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Report of Test

Of

Bantam Chassis

By:

THE CAVALRY BOARD

Fort Riley, Kansas.

File No. 451.2

Date November 8, 1938

451.

SUBJECT: Bantam Chassis, test of.

TO: The Chief of Cavalry, Washington, D.C.

1. OBJECT OF THE TEST.-- The object of the test was to determine whether this vehicle was suitable for use in cavalry as:

a. A possible replacement for the motorcycle in courier service or for traffic control with convoys.

b. As a weapon and/or ammunition carrier.

c. As a light reconnaissance vehicle.

d. Any other uses.

2. THE TEST. -- The vehicle was equipped with two seats in front and with a light "pick-up" type wooden body. It was then issued to the Headquarters Troop, 2d Cavalry, for test. This troop used it in lieu of a motorcycle to accompany the Scout Car Platoon and, at times, the Transportation Platoon during all garrison and field training conducted by the unit until the end of the test period. It accompanied the troop on the Cavalry School spring march during which the regiment operated over wet clay roads. It was also used on the reservation on several occasions to transport a caliber .50 machine gun, with ammunition and one man in addition to the driver.

3. DISCUSSION. --a. Oil consumption was high during the first part of the test period and this was believed due to leakage from the rear main bearing. On October 17, 1938, a new main bearing and fly wheel was received from the factory and installed in the vehicle. This appeared to stop excessive oil consumption. Performance of the vehicle was also greatly improved after these new parts were installed.

b. Speedometer readings when test started -- 186.
Speedometer reading when test ended -- 2264.
Total oil consumption during test period -- 4 gallons.
McMillan Ring Free oil was used throughout the test.

c. A test run conducted after the break-in period, using a measured quantity of fuel with vehicle operating on a level concrete road carrying two passengers gave a mileage of 24.4 miles to the gallon. Regular issue gasoline was used.

d. There were no maintenance costs other than those incident to installing new main bearing and flywheel and making minor adjustments. No parts were worn out or broken during the test.

4. RESULTS OF THE TEST. -- The test indicated that:

a. The vehicle has little unimproved road or cross country mobility. Difficulty was experienced in climbing grades encountered when vehicle was carrying two passengers. There was insufficient power and flotation to permit operation over muddy clay roads.

b. The vehicle cannot perform the missions of the motorcycle for the reason that it accelerates too slowly, and cannot quickly attain the speed desired. It is less flexible than a motorcycle due to its greater turning radius.

c. The narrow gauge of the vehicle makes operation on clay roads difficult as car must be driven straddle of one rut or with outside wheels in one rut.

d. The cargo capacity of the vehicle (one-fourth ton) is generally too small to permit of its use as a weapon carrier, as transportation of a machine gun with ammunition and minimum crew usually results in an overload.

e. The vehicle generally lacks the power, ability to accelerate and mobility necessary in any tactical vehicle with cavalry.

5. CONCLUSIONS. -- The Cavalry Board, therefore, concludes that the subject vehicle is not suitable for any tactical use in cavalry, either horse or mechanized.

6. RECOMMENDATIONS. -- The Board recommends that the Bantam chassis be considered unsuitable for any tactical uses in cavalry either horse or mechanized.

For the President:

s/ Dorsey R. Rodney,
Dorsey R. Rodney,
Colonel, Cavalry,
Director.