

CONFIDENTIAL
PROPERTY OF THE U.S. GOVERNMENT
DO NOT DISTRIBUTE



The valve lifters (#1079) were responsible for the greater part of the delays experienced with this truck. The steel valve tappet rollers (#1080) crystallized and broke up, and the lock nuts (#1083) loosened permitting the lifter assembly to drop down. In many cases the guides (#1078) broke at the lower end permitting the pin (#1081) to turn at an angle to the cam. The valve springs (#1011) also gave a considerable amount of trouble frequently breaking into three or more pieces on account of crystallization. The end of the valve stem where it is turned down for the spring lock (#1013) sometimes broke off.

One piston (#2113) collapsed on the Class 2 machine shop truck while coasting down grade at too great speed. This accident was peculiar inasmuch as an examination of the cylinder and the piston indicated that they were without oil, both being heavily scored although the other pistons and cylinders showed perfect lubrication. There was a large supply of oil in the crank case and the oil pump was apparently in perfect working order. Lack of time made it impossible to make a more careful study of the cause of this accident.

The U.S.A. carburetor gave trouble because of the float valve adjustment loosening up. This is held in position entirely by solder and the excessive vibration of the engine resulted in the needle separating from the collar (#1972). Some trouble was also experienced with the low speed adjustment screw (#1359) working loose and dropping out of the carburetor. The air choke valve also gave trouble on account of the pinch screw (#1365) loosening up, permitting the disc (#1361) to close the air entrance into the carburetor. The throttle lever (#1364) also became loose on account of pinch screw (#1363) working out. This prevented the carburetor from being opened fully. While these difficulties are obvious to any one experienced with carburetors, they seem very mysterious to the average enlisted driver or mechanic.

The low speed adjustment screw of the Zenith carburetor frequently loosened up and fell out. The air choke valve also worked loose from the controlling links and partially closed the air intake into the carburetor.

The Bosch magnets, type L-2.4 was used on the Class 2 trucks and gave considerable trouble especially during the first four weeks of the Convoy. A static condition developed between the distributor block and the high tension conducting pencil, resulting in a short circuit which stopped the ignition in all cylinders. Temporary repairs were made by roughly grinding out the distributor (#42683) so that a greater air space existed between the pencil and distributor block. At Chicago Heights the Bosch Representative turned over to the Convoy three of the new Bakelite type distributors and although it was necessary to dismantle the magnets in order to install them, they were used with very satisfactory results.