Restoration of M26 Pershing tank 'Ike'

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Nederweert
The Netherlands

M-26 (T26E3) Heavy Tank Pershing

Technical Specifations

Manufacturer:	**Fisher Tank Arsenal, Grand Blanc, MI, USA**	
	From March 1945 Detroit Tank Arsenal, Warren, MI, USA	
Production period:	**2,212 from November 1944 till December 1945**	
USA registration:	**USA 30119850**	
Date of Delivery:	**December 1944 or January 1945 (early model)**	
Weight:	**46 Short Tons (41,700 kg)**	
Crew:	**5 (Commander, gunner, loader, driver, co-driver)**	
Engine:	**Ford GAF; 8-cylinder, gasoline;**	
	Displacement:	**1,100 cu in**
	Power output:	**450–500 hp at 2,600 rpm**
	Torque:	**1,050 lb.ft at 2,200 rpm**
Transmission:	**Manual operated, 3 speeds forward and 1 reverse.**	
	The differential operated 3 drum brakes on each side	
Suspension:	**Individual torsion arms with bumper springs and shock absorbers**	
Electrical installation:	**24 Volt**	
Speed:	**30 miles/h (48 km/h)**	

Range:	**Cross country: 75 miles**	
	Highway: 110 Miles	
Fuel capacity:	**Right; 75 ½ gallon**	
	Left: 116 gallon	
Dimensions:	**Length:**	**20 ft 9.5 in (6.337 m) (turret facing aft)**
		28 ft 4.5 in (8.649 m) (turret facing forward)
	Width:	**11 ft 6 in (3.510 m)**
	Height:	**9 ft 1.5 in (2.780 m)**
Armament	**Main:**	**1 × 90 mm Gun M3 with 70 rounds**
	Secondary:	**1 × .50 cal. Browning M2HB MG with 550 rounds**
		2 × .30-06 Browning M1919A4 MG with 5,000 rounds
Armor:	**Front glacis max 4 ½ inch**	
	Manlet 5 ½ inch	

M26 (T26E3) Heavy Tank Pershing - USA 30119850

Introduction

During WW2 heavy tank development had low priority since the US Army, USMC and Allied forces required a mass-built, good-all-around medium tank, the M4 Sherman. Both the British and US upgraded their tanks in armour and guns and developed tank destroyers. However, these stopgap measures proved insufficient. By 1944, the High Command became aware of the limitation of the M4 when facing German upgraded Panzer IVs, Panthers and Tigers. After reports came from Normandy clear-cut decisions were finally taken: the innovative T26 was pushed forward for production and named M26. At last, the crews had the ideal tank to deal with German armour, though a little late: the M26 Pershing saw little combat during WW2.

Design of the M26

Compared to the Sherman and previous models, the Pershing was revolutionary. The Wright engine and short transmission gave it a low profile. The glacis plate was one of the thickest fitted on an American tank. The torsion bar system conferred a noticeably better ride and far better than the tractor based VVSS and simpler than the HVSS. The large tracks fitted with soft steel shoes contributed to lowering the ground pressure and giving better grip on soft terrain. Two wide mudguards mounted large storage bins for tooling, spares, and equipment.

The drivetrain counted six pairs of rubberized roadwheels, each fitted on its own wheel arm and connected to the torsion bars by the way of an eclectic spindle. Eeach was also connected to a bump stop, which limited the motion of the arm. Three out of the six received extra shock absorbers.
On each side it had one idler (identical to the roadwheels) at the front and a sprocket at the rear. The idler could be precisely adjusted to the track thanks to a large notch. This meant that the idler could be displaced forward or backward and thus change the track tension. There were also five return rollers.
The tracks were a new model, but rather classic in appearance, each link being articulated with wedge bolts and having a two-piece center guide. These were also rubberized.

Construction called for large cast sections, front and rear, attached to the hull sides and welded together. Another cast section went across the engine deck for better strength. An infantry telephone was fitted on the back panel of the engine compartment, inside an armoured box, allowing them to communicate with the tank, for close support, even during battle.
The engine compartment was covered by eight armored grids, four openings total, only accessible when the turret was turned to the side. The two rearward ones gave access to the engine, while the two forward ones allowed access to the left and right fuel tanks, the right being shorter to make room for the auxiliary engine and electric generator. There was also a semi-automatic fire extinguishing system. The radiator filler cap and gun travel lock were located on the engine deck.

The transmission had three speeds forward and one reverse. The differential operated three drum brakes on each side.

The M36 commander's cupola had a one-piece hatch and six direct vision prisms made of thick bulletproof glass, inserted inside the cupola bulge. The top of the hatch mounted a periscope and the entire structure moved freely around a fixed azimuth scale. When inside, the commander had a lever for traversing the turret left or right. Just behind him was mounted the SCR 5-28 radio set. Due to its lengthwise position, a mirror allowed the commander to use the commands at hand. The gunner had an M10 periscope, with x6 magnification, and to its left was an M71 auxiliary telescope with x4 magnification.

The 90 mm (3.54 in) M3 gun was power traversed, with a joystick controlling elevation and a pump for manual traverse. The gun also had an elevation handle and, just behind it, a manual trigger, in case of failure of the electrical fire system. There was also a gear change lever, for choosing between the manual or hydraulic options for traverse. At a lower position the manual traverse lock was located, which was used when the turret was reversed, and gun lowered and attached for transportation. The gun had a classic percussion fire system and manual breech. The loader also fired the cal.30 (7.62 mm) coaxial machine gun and had his own vision system. Just left of him were the ready racks, storing ten rounds of various types for immediate use. Additional stowage inside six floor compartments was used. The loader also had a pistol port.

The driver and assistant driver both had sprung suspended seats and single-piece hatches. The driver had a rotatable periscope, immediate access to the semi-automatic fire extinguisher to his left and a brake release. The instrument panel counted five circuit breakers, a fuel gauge, a lever for fuel tank selector, electrical starter, electrical gauge, tachometer, personal heater, differential settings, fuel cut-off emergency button, panel light trigger, main lights, speedometer, oil pressure & engine temperature gauges, as well as several lamp indicators.
The two brake levers had no neutral positions. The turning radius was about 20 feet (6 m). The assistant driver was in charge of the bow machine-gun, a ball-mount cal.30 (7.62 mm), and had a complete set of driving levers to replace the driver if needed, and had a simple hatch periscope which allowed him to see his machine-gun tracers. The turret roof also housed, near to the commander cupola, a multi-purpose cal.50 (12.7 mm) heavy machine gun. Ammunition racks for it and the coaxial cal.30 were found inside the turret rear cast basket.

Production

The actual production of the T26E3 pre-series, which was standardized in March as the M26, only began in November 1944 at the Fischer Tank Arsenal. Only ten were built in the first month. Then production grew to 32 in December, 70 in January, and 132 vehicles in February 1945.
In March 1945 the Detroit Tank Arsenal joined the production effort, releasing some additional tanks. From then, around 200 left both factories each month. In total about 2,212 vehicles were built, some after WW2.

Although months were needed to train crews and maintenance teams, the first real operations began in western Germany in February-March 1945.

Active service in Europe

Twenty vehicles of the first batch were sent to Western Europe, landing at the Belgian port of Antwerp. They would be the only Pershings to see combat in World War Two, spread between the 3rd and 9th Armored Divisions, part of the First Army.

The M26s drew their first blood in late February 1945 in the river Roer sector. A famous duel took place in March at Köln (Cologne). Four T26E3s were also seen in action during the "mad dash" to the bridge at Remagen, providing support, but not crossing the fragile bridge for days. Instead, these heavyweights crossed the Rhine on barges.

Another 310 Pershing tanks were shipped to Europe until V-day. After the war the M26s were grouped into the 1st Infantry Division, stationed in Europe as a reserve. The "Big Red One" counted 123 M26s in one divisional and three regimental tank battalions. In the summer of 1951, with the NATO reinforcement program, three more infantry divisions were stationed in West Germany. They accepted mostly battle-proven M26s retired from Korea. However, by 1952-53, these were phased out gradually in favor of the M47 Patton.

The Pacific Theater in WW2

While the heavy fighting at Okinawa raised concerns about the losses taken by M4s, it was eventually decided to send a shipment of 12 M26s, departing on May, 31. They landed at Naha beach on the 4th of August. However, they arrived too late as the island was nearly secured.

The Korean War

The bulk of the M26 (and M26A1) force saw action during the Korean war. In July 1950 four US infantry divisions stationed in Japan were shipped, with a few M24 Chaffee's and howitzer support models. More divisions were sent, mostly with medium tanks. However, they were no match for the T34/85s of North Korea. Hastily M26s were reconditioned and shipped. By the end of 1950 some 305 Perishings managed to arrive in Korea and saw combat. As the Pershing displayed insufficient mobility on the mountainous terrain of Korea the M26s were gradually replaced by the M46 Patton, the upgraded version of the M26.

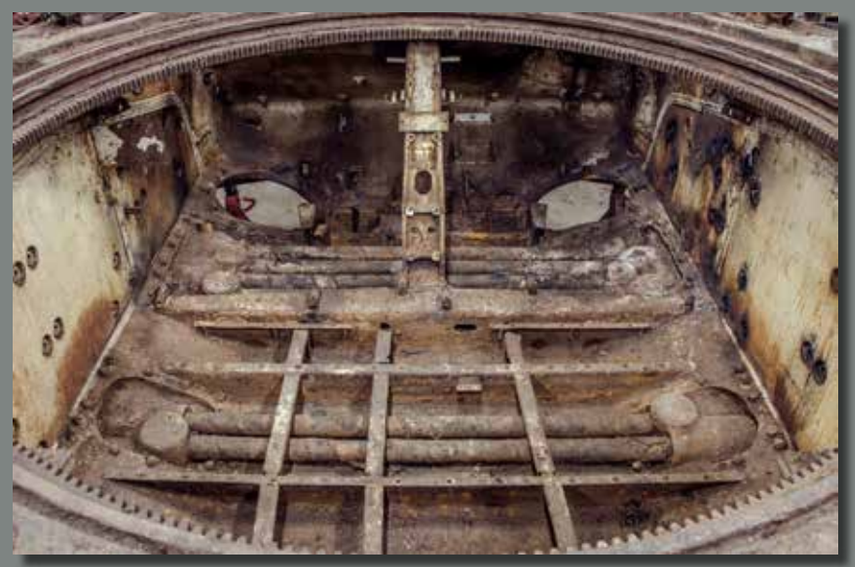
The restored M26 Pershing

This Pershing is a survivor from a German shooting range and was discovered by BAIV in the spring of 2018 at a German scrap yard. Even though it suffered badly from years of outdoor storage BAIV decided to restore it to its former glory (Class A).

This restoration was not an easy task and an enormous challenge as you can see in the pictures in this book. Over 8,000 hours were invested in the project and parts have been searched (and found) all over Europe and even in the US.
Total restoration period was 14 months.

The first public appearance of the M26 Pershing-USA 30119850 was to take part in a tour during the 75th Anniversary of the liberation of The Netherlands. However, the Covid-19 virus put a stop on all plans. Therefore, BAIV decided, together with the new owner, to ship the tank to the US in March 2020.

We wish you lots of fun in looking through this photo album. It gives a good impression of all work, sacrifice but also the great fun and satisfaction to restore this fantastic tank.
Surviving Pershing tanks are extremely rare compared to for instance Sherman and other US tanks which were built in large quantities. Therefore, it is unique that BAIV acquired and restored such a "'holy grail" of US Tank History

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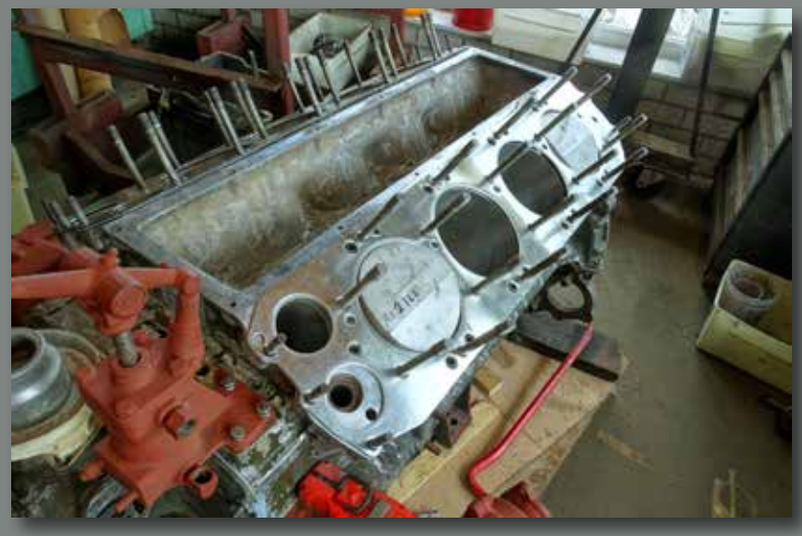

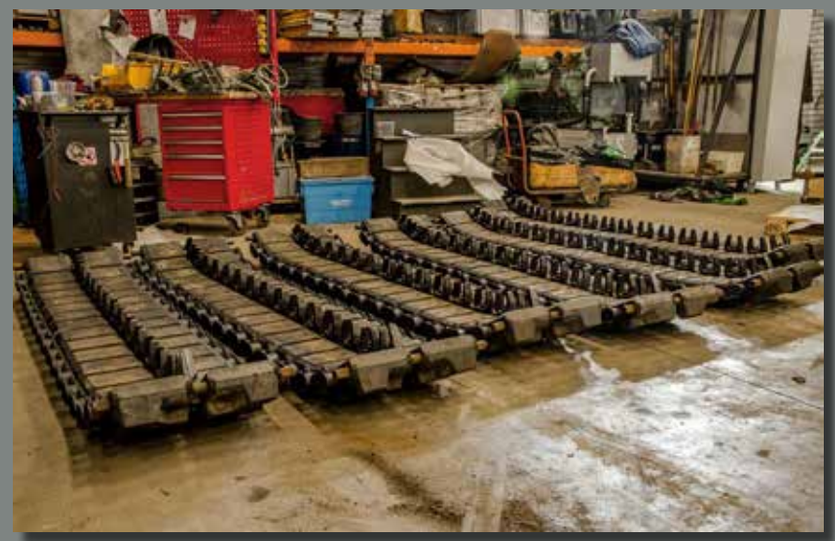

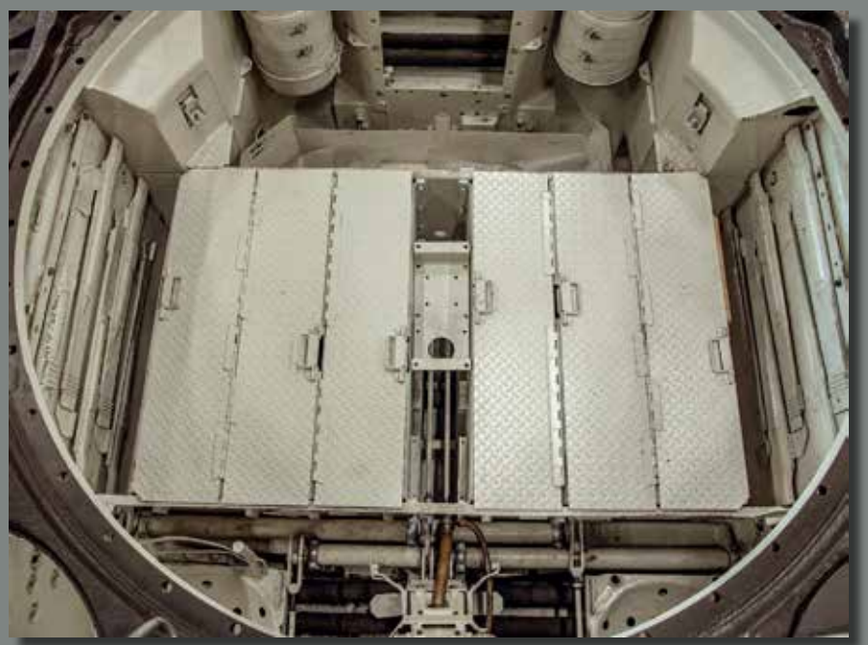









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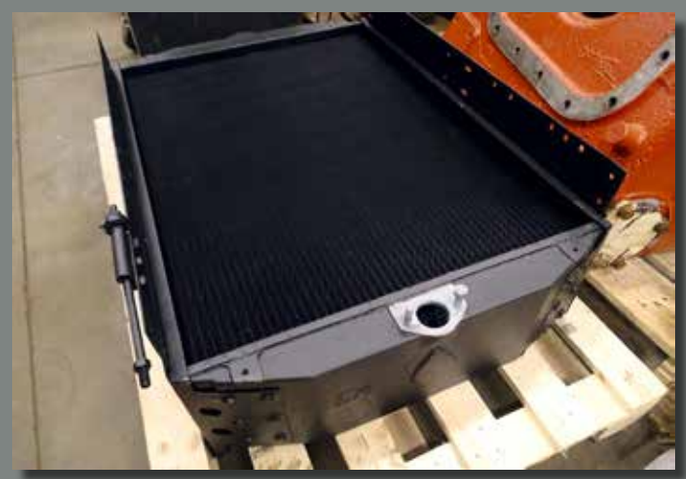


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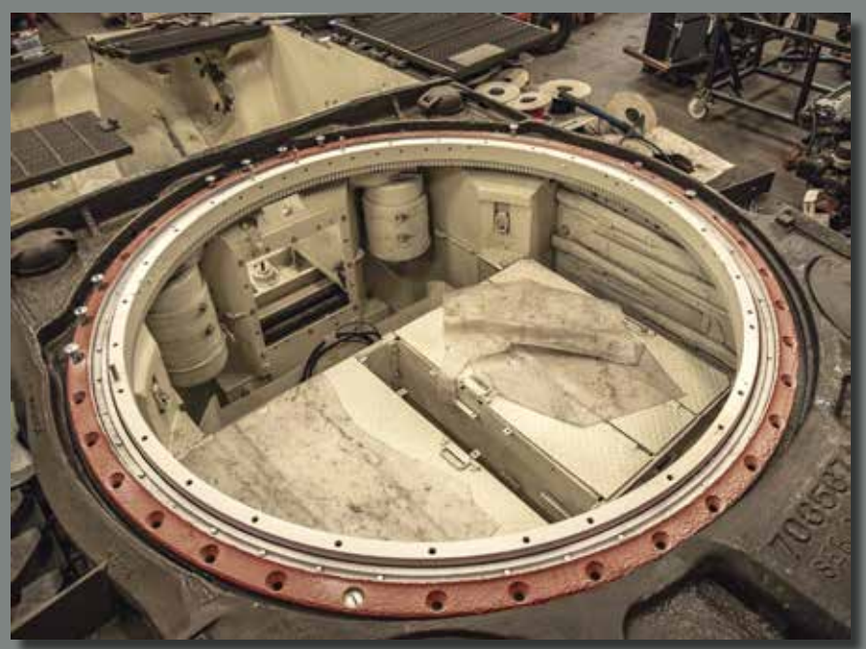












CIRCUIT BREAKERS


90816


DANGER


E-40


E-40


TANK, HEAVY, M26-E3
ORDNANCE DEP'T., U. S. ARMY
M'F'D. BY FISHER BODY DIV. GENERAL MOTORS CORP.
CREW 5 MEN
PARTS LIST SNL G-226 VOL.
OPERATOR'S MANUAL - T.M.9-738
MAINTENANCE MANUALS
TM9-1735-B
TM9-1735-A
TM9-1735-C
VEHICLE CRUISING SPEEDS
1- 6 M.P.H. 2- 15 M.P.H. 3- 25 M.P.H.
REVERSE 6 M.P.H.
1945


CAL. 45 AMM.
105 CAL 50
LINKED AMMO


FLASHLIGHT


MANUALS


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FLASHLIGHT
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