

type of engine. The governors on such lorries as are provided with these fittings must be kept in working-order, and are not to be disconnected or tampered with.

*Lubrication and Lubricants.*—Care must be taken before starting on a day's run, and at intervals during the day, to see that the proper level of oil is maintained in the crank-chamber of engine. If too much oil is left in the crank-chamber the engine is liable to smoke badly: this may cause the sooting-up of the plugs. On the other hand, an insufficient quantity of oil will cause the engine to overheat, and will cause the bearings to run out.

*Oil-tins and Water-tins.*—The petrol-tin carrier on left of lorry should be reserved for carrying tins of petrol only; the right of the vehicle for oil, grease, and water when necessary only.

*Cleaning Base Chambers.*—After motor vehicles have run 1,000 miles in case of a lorry, 2,000 miles in case of a car, and in any case not less frequently than once in two months, the crank-chamber of the engine should be taken down and thoroughly cleaned with paraffin. Date to be recorded in running-book. At the same time precautions must be taken to ensure that all oil-passages and oil-pipes are thoroughly cleaned, and cleared of all obstruction, and not reduced in size. Neglect to carry out this cleaning has led to a number of cases of overheating of ends and bearings.

*Pumps and Packing.*—Special attention must be paid to packing of water-pumps where there is any possibility of water leaking into crank-chamber, and the oil of the crank-case must be examined from time to time to see if water is present.

*Oil-leakages.*—The oil-leakages from engine or base chamber must be reduced to a minimum by renewing packings where necessary, not merely to prevent waste of oil, but in order to prevent oil escaping so as to reduce oil in base chamber below safe working limit.

*Marking Motor-cars and Lorries.*—All motor-cars and motor-lorries must have their official registration number painted on bonnet and also on back of vehicle. This number is to be painted on both sides of the bonnet in white paint, and in a conspicuous position at back, where it is not likely to be obscured by the tires, tarpaulins, or other obstructions. Size of figures to be as under: Motor-cars, 4 in. high,  $\frac{1}{2}$  in. wide; motor-lorries, 6 in. high,  $\frac{3}{8}$  in. wide. A broad arrow to be placed on top or on one side of the numbers, according to shape of bonnet, as may be most convenient. No numbers or letters are to be painted on bonnets or on backs of vehicles except official registration number.

*Economy as regards Spare Parts, Stores, Equipment, &c.*—In the interests of economy it is absolutely essential that very careful supervision should be exercised over demands for spare parts, stores, equipment, and accessories, and officers in charge should never lose sight of the fact that they are personally responsible for the correctness and necessity for such demands. The drivers should be made personally responsible for the equipment of their vehicles, and being placed in charge a receipt should be obtained from them for all tools, lamps, accessories, &c., and they should be held responsible that these are forthcoming when vehicles are transferred from their charge to another driver or returned to store.

*Pyrenes, Care of.*—These are to be carried in proper brackets, not thrown about or carried loose in tool-boxes.

APPENDIX 16

(Referred to in para. 224).

MATERIALS FOR CLEANING AND PRESERVATION OF ARMS.

*Annual Supply of Oil, &c., for the Cleaning, Oiling, and Preservation of Arms.—Peace only.*

No oil, &c., except that supplied by the Ordnance Department will be applied to the arms under any circumstances.

- Oil, petroleum, lubricating—
  - 100 arms, including pistols, 72 pints.
  - 100 rifles or 200 pistols—
    - For lubricating actions, 9 pints.
    - For removing rust from barrels, 1 pint.
  - Mineral jelly—Per 500 rifles, 10 lb.

*Annual Supply (Peace only).*

- Sheeting, old .. .. 1½ oz. for each Webley pistol, and 10 lb. for use of the armourer.
- Flannelette .. .. 8 yards each .303 in. rifle in possession of units of Cavalry, Horse, and Field Artillery, and Infantry; 4 yards for each .303 in. rifle in possession of other units.
- Wire, brass, No. 26 W.G., 2 oz. per 100 arms, for use with cleaning-rods Nos. 2 hard, 3 in. lengths .. .. and 3, and rod-cleaning cylinder, pistol, Webley.
- Jute, dressed .. .. 1 hank per 200 arms, for use with cleaning-rod No. 1.

*Pullthroughs, Double (Peace).*

- Pullthroughs—Double .. .. 10 } Per 1,000 arms. To be supplied
- Cords (spare) .. .. 10 } to and used by armourers only.
- Gauze, wire (pieces) .. .. 20 }