† |

*A result of 2 or 12 (or 8 if the attack strikes the side) may inflict a critical hit on the VTOL. For each such attack, apply damage normally to the armor in that section. The attacking player then immediately rolls once on the VTOL Combat Vehicle Critical Hits Table, below.
†Damage Value / 10 (round up); see Rotor Hits, p. 197. Additionally, damage to the rotors slows down the VTOL. Each hit reduces the VTOL's Cruising MP by 1, meaning that the controlling player must also recalculate Flank MP; multiply the new Cruising MP by 1.5 and round up. As with all damage, such movement penalties do not apply until the end of the phase in which the damage occurred.

## GROUND COMBAT VEHICLE CRITICAL HITS TABLE

| 2D6 Roll | Hit Location | | | |
|---|---|---|---|---|
| | **Front** | **Side** | **Rear** | **Turret** |
| 2–5 | No Critical Hit | No Critical Hit | No Critical Hit | No Critical Hit |
| 6 | Driver Hit | Cargo/Infantry Hit | Weapon Malfunction | Stabilizer |
| 7 | Weapon Malfunction | Weapon Malfunction | Cargo/Infantry Hit | Turret Jam |
| 8 | Stabilizer | Crew Stunned | Stabilizer | Weapon Malfunction |
| 9 | Sensors | Stabilizer | Weapon Destroyed | Turret Locks |
| 10 | Commander Hit | Weapon Destroyed | Engine Hit | Weapon Destroyed |
| 11 | Weapon Destroyed | Engine Hit | Ammunition** | Ammunition** |
| 12 | Crew Killed | Fuel Tank* | Fuel Tank* | Turret Blown Off |

*If Combat Vehicle has ICE engine only. If Combat Vehicle has a fusion engine, treat this result as Engine Hit.
**If Combat Vehicle carries no ammunition, treat this result as Weapon Destroyed.

## VTOL COMBAT VEHICLE CRITICAL HITS TABLE

| 2D6 Roll | Hit Location | | | |
|---|---|---|---|---|
| | **Front** | **Side** | **Rear** | **Rotors** |
| 2–5 | No Critical Hit | No Critical Hit | No Critical Hit | No Critical Hit |
| 6 | Co-Pilot Hit | Weapon Jam | Cargo/Infantry Hit | Rotor Damage |
| 7 | Weapon Jam | Cargo/Infantry Hit | Weapon Jam | Rotor Damage |
| 8 | Stabilizer | Stabilizer | Stabilizer | Rotor Damage |
| 9 | Sensors | Weapon Destroyed | Weapon Destroyed | Flight Stabilizer Hit |
| 10 | Pilot Hit | Engine Hit | Sensors | Flight Stabilizer Hit |
| 11 | Weapon Destroyed | Ammunition** | Engine Hit | Rotors Destroyed |
| 12 | Crew Killed | Fuel Tank* | Fuel Tank* | Rotors Destroyed |

*Only if the VTOL has an ICE engine. For VTOLs with fusion engines, treat this result as Engine Hit.
**If the VTOL carries no ammunition, treat this result as Weapon Destroyed.

## GENERIC CONVENTIONAL INFANTRY DAMAGE TABLE

| | Maximum Weapon Damage Per Platoon Type* | | | | | |
|---|---|---|---|---|---|---|
| Number of Troopers | Rifle, Ballistic | Rifle, Energy | Machine Gun | SRM | LRM | Flamer |
| 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 2 | 1 | 2 | 1 | 1 | 1 |
| 4 | 2 | 1 | 2 | 2 | 2 | 2 |
| 5 | 3 | 1 | 3 | 2 | 2 | 2 |
| 6 | 3 | 2 | 3 | 3 | 3 | 3 |
| 7 | 4 | 2 | 4 | 3 | 3 | 3 |
| 8 | 4 | 2 | 4 | 4 | 3 | 4 |
| 9 | 5 | 3 | 5 | 4 | 4 | 4 |
| 10 | 5 | 3 | 6 | 5 | 4 | 5 |
| 11 | 6 | 3 | 6 | 5 | 5 | 5 |
| 12 | 6 | 3 | 7 | 6 | 5 | 6 |
| 13 | 7 | 4 | 7 | 6 | 6 | 6 |
| 14 | 7 | 4 | 8 | 7 | 6 | 7 |
| 15 | 8 | 4 | 8 | 7 | 6 | 7 |
| 16 | 8 | 4 | 9 | 8 | 7 | 8 |
| 17 | 9 | 5 | 10 | 8 | 7 | 8 |
| 18 | 9 | 5 | 10 | 9 | 8 | 9 |
| 19 | 10 | 5 | 11 | 9 | 8 | 9 |
| 20 | 10 | 6 | 11 | 10 | 9 | 10 |
| 21 | 11 | 6 | 12 | 10 | 9 | 10 |
| 22 | 11 | 6 | 12 | 11 | 9 | 11 |
| 23 | 12 | 6 | 13 | 11 | 10 | 11 |
| 24 | 12 | 7 | 13 | 12 | 10 | 12 |
| 25 | 13 | 7 | 14 | 12 | 11 | 12 |
| 26 | 14 | 7 | 15 | 13 | 11 | 12 |
| 27 | 14 | 8 | 15 | 13 | 11 | 13 |
| 28 | 15 | 8 | 16 | 14 | 12 | 13 |
| 29 | 15 | 8 | 16 | 14 | 12 | 14 |
| 30 | 16 | 8 | 17 | 15 | 13 | 14 |

*Damage is always applied in 2-point Damage Value groupings*

## INFANTRY DAMAGE IN BUILDINGS TABLE

| Building Type | Damage to Infantry is: |
|---|---|
| Light | 75 percent of damage to building |
| Medium | 50 percent of damage to building |
| Heavy | 25 percent of damage to building |
| Hardened | None |

## INFANTRY DAMAGE FROM ATTACKS INSIDE BUILDINGS TABLE

| Building Type | Damage to Infantry is: |
|---|---|
| Light | All damage is assigned to infantry unit |
| Medium | All damage is assigned to infantry unit |
| Heavy | 75 percent of damage to building |
| Hardened | 50 percent of damage to building |

## SPECIAL 'MECH HIT LOCATION TABLE

| Shot from Above | | Shot from Below | |
|---|---|---|---|
| Die Roll (1D6) | Hit Location (Four legged)** | Die Roll (1D6) | Hit Location (Four legged)** |
| 1 | Left Arm (Left Front Leg) | 1 | Left Leg (Left Front Leg) |
| 2 | Front/Rear Left Torso* | 2 | Left Leg (Left Rear Leg) |
| 3 | Front/Rear Center Torso* | 3 | Front/Rear Left Torso* |
| 4 | Front/Rear Right Torso* | 4 | Front/Rear Right Torso* |
| 5 | Right Arm (Right Front Leg) | 5 | Right Leg (Right Rear Leg) |
| 6 | Head | 6 | Right Leg (Right Front Leg) |

*The attack hits the front if from the front or the side. It hits the rear if from the rear.

**Location in parenthesis are for a four-legged 'Mech.

## BASEMENTS TABLE

| Die Roll (2D6) | Effect |
|---|---|
| 2 | Double basement. The unit falls 2 levels. Apply all damage to a 'Mech's legs (use the Front column of the 'Mech Kick Location Table). |
| 3 | Basement. The unit falls 1 level. Apply all damage to a 'Mech's legs (use the Front column of the 'Mech Kick Location Table). |
| 4 | Basement. The unit falls 1 level (for 'Mechs, use the Front/Rear column of the 'Mech Hit Location Table). |
| 5-8 | No basement. |
| 9 | Small basement. Infantry may move into the basement as though it were a new level of the building (Sublevel 1); ProtoMechs cannot enter this level. No effect on 'Mechs or vehicles. |
| 10 | Basement. The unit falls 1 level (for 'Mechs use the Front/Rear column of the 'Mech Hit Location Table). |
| 11 | Basement. The unit falls 1 level. 'Mechs fall headfirst (use the Front/Rear column of the 'Mech Punch Location Table). |
| 12 | Double basement. The unit falls 2 levels. 'Mechs fall headfirst (use the Front/Rear column of the 'Mech Punch Location Table). |

## BURST-FIRE WEAPON DAMAGE VS. CONVENTIONAL INFANTRY TABLE

### BattleMechs, ProtoMechs and Vehicles

| Weapon | Damage vs. Conventional Infantry |
|---|---|
| AP Gauss Rifle | 2D6 |
| Light Machine Gun | 1D6 |
| Machine Gun | 2D6 |
| Heavy Machine Gun | 3D6 |
| Small/Micro Pulse Laser | 2D6 |
| Flamer | 4D6 |

### Battle Armor

| Weapon | Damage vs. Conventional Infantry |
|---|---|
| Light Machine Gun | 1D6/2 (round up) |
| Machine Gun | 1D6 |
| Heavy Machine Gun | 2D6 |
| Flamer | 3D6 |
| Light Recoilless Rifle | 1D6 |
| Medium Recoilless Rifle | 2D6 |
| Heavy Recoilless Rifle | 2D6 |
| Light Mortar | 1D6 |
| Heavy Mortar | 1D6 |
| Automatic Grenade Launcher | 1D6/2 (round up) |
| Heavy Grenade Launcher | 1D6 |

## NON-INFANTRY WEAPON DAMAGE AGAINST INFANTRY TABLE

| Weapon Type* | Number of Conventional Troopers Hit† |
|---|---|
| Direct Fire (Ballistic or Energy) | Damage Value / 10 |
| Cluster (Ballistic) | Damage Value / 10 + 1 |
| Pulse** | Damage Value / 10 + 2 |
| Cluster (Missile) | Damage Value / 5 |
| Area-Effect (AE) | Damage Value / .5 |
| Burst-Fire | See Burst-Fire Weapons above |
| Heat-Effect Weapons | See Heat-Effect Weapons‡ |

*See *Combat*, p. 113, for weapon terminology. If a weapon falls under multiple types, use the type that inflicts the most damage. For example, a rotary AC/5 is defined as a direct-fire (ballistic) and a cluster (ballistic) weapon. A cluster (ballistic) weapon does more damage than a direct-fire (ballistic) weapon, and so players should use the statistics for cluster (ballistic) weapons when determining damage against conventional infantry.

**Except for Small and Micro Pulse Lasers, which are treated as Burst-Fire Weapons (see Burst-Fire Weapons Damage Vs. Conventional Infantry Table, p. 217).

†This equals the number of conventional infantry troopers hit and eliminated, regardless of armor protection. Attacks by non-infantry weapons against mechanized infantry double the number of troopers eliminated; Round all fractions up.

‡Heat-Effect Weapon each has specific damage against conventional infantry, as noted on either the appropriate Weapon and Equipment Tables or in *Other Combat Weapons and Equipment* (see p. 129).

## BUILDING MODIFIERS TABLE

| Building Type | Original CF | MP Cost Per Hex* | Piloting Skill Modifier |
|---|---|---|---|
| Light | 1–15 | 1 | 0 |
| Medium | 16–40 | 2 | +1 |
| Heavy | 41–90 | 3 | +2 |
| Hardened | 91–150 | 4 | +5 |
| Cost to Enter Any Hex | | 1 | |

*Infantry (except mechanized infantry) pay only 1 MP to enter a building hex regardless of building type; ProtoMechs and mechanized infantry only pay 2 MP to enter a building hex.

## BUILDING MOVEMENT MODIFIERS TABLE

| Hexes Moved In Turn | Piloting Skill Modifier |
|---|---|
| 1–2 | 0 |
| 3–4 | +1 |
| 5–6 | +2 |
| 7–9 | +3 |
| 10–17 | +4 |
| 18–24 | +5 |
| 25+ | +6 |

## CHANGING FACING COST TABLE

| Current Velocity | Thrust Point Cost | Current Velocity | Thrust Point Cost |
|---|---|---|---|
| 0-2 | 1 | 8-9 | 4 |
| 3-5 | 2 | 10 | 5 |
| 6-7 | 3 | 11 | 6 |
|  |  | 12+ | +1 per point |

## EVASIVE ACTION MODIFIERS TABLE

| Evading Unit is: | Target's Evasive Action Modifier | Attacker's Evasive Action Modifier |
|---|---|---|
| Fighter | +3 | N/A |
| Small craft, Fixed-Wing Support Vehicle | +2 | N/A |
| DropShip | +2 | +2 |
| Airship | N/A | N/A |

## STRAIGHT MOVEMENT TABLE

| | Minimum Straight Movement (in hexes) | | |
|---|---|---|---|
| Effective Velocity | Aerospace Fighter | Conventional Fighter | Aerodyne DropShip |
| 1–3 | 1 | 1 | 1 |
| 4–6 | 1 | 1 | 2 |
| 7–9 | 2 | 1 | 3 |
| 10–12 | 3 | 2 | 4 |
| 13–15 | 4 | 3 | 5 |
| 16+ | 5 | 4 | 6 |

## STRAIGHT MOVEMENT ON GROUND MAPS TABLE (AERODYNE CRAFT ONLY)

| | Minimum Straight Movement (in hexes) | | |
|---|---|---|---|
| Velocity | Fighter | Small Craft | DropShip |
| 1 | 8 | 8 | 8 |
| 2 | 12 | 14 | 16 |
| 3 | 16 | 20 | 24 |
| 4 | 20 | 26 | 32 |
| 5 | 24 | 32 | 40 |
| 6 | 28 | 38 | 48 |
| 7 | 32 | 44 | 56 |
| 8 | 36 | 50 | 64 |
| 9 | 40 | 56 | 72 |
| 10 | 44 | 62 | 80 |
| 11 | 48 | 68 | 88 |
| 12 | 52 | 74 | 96 |

Units on ground maps cannot reach a velocity above 12. If required to gain a velocity above 12 (through special maneuvers, for example) the unit remains at Velocity 12 and must make a Control Roll.

## RE-ENTRY TABLE

| Situation | Modifier (Maximum 6) |
|---|---|
| Craft has engine damage | +1 per box crossed out |
| Craft has damage to thrusters | +1 per box crossed out |
| Craft has no thrust* | +6 |

*A craft has no thrust if it cannot generate any due to critical engine damage or lack of fuel.

## HIGH-ALTITUDE TABLE

| Hex Row | Altitude (km) | Max. Safe Velocity |
|---|---|---|
| Ground | 0–17 | 2 |
| Row 1 | 18–35 | 3 |
| Row 2 | 36–53 | 6 |
| Row 3 | 54–71 | 9 |
| Row 4 | 72–89 | 12 |
| Interface | 90–107 | 15 |

## ATMOSPHERIC CONTROL MODIFIERS TABLE

| Condition | Control Roll |
|---|---|
| Per 20 points of damage | +1 |
| Unit is spheroid DropShip | +1 |
| Unit is aerodyne DropShip | 0 |
| Unit is fighter or small craft | −1 |

## RAMMING ATTACKS TABLE

**Base To-Hit Number:** 6 + (target Piloting Skill – attacker Piloting Skill)

| Modifiers | |
|---|---|
| *Attacker existing damage:* | |
| Sensor damage | +1 |
| Avionics damage | +1 per box |
| *Target is:* | |
| Fighter or small craft | +4v |
| DropShip | +2 |
| Cannot spend thrust | −2 |
| *Attacker is:* | |
| Fighter or small craft | −2 |
| DropShip | −1 |

## CONTROL ROLL TABLE

| Base Target Number: Piloting Skill |
|---|
| **Situation*** |
| *Movement* |
| Hovering (spheroids) |
| Exceed normal operational ceiling (conventional fighters, Airships and Fixed Wing Support Vehicles) |
| Atmospheric re-entry |
| Rolling more than once in a turn |
| Using thrust in excess of current SI rating |
| Unit with velocity over 2x Safe Thrust in a atmosphere hex |
| Stalling |
| Descending 3+ altitudes in a single turn |
| *Damage* |
| Avionics critical |
| Control critical |
| Sustaining damage while in atmosphere |

| **Modifiers** | |
|---|---|
| Pilot/crew damage | +1 per crossed box |
| Avionics damage | +1 per crossed box |
| Life support damage | +1 per crossed box |
| Atmospheric operations | +2 |
| Above safe thrust | +1 |
| Above 2x Safe Thrust | +1 per velocity point above 2x Safe Thrust |

*Requires a Control Roll; apply all appropriate modifiers

## FAILED BRAKING MANEUVER TABLE

| Margin of Failure | Effect |
|---|---|
| 1–4 | Landing requires full distance. The pilot can attempt to land normally or abort the landing, circle and try again in a subsequent turn. |
| 5 | The unit must land. However, the unit becomes harder to control, adding 1 to the landing Control Roll target number. |
| 6+ | The unit must land and requires 20 hexes of runway to do so, regardless of unit type. The unit suffers 20 points of damage on the nose and the landing gear is destroyed. Add 2 to the landing Control Roll target number. |

## AEROSPACE UNITS HIT LOCATION TABLE

| **FIGHTERS** | | | | |
|---|---|---|---|---|
| **2D6 Roll** | **Nose** | **Aft** | **Side** | **Above/Below** |
| 2 | Nose/Weapon | Aft/Weapon | Nose/Weapon | Nose/Weapon |
| 3 | Nose/Sensors | Aft/Heat Sink | Wing/Gear | Wing/Gear |
| 4 | Right Wing/Heat Sink | Right Wing/Fuel | Nose/Sensors | Nose/Sensors |
| 5 | Right Wing/Weapon | Right Wing/Weapon | Nose/Crew | Nose/Crew |
| 6 | Nose/Avionics | Aft/Engine | Wing/Weapon | Wing/Weapon |
| 7 | Nose/Control | Aft/Control | Wing/Avionics | Nose/Avionics |
| 8 | Nose/FCS | Aft/Engine | Wing/Bomb | Wing/Weapon |
| 9 | Left Wing/Weapon | Left Wing/Weapon | Aft/Control | Aft/Control |
| 10 | Left Wing/Heat Sink | Left Wing/Fuel | Aft/Engine | Aft/Engine |
| 11 | Nose/Gear | Aft/Heat Sink | Wing/Gear | Wing/Gear |
| 12 | Nose/Weapon | Aft/Weapon | Aft/Weapon | Aft/Weapon |

| **DROPSHIPS/SMALL CRAFT** | | | | |
|---|---|---|---|---|
| **2D6 Roll** | **Nose** | **Aft** | **Side** | **Above/Below** |
| 2 | Nose/Crew | Aft/Life Support | Nose/Weapon | Nose/Weapon |
| 3 | Nose/Avionics | Aft/Control | Nose/FCS | Nose/FCS |
| 4 | Right Side/Weapon | Right Side/Weapon | Nose/Sensors | Nose/Sensors |
| 5 | Right Side/Thruster | Right Side/Door | Side/Thruster | Side/Thruster |
| 6 | Nose/FCS | Aft/Engine | Side/Cargo | Side/Cargo |
| 7 | Nose/Weapon | Aft/Weapon | Side/Weapon | Side/Weapon |
| 8 | Nose/Control | Aft/Docking Collar | Collar Side/Door | Side/Door |
| 9 | Left Side/Thruster | Left Side/Door | Side/Thruster | Side/Thruster |
| 10 | Left Side/Weapon | Left Side/Weapon | Aft/Avionics | Aft/Avionics |
| 11 | Nose/Sensors | Aft/Gear | Aft/Engine | Aft/Engine |
| 12 | Nose/K-F Boom | Aft/Fuel | Aft/Weapon | Aft/Weapon |

## AEROSPACE WEAPON RANGE TABLE

| Range Bracket | Hexes (Standard) | Hexes (Capital) |
|---|---|---|
| Short | 0–6 | 0–12 |
| Medium | 7–12 | 13–24 |
| Long | 13–20 | 25–40 |
| Extreme | 21–25 | 41–50 |

## CAPITAL MISSILE CRITICAL HIT TABLE

| Missile | Critical Hit Chance |
|---|---|
| Barracuda | 11+ |
| White Shark | 9+ |
| Killer Whale | 10+ |
| Kraken | 8+ |

## RANDOM MOVEMENT TABLE

| 1D6 Result | Effect |
|---|---|
| 1 | Forward 1 hex, turn left 2 hexsides |
| 2 | Forward 1 hex, turn left 1 hexside |
| 3–4 | Forward 1 hex |
| 5 | Forward 1 hex, turn right 1 hexside |
| 6 | Forward 1 hex, turn right 2 hexsides |

## AEROSPACE ATTACK MODIFIERS TABLE

| Range | Modifier |
|---|---|
| Short | +0 |
| Medium | +2 |
| Long | +4 |
| Extreme | +6 |
| | |
| *Target/Intervening Conditions* | |
| Angle of Attack | |
| Attack against aft | +0 |
| Attack against nose | +1 |
| Attack against side | +2 |

| Range | Modifier |
|---|---|
| Target is at 0 Velocity | –2 |
| Weapon is capital-scale | |
| vs. unit less than 500 tons | +5† |
| Firing through atmospheric hex* | +2 per hex |
| Firing into or out of screen hex | +2 |
| Target is evading | Variable |
| *Attacker Conditions* | |
| Attacker exceeded Safe Thrust this turn | +2 |
| Attacker is out-of-control | +2 |

| Range | Modifier |
|---|---|
| Attacker has pilot/crew damage | +1 per box crossed |
| Attacker has CIC or FCS critical damage | +2 per box crossed |
| Attacker has sensors critical damage | +1 per box crossed, or +5 if sensors destroyed |
| Attacker is evading | Variable |
| | |
| *Special Weapons and Equipment* | |
| Barracuda missile (not tele-operated) | –2§ |

*This applies to atmospheric hexes on the high-altitude map, not to hexes on a low-altitude map, or when using Aerospace Units on Ground Mapsheets rules.

†Modifier does not apply to capital missiles, which are designed to track small targets.

§Modifier does not apply if Barracuda missiles are fired in conjunction with other capital missiles (see *Large Craft Weapon Bays*, p. 234).

## AIR-TO-GROUND ATTACK MODIFIER TABLE

| Attack Type | Modifier |
|---|---|
| Strafing | +4* |
| Striking | +2‡ |
| Bombing | +2† |

*Aerospace units flying at Altitude 1 (NOE) also suffer a +2 to-hit modifier as described in *Movement* (see p. 80).

†Terrain and target movement modifiers do not apply to any type of bombing attack; fighters can make altitude-bombing attacks from any altitude, but suffer a to-hit modifier equal to their altitude (see *Altitude-Bombing*, p. 246).

‡As noted under Weapons and Equipment, rapid-fire weapons always fire at their maximum rate, and so players must check for jamming every time they fire these weapons (see p. 114).

## AEROSPACE FIGHTER/SMALL CRAFT HEAT POINT TABLE

| Activity | Heat Points |
|---|---|
| Weapons fire | Per Weapons and Equipment Tables, p. 303 |
| Heat-causing weapons | Per Weapons and Equipment Tables, p. 303, or *Other Combat Weapons and Equipment*, p. 129 |
| Heat sink | –1 per operational heat sink; –2 per operational double heat sink |
| Engine damage | +2 per hit |

## SPECIAL MANEUVERS TABLE

| Maneuver | Min/Max Velocity | Thrust Cost | Control Modifier | Effect |
|---|---|---|---|---|
| Loop | Min 4 | 4 | +1 | The unit spends its first 4 points of velocity in the loop, though the actual velocity remains unchanged. It ends in the same hex where it started the move, then spends the remainder of its velocity normally. |
| Immelmann | Min 3 | 4 | +1 | The unit gains two altitudes and ends the maneuver facing any hexside. Velocity drops by 2. The remainder is spent normally. |
| Split-S | Any | 2 | +2 | The unit loses two altitudes and ends the maneuver facing any hexside. Velocity increases by 1. |
| Hammerhead | Any | Velocity | +3 | The unit remains in the hex it started, but changes facing 180 degrees. |
| Half-roll | Any | 1 | –1 | The unit rolls 180 degrees, reversing left and right sides and up/down facings. |
| Barrel roll | Min 2 | 1 | 0 | The unit rolls 360 degrees, ending with the same facing. Velocity drops by 1. |
| Side-slip | Any | 1 | 0/–1* | Instead of moving into the hex directly ahead, the unit moves into the front-left or front-right hex without changing facing. (Modifier is –1 for VSTOL units.) |
| VIFF | Any* | Velocity +2 | +2 | Successfully using this "Vector in Forward Flight" maneuver, a VSTOL unit halts its forward momentum and gains one altitude. |

*VSTOL units only

## LANDING MODIFIERS TABLE

| Condition | Modifier |
|---|---|
| Unit has damaged thrusters | +4 |
| Unit is out-of-control | Automatic failure (assume MoF of 10) |
| Unit is attempting vertical landing | +1 per point of Velocity above 1 |
| Unit is attempting horizontal landing | +1 per point of Velocity above 3 |
| Landing gear damaged | +3 per box crossed |

| Condition | Modifier |
|---|---|
| Nose armor destroyed (fighters and aerodyne units) | +2 |
| Unit reduced to 50% or less of starting thrust | +2 |
| No thrust available (aerodyne) | +4 |
| No thrust available (spheroid)* | +8 |
| Runway too short for unit | +2 |
| Unit is aerospace fighter making vertical landing | +2† |
| | |
| *Terrain Modifiers‡* | |
| Unit landing at manned, friendly airfield‡‡ | –2 |
| Unit landing at unmanned, friendly airfield‡‡ | –1 |
| Unit landing on road or paved hex | 0 |
| Unit landing at unfriendly airfield‡‡ | +1 |
| Unit landing in clear hex | +2 |
| Unit landing in water hex | +3 |
| Unit landing in rough or rubble hex (landing gear damaged, cross off 1 box) | +3 |
| Unit landing in elevated hex (non-vertical landing)§ | +3 |
| Unit landing in building hex (non-vertical landing)§§ | +3 |
| Unit landing in light woods hex | +4 |
| Unit landing in heavy woods hex | +5 |

*Only applies if spheroid unit lost thrust this turn, otherwise the unit falls and is destroyed (see *Crashes*, p. 81).

†Only applies in atmospheres and does not apply to VSTOL-equipped conventional fighters.

‡Determine all appropriate modifiers based on the hexes of the landing area and then apply only the highest modifier (if there are multiple "highest" modifiers, still only add a single hex modifier). These modifiers are halved for vertical landings.

‡‡The placement of such features, which do not appear on *BattleTech* maps, depends on the scenario being played or a designated gamemaster.

§If the hex is greater than a one level change, the unit automatically crashes in the elevated hex (see *Crashes*, p. 81); determine all damage normally, than reduce to half (round down) before applying.

§§The unit automatically crashes in the building hex (see *Crashes*, p. 81); determine all damage normally, than reduce to half (round down) before applying. If a unit makes a successful vertical landing into a building hex, immediately check for a collapse (see *Collapse*, p. 176).