

Early Japanese Tanks

Ko-Gata Sensha: Renault FT18 tanks purchased from France around 1922, some in service until 1940. All armed with 37mm gun, no machineguns.

Otsu-Gata Sensha: Renault NCI tanks purchased from France in 1927, some staying in service until 1940.

Japanese Heavy Tank Designs

Experimental Tank No. 1: Built in 1927, multi-turreted, about 20 tons, crew of 5, 57mm gun and two 6.5mm machineguns. Similar to British Vickers Medium Tank Mark C. One built. It was rebuilt later in 1927 as:

Experimental Heavy Tank: Thinner armour, about 18 tons, armament upgraded to short 70mm gun. Speed about 12 mph.

Heavy Tank Type 91: Slightly larger version of Experimental Heavy Tank, built in 1931. Same details, but 3 machineguns and speed 16 mph. Sometimes known as **Type 92**.

Chi-I-Sha Heavy Tank Type 95: Similar to the earlier heavy tank designs, this had a 37mm gun in one of the sub-turrets. 14 mph. One built.

O: 110 tons, started in 1940, never finished.

O-I: 130 tons, 105mm gun in the main turret, 47mm gun plus machineguns in the sub-turrets. One possibly built in 1944.

Type 92 Osaka	Japan	1932
Gun: None	Weight: 6 tons	
MG: 2 x 6.5mm		
Speed: 37 mph	Crew: 3	
UpHullFr: 11/0°	TurFr: 11/15°	
LowHullFr: 11/0°	GunMant: 11/0°	
HullSide: 11/0°	TurSide: 11/15°	
LowHull: 11/0°	TurRear: 11/15°	
HullRoof: 6/85°	TurRoof: 6/90°	
HullRear: 11/0°		

Notes: Four-wheeled armoured car.

Type 93 Sumida	Japan	1933
Gun: None	Weight: 8 tons	
MG: 1 x 6.5mm		
Speed: 37 mph	Crew: 6	
UpHullFr: 16/45°	TurFr: 16/20°	
LowHullFr: 16/10°	GunMant: 11/0°	
HullSide: 11/0°	TurSide: 16/20°	
LowHull: 11/0°	TurRear: 16/20°	
HullRoof: 6/85°	TurRoof: 6/80°	
HullRear: 11/15°		

Notes: Six-wheeled armoured car.

Type 89 Chi-Ro	Japan	1929
Gun: 57mm L15	Weight: 13 tons	
MG: 2 x 6.5mm		
Speed: 16 mph	Crew: 4	
UpHullFr: 17/37°	TurFr: 17/15°	
LowHullFr: 17/60°	GunMant: 10/0°	
HullSide: 17/0°	TurSide: 15/15°	
LowHull: 17/0°	TurRear: 15/0°	
HullRoof: 10/80°	TurRoof: 10/90°	
HullRear: 17/60°		

Notes: Heavily influenced by the Vickers Medium Mark C. This tank was built as two main types:

Type 89-Ko, or 89A: The original version.

Type 89-Otsu, or 89B: New version from 1936 with deisel engine, minor manufacturing improvements, slightly better armour layout.



Medium Tank Type 89-Otsu Chi-Ro



Type 92 Combat Car	Japan	1932
Gun: None	Weight: 4 tons	
MG: 2 x 6.5mm or 1 x 13mm and 1 x 6.5mm		
Speed: 22 mph	Crew: 3	
UpHullFr: 6/65°	TurFr: 6/10°	
LowHullFr: 6/35°	GunMant: 10/0°	
HullSide: 6/0°	TurSide: 6/15°	
LowHull: 6/0°	TurRear: 6/10°	
HullRoof: 6/85°	TurRoof: 6/90°	
HullRear: 6/10°		

Notes: Light tank designed for cavalry support. Single 6.5mm machinegun in the turret, 6.5mm or 13mm machinegun in the left front sponson.

The Book of Tanks
Japanese Section: 6/20/2000

Type 94 Tankette Te-Ke	Japan	1934
Gun: None	Weight: 4 tons	
MG: 1 x 6.5mm		
Speed: 25 mph	Crew: 2	
UpHullFr: 12/60°	TurFr: 10/30°	
LowHullFr: 12/30°	GunMant: 7/15°	
HullSide: 6/0°	TurSide: 7/15°	
LowHull: 4/0°	TurRear: 5/15°	
HullRoof: 4/90°	TurRoof: 4/90°	
HullRear: 4/0°		

Notes: Sometimes called the **Type 92**. Based on the Carden-Loyd Mark VIB. Very thin armour. Used in large numbers in WWII.

Type 97 Te-Ke/Ke-Ke	Japan	1938
Gun: 37mm L37	Weight: 5 tons	
MG: None		
Speed: 26 mph	Crew: 2	
UpHullFr: 12/60°	TurFr: 12/0°	
LowHullFr: 12/15°	GunMant: 12/0°	
HullSide: 7/15°	TurSide: 7/15°	
LowHull: 6/0°	TurRear: 5/15°	
HullRoof: 6/90°	TurRoof: 6/90°	
HullRear: 5/15°		

Notes: Japan's last tankette design. Some had a 7.7mm machinegun instead of the 37mm cannon. Used extensively in WWII.


Type 95 Ha-Go	Japan	1935
Gun: 37mm L37	Weight: 7 tons	
MG: 1 or 2 x 7.7mm		
Speed: 28 mph	Crew: 3	
UpHullFr: 12/45°	TurFr: 12/15°	
LowHullFr: 12/25°	GunMant: 15/15°	
HullSide: 12/30°	TurSide: 12/15°	
LowHull: 12/0°	TurRear: 12/15°	
HullRoof: 9/60°	TurRoof: 9/90°	
HullRear: 12/0°		

Notes: Used extensively throughout WWII. Good light tank as long as it was not opposed by enemy armour. Very highly regarded by the Japanese soldiers.

Type 3 Ke-Ri: Same vehicle with short 57mm from Chi-Ha mounted in place of 37mm gun. Very few built in 1943.

Type 4 Ke-Nu: Early Chi-Ha turret on Ha-Go hull. About 100 vehicles converted, probably not used in combat.

So-Ki: Single or twin 20mm anti-aircraft mount on modified Ha-Go hull.



Light Tank Type 95 Ha-Go


Type 97 Chi-Ha	Japan	1938
Gun: 57mm L18	Weight: 15 tons	
MG: 2 x 7.7mm		
Speed: 24 mph	Crew: 4	
UpHullFr: 25/45°	TurFr: 25/15°	
LowHullFr: 25/15°	GunMant: 25/0°	
HullSide: 15/15°	TurSide: 25/15°	
LowHull: 12/0°	TurRear: 12/15°	
HullRoof: 8/80°	TurRoof: 8/90°	
HullRear: 7/15°		

Notes: Produced in large numbers, this was Japan's primary medium tank in WWII. The low-velocity 57mm was not suitable for fighting other tanks, so in 1941 a new version was introduced with a redesigned turret and long 47mm L48 gun:

Shinhoto Chi-Ha:

UpHullFr: 25/45°	TurFr: 25/20°
LowHullFr: 17/30°	GunMant: 30/0°
HullSide: 20/20°	TurSide: 25/25°
LowHull: 20/0°	TurRear: 25/30°
HullRoof: 8/80°	TurRoof: 10/85°
HullRear: 20/20°	

Notes: This was an interim design until the Type 1 Chi-He could reach production. *Shinhoto* means "New Turret". This vehicle is sometimes called the **Type 97 Chi-Ha Special**. Produced in large numbers.



Medium Tank Type 97 Shinhoto Chi-Ha

The Book of Tanks
Japanese Section: 6/20/2000

Sa-To: 20mm anti-aircraft gun in an open mount on a Type 97 Chi-Ha hull. Built in 1938.

Type 98 Ken-Ni	Japan	1938
Gun: 37mm L37	Weight: 7 tons	
MG: 2 x 7.7mm		
Speed: 34 mph	Crew: 3	
UpHullFr: 12/45°	TurFr: 12/25°	
LowHullFr: 12/30°	GunMant: 15/5°	
HullSide: 12/5°	TurSide: 12/15°	
LowHull: 12/0°	TurRear: 12/15°	
HullRoof: 6/90°	TurRoof: 6/90°	
HullRear: 9/45°		

Notes: Light tank intended to be a replacement for the Ha-Go. Only about 200 built.

Type 98-B Ken-Ni: Same vehicle with Christie suspension. Only one built.

Type 2 Ke-To: Slightly modified Ken-Ni with longer 37mm L46 gun. Only about 30 built.

Type 1 Chi-He	Japan	1941
Gun: 47mm L48	Weight: 17 tons	
MG: 2 x 7.7mm		
Speed: 27 mph	Crew: 5	
UpHullFr: 50/45°	TurFr: 50/0°	
LowHullFr: 50/15°	GunMant: 50/10°	
HullSide: 15/15°	TurSide: 45/15°	
LowHull: 12/0°	TurRear: 12/15°	
HullRoof: 8/80°	TurRoof: 8/90°	
HullRear: 8/15°		

Notes: Intended replacement for the Medium Tank Type 97 Chi-Ha. Same turret as the Shinhoto Chi-Ha but with thicker armour. Hull was similar to Chi-Ha but had improved shape and thicker armour.

Ta-Ha: Chi-He with twin 37mm anti-aircraft guns fitted in place of the 47mm gun. Very few, if any, actually built.

Type 3 Chi-Nu: Slightly larger version of Chi-He, with 75mm L38 gun, 19 tons, built in 1943. Only around 60 built, none used in combat.

Type 4 Chi-To: Again, slightly larger version of Chi-Nu. Long 75mm L56 gun. 30 tons, built in 1944. Probably between 4 and 6 vehicles completed, none saw combat.

Type 5 Chi-Ri: Similar to Chi-To but with a 37mm L46 gun mounted in the driver's plate instead of the hull machinegun, in addition to the 75mm L56 gun in the turret. 37 tons. Only one built in 1945. One source says this was armed with 88mm and 57mm guns.

Type 1 Ho-Ni	Japan	1942
Gun: 75mm L38	Weight: 15 tons	
MG: None		
Speed: 25 mph	Crew: 4	
UpHullFr: 25/45°	SupFr: 25/10°	
LowHullFr: 25/15°	GunMant: 25/15°	
HullSide: 15/15°	SupSide: 8/15°	
LowHull: 12/0°	TurRear: Open	
HullRoof: 8/80°	TurRoof: 8/90°	
HullRear: 7/15°		

Notes: Self-propelled gun with 75mm anti-tank gun mounted on a Chi-Ha chassis. Fixed superstructure with a small roof, open at the rear.

Type 2 Ho-Ni II: Same vehicle but with 105mm howitzer instead of 75mm gun.

Type 3 Ho-Ni III: Same as Ho-Ni 75mm but with superstructure completely enclosed.

Type 4 Ho-Ro: Very similar to Ho-Ni. 150mm howitzer in fixed superstructure on Chi-Ha chassis.



Gun Tank Type 1 Ho-Ni

Type 2 Ka-Mi	Japan	1942
Gun: 37mm L46	Weight: 12 tons	
MG: 2 x 7.7mm		
Speed: 23 mph	Crew: 6	
UpHullFr: 13/45°	TurFr: 13/15°	
LowHullFr: 13/15°	GunMant: 13/0°	
HullSide: 11/0°	TurSide: 9/15°	
LowHull: 9/0°	TurRear: 9/15°	
HullRoof: 9/90°	TurRoof: 9/90°	
HullRear: 9/0°		

Notes: Amphibious version of the Light Tank Type 95 Ha-Go. Large detachable buoyancy tanks front and rear.

Type 3 Ka-Chi: Amphibious tank based on Medium Tank Type 1 Chi-He. 47mm gun.

Type 5 To-Ku: Larger and heavier than Ka-Chi, with 47mm gun mounted in the hull and 25mm gun in the turret. Only one built.

The Book of Tanks
Japanese Section: 6/20/2000

Type 60	Japan	1960
Gun: 2 x 106mm Recoilless Rifle		
MG: 2 x .50 cal	Weight: 9 tons	
Speed: 30 mph	Crew: 3	
UpHullFr: 15/60°		
LowHullFr: 15/45°		
HullSide: 15/0°		
LowHull: 11/0°		
HullRoof: 9/90°		
HullRear: 9/0°		
Notes: Lightweight tank hunter. The two .50 calibre ranging machineguns are mounted directly on the two recoilless rifle barrels and are used for targetting, not as anti-personnel weapons.		

Type 73 MICV	Japan	1974
Gun: None	Weight: 15 tons	
MG: 1 x .50 cal, 1 x .30 cal		
Speed: 37 mph	Crew: 2	
UpHullFr: 15/65°		
LowHullFr: 15/45°		
HullSide: 16/0°		
LowHull: 12/0°		
HullRoof: 12/90°		
HullRear: 16/0°		
(All armour numbers are guesses.)		
Notes: Standard Mechanised Infantry Combat Vehicle of the Japanese Army for several decades. Amphibious. Carries 10 soldiers.		

Type SU60	Japan	1960
Gun: None	Weight: 13 tons	
MG: 1 x .50 cal, 1 x .30 cal		
Speed: 31 mph	Crew: 4	
UpHullFr: 15/45°		
LowHullFr: 15/45°		
HullSide: 12/0°		
LowHull: 12/0°		
HullRoof: 12/80°		
HullRear: 12/0°		
Notes: Traditional armoured personnel carrier design. Carries 6 soldiers.		

Type 74 MBT	Japan	1973
Gun: 105mm	Weight: 42 tons	
MG: 1 x .50 cal, 1 x .30 cal		
Speed: 37 mph	Crew: 4	
UpHullFr: 65/60°	TurFr: 60/45°	
LowHullFr: 65/45°	GunMant: 55/45°	
HullSide: 50/30°	TurSide: 50/45°	
LowHull: 50/0°	TurRear: 50/45°	
HullRoof: 30/90°	TurRoof: 30/90°	
HullRear: 30/30°		
(All armour numbers are guesses.)		
Notes: Innovative Main Battle Tank design. Hydropneumatic suspension allows the driver to adjust the height of the vehicle up or down, and to compensate for rough ground.		

Type 61 MBT	Japan	1962
Gun: 90mm	Weight: 39 tons	
MG: 1 x .50 cal, 1 x .30 cal		
Speed: 28 mph	Crew: 4	
UpHullFr: 64/45°	TurFr: 64/30°	
LowHullFr: 64/30°	GunMant: 64/45°	
HullSide: 25/20°	TurSide: 50/30°	
LowHull: 25/0°	TurRear: 35/0°	
HullRoof: 15/90°	TurRoof: 15/90°	
HullRear: 15/0°		
Notes: Japan's first post-WWII main battle tank. Looks a lot like American M47.		

Type 90 MBT	Japan	1990
Gun: 120mm	Weight: 55 tons	
MG: 1 x .50 cal, 1 x .30 cal		
Speed: 43 mph	Crew: 3	
Notes: Modern MBT design, looks a bit like Leopard 2. Suspension is mixed, torsion bar on the center ground wheels and hydropneumatic on the first and last ground wheels.		