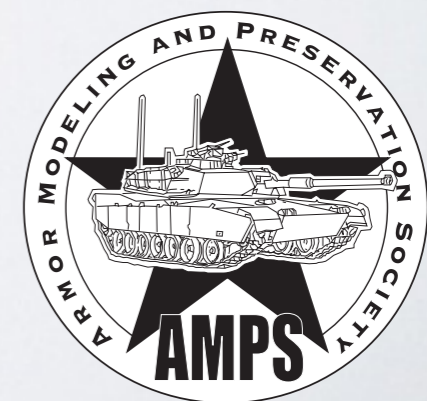




TAMIYA 1/35 M-51 ISHERMAN

AMPS Atlanta 2014 Club Project



HISTORY OF THE M-51

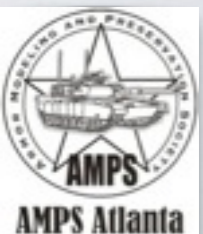
The IDF secured most of their early light armor (halftracks) from the former European Allies, primarily France.

The IDF's first gun tanks were a French R35 and an R39 that were captured from Syria in 1948.

Two Cromwell tanks were acquired from the British forces by theft / bribery as they were evacuating the Palestine mandate.

Shortly after independence Israel secured their first "real" tanks. They were ten Hotchkiss H39's purchased from France and a single Sherman was salvaged from a British scrap yard.

Shortly after 1948, additional Shermans were purchased from France, bringing the total armored strength of the IDF to about 50 tanks. All Israeli Shermans at this point were designated M-1 regardless of their hull / gun / engine configuration.



HISTORY OF THE M-51

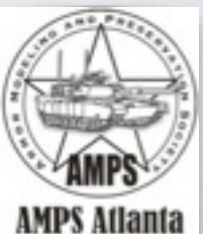
In 1953 the French AMX-13 received consideration from the IDF. The IDF did eventually purchase the AMX-13.

It was then decided to “graft” the French 75-50 gun to the more heavily armored Sherman hull and turret. The turret was modified and after the first 50 vehicles were upgunned, the engine was upgraded to a Cummins V-8 460 hp diesel.

This process started in 1956 resulting in about 300 “M-50’s” being produced. Due to the increase in weight, these tanks, and the later M-51’s were fitted with wider T-80 tracks and the HVSS suspension.

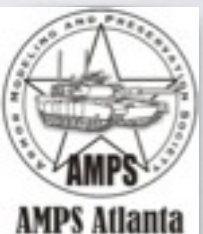
In the mid 1960’s an initial 180 Shermans received the modified French D1504 L/44 main gun. This is a modified version of the French VO980 gun developed for the AMX-30. This gun used a smaller cartridge and was equipped with a large muzzle brake.

All of tanks of this version had the Cummins diesel engine. This tank was first shown in public in 1965 and was designated M-51.



ISRAELI TANK M-51

Weight:	39 tons
Crew:	4 - 5
Engine:	Cummins VT8-460-B1 4-stroke V8 Diesel
Max. Speed:	27 mph (45 km/h)
Armament:	105mm D1504 L/44 gun (55 rds) M1919A4 .30 cal MG (x2)
Max Armor:	Turret - 89mm (mantlet) Hull - 64mm (front)



IDF M-51 SHERMAN



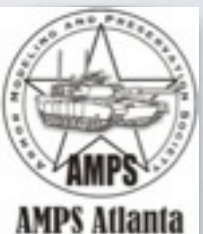
M-51 COMBAT HISTORY

During the Suez crisis of 1956 the IDF fielded M-1 and M50 Shermans and the AMX-13

In 1956 the IDF knocked out or captured 488 Egyptian armored vehicles.

- 26 - T34/85
- 40 - Sherman Mk III
- 40 - Archer SPG
- 15 - Valentines
- 6 - SU-100
- 12 - M4-FL/10 (Sherman Hull w/ AMX-13 turret)
- 60 - BTR-152 APCs
- 6 - Sherman Recovery / Engineer Vehicles
- 283 - Bren Gun Carriers

IDF losses were approximately 30 tanks and halftracks.



M-51 COMBAT HISTORY

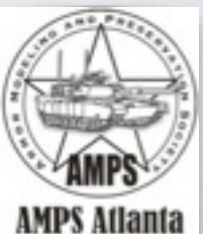
After the defeat of 1956, Egypt began receiving increased Soviet military support. This included shipments of the new T-54.

The T-54, along with the Soviet JS-3, gave the Egyptian armored force a distinct advantage in both firepower and armor protection.

Between 1956 and 1967 Israel acquired more modern MBT's, again from Europe. Approximately:

250 British Centurion Mk. III, Mk.V (these were ultimately up gunned from the 25 pdr to the L7 105mm)
200 West German M48A2C

The development and fielding of the M-51 was an additional step in response to this increased Arab armored threat.

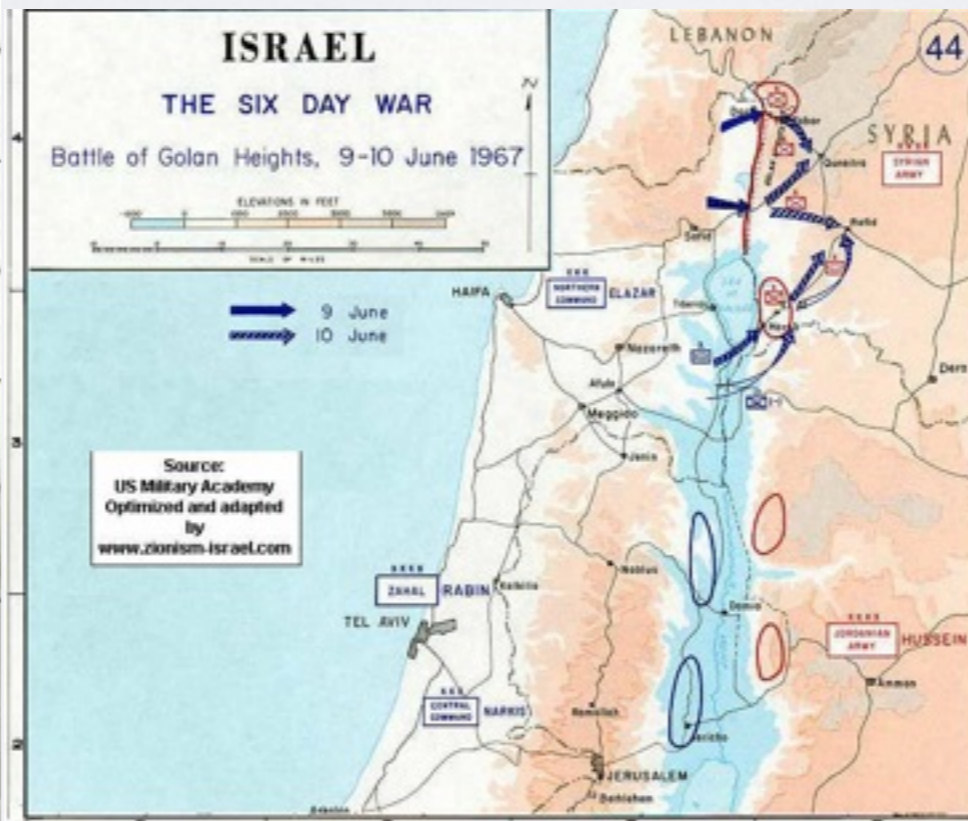


M-51 COMBAT HISTORY

THE SIX DAY WAR

In the 1967 Six Day War, M-51 Shermans fought on all three fronts - Sinai, West Bank, Golan.

The Israeli Armored Force destroyed over 500 Arab tanks, against a loss of approximately 60 IDF tanks.



M-51 COMBAT HISTORY

THE SIX DAY WAR



M-51 COMBAT HISTORY

THE SIX DAY WAR



M-51 COMBAT HISTORY

THE SIX DAY WAR



THE MODEL

There are four versions of the M-51 that were produced over its service life.

Alef (A), Bet (B), Gimel(C), Dalet (D)

Key recognition:

Alef - M4A1 gasoline engine deck, early muzzle brake, single stowage box, spare tracks on hull.

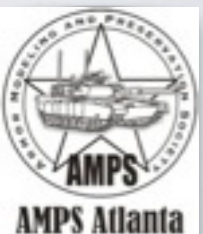
Bet - Same as **alef** plus: revised diesel engine deck, early or late muzzle brake.

Gimel - Same as **bet** plus: louvres on engine deck, only late muzzle brake, dual stowage boxes, spare tracks on turret.

Dalet - Same as **gimel** plus: exhaust on top of engine deck.

The travel lock and rear hull stowage shelf / bin varied throughout the series.

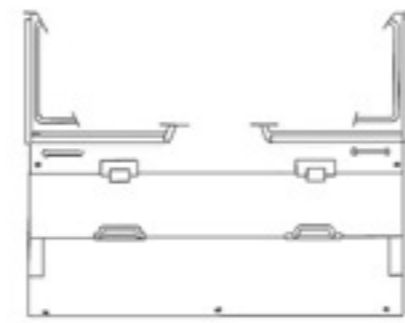
Out of the box, the Tamiya kit builds into a “Degem Bet” tank.



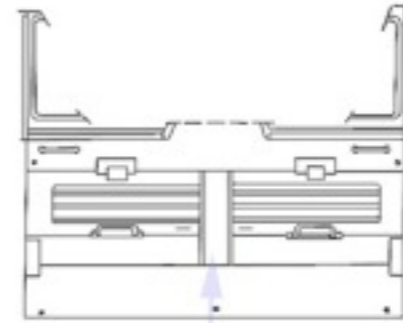
THE MODEL



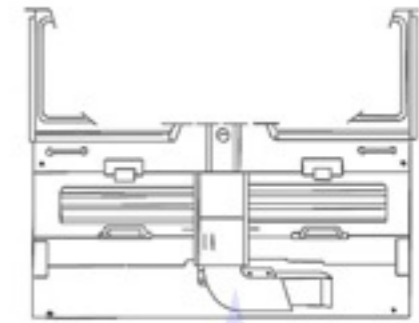
Alef



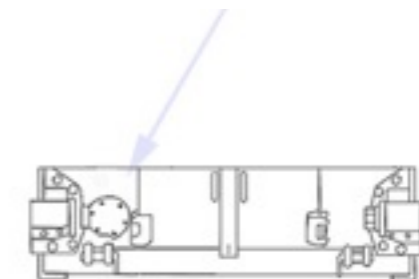
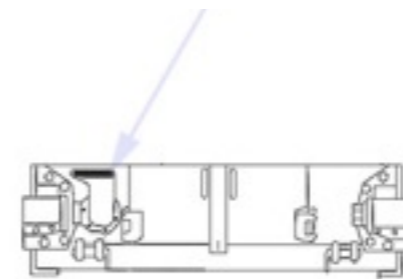
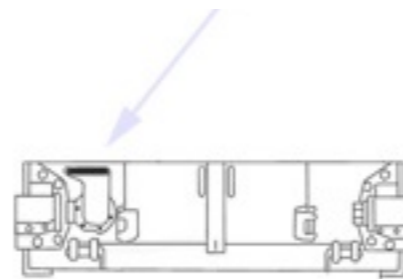
Bet



Gimel



Dalet



THE MODEL

Early



Early



Late



Late



THE BUILD

References:

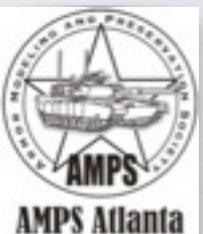
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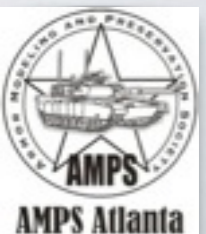
THE BUILD

Part I - Introduction, History, Lower Hull and Running Gear - Steps 1 - 7

Part II - Upper Hull - Steps 9 - 15

Part III - Turret - Steps 16 - 20

Part IV - Painting & Weathering

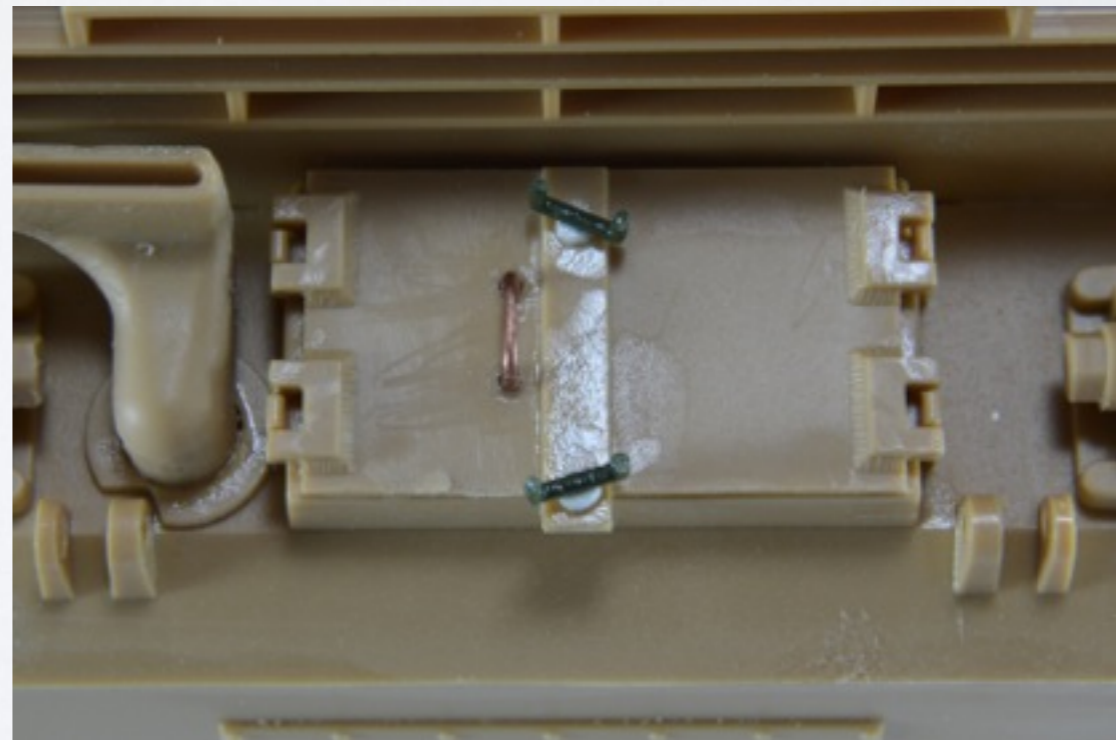
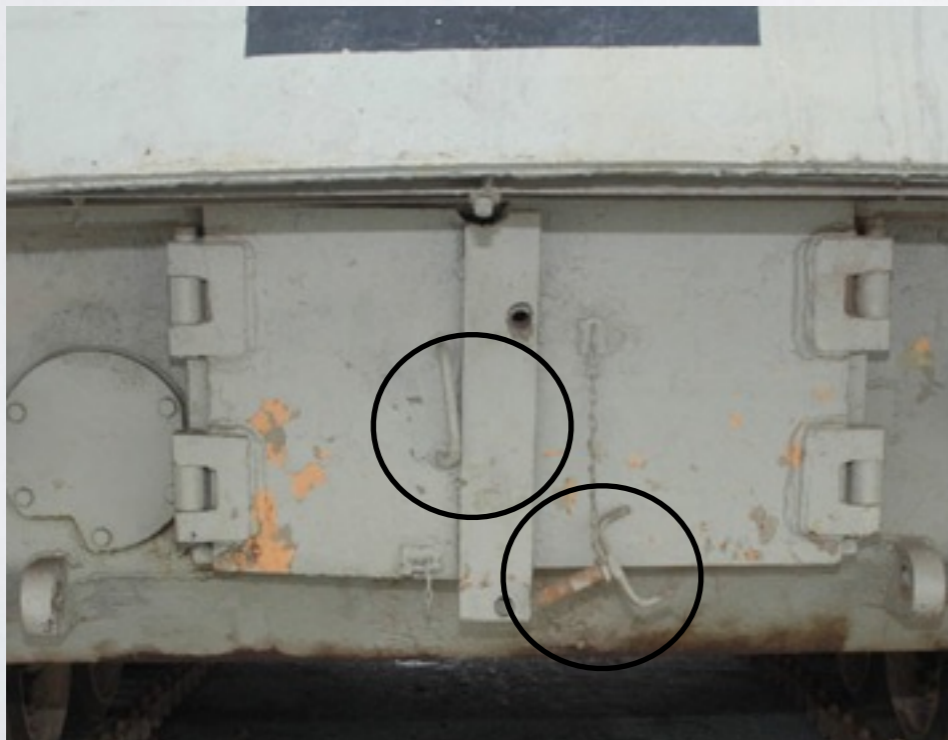


THE BUILD

Step 1: This starts the basic assembly of the lower hull tub. It is very straightforward and the fit is good. Just make sure that parts F21 and F25 are snug and flush.

Step 2: The rear hull plate assembly is also very simple. Take care to insure that parts 26 are carefully affixed as there is a joint seam on each that is tough to avoid. It should not be visible but be aware.

This step is where the first extra details are added. On the access doors (part 19) there is a handle added with wire on the left hand door. Also, on the vertical plate that overlaps the two doors there are two locking bolts with handles. I made these using my sub miniature punch and die set to make two disks, and then added the handles by using some grab handles from my spares box - backwards. I also drilled the solid molded tow hook mounts.



THE BUILD

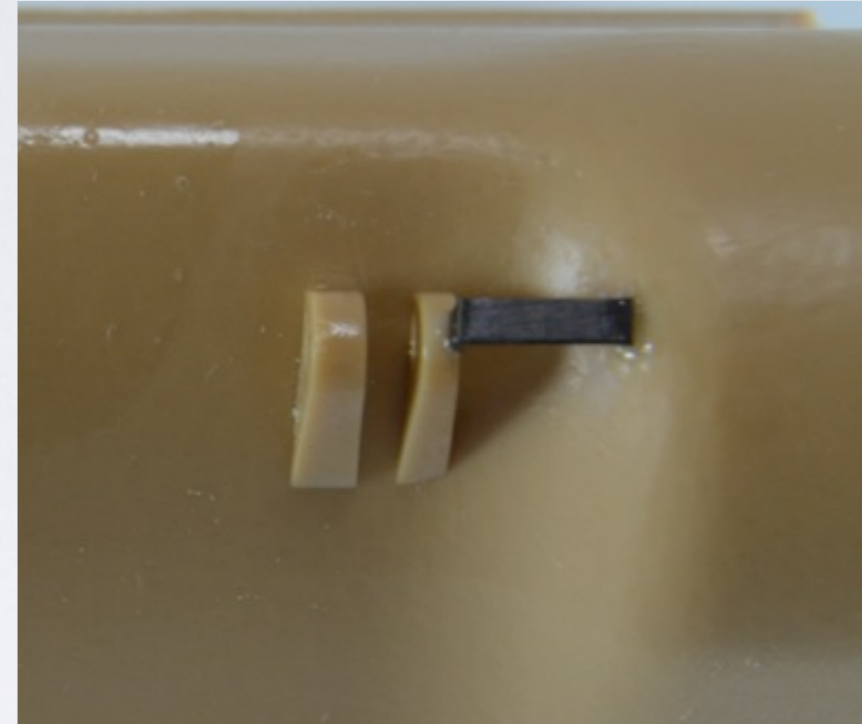
Step 3: In this step we attach the assembled rear plate (F26) and the final drive cover (D11) to the basic lower hull tub. These parts fit very well. There are slight seams on the joints, but these are very slight and easy to fill with putty.

At this point I added casting marks to the lower front of the final drive cover. I used the Archer raised detail set. The final drive covers typically had marks that consisted of a "C" or "G" inside an octagon and a series number. Some Micro Sol settled the carrier down nicely and some clear flat was used to seal the marks.

A feature seen on many, although not all, M51's is two step ups welded to the front tow hook mounts and final drive cover. After drilling the tow hook mounts I took some spare photo etch cut it to size, folded it and attached it with CA cement.



THE BUILD



Step 4: This is a pretty straightforward step involving assembly of the return rollers and drive sprocket.

Step 5: Again, another basic step of attaching the drive sprocket and return rollers. No issues here other than I don't attach the actual running gear until I'm into the painting phase.

Step 6: This step covers assembly of the suspension bogies and road wheels. The only issue I had with this step is that nearly all of the road wheels in my kit were slightly concave and required a fair bit of sanding to make them smooth.

THE BUILD



- Next Month ... the Upper Hull