

= AIL Storm =

The AIL Storm (Hebrew : סופה , Sufa) is an Israeli manufactured off -road vehicle and the workhorse of the Israeli Security Forces . The series of Jeep Wrangler based vehicles have been produced by Automotive Industries Ltd. in Upper Nazareth under licence from Chrysler since 1990 . The vehicles fill a number of military roles , including that of armoured Infantry Mobility Vehicle , and certain models are available for export as well as for the civilian market .

Production of an updated four -door second generation model commenced in 2006 despite some mixed messages from the Storm 's primary customer , the Israel Defense Forces . Development of a third generation vehicle based on the new Jeep Wrangler JK has been completed and significant production for both Israeli and foreign customers is under way .

= = Storm I = =

The M -240 Storm MultiMission Vehicle is the first of three Storm generations . A variant of the 1991 Jeep Wrangler YJ and the older CJ -6 / CJ -8 wheelbase , it is entirely produced in Israel by Automotive Industries Ltd. with the exception of the engines , as their manufacture is not economically viable on the Storm 's market scale .

The Storm was primarily meant to satisfy Israeli military needs , but capable long and short versions are produced for the local civilian market . Like the Jeep , it has a conventional front -engine design with a driver and passenger seated behind the engine , and room for cargo or passengers behind them . It is powered by an AMC 3 -983 litre 6 -cylinder in -line petrol with fuel injection developing 180 hp (130 kW) at 4 ,700 rpm , fitted with Vortox 2 -stage air cleaner or a Volkswagen 2 -5 litre 4 -cylinder turbocharged diesel developing 88 kilowatts (118 hp) at 4 ,200 rpm . The front axle is fully floating and the rear axle is semi -floating , while a reinforced frame and body as well as good angles of approach and departure (40 ° and 37 ° for short frame , 40 ° and 26 ° for long frame) add to the Storm 's off -road roading capability .

The two production frame lengths , 4 -15 (13 -6) and 4 -5 metres (14 -8 ft) , the latter of which was among the few such Jeep -derivatives in production in recent years , were both available in civilian and military models . Aside from the Israeli market , Storms have long been exported to countries in South America , Asia , and Africa . A Jeep -managed production line in Egypt , whose vehicles are used by the Egyptian armed forces , was absorbed into the AIL Storm production after it closed in 1995 .

= = = Security versions = = =

Like its parent Jeep Wrangler , the Storm is first and foremost an airmobile , capable offroad and utility vehicle meant to tackle extreme terrain in a general reconnaissance role , and can be outfitted with a machine gun or other weapons systems . When armed with a 105 mm (4 -1 in) M40 recoilless rifle , the vehicle is uniquely capable of firing directly over its blast guard equipped hood rather than in the perpendicular position required by most other vehicles .

A variant of the extended version used in desert border patrol makes use of a high -ceilinged canopy to allow a swivelling rear -facing heavy machine -gun mount , while the canopy can be extended to provide a mobile command post . An air conditioned hardtop version of the extended model is often used by officers , and a version developed for riot control has clear polycarbonate shielding along the rear sides and roof , as well as gunports for less -lethal weapons . The shielding allows for a wide field of view while at the same time protecting against firebombs and rock -throwing .

= = = Armoured version = = =

As with several analogous light military vehicles , despite being originally designed to fill a light

reconnaissance role , the rise of urban warfare and close quarters combat meant that the Israel Defense Forces had to recast the Storm in new roles .

When the need for a light armoured vehicle became apparent to the Israeli security forces , AIL 's engineering department designed a vehicle protection system from the bottom up , integrating it into the existing vehicle in a manner that did not compromise its off @-@ road and other capabilities , and that did not create the mechanical strain and increase in maintenance often associated with up @-@ armouring , in part due to its computerized 180 horsepower (130 kW) injected engine .

The armour protects against 7 @-@ 62 x 39mm (0 @-@ 3 in) armour @-@ piercing ammunition , and maintains a high protection @-@ to @-@ weight and cost ratio by employing IDF approved advanced materials . The protected Israeli configuration 's gross vehicle weight is 3 @-@ 000 kilograms (6 @-@ 614 lb) , though several varying protection levels are in use with individual units .

Another important asset are the Storm 's narrow dimensions , which allow it to traverse the narrow alleyways common to the casbahs of many Middle Eastern cities , places that armoured Humvees can only enter with great difficulty and minimal manoeuvrability , if at all . Full @-@ height rear doors which allow for the quick deployment of fully equipped troops into combat are touted as another advantage over similar vehicles .

= = = Civilian use = = =

First generation Storms were made available to the general public in Israel from 1992 to 2001 . A small number were purchased directly by private consumers , while larger numbers were acquired second @-@ hand from Israeli government @-@ owned firms like the Israel Electric Company and Mekorot water company , as well as National Parks Authority and Israel Police . Modified Storms are popular with off @-@ roading enthusiasts in Israel .

= = Storm II = =

Beginning in 2006 , AIL began delivery of an improved model to the IDF , the M @-@ 242 Storm Mark II , known in the field as the " Storm Commander " . A number of significant changes have been incorporated into the new TJ @-@ based Storms stemming from soldiers ' feedback , updated operational requirements , and testing by GOC Army Headquarters and Logistics , Medical , and the Centers Directorate . Perhaps the most obvious change is the addition of dual passenger doors , making the Storm II the first five @-@ door Jeep Wrangler derivative .

Other improvements include the change to a manual transmission with six forward speeds (instead of the previous four) , and increased stability resulting from wider track axles than its predecessor . Leaf springs were replaced with modern coil spring suspension front and rear , and the Storm II features rear Dana 44 axles and front TJ Dana 30s , factory designed slip yoke eliminators , and the added safety of standard airbags . Soldiers ' comfort was addressed as well with the addition of standard rear air conditioning and a compact disc player .

Storm II is also produced in an armoured version , and is offered with an optional 2 @-@ 8 litre VM Motori turbodiesel , automatic transmission , right hand drive , and run @-@ flat tyres . AIL is capable of completing ten vehicles daily . Due to recently passed tax laws , a civilian version is not yet available in the local market .

= = = MDT David controversy = = =

Developed in the 2000s at an investment of US \$ 2 million after IDF commitments for 1 @-@ 200 units , some AIL jobs were believed to be in jeopardy following a mid @-@ 2005 announcement that the IDF would purchase 100 US sold Land Rover Defender @-@ based MDT David . The announcement provoked threats of protests from AIL 's management and labourers , who had recently faced the blow of local Humvee assembly ceasing due to budget considerations . The MDT David was chosen over the armoured version of the Storm because the heavy Storm was said to

suffer from handling and reliability problems , safety hazards and limited mission operability . However the IDF said that the purchase of the David was to fill a temporary gap in production until the Storm II 's testing was completed , and has since begun filling its commitment .

= = Storm III = =

A Storm Mark III was set to be produced for the Israeli defense forces starting in June 2008 , when the IDF was to purchase around 600 vehicles beginning in early 2011 . Based on the then new four @-@ door Jeep Wrangler JK design , the Mark III is meant to address some of the shortfalls of the earlier Mark II . Whereas the previous vehicle was an update of the original TK Storm , the Storm III was designed from the outset with a five @-@ door configuration . Unlike the TJ @-@ L , the new JK Storm has a much higher maximum load capacity in part due to heavier @-@ duty shock absorbers , springs and axles , necessary for an armored version . It includes a standard 2.8L VM Motori turbodiesel and automatic transmission .

Like the Storm II , the Mark III was initially available only to the military with versions set to be delivered to the Israel Police in 2009 . A civilian version would only be released if the local tax code was modified to allow it to compete with foreign imports of the same class . AIL states that if such a thing would happen , a petrol engine version could be offered . Regarding Export markets , the Storm 3 has already seen use in several countries , especially in its armored version .

A pair of production J8 's was tested by Israeli web magazine Jeepolog.com journalists in April 2009 . It was dubbed " probably , the best Jeep ever " .

= = = Commander version = = =

The commander version incorporates a 5 @-@ door hard top cab allowing for the quick and convenient entrance and exit of the driver and all passengers or troops . A large rear compartment enables the storage of both cargo and communications equipment .

This version comes equipped with an air conditioning system providing maximum comfort in hot climatic conditions . A roll over protection structure (ROPS) maximizes safety conditions for passengers .

= = = Armored version = = =

The armored version of the Storm 3 , designed for protection against light weapon threats , incorporates a heavy duty transfer case and a specially designed suspension system which includes heavy duty springs (front - coil , rear - leaf) and shock absorbers , together with rigid heavy duty axles allowing for a smooth and safe ride on both rough terrain as well as regular highways .

= = = Reconnaissance & Patrol version = = =

The Storm 3 reconnaissance and patrol model allows for extra stowage of fuel , water and equipment . This version is especially suited to be fitted with various machine gun or special equipment mountings .