

## Chapter 1 : Humvees and Other Military Vehicles by Jay H. Smith | eBay

*Humvees and Other Military Vehicles (Wheels) [Jay H. Smith] on blog.quintoapp.com \*FREE\* shipping on qualifying offers. Discusses the history and use of military vehicles including the Humvee, the Hummer, the Land Rover, tanks.*

Although the US Army had let Ford redesign the jeep from the ground up during the s, and the resulting M jeep incorporated significant innovations, it firmly adhered to the original concept—a very compact, lightweight, low profile vehicle, with a folding windshield, that a layman could barely distinguish from the preceding Willys jeeps. By the mids, the U. When becoming aware of the U. In , Lamborghini developed the Cheetah model in an attempt to meet the Army contract specifications. In , the U. The new truck was to climb a 60 percent incline and traverse a 40 percent slope. The radiator was to be mounted high, sloping over the engine on a forward-hinged hood. Out of 61 companies that showed interest, only three submitted prototypes. Less than a year later, the first prototype was in testing. Chrysler Defense and Teledyne Continental also produced competing designs. In June , the Army awarded AM General a contract for development of several more prototype vehicles to be delivered to the government for another series of tests. The three companies were chosen to design and build eleven HMMWV prototypes, which covered over , miles in trials which included off-road courses in desert and arctic conditions. AM General was awarded an initial contract in for 2, vehicles, the first batch of a five-year contract that would see 55, vehicles delivered to the U. Yakima Training Center in Yakima, Washington was the main testing grounds for HMMWVs from through December , when the motorized concept was abandoned and the division inactivated. The HMMWV was designed primarily for personnel and light cargo transport behind front lines, not as a front line fighting vehicle. Like the previous jeep, the basic HMMWV has no armor or protection against chemical, biological, radiological or nuclear threats. Nevertheless, losses were relatively low in conventional operations , such as the Gulf War. Vehicles and crews suffered considerable damage and losses during the Battle of Mogadishu in due to the nature of the urban engagement. However, the chassis survivability allowed the majority of those crews to return to safety, though the HMMWV was never designed to offer protection against intense small arms fire, much less machine guns and rocket-propelled grenades. With the rise of asymmetric warfare and low intensity conflicts , the HMMWV was pressed into service in urban combat roles for which it was not originally intended. The M has been in production since , seeing limited use in the Balkans before deployment to the Middle East. This design is superior to the M with a larger, more powerful turbocharged engine, air conditioning , and a strengthened suspension system. More importantly, it boasts a fully armored passenger area protected by hardened steel and bullet-resistant glass. With the increase in direct attacks and guerrilla warfare in Iraq, AM General diverted the majority of its manufacturing power to producing these vehicles. In the early years before IEDs became prevalent, the vehicle was liked by troops for its ability to access rough, mountainous terrain. Some soldiers would remove features from Humvees, including what little armor it had and sometimes even entire doors, to make them lighter and more maneuverable for off-road conditions and to increase visibility. To increase protection, the U. Although this somewhat improved survivability, bolting on armor made the Humvee an "ungainly beast", increasing weight and putting strain on the chassis, which led to unreliability. Armored doors that weighed hundreds of pounds were difficult for troops to open and the newly armored turret made Humvees top heavy and increased the danger of rollovers. Army stated that the vehicle was "no longer feasible for combat" in As the role of American forces in Iraq changed from fighting the Iraqi Army to suppressing the guerrilla insurgency, more armor kits were being manufactured, though perhaps not as fast as production facilities were capable. Even more advanced kits were also being developed. Most up-armored HMMWVs hold up well against lateral attacks, when the blast is distributed in all different directions, but offers little protection from a mine blast below the truck, such as buried improvised explosive devices IEDs and land mines. Explosively formed penetrators EFPs can also defeat the armor kits, causing casualties. The doors may also require a mechanical assist device to open and close. The D-ring hooks on the door of the HMMWV so that another vehicle can rip the door off with a tow strap, chain, or cable to free the troops inside. The soldier manning the exposed crew-served weapon on top of the vehicle is extremely vulnerable.

Additionally, some HMMWVs have been fitted with a remotely operated CROWS weapon station, which slaves the machine gun to controls in the back seat so it can be fired without exposing the crew. The Boomerang anti-sniper system was also fielded by some HMMWVs in Iraq to immediately give troops the location of insurgents firing on them. Another weakness for the HMMWV has proven to be its size, which limited its deployment in Afghanistan because it is too wide for the smallest roads and too large for many forms of air transport compared to jeep or Land Rover-sized vehicles which are nearly two feet narrower. This size also limits the ability for the vehicle to be manhandled out of situations. Heavier models of infantry mobility vehicles IMV can also be used for patrol vehicles. The massive weight of these vehicles combined with their high center of gravity also greatly reduces their utility in off-road situations versus the HMMWV, which was the primary cause for the push for the Oshkosh M-ATV to be developed quickly. Humvee replacement process The Humvee replacement process being undertaken by the U. The HMMWV has evolved several times since its introduction and was used in tactical roles for which it was never originally intended. The military pursued several initiatives to replace it, both in the short and long terms. These vehicles were procured to replace Humvees in combat theaters. Marine Corps issued a request for proposals RFP in for its Humvee sustainment modification initiative to upgrade 6, expanded capacity vehicles ECVs. The Marines plan to field the JLTV, but do not have enough funding to completely replace all Humvees, so they decided to continue sustaining their fleet. Key areas of improvement include upgrades to the suspension to reduce the amount of force transferred to the chassis, upgrading the engine and transmission for better fuel efficiency, enhancements to the cooling system to prevent overheating, a central tire inflation system to improve off-road mobility and ride quality, and increased underbody survivability. Testing of upgraded Humvees was to occur in , with production and installation occurring from through Older A2 series Humvees make up half the current fleet, and 4, are to be disposed of through foreign military sales and transfers. Humvees in service with the Marine Corps will be upgraded through Oshkosh Corporation is offering Humvee upgrades to the Marine Corps in addition to its JLTV offering , which are modular and scalable solutions providing varying levels of capabilities at a range of price points that can be provided individually or as complete solutions. Their approach is centered around the TAK-4 independent suspension system, which delivers greater off-road profile capability, improved ride quality, an increase in maximum speed, greater whole-vehicle durability, and restored payload capacity and ground clearance. If converted to a UGV, the vehicle could serve as a mobile scout vehicle with armor features removed to enhance mobility and terrain accessibility, since there would be no occupants needed to protect. Because there will still be tens of thousands of Humvees in the U. Autonomy features would allow the Humvees to drive themselves and one soldier to control a "swarm" of several vehicles. For the Marines, 69 JLTVs will replace the 74 Humvees in all active infantry battalions to cover its expeditionary forces. The Army does not plan to replace Humvees in the Army National Guard , and is considering options on how many of its , vehicles will be replaced, sustained, or modernized. Even if half of the force is replaced by JLTVs, the entire planned order will not be complete until The Humvee seats 4 with an available fully enclosed metal cabin with a vertical windshield. The body is constructed from lightweight and rust-resistant aluminum, instead of conventional steel. The body is mounted on a narrow steel frame with boxed rails and five cross members for rigidity. The rails act as sliders to protect the drivetrain which is nestled between and above the rails. The brake discs are not mounted at the wheels as on conventional automobiles, but are inboard, attached to the outside of each differential. The front and rear differentials are Torsen type, and the center differential is a regular, lockable type. Torque-biasing differentials allows forward movement as long as at least one wheel has traction. In combat conditions, the HMMWV can be delivered by the Low Altitude Parachute Extraction System which pulls the vehicle out of the open rear ramp just above the ground without the aircraft having to land. Recent improvements have also led to the development of the M model, which quickly rendered the previous models obsolete. Army hopes to lower maintenance costs. The latest iteration of the Humvee series can be seen in the MA1 and later up-armored A1-versions. It has a stronger suspension and larger 6. The armor protection can be installed or taken off depending on the operating environment, so the vehicles can move more efficiently without armor when there is no threat of attack. There is some underbody armor that moderately protects against mines and roadside bombs. Other

improvements include Vehicle Emergency Escape VEE windows that can be quickly removed so troops inside can escape in the event of a rollover, jammed door, or the vehicle catching fire, and a blast chimney that vents the force of a bomb blast upwards and away from the occupants. The mortar itself can fire on single shots or on automatic using 4 round clips. Range for direct fire is 1,m and indirect fire is 4,m. It is also intended to provide another means of destroying roadside bombs but at a safer standoff range. Only one has been produced. The M meets Army requirements for a scout, military police, and explosive ordnance disposal vehicle with improved ballistic protection levels. The M provides protection against 7. In June , the U. Army purchased an initial Ms for operations in Bosnia. Air Force has a number of M vehicles that differ in detail from the U. Under the designation M, the type was specifically designed and tailored to the needs of the U.

### Chapter 2 : Current Military Vehicle: AM General's HMMWV A.K.A., "Humvee" - Diesel Army

*Humvees for Sale Buy and sell Humvees in GovPlanet's weekly auctions. The AM General HMMWV (High Mobility Multipurpose Wheeled Vehicle), commonly referred to as a humvee, was introduced to the Military in the 's and soon became popular with all branches.*

Navy Equipment Known by its military designation as the High Mobility Multi-purpose Wheeled Vehicle, the HMMWV is a lightweight, highly mobile, diesel-powered, four-wheel-drive tactical vehicle that uses a common chassis to carry a wide variety of military hardware ranging from machine guns to tube-launched, optically tracked, wire command-guided TOW anti-tank missile launchers. It must perform in a wide variety of terrain, from deserts to jungles, for long periods of time, with minimal maintenance. It has to carry its cargo and occupants in safety while dodging instruments of war – bullets, bombs and mines. That means fewer training hours are necessary for the mechanics who will maintain it. Its simplified supply, maintenance and logistics system – essentially one set of common parts for 15 configurations – means lower life-cycle costs which saves tax dollars. Members of the rd Infantry Brigade Combat Team shoot targets from. They meet all of these requirements while incorporating new standards of reliability for combat vehicles. During initial production tests, the new vehicle proved to be nearly twice as durable as the Army required. High ground clearance is a prerequisite for superior mobility. The inch ground clearance of the HMMWV is an engineering feat considering that the vehicle stands only 72 inches high. Full-time four-wheel drive, independent suspension, steep approach and departure angles, 60 percent slope-climbing, 40 percent side slope and inch water-fording capabilities combine with the high ground clearance to make the HMMWV an exceptional off-road vehicle. The M A0 series has a curb weight of approximately 5, lbs. The current comparable model, the MA2, weighs only lbs. It has a 6. The M has a turbocharged 6. These proportions contribute to a stable, road-hugging truck that is very difficult to roll over. This contrasts to the old M Jeeps that were considered unstable. The HMMWV is constructed on a steel frame with boxed frame rails and five cross members constructed from high-grade alloy steel. Once the substructure is assembled, E-coating is applied to provide additional corrosion protection. The aluminum body reduces weight and provides resistance to corrosion. Aluminum body panels are riveted and bonded together with technologically-advanced adhesives to provide additional strength. The body is designed to flex to accommodate off-road stresses. The AM General-designed geared hub assembly in the power train doubles the torque to each wheel in the hub of the wheel. This also helps achieve 16 inches of ground clearance, far more than any other vehicle in its class. The use of a double A-arm independent suspension front and rear, coil springs and hydraulic double-acting shock absorbers gives the HMMWV unsurpassed mobility. Four-wheel disc brakes are mounted inboard against the sides of the differentials both of which are located up, between the frame rails, protecting them from impact and debris. Torque-biasing differentials allow the vehicle to continue to move forward as long as any one wheel has traction. This unique configuration of components along with military 37 x The MA2 series features a 6. It is coupled to a four-speed automatic transmission and full-time four-wheel drive transfer case to provide the HMMWV with exceptional performance. See specifications The vehicle can reach speeds of more than 70 mph. It has power-assisted hydraulic disc brakes and power steering. This, along with the geared hubs, contributes to high ground clearance. The location of the crew on each side of the drivetrain also allows for a low center of gravity.

## Chapter 3 : High Mobility Multipurpose Wheeled Vehicle (HMMWV) | [blog.quintoapp.com](http://blog.quintoapp.com)

*The High Mobility Multipurpose Wheeled Vehicle (HMMWV; colloquial: Humvee) is a family of light, four-wheel drive, military trucks and utility vehicles produced by AM General.*

Conventional Humvees were not designed to face some of the most insidious threats in the Iraq combat zone. Roadside bombs have killed more than 80 soldiers since the war began last March. Hundreds of other troops have been killed when explosive devices were tossed into their vehicles or they were ambushed. Army officials said last week that up to armored Humvees a month will be produced in a new factory in the United States by this spring. In addition, 6, kits for armoring standard Humvees and other military vehicles also are being sent to the region. In the meantime, some soldiers are turning to local metal shops to upgrade their conventional Humvees as best they can. The battalion, a California National Guard unit, brought 13 vehicles into Iraq, including 12 unarmored Humvees, when they arrived in March. They since have hired Iraqis to install makeshift armor on all their vehicles. Steel doors were added, along with steel enclosures for the gunners on gun trucks. Sandbags on the floor and crossed fingers do the rest. Anna Berber-Giddings, a driver for unit commander Lt. The improvised armor has its drawbacks. On one recent trip to Iraqi villages near LSA Anaconda, Berber-Giddings had to repeatedly check the loose-fitting latches on her door to keep it from swinging open while she drove. The Army has frowned upon such improvised armor, warning that the untested steel may shatter when hit by a projectile such as a rocket. That could send hot shrapnel into the passengers. The Army recently ordered an Alabama National Guard unit to remove the improvised armor it placed on its vehicles before the unit deploys to Iraq, according to news reports. It said the unit would be provided with official Army armoring kits. Ryan, the rd commander, admits the jerry-rigged upgrades leave much to be desired, but he said felt he had no choice. The Army kit armors the soft sides of the Humvee and adds a bulletproof windshield. Army officials said there are between and 2, armored Humvees in Iraq, where , U. Army spokesmen said the service requires 4, armored vehicles in Iraq and Afghanistan “ 3, in Iraq alone. In lieu of a complete armored Humvee, the Army provides armoring kits like this one. The kit, however, does not armor the floor or bulletproof the windshield “ crucial for protecting troops from roadside bomb blasts and gunshots.

## Chapter 4 : Military Humvee - [blog.quintoapp.com](http://blog.quintoapp.com)

*Please let me know what specific Humvee, M35A2 or other military vehicle products you would like to see reviewed. If they fit our plans for the Battlewagon or the Deuce Utility Vehicle, then we will reach out to the company to arrange getting the product for review.*

## Chapter 5 : The Humvee Military Vehicle (HMMWV) | Military Machine

*To buy a Humvee you need to start by visiting Gov [blog.quintoapp.com](http://blog.quintoapp.com) is the official website that has the authority to auction the Humvee and various other military vehicles.*

## Chapter 6 : Troops add improvised armor to Humvees - News - Stripes

*Surplus military Humvees for sale in San Antonio, across the U.S. for as low as \$4k trailers and other government surplus items. The vehicles are sold in eBay auction style through the.*

## Chapter 7 : Military Vehicles

*If the vehicle is more successful, it could be an even greater windfall “ since the '80s, the AM General has produced , Humvees for the US military. Here are the three vehicles that could.*

### Chapter 8 : Military Vehicles | eBay

*Need a new vehicle? For the next few days, the United States Department of Defense will sell you a military Humvee for a real bargain. The surplus inventory needs to go, so they're priced to move.*

### Chapter 9 : Military Hummer Humvee Hmmwv H1 for sale utah

*Buy Humvees, government surplus equipment, construction, industrial, vehicles, trailers, textiles, furniture, electronics & much more.*