

Weapons of Tank Battalions Illustrations

Chapter 3: Medium Tanks



SC-115033: Some of the menagerie of tanks the Armored Force inherited at its creation (left to right): the M2 medium tank, with a 37mm main gun and up to eight machine guns (this one lacks two normally mounted on the turret sides); the T4 medium tank, which had a Christie suspension and three machine guns; and the M2A2 light tank, which had two turrets and three machine guns. (NARA, Signal Corps photo)



SC-115352: An M2A1 medium tank belonging to the 67th Infantry Regiment (Tanks) in 1940. The M2A1 had slightly thicker armor than the M2 and a supercharger on the engine to boost horsepower. Note the two fixed machine guns in the lower glacis armor. The vehicle passed on its chassis, the suspension arrangement, the power train, and much of its superstructure design to the M3. (NARA, Signal Corps photo)



SC-118857: One of the first M3 medium tanks undergoes testing at Aberdeen Proving Ground in April 1941. Note the holes for fixed machine guns beside the left headlamp, the short-barreled 75mm Gun M2 without gyrostabilizer, and the absence of stowage bins on the back deck that were added to later vehicles. (NARA, Signal Corps photo)



SC-119303: The French Char B1 bis heavy tank carried its 75mm gun in the hull. The upper turret sported a 47mm gun and coaxial machine gun. (NARA, Signal Corps photo)



208.45_2: An early-production M3 Lee fires its main gun.
(NARA, Signal Corps film)



111-M-1001_1: An M3 from Company D, 2/13th Armored Regiment, heads toward the Tunisian front in late November 1942. This tank has the short-barreled 75mm gun M2 with added weight. (NARA, Signal Corps film) [color photo]



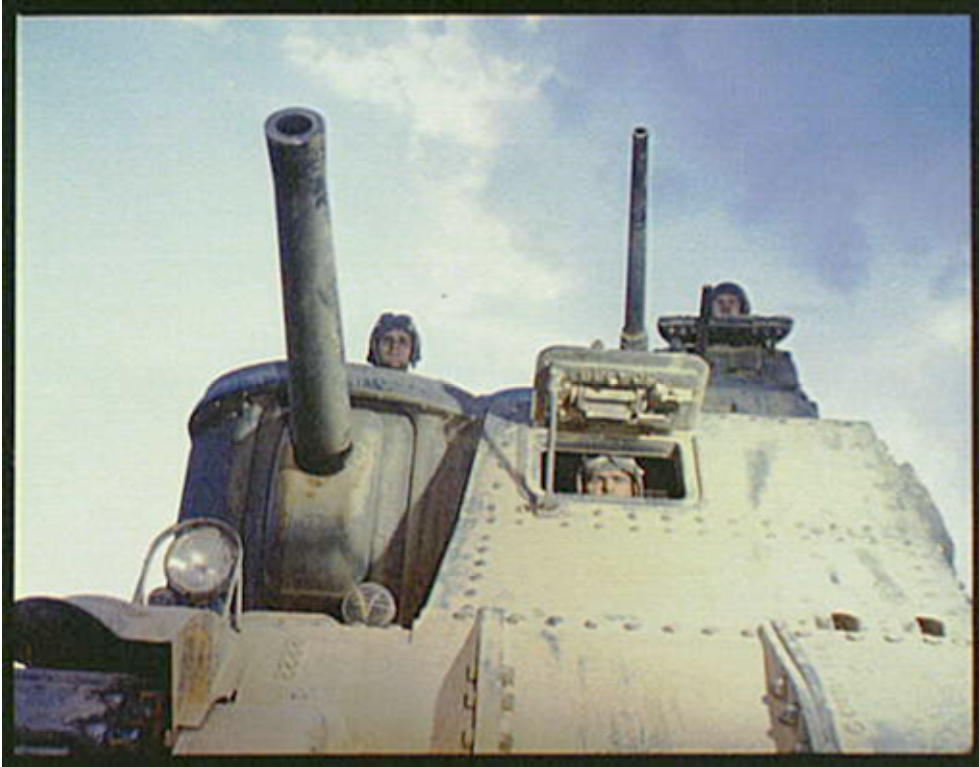
SC-167321: A Company D crew prepares chow near Souk el Arba, Tunisia, on 23 November 1942. Note the longer barreled 75mm Gun M3. The men are wearing tanker jackets over herringbone twill one-piece coveralls, which remained standard garb through the war. (NARA, Signal Corps photo)



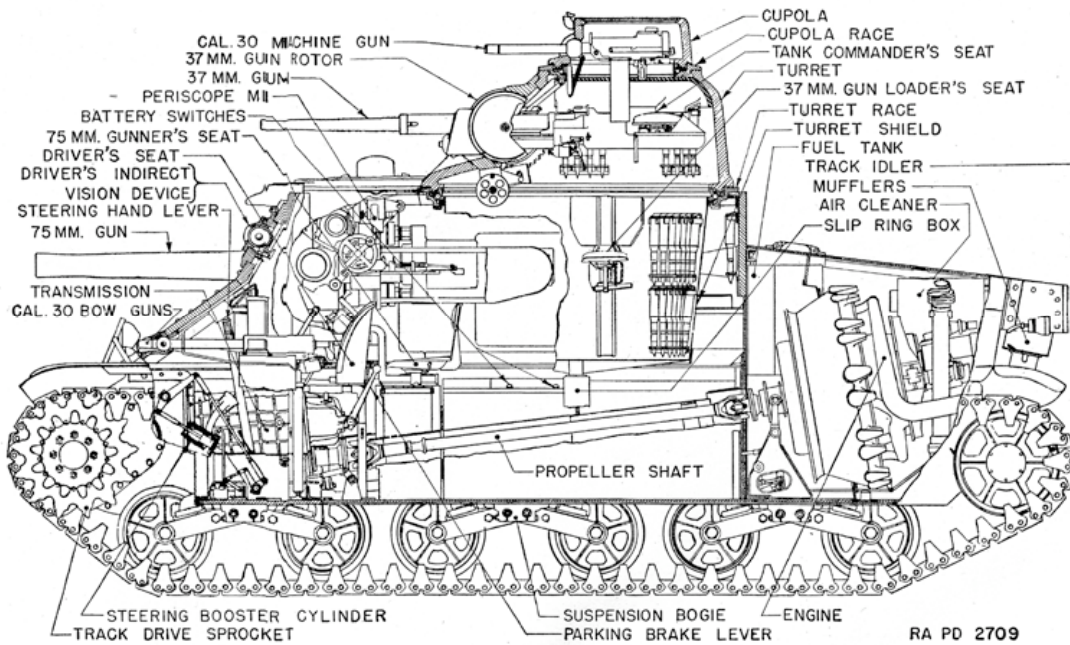
111-M-1001_16: A rear view of the M3 medium tank, with two crewman squeezed through the gunner's hatch. (NARA, Signal Corps film) [color photo]



8b02863u: A closeup view of the commander's cupola.
(Library of Congress, Prints & Photographs Division, FSA-OWI Collection)



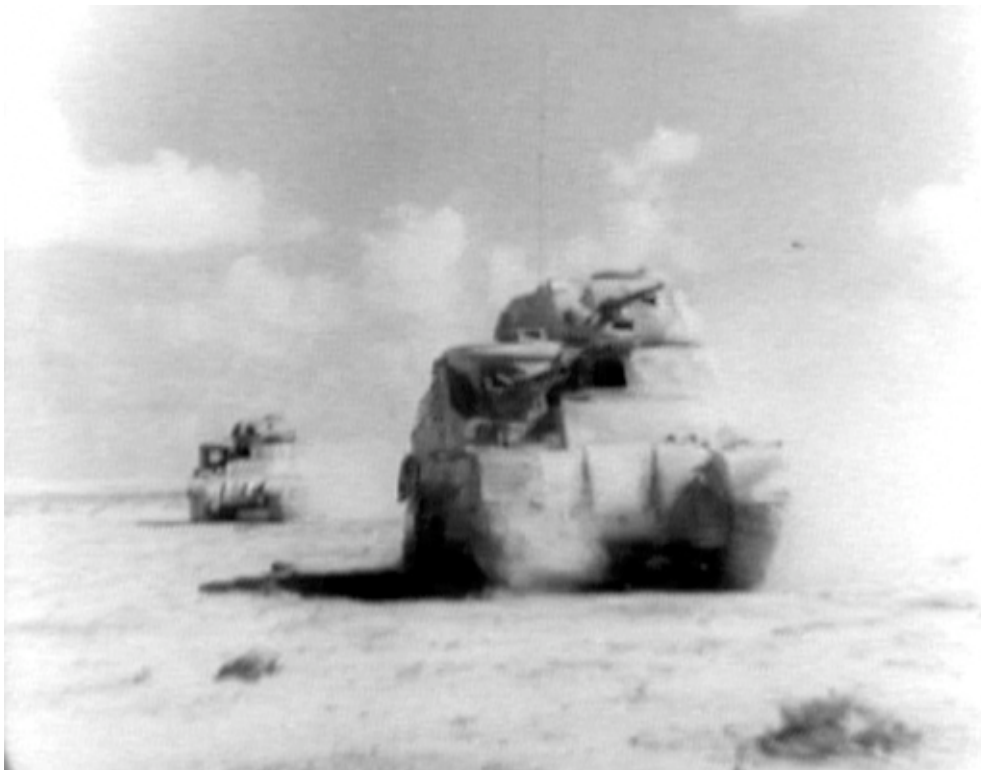
1a35201r: The M3 was a tall mountain of tank. The 75mm gunner had his own hatch topside. (Library of Congress, Prints & Photographs Division, FSA-OWI Collection) [color photo]



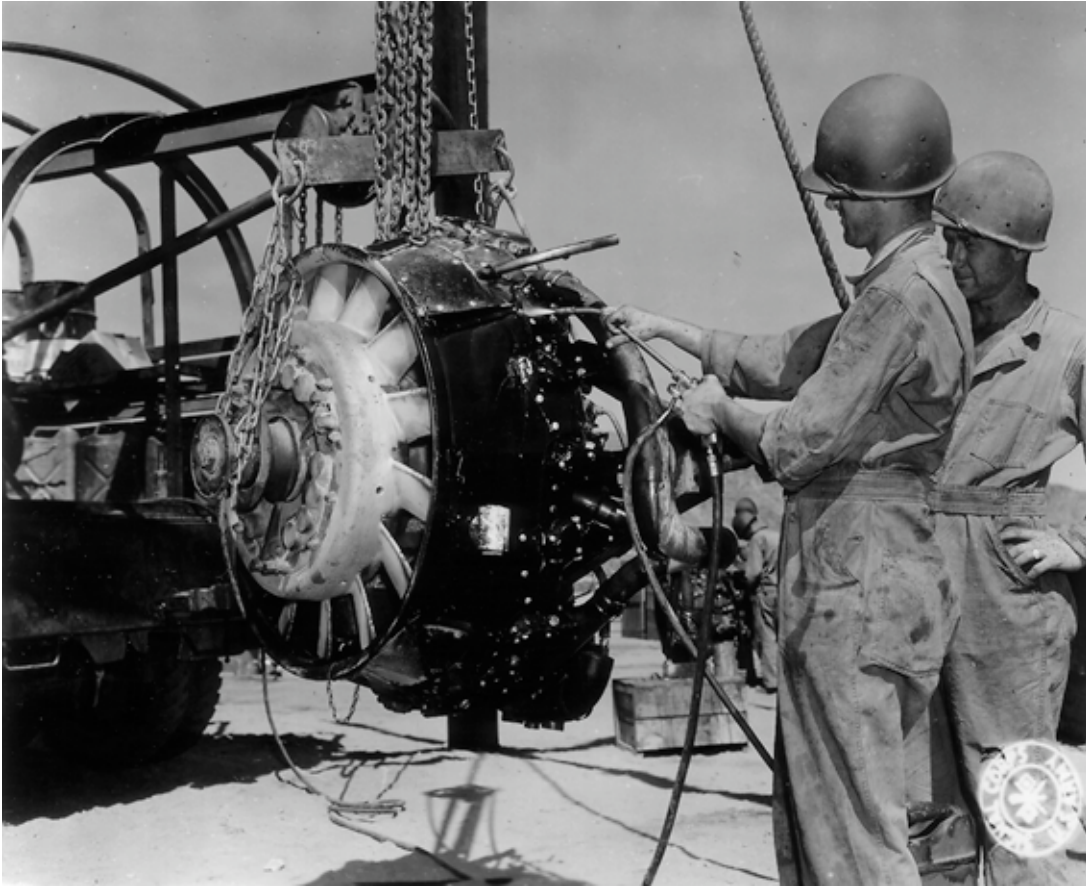
TM 9-750_2: This M3 Lee cut-away view illustrates the standard internal layout for all models. Why use of an aircraft engine forced design of a tall hull for the M3 and M4 medium tanks becomes apparent. (NARA, records of the Government Printing Office)



SC-169063: The rounded contours of the M3A1 with cast hull.
(NARA, Signal Corps photo)



111-FB-51_2: The British M3 variant, dubbed the Grant, lacked the commander's cupola and had a longer turret to make room for a wireless set. (NARA, Signal Corps film)



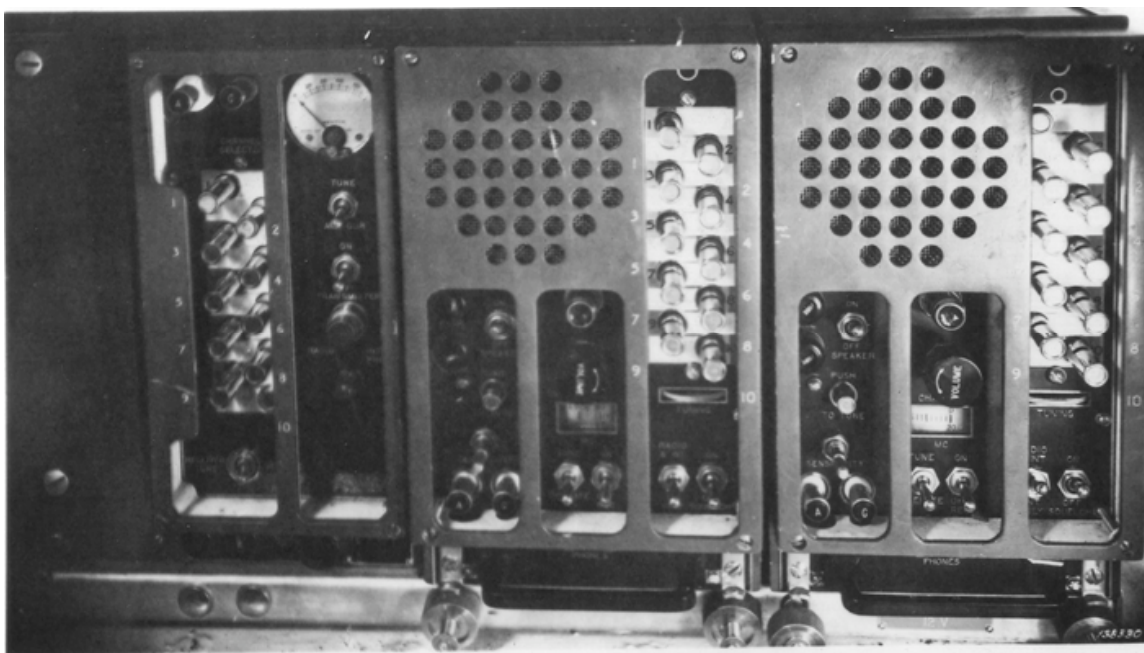
SC-239900: GIs clean a Continental 400 hp aircraft engine for an M3 tank. This engine also powered most M4 Sherman tanks. (NARA, Signal Corps photo)



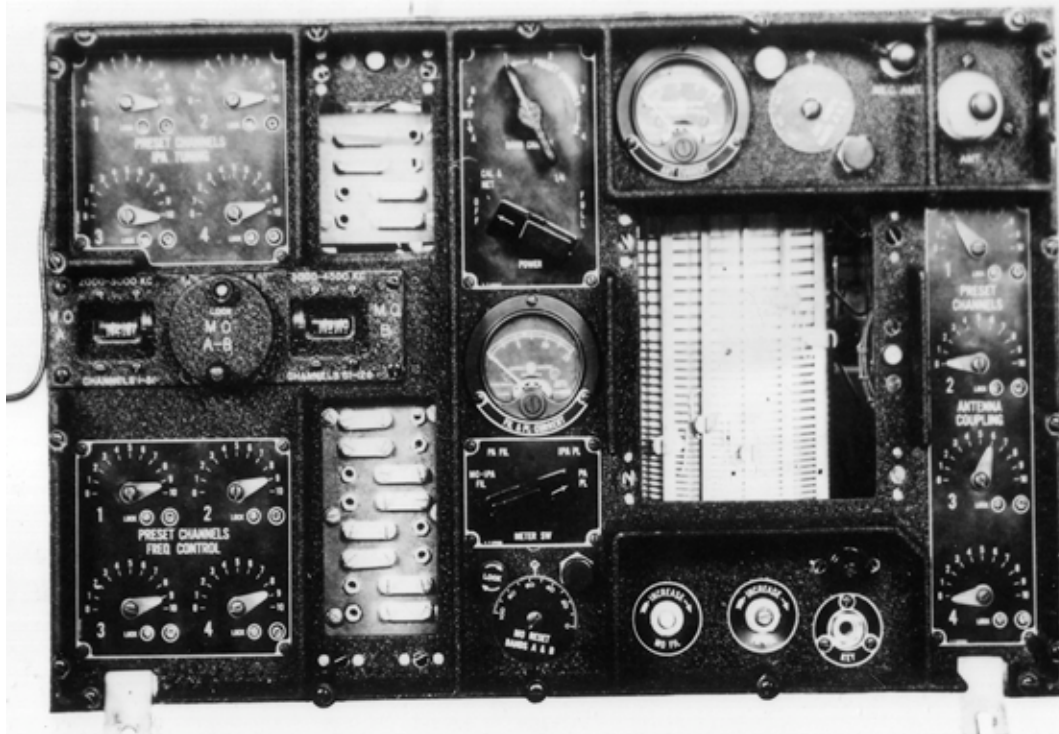
SC-183513: A rare picture of an M3 Lee with wading gear; the tank is oriented to the right. This one is crashing through underbrush on Makin Atoll during the first moments of battle on 20 November 1943. (NARA, Signal Corps photo)



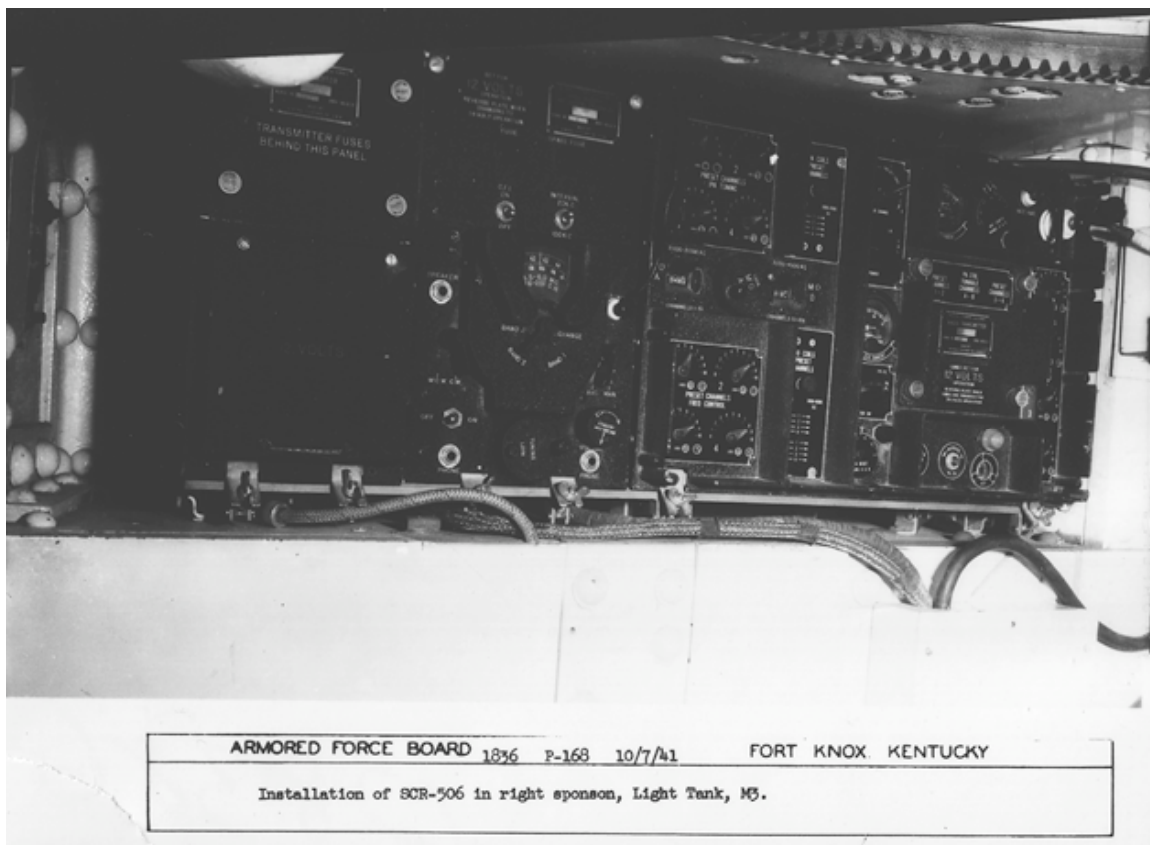
SC-183581: M3 tanks shell the Japanese at King's Wharf, Makin Atoll, on 21 November 1943. These Lees belong to Company A, 193d Tank Battalion. The lower elements of the wading stacks are still mounted. (NARA, Signal Corps photo)



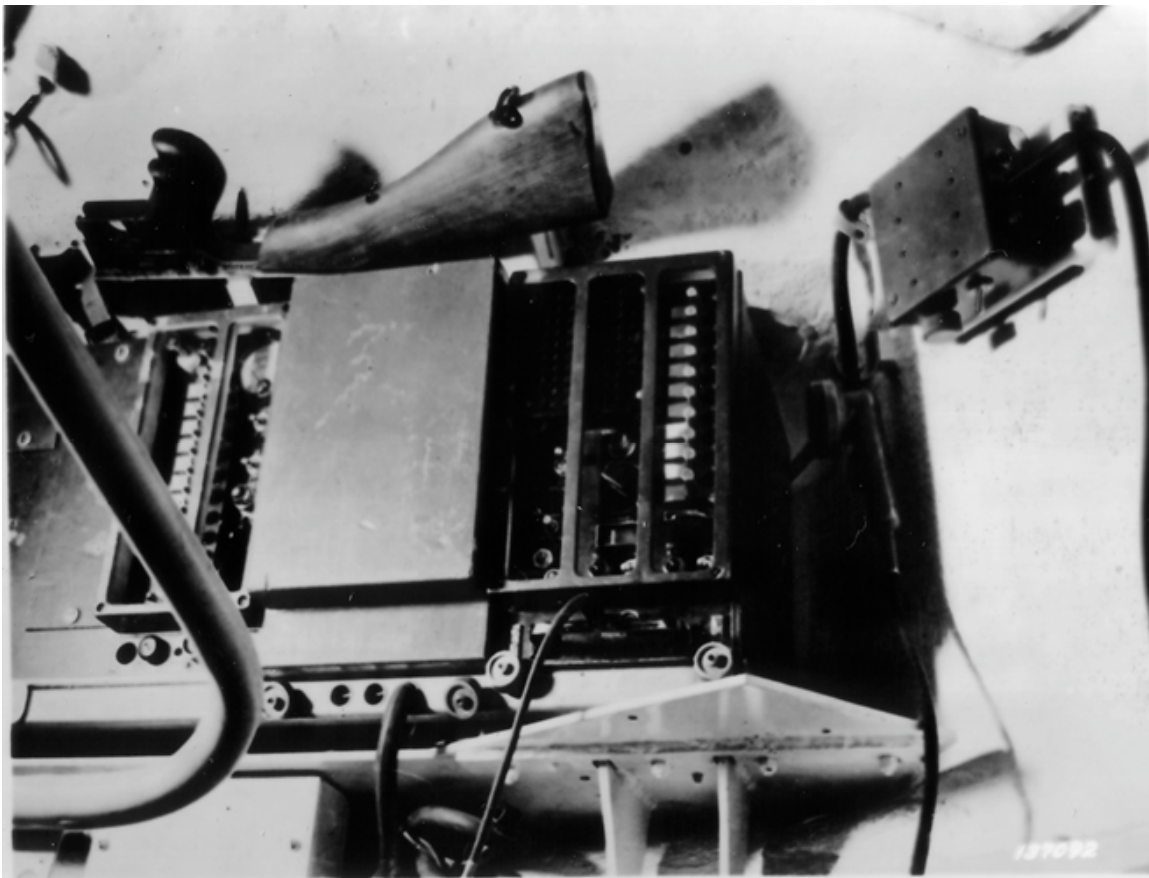
SC-138330-R: The FM Radio Set SCR-508. The push buttons selected among pre-set frequencies. (NARA, Signal Corps photo)



SC-140308-R: The AM Radio Set SCR-506 transmitter. (NARA, Signal Corps photo)



SC-128386: The radio was installed in the sponson of the M3 and early M5 light tanks, in this case an SCR-506 AM command set. The turret gear is visible in the upper right-hand corner. (NARA, Signal Corps photo)



SC-137092-R: Principal components of Radio Set SCR-508 installed in the center-rear turret of an M4A3 medium tank. The Tommy gun rack is visible above the radio. The bar in the lower left is the breach guard on the main gun. An intercom box is to the right of the radio set. (NARA, Signal Corps photo)



SC-130896: The T6 medium tank pilot was completed in September 1941, nine months after the first M3 Lee. (NARA, Signal Corps photo)



111-CB-31_1: An M4, probably from the 2d Armored Division, fires indirectly during the Roer River offensive in November 1944. The 75mm gun produced a modest muzzle blast. (NARA, Signal Corps photo)



111-CR-2_2: View from the commander's hatch of the M4's 75mm main gun firing. (NARA, Signal Corps photo)



SC-131189: The cast-hull M4A1 preceded the welded-hull M4 into production. The first Shermans issued to the Armored Force had two fixed machine guns in the hull front and bogie assemblies with the return rollers above the center. The extra MGs were dropped almost immediately, and the return rollers were soon shifted back and replaced at the top of the bogie assembly by a skid plate. (NARA, Signal Corps photo)



SC-131040-R: The M3 and new M4A1 medium tanks in spring 1942. The early M4A1 had solid vision blocks for the driver and bow gunner instead of periscopes. The bulge atop the M4A1 turret is an early version of the main gun sight; the gun itself is missing. (NARA, Signal Corps photo)



SC-186633: The turret basket of an M4 tank from the 34th Armored Regiment, 5th Armored Division. This tank has early vision blocks but a cast final drive housing. (NARA, Signal Corps photo)



SC-190188: M4A1s from the 760th Tank Battalion near Turo, Italy, on 12 May 1944. The original hatches for the driver and bow gunner were an extremely tight fit. The lead tank has appliqué armor over the gunner's position. (NARA, Signal Corps photo)



SC-189595: An unfortunate incident involving a bomb crater near Littoria, Italy, provides a top view of an M4A1. All three members of the turret crew had to make it out of the single hatch in case the tank caught fire. Periscopes are visible in the driver's and commander's hatches. (NARA, Signal Corps photo)



SC-208550: The composite hull, which mated a cast glacis with a welded main hull, was produced in limited numbers. (NARA, Signal Corps photo)



SC-188332: An M4 with the 56-degree glacis operates with the Americal Division on Bougainville in February 1944. This tank has appliqué armor in front of the hull hatches and over the sponson ammo racks (one on the left side and two on the right). It also has extra armor around the lower part of the turret, a modification common in the Pacific and possibly inspired by the Japanese practice of throwing explosive charges onto the deck. (NARA, Signal Corps photo)



SC-191353: A venerable 712th Tank Battalion M4 advances with riflemen near St. Jores, France, on 7 July 1944. The tank displays the elimination of the hatch shot traps accomplished by welding angled iron plates in front of them. It also has appliqué armor on the right turret side over the gunner's position. (NARA, Signal Corps photo)



SC-337939: This 105mm assault gun has the 47-degree glacis, which both eliminated the shot traps and provided bigger hatches to the driver and bog. (NARA, Signal Corps photo)



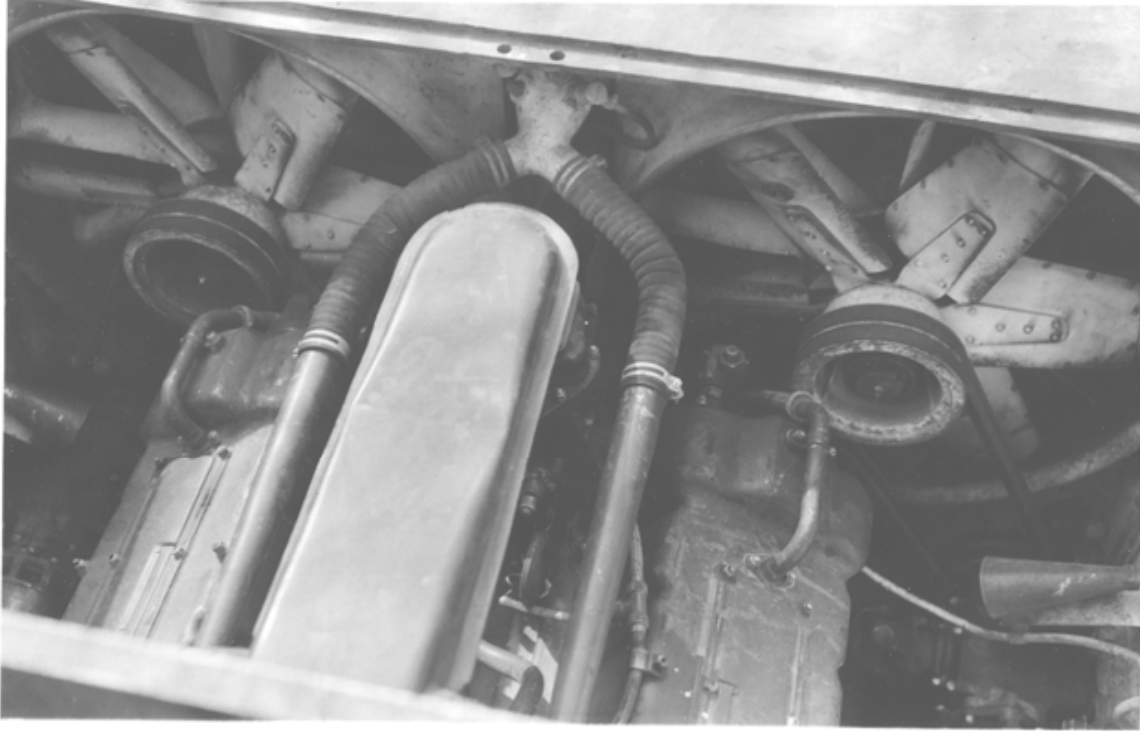
SC-203698: An M4A3E8 with a 1-inch add-on armor plate welded to the glacis. The loader's position is fitted out with an old-style commanders ring hatch. (NARA, Signal Corps photo)



SC-195693: Tankers resorted to field expedients to reduce the likelihood of a penetration, at least by the ubiquitous German bazooka-style weapons. They first turned to sandbags during the fighting in Normandy; tests offered mixed results as to whether the bags worked, but they made tankers feel safer. Here, a 3d Armored Division Sherman displays a typical sandbagging job near Stolberg, Germany, on 14 October 1944. (NARA, Signal Corps photo)



SC-203168: A 2d Armored Division M4A3 (76mm) displays another field expedient armor: a layer of concrete poured on the glacis. Experiments conducted by the 709th Tank Battalion in February 1945 indicated that poured concrete did not stop bazookas from penetrating the armor plate, but that it did reduce the splash of molten steel inside the tank caused by the warhead to "negligible" proportions. (NARA, Signal Corps photo)

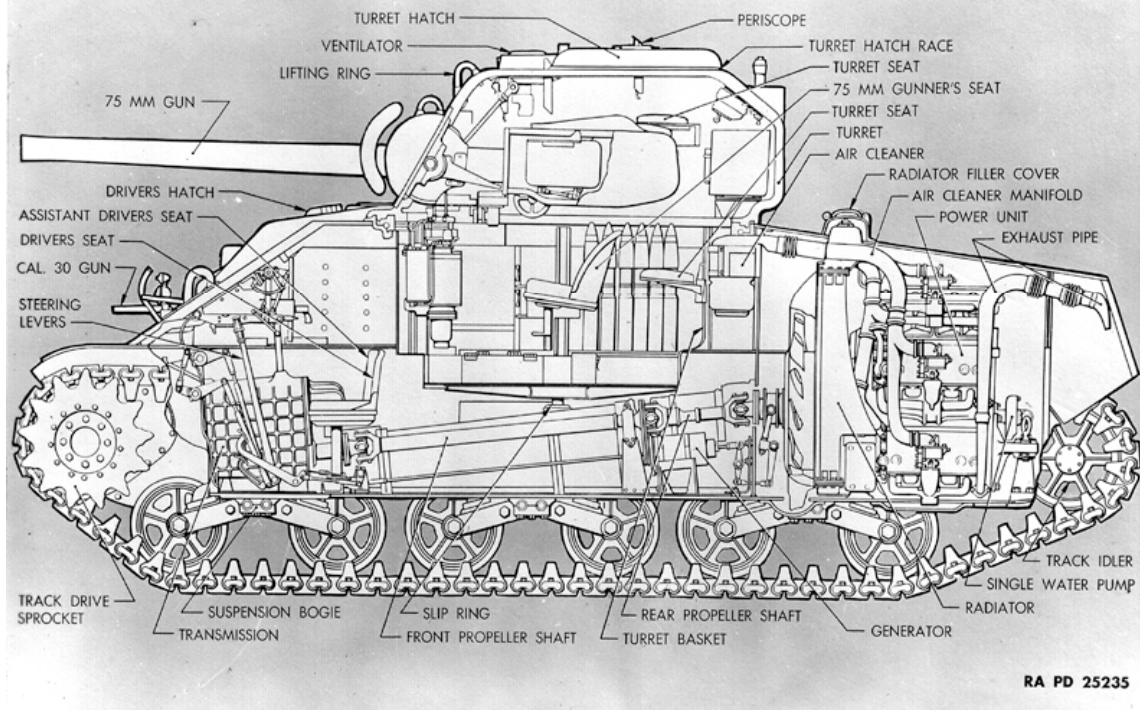


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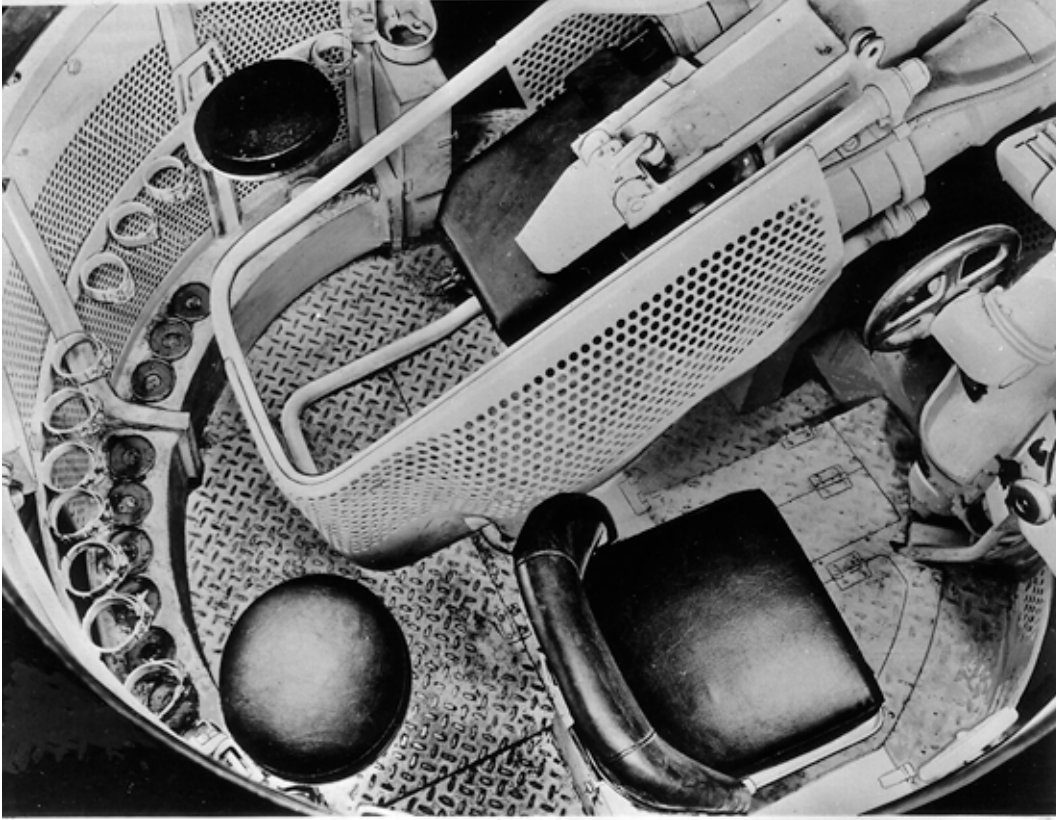
P-267 FORT KNOX, KENTUCKY

Ford V-8 Engine Medium M4A3 showing Fan End.

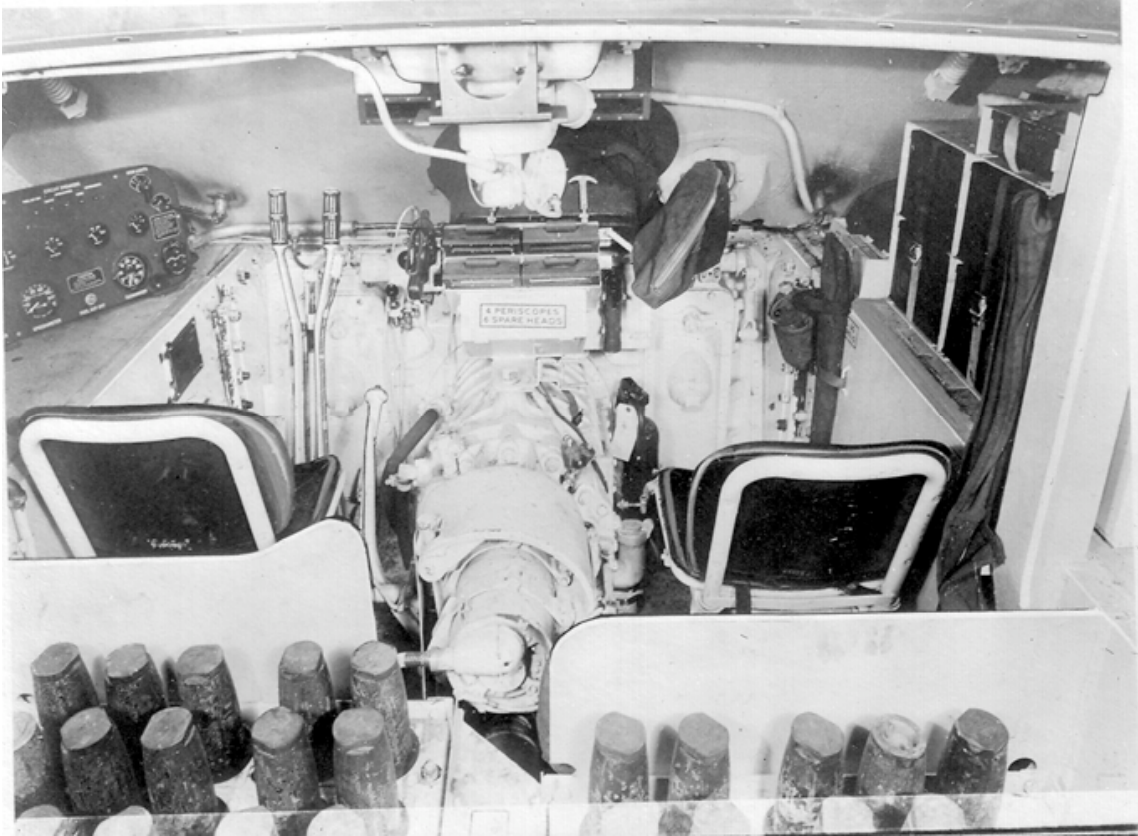
AFB3908: The Ford V-8 engine became the preferred type in the Sherman and powered the M26 Pershing. (NARA, records of the Chief of Ordnance)



Army5: This diagram of the M4A4, which was used for training by some American battalions but was mainly supplied to the Allies under Lend-Lease, shows a typical internal Sherman layout. The M4A4 had five automobile engines welded together and a slightly longer hull to fit them. (NARA, records of the Chief of Ordnance)



Army8: View of the turret interior in a 75mm Sherman. The seats, clockwise from the upper one, are the loader's, the gunner's and the commander's. The hoops on the turret basket are the ammunition ready racks. (NARA, records of the Chief of Ordnance)



Army9: Interior of the M4 hull; the bow machine gun is covered. The transmission is between the two seats, and the driver's steering levers, which applied the brakes to the two tracks, are visible. Note the ammunition racks behind the seats; one of the bog's jobs was to pass shells up into the turret basket. (NARA, records of the Chief of Ordnance)



SC-170176: This almost certainly is part of Lt. Col. Louis Hightower's 2d Battalion retreating toward Sbeitla on 14 February 1943. An M4A1, recognizable by its smoothly curving cast hull, pulls a halftrack across a dry riverbed near Sidi bou Zid. (NARA, Signal Corps photo)



SC-170101: A German Mark IV knocked out by artillery fire at Kasserine Pass only days after Hightower's shootout. With the long 75mm gun, the panzer was a rough match for the Sherman. (NARA, Signal Corps photo)



SC-175484: A Mark VI knocked out by a British Sherman in Tunisia in April 1943. An M4 gunner usually had to catch a Tiger with a shot from the flank, as in the case, or the rear in order to score a kill. (NARA, Signal Corps photo)



111-ADC-2711_1: A 747th Tank Battalion Sherman on the Roer plain two days before Sgt. Herman Deaver's encounter with a Tiger in one of this vehicle's sisters. This tank is in close proximity to the enemy, and the commander, whose head is out of his hatch, is using the covers to protect himself from snipers. (NARA, Signal Corps photo)



SC-192380: One of the first M4A1s (76mm) to see action in Normandy in August 1944. This one belongs to the 33d Armored Regiment, 3d Armored Division. The Signal Corps caption claims the new gun was known as the "hole puncher." (NARA, Signal Corps photo)



111-ADC-9704_2: A better view of the M4A1 (76mm), again belonging to the 3d Armored Division; this tank is part of the force that captured Cologne in March 1945. (NARA, Signal Corps film)



SC-195943: One of the first M4A3 (76mm) tanks to reach a separate tank battalion serves with the 756th in Brouvelieures, France, in late October 1944. (NARA, Signal Corps photo)



SC-208218: Second Armored Division tankers compare 76mm (right) and 75mm ammunition in front of an M4A3E8. (NARA, Signal Corps photo)



SC-197356: An infantry officer helps the commander of an M4A3 (76mm) pick out the enemy during street fighting in Gürzenich, Germany, on 14 December 1944. (NARA, Signal Corps photo)



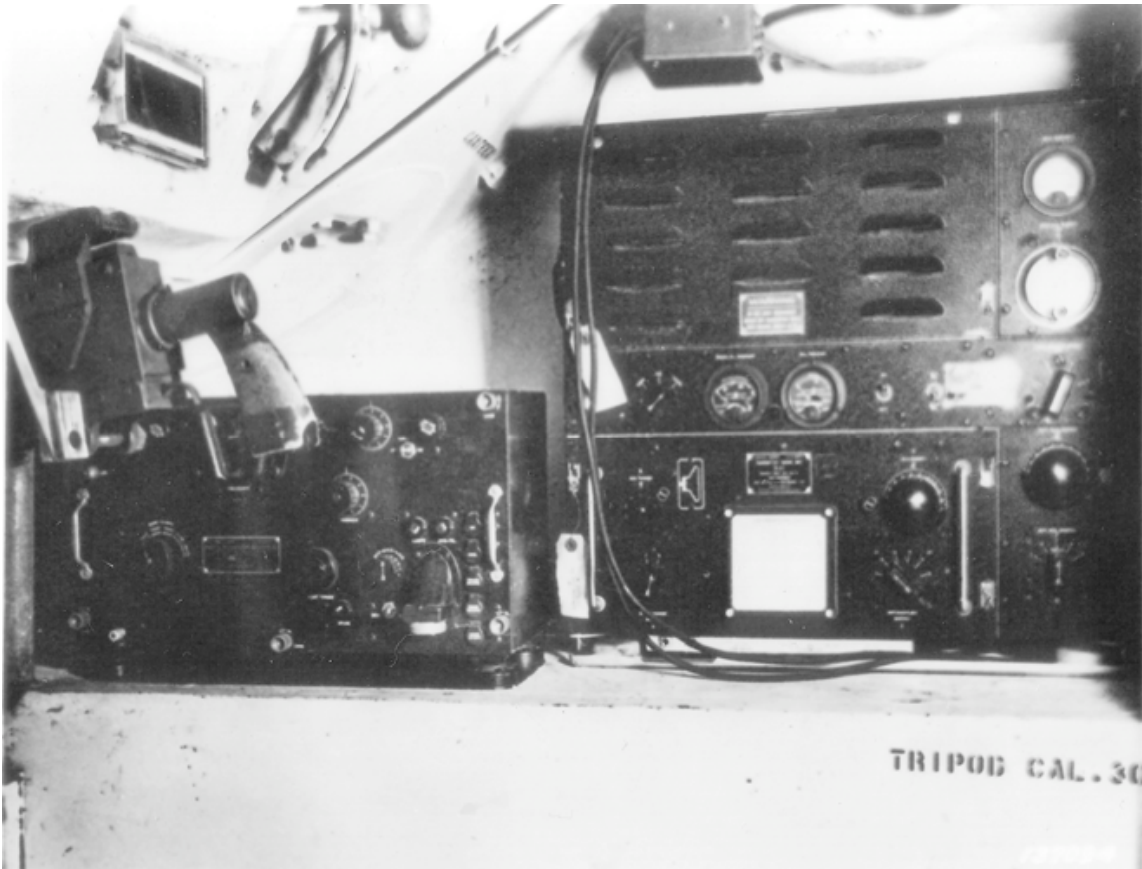
111-HRB-30_1: The tank fires! The 76mm produced such a large muzzle blast that crews often found it difficult to spot the impact and correct the aim, particularly when dry conditions produced kicked-up dust. (NARA, Signal Corps film)



111-ADC-4025_1: A close-up view of track grousers, with their curved-edge construction that inspired the nickname "duckbills". (NARA, Signal Corps film)



SC-205225: The 25th Tank Battalion, 14th Armored Division, enters Eichstatt on 25 April 1945. Though blessed with improvements to the gun and suspension, the Easy 8 had armor no thicker than that on earlier models, so crews continued to turn to sandbagging for extra protection. (NARA, Signal Corps photo)



SC-137094-R: The bog's .30-caliber machine gun (left) in place in an M4A3 command tank. The bog had to aim his fire by watching where his tracer rounds hit; the fixed periscope that replaced early vision blocks is visible above the weapon. The Sherman carried a tripod so that the crew could use the weapon dismounted from the tank. (NARA, Signal Corps photo)



SC-201557-S: A 3d Armored Division tanker in Viersen, Germany, fires his .30-caliber antiaircraft machine gun at a strafing German plane on 2 March 1945. (NARA, Signal Corps photo)



SC-239946: Firing the .50-caliber machine gun mounted beside the commander's hatch on an early model M4. This photo offers a clear view of the blade-style sighting vane the commander could use to roughly aim the main gun at a target. (NARA, Signal Corps photo)



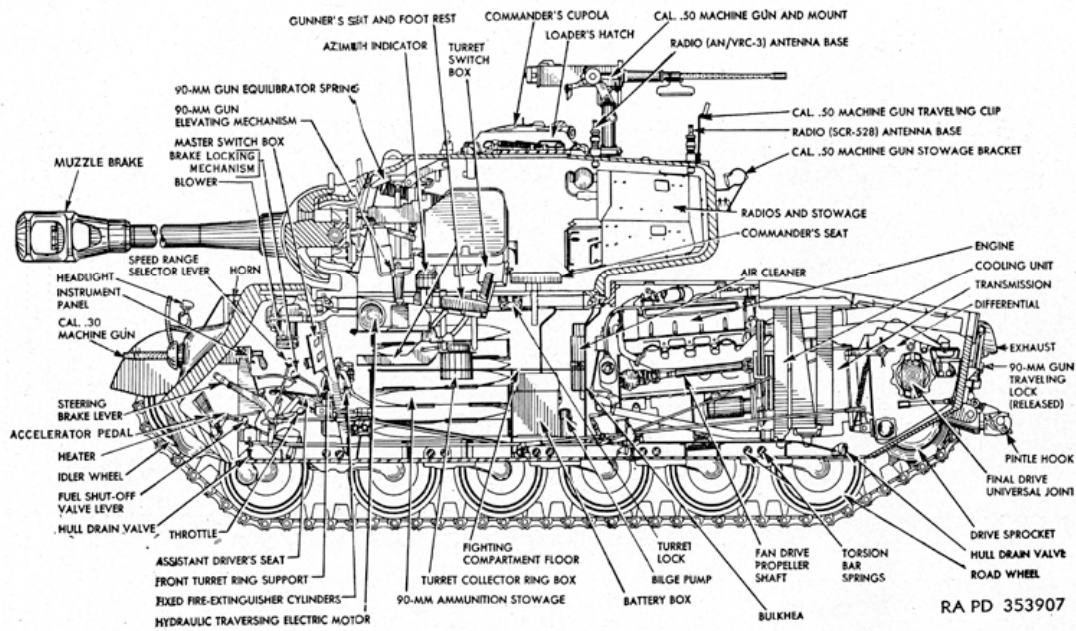
SC-204486: The new M26 heavy tank at Aberdeen Proving Grounds. The torsion-bar suspension system became standard on American tanks for decades to come. (NARA, Signal Corps photo)



SC-210672: An M26 fires at German positions on the far side of the Rhine River in March 1945. (NARA, Signal Corps photo)



111-ADC-2208_1: A 3d Armored Division M26 in action during street fighting in Cologne in early March 1945. This Pershing engaged and destroyed a Mark V Panther in the main square. (NARA, Signal Corps film)



TM 9-735_1: Internal layout of the M26 Pershing. (NARA, records of the Government Printing Office)