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At Aberdeen's Ordnance Research Center, inquisitive experts find what makes an Axis vehicle tick, and their tests produce facts worth remembering.

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This is the famous Tiger (with a picture of its namesake painted on the face plate) the largest and heaviest German tank. Weighing 61 $\frac{1}{2}$ tons, it is propelled at a top speed of 15 to 18 miles an hour by a 600-to-650 horse power Maybach V-12 cylinder engine. Maybach engines are used in many of the Nazi panzer weapons and in submarines. The Pzkw VI has an armor thickness which ranges from 3 $\frac{1}{4}$ to 4 inches. An additional slab of steel mounted in conjunction with its 88-mm gun forms frontal armor for the turret. Besides the long-barreled 88 it carries two MG34 (Model 1934) machine guns. Largest tank used in combat by any nation today, the Tiger is more than 20 feet long, about 9 $\frac{1}{2}$ feet high. It has a crew of five.

ABERDEEN, Md.—The first thing you learn at the Foreign Materiel outfit here is never, ever, to call a Nazi tank a "Mark Six" or a "Mark Four." The correct designation is PzKW VI or PzKW IV. "Mark" is the British way of saying model, whereas PzKW means what it says: *Panzer Kampfwagen*, or armored battlewagon.

For more than a year captured enemy vehicles have been arriving here from every battle front on earth. The first was a half-track prime mover that came in sections and required three months of trial-and-error tinkering to be completely reconstructed. Missing parts, which were requisitioned from North Africa, never arrived: mechanics in the Base Shop section made their own.



A mechanic at Ordnance Research Center adjusts the valves of the Maybach engine in a PzKW IV

PzKW VI

The worst headache for repair crews here is the difference in measurement caused by the European metric system. Nothing manufactured in the U. S. will fit anything in a Nazi machine unless it is made to fit. In reconstructing the captured stuff, it has sometimes been necessary to combine the salvaged parts of two or three vehicles in order to put one in running order. The mechanics have made their own pistons or recut foreign pistons to take American piston rings; they've cut new gears; they've had to re-tap holes so that American screws will fit them.

Specially assigned recovery crews, ordnance men trained to know and work with enemy materiel, roam the battlefields of the world to collect the captured rolling stock, which is being accumulated here. It arrives with the dust of its respective theater still on it, plus the names and addresses of GIs who scratch "Bizerte" or "Attu" or "Buna Mission" in big letters on the paint.

Generally speaking, ordnance experts here



T-3 Bruce Warner welds the cracked fender of a German personnel carrier received at Aberdeen.

Generally speaking, ordnance experts here have found German stuff exceptionally well made in its vital mechanisms, whereas the less essential parts are comparatively cheap. The motor of a Nazi personnel carrier, for example, is a well-built affair, while the body of the vehicle is hardly more than scrap tin. Japanese pieces of equipment for the most part are cheap imitations of American or British counterparts.

The engineers, who judge by the mass of detail employed in all German-built machines, are convinced that the Nazi idea has been to sacrifice speed for over-all performance and maneuverability. The German equipment, from the sleek motorcycle to the massive PzKW VI, is rugged.

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