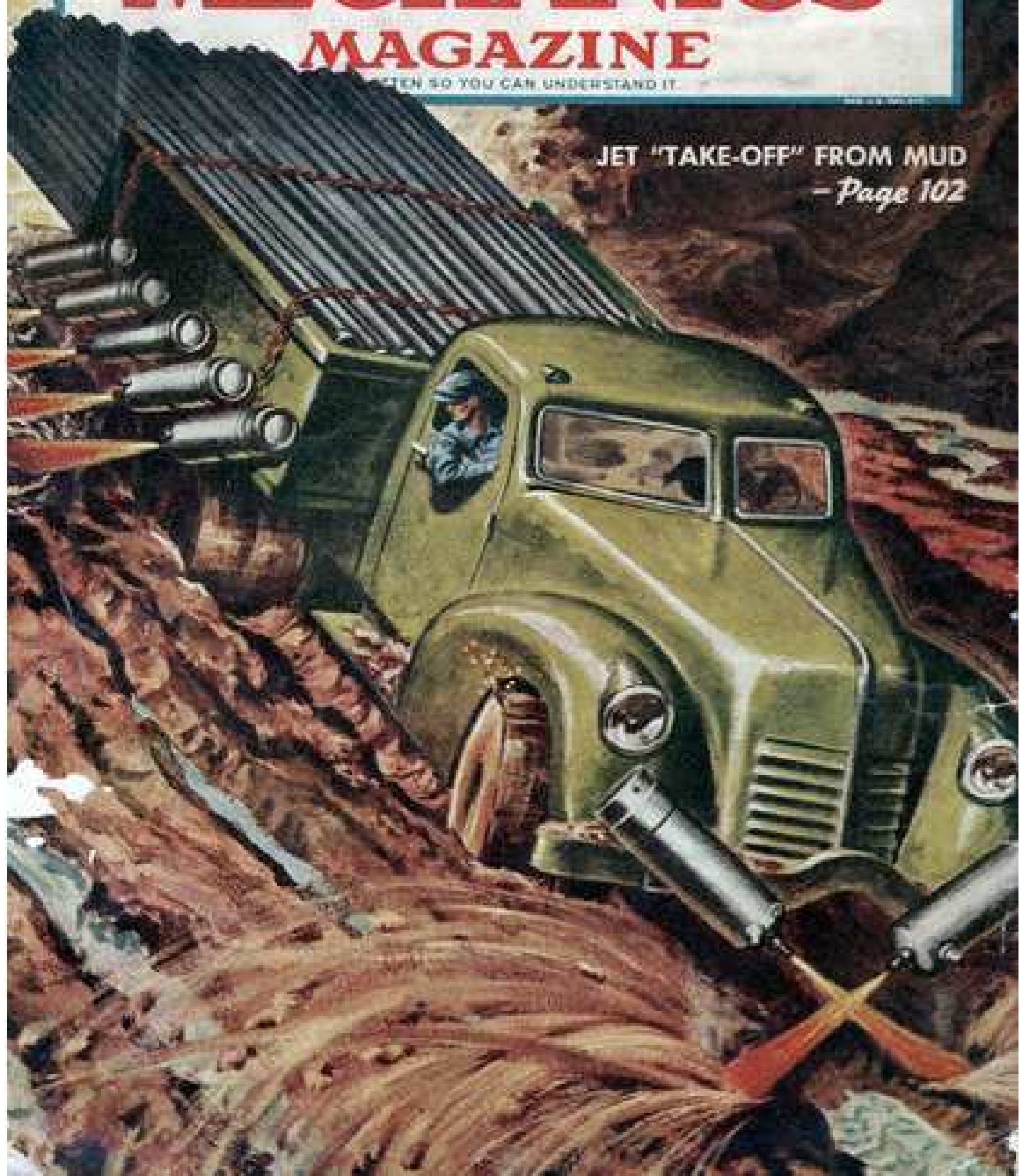


POPULAR MECHANICS

MAGAZINE

...TEN SO YOU CAN UNDERSTAND IT.

JET "TAKE-OFF" FROM MUD
— Page 102





Mired in axle-deep mud for Army test shown on cover, a "six by six" weighing 36,000 pounds was boosted to firm ground by 12 JATO units

Five jet-assist units were put on each side of test truck and two more were angled downward in front to blow mud out of the path



The folks who helped "jet" heavily loaded planes out of tiny New Guinea airfields are now busy finding more homely uses for JATO units. Such as boosting tired trucks out of mudholes and up steep roads, or putting emergency brakes on runaway mine cars

WHAT we want," the public-utilities official stated, "is an auxiliary engine that will help our construction trucks and trailers climb up into the mountains. The loaded vehicles weigh 33 tons and right now we grind along at six miles per hour. We want to get up those grades at 45 miles per hour."

The Aerojet engineer thumbed his slide rule for a moment and grinned.

"We have just the thing," he commented. "Five hundred horsepower in a package 18 inches square. How's that? Turn the auxiliary power on at the foot of the grade and cruise along as fast as you want. Only trouble is, you can't afford it. At \$2.50 per gallon, fuel will cost about \$1200 per trip."

The compact motor the engineer described is a lightweight rocket-driven turbine, comparable to the turbine that drives the fuel pumps of a V-2. It uses Diesel oil plus a liquid oxidizer as fuel. It makes relatively little noise and needs no muffler. It's cooled internally by steam in the rocket chamber. It produces 500 horsepower at 30,000 revolutions per minute.

As a booster engine for a truck, the turbine would be connected to the vehicle's drive shaft by a fluid coupling that would also serve

Gets
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