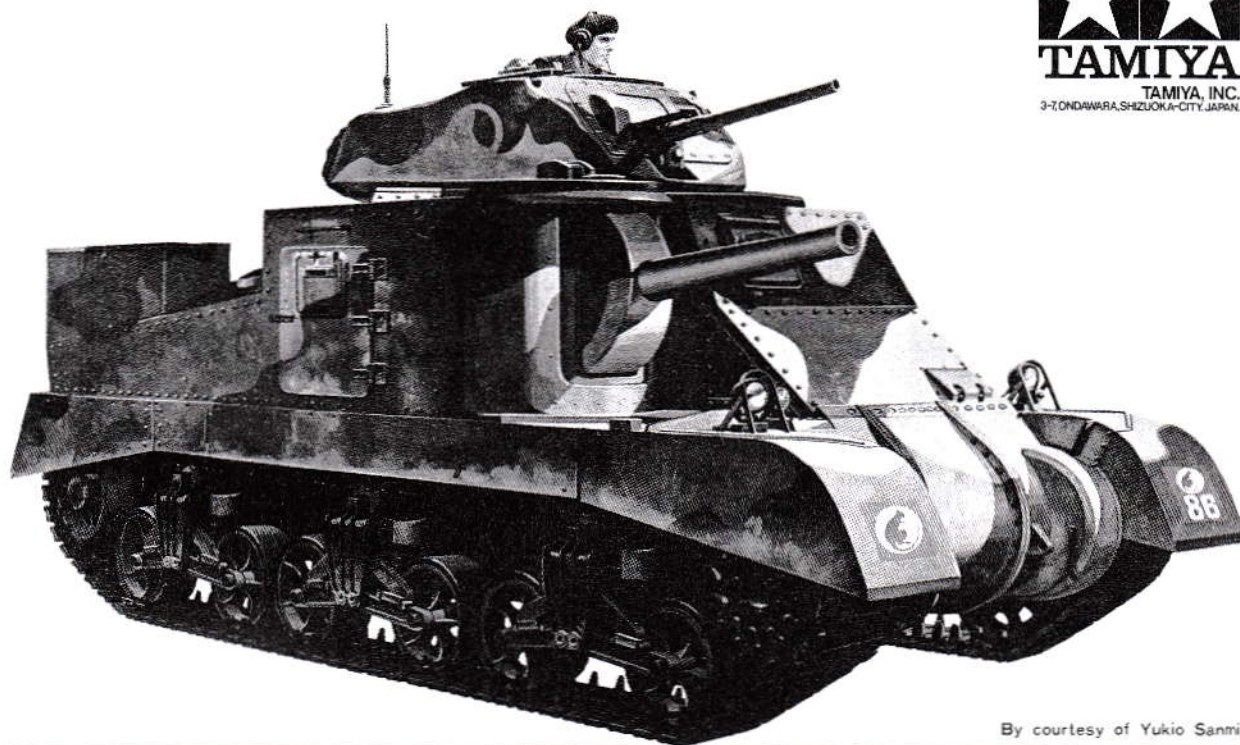


BRITISH ARMY M3 GRANT Mk I MEDIUM TANK

1/35 MILITARY MINIATURE

SERIES



By courtesy of Yukio Sanmi

Grants Debut At Gazala

At 7:30AM on the morning of May 27th, 1942, the British 7th Armored Division's 4th Armored Brigade, made up of 8th Hussars, 3rd Royal Tank Regiment, and 5th Royal Tank Regiment and under the command of Brigadier A.H. Gatehouse, advanced to a point 10km southeast of Bir el Harat. There they engaged the 1st Battalion of the German 8th Panzer Regiment, the vanguard of the Africa Corps' 15th Panzer Division which was attempting a flanking maneuver around the British defensive lines at Gazala. The tanks of the 8th Hussars opened fire on the German tanks, which were advancing in a wedge shaped formation, and scored hits from a range at which the Panzer III's 50mm guns could not reply. This was the first time that the 15th Panzer Division had suffered such an attack since their deployment to the North African front and the tank commanders were astonished and could hardly believe what they were seeing. They took up their binoculars to observe the enemy ahead and their eyes were met by tall profile tanks which they had never encountered before. These were Medium Tank M3 "General Grant" Mk.I.s, which debuted on the battlefield at this opening engagement of the Battle

of Gazala. The 8th Hussars used the 75mm M2 guns on their Grant Mk.I.s to great effect, firing on the 33rd Mechanized Artillery Regiment's positions to neutralize it and then inflicted severe damage on the 8th Panzer Regiment's 1st Battalion. This same battalion was nearly annihilated when the 3rd Royal Tank Regiment also joined the attack, but timely intervention from the 8th Panzer Regiment's 2nd Battalion defeated the 8th Hussars and also forced the 3rd Royal Tank Regiment to abandon sixteen of their Grant Mk.I tanks on the battlefield.

This action, which took place near a position known as "Knightsbridge," was the opening round of the Battle of Gazala. For twenty two days, the 15th Panzer Division's 8th Panzer Regiment and 1st Panzer Division's 5th Panzer Regiment were engaged in intense combat against the British 2nd, 4th, and 22nd Armored Brigades. The British Grant Mk.I.s were able to inflict heavy losses on the Africa Corps units at one point, but the German forces' use of their 88mm guns and their more extensive experience in mechanized warfare, combined with inexperienced British tank unit commanders and under-trained British tank crews, resulted in a German victory. Tobruk was captured and the British 8th Army was driven back to the defensive lines at El Alamein in Egypt. However, following the battle Rommel observed that "the advent of the new American tank had torn great holes in our ranks. Our entire force now stood in heavy and destructive combat with a superior enemy." If the British armored units had utilized their Grant Mk.I.s in a more concentrated manner, the battle at

Knightsbridge may have ended with a British victory instead.

The British Need for Tanks

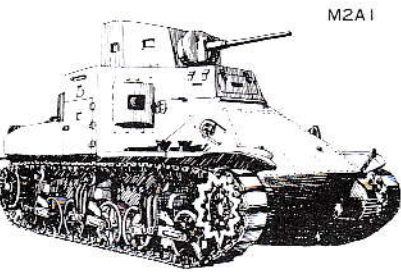
In June 1940, the British Army deployed Brigadier D. H. Pratt's 1st Army Tank Brigade (4th and 7th Royal Tank Regiments) and Major General R. Evans' 1st Armored Division (2nd and 3rd Armored Brigades) to France. These units served as the mechanized component of Lord Gort's British Expeditionary Force. However, the BEF was pushed back by the might of the German advance and were eventually forced to leave behind most of their equipment, including tanks, and evacuate from France via Dunkerque and Cherbourg. Due to the need to strengthen their tank forces and replace the losses suffered in France, a British Tank Commission was sent to the United States to plan the procurement of American made tanks.

At the time, the U.S. Army, having observed the war developments in Europe, was undergoing reorganization and had established new tank units. The production of light and medium tanks to equip these new units was also passed from the military arsenal to companies in the civilian sector. William S. Knudsen, the president of General Motors Corporation, became a member of the National Defense Advisory Commission and arranged for the mobilization of American heavy industry to undertake the National Munitions Program. Production of light tanks was entrusted to American Car & Foundry while Chrysler, joined later by American Locomotive Company and Baldwin Locomotive Works, handled the production of medium

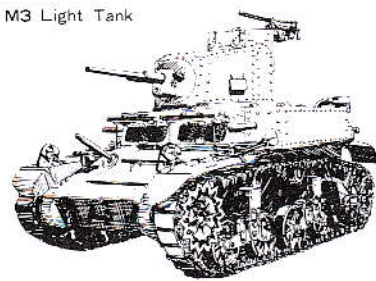
Pzkwf IV



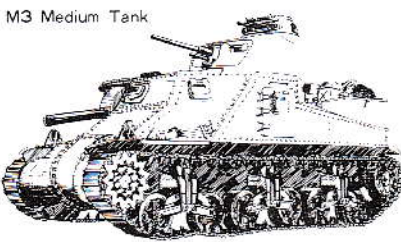
tanks. The M2A4 light tank and M2A1 medium tank initially planned for production by the National Munitions Program were replaced by the M3 light and M3 medium tank



M2A1



M3 Light Tank



M3 Medium Tank

designs. The British Tank Commission took interest in the M3 medium tank in particular

and based on their combat experiences in Europe, they provided detailed suggestions regarding design modifications while participating in the U.S. Army Tank Commission's discussions in an unofficial manner.

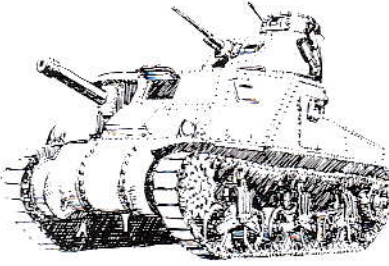
On April 11, 1940, the British Tank Commission placed orders with the Baldwin Locomotive Works, which had previously been contracted to produce tanks for the British Army in October 1940, as well as Lima Locomotive Works, Pressed Steel Car Company, and Pullman-Standard Car Manufacturing Company for a British specification variant of the pre-production pilot M3 medium tank built by Chrysler Corporation. This variant was to be armed with the same hull-mounted 75mm M2 Gun and turret-mounted 37mm M5 Gun as the previous M3 General Lee Mk.I medium tank, but with a larger, British-designed cast turret which did not have a machine gun cupola. The tank received the British designation "General Grant" Mk.I, after General Ulysses S. Grant, the victorious commander of the Union Army during the American Civil War who later became the 18th President of the United States. 242 examples were sent to the North African front at the beginning of 1942 and 167 were deployed with British tank units in the Gazala area.

The Grant Mk.I featured a hull of riveted construction which had a 75mm M2 Gun mounted in a sponson that was offset to the right of the tank. A 37mm M5 Gun turret was offset to the left side on top of the hull, and the tank's armament was rounded out with three M1919A4 .30 caliber Browning machine guns fitted on a front mount as well as coaxially with the 37mm gun. The machine gun cupola from the previous M3 Lee Mk.I was not fitted. The tank had a crew of six and was powered by a 400hp Wright (Continental) Whirlwind R975 EC2 9-cylinder radial gasoline engine matched to a synchromesh transmission with five forward and one reverse speeds. Suspension-wise, the Grant Mk.I was identical to the Lee Mk.I which meant they were equipped with smooth

rubber block tracks and vertical volute spring suspension.

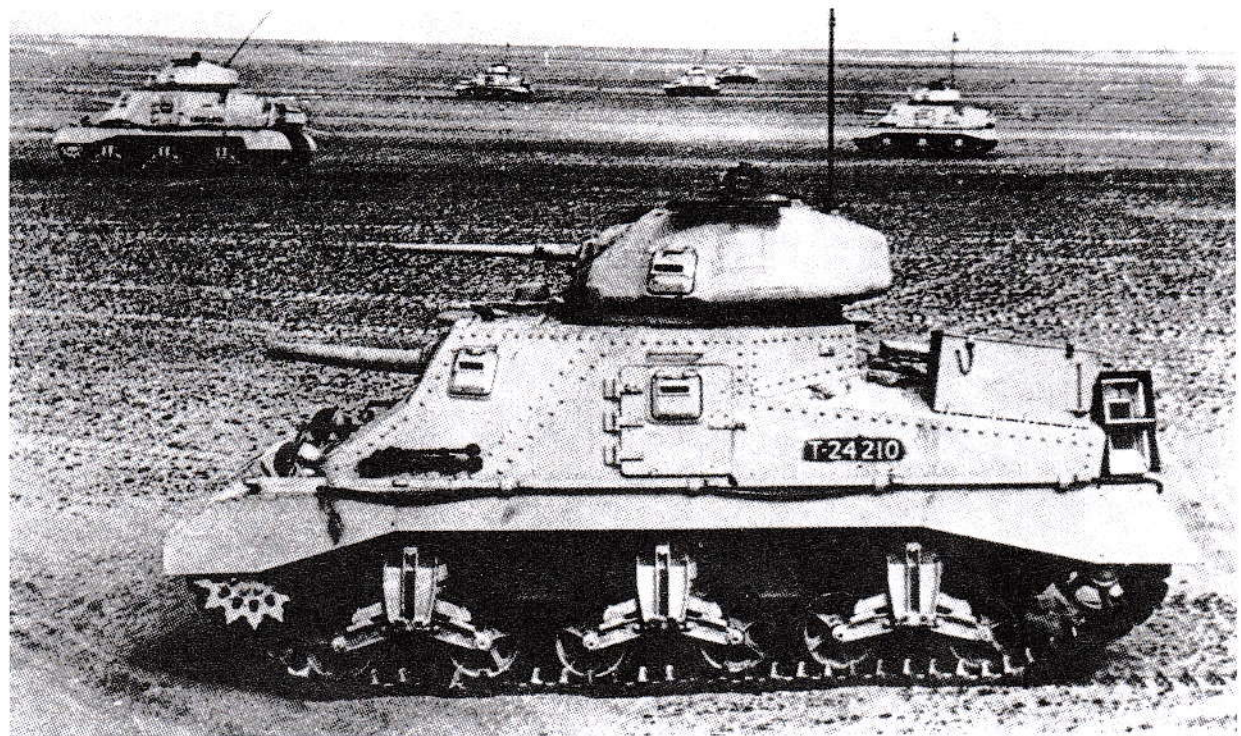
A variant designated M3A5 (Grant Mk.II) and equipped with the U.S. specification three-tier armament from the Lee Mk.I was also produced. These featured smoke dischargers on their 37mm gun turrets and mainly saw service in Burma in 1945.

M3A5 Grant Mk II



《Specifications》

- Length: 5.639m
- Width: 2.670m
- Height: 3.124m
- Weight: 28.233 tons (Fully-Loaded), 27.017 tons (Empty)
- Armament:
 - 75mm M2 Gun x1.
 - 37mm M5 Gun x1.
 - M1919A4 Browning Machine Gun x3
- Engine: Wright (Continental) Whirlwind R975 EC2 Radial Gasoline Engine
- Engine Output: 400hp/2,400rpm
- Maximum Speed: 35km/h
- Maximum Gradient: 36.5°
- Range: Between 192km and 234km
- Ammunition Capacity: (75mm) 41 rounds, (37mm) 179 rounds, (Machine Gun) 8,000 rounds
- Crew: 6



PAINTING



APPLYING DECALS

Painting of the M3 Grant

Military vehicles, including the M3 Grant, were often painted in camouflage schemes which matched the local battlefield environment in order to hide them from the eyes of the enemy. British tanks stationed at home or deployed in Europe were painted in overall Dark Green, but the M3 Grants in North Africa featured camouflage patterns of Dark Green, Flat White, Olive Drab, Red Brown, etc. applied on a base coat of Desert Yellow. The camouflage colors were applied to large areas and the demarcations between each color were distinctly clear. Other typical British camouflage patterns such as gradations and spots were rarely seen on these tanks.

Recommended Tamiya Colors


Use Tamiya Spray Colors for convenient painting of large areas and apply bottled colors with a brush to finish small details.


Flat Black	XF1
Khaki	XF49
Metallic Grey	XF56
Desert Yellow	XF59
Red Brown	XF64
Flat Flesh	XF15


M3 Grant Markings


British tanks featured division, brigade, squadron, and tactical markings, as well as vehicle identification numbers. Some tanks were adorned with nickname markings. Refer to the images shown at right.

Explanation of Markings

 Unit symbol for the 7th Armored Division, the famous "Desert Rats." This unit saw action throughout North Africa.

 Unit symbol for the 8th Armored Brigade, which was the same as that for the 10th Division. They saw action in the western desert and Tunisia.

 Unit symbol for the 22nd Armored Brigade, which took part in the fighting in Tunisia.

 The tactical marking indicated the tank's regiment.

The squadron marking indicated the tank's company and the number within indicates both vehicle number and platoon number.

Markings at the Battle of El Alamein 7th Division

-  Desert Yellow
-  Red Brown
-  Desert Yellow
-  Red Brown

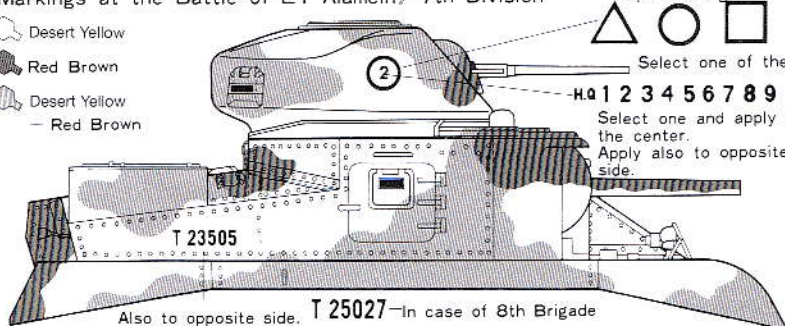
Squadron sign



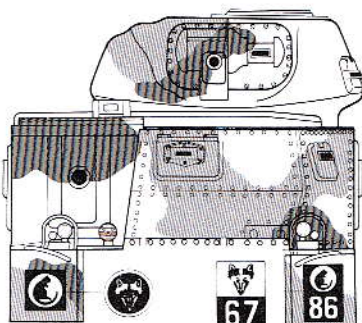
Select one of them

HQ 1 2 3 4 5 6 7 8 9

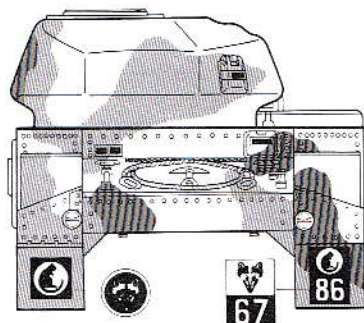
Select one and apply to the center.
Apply also to opposite side.



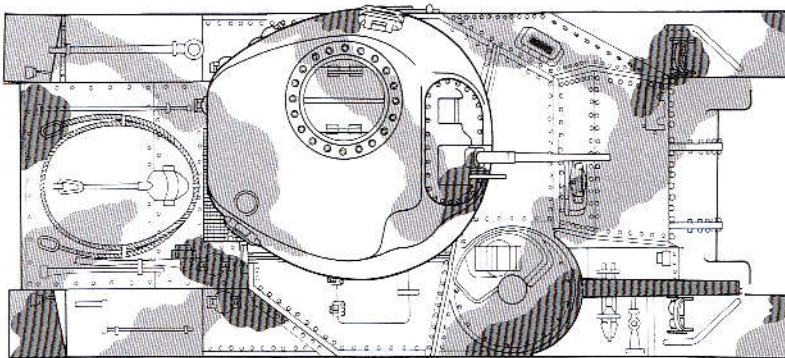
Also to opposite side. T 25027-In case of 8th Brigade




In case of 8th Brigade



In case of 8th Brigade



Markings at the Battle of Gazala 22nd Brigade

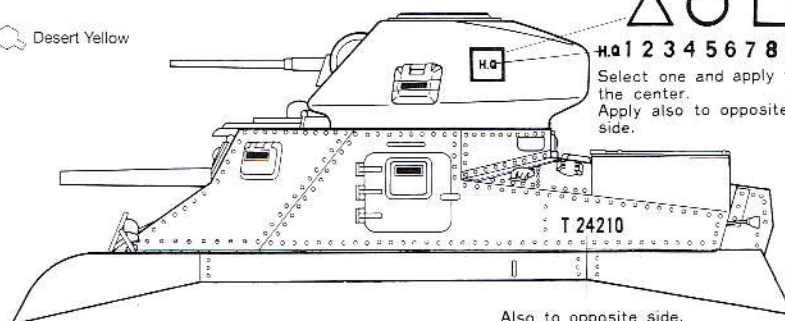
-  Desert Yellow

Squadron sign

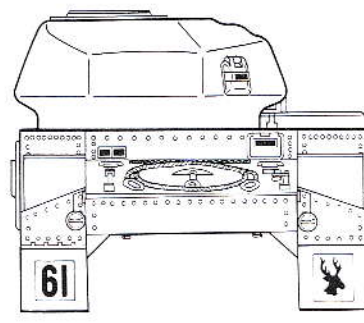
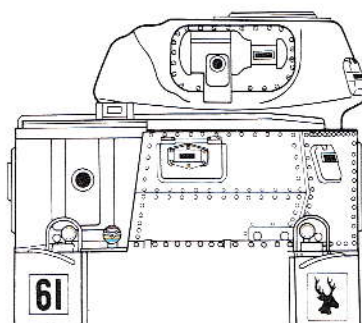


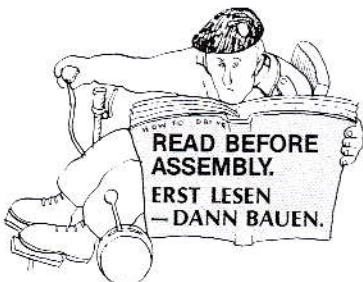
HQ 1 2 3 4 5 6 7 8 9

Select one and apply to the center.
Apply also to opposite side.



Also to opposite side.






**READ BEFORE
ASSEMBLY.
ERST LESEN
- DANN BAUEN.**

★ Read carefully and fully understand the instructions before commencing assembly. A supervising adult should also read the instructions if a child assembles the model.

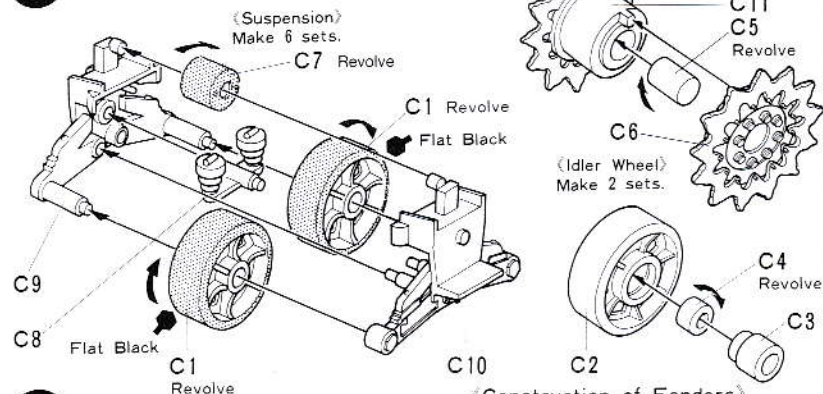
★ When assembling this kit, tools including knives are used. Extra care should be taken to avoid personal injury.

★ Do not snap off the parts from the sprue. Use a knife or side cutters to cut them off carefully.

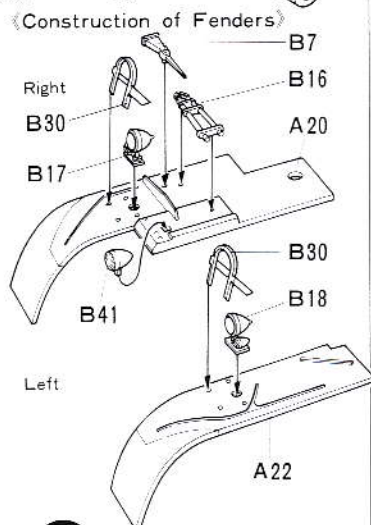
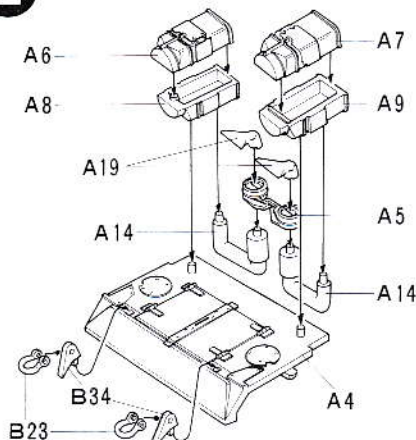
★ Read and follow the instructions supplied with paint and/or cement, if used (not included in kit). Use plastic cement and paints only.

★ The  mark indicates instructions to paint using Tamiya Paint colors.

1 Construction of Wheels



2 Construction of Rear Panel



1 Construction of Wheels

★ Construct 6 sets of road wheels. Assemble so that C1 and C7 will rotate freely.

★ Make 2 Drive Sprockets and 2 Idler Wheels. Make sure C4 and C5 can rotate freely.

2 Construction of Rear Panel

Parts A6 & A7 are similar in shape. See the figure and assemble with care. It makes the job easier to assemble parts A5, A14, & A19 first.

Construction of Fender

Lights B17 & B18 look alike. Make sure of their numbers, and assemble.

3 Construction of 75 mm Gun

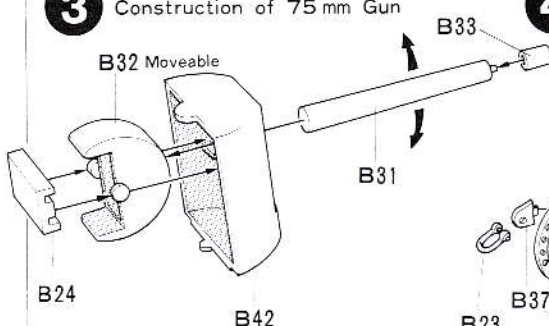
Part B24 is a stopper of part B32. Use sufficient cement to make a strong bond.

5 Construction of Lower Hull

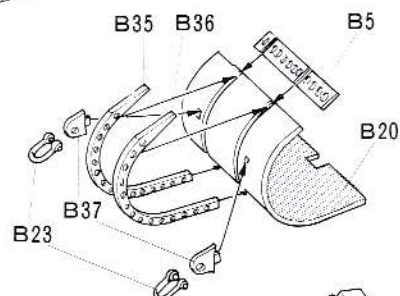
★ Suspension bogies, Drive Sprockets, and Idler Wheels should be assembled in the same way on both sides. Be careful when attaching the Drive Sprockets and Idler Wheels, as they should rotate freely.

★ Spread the sides of the Lower Hull slightly, then insert Rear Panel from above.

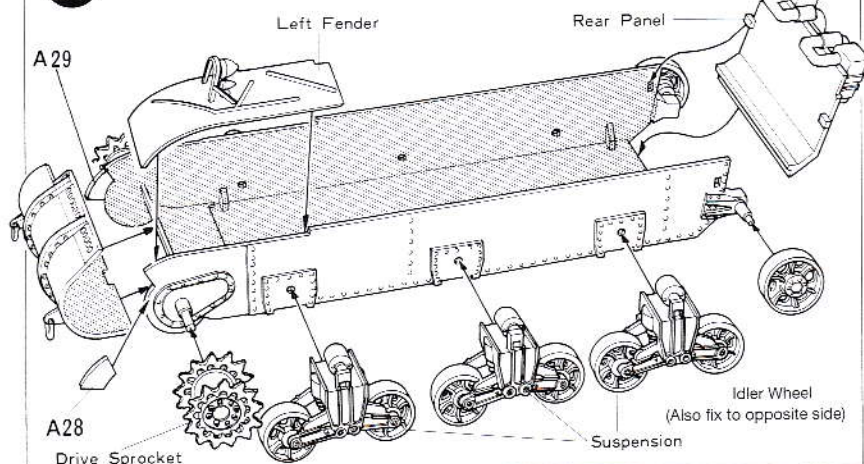
3 Construction of 75 mm Gun



4 Construction of Hull Front



5 Construction of Lower Hull



⑥〈Construction of Upper Hull 1〉

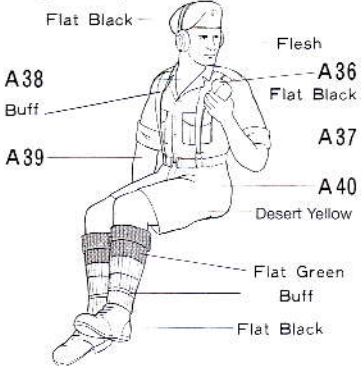
★ Confirm you have the correct part before attaching.

★75mm Gun Turret is held in position by B19 and Right Fender and should be able to rotate.

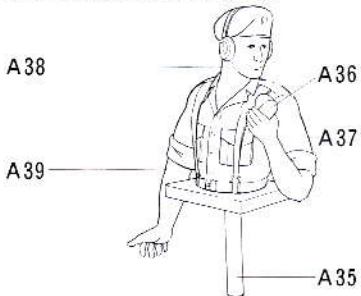
〈Construction of Figure〉

Figure may be assembled in one of two positions: sitting on the Turret or placed inside it. Choose one to assemble. If depicting the Figure inside the Turret, note that A35 is attached in Step 9 so the figure can be attached afterwards.

<<Figure sitting on the Turret>>

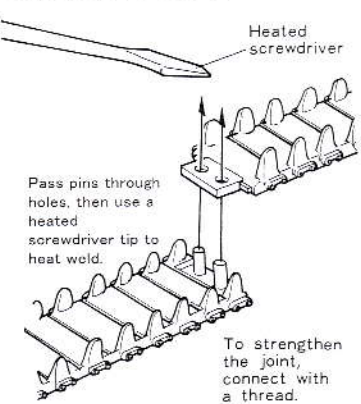


<<Figure placed inside the Turret>>

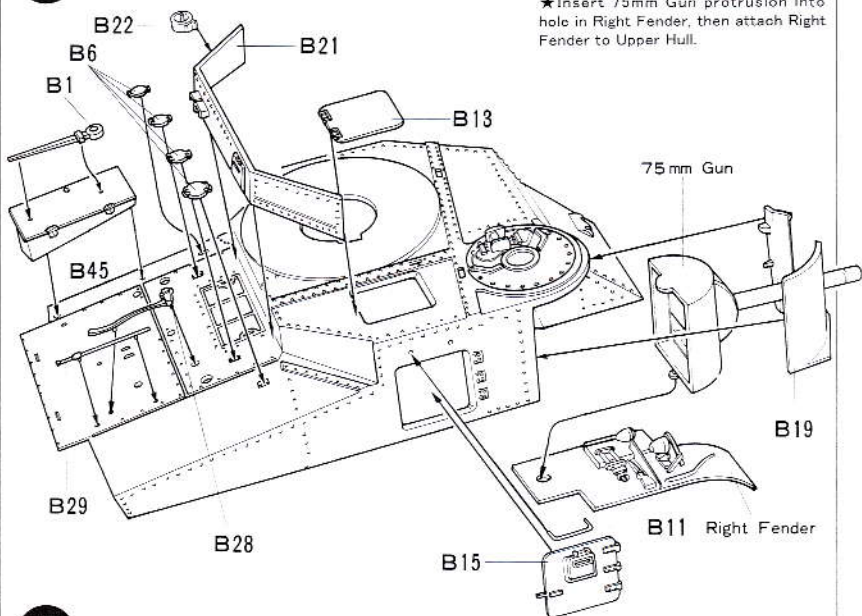


★Do not cement
A35 here.

Construction of Tracks



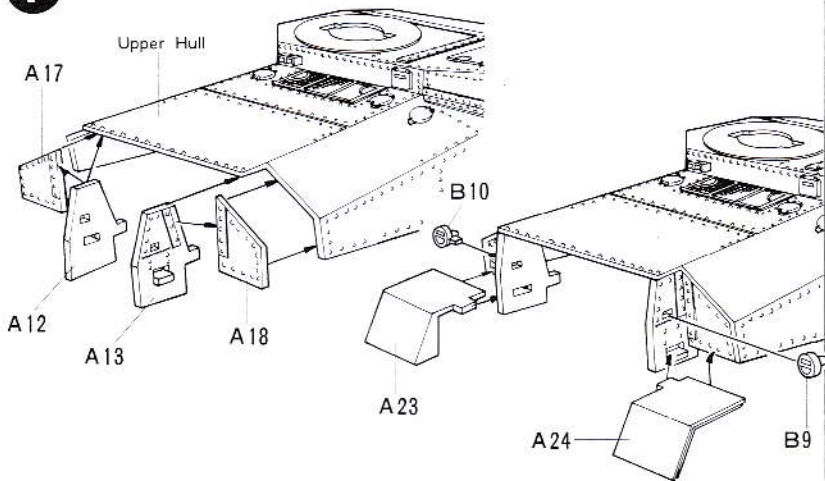
6 Construction of Upper Hull (1)



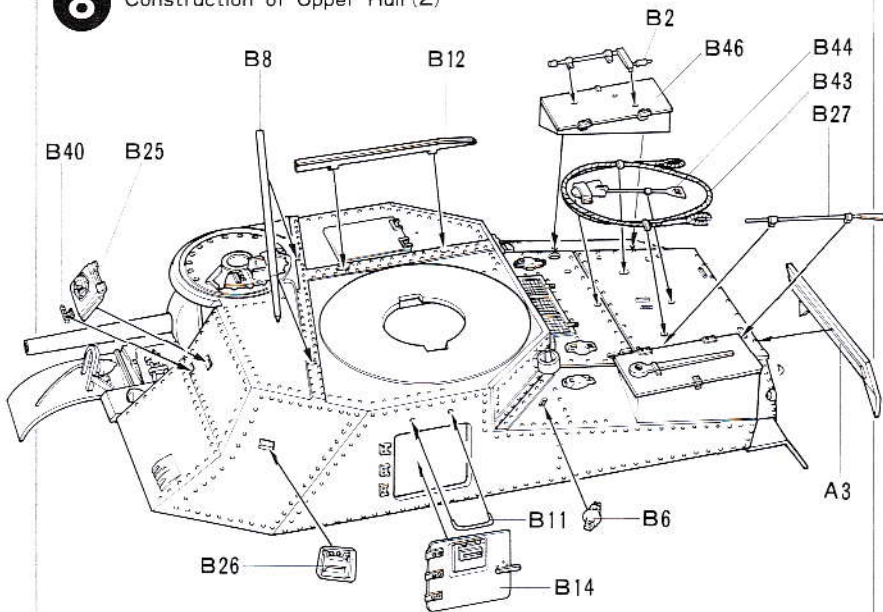
★ Pass 75mm Gun through B19, then attach B19 to Upper Hull.

★Insert 75mm Gun protrusion into hole in Right Fender, then attach Right Fender to Upper Hull.

7 Fixing Rear Parts



8 Construction of Upper Hull (2)



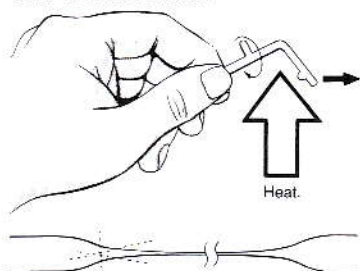
9 Construction of Turret

Part A26 is moveable. Keep in position by cementing parts A31 & A32 to part A25. When you fix Cupola A15 & A16 to part A33, make sure that no cement touches A16.

A35 is the base of the Figure torso. Attach Figure to it during final assembly.

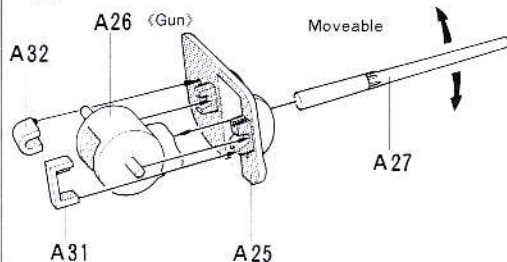
A10 & A11 should be attached in open position if placing Figure inside the Turret.

(How to make antenna)

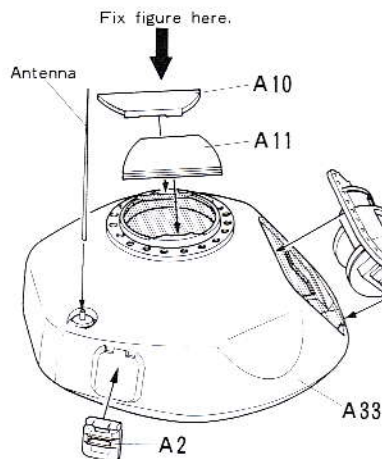
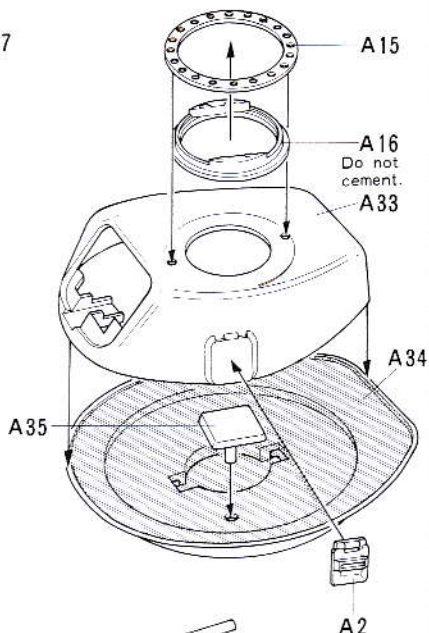


★ Heat a section of sprue and stretch it slowly as it begins to soften. Allow it to cool for about 15 seconds, then cut to needed length.

9 Construction of Gun



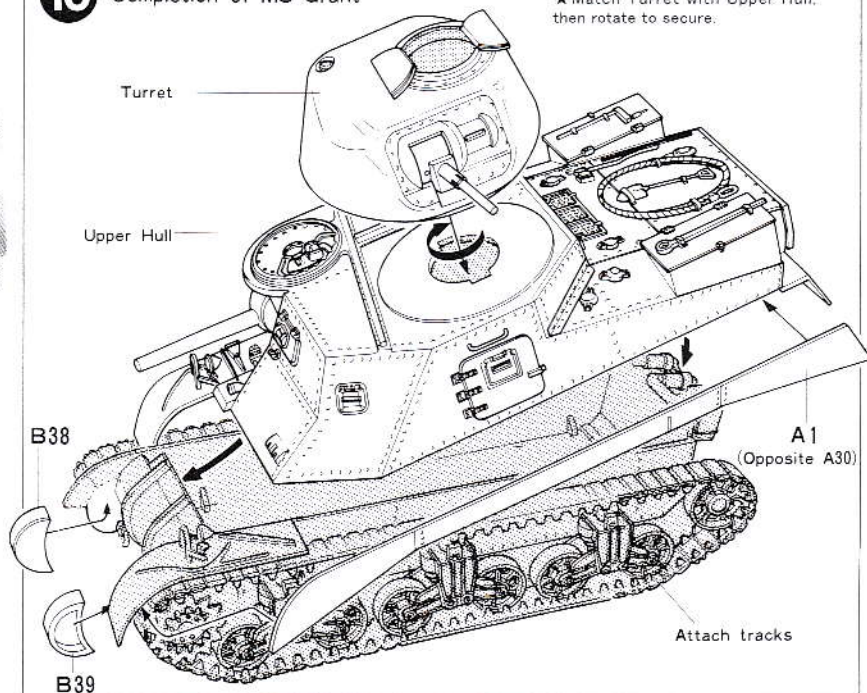
★ Allow A16 to rotate. Keep this in position with A15.



★ Hatch Halves A10 & A11 can be fixed in either open or closed position. Glue in open position in case you place figure here.

10 Completion of M3 Grant

★ Attach Upper Hull to Lower Hull.
★ Match Turret with Upper Hull, then rotate to secure.



Parts B3 & B4 are unnecessary.