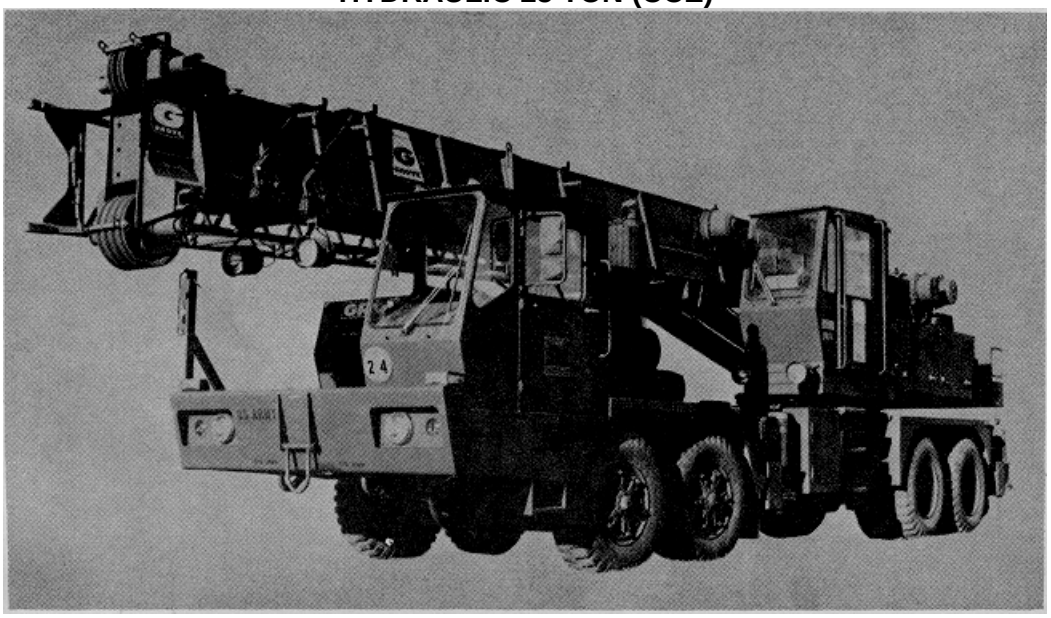
TECHNICAL MANUAL

OPERATOR'S MANUAL
FOR
CRANE, TRUCK MOUNTED
HYDRAULIC 25 TON (CCE)



GROVE MODEL TM S-300-5
CONTRACT NO. DSA 700-77-C-8511

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1 MAY 1980

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"BREAKING-IN" A NEW CARRIER

Your new Grove carrier has been thoroughly tested, adjusted, lubricated and inspected prior to delivery. However, as road shock, crane operation, moving parts "wear in" ’or gasket and hose connections "take a set" an occasional oil, air or coolant leak may develop. Immediate corrective action should be taken to avoid major repairs later. For detailed engine "break-in", reference should be made to the applicable Engine Operator’s Manual.

As a "rule of thumb", 2,000 3,000 miles may be considered the equivalent of 100 hours which should also be considered the "break-in" period.

Some important rules to follow to establish conditions for long service life are:

1. Operate as much as possible in half to three-quarter throttle or load range.
2. Avoid long periods of operation at engine idle speeds or at continuous maximum horsepower levels.
3. Develop the habit of observing instruments often and shut down at first indication of abnormal readings.
4. Operate to a power requirement that allows acceleration to governed speed when conditions require more power.
5. Check all components frequently for proper operation, unusual noises or excessive heating.
6. Check engine oil and coolant levels frequently.

These rules should not be considered as limitations in putting your equipment to work at maximum capability but rather to serve as a guide to familiarization and development of good operating habits.

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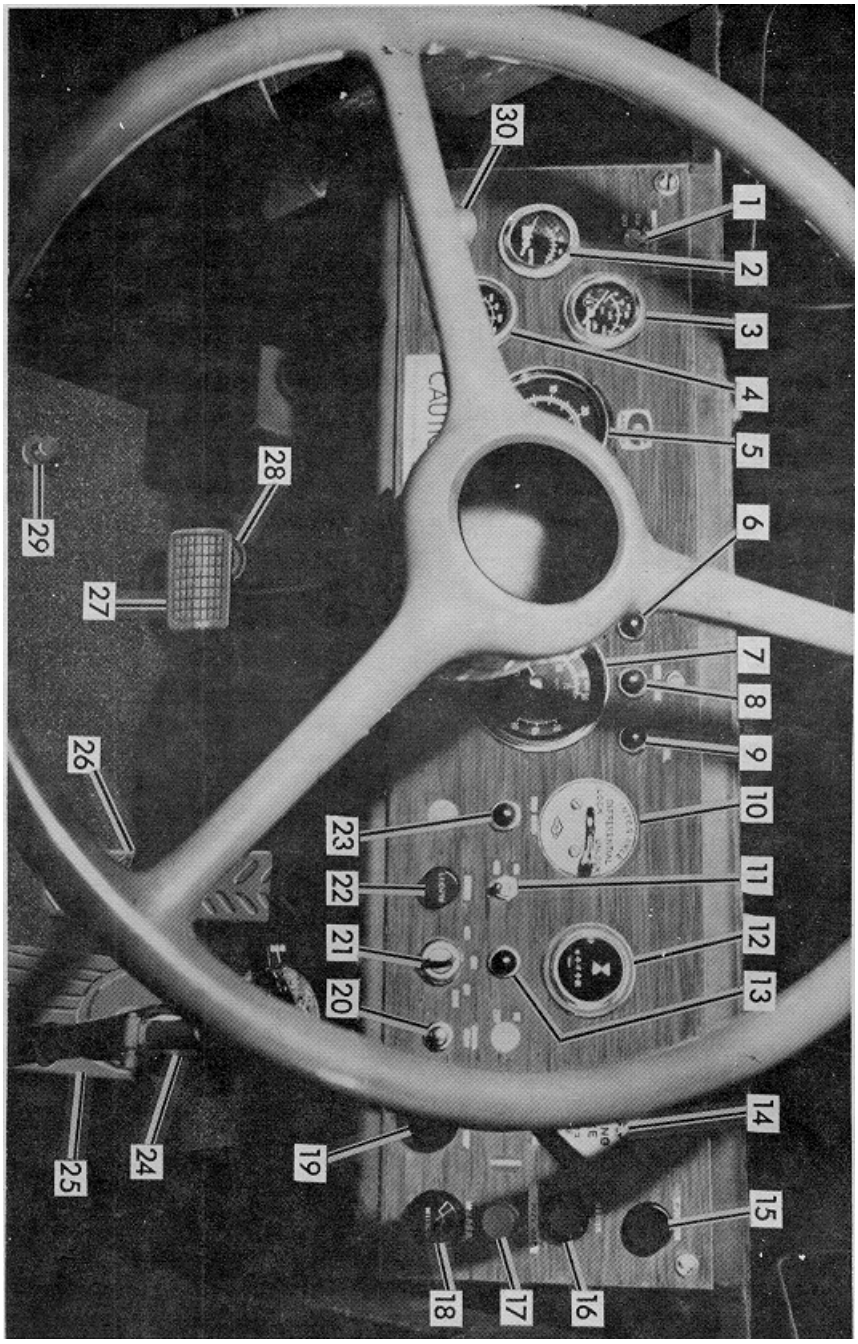
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CONTROLS, GAGES AND INDICATORS

The items that follow identify the controls, gages, and indicators in the Carrier Cab. Also, the paragraphs specify the purpose of each control, indicator, and gage. The index numbers on the illustration correspond to the numbers in the paragraphs.

1. **REMOTE THROTTLE CONTROL**. Controls operation of the Superstructure throttle. When in the ON position allows the Superstructure air throttle system to control engine rpm.

2. **VOLTMETER**. Indicates the battery condition, when alternator is not producing electromotive force (volts). Also, shows condition of the charging system when engine is operating.

3. **ENGINE OIL PRESSURE GAGE**. Normal operating pressures should remain in a range of 40 to 60 psi.

4. **ENGINE WATER TEMPERATURE GAGE**. Normal temperature indication should be in the range of 170" to 185 F. If temperature indication is abnormal, operation of automatic radiator shutters and/or the thermostat should be checked.

5. **ENGINE TACHOMETER**. Indicates revolutions per minute at which engine is operating.

MAIN AIR SYSTEM PRESSURE GAGE. (Not Shown). Indicates pressure in main air tank. Operating range is normally between 95 and 125 psi. If pressure drops below 75 psi, a low pressure warning buzzer will operate and the red warning light will illuminate.

FUEL GAGE. (Not Shown). Indicates fuel tank quantity in fractions of the total tank capacity.