

GERMAN PANZER MAINTENANCE AND RECOVERY.

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1. INTRODUCTION

The German Army attaches the utmost importance to the effective maintenance and prompt recovery of vehicles. In the German armored divisions, each tank company, battalion, and regimental headquarters has a repair section. Moreover, each tank regiment is provided with a workshop company consisting—for a regiment of six companies—of a headquarters platoon, 1st and 2d (repair) platoons, 3d (recovery) platoon, an armory section, workshops for communications equipment, and a company supply section. Larger regiments may be given added strength. According to pre-war organization, a tank regiment of three battalions had—in addition to its workshop company—a light workshop platoon. Although little information about the workshop platoon has been available since 1940, it is believed that the strength of the unit has been increased.

2. DUTIES OF UNITS

a. Repair Sections

Repair sections are responsible for the general maintenance of tanks, their armament, and their radio apparatus. In camp and rest areas, a repair section checks the serviceability of vehicles in the unit to which it is attached; during this period, mechanics are sent to the workshop company for advanced training, or else master mechanics are brought in to give instruction.

On the march, repair sections travel with the tank units and deal with all vehicle or equipment breakdowns that can be repaired with field equipment and in less than 4 hours. If a tank breaks down, the repair section leader inspects it to determine the nature of the damage. If the damage warrants it, the tank is handed over to the recovery platoon of the workshop company to be towed away. Otherwise, two mechanics with a motorcycle and sidecar stay with the tank to make repairs, while the other elements of the repair section travel in the rear of the column—if possible, on higher ground, from which they can spot breakdowns.

In this way, one vehicle after another of the repair section stays behind—ordinarily the motorcycles, but if the damage is serious, a converted PzKw I tank without turret or armament. The repair section truck always stays with the repair vehicle left farthest to the rear.

In battle, the company repair sections are under the order of the battalion commander and are directed by a battalion motor-transport officer. On the march, they follow closely behind the

fighting units and range over the battle area, looking for broken-down tanks.

If a tank cannot be repaired on the spot, it is made towable, and its position is reported to the workshop company's recovery platoon.

Repair sections are not allowed to undertake the welding of armor gashes longer than 4 inches. In battle, the regimental headquarters repair section is attached to a battalion.

b. Workshop Companies

(1) General.—The workshop company operates as far as 15 to 20 miles behind the fighting tanks of its regiment, except that the recovery platoon works in the battle area, mainly to tow out disabled tanks. The workshop company handles repair jobs which take up to 12 hours. Repair jobs requiring up to 24 hours are sent back to rear repair bases. The workshop company has its own power and light system, power tools, a crane, and apparatus for electric welding and vulcanizing. Existing facilities on the spot, such as factories, are used whenever possible.

(2) Tank Recovery Platoon.—According to information received from prisoners of war, the towing vehicles and trailers of the recovery platoon are sent forward to regimental headquarters and operate under its direction. The current method is to send two or three recovery vehicles forward with the fighting units. These vehicles advance in the line of attack and cruise across the width of the battle front. The Germans believe that hostile forces will be preoccupied with the German tanks and therefore will not attack the recovery vehicles, even when they come very close.

If a member of a tank crew orders the driver of a recovery vehicle to tow his tank to the rear, the former assumes responsibility for the action (in case it should later prove that the damage was unimportant and could have been fixed on the spot by a repair section).

It is always permissible, however, to request that a damaged vehicle be towed away if it is in danger of being shot up. The towing vehicle usually goes forward alone, and tows a disabled tank away by tow ropes. Towing is used in preference to loading on a trailer. A prisoner of war explains that in the North African desert the latter operation may take as long as 20 minutes—and time is precious in front-line recovery. Prisoners state that trailers are being used less and less and that their use is confined chiefly to roads. On roads a higher speed can be maintained, and the trailers neither cut up the road surfaces nor weave as much as a towed tank. In roadless parts of the desert, trailers are resorted to where the ground is bad, and towing is done where the ground affords reasonably good going. The recovery platoon is not given the whole responsibility for the important work of salvaging tanks. In case of retirement,

the Germans use combat tanks to tow disabled tanks. Instances have been reported in which, even during battles, combat tanks have been employed both to protect towing operations and to assist in the towing.

Recovered tanks are towed to an assembly point behind the combat area. Trailers may be used to take the disabled tanks from the assembly point to a workshop company.

According to prisoners of war, the drivers of recovery vehicles have done front-line duty for about 8 days at a time, and then worked at the rear, between assembly points and workshops. One prisoner who had been a driver reported that he usually had a crew of two unskilled men with him. It was his opinion that skill was not so necessary as a fair amount of intelligence and plenty of courage.

c. Light Workshop Platoon

A German document from North Africa gives detailed instructions for organizing a workshop platoon in a two-battalion tank regiment (which normally would not have this unit). In this case, a good illustration of how flexible German organization can be, personnel was obtained for the platoon by breaking up the battalion headquarters repair sections of the two battalions. This platoon was smaller than the workshop platoon designated by the pre-war organization for a tank regiment of three battalions, and was to operate in place of the battalion headquarters repair sections, under direct regimental command. The platoon was to serve as a link between the workshop company and the company repair sections. Like the latter, it would handle work requiring less than 4 hours. In attack, it would follow the central axis of advance, keeping in close touch with the workshop company's recovery platoon.

The light workshop platoon was to work on brakes, gears, and clutches of PzKwII's; on damaged gearmechanisms of PzKwIII 's; and on valve defects in all types of truck and tank engines, except PzKwIII's and PzKwIY's. Also, the platoon was to repair electrical and fuel systems; salvage and tow wheeled vehicles; repair wheeled vehicles; perform autogene welding and soldering work; and charge and test batteries and electrical apparatus.