THE DUTIES OF PITMEN FOR LUBRICATING THE BEARINGS AND GEARS AND REPACKING OF TRAM BEARINGS.

All containers used for oil or grease must be kept clean and when not in use, stowed in a locker.

Dry Wool Packing must be kept in a clean locked locker.

Dry wool packing must be soaked in armature oil for at least 24 hours before it is used and the container that is used must have a dust proof cover.

Rostered Day-in Service:

Clean dirt from around the hatchway ledges and the tops of the bearing lids, using a millet whisk.

Lift the lids on the armature and suspension bearing lids, and check the height of the oil in the wells using the steel standard measuring gauge, then add sufficient oil to bring the oil to the correct height on the gauge, (armature bearing 1½", suspension bearing 1¾") then pour approximately one tablespoon of oil on the top of each wool packing; close the lids, making sure that they are seated firmly on the housing.

Note: If bubbles of water appear on the gauge after dipping the oil wells, the bearings must be repacked with new wool. Oil the motor thrust collars (quantity: one teaspoon per collar).

Every Second Rostered Day-in Service:

Clean and oil the truck bolster centre bearing, the truck bolster transom plates, and on Class W3 and 4 trams clean and oil the inside compensating brake lever pivot points.

Check the oil level in the compressor by using the steel gauge. The correct level is ½" below the top of the filler plug; add compressor oil as required.

All compressor breathers and drain holes must be kept clean.

Every 4th Rostered Day-in Service:

Lubricate all transmission gears as required. The usual quantity is one 3 oz. pat to each set of gears.

SCHEDULE OF BEARING INSPECTION AND REPACKING:

Every 12 weeks the armature gear side bearing on M.V. motors must have the wool packing drawn and repacked with new wool packing. This is important as the gear shield tends to glaze the wool packing.

Inspection of axle box saddle bearings and repacking of the boxes.

Four weeks after a change of trucks, the axle box cover is to be removed, and the wool packing pushed back by using a wood packing stick; if necessary, add wool packing.

Armature oil is used for lubrication. Ensure that the wool is thoroughly soaked; a slight excess of oil should be present. Replace the rubber gasket if defective, inspect the bolts and Nylock nuts and if defective, replace. Replace the cover and tighten securely.

52 Weeks after a change of trucks:

Remove the axle box cover and draw the wool packing, using the steel hook provided.

Place a hydraulic jack under the axle box and lift the box sufficiently to allow the saddle bearing (and, if used, the keeper) to be removed. It may be necessary to slacken off the brakes to gain sufficient height to remove the saddle brass; before the job is completed the brakes must be re-adjusted. Examine the saddle bearing and, if worn at the end, or if the white metal is defective replace with a reconditioned bearing. When the bearing is being used again, all surplus metal must be removed from the side edges and a draw scraper used to level both sides of the bearing to assist with the oil feed. Clean all the old oil out of the box and with a clean kerosene rag on a piece of wood, wipe the axle journal and the inside of the box making sure that all foreign material is removed. On no account must the hand be placed between the top of the journal and the axle box, use a piece of rag wrapped around a wooden stick. Oil the running surface of the bearing and place it in position (also the keeper, if used) then lower the jack and check that the bearing is seated correctly.

Repack the box with new soaked wool packing using a wooden pushing stick to pack the wool into position.

Use armature oil to lubricate the box, ensuring that the wool is thoroughly soaked (slightly in excess) with the oil.

Examine the axle box rubber gasket and if defective, replace; examine the bolts and the Nylock nuts and if defective, renew. Replace axle box cover, tighten firmly.

All other axle boxes on the tram must be serviced by the same method.

Hot Axle Box - Safety Precautions:-

To prevent the heated wool from igniting on exposure to air the axle box cover must not be removed until the box has cooled.

When it has cooled, remove the axle box cover and draw the wool packing using the steel hook provided.

Place a 3 ton hydraulic jack under the bottom of the axle box and lift the box sufficiently high to allow the saddle bearing and, if used, the keeper to be removed.

After the saddle bearing has been removed, clean out all debris and wash the inside of the box and the journal with kerosene.

Hands must not be placed between the top of the journal and the axle box - use a piece of rag wrapped around a wooden stick. If the journal is damaged report it to the Depot Foreman.

Oil the bearing face of a reconditioned saddle bearing and place in position, (and if used, the saddle brass keeper) lower the jack and check that the bearing is seated correctly.

Repack the box with new soaked wool packing using a wooden pushing stick to pack the wool into position.

Use armature oil to lubricate the box ensuring that the wool is thoroughly soaked (slightly in excess). Examine the axle box rubber gasket and if defective, replace. Examine