

STURMARTILLERIE

from Assault Guns to Hunting Panther



Feist

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Part 1

In 1934, the basic concept of the newly developed "Panzerkampfwagen" provided a clear indication of their main purpose: namely, to be used within Armored Divisions for operational warfare. The infantry, which was left without armored support, demanded a vehicle of their own. Agreeing with their demand, the German High Command placed an order on June 15, 1936 to create an armored vehicle to be used as support artillery for assault and anti-tank purposes.

Charged with the responsibility for design and development were the companies of Daimler-Benz AG. of Berlin-Marienfelde for chassis and superstructure and Friedrich Krupp AG. of Essen for the armament. In its final design, the vehicle appeared as a full-tracked, turretless, fully enclosed armored vehicle, mounting a short barreled 75 mm KwK L/24 (the main armament of the Panzer IV) in limited traverse. To accommodate these features, including a four man crew and armor protection of 10 to 50 mm, a Panzer III chassis was used.

After exhaustive research, between 1937 and 1939 an O-series of 30 vehicles was authorized with production starting in February of 1940. Six of these vehicles were fieldtested during the campaign in France in 1940.

The first production model, called "Ausführung A" carried the official designation: Gepanzerte Selbstfahrlafette fuer Sturmgeschuetz 7.5 mm (Sd. Kfz. 142). Based upon the chassis of the Panzer III Ausf. F (5/ZW), the vehicle had a total weight of 19.6 metric tons. Delivery started on August 2, 1940. Responsible for assembly at that time was the Altkaiserische Kettenfabrik GmbH. (Alkett) of Berlin-Spandau. The models B, C, D and E followed during 1941 and 1942 based upon the Panzer III Ausf. H (7/ZW). There were only insignificant differences between these models. The production start of Ausf. C was in June, 1941.

After the appearance of the Russian T 34 in 1941, Hitler demanded on September 28th. an increase in armor protection and a high velocity gun for the Sturmgeschuetze. Daimler-Benz was again contracted to improve the chassis, while Rheinmetall-Borsig AG. of Duesseldorf developed a modified superstructure and provided a long barreled gun. Official presentation of this model to Hitler took place on March 31, 1942.

Production commenced for these most needed vehicles in spring of 1942. The new assault gun, named now the "Sturmgeschuetz 40" (Ausf. F) (Sd. Kfz. 142/1) mounted the 7.5 cm Sturmkanone 40 L/43. Armor was still 50 mm, the total weight now 21.6 metric tons. One hundred nineteen of these vehicles were built. Starting with unit 120, the 7.5 cm Sturmkanone 40 in its final length of L/48 was installed. The official designation was now "Sturmgeschuetz 40" (Ausf. F/8).

The final version of the Sturmgeschuetz appeared by the end of 1942. Frontal armor was now increased to 80 mm. An improved superstructure was fitted with a commander's cupola and a MG 34 or 42 for close-battle protection. Equipped in production with the standard armor skirts, these vehicles were now also built by Daimler-Benz and Mag of Braunschweig, proved to be most efficient in protecting infantry against enemy armor. Official documents credit Sturmgeschuetz units for the destruction of 20,000 enemy tanks by spring of 1944. Production figures for 1943, 1944 and 1945 indicate 3041, 4850 and 145 Sturmgeschuetz as having been built during this time.

The installation of the long barreled gun indicated a basic change in the role of these support vehicles. To assure infantry units support against other than enemy armor, the 10.5 cm Sturmhaubitze 42 (Sd. Kfz. 142/2) was issued to Sturmgeschuetz formations. Basically unchanged, these vehicles mounted a 10.5 cm howitzer instead of the 75 mm gun. The production target asked for 24 of these units per month. Originally the gun was equipped with a muzzle brake, which was later omitted due to supply difficulties. The initial model was based upon the Sturmgeschuetz Ausf. F, while the final version was called Ausführung G.

Vehicles of this type, but without gun, were used in small numbers as ammunition carriers or "Munitionspanzer III".

To mount the sIG 33, a heavy infantry howitzer, twelve Panzer III chassis were utilized in 1941. Weighing 21 tons, these vehicles with a crew of five and mounting the 15 cm Howitzer L/11 carried the nomenclature: Sturm-Infanterie-Geschuetz 33. Owing to the limited payload capacity of the Panzer III

chassis, adequate armor protection could not be provided and the task of this vehicle was taken over by the Panzer IV mounted Sd. Kfz. 166 "Brummbaer".

After the Panzer IV production at Krupp-Gruson in Magdeburg was relocated to the Nibelungenwerke in St. Valentin, Austria, the available production capacity was converted toward the production of the Sturmgeschuetz IV. The superstructure of this assault gun was almost identical to the one of the Sturmgeschuetz III. Only the driver front was altered to accommodate the Panzer IV chassis. With a four man crew and frontal armor of 80 mm, the fighting weight was 23,000 kp.

Since fall of 1943 these vehicles, together with the Sturmgeschuetz III, comprised the main equipment of Sturmgeschuetz outfits and partially also of tank units.

As a replacement for the Sturmgeschuetz IV, the Panzerjaeger IV was created. Designed and built by Vomag AG. of Plauen/Vogtland, these vehicles also utilized the chassis of the Panzer IV (Ausf. F). It appeared as a turretless tank destroyer with ballistically well sloped armor of 60 mm frontal strength. The total height was only 1860 mm. Normally with a four man crew, the unit weighed 24 tons. As a commander's vehicle the crew was increased to five carrying an additional radio operator and mounting a MG 34 in the sloping front plate of the hull. Main armament was still the 7.5 cm Pak 39 L/48 with or without muzzle brake. Official nomenclature: Panzerjaeger IV Ausf. F (Sd. Kfz. 162). Demonstrated for the first time on March 14, 1943 production commenced on October 20th of the same year. During the first part of 1944, Vomag investigated the installation of the 7.5 cm Panzerjaegerkanone 42 L/70 (main armament of Panzerkampfwagen Panther) in the Jagdpanzer IV. After several prototypes, the final version went into production by mid-year 1944. It appeared with front units by August 1944. Officially known as "Panzer IV/70" (Sd. Kfz. 162/1), this vehicle looked almost identical to the Panzerjaeger IV, Ausf. F. It mounted, however, the 7.5 cm Sturmkanone 42 L/70 and had 80 mm frontal armor. Total weight was 25.8 tons. Maneuverability was impaired since the long gun and the increase in frontal armor put too much weight to the front of the vehicle. The final series of these tank destroyer vehicles had a modified suspension system in having only three return rollers instead of the usual four. Guderian himself was not at all convinced of the necessity for such a vehicle. He considered the Panzerjaeger IV with the 7.5 cm L/48 to be quite adequate. Production for both versions totalled 1530 units in 1944.

There existed a constant demand by infantry units for a high explosive-shell weapon which could be used in close support roles. Available to them for years was the so-called heavy infantry Howitzer 33 (sIG 33), which was mounted, in order to provide mobility, over the years on Panzer I, II, 38 (t) and III chassis. In all cases the armor protection proved to be inadequate. In its final form, based upon the Panzer IV chassis, the vehicle was sufficiently armored (up to 100 mm) and carried with a crew of five, the 15 cm Sturmhaubitze 43 L/12. Total weight was 28.2 metric tons. Designated as "Sturmpanzer 43 Brummbaer", it carried the Sd. Kfz. #166. Developed by Alkett of Berlin, the assemblyline was at the Deutsche Eisen Werke in Duisburg. Approximately 60 of these vehicles were issued to fighting units starting in April of 1943.

One of the most reliable tank chassis, used by the German army during World War II, was the one of the Czech Panzer 38 (t) built by Praga. It was only natural to utilize these chassis components for a "Sturmgeschuetz"-type vehicle. As a result, the "Jagdpanzer 38 — Hetzer" was created. Small in its outside dimensions, mounting a 7.5 cm Pak 39 L/48 and weighing only 16 tons, this vehicle was one of the most versatile and advanced tank destroyer designs of World War II. It had a frontal armor, 60 mm thick, well sloped, and a crew of four.

Built by Praga of Prague and later on also by Skoda, Wark Koenigsgratz, these vehicles are still used today by the Swiss army, which purchased 158 units during 1946 and 1947. Total production was approximately 3000. The same vehicle, equipped with a flamethrower instead of the gun, was issued to special units as "Flamethrower Tank 38". Only few of these units were produced as was a very similar tank retriever called "Bergepanzer 38".

Intended for its replacement in 1945 was the "Panzerjaeger 38 (d)", which was supposed to enter troop service as the light standard armored vehicle of the Wehrmacht. Almost identical in its appearance to the "Jagdpanzer 38", this new tank destroyer vehicle was equipped with an air-cooled 210 HP Tatra diesel engine. Original drawings dated February, 1945 indicated two versions to be produced:

Panzerjaeger 38 (d) (W 1807) — Engine in rear of vehicle

Panzerjaeger 38 (d) (W 1806) — Engine in center of vehicle

Suggested main armament was the 7.5 cm Panzerjaegerkanone 42 L/70. The development of this vehicle

received top priority during 1944/45. Production capacities were made available from former Panzer IV facilities. The monthly production schedule asked for 2000 of these units. Included in this figure were between 300 to 350 armored weapons carrier vehicles and some reconnaissance units. Production, however, was never started since the war was at that time in its closing stages.

Climaxing the development of German tank destroyer vehicles during World War II, not so much in dimensions but in effectiveness, was the "Jagdpanther". The mobility of the much used and most effective long barreled 88 mm anti-tank gun left in its previous solutions as a self-propelled mount much to be desired. Neither the "Nashorn", based upon the Panzer III/IV chassis with its inadequate armor protection, nor the "Elephant", based upon the Porsche Tiger chassis with its very elaborate chassis design, provided a satisfactory solution.

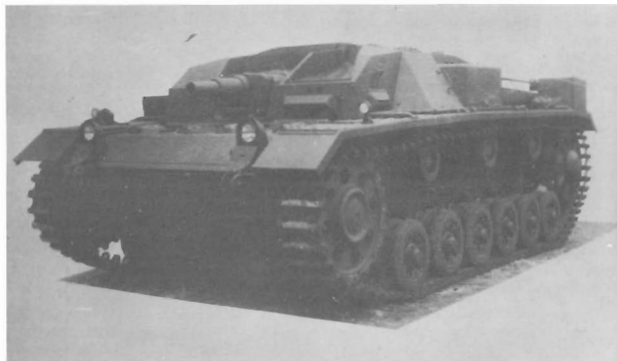
In merging the very modern chassis design of the "Panther" tank with the outstanding ballistic performance of the 8.8 cm Pak 43 L/71 and surrounding it with well sloped armor of 80 mm frontal strength, a vehicle was conceived which ranked among the best anti-tank weapons of its time. One of its few drawbacks was its excessive weight of 46 metric tons.

Shown as a model for the first time on October 20, 1943 and developed by the company Muehlenbau und Industrie AG. (Mlag) of Braunschweig, the vehicle entered troop service in March of 1944. Officially known as "8.8 cm Pak 43/3 auf Panzerjaeger Panther" (Sd. Kfz. 173) or "Jagdpanther", the vehicle was also assembled by Maschinenfabrik Niedersachsen-Hannover of Hannover. Production at MNH started in December 1944. Both companies produced a total of 384 units. Panzerjaeger vehicles, using both the Tiger B (Jagdtiger), Tiger (P) chassis (Porschetiger) have already been dealt with in our first publication called the "Tiger Tanks".

We wish to acknowledge our appreciation to the following who have provided photographs for this volume:

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Washington 25, D. C.

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The Ausfuehrung A of the assault gun utilized the chassis of the Panzer III F. Installed were a Maybach Variorex Preselective Transmission with 10 forward speeds and the Maybach 12 cyl. "HL 120 TR" engine.



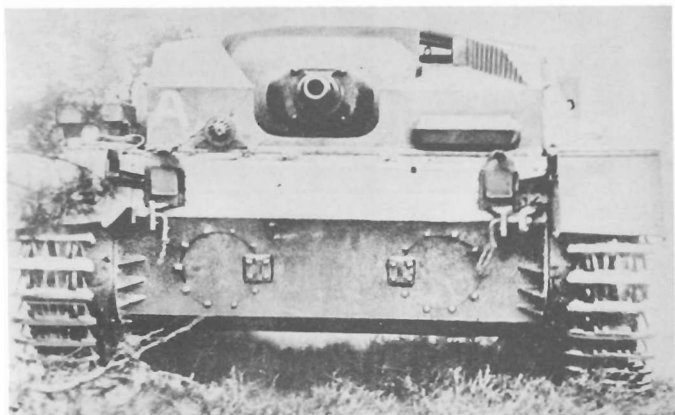
Noticeable here are the drive and idler sprockets and the original spacing of the return rollers. The box-like protrusion on the left side of the superstructure housed radio equipment.



"Sturmgeschuetz" in action in France in 1940. Its low silhouette made it a most effective infantry support weapon.

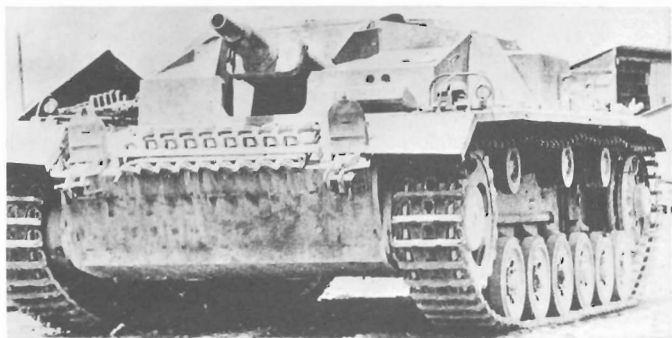


One of the few assault guns at the beginning of the campaign against France in May, 1940. Together with "Panzergranadier" units in armored personnel carriers they spearheaded the drive against allied forces.

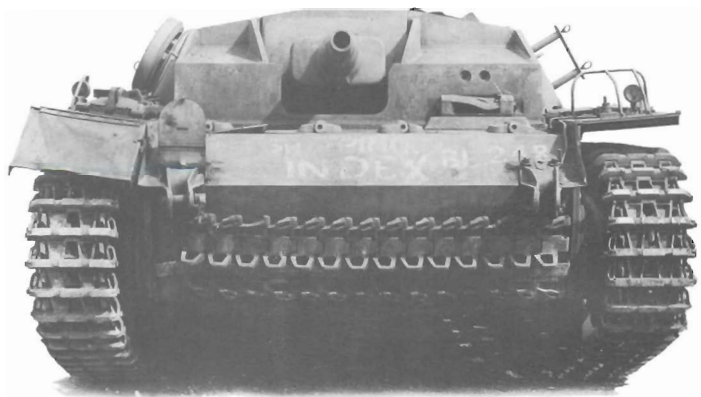


A final picture of the Ausf. A indicates clearly the two round maintenance hatches in the hull front, which were omitted in the following models.

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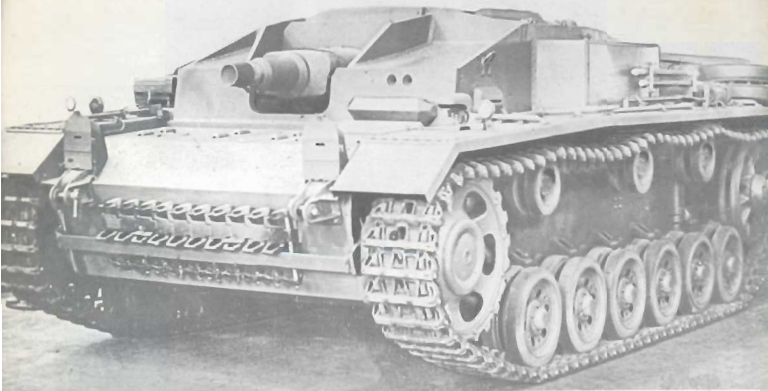
"Sturmgeschütz III" of the B-D series, using the chassis of the Panzer III, Ausf. H, 400 mm tracks, together with new drive and idler sprockets are installed, the superstructure only slightly modified. Note the spare torsion bar attached to both hullsides, just above the bogie wheels.



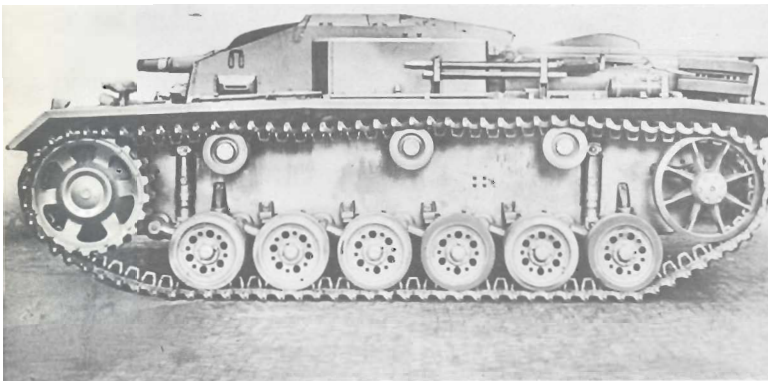
B-D series were equipped like all subsequent models with a six-speed synchronized transmission coupled with the Maybach "HL 120 TRM" engine. Note extra tracklinks in front of vehicle to provide additional armor protection.



Sturmgeschuetz III, Ausf. B, being resupplied in France, 1940. Hatches in top of superstructure are the only access for crew. However, emergency exits were provided for driver and radio operator through openings in the top plate of the front hull armor.



Last model to have the short-barreled 75 mm gun, the Ausf. E, now had the box-like armored protrusion also on the right side of the superstructure.



This was mainly done on commander vehicles to provide space for additional radio equipment. Vehicles without this equipment used the space for 6 additional shells, bringing the total of 70. Many of these vehicles were later, during overhaul in Germany, up-gunned with the long-barreled 75 mm gun.

STURMGESCHÜTZ III A (Sd. Kfz. 142)

Crew	4 men
Combat Weight	19.6 tons
Width	2.92 meters
Height	1.95 meters
Length	5.38 meters
Max. Speed	30 km/hr.
Max. Range	160 km (cross country)
Armament	1 × 7.5 cm L/24 2 × 9 mm MP
Ammunition	7.5 cm — 44 rounds
Armor	Front: 50 mm Side: 30 mm Top: 17 mm Rear: 30 mm
Engine	Maybach HL 120 TR, 12 cyl., 300 H.P.
Transmission	10 speed forward, 3 speed reserve
Fuel Capacity	320 liters
Track Width	38 cm
Manufacturer	Development Firm: Daimler Benz. built by Altmärkische Kettenfabrik GmbH, Berlin

"Sturmgeschuetz III" in Russia in 1942, where they proved themselves to be outstanding in providing protection against enemy armor. This assault gun is followed by a Panzer II, Ausf. F and a Panzer III, Ausf. M, all three vehicles have the usual winter camouflage, used since 1941.

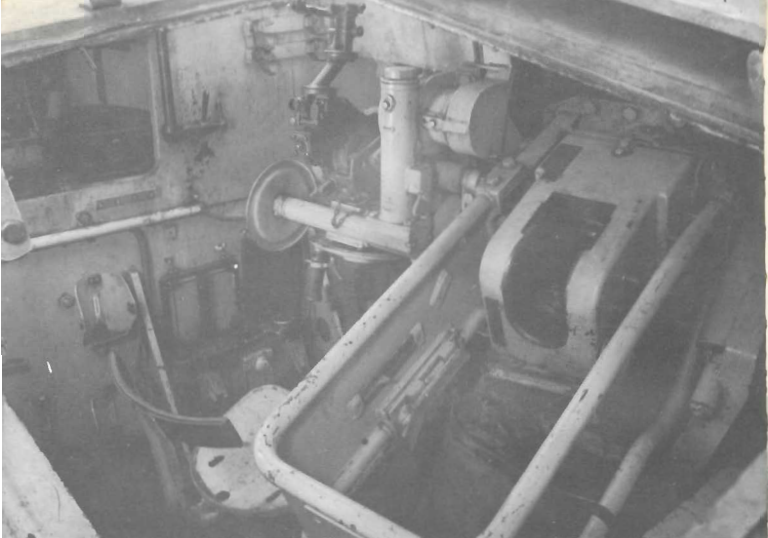




This factory picture shows the first production model of the "Sturmgeschuetz III" mounting the long 75 mm StuK 40 L/43. Called Ausf. F, it also offered a ventilated fighting compartment and other minor modifications to the superstructure.

The widening of the superstructure, as already contemplated in Ausf. E, was now standard procedure. Only 119 of these units were built with the 7.5 cm L/43. Some of them appeared without muzzle brake.





An interior shot shows the gunner seat and the breech block for the gun. On the left side of the picture, the additional storage created by the box-like protrusion on both sides of the superstructure can be seen.



Russia, 1943, a "Sturmggeschütz" outfit on the march, toward a new assignment. Note makeshift storage on vehicles provided by the crew.

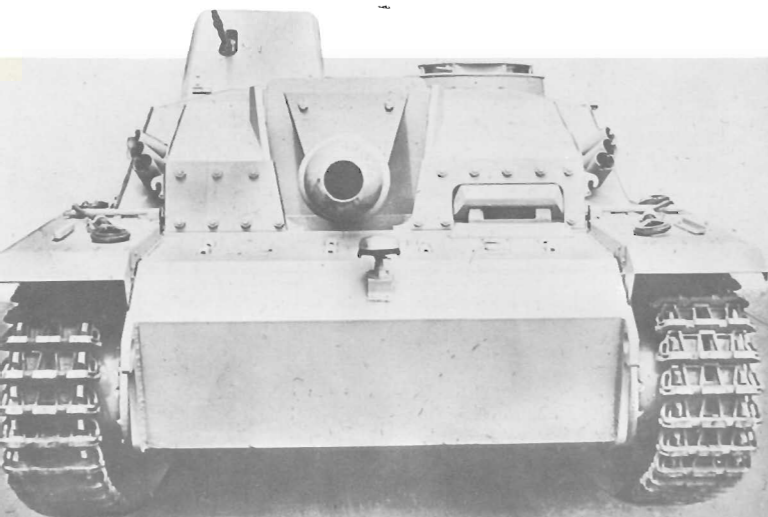
Ausf. F/8 vehicles, now fitted with the final version of the gun, the 7.5 cm StuK 40 L/48 in Russia. The leading "Sturmgeschuetz", trying to cross a frozen river, broke through the ice and is being recovered by other units of this outfit. Troop-applied winter pattern provided effective camouflage.



Counterattack on the eastern front.

In close support with "Luftwaffe" units, "Sturmgeschuetz" and "Panzergrana-dier" units attack a Russian village. The only time "Wehrmacht" units used swastika flags was when they indentified themselves to their own airplanes.





The final production version of the "Sturmgeschuetz III", called Ausf. G Frontal Armor, is now increased to 80 mm. A commander's copula and a machine gun 34 or 42 behind armor shield are the obvious recognition features of this model.

This top view illustrates the basic changes of the Ausf. G. Smoke ejectors are seen on the left side of the widened superstructure. Spare bogie wheels are now carried above the engine compartment.

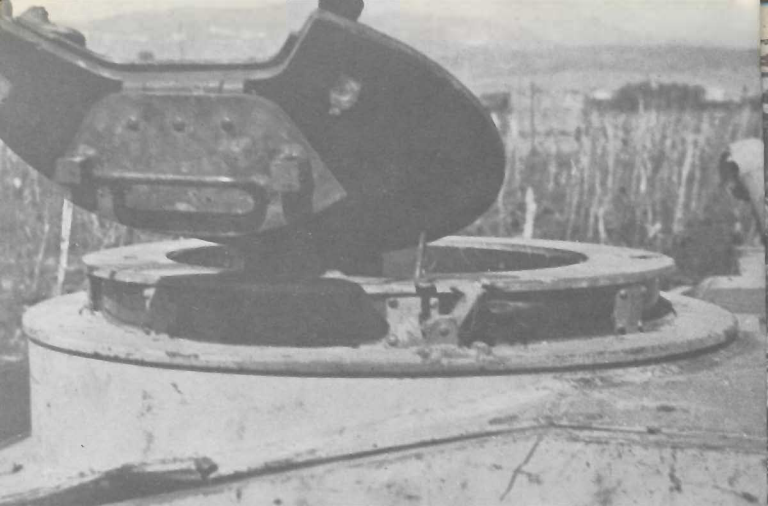




Besides armor skirting, quite common on "Sturmgeschuetz" vehicles, additional protection was achieved by attaching spare track links to both hull sides, where only 30 mm base armor was provided.



Owing to the severe raw material shortage in Germany during 1944 and 1945, some of the return rollers for assault guns were supplied without the usual rubber tires. This vehicle is covered with a "Zimmerit" protective coat to eliminate magnetic anti-tank mines. Also seen is the bullet-splash proofing of the cupola, which appeared on late-production models. It is obvious that some of the front torsion bars on this vehicle are broken.



Close-up view of the commander's copula. Note the double-hinged lid to provide additional ventilation during bottled-up battle conditions.

"Sturmgeschuetze" in Russia, 1944. Standard armor skirt protection can be seen, as well as the attachment of additional track links to provide extra resistance against the very effective Russian anti-tank rifle.





Orel, Russia, 1943. "Sturmgeschuetz" units negotiate a levelled-out, anti-tank ditch to support advancing infantry units.

New assault guns, just arrived from Germany, cross Orel in Russia on their way to the front.





"Sturmgeschuetz" units in Italy, 1944. To be more comfortable, the driver of the first vehicle provided "air conditioning" by opening of the maintenance hatch cover.

Ausfuehrung G in action in Italy in 1944. These were highly mobile vehicles, which were called upon over and over for all purposes and proved themselves to be outstanding armored fighting vehicles.



The crew of a "Sturmgeschuetz", a commander, a gunner, a loader (also radio operator), and the driver, highly trained and spirited, and despite the fact that they were under continuous battle stress, they remained optimistic and very effective.

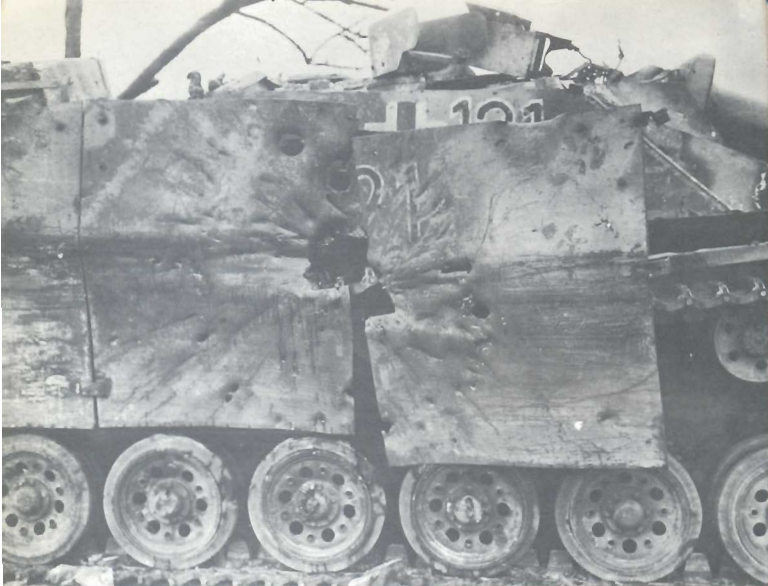




Counterattack around Shitomir, Russia, in 1944. Supplied by "Maultier" halftrack lorries, these units were thrown into the breach and stemmed the Russian armored tide. 20 mm AA self-propelled mounts are assigned to provide protection against Russian "IL 2" airplanes.

Similar units fighting in the vast and endless areas of Russia. Armor skirts were soon lost in battle and almost never replaced.





These skirts could not provide protection against hits like this one. Russian armor, together with highly-effective anti-tank guns, numerically vast superior, took their toll of German armored vehicles.



The effect of Russian anti-tank rifles, against the skirt armor of a "Sturmgeschütz". An inexpensive and effective protection against small arm fire to protect the weak armored flanks of these vehicles.



Refueling between battles, one of the most important tasks of the crew. A chronic fuel shortage during the war did not always allow the freedom of decision tank formation commanders needed to adapt themselves to existing conditions.



Spring in Russia meant the removal of the water-based white camouflage paint. To thoroughly clean the vehicles at the same time was an unwritten rule.



Many of the vehicles, although badly damaged by the enemy, were quickly retrieved and returned for much-needed overhaul. German recovery units were some of the most efficient of all armies in World War II.

Most of the vehicles, however, had to be abandoned, not so much because of enemy action, but because of fuel shortage and the lack of spare parts. Demolition was not always possible.





Some of them fell in enemy hands and were sometimes reused against their former owners. This late-type "Sturmgeschuetz" is manned by American GI's and represents the very last version. A new type cast gun mantlet, the so-called "Saukopfblende", was used, together with a cast front portion of the superstructure. Vehicles of this type were in production until the end of the war.

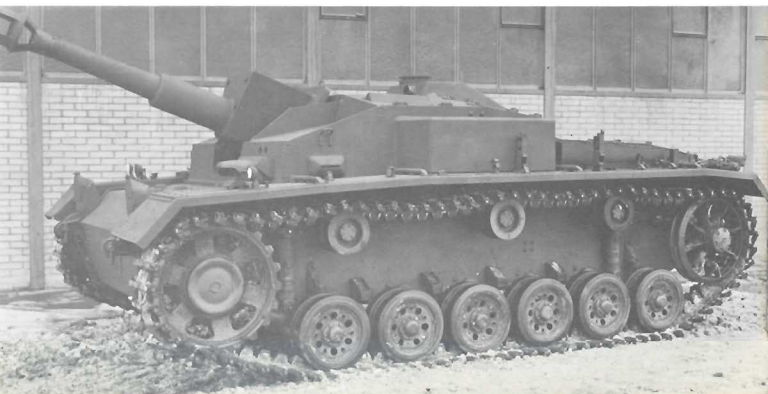
STURMGESCHÜTZ III 40 (Sd. Kfz. 142/1)

Crew	4 men
Combat Weight	21.6 tons
Width	2.92 meters
Height	2.15 meters
Length	6.31 meters
Max. Speed	40 km/hr. on road
Max. Range	169 km (on road), 85 km (cross country)
Armament	1×7.5 cm Stu. K. 40
	1×7.92 mm MG 34
	2×9 mm MP
	7.5 cm — 44 rounds
Ammunition	7.92 mm — 600 rounds
	MP — 384 rounds
	Front: 50 mm
Armor	Side: 30 mm
	Top: 10—25 mm
	Rear: 30 mm
Engine	Maybach HL 120 TRM, 12 cyl., 300 H.P.
Transmission	6 forward, 1 reserve
Fuel Capacity	310 liters
Manufacturer	Alkett, Berlin, Daimler Benz, Berlin, MIAG, Braunschweig

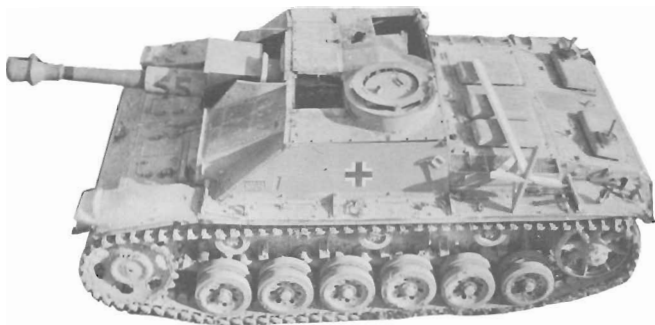
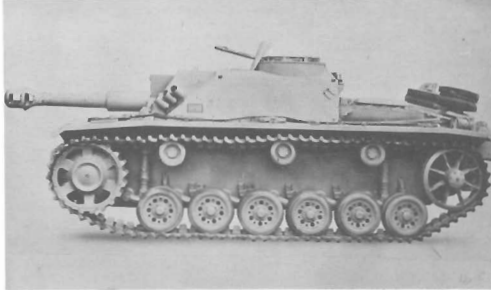


The "Sturmhaubitze 42" as Ausfuehrung F. The vehicle is identical to the "Sturmgeschuetz 40", but mounts the 10.5 cm gun.

This vehicle just left the production line at ALKETT in Berlin. Ausf. F. was a pre-production model and only a limited number of them were procured.



This is the Ausf. G of the "Sturmhaubitze 42". The widening of the superstructure, the adding of a commander's copula, and an MG 34 behind armored shield for self-protection are obvious recognition features of this model. Note the official stenciling on the side of the vehicle, giving railroad load class and fighting weight.



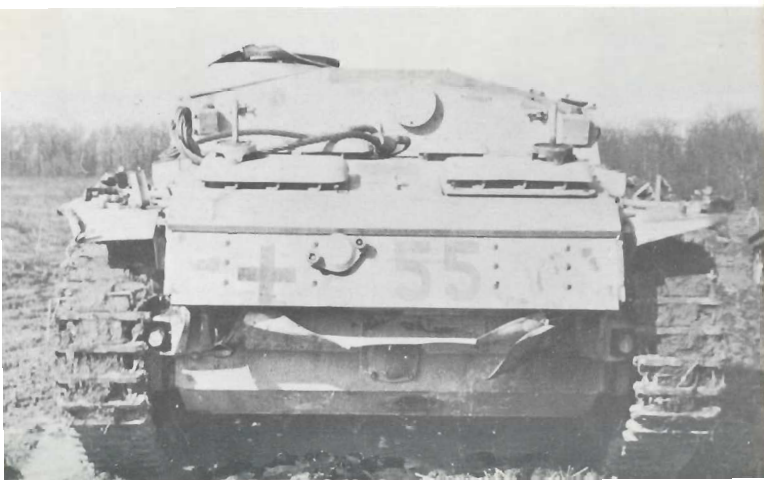
The same vehicle from above, showing basic layout of the assault howitzer. "Panzer III" engine cover remained unchanged.



Vehicles were slightly nose-heavy and front torsion bars were easily broken. Late-production models were delivered without muzzle brake.



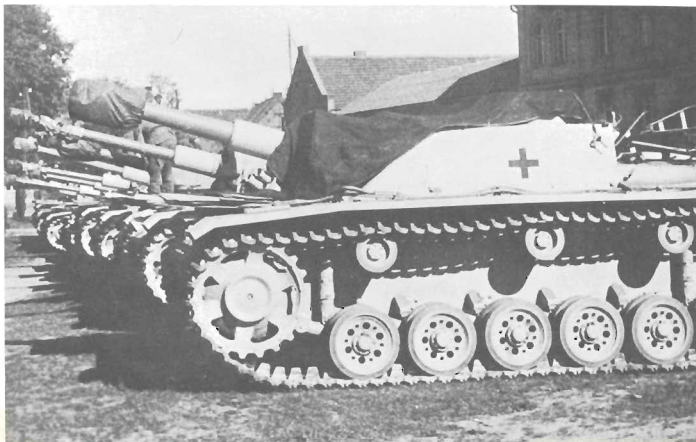
Front and rear view of "Sturmhaubitze 42" demonstrate the compact, low silhouette of the vehicle.





An abandoned assault howitzer in 1944. Note the bolting of the additional 30 mm armor to the front of the vehicle.

This pictures gives a comparison between the "Sturmgeschuetz" and the "Sturmhaubitze". Vehicle one and three mount the 105 mm gun, while the rest is equipped with the 7.5 cm Sturmkanone.





Only few and poor pictures are available to show this vehicle. It was issued to troops in Russia, but only a total of 12 units were built.

STURM-INFANTERIE GESCHÜTZ 33 (Heavy Assault Gun)

Crew	Driver and 1 — 3 men
Combat Weight	21 tons
Width	2.90 meters
Height	2.30 meters
Length	5.40 meters
Max. Speed	20 km/hr.
Max. Range	110 km (road), 85 km (cross country)
Armament	1 x 15 cm L/11 Range 3,900 meters 1 x MG 34, 2 MP 38 15 cm — 30 rounds
Ammunition	Front: 80/50 mm
Armor	Side: 50/30 mm Top: 10 mm Rear: 30/15 mm
Engine	Maybach HL 120, 12 cyl. 300 H.P.
Transmission	6 forward, 1 reserve
Fuel Capacity	320 liters
Track Width	38 cm
Manufacturer	Alkett, Berlin



The "Sturmgeschuetz IV" was very similar to the "Sturmgeschuetz III". "Saufkopf" mantlet and bolted-on frontal armor, together with armor skirts, made identification sometimes difficult.



Assault gun IV in Russia. One of the recognition features was the box-like driver compartment. Note extra drive sprocket stowed away on vehicle.



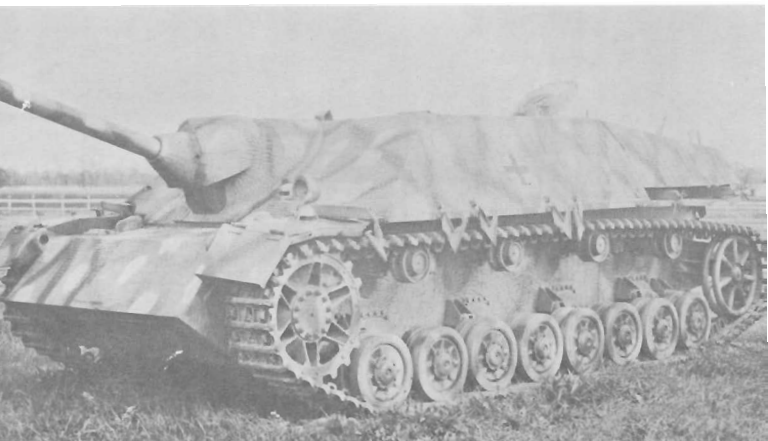
A good superstructure comparison between both "Sturmgeschuetz" types. The longer "Panzer IV" chassis asked for modifications to the regular assault gun fighting compartment. "Sturmgeschuetz IV" is in foreground.



A close-up view of the driver compartment with vision episcopes and hatch cover. The cast gun mantlet can clearly be seen in all details.

STURMGESCHÜTZ IV L/48

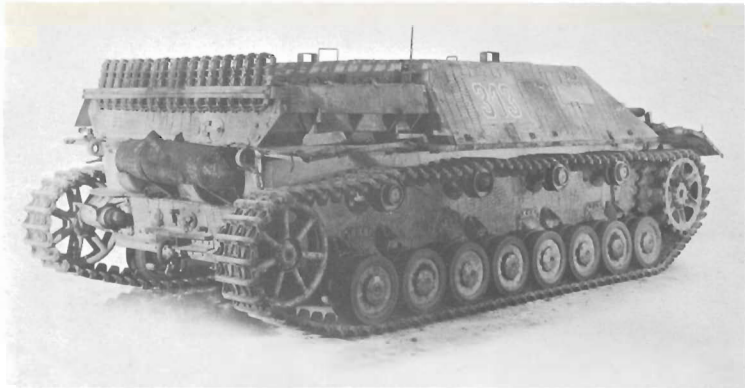
Crew	4 men
Combat Weight	23 tons
Width	2.95 meters
Height	2.20 meters
Length	6.70 meters
Max. Speed	38 km/hr.
Max. Range	210 km (on road), 130 km (cross country)
Armament	1x 7.5 cm Stu. K. 40 L/48 1x 7.92 mm MG 34 2x 9 mm MP
Ammunition	7.5 cm — 63 rounds
Armor	Front: 80 mm Side: 30 mm Top: 30/10 mm
Engine	Maybach HL 120 TRM, 12 cyl. 265 H.P.
Transmission	6 forward, 1 reserve
Fuel Capacity	430 liters
Manufacturer	Krupp-Gruson, Magdeburg and Essen



Applying armor sloping, as initiated by the Russians, the "Jagdpanzer IV", while mounting the same armament as the "Sturmgeschuetz IV", provided much improved protection.

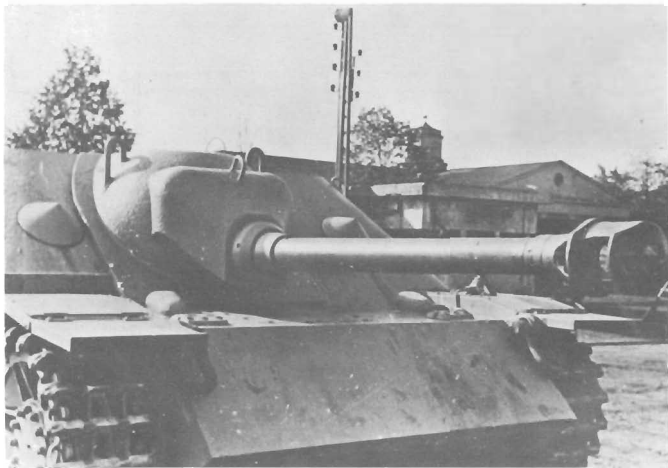
The main armament appeared with or without muzzle brake. Shortage of rubber made it necessary to use steel return rollers. Anti-magnetic mine paint was especially necessary because of the low overall height of the vehicle.

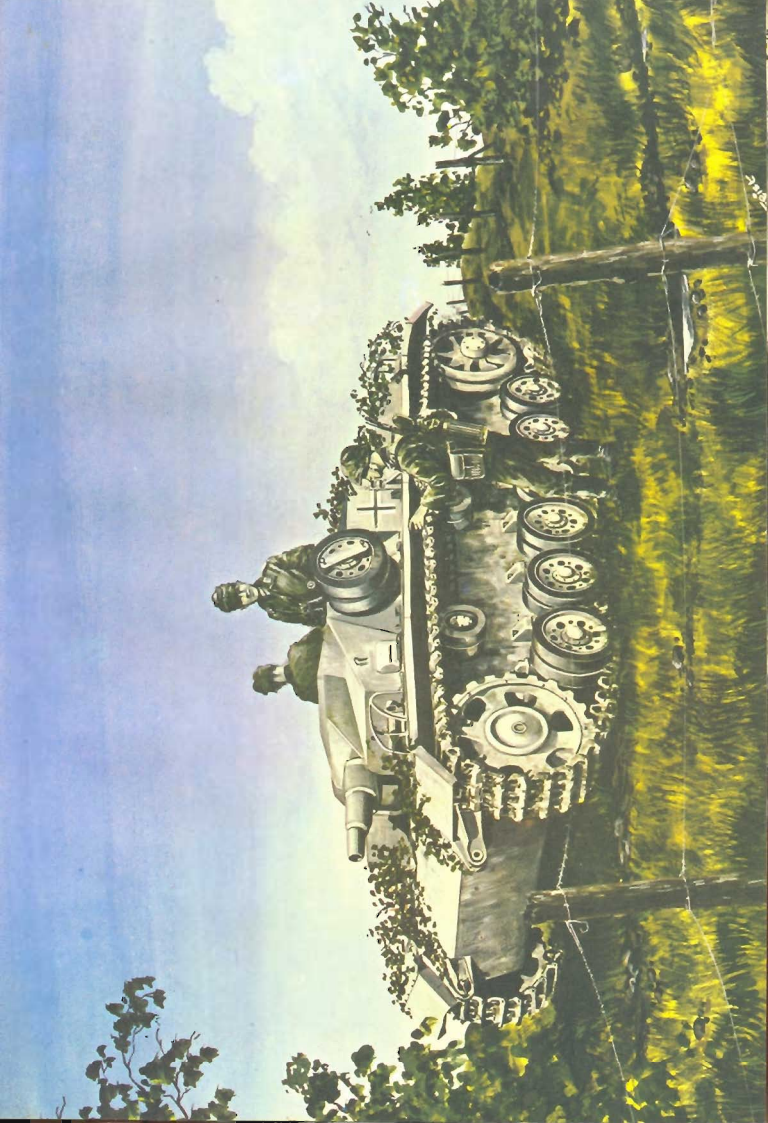


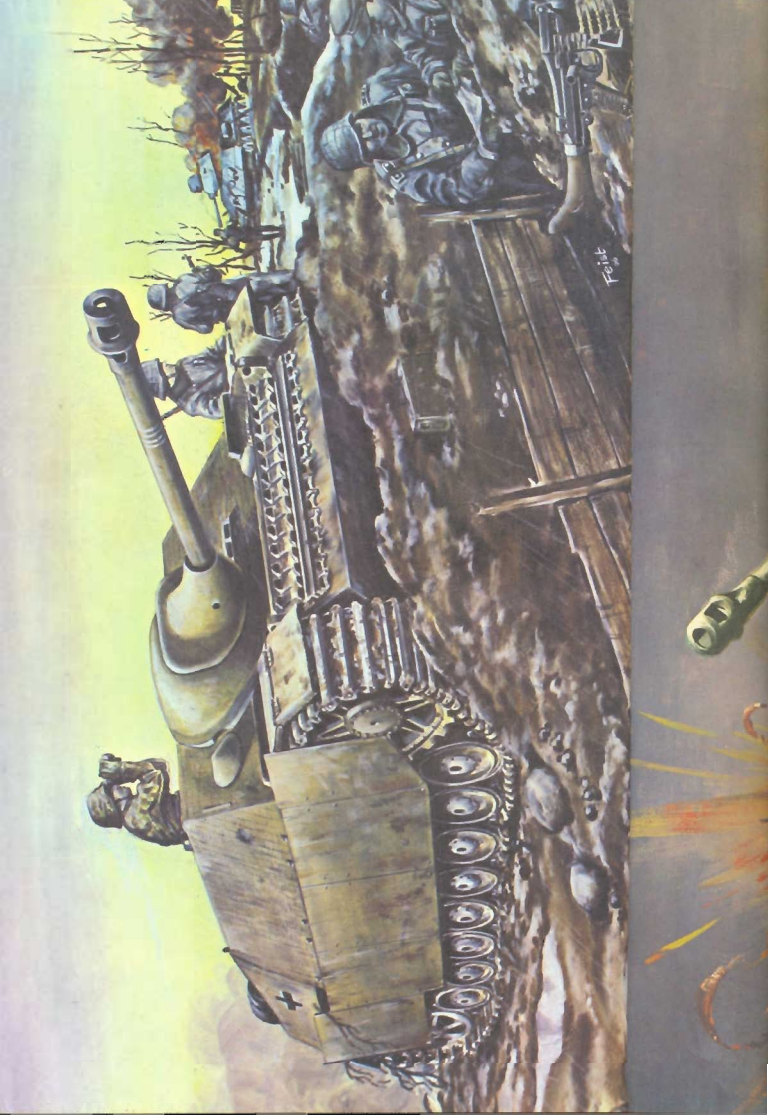


Based upon the Panzer IV, Ausf. F chassis, no major changes were necessary to the hull components.

The gun mantlet underwent several changes until a satisfactory solution was found. This picture shows one of the early attempts to afford maximum protection.











Technical Data for JAGDPANZER IV

Crew	4 men
Combat Weight	24 tons
Width	3.17 meters
Height	1.85 meters
Length	6.85 meters
Max. Speed	40 km/hr.
Max. Range	210 km (on road), 130 km (cross country)
Armament	1 × 7.5 Pak 39 L/48 1 × 7.92 mm MG 42 1 × 9 mm MP
Ammunition	7.5 cm — 79 rounds
Armor	Front: 50 mm Side: 40/30 mm Top: 20 mm Rear: 20 mm
Engine	Maybach HL 120 TRM, 12 cyl. 265 H.P.
Transmission	6 forward, 1 reserve
Fuel Capacity	470 liters
Manufacturer	Vomag, Plauen

Panzer, Panzerkampfwagen, Kampfpanser — armored fighting vehicle
 Gepanzert — armored
 Selbstfahrlafette — self propelled mount
 Sturmgeschuetz — assault gun
 Sd. Kfz./Sonderkraftfahrzeug — special motor vehicle
 Ausf./Ausfuhrung — model or version
 Jagdpanzer/Panzerjaeger — tank destroyer
 Sturmkanone, Panzerjaegerkanone, Kampfwagenkanone — main-armament
 Sturmhaubitze — assault howitzer
 Bergepanzer — tank retriever
 Flammpanzer — flamethrower tank

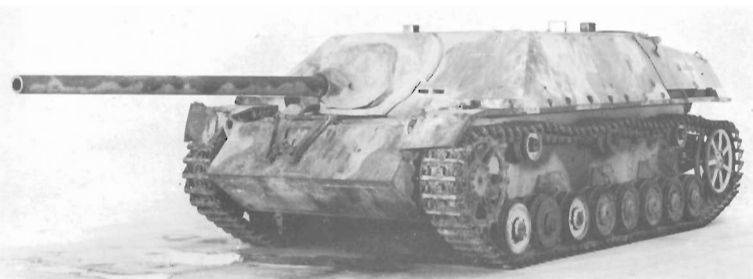
Technical Data for PANZER IV/70

Crew	4 men
Combat Weight	25.8 tons
Width	3.17 meters
Height	1.85 meters
Length	8.50 meters
Max. Speed	35 km/hr. (on road), 16 km/hr. (cross country)
Max. Range	210 km (on road), 130 km (cross country)
Armament	1 × 7.5 cm Pak 42 (L/70)
Ammunition	7.5 cm — 76 rounds
Armor	Front: 80 mm Side: 40/30 mm Top: 20 mm
Engine	Maybach HL 120 TRM, 12 cyl., 265 H.P.
Transmission	6 forward, 1 reserve
Fuel Capacity	470 liters
Manufacturer	Vomag, Plauen



While the "Jagdpanzer IV" come sometimes equipped with two cone-shaped covers on the sloped frontal armor, most of the "Panzer IV/70" carried only one. A regular driver vision slit was provided, while the opposite opening remained closed, unless the vehicle was used as a commander unit, carrying a crew of 5. The first production model of the "Panzer IV/70" left the factory in Plauen, with the standard Panzer IV chassis. As usual, four return rollers were provided.

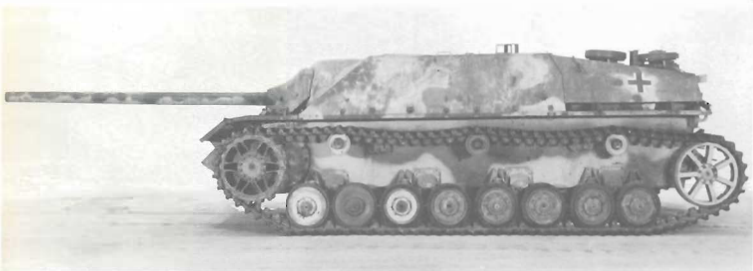




Battle experience showed, however, that the very nose-heavy vehicle ruined the front bogie wheels within a relatively short time. Thus resilient bogies with steel rings based upon a design taken over from the Russian KV I, replaced the front two bogies on these vehicles. To further ease the pressing supply problem, only three return rollers per side were used.



The exhaust configuration changed also toward the end of the war. Simplified versions were adapted, disregarding noise level and loss of performance. Picture shows vehicle with half of the exhaust missing.



Low, compact and with a main armament, capable of destroying any existing enemy armored vehicle, these "Guderian-Enten" proved to be a most effective anti-tank weapon.



This "Sturmpanzer 43", built only in limited numbers, appeared with two different driver compartment configurations. The unchanged Panzer IV chassis was used.

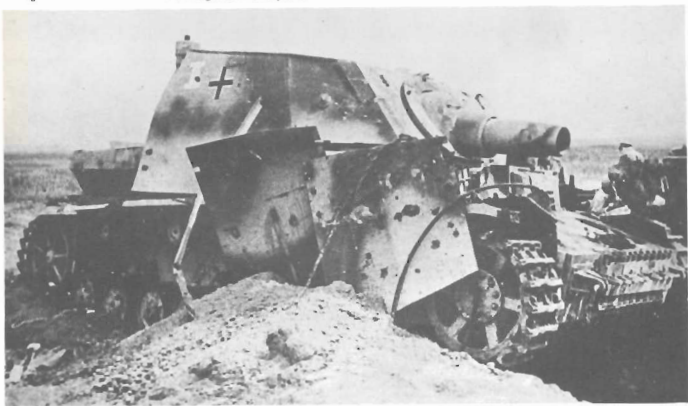
Left without gasoline in an Italian city, this version shows the usual armor skirting and the futile attempt to camouflage the vehicle.





Counted as war booty, this "Sturmpanzer" was captured by the Allied in Italy in 1944. Note the **driver** compartment is without visor.

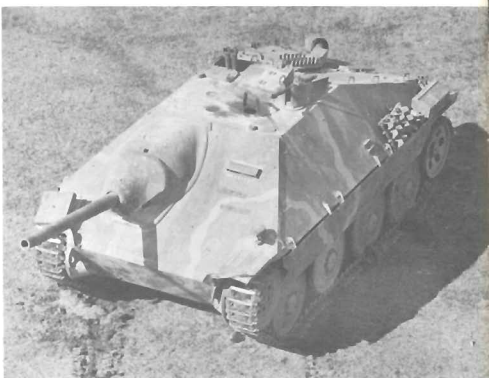
This vehicle, destroyed on the Russian front, shows the regular "Fahrerblende 80", taken over from the Tiger E. Note absence of anti-magnetic mine paint.



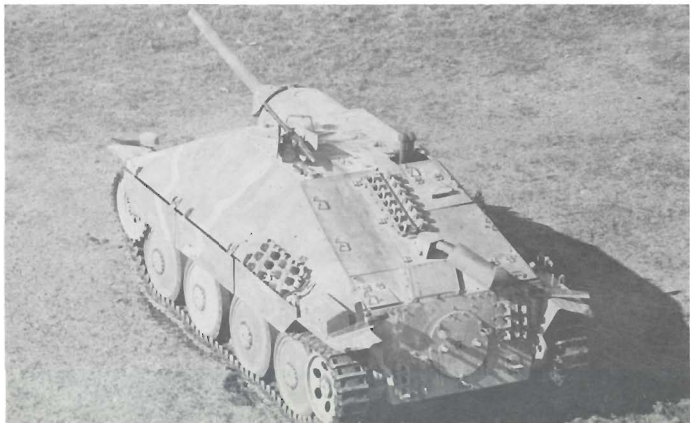


Sloping armor all the way around, plus additional armor skirting, gave these vehicles outstanding protection.

The original Panzer 38 (t) chassis was widened to accommodate the 75 mm gun. Its suspension was one of the most reliable, utilized by any armored vehicle of the Wehrmacht.

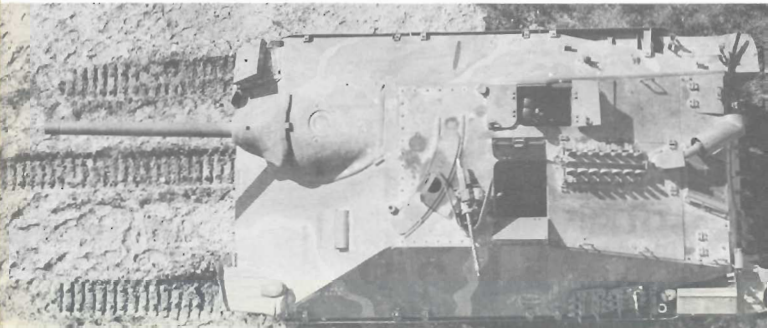
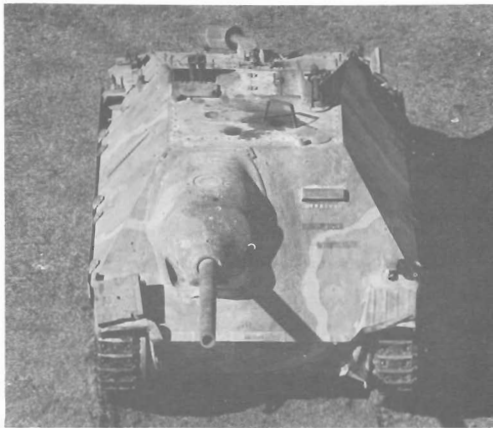


The engine, a six-cylinder "Praga" gasoline power plant had an output of 160 DIN H.P.. Note the attachment of spare track links to the superstructure.





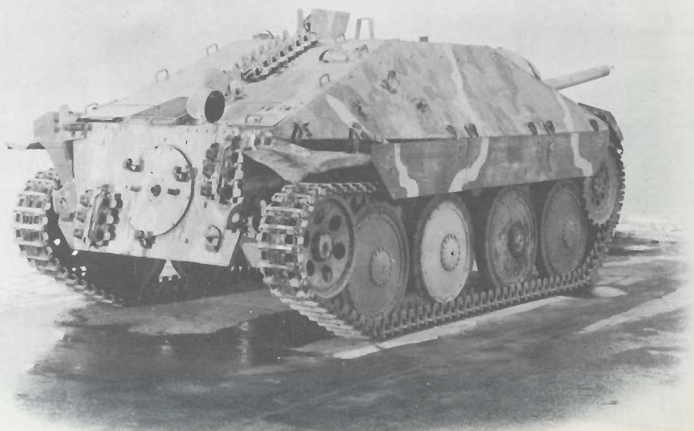
Not many armored vehicles during World War II featured such a ballistically well-proportioned hull.





Mounting the same main armament as the "Jagdpanzer IV", providing improved armor protection and weighing almost 10 tons less, gives an indication as to the effectiveness of this design.

The machine gun for self-protection could be operated from the inside of the vehicle without exposing any member of the crew.



JAGDPANZER 38(t) "HETZER" (Baiter)

Crew:	4 men
Combat Weight:	16 tons
Width:	2.36 meters
Height:	2.10 meters
Length:	4.87 meters (without gun)
Maximum Speed:	40 Km/Hr (on road), 14 Km/Hr (cross country)
Maximum Range:	180 Km (on road), 130 Km (cross country)
Armament:	1 × 7.5 cm Pak 39 L/48 1 × 7.92 mm MG (mounted on top)
Ammunition:	7.5 cm—40 rounds 7.92 mm—600 rounds
Armor:	Front: 60 mm Side: 20 mm Top: 8 mm Rear: 8 mm
Engine:	Praga E.P.A., 6 cylinder, 150 H.P.
Transmission:	5 speeds forward, 1 reverse
Fuel Capacity:	320 liters
Manufacturer:	BMM
Number Manufactured:	1577

JAGDPANZER V (Sd. Kfz. 173s) "JAGDPANTHER" (Hunting Panther)

Crew:	5 men
Combat Weight:	45.5 tons
Width:	3.28 meters
Height:	2.51 meters
Length:	6.86 meters (without gun), 9.86 meters (with gun)
Maximum Speed:	55 Km/Hr (on road), 24 Km/Hr (cross country)
Maximum Range:	210 Km (on road), 140 Km (cross country)
Armament:	1 × 8.8 cm Pak 43 L/71 1 × 7.92 mm MG
Ammunition:	8.8 cm—57 rounds 7.92 mm—3,000 rounds
Armor:	Front: 60 mm/80 mm Side: 45 mm Top: 17 mm Rear: 40 mm
Engine:	Maybach HL 230 P30, 12 cylinder, 700 H.P.
Transmission:	7 speeds forward, 1 reverse
Fuel Capacity:	700 liters
Track Width:	65 cm
Manufacturer:	MNH, MIAG
Number Manufactured:	382

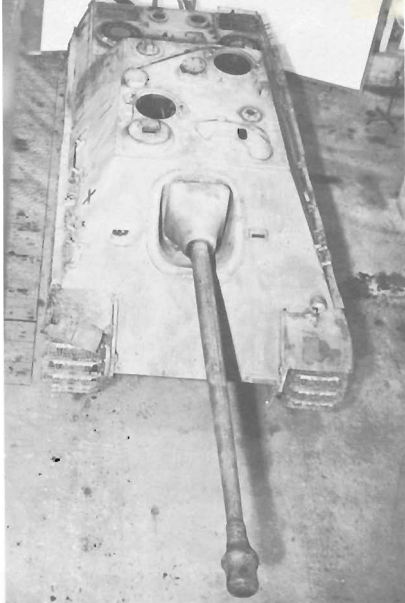


Frontal view of this tank-destroyer indicates the pronounced slope of the front plate, the ball mount for the radio operator MG and the vision slit for the driver.

Two models of the "Jagdpanther" were in production, one with a small collar encircling the opening for the main armament, as shown in this picture. The other version is pictured on the introduction page of this book.



The long-barreled 88 mm gun L/71 also came in two versions. This one has the straight barrel without a reinforcement ring just before the mantlet. Roof lay-out indicates hatches, periscopes, and ventilation equipment.



Only openings for the crew were the two hatches in the roof and a large rectangular entrance at the rear of the superstructure,





"Jagdpanther" recently issued to tank-destroyer units on field training just before engagement.

Note different gun mounted in this vehicle. Skirts and other gear attached to the side of the vehicle include tube-like container for gun barrel cleaning equipment.





The double torsion bar suspension, employed for the first time on the "Panzerkampfwagen Panther", proved to be one of the most advanced suspension systems used on any German Tank.

A top speed of 55 km/h was attainable with these vehicles. Despite their 46 tons, they proved to be most mobile and flexible.





Only few tank-destroyer formations were actually equipped with "Jagdpanthers". They were without a doubt one of the most useful anti-tank weapons the German Army possessed.

Close-up view reveals roof details and the mounting of the main armament. "Zimmerit" anti-magnet mine paint can be seen.





A vehicle from the outfit your author commanded, abandoned in Northern Germany in April, 1945.

Knocked out from the side, this exemplar is a commander's vehicle with two antennas to accommodate additional radio equipment. Multitube muffler provided extra engine cooling.



Volume 4 of the ARMOR SERIES will feature the German self-propelled guns and flak tanks under the Title:

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Self-propelled Guns and Flak Tanks

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