

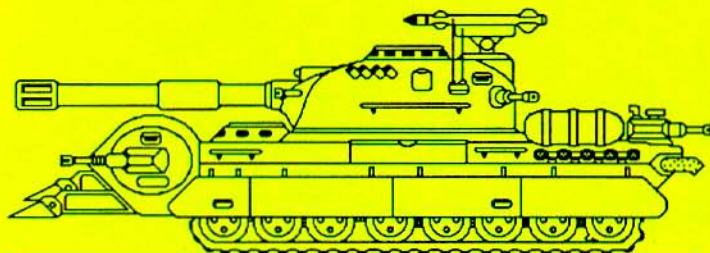


# Imperial Armed Forces Vehicle Guide, Altair Sub-Sector

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Set Number Three,  
*Track Laying*

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## Acknowledgments

Anyone who has ever tried to design new and innovative vehicles for a science fiction game realize the complexities involved. Great amounts of time are spent in calculating and designing all the components that make up futuristic combat vehicles.. Staying up until the wee hours of the morning before the gaming session vainly trying to get the last little details worked out for detail greedy players. As GMs, we have all been placed in this unenviable position.

It is my intent to save you the time and aggravation required to put vehicles into your campaign. I hope you find this and future guides useful. My thanks and deepfelt gratitude go to the following individuals for their help in working as many of the "bugs" out of this package as is possible;

Cindy Popp, for her production assistance

Steve Popp for his valuable technical assistance and experience

Thanks to these friends and the rest of the Marina Gaming Club without whose help this project would never have been.

Mark Schmidt

*Other guides planned in this series will include:*

RM-90-01	Air Cushioned
RM-90-02	Rotary and Fixed Wing Aircraft
RM-90-04	Wheeled Vehicles
RM-90-05	Grav Vehicles
RM-90-06	Waterborne Vehicles
RM-90-07	Orbital Assault & Landing Vehicles
RM-90-08	Exotic Vehicles
RM-90-09	Infantry Weapons

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# Introduction

Thank you for your purchase of this vehicle guide. It contains tracked vehicles designed for use with Traveller® and the Striker® science fiction role playing systems. However, the specifications are comprehensive enough that conversion to other systems should cause no problems.

With the advent of small, functional fusion drives, armored vehicles moved into the super heavy phase of Armored Fighting Vehicle design. While the high expense and maintenance of track laying vehicles is a consideration, they do not require the use of sophisticated avionics or other delicate equipment that Grav and Air Cushion vehicles need. The vehicles in this guide are all designed at tech level 9 and all but five use the same type chassis. It is based on the unusual XTLV-37, designed by the War Ministry's Armored Warfare Section. By using oversized road wheels and four separate drive wheel/track systems, these vehicles are capable of movement with damage to two of the track systems. The other chassis type uses a more conventional dual track system. Another breakthrough was the development of hydropneumatic suspension units. These individual units are mounted to the tank chassis and replace the cumbersome torsion bars found in early 20th century designs.

All vehicles have food & supplies for their crew for at least one week with small arms and ammunition for each crewmember. Once in a combat environment, the crew often personalize their vehicles. Because of this and the fact that spare parts and supplies can be scarce, it is not uncommon to find extras of everything that can be strapped on, buckled in or shoved under any usable space in the crew compartment or on the outside of the vehicle.

Tracked Laying vehicles move by virtue of a continuous belt of track material being "laid" on the ground under the vehicle. This belt is made up of linked sections with holes for a drive sprocket. As the drive sprocket turns, the track is forced to move over the sprockets. The vehicle is then propelled on the track by virtue of the drive sprocket and held in place with "road wheels", that keep the vehicle on this track. Sharp turns, sudden stops/starts, or damage from gun fire can cause a tank to "throw a track" which means the track becomes separated from the drive sprocket or road wheels. This is a serious problem and takes a long time to repair (several hours). To make the vehicle turn, a brake is applied to the tracks on one side of the vehicle while the other side's track is left at speed. This causes the vehicles to pivot on the slow track. The harder the brake is applied the sharper the turn rate. If one track is placed in reverse with the other left in forward, a "neutral steer" occurs. This is the fastest way to turn a tank, but also the quickest way to throw a track.

The biggest disadvantage of tracked vehicles are their slow speeds when moving cross country. This is due to the dangers of throwing a track. They may not pass over very soft ground or climb steep obstacles. What they can do is crush almost anything that happens to find its way under the tracks. While the vehicles in this set

are not capable of great speed, they can move faster than walking infantry and are rugged and dependable in their design. The best designs tend towards simple but effective equipment and once a design has been proven in battle, it will remain in service for a long time. All of these vehicles are still in the current military inventory as well as being exported to several client world states for use in low to medium tech level conflicts.

The final point to address is the use of chemically propelled munitions vs. high energy weapons. The decision to use CPR guns was based on expense, maintenance, versatility, and technology levels available. Tracked vehicles are subject to severe jarring. High precision energy weapons in these vehicles would need to be constantly calibrated and adjusted and repair parts are expensive and time consuming to install (and often just not available in a combat environment). CPR guns, on the other hand, are a cost effective alternative and have the advantage of firing a wide variety of ammunition based on the situation with minimal energy requirements. And while lasers may be defeated in several ways, the only protection against CPR rounds is armor and lots of it. Plus when was the last time you saw a fusion gun fire smoke, or offer indirect fire support? . For that reason, no high energy weapons are included for use on these vehicles. The highest tech level weapon that could be expected on these vehicles is a Mass Driver.

I hope this brief explanation helps in the use of these vehicles in your campaigns. I will be happy to answer any questions or clarify an unclear point, simply enclose an S.A.S.E. with your questions and I will return an answer to you. Look for future sets outlining other vehicle families.

Also write for a sample issue of The ADJUTANT, a newsletter written for Traveller Army, Marine and Mercenary characters. Published six times a year, each issue is full of rules variants, suggestions, personal weapons, etc. At only \$9.00 per year, it's one of the best deals in the Imperium.

Mark Schmidt

## Effects of Munitions

<u>Type</u>	<u>Cost (cr)</u>	<u>Effect</u>
7.62mm	150/100	25mm pent
20mm	2.5	140mm pent
40mm	12	210mm pent

### 120 mm High Velocity CPM Gun

KEAP	320	370mm Eff./ 330mm Long/ 290mm Extr.
KEAPER	352	350mm Eff./ 330mm Long/ 310mm Extr.
HEAP	480	410mm pent.
Flechette	1600	20mm pent. w/ 150 meter danger space

### 150 mm High Velocity CPM Gun

KEAP	480	400mm Eff./ 350mm Long/ 300mm Extr.
KEAPER	528	380mm Eff./ 360mm Long/ 340mm Extr.
HEAP	720	350mm pent.
Flechette	2400	20mm pent. w/ 150 meter danger space

### 175 mm High Velocity CPM Gun

KEAP	640	410mm Eff./ 360mm Long/ 300mm Extr.
KEAPER	704	390mm Eff./ 370mm Long/ 350mm Extr.
HEAP	960	460mm pent.
Flechette	2400	20mm pent. w/ 150 meter danger space

### 200mm Low Velocity Mortar

HE	360	270mm contact pent. w/ 40 meter burst radius w/ 40mm frag. pent.
CBM	1080	90 mm contact pent. w/3 meter burst radius w/ 10mm frag. pent.
Flechette	1080	20mm pent. w/ 50 meter danger space
Smoke	720	20 m3 per round, duration 6 turns
RAP	+360	+10 km to range

*If Depleted Uranium is used in KEAP / KEAPER munitions, add following modifiers:*

Cost:               x1.5  
 Penetration:     +100mm

# **M-703**

The M-703 is an APC capable of delivering 10 soldiers directly to the FOB. It is found in Armored and Mechanized Infantry units. One of the most unique features of the chassis design is its drive. Using two sets of drive wheels and four separate track systems, the vehicle can maintain forward momentum even if two of the track systems are disabled. One bow LMG, one remote turreted LMG at the rear of the vehicle and on remote mount at the top of the chassis serve as defense. The rear remote mount has a 190° rotation while the chassis top gun has a full 360° rotation. Troops may exit out doors on either side of the chassis between the tracks or from a large split-door hatch on the deck. This vehicle can be carried in heavy lift transport vehicles. Defensive smoke can be generated from the heat exhaust ports and an APERS unit is mounted on both front corners. This vehicle has also been retrofitted to fill a variety of roles listed below. All these options may be fitted with a snorkle attachment allowing for fording of water obstacles of up to 5 meters in depth.

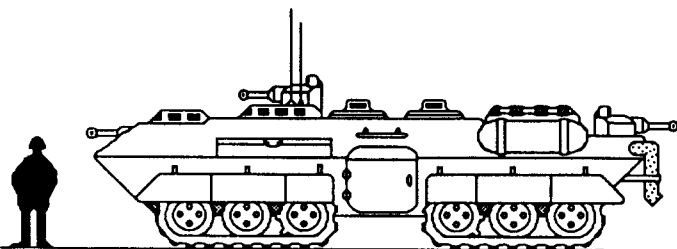
## **SPECIFICATIONS:**

Dimensions:	10 m L x 4 m W x 2.25 m H, DM: Low hit +3, high hit 0				
Combat Weight:	70 metric tons				
Power Plant:	Fusion, 4 megawatt output				
Fuel Req.:	6 liters/hour, 500 liters carried				
Aarmor:	Chassis Front	Sides	Rear	Deck	Belly
Actual/Rated mm	30/120	20/60	15/60	10	15
Ground Pressure:	.875 / cm2				
Pwr. to Wt. Ratio:	57:1				
Max.Road Speed:	137 kph				
Cross Country					
Speed:	82 kph				
Max. Eff. Rng:	6,391 km				
Weapons:	3 7.62 mm LMGs, two in remote turret mounts, 1 bow				
Fire Rate:	10 rounds / turn (per gun)				
Feed Device:	100 round linked belts from boxes, 6,000 rounds carried				
Crew:	3 - Driver, Gunner Commander				
Defense:	Smoke generator from heat exhaust port				
Electronics:	500 power Radio, Thermal Imaging				
Passengers:	10 combat troops				
Cargo:	2 tons				
Flotation:	No				
Price:	332,000 cr, (snorkle attachment; 1500 cr)				

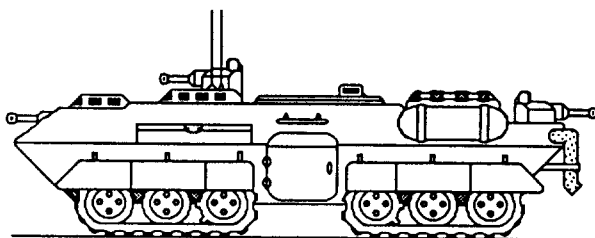
## **Configurations:**

- A AASV (used with Artillery units)
- B Cargo (12 ton capacity)
- C MEV (6 stretchers & 2 corpsmen)
- D ACV (Passengers with 4 additional deck mounted LMGs)
- E SPAW ( 120mm mortar with 3 crew, used as organic arty in ACV and armored units)

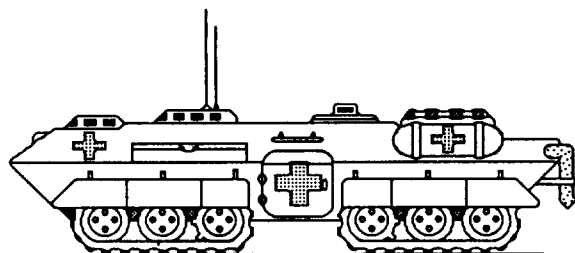
M-703 (std)



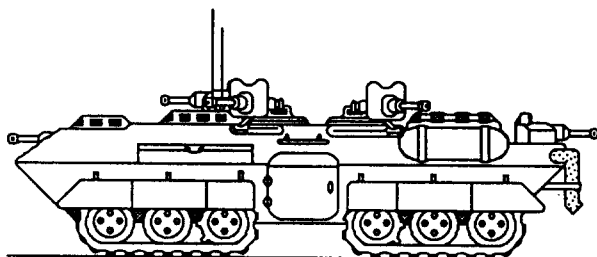
M-703-A or -B



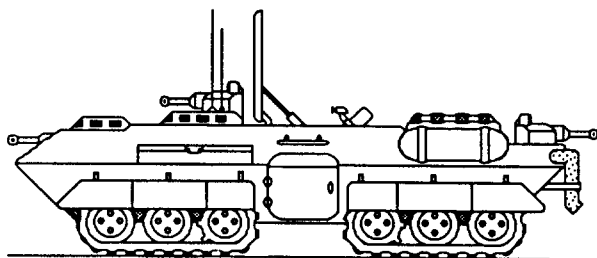
M-703-C



M-703-D



M-703-E



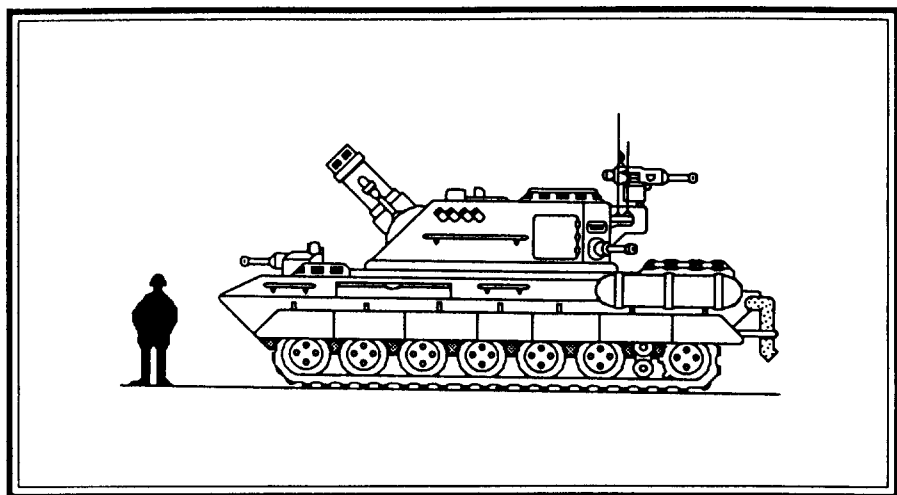


## **M-705**

The M-705 is a heavy SPAW piece used in suppression of enemy artillery and as artillery support to ground units in either defensive or offensive roles. Known to their crews as "Boomers" these vehicles carry an incredible punch. Main armament consists of a 200mm Low Velocity, CPM Mortar. This gun can fire two shells per turn to a distance of 11.5 km, with rocket assisted rounds out to 21.5 kilometers. The 120 kg shell is capable of massive destruction if you are unlucky enough to be on the receiving end. One remote bow LMG, two LMGs in the sides of the main turret at the back and one LMG mounted on top of the turret at the commander's hatch serve as anti-personnel defense. Defensive smoke can be generated from eight smoke launchers on the turret's sides and also from the heat exhaust ports. APERS dispensers are mounted on both rear corners of the chassis. Because of the weight and size of the ammo, two ammo carriers are usually assigned to each of these SP Guns. These carriers are M-703-A's with a crew of five.

### **SPECIFICATIONS:**

Dimensions:	10 m L x 4 m W x 4.5 m H, DM: Low hit +3, high hit +2				
Combat Weight:	106 Tons				
Power Plant:	Fusion, 4 megawatt output				
Fuel Req.:	6 liters/hour, 500 liters carried				
Armor:	Chassis Front	Sides	Rear	Deck	Belly
Actual/Rated cm	150/450	100/300	50/200	40	40
	Turret: 100/300	40/80	40	40	.
Ground Pressure:	1.6 kg / cm <sup>2</sup>				
Pwr. to Wt. Ratio:	37:1				
Max.Road Speed:	117 kph				
Cross Country					
Speed:	58 kph				
Max. Eff. Rng:	6,391 km				
Weapons:	Main: 250mm Low Velocity CPM Mortar				
Range:	Effective to 11.5 km (21.5 with RAP)				
	Aux.: 4 7.62 mm LMGs, 1 remote turret mount,				
	1 coupola mount, 2 pintel mounts				
Fire Rate:	Main: 2 rounds per turn				
	Aux.: 10 rounds / turn / per gun				
Feed Device:	Main: 4 Loaders from 20 rounds in internal bins and aux. carriers				
	Aux.: 100 round linked belts from boxes, 4,000 rounds carried				
Crew:	7 - Driver, Gunner, 4 Loaders, Commander				
Defense:	8 Smoke launchers & smoke generator from heat exhaust port				
Electronics:	500 power Radio, Mk IV EPAWS				
Cargo:	1 ton				
Flotation:	No				
Price:	620,000 cr				



### Munitions:

HE: 360 cr, Contact Pent. 270 mm with 40 m burst radius w/40 mm frag. pent.

CBM: 1080 cr, 90 mm pent. with 3 meter burst radius w/ 10 mm frag. pent.

Flechette: 1800 cr, 20 mm pent. with 50 meter danger space, +6 to hit

Smoke: 720 cr, 20 m3 per round, duration 6 turns

RAP: (Rocket Assisted Projectile) add 360 cr to above, extend range 10 km

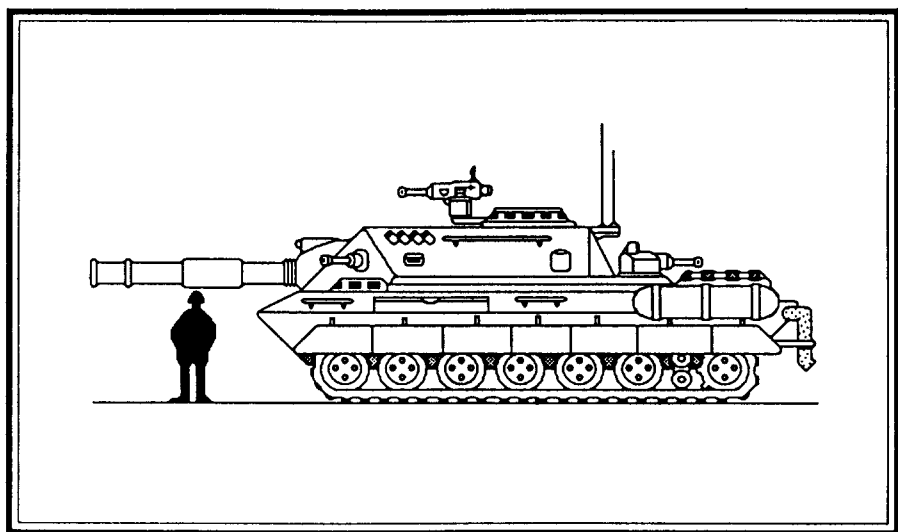
Chemical/  
Biological (Available but to be determined by GM, recommended area of effect to be double that of the smoke round above, and subject to wind and type of agent , eg: persistant vs. non-persistant)

## M-709

The M-709 is a Heavy AFV used in anti-tank units as part of a static defense. It is well suited to urban environments where movement is restricted. Main armament consists of a 150mm High Velocity, CPM Cannon mounted in the chassis. Two forward mounted LMGs, one LMG on the Commander's coupola & one remote LMG at the rear of the main chassis serve as secondary armament. The rear remote mount has a 190° rotation while the Commander's gun rotates 360°. Defensive smoke can be generated from eight smoke launchers and from the heat exhaust ports. An APERS discharger is mounted on each corner of the chassis. The main gun has a deflection of 30° to either side with an elevation of 15° and depression of 7°. This vehicle is normally emplaced in trenchworks or in buildings in a "hull down" position. Only the top 1.25 meters of the chassis being exposed to enemy fire. This vehicle may be fitted with a snorkle attachment allowing fording of water up to 5 meters deep. When moving from a submerged position, the barrel must be cleared before firing can occur. (usually by opening the breach and allowing the water in the barrel to flow into the crew compartment)

### **SPECIFICATIONS:**

Dimensions:	13 m L x 4 m W x 3.75 m H, low hit DM -1				
Combat Weight:	85 Tons				
Power Plant:	Fusion, 4 megawatt output				
Fuel Req.:	6 liters/hour, 500 liters carried				
Armor:	Chassis Front	Sides	Rear	Deck	Belly
Actual/Rated mm	150/450	100/300	50	40	40
	Turret: 150/450				
Ground Pressure:	0.9 kg / cm <sup>2</sup>				
Pwr. to Wt. Ratio:	46:1				
Max.Road Speed:	124 kph				
Cross Country Speed:	74 kph				
Max. Eff. Rng:	6,391 km				
Weapons:	Main: 150mm High Velocity CPM Cannon				
	Aux.: 4 single barrel 7.62 mmMGs				
Range:	Effective 2.5 km, Long 3.5 km, Extreme 5 km				
(Main)					
Fire Rate:	Main: 2 rounds / turn, (-2 EFP)				
	Aux.: 10 rounds / turn / per gun				
Feed Device:	Main: Loaders from 50 rounds in bins				
	Aux.: 100 round linked belts from boxes, 8,000 rounds carried				
Crew:	6 - Driver, 3 Gunners, 1 Loaders, Commander				
Defense:	8 Smoke launchers & smoke generator from heat exhaust port				
Electronics:	500 power Radio, Mk III FCS				
Cargo:	1 ton				
Flotation:	No				
Price:	475,000 cr, (Snorkle attachment; 1500 cr)				



#### **Munitions:**

KEAP        480 cr, 400 mm pent. at Eff. / 350 mm at Long / 300 mm at Extreme

KEAPER:   528 cr, 380 mm pent. at Eff. / 360 mm at Long / 340 mm at Extreme

HEAP:       720 cr, 350 mm penetration

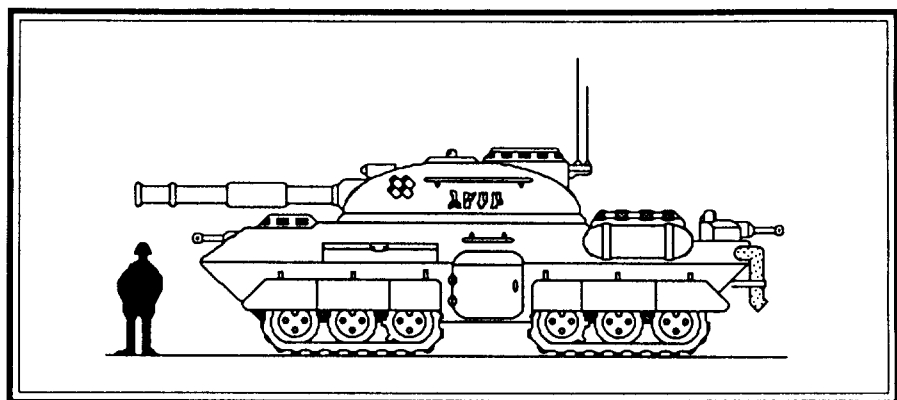
Flechette:  2400 cr, 150 meter danger space w/ 20 mm pent., +5 to hit

# M-711

The M-711 is a Medium, tracked, AFV used primarily in Armored and Mechanized Infantry units. One of the most unique features of the chassis design is its drive. Using two sets of drive wheels and four separate track systems, the vehicle can maintain forward momentum even if two of the track systems are disabled. A 120 mm High Velocity cannon serves as its main armament with one bow LMG and one remote turreted LMG at the rear of the vehicle serving as auxiliary weapons. The remote mount has a 190° rotation. This vehicle can be carried in heavy lift transport vehicles. Four smoke dischargers are turret mounted and smoke can also be generated from the heat exhaust ports. The turret is manufactured in the "frying pan" tradition, ie. it is rounded with a flat top and cast in a single piece. An APERS discharger is mounted on the forward corners of the chassis. This vehicle may be fitted with a snorkle attachment allowing fording of water up to 5 meters deep. When moving from a submerged position, the barrel must be cleared before firing can occur. (usually by opening the breach and allowing water in the barrel to flow into the crew compartment)

## **SPECIFICATIONS:**

Dimensions:	10 m L x 4 m W x 3.75 m H, DM low hit +1, high hit 0				
Combat Weight:	81.5 Tons				
Power Plant:	Fusion, 4 megawatt output				
Fuel Req.:	6 liters/hour, 500 liters carried				
Armor:	Chassis Front	Sides	Rear	Deck	Belly
Actual/Rated mm	30/120	20/60	15/60	10	15
	Turret 100/300 (100/100 top)				
Ground Pressure:	1.01 kg/cm <sup>2</sup>				
Pwr. to Wt. Ratio:	49:1				
Max.Road Speed:	129 kph				
Cross Country					
Speed:	77 kph				
Max. Eff. Rng:	6,391 km				
Weapons:	Main: 120 mm High Velocity CPM Gun, 100 rounds carried				
Range:	Effective: 2.5 km, Long: 3.5 km, Extreme: 5 km Aux: 2 7.62 mm LMGs, one bow mount one remote turret mount				
Fire Rate:	Main: 1 round per turn Aux.: 10 rounds / turn / per gun				
Feed Device:	Main: Loader from 50 round bin Aux.: 100 round linked belts boxed, 4,000 rounds carried				
Crew:	5 - Driver, 2 Gunners, Loader, Commander				
Defense:	8 smoke dischargers and smoke from exhaust ports				
Electronics:	500 power Radio, Mk III FCS				
Cargo:	none				
Flotation:	No				
Price:	460,500 cr (Snorkle attachment; 1500 cr)				



### Munitions:

KEAP: 320 cr, 370 mm pent. at Eff. / 330 mm at Long / 290 at Extreme

KEAPER: 352 cr, 350 mm pent. at Eff. / 330 mm at Long / 310 mm at Extreme

HEAP: 480 cr, 410 mm pent.

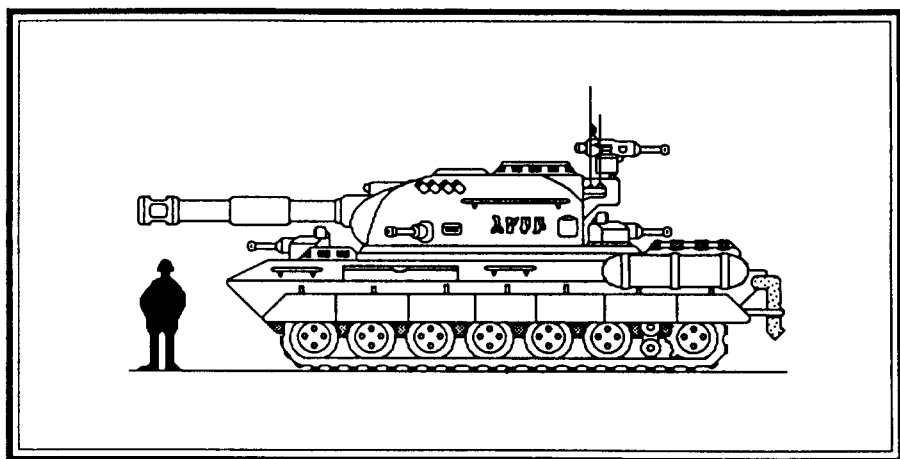
Flechette: 1600 cr, 15 meter danger space w/20 mm pent., +6 to hit

# M-712

The M-712 is a Heavy AFV used to create openings at the FOB that medium tanks and mechanized infantry may then exploit. Known to its crews as "Thunder Tracks" this vehicle is a formidable adversary. Main armament consists of a 150mm High Velocity, CPM Cannon. One remote turreted bow LMG, one remote turreted LMG at the rear of the main turret, two LMGs in the sides of the main turret and one LMG mounted on the top of the turret at the commander's hatch serve as defense. The rear remote mount has a 190° rotation. Defensive smoke can be generated from eight smoke launchers and from the heat exhaust ports. The turret is a half dome shape, slightly higher than the "frying pan" shape of the M-170 Medium Tank. This vehicle has an excellent "hull down" defensive silhouette (DM=0 when hull down). This vehicle may be fitted with a snorkel allowing for fording of water up to 5 meters deep. When moving from a submerged position, the barrel must be cleared before firing can occur. (Usually by opening the breach and allowing water in the barrel to flow into the crew compartment)

## **SPECIFICATIONS:**

Dimensions:	10 m L x 4 m W x 4.25 m H, DM Low hit +3, high hit +2					
Combat Weight:	90 Tons					
Power Plant:	Fusion, 4 megawatt output					
Fuel Req.:	6 liters/hour, 500 liters carried					
Armor:	Chassis Front	Sides	Rear	Deck	Belly	
Actual/Rated mm	150/450	100/300	50/200	40	40	
	Turret: 150/450					
Ground Pressure:	.90 kg / cm <sup>2</sup>					
Pwr. to Wt. Ratio:	44:1					
Max.Road Speed:	124 kph					
Cross Country						
Speed:	74 kph					
Max. Eff. Rng:	6,391 km					
Weapons:	Main: 150mm High Velocity CPM Cannon					
	Aux.: 4 7.62 mm LMGs, 2 remote turret mount, 1 coupola mount					
Range:	Effective 2.5 km, Long 3.5 km, Extreme 5 km					
(Main)						
Fire Rate:	Main: 2 rounds per turn, (-2 EFP)					
	Aux.: 10 rounds / turn / per gun					
Feed Device:	Main: Loaders from 50 rounds in bins					
	Aux.: 100 round linked belts from boxes, 5,000 rounds carried					
Crew:	7 - Driver, 3 Gunners, 2 Loaders, Commander					
Defense:	8 Smoke launchers & smoke generator from heat exhaust ports					
Electronics:	500 power Radio, Mk III FCS					
Cargo:	2 tons					
Flotation:	No					
Price:	590,000 cr (Snorkle attachemnt; 1500 cr)					



### **Munitions:**

KEAP: 480 cr, 400 mm pent. at Eff. / 350 mm at Long / 300 mm at Extreme

KEAPER: 528 cr, 380 mm pent. at Eff. / 360 mm at Long / 340 mm at Extreme

HEAP: 720 cr, 350 mm penetration

Flechette: 2400 cr, 150 meter danger space w/ 20 mm pent., +5 to hit

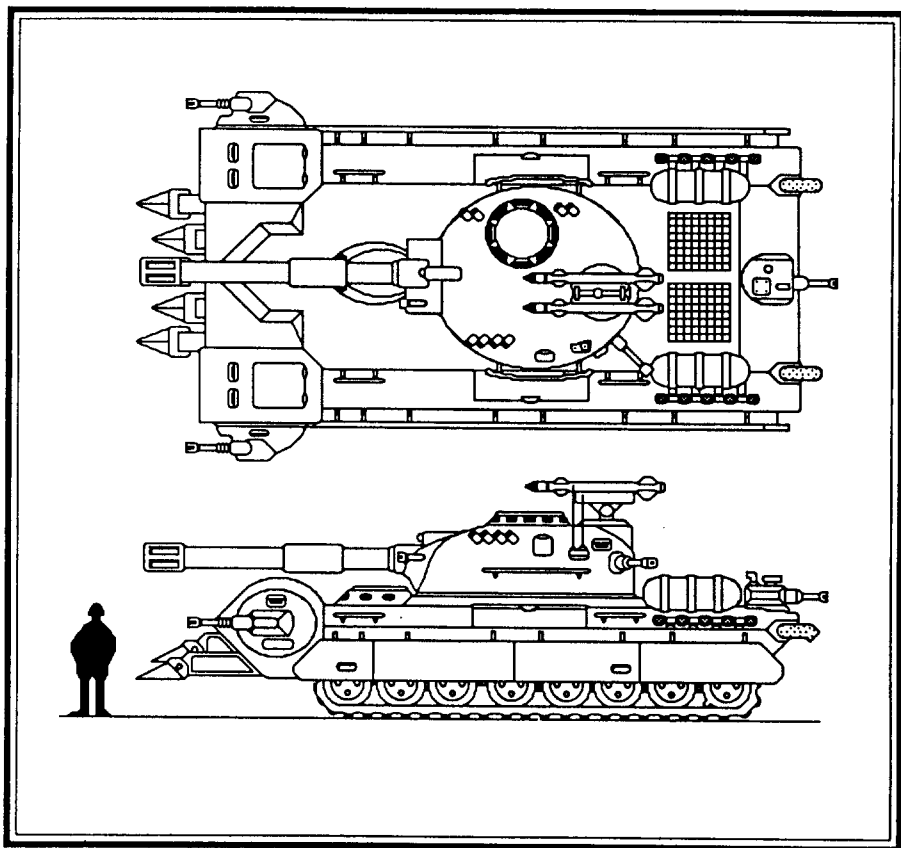


# M-713

The M-713 is an Ultra-Heavy Armored Fighting Vehicle used in heavy shock troop units to create openings at the Forward Edge of Battle that medium tanks and infantry may then exploit. It is also used in urban environments and against static defenses. Main armament consists of a 175mm High Velocity, CPM Cannon. Two forward mounted 40mm autocannons serve as secondary armament with two turret mounted LMG & one remote LMG at the rear of the main chassis. A twin missile rack is mounted on the top of the turret near the commander's hatch which serves as anti-aircraft defense. The rear remote mount has a 190° rotation. Defensive smoke can be generated from eight smoke launchers and from the heat exhaust ports. The turret is a half dome shape, slightly higher than the "frying pan" shape of the M-170 Medium Tank. A removable barricade/obstacle "plow" is mounted on the front of the vehicle.

## **SPECIFICATIONS:**

Dimensions:	12 m L x 6.5 m W x 4.25 m H, DM Low hit +3, high hit +2				
Combat Weight:	120 Tons				
Power Plant:	Fusion, 4 megawatt output				
Fuel Req.:	6 liters/hour, 500 liters carried				
Armor:	Chassis Front	Sides	Rear	Deck	Belly
Actual/Rated mm	150/450	100/300	50/200	40	40
	Turret: 150/450				
Ground Pressure:	1.0 kg / cm <sup>2</sup>				
Pwr. to Wt. Ratio:	40:1				
Max.Road Speed:	110 kph				
Cross Country Speed:	64 kph				
Max. Eff. Rng:	6,391 km				
Weapons:	Main: 175mm High Velocity CPM Cannon				
	Secondary: two 40mm high velocity autocannons				
	Aux.: 3 single barrel 7.62 mmMGs, 2 anti-aircraft missiles				
Range: (Main)	Effective 2.5 km, Long 3.5 km, Extreme 5 km				
(Secondary)	Effective 2.5 km w/ +6, Long 3.5 km w/ +5, Ext. 5 km w/ +2				
Fire Rate:	Main: 2 rounds / turn, (-2 EFP)				
	Secondary: 750 rounds / turn / gun (up to 16 targets / gun)				
	Aux.: 10 rounds / turn / per gun, 2 missiles				
Feed Device:	Main: Loaders from 50 rounds in bins				
	Secondary: linked belt from gas operated drive, 500 rounds, ea.				
	Aux.: 100 round linked belts from boxes, 2,500 rounds carried				
Crew:	7 - Driver, 3 Gunners, 2 Loaders, Commander				
Defense:	8 Smoke launchers & smoke generator from heat exhaust port				
Electronics:	500 power Radio, Mk III FCS				
Cargo:	1 ton				
Flotation:	No				
Price:	650,000 cr				



## Munitions:

### 175 mm CPM

KEAP: 640 cr, 410 mm pent. at Eff. / 360 mm at Long / 300 mm at Extreme

KEAPER: 704 cr, 390 mm pent. at Eff. / 370 mm at Long / 350 mm at Extreme

HEAP 960 cr, 460 mm penetration

Flechette: 15 meter danger space w/ 20mm penetration, +6 to hit

### 40 mm Auto Cannon

HEAP: 24' cr, 90 mm penetration

## **M-741**

The M-741 is a small, tracked vehicle found in ACV and ARSV units, where its primary role is a recon/scout. Its speed and extended range make it good for creating havoc behind enemy lines. Capable of flotation, it can maneuver in calm water (waves up to 1 foot). It is lightly armored and carries 2 LMGs with a crew of 3. The top LMG is a remote mount with 360° rotation while the chassis gun is in the bow. Due to its small size, this vehicle can be carried in medium lift transport vehicles. The M-127 is usually encountered in pairs, resembling the Lead Plane / Wingman formations found in aviation. Two APERS dispensers are mounted at the rear of the chassis on the corners. Smoke may be generated from the heat exhaust ports. The two alternate versions shown are the most widely found in use.

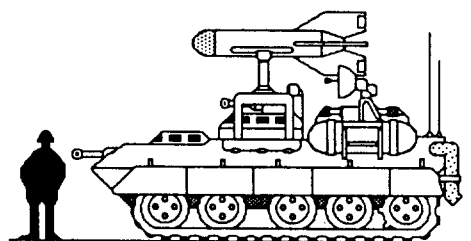
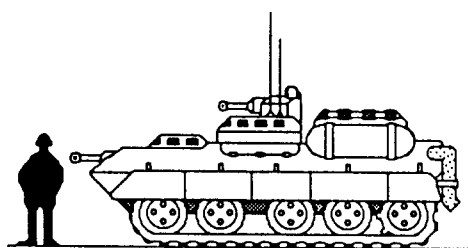
### **SPECIFICATIONS:**

Dimensions:	6.25 m L x 3.5 m W x 3 m H				
Combat Weight:	17 Tons				
Power Plant:	Fusion, 2 megawatt output				
Fuel Req.:	1.5 liters/hour, 200 liters carried				
Armor:	Front	Sides	Rear	Deck	Belly
Actual/Rated mm	30/120	20/60	15/60	10	15
Ground Pressure:	.6 kg/cm <sup>2</sup>				
Pwr. to Wt. Ratio:	117:1				
Max. Speed:	212 kph				
Cross Country					
Speed:	127 kph				
Water Speed:	10 kph				
Max. Eff. Rng:	16,891 km				
Weapons:	2 single barrel 7.62 mm LMGs				
Fire Rate:	10 rounds/ turn (per gun)				
Feed Device:	100 round linked belts, boxed, 4,000 rounds carried				
Crew:	3 - Driver, Gunner, Commander				
Electronics:	1,000 power Radio				
Cargo:	none				
Flotation:	Yes				
Price:	275,000 cr				

-A Tank Hunter, equipped with two Brimstone SSM missiles

-B LADS vehicle, equipped with two Swatter SAM missiles

(for missile specs see M-775)

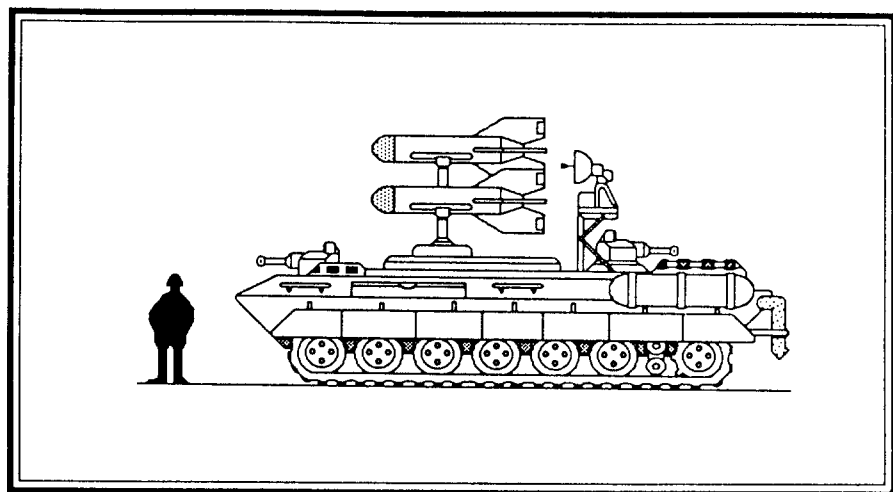


## **M-775**

The M-775 is an Armored ADMP/SPAW used to eliminate enemy armor or air support at the FOB. Carrying three "Brimstone" anti tank missile or three "Swatter" surface to air missiles, these vehicles are grouped three vehicles to a platoon, with an M-788 used as the command and control vehicle. The Brimstone missile is wire guided to 1 km when an internal IR guidance system takes over. When it has reached a predetermined range from the target, it executes a "pop-up" maneuver to allow for it to strike the target from the top where armor is usually thin. It has a 25 km range at a cost of 2104 cr each. The Swatter is also wire/IR guided, but contains a proximity fuse. Range is 35 km. Both missiles weigh 205 kg. One remote turreted bow LMG and one remote turreted LMG at the rear of the crew compartment on the deck serve as defense. The rear remote mount has a 180° rotation. Defensive smoke can be generated from the heat exhaust ports. An M-703-A serves as an AASV equipped with 6 missiles (2 reloads) and a crew of four (one AASV for each M-775 in the platoon. Complete reloading of the launch rails on the M-775 takes approximately 6 minutes.

### **SPECIFICATIONS:**

Dimensions:	10 m L x 4 m W x 5 m H, DM Low hit +3, high hit +2					
Combat Weight:	75 Tons					
Power Plant:	Fusion, 4 megawatt output					
Fuel Req.:	6 liters/hour, 500 liters carried					
Armor:	Chassis Front	Sides	Rear	Deck	Belly	
Actual/Rated mm	150/450	100/300	50/200	40	40	
Ground Pressure:	.625 kg / cm2					
Pwr. to Wt. Ratio:	53:1					
Max.Road Speed:	137 kph					
Cross Country						
Speed:	82 kph					
Max. Eff. Rng:	6,391 km					
Weapons:	Main: 3 250mm Brimstone or Swatter missiles					
	Aux.: 2 7.62 mm LMGs, both remote turret mount					
Range:	Brimstone; 25 km, Swatter; 35 km					
(Main)						
Fire Rate:	Main: 1 missile per turn					
	Aux.: 10 rounds / turn (per gun)					
Feed Device:	Main: Launch Rail					
	Aux.: 100 round linked belts from boxes, 5,000 rounds carried					
Crew:	6 - Driver, Commander / Gunner, 4 Loaders					
Defense:	Smoke generator from heat exhaust port					
Electronics:	500 power Radio, TADS, Image enhancement					
Cargo:	1 ton					
Flotation:	No					
Price:	320,000 cr					



#### **Swatser: SAM (Surface to Air Missile)**

Wt: 205 kg  
Guidance: Wire to 1 km, IR / Optical to target  
Fuse: Impact with Proximity back-up  
Range: min - 1 km, max - 35 km  
Warhead: equivalent to 240 kg, 310 mm pent., 50 meter burst radius w/ 50 mm pent  
Cost: 2104 cr

#### **Brimstone: SSM (Surface to Surface Missile)**

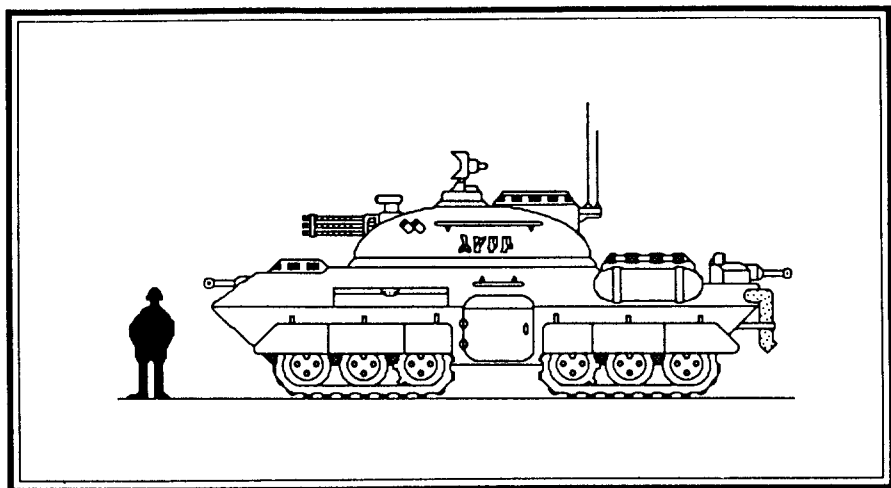
Wt 205 kg  
Guidance Wire to 1 km, IR / Optical to target  
Fuse Delayed Impact  
Range min - 100 meters, max - 25 km  
Warhead: equivalent to 480 kg, 530mm penetration on impact  
Cost: 2250 cr

## M-779

The M-779 is a medium tracked vehicle used as ARMAD in Armored and Mechanized Infantry units. One of the most unique features of the chassis design is its drive. Using two sets of drive wheels and four separate track systems, the vehicle can maintain forward momentum even if two of the track systems are disabled. A gas operated, 40 mm 8- barreled High Velocity Rapid Fire Cannon serves as its main armament with one bow LMG and one remote turreted LMG at the rear of the vehicle serving as auxillary weapons. The remote mount has a 190° rotation. The main armament has an elevation of 100°(10° past vertical) to -10°. This vehicle can be carried in heavy lift transport vehicles. Four smoke dischargers are turret mounted and smoke can also be generated from the heat exhaust ports. An APERS discharger is mounted at each corner on the chassis. The turret is manufactured in the "frying Pan" tradition, ie. it is rounded and cast in a single piece. The sighting system on this vehicle is Radar primary with Optical and IR backups. This vehicle may be fitted with a snorkle attachment allowing for fording of water up to 5 meters deep. Because of the special type of weapon carried, when moving from a submerged position, a special 20 round "dry fire" belt is used to purge water from the barrels.

### **SPECIFICATIONS:**

Dimensions:	10 m L x 4 m W x 4.25 m H, DM: Low hit +1, High hit 0				
Combat Weight:	79 Tons				
Power Plant:	Fusion, 4 megawatt output				
Fuel Req.:	6 liters/hour, 500 liters carried				
Armor:	Chassis Front	Sides	Rear	Deck	Belly
Actual/Rated mm	30/120	20/60	15/60	10	15
	Turret 100/300				
Ground Pressure:	.986 kg / cm <sup>2</sup>				
Pwr. to Wt. Ratio:	50:1				
Max.Road Speed:	130 kph				
Cross Country					
Speed:	78 kph				
Max. Eff. Rng:	6,391 km				
Weapons:	Main: 40 mm 8 barreled High Velocity RFC				
	Aux: 2 7.62 mm LMGs, 1 remote turret mount, 1 bow				
Range:	Effective: 2.5 km(+3), Long: 3.5 km(+2),				
(Main)	Extreme: 5 km (+1), up to 4 targets				
Fire Rate:	Main: 150 rounds per turn				
	Aux.: 10 rounds / turn (per gun)				
Feed Device:	Main: Gas Drive, linked belt from 5,000 round bin				
	Aux.: 100 round linked belts, boxed, 4,000 rounds carried				
Crew:	3 - Driver, Gunner, Commander				
Defense:	4 smoke dischargers				
Electronics:	500 power Radio, 1,000 Pwr Target Acquisition Radar				
	Mk III FCS				
Cargo:	none				
Flotation:	No				
Price:	400,000 cr (Snorkle attachment; 1500 cr)				



**Munitions:**

40mm HEAP:      24 cr ea., 90mm penetration



## **M-788**

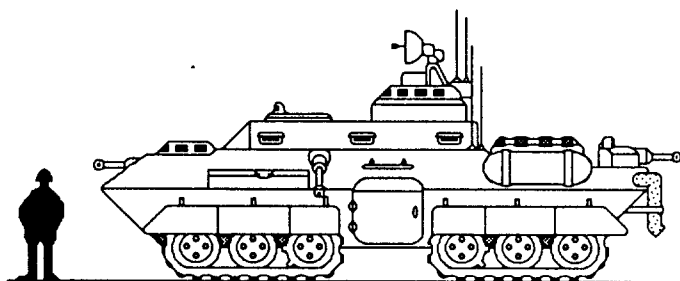
The M-788 is a modified APC used for C3 functions and as a BCC at the FOB. It is found in Armored, Mobile Artillery and Mechanized Infantry units. One of the most unique features of the chassis design is its drive. Using two sets of drive wheels and four separate track systems, the vehicle can maintain forward momentum even if two of the track systems are disabled. One bow LMG, one remote turreted LMG at the rear of the vehicle and two LMGs mounted on the side of the chassis serve as defense. The rear remote mount has a 190° rotation. This vehicle has additional head space and carries a variety of electronic packages based on the unit to which it is assigned. Artillery versions carry counterbattery and fire control radar, while infantry and armored unit vehicles carry battle computers and multiple radio sets. An ambulance version has been encountered with an 8 litter capacity. This vehicle can be carried in heavy lift transport vehicles. Defensive smoke can be generated from the heat exhaust ports.

### **SPECIFICATIONS:**

Dimensions:	10 m L x 4 m W x 5 m H, DM: Low hit +3, high hit +1
Combat Weight:	75 Metric Tons
Power Plant:	Fusion, 4 megawatt output
Fuel Req.:	6 liters/hour, 500 liters carried
Armor:	ChassisFront      Sides      Rear      Deck      Belly
Actual/Rated cm	30/120      20/60      15/60      10      15
Ground Pressure:	.93 kg / cm <sup>2</sup>
Pwr. to Wt. Ratio:	53:1
Max.Road Speed:	137 kph
Cross Country	
Speed:	82 kph
Max. Eff. Rng:	6,391 km
Weapons:	4 7.62 mm LMGs; 1 remote turret mount, 1 bow, 2 pintel
Fire Rate:	10 rounds / turn (per gun)
Feed Device:	100 round linked belts from boxes, 4,000 rounds carried
Crew:	3 - Driver, 2 Gunners
Defense:	Smoke generator from heat exhaust port
Electronics:	1,000 power Radio, Battle Computer, Map Box
Passengers:	5 - 7 HQ staff
Cargo:	1 ton
Flotation:	No
Price:	520,000 cr

### **Variations:**

- B BCC (w/ RAFTAC, RDF, ECM, FACE @250,000 cr)
- E MEV

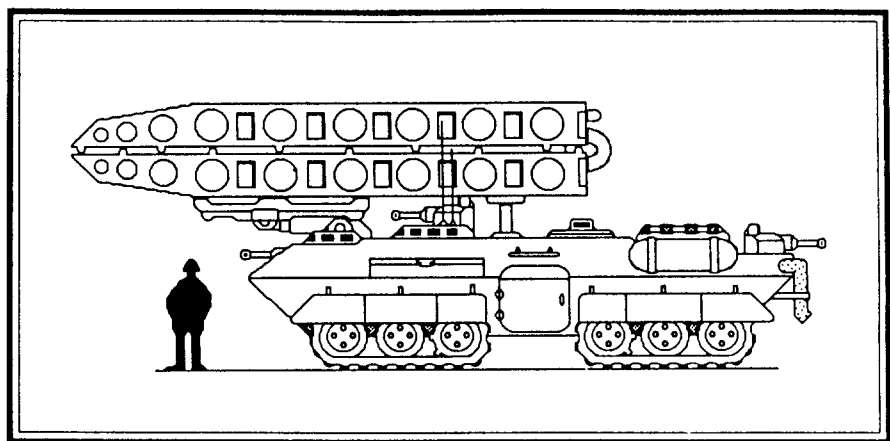


## **M-791**

The M-791 is an AVLB used for spanning obstacles at the FOB. It is found in Armored, Mechanized Infantry and Combat Engr units. One of the most unique features of the chassis design is its drive. Using two sets of drive wheels and four separate track systems, the vehicle can maintain forward momentum even if two of the track systems are disabled. One bow LMG, one remote turreted LMG at the rear of the vehicle, and one remote LMG mounted on the deck of the chassis serve as defense. The rear remote mount has a 190° rotation while the deck turret has a limited field of fire with 360° rotation. This vehicle carries a 4.5 ton, detachable bridge, capable of spanning up to 22 meters and supporting 100 tons. It is launched by an articulated manipulator arm and recovered in similar fashion. This vehicle can be carried in heavy lift transport vehicles if there is sufficient headspace. Defensive smoke can be generated from the heat exhaust ports. Bridge erection takes approximately five minutes while recovery takes ten. For long range operations extra bridges are carried in cargo vehicles traveling with the AVLB. It may then leave bridges over obstacles in place and move to another

### **SPECIFICATIONS:**

Dimensions:	14 m L x 4 m W x 6.50 m H, DM Low hit +3, high hit +3 (with bridge loaded)				
Combat Weight:	75 Tons				
Power Plant:	Fusion, 4 megawatt output				
Fuel Req.:	6 liters/hour, 500 liters carried				
Armor:	Chassis Front	Sides	Rear	Deck	Belly
Actual/Rated cm	30/120	20/60	15/60	10	15
Ground Pressure:	.936 kg / cm <sup>2</sup>				
Pwr. to Wt. Ratio:	53:1				
Max.Road Speed:	137 kph				
Cross Country Speed:	82 kph				
Max. Eff. Rng:	6,391 km				
Weapons:	3 7.62 mm LMGs, 2 remote turret mounts, 1 bow				
Fire Rate:	10 rounds / turn (per gun)				
Feed Device:	100 round linked belts from boxes, 6,000 rounds carried				
Crew:	5 - Driver, Gunner, 2 Combat Engineers, Commander				
Defense:	Smoke generator from heat exhaust ports				
Electronics:	500 power Radio				
Cargo:	2 tons				
Flotation:	No				
Price:	350,000 cr (Bridge only; 8000 cr)				

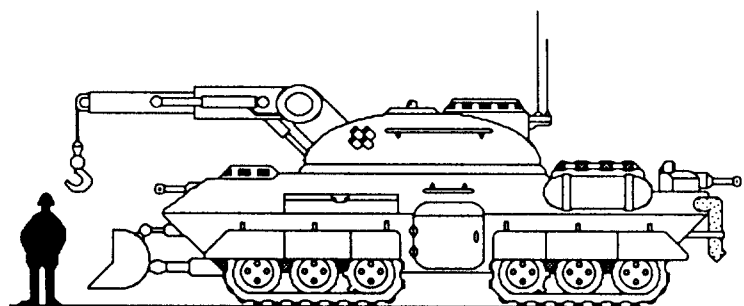


## M-797

The M-797 is a CEV based on the medium, quad drive, tracked chassis. It is found in Combat Engineering units. One bow LMG and one remote turreted LMG at the rear of the vehicle serve as defense. The remote mount has a 190° rotation. The main turret contains a medium lift crane with an elevation of 75° to -30°. This crane has a lift capacity of approximately 12 tons. A dozer / scoop blade is attached to the chassis front which allows pushing up to 120 tons. The blade can also scoop 2 cubic meters of earth per load and is often used for construction of entrenchments and bunkers. Disabled vehicles can also be towed, or dragged off the battlefield. The crew carries a full set of tools and construction equipment. This vehicle can be carried in heavy lift transport vehicles. Four smoke dischargers are turret mounted and smoke can also be generated from the heat exhaust ports. The turret is manufactured in the "frying Pan" tradition; ie. it is rounded and cast in a single piece. A snorkle may be fitted to this vehicle allowing fording of water up to 5 meters deep.

### **SPECIFICATIONS:**

Dimensions:	10 m L x 4 m W x 4 m H, DM Low hit +1, high hit 0
Combat Weight:	80 Tons
Power Plant:	Fusion, 4 megawatt output
Fuel Req.:	6 liters/hour, 500 liters carried
Armor:	Chassis Front      Sides      Rear      Deck      Belly
Actual/Rated cm	30/120      20/60      15/60      10      15
	Turret 100/300
Ground Pressure:	.986 kg / cm <sup>2</sup>
Pwr. to Wt. Ratio:	49:1
Max.Road Speed:	129 kph
Cross Country	
Speed:	77 kph
Max. Eff. Rng:	6,391 km
Weapons:	2 7.62 mmLMGs, one remote turret mount, one bow
Fire Rate:	10 rounds / turn / per gun)
Feed Device:	100 round linked belts from boxes, 4,000 rounds carried
Crew:	7 - Driver, Gunner, Commander, 4 combat engrs.
Defense:	8 smoke dischargers
Electronics:	500 power Radio
Cargo:	2 tons, made up of spare parts, construction equipment etc.
Flotation:	No
Price:	360,000 cr (Snorkle attachment; 1500 cr)

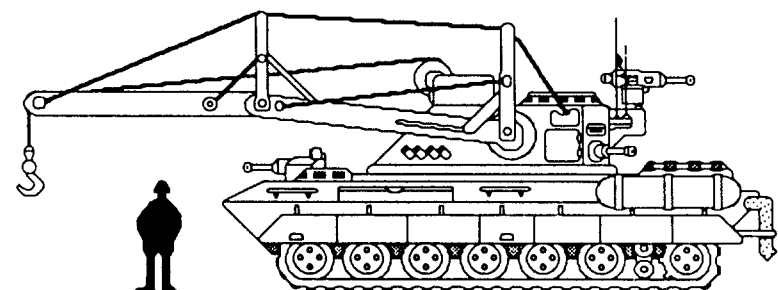


## M-799

The M-797 is a heavy ARV used to recover damaged vehicles from the battlefield. It is found in Combat Engineering and Maintenance units. One remoteturreted LMG at the bow, one mounted LMG at the rear of the main turret and an LMG to the rear of the commander's coupola serve as defense. The remote mount has a 190° rotation. The main turret contains a heavy lift crane with an elevation of 75° to 0°. This crane has a lift capacity of approximately 100 tons. Disabled vehicles can be lifted onto a transporter or towed off the battlefield. The crew carries a full set of tools and repair equipment as well as tow and lift cables. This vehicle can be carried in heavy lift transport vehicles. Four smoke dischargers are turret mounted and smoke can also be generated from the heat exhaust ports.

### **SPECIFICATIONS:**

Dimensions:	10 m L x 4 m W x 5.25 m H, DM Low hit +1, high hit +1				
Combat Weight:	98 Tons				
Power Plant:	Fusion, 4 megawatt output				
Fuel Req.:	6 liters/hour, 500 liters carried				
Armor:	Chassis Front	Sides	Rear	Deck	Belly
Actual/Rated cm	150/450	100/300	50/200	10	15
	Turret 100/300	40/80	40/80	10	
Ground Pressure:	1.4 kg / cm <sup>2</sup>				
Pwr. to Wt. Ratio:	37:1				
Max.Road Speed:	117 kph				
Cross Country					
Speed:	58 kph				
Max. Eff. Rng:	6,391 km				
Weapons:	3 7.62 mmLMGs, one remote turret mount, one main turret rear mount, one mounted to the rear of the commander's coupola				
Fire Rate:	10 rounds / turn / per gun)				
Feed Device:	100 round linked belts from boxes, 4,000 rounds carried				
Crew:	5 - Driver, Gunner, Commander, 2 combat engrs.				
Defense:	8 smoke dischargers				
Electronics:	500 power Radio				
Cargo:	2 tons, made up of spare parts, repair equipment etc.				
Flotation:	No				
Price:	580,000 cr				





## Explanation of Terms

AGLS, FCS, MRLS, TOGS...?! Arggg! you say. What is all this \*@#%?! I didn't buy this guide to learn government speak. Actually once you start to use these abbreviations, you'll be surprised how fast they stick. Let us explain how they work.

The Fire Control System (FCS) is the package of controls and sensors that allow the gunner to identify and engage targets. Within this system are Optical (L3TV), Infra-Red (TOGS) and Laser (LTFCS) sighting sub-systems.

Artillery vehicles have a similar package (EPAWS) but it also includes indirect fire components (AGLS, AIFS).

The weapons in this guide are also stabilized (FCE). This allows for "fire on the fly" or firing while moving with no penalty.

All Direct fire guns are equipped with a Mk. III FCS. It contains the following Sensor/Computer sub-systems: ATTS, CSS, LTFCS w/LTD, MTI, TADS/TES, TGTS & TOGS.

All Indirect Fire guns are equipped with a MK IV EPAWS. It contains the following Sensor/Computer sub-systems: AGLS, AIFS, ARETS, CAWS, CSS, FCE & TOGS.

Should the main power fail, a manual back-up system can be employed, but the fire rate will be cut to 1/4 normal. Propulsion would be impossible

Opposite is a list of what these "techspeak" terms can do for you in games terms.

## OFFENSIVE

- AGLS +1 to hit coordinates fed by the BCC.
- AIFS Computer Link to BCC or can function independently for fire support only.
- ARETS Allow gun to fire based on laser designator from other vehicle and use their bonus. (*tank A spots and Tank B fires*)
- ATTS Works with TADS to identify targets as hostile or friendly and then cues the Targeting computer.
- CAWS Allows artillery to function in a direct fire mode.
- CSS Coordinates L3TV, TOGS and Laser sighting subsystems to give gunner the best target solution.
- LTFCS Interprets and integrates sighting from other laser. Works with ARETS.
- MTI Allows fire at a moving target with no penalty
- TGTS Allow stationary target bonus (+1/turn) against a moving target.
- TOGS Sighting sub-system used when Optical system fails to obtain a target lock.

## DEFENSIVE

- APERS Flechette charge with 15 meter danger space (6D6)
- ECM -1 to opponents attempt to target vehicle by radio or radar.
- EW If opponent fails to lock because of ECM, EW attempts to redirect missiles to nearest enemy target (normal role to hit nearest enemy in range)
- NBC no effect to crew inside vehicle from Nuclear fallout, biological or chemical contaminates as long as vehicle stays sealed.
- Prismatic
- Aerosol anti Laser/Thermal/Optical screen, good for 2 turns (works both ways though, you can't see out either).
- RDFSS gives +1 to crews survival roll in case of internal fire or explosion. (still damaged by fragmentation)
- TLS Senses incoming targeting lasers and automatically deploys smoke.

# Glossary of Terms

AASV	Armored Ammunition Supply Vehicle
ACV	Armored Cavalry Vehicle
ADMP	Air Defense Missile Platform
AFSV	Armored Fire Support Vehicle
AFV	Armored Fighting Vehicle
AGLS	Automatic Gun Laying System (provides targeting from location in map box)
AI FS	Advanced Indirect Fire System
AIFV	Armored Infantry Fighting Vehicle
AP	Armored Piercing
APC	Armored Personnel Carrier
APDS	Armor Piercing, Discarding Sabot
APERS	Anti-Personnel
APFSDS	Armor Piercing, Fin Stabilized, Discarding Sabot
APIHE	Armor Piercing, High Explosive
ARETS	Armor Remote Target System (provides targeting from external sighting source)
ARMAD	Armored & Mechanized Unit Air Defense
ARSV	Armored Recon/Scout Vehicle
ARV	Armored Recovery Vehicle
ATTS	Automatic Tank Target System
AVGP	Armored Vehicle, General Purpose
AVLB	Armored Vehicle, Launched Bridge
BCC	Battery Control Center (arty. command vehicle)
CAWS	Cannon Artillery Weapons System (arty. fire control for direct fire mode)
CMB	Cluster Bomblet Munition
CETSS	Counterbattery Targeting Solution System
CEV	Combat Engineering Vehicle
CLGP	Cannon Launched, Guided Projectile
CSI	Computer Synthesized Image
CSS	Computer Sighting System
CVR (T)	Combat Recon Vehicle (Tracked)
C3	Command, Control & Communications
DPU	Depleted Uranium (extremely dense material used for warheads)
ECM	Electronic Counter Measures
EPAWS	Enhanced Self Propelled Artillery Weapons System (primarily indirect fire control)
EW	Electronic Warfare
FACE	Field Artillery Computer Equipment
FAE	Fuel Air Explosive
FCE	Fire Control Equipment (stabilization gear)
FCS	Fire Control System
FOB	Forward Edge of Battle (the front lines!)
HE	High Explosive
HEAT	High Explosive, Anti-Tank
HEI	High Explosive, Incendiary
HESH	High Explosive, Squash Head (mushrooms on impact, causes spalling inside tank)
HPVC	Hyper Velocity Cannon
HPVAP	Hyper Velocity, Armor Piercing

ICM	Improved Conventional Munitions
IFV	Infantry Fighting Vehicle
IR	Infra Red (detects variations in heat signatures)
KEAP	Kinetic Energy, Armor Piercing
KEAPER	Kinetic Energy, Armored Piercing, Extended Range
LAAB	Light Armored Assault Vehicle
LADS	Light Air Defense System
L3 TV	Low Light Level Television
LMG	Light Machine Gun
LTFCS	Laser Tank Fire Control System, (allows main gun to sight from laser)
LTD	Laser Target Designator (paints laser target for main gun)
LVH	Low Velocity Howitzer
MASH	Mobile Army Surgical Hospital
MBT	Main Battle Tank
MD	Mass Driver
MEV	Medical Evacuation Vehicle
MICV	Mechanized Infantry Combat Vehicle
MRS	Multiple Rocket System (includes missile equipped systems)
MTI	Moving Target Indicator (allows tracking of moving targets)
NBC	Nuclear, Biological, Chemical (protective system includes overpressurization & shielding)
Neutral Steer	Slang; indicating one track moved forward - one backward allowing a rapid pivot in place
PODADS	Point Defense, Air Defense System
RAP	Rocket Assisted Projectile
RAFTAC	Radar For Field Tactical Artillery Fire Control
RDF	Radio Direction Finder (locates radio transmission for arty. fire)
RFC	Rapid Fire Cannon
RPV	Remote Piloted Vehicle
SAPI	Semi Armor Piercing, Incendiary (for soft and light armored targets)
SP	Self Propelled
SPAAG	Self Propelled Anti-Aircraft Gun
SPAW	Self Propelled Artillery Weapon
SPH	Self Propelled Howitzer
SPL	Self Propelled Launcher
STAFF	Smart Target Activated, Fire and Forget
TCV	Tactical Control Vehicle
TES	Target Engagement System (coordinates all targeting subsystems allowing for firing of weapons)
TGTS	Tank Gunnery Tracking System (works with MTI to keep gun on a moving target)
TIS	Thermal Imaging System (infra-red observation)
TOGS	Thermal Observation & Gunnery System (IR option for guns)
VDU	Video Display Unit (combined with L3TV for optical sighting)
WP	White Phosphorous

## Optional Equipment

<u>Equipment</u>	<u>Cost (cr)</u>	<u>Effect</u>
<b>Applique Armor</b> (Reactive)	500 / m2	Adds 100mm eqv. armor protection to front, back sides, and top of vehicle. If hit twice in same location, roll 1 on 1d 6 to negate protection. Replaced in 1 m2 blocks @125kg/m2.
<b>Drop Tanks</b>	250 / ea.	Allows 100 liters of addit'l fuel to be carried externally. When empty or vehicle is threatened, tanks may be discharged.
<b>Snorkle</b>	1500 / set	Allows fording of water obstacles up to 15 meters deep. Not all vehicles may be fitted with this option.
<b>IR &amp; Enhanced Imaging</b>	1000 / ea.	Cost per station, allows operation in limited visibility environments.
<b>Caouflage Netting</b>	150 / m2	Will conceal vehicles placed underneath, not running, from I/R & Optical sights.
<b>Flame Thrower</b>	100,000	Includes Gun, pressurization system, igniter & internal 240 liter fuel tank. Weapon replaces main armament. Range: up to 100 meters Area of Effect: 20 m2 Shots per tank: 12 Damage: 10d 6