

DIRECTORATE GENERAL BORDER ROADS

GENERAL MAINTENANCE INSTRUCTION NO. 70

ON

GENERAL MAINTENANCE OF MECHANICAL TYRE PUMPS FITTED WITH ALL  
VEHICLES

Introduction

1. Exceptional wear and failures of mechanical tyre pumps have been traced in many instances due to condensation accumulating on the piston rings. This leads to their final collapse with consequent loss of pressure and finally the pumping of lubricant into the airline.

Action by

2. (a) All units concerned: Carry out the following instruction in paras 3 and 5.
- (b) Base & Field Workshop: Carry out the following instructions in para 4 when necessary.

Details

3. To obviate condensation take the following action:-

- (a) All mechanical tyre pumps will be operated for not less than 10 minutes per week.
- (b) Inlet and outlet valves to be removed, dismantled and cleaned every 2000 miles and a drop of oil should be applied to each valve and the valves reassembled.

4. In some instances the tyre pumps will be found to pump oil into the tyre tube during inflation. This condition is usually the result of piston rings being too tight in the ring grooves. If this defect is noticed, dismantle tyre pump and increase side play in ring grooves by .001". Normal care will be taken to ensure that the ring is reduced evenly all round to obtain this side clearance.

5. In order to clear the air hose and connection of any accumulation of oil and water always operate the tyre pump for a few minutes before connecting the delivery hose to the pump outlet and again before connecting hose to the tube valve. To ensure cleanliness of the air delivery a check may be made by holding a piece of paper in the air stream. If the discharging air does not clean up quickly check oil levels. If the levels are correct and the unclean discharge persists, the pump requires workshop attention as described in para 4 above.

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