48. PURPOSE AND INTERVALS OF OPERATOR MAINTENANCE SERVICES

a. Purpose. To insure maximum efficiency so that defects may be discovered and corrected before serious damage or failure occurs, it is necessary that the vehicle be systematically inspected at intervals every day it is operated and semi-annually. Certain scheduled maintenance services will be performed at these designated intervals. Any defects or unsatisfactory operating characteristics beyond the scope of the crew to correct must be reported at the earliest opportunity to the designated individual in authority.

b. Daily Preventive-maintenance Service.

(1) Vehicle. Each vehicle will be inspected each day that it is operated. This service is divided into three parts, as indicated in (a) through (c) below.

(a) Before-operation Services (figure 22). This is a brief service to ascertain that the vehicle is ready for operation; it is mainly a check to see if conditions affecting vehicle readiness have changed since the last after-operation service.

(b) During-operation Services (figure 23). This service consists of detecting unsatisfactory performance. While operating the vehicle, the crew should be alert for any unusual noises, odors, abnormal instrument readings, steering irregularities, or any other indications of malfunction of any part of the vehicle. Every time he applies the brakes, shifts gears, or turns the vehicle, the driver should instinctively consider it a test and note any unusual or unsatisfactory performance.

(c) After-operation Services (figure 24). This is the basic daily service for tactical vehicles. It consists of correcting, insofar as possible, any operating deficiencies. Thus, the vehicle is prepared to operate upon a moments notice.

49. GENERAL PROCEDURES FOR OPERATOR

a. The following general procedures apply to operator preventive-maintenance services and to all inspections, and are just as important as the specific procedures.

b. Inspections to see if items are in good condition, correctly assembled or stored secure, not excessively worn, not leaking, and adequately lubricated, apply to most items in the preventive-maintenance and inspection procedures. Any or all of these checks that are pertinent to any item (including supporting, attaching, or connecting members) will be performed automatically, as general procedures, in addition to any specific procedures given.

(1) Inspection for "good condition" is usually a visual inspection to determine whether the unit is damaged beyond safe or serviceable limits. Good condition means that a component or part is not bent or twisted, not chafed or burred, not broken or cracked, not bare or frayed, not dented or collapsed, not torn or cut, or not deteriorated.

(2) Inspection of an item to see that it is correctly assembled or stowed is usually a visual inspection to see if the item is in its normal position in the vehicle and if all its parts are present and in their correct relative position.

(3) Inspection of an item to determine if it is "secure" is usually a visual examination or a check by hand, wrench, or pry-bar for looseness. Such an inspection must include any brackets, lock-washers, lock-nuts, lockwires or cotter-pins, as well as any connecting tubes, hoses, or wires.

(4) "Excessively worn" means worn beyond serviceable limits or to a point likely to result in failure if the item is not replaced before the next scheduled inspection. Excessive wear of mating parts of linkage connections is usually shown by too much play (lash or lost motion). It includes illegibility as applied to markings, data and caution plates, and printed matter.