ARCHIVED REPORT

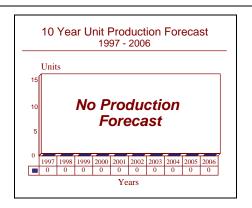
For data and forecasts on current programs please visit

www.forecastinternational.com or call +1 203.426.0800

M47 Patton - Archived 3/97

Outlook

- Production of the M47 completed in 1953
- Total of 8,576 M47 tanks manufactured
- M47 remains in service in at least 11 nations
- No additional significant modernization or retrofit programs for this tank are forecast



Orientation

Description. A tank

Sponsor. The development and United States procurement of the M47 was sponsored by the United States Department of Defense through the United States Army Tank Automotive Command.

Contractors. This tank was manufactured at the Detroit Tank Plant by the Defense Division of Chrysler Corporation (now General Dynamics Land Systems Division), Detroit, Michigan, and by the American Locomotive Company (now ALCO Products Incorporated); Schenectady, New York, United States of America. Major subcontractors included Continental Motors (now Teledyne Continental), General Motors Corporation, Allison Transmission Division and Watervliet Arsenal.

Licensees. None

Status. Production of the M47 ended in late 1953; the tank remains in service with a number of nations around the world.

Total Produced. A total of 8,576 M47 tanks was built: Detroit Arsenal manufactured 5,481 and American Locomotive manufactured the remaining 3,095.

Application. A tank for the projection of power as well as defensive missions.

Price Range. Through international arms merchants, an M47 modernized to M47M standards lists for about \$290,000 in 1997 United States dollars.

Technical Data

Crew. Five: commander, gunner, loader, driver, machine gunner.

Armor. Conventional rolled homogeneous with a maximum thickness of 11.5 centimeters (4.52 inches) on the mantlet.

Dimensions. The following data are for the last production standard.

	SI units	US units
Length	8.51 meters	27.92 feet
Width	3.51 meters	11.52 feet
Height	3.35 meters	10.99 feet
Fuel capacity	875 liters	232.71 gallons
Weight	46.17 tonnes	50.89 tons

Performance. The maximum speed and range figures are on a metalled road.

	SI units	US units
Maximum speed	48 kilometers per hour	29.8 milers per hour
Maximum range	130 kilometers	80.73 statute miles
Step	91.4 centimeters	2.99 feet
Trench	2.59 meters	8.5 feet
Slope	35%	35%
Gradient	60%	60%
Fording	1.22 meters	4.0 feet

Engine. The AV-1790-5B spark ignition engine was provided by Continental (now Teledyne Continental Motors); this air cooled engine of V-12 configuration is rated at 604.01 kilowatts (810 horsepower) at 46.67 revolutions per second (2,800 revolutions per minute). The power-to-weight ratio with this engine is 13.09 kilowatts per tonne (15.92 horsepower per ton). Wisconsin provided the model TFT two-cylinder spark ignition engine used for an auxiliary power unit.

Gearbox. The CD-850-4/4A/4B gearbox was provided by General Motors Corporation, Allison Transmission Division. This cross drive unit has two forward and one reverse gear ratios.

Suspension and Running Gear. This tank uses a torsion bar suspension with six dual tired road wheels and three track return rollers on each side. Hydraulic shock dampers are located at the first, second, fifth and sixth road wheel stations. An adjustable tensioning

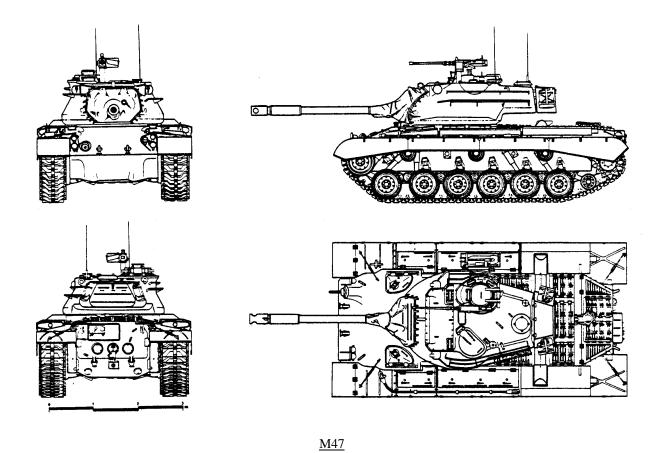
wheel is located between the last road wheel and the drive sprocket.

Armament. The main armament of the M47 is the M36 90 millimeter cannon fitted with several types of gas deflectors and a fume extractor. All NATO standard 90 millimeter ammunition, including an Armor Piercing Fin Stabilized Discarding Sabot round, can be fired from this cannon. A total of seventy-one 90 millimeter rounds are carried with 11 rounds in the turret bustle for ready use. Secondary armament includes a M1919A4E1 30 caliber machine gun in a coaxial mount and another in a bow mount. A 12.7 millimeter M2HB machine gun is mounted on the turret roof.

Fire Control. The gunner and commander are provided with an M20 dual mode (wide angle observation and ranging/sighting) periscope. The gunner is provided with an M12 stereoscopic ballistic computing rangefinder.

Variants/Upgrades

No variants of the M47 were developed to production status.



Source: Forecast International