

No. 3

Panzer= Grenadiers





German Infantry and its equipment 1.29-1945

ALMARK PUBLICATIONS



The classic panzer-grenadier role; grenadiers dismount from their Sd Kfz 251 half-track carrier and cautiously approach a burning farmhouse, grenades at the ready. This picture dates from July 1941 during the advance into Russia (Chamberlain Collection).

Panzer-Grenadiers

GERMAN INFANTRY, 1939-45

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Drawings by Kenneth M. Jones

ALMARK PUBLISHING CO. LTD., LONDON

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First Published — January 1972

ISBN 0 85524 056 3

Printed in Great Britain by Vale Press Ltd., Mitcham, Surrey CR4 4HR for the publishers, Almark Publishing Co. Ltd., 270 Burlington Road, New Malden, Surrey, KT3 4NL, England.



The key vehicle in the armoured battalions of panzer-grenadier regiments was the Hanomag Sd Kfz 251 half-track, one of the best known of all German military vehicles. The early model had a MG 34 mounted with a small protective shield. Here a complete platoon of four vehicles (one is obscured extreme right) passes General List during the victory parade in Athens after the conquest of Greece, May 1941. The German censor has painted out the vehicle registration numbers and over-painted the rectangular tactical signs denoting a motorised infantry company (Chamberlain Collection).

1: Organisation and Tactics

STRICTLY speaking Panzer-Grenadiers were the armoured infantry element of Panzer (tank) Division or Panzer-Grenadier Divisions and were administered by the Inspectorate of Mobile Troops rather than by the Inspectorate of Infantry who administered all other infantry units. In practice, however, the distinction becomes blurred for the infantry units of most Motorised Infantry Divisions (Panzer-Grenadier Divisions) and some Light Divisions were similarly equipped and organised, even though overall divisional organisation was different. In November 1942 all infantry units were re-designated as Grenadiers at Hitler's personal command in recognition of the infantry's important status in the war. Hence even the conventional Infantry Division was re-titled as a Grenadier Division from this period onwards. This book is concerned with the mechanised infantry, however, the Panzer-Grenadiers and Motorised Infantry.

The German Army had a very flexible attitude to divisional organisation



Grenadiers of a Panzer-Grenadier Division are here seen moving into the suburbs of Stalingrad, following and riding upon the StuG IIIs of the division's assault gun battalion. Date is October 12, 1942. Close coperation between the assault guns and the infantry were a feature of the tactics in a panzer-grenadier division (Chamberlain Collection).

and there were considerable changes in the composition of divisions during World War 2. Partly these changes resulted from operational experience and partly they were made to conserve or stretch available manpower as losses mounted and operational commitments increased. Thus the examples given here should only be regarded as typical for any given period. There was often some variation, even from the theoretical establishment at any given time. As the war progressed many divisions became well under strength and some nominal divisions by 1945 had only a few hundred men.

German infantry units were built up on the basis of the platoon which was the smallest self-contained fighting element. The platoon consisted of four ten-man rifle sections, each with a light machine gun, plus a light mortar section with a 5cm mortar and three men, and a HQ section with the platoon commander, platoon sergeant, and four men. A rifle section (or squad) was commanded by a NCO and had six riflemen plus a machine gun crew of three with the MG 34 (later the MG 42) used in the 'light' role only. The machine gun commander was also sometimes a NCO. In panzer-grenadier battalions later in the war the light mortar section was dropped from the platoon but overall fire-power was theoretically much greater for the section light machine gun was augmented by two others which formed the demountable armament of the section's armoured troop carrier.

From the tactical point of view the most important feature of the infantry battalion was that the fourth company was the machine gun company with three (later two) heavy machine gun platoons (each with two gun sections) and a heavy (8cm) mortar platoon with three (later two) mortars. Within the infantry regiment was an infantry gun company with three platoons of 7.5cm howitzers and one platoon of 15cm howitzers (two guns to each platoon). Later in the war the fourth company of a panzer-grenadier battalion became a heavy company with three anti-tank gun platoons and an infantry gun platoon (see Table 3). These were additional to the weapons of the battalion's gun company which by this time had become a heavy gun company with 15cm pieces. Thus it can



Two Hanomag half-tracks of a panzer-grenadier armoured battalion following up tanks during the Stalingrad offensive, September 17, 1942. Just visible on the right mudguard of the nearest vehicle is the motorised infantry tactical sign. Note the section commander standing behind the gunshield in each vehicle. Overtaking on the left is one of the Sd Kfz 250/3 radio/command vehicles, probably that of the battalion commander (Chamberlain Collection).

be seen that infantry regiments and their battalions were virtually selfcontained as far as immediate artillery support was concerned.

Table 1 shows the basic organisation and composition of an ordinary infantry regiment in the 1943 period. The three battalions of infantry were frequently reduced to two later in the war. The ordinary infantry division throughout the war relied extensively on horse-drawn transport, supplemented to a small extent by trucks and other wheeled vehicles when available.

A motorised infantry regiment (Grenadier-Regiment [mot.]) was organised as in Table 1 except that the mounted infantry platoon (horses or bicycles) was replaced by a motor-cycle platoon and this was amalgamated with the engineer and signal platoons to form a single regimental HQ company. In a motorised regiment all transport was by truck.

(continued on page 8)

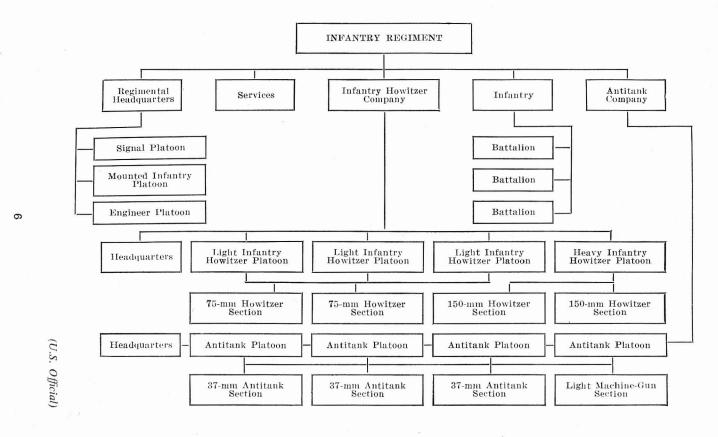
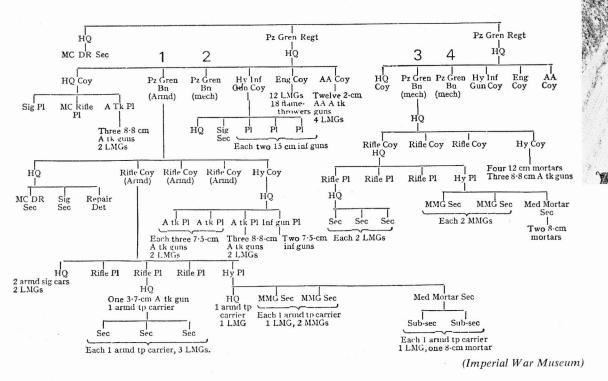
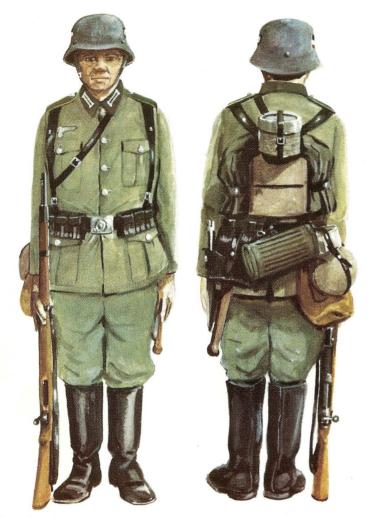


Table 2: Panzer-Grenadier Brigade, 1943



A widely used vehicle in the motorised battalions of panzer-grenadier and motorised infantry regiments was the Krupp L2H 43 6 × 4 light truck. This 1940 picture shows part of an infantry platoon on the move. The rectangular motorised infantry factical sign is just visible on the farmudguard (Chamberlain Collectice)



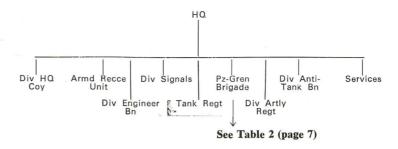
Grenadier in full marching order, 1940. He is wearing full equipment except for the large hide pack. The rifle is the Mauser Kar 98 7.92mm.

(continued from page 5)

An armoured infantry regiment (Panzer-Grenadier Regiment) was similar again but had only two instead of three infantry battalions at all times. Within the battalion were the changes in composition mentioned above. The heavy gun companies usually had self-propelled weapons rather than towed guns.

Within a Panzer Division there were two Panzer-Grenadier Regiments forming a Panzer-Grenadier Brigade. While panzer-grenadiers are popularly associated with armoured half-tracks, in reality this type of vehicle was restricted in supply and of the four battalions in the Panzer-Grenadier Brigade (ie, 2 x 2) only one, or at most two, would be fully armoured battalions; the remaining battalions were motorised with truck transport instead of half-tracks. Within a regiment the infantry companies were

Table 3: Elements of a Panzer Division



numbered consecutively, *ie*, companies 1-4 were in the first battalion, companies 5-8 were in the second, and companies 9-12 were in the third battalion. Company 13 was the infantry gun company, 14 was the engineer company, and company 15 was the AA(Flak) company. In two-battalion regiments the support companies still retained their 13, 14 and 15 numbering.

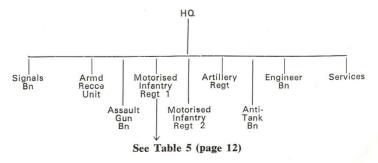
Table 2 shows the composition of a typical 1943 period Panzer-Grenadier Brigade where it can be seen at once that only Battalion 1 is armoured and Battalions 2, 3 and 4 are motorised.

Table 3 shows the relationship of the Panzer-Grenadier Brigade to the other arms within a Panzer Division. In this book only the panzer-grenadiers are shown in detail (*ie*, Table 2) though it will be appreciated that all the other arms in the division had their own battalion and company organisation.

Table 4 shows the relationship of the Motorised Infantry Regiments to the other arms within a Panzer-Grenadier Division. This type of division was essentially similar to a Panzer Division except that a single assault gun battalion replaced the tank regiment. The infantry regiments in a Panzer-Grenadier Division were normally motorised only (ie, carried in trucks) though sometimes one battalion was carried in armoured half-tracks as in a Panzer Division.

Table 5 shows the composition in 1943 of a Motorised Infantry Regiment from a Panzer-Grenadier Division. Comparison with the relevant part of Table 2 shows that essentially the motorised regiments were the same whether in Panzer or Panzer-Grenadier Divisions and the only real changes were differing modes of transport and fewer light machine guns.

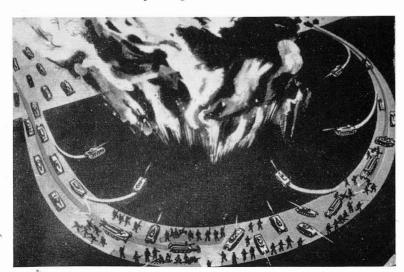
Table 4: Elements of a Panzer-Grenadier Division





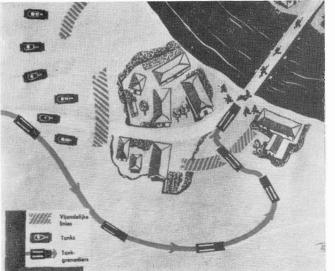
Panzer-Grenadier Tactics

Within the Panzer Division the task of the armoured battalion of panzer-grenadiers was to follow closely on the heels of the attacking tanks, co-operating with them as required by the situation in hand. The German method of tank attack was to concentrate first on any enemy artillery with the first wave of tanks. The second wave of tanks was usually accompanied by the panzer-grenadiers in their half-tracks and the task of this wave was to engage enemy infantry and anti-tank guns. SP weapons were also employed at this stage. A third wave of tanks and panzer-grenadiers would concentrate on 'mopping up' or engaging any remaining pockets of resistance. The motorised infantry battalions at this stage relieved the armoured battalion. In defence the Panzer Division was most often used to make counter-attacks. One tactic here was for the panzer-grenadiers to engage the enemy frontally while tanks attempted a flanking movement. These illustrations from the wartime German magazine 'Signal' show typical panzer-grenadier tactics.



LEFT: Taking a lightly held village. Artillery support fire precedes a direct frontal assault by panzer - grenadiers. Meanwhile the tank companies go round the flanks to cut-off and destroy the fleeing enemy. RIGHT: The second wave of a major tank assault. The tanks push forward to attack antitank positions and strong points while the panzer-grenadiers de-bus to take on





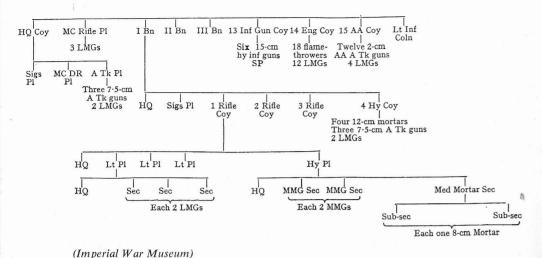
isolated infantry pockets and attack any positions which have been by-passed by the tanks.

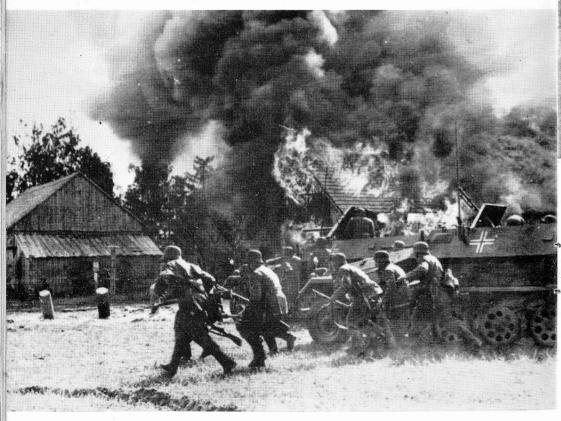
LEFT: Taking a well defended river crossing. The tanks engage the main defence positions in a frontal assault while panzer-grenadiers rush the flank and concentrate on seizing the bridge intact. BELOW: A river crossing. Tanks and the infantry gun company give strong covering fire while the assault engineers of the regimental engineer company (who were organised as specialist infantry) make the crossing in their rubber assault boats.

LEFT: An attack on a major target. Heavy bombing or bombardment is concentrated on the target area. Tanks and panzer-grenadiers encircle the target, half making an attack from behind on area concerned while half the force gives cover against counter-attacks.



Table 5: Composition of a Motorised Infantry Regiment, 1943





2: Weapons and Equipment



ABOVE: Nearly 15,000 Sd Kfz 251 series vehicles were built and this type, a Hanomag design, was the standard troop carrier for panzer-grenadier armoured battalions. The Ausf A and B models had multi-faceted hull armour plates and separate external side storage bins. In most battalions platoon commanders were issued with the Sd Kfz 251/10 variant which mounted a Pak 36/37 3.7 cm gun as shown here. This grey-painted vehicle sports white corners to its mudguards, a common 'blackout' precaution. Note the rear pintle mounting for an AA machine gun (Chamberlain Collection).

OPPOSITE: Typical panzer-grenadier tactics as detailed in the upper diagram on page 10. Grenadiers de-bus to rush the burning farm buildings. The platoon commander's Sd Kfz 251/10 vehicle is in the middle distance covering the building, with a Sd Kfz 251 nearest. Date is July 24, 1941, during the invasion of Russia.



ABOVE: There were four basic production models of the Sd Kfz 251. The last, the Ausf D, had a very much simplified body shape with the number of separate plates reduced to facilitate production. The side storage lockers were now integral with the hull side. Detachable hoops provided a support for a wet weather canvas cover. Instead of the earlier type of gun mount, a skate rail was provided for the vehicle's machine gun. This example was captured by the British in 1944. BELOW: The Flak (anti-aircraft) company of panzer-grenadier battalions was equipped with the Sd Kfz 10/4 or 10/5 (armoured cab) 2cm AA vehicle. Based on the standard 1 ton half-track chassis, this vehicle could keep pace with the battalion's armoured half-tracks. The gun was used when necessary to give ground support fire as well as for air defence. This example is at Sebastopol on December 3, 1941, the the crew wearing winter clothing (IWM-MH11710).







TOP: An armoured car and motor-cycle combination of the divisional reconnaissance unit overtake a panzer-grenadier company advancing in their half-tracks. From the direction of travel and the movement of the distant tank (far right) the unit is engaged in outflanking and encircling the village in the background as shown in diagram form on page 11. Nearest

vehicle, radio-equipped, appears to be from the company or battalion staff platoon according to the 'flag' and 'St' symbols just discernible on its tactical sign. These vehicles are actually from SS-Pz-Div. 'Das Reich' whose divisional sign may also be seen (IWM-MH12183). ABOVE: Sd Kfz 251 half-tracks move up in line through the vehicles of a tank battalion during the Orel offensive July 28, 1943. The nearest tanks are captured Russian T-34s with large German crosses on their turrets. RIGHT: The mortar section of the heavy platoon had two Sd Kfz 251/2 vehicles, each carrying an 8cm mortar which could be fired from the vehicle (Chamberlain Collection).



Infantry Small Arms



Karbine 98 Kurz (Kar 98K) Mauser

7.92mm (.312 inches). Calibre:

Magazine capacity: 5 rounds, internal box magazine.

8 pounds 8 ounces. Weight: 3,000 yards maximum. Range: 800 yards effective.

Muzzle velocity: 2.800 fps.

Sights: Rear: open, vee-notch tangent graduated from 100 to 2,000

metres.

Fore: inverted vee-blade which was fixed and could be fitted with a cowl (NB. No facilities for windage adjustments on sights).

N.B.: Drawings are not to common scale



Maschinengewehr 34 (MG 34)

Calibre: 7.92mm (.312 inches).

Left side; (1) 50 round interconnecting non-Feed: disintergrating metallic-link belts. (2) 75 round saddle drum feed. (3) 50 round belts in drums. (4) 100 round canvas

containers for tank use. Action:

Semi- and fully automatic, short recoil action. Air cooled, with barrel changing facility. There is a recoil booster fitted to to the end of the barrel which aids barrel recoil by gas pressure force upon the

barrel face.

Weight: 26 pounds 8 ounces.

5,000 yards maximum, 3,825 yards tripod Range: mounted, 2.000 vards bipod mounted

(effective ranges).

Vertical rear leaf, graduated 200 to 2,000 Sights:

metres, foresight fixed, inverted vee blade. Telescopic sights for use in the heavy role (when mounted on a tripod) sighted up to 3,500 metres. AA ring sight fitting.

Dependent on ammunition used: up to Muzzle 3,000 fps. Ammunition used: Ball, AP velocity:

and AP tracer.

Rate of fire: Approximately 900 rpm cyclic.

Sights:



Maschinengewehr 42 (MG 42)

7.92mm (.312 inches). Calibre:

Feed: Left side; (1) 50 round interconnecting nondisintergrating metallic-link belts. (2) 50 round belts in drums, (3) 100 round

canvas containers for tank use.

Fully automatic only. Combination short Action: recoil blowback action. Air cooled, with barrel changing facility. Fitted with a

recoil booster as in the MG 34.

25 pounds 8 ounces. Weight:

Approximately as for MG 34. Range: Sights:

Rear tangent graduated from 200 to 2,000 metres. Anti-aircraft peep sight fitted to rear sight, which was used in conjunction with the standard AA ring sight as used

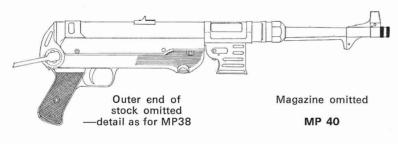
on the MG 34.

Muzzle Dependent on ammunition used . . . as for

velocity: MG 34.

Rate of fire: 1,300 rpm cyclic (decrease in accuracy

compared with the MG 34).



magazine in butt.

Maschinenpistole 38 & 40 (MP 38 & MP 40)

Calibre: 9mm (.354 inches). Magazine capacity: 32 rounds, in removable box magazine.

Weight: 10 pounds 7 ounces, loaded. 1,850 yards maximum, Range: 200 vards effective.

Rate of fire: Practical, up to 100 rpm burst fire.

Rear: fixed and folding leaf open notch.

fixed, 100 metres, folding, 200 metres.

Fore: fixed inverted vee-blade with ring cowl cover.

Range:



Pistole 1908 (P 08) Luger

Calibre: 9mm (.354 inches). Magazine capacity: 8 rounds, removable box

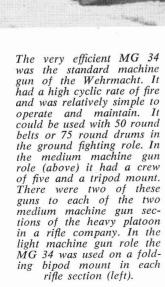
Weight: Range:

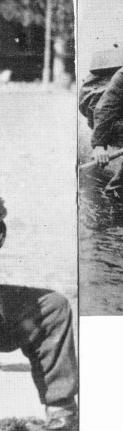
1 pound 14 ounces, empty. 1,150 yards maximum.

25 yards effective. Muzzle velocity: 1,040 fps using Parabellum ammunition.

16







Combat engineers (Pionere) were an integral part of German infantry formations and were trained and armed for a fighting role. A motorised engineer battalion was included in each Panzer-Grenadier Division and Panzer Division and units were deployed closely with the grenadier battalions. ABOVE: For a river or water crossing (example, see page 11) the engineer field companies used small (3-man) and large (7-man crew) pneumatic boats. The latter seen here, could carry a machine gun section or a rifle section of 10 men as in this picture. BELOW: Flame-throwers were another combat engineer responsibility. This July 1941 picture shows the early Kleif type of man-pack in use. This had a 25 yard range and 12 second capacity. Waffen-SS engineers are shown. The engineer battalion light column had six of these (or later) models and three medium (wheeled trollev) units.







ABOVE: The Panzerfaust (shown loaded in its spigot discharger) was a hollow charge anti-tank weapon with a 100 yard range. It was introduced in 1943 and this two man team is covering an adjacent roadway (out of the picture) in a defensive position on the Russian front. RIGHT: 50 round belts of MG 34 ammunition, a PO8 Luger pistol, and Stielhandgranate 24 (hand grenade) carried by MG 34 team commander. BELOW: The rifle grenade and its launcher fitted on the Kar 98k rifle. Both HE and AP types were issued (Chamberlain Collection).







ABOVE: The anti-tank platoon of a panzer-grenadier battalion's heavy company was equipped with the Sd Kfz 10 1-ton half-track. The gun was the 5cm Pak 38, gradually replaced by the 7.5cm Pak 40 from late 1942. There were three guns in the platoon. In some armoured battalions a Sd Kfz 251 was used as the towing vehicle instead of its unarmoured equivalent.

BELOW: An armoured infantry company on the move during the invasion of France in May 1940. This is the early Sd Kfz 251 Ausf A model, lacking a front machine gun shield. Modifications on these vehicles give a low stowage rack above the cab. Very clearly shown on the mudguard is the rectangular motorised infantry symbol with the company number alongside. Just above this is the famous oak leaf emblem of 1st Panzer-Division. The 'G' indicates Guderian's panzer group.



3: Uniforms and Clothing



ABOVE: Though there was a regulation way of wearing personal equipment (see drawing, page 8), there was considerable variation in the actual manner of wearing it as shown in this view of grenadiers seeking out snipers in a railway yard. Nearest man has full equipment (except large pack), the second has his small pack, respirator case, and entrenching tool all attached to his belt. RIGHT: Panzer-Grenadier Division 'Grossdeutschland was an elite formation, one of the few Army units to wear a divisional cuff-title. This unteroffizier is a rifle section commander and has a MP 40 sub-machine gun, and the special Schmeisser pouches. He wears the Iron Cross 2nd class and the infantry assault badge. Picture comes from a German wartime magazine (IWM-STT2203).

deutsche Julitrierte



Der Infanterift bleibt immer der erste Soldat

Section Region



ABOVE: Feldwebel (sergeant) on left with MP 40 covers the door while a grenadier breaks it down during a house-to-house search in a Russian town, September 1941. Both men carry haversacks and the sergeant has a leather map case. This was standard service dress in the early part of the war. By late 1942 the service dress had been simplified a little. The machine gun team on page 18 shows typical changes — anklets replaced boots (to save leather) and a more abbreviated tunic was issued with no pleats to the pockets and other simplifications, such as one fewer button. Note that epaulettes have been removed by the men in the picture on page 18.





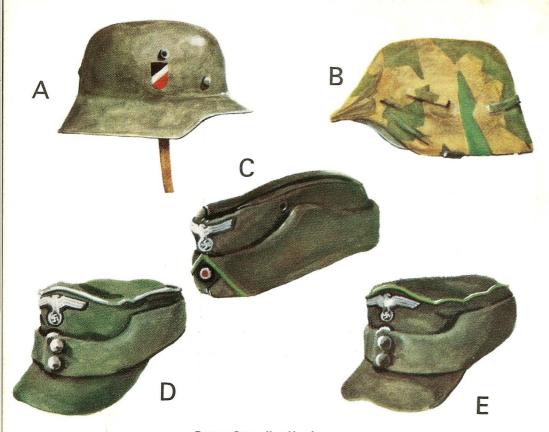
ABOVE: In wet weather the camouflage shelter quarter (or poncho) (Zeltbahn) was worn in cape fashion. This camouflaged garment could be used as a single bivouac or could be buttoned together to make a larger tent. BELOW: The most common pattern greatcoat in the use by 1944. It had a distinctive large collar and reached well down the legs. Two men wear standard camouflage smocks over their coats.





ABOVE: The simplest item of snow camouflage clothing was a white cape which came nearly to the ankles. It was worn over normal uniform. This MG 34 team is firing tracer at night. BELOW: Specially designed for the bitter conditions of the East front was the two-piece quilted winter combat suit. This was reversible—white one side and field grey the other. The helmet was white painted as necessary.





Panzer-Grenadier Headwear

(A) 1916 pattern steel helmet with national insignia as still worn by some units in 1939. (B) 1935 pattern steel helmet worn with standard camouflage helmet cover. The stitched in loops were for affixing foliage for camouflage purposes. (C) Feldmütze (field cap) with panzer-grenadier Waffenfarbe (arm of service colour). (D) Officers' 1943 pattern Einheitsmütze (silver piping). (E) Other ranks' 1943 pattern Einheitsmütze.

Badges and Insignia (opposite page)

(A) National emblem worn on right breast of tunic and on caps. (B) Other ranks' belt plate. (C) Obergefreiter (corporal) rank chevrons, worn on left arm of service tunic. (D) Grenadier's epaulette with panzer-grenadier Waffenfarbe (arm of service colour piping—apple green). (E) Oberleutnaut's epaulette. (F) Grenadier's collar patch with Waffenfarbe. (G) Panzerkampfabzeichen (tank assault badge), bronze class, awarded for taking part in three tank assaults on three different days. Worn on left breast pocket of service tunic. (H) Das Infanteriesturnabzeichen (infantry assault badge). Silver class—infantry; bronze class—panzer-grenadiers or motorised infantry. Awarded for three first-wave assaults on three different days. Worn on left breast pocket of service tunic. (I) Sonderabzeichen Fur Das Niederkampfen von Panzerkampfwagen Durch einzelkämpfer (tank destruction badge). Silver class. Awarded for the single handed destruction of an armoured vehicle using infantry weapons only. Introduced early 1942. Maximum award of five, after which a 'gold' class badge was awarded. Worn on the right sleeve below the shoulder.





This picture shows the special two-piece winter suit in use, this time with its hood up over the helmet. This item of clothing was worn almost exclusively on the Russian front. The nearest man has the MP 38 machine pistol.

BELOW: Grenadiers move cautiously through a courtyard behind a burning building while searching for snipers in a Russian town in the summer of 1941. The two men on the right are Gefreiters (lance corporals) and the centre man appears to be section commander. Rolled up tunic sleeves and open collar were normal practice in warm weather.



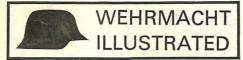


ABOVE: General-Leutnant von Manteuffel (left) with Major Kriegk, commander of the Panzer. Grenadier Regiment 'Grossdeutschland' (right). Kriegk held the Knight's Cross and wears a tank destruction badge on his arm. RIGHT: A battalion commander of Pz-Gren.-Regt. 'Grossdeutschland'. in June 1944.









Panzer-Grenadiers

A pictorial guide to the German motorised and armoured infantry units and their equipment

by
Peter Chamberlain and Chris Ellis

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UK price: 50p net ABOVE: Sd Kfz 251 half-tracks of the panzer-grenadier armoured battalion of 4th Panzer Division move through a Russian village in late July 1941. The first two vehicles are fitted with racks to fire 28cm rockets. On the left a panzer-grenadier platoon is apparently about to search adjacent buildings and a complete ten-man rifle section is moving away up the sidewalk (Chamberlain Collection).

Front Cover

A gefreiter (lance corporal) of panzergrenadiers in 1940 with MP 40 machine pistol, and wearing goggles for riding in his half-track. The small illustration shows the widely-awarded Iron Cross 2nd Class. Only the ribbon was worn on active service, in a coat button hole.

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