

**TM 5-3805-257-14&P**

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**TECHNICAL MANUAL  
OPERATOR'S, ORGANIZATIONAL  
DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT  
MAINTENANCE MANUAL  
(INCLUDING REPAIR PARTS INFORMATION AND SUPPLEMENTAL  
MAINTENANCE AND REPAIR PARTS INSTRUCTIONS)**

**FOR**

**LOADER, SCOOP TYPE, DED, 4 X 4, ARTICULATED  
FRAME STEER, 4 1/2 to 5 CUBIC YARD (CCE)**

**CLARK MODEL 175 B**

**TYPE I WITH 4 1/2 CU. YD. BUCKET**

**NSN 3805-00-602-5006**

**CLARK MODEL 175**

**TYPE II WITH 5 CU. YD. GENERAL PURPOSE BUCKET**

**NSN 3805-00-602-5013**

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| <p><b>This copy is a reprint which includes current<br/>pages from Changes 1 and 2.</b></p> |
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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

**JANUARY 1981**

TECHNICAL MANUAL

No. 5-3805-257-14&P

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
Washington D.C., 9 January 1981

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,  
GENERAL SUPPORT, AND DEPOT MAINTENANCE MANUAL  
(INCLUDING REPAIR PARTS INFORMATION AND SUPPLEMENTAL  
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FOR  
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NSN 3805-00-602-5006  
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TYPE II WITH 5 CU. YD. GENERAL PURPOSE BUCKET  
NSN 3805-00-602-5013**

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

**You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual, direct to: Commander, U.S. Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished to you.**

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This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 25-30, The Army Integrated Publishing and Printing Program. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

SECTION I  
OPERATOR'S MANUAL

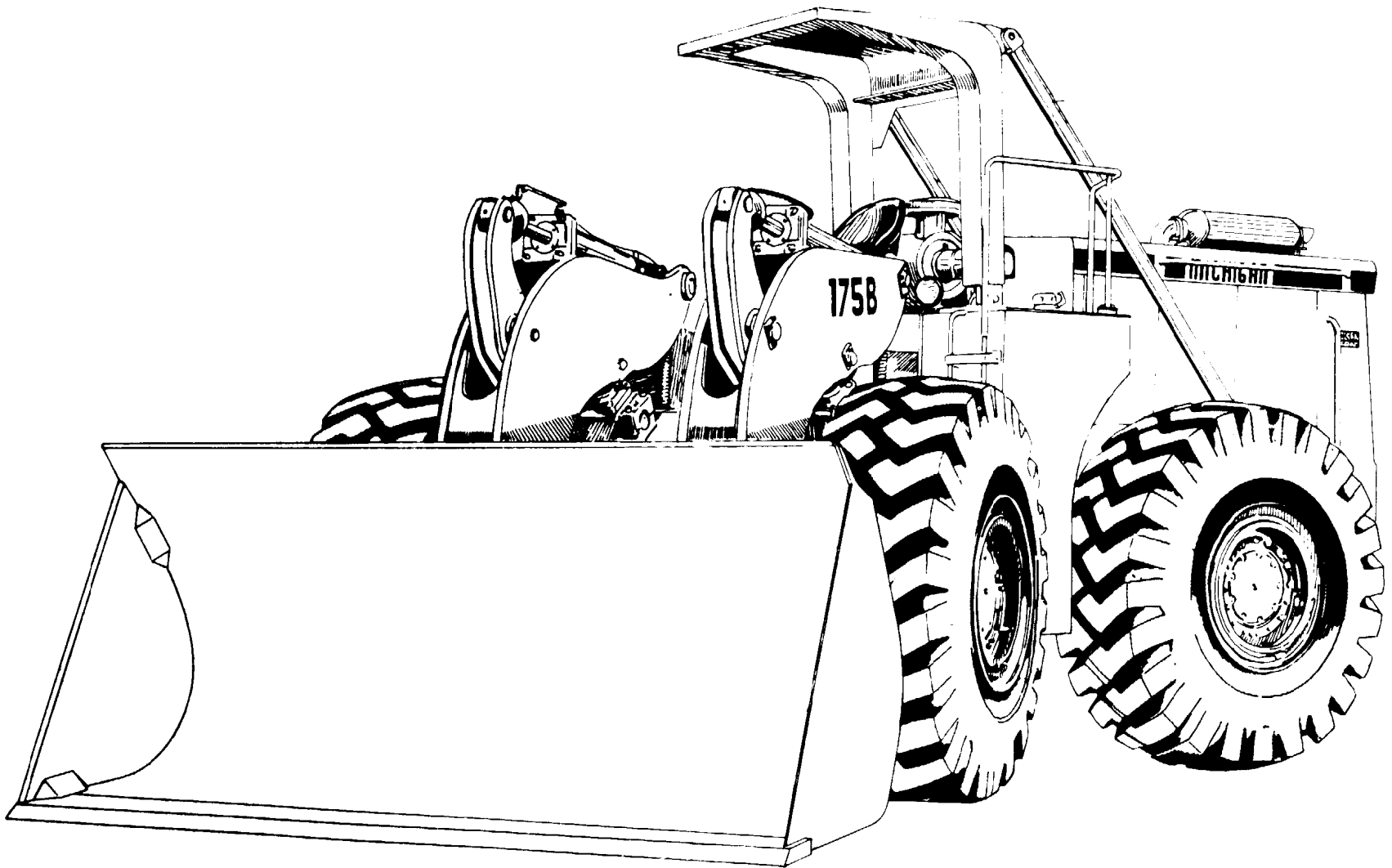
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**LOADER, SCOOP TYPE, DED, 4 X 4 ARTICULATED  
FRAME STEER 4<sup>1</sup>/<sub>2</sub> TO 5 CUBIC YARD (CCE)  
CLARK MODEL 175 B,  
TYPE I WITH 4<sup>1</sup>/<sub>2</sub> CU. YD. BUCKET  
NSN 3805-00-602-5006**

**CLARK MODEL 175  
TYPE II WITH 5 CU. YD. GENERAL PURPOSE BUCKET  
NSN 3805-00-602-5013**

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**MODEL 175B TRACTOR SHOVEL**

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| LUBRICATION INSTRUCTIONS  |  |        |  |   |   |               |
|---|--|--------|--|---|---|---------------|
| ITEM  | SHOVEL   | DOZER  | SCRAPER  | CHECK   | LUBRICATION OR CHANGE PERIOD                                | LUBRICANT KEY |
| AIR CLEANER(S)  | X  | X      | X  |   | SEE OPERATORS MANUAL FOR DETAILED INSTRUCTIONS.             |               |
| HYDRAULIC RESERVOIR   | X  | X      | X  | 8 HRS.  | 1000 HRS.   | HF            |
| TORQUE CONVERTER & TRANSMISSION   | X  | X      | X  | 8 HRS.  | 500 HRS.  | HF            |
| ALL GREASE FITTINGS EXCEPT:<br>AUTOMATIC LUBE SYSTEM RESERVOIR**  | X  | X      | X  | —   | 8 HRS.  | LBG-1         |
| BOOM & BUCKET SEALED LINKAGE PINS**   | X  | —      | —  | —   | *100 HRS.   | LBG-1         |
| BRAKE CAMSHAFT FITTINGS   | X  | X      | X  | —   | 50 HRS.   | LBG-1         |
| PROPELLER SHAFT FITTINGS  | X  | X      | X  | —   | *100 HRS.   | LBG-1         |
| ELEVATOR MOTOR CIRCUIT SWIVEL JOINTS  | —  | —      | X  | —   | 250 HRS.  | LBG-1         |
| FRONT AXLE DIFFERENTIAL   | X  | X      | X  | 50 HRS.   | 1000 HRS. - 6 MO.   | SAE 90 EPGL-1 |
| REAR AXLE DIFFERENTIAL  | X  | X      | —  | 50 HRS.   | 1000 HRS. - 6 MO.   | SAE 90 EPGL-1 |
| FRONT AXLE PLANETARY HUBS   | X  | X      | X  | 50 HRS.   | 1000 HRS. - 6 MO.   | SAE 90 EPGL-1 |
| REAR AXLE PLANETARY HUBS  | X  | X      | —  | 50 HRS.   | 1000 HRS. - 6 MO.   | SAE 90 EPGL-1 |
| REAR AXLE WHEEL BEARINGS  | —  | —      | X  | —   | 1000 HRS. - 6 MO.   | WB            |
| REAR AXLE WHEEL BEARINGS & CENTER STEER<br>ARM BEARINGS (Non Driving Axles)                                 | X  | —      | —  | —   | 1000 HRS. - 6 MO.   | WB            |
| STEERING GEAR**   | X  | X      | X  | 50 HRS.   | —   | LBG-1         |
| FAN DRIVE GEAR BOX**  | —  | X      | —  | 50 HRS.   | 1000 HRS. - 6 MO.   | SAE 90 GL     |
| ELEVATOR GEARBOX  | —  | —      | X  | 50 HRS.   | 1000 HRS. - 6 MO.   | SAE 90 EPGL-2 |
| MIDMOUNT BEARING ASSEMBLY:<br>A — Equipped with level & drain plug<br>B — Equipped with grease fittings (2) | X<br>X   | X<br>X | —<br>—   | 50 HRS.<br>—  | 1000 HRS. - 6 MO.<br>100 HRS.                               | HF<br>LBG-1   |
| BRAKE MASTER CYLINDER<br>(Hydraulic & Air Over Hydraulic Brakes)  | X  | —      | X  | 50 HRS.   | —   | BF            |
| BRAKE POWER CLUSTER AIR CHAMBER<br>(Air Over Hydraulic Brakes)  | X  | —      | X  | —   | 1000 HRS.   | HF            |
| CAB PRESSURIZER FILTER**  | X  | X      | X  | —   | REMOVE, CLEAN & REPLACE EVERY 8 HRS. OR OFTENER AS REQUIRED |               |
| HYDRAULIC SYSTEM BREATHER   | X  | X      | X  | —   | REMOVE, CLEAN & REPLACE EVERY 50 HRS.                       |               |
| CONVERTER BREATHER  | X  | X      | X  | —   | REMOVE, CLEAN & REPLACE EVERY 50 HRS.                       |               |
| TRANSMISSION BREATHER   | X  | X      | X  | —   | REMOVE, CLEAN & REPLACE EVERY 50 HRS.                       |               |
| CONVERTER & TRANSMISSION OIL FILTERS  | X  | X      | X  | —   | 250 HRS.  | —             |
| STEERING SYSTEM OIL FILTERS   | X  | X      | X  | —   | 250 HRS.  | —             |
| BRAKE SYSTEM AIR DRYER CARTRIDGE**  | X  | X      | X  | —   | *CHANGE CARTRIDGE EVERY 500 HRS.                            |               |
| HYDRAULIC RESERVOIR SUCTION<br>& RETURN FILTERS   | X  | X      | X  | —   | CLEAN OR REPLACE EVERY 250 HRS.                             |               |
| AXLE BREATHERS  | X  | X      | X  | —   | REMOVE, CLEAN & REPLACE EVERY 500 HRS.                      |               |
| ENGINE, FUEL & OIL FILTERS & ACCESSORIES  |  |        |  |   | SEE ENGINE OPERATORS MANUAL FOR INSTRUCTIONS.               |               |
| *LUBRICATION OR CHANGE PERIOD IS AS INDICATED, EXCEPT WHEN DIFFERENT ON DECAL BELOW. **WHERE APPLICABLE.    |  |        |  |   |   |               |
| LUBRICANT KEY   |  |        |  |   |   |               |
| LBG-1   | LITHIUM BASE MULTI-PURPOSE GREASE<br>0°F & ABOVE — GRADE 2<br>BELOW 0°F — GRADE 0                                | GL     | STRAIGHT MINERAL OIL GEAR LUBE —<br>API CLASS GL1  |   |   |               |
|   |  | BF     | SAE J1703 (70R-3) BRAKE FLUID  |   |   |               |
| LBG-2   | LITHIUM BASE MULTI-PURPOSE GREASE<br>30°F (-1°C) & ABOVE — GRADE 0<br>-30°F (-34°C) TO 30°F (-1°C) —<br>GRADE 00 | WB     | WHEEL BEARING GREASE — EP GRADE 1<br>(Lithium Soap or Lithium Lead Type —<br>40 lbs. Min. Lever Load, Timken Test) |   |   |               |
| EPGL-1  | EXTREME PRESSURE GEAR LUBE —<br>SCL TYPE   | HF     | AMBIENT<br>TEMP. RANGE   | LUBRICANT TO BE USED  |   |               |
| EPGL-2  | EXTREME PRESSURE GEAR LUBE —<br>API CLASS GL4<br>(Military Spec. MIL-L-2105B)                                    |        | ABOVE 0°F<br>(-18°C)   | SAE 10W Engine Oil, API Class SD<br>or SE MIL-L-2104B or MIL-L-2104C.<br>(For Optional Lubricants<br>See Operators Manual). |   |               |
|   |  |        | 0°F (-18°C) &<br>BELOW   | See Operators Manual  |   |               |
| SEE APPLICABLE OPERATORS MANUAL FOR DETAILED INSTRUCTIONS.  |  |        |  |   |   |               |

TS-13907

Fig. 3. Lubrication Instruction Decal

### LUBRICATION INSTRUCTION PLATE

The lubrication instruction plate as shown in Figure 3 provides a list of items to be lubricated on specific models, intervals of lubrication, and types of lubricant to be used. However, in addition to the lubrication instruction plate, it will be necessary to refer to the Lubrication Section in applicable Operator's Manual for location of lubricating points and detailed instructions pertaining to lubrication.

### SAFETY WIRING DECAL

The safety wiring decal as shown in Figure 4 indicates that the machine is equipped with an alternator having a negative grounded electrical system.

The alternator is a continuous output diode rectified alternating current (a.c.) generator that develops a continuous output of electrical energy at all engine operating speeds (high, low and idle). The trade name for this unit manufactured by Delco-Remy is "Delcotron". The output of the alternator is controlled by a transistorized voltage regulator.

*Note: To prevent serious injury to personnel or extreme damage to electrical system components, it should be noted that information contained in this manual pertaining to electrical system components will emphasize certain precautions that must be followed when servicing the "Delcotron" charging system.*

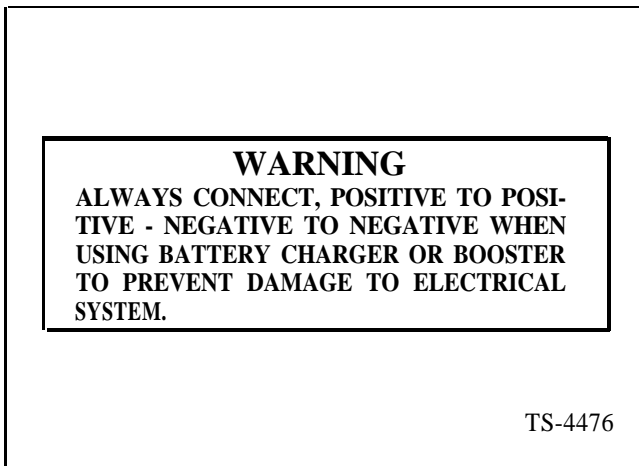


Fig. 4. Safety Wiring Decal

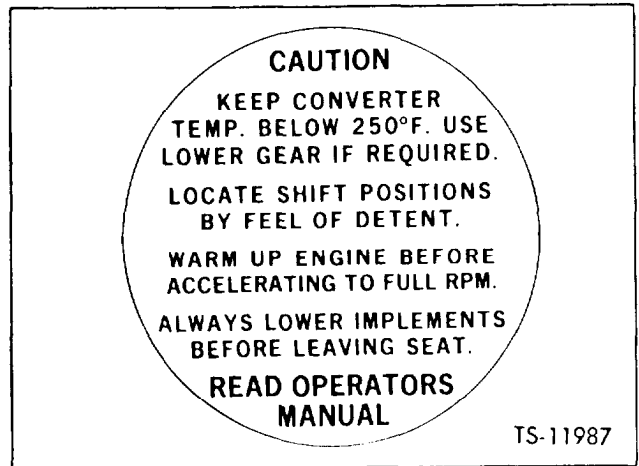


Fig. 5. Operating Precaution Plate

### OPERATING PRECAUTION PLATE

The operating precaution plate as shown in Figure 5 is located in the center of the steering wheel. This plate provides a few precautions to follow during machine operation, and also reminds the operator to refer to the Operator's Manual for additional information that is necessary for proper operation of the machine.

### TRANSMISSION OR TORQUE CONVERTER SERIAL NUMBER PLATE

The transmission serial number plate is located on the transmission. The torque converter serial number plate is located on the torque converter. Both plates are identical except for model number and serial number stamped on each plate to properly identify the units. Plate is shown in Figure 6.

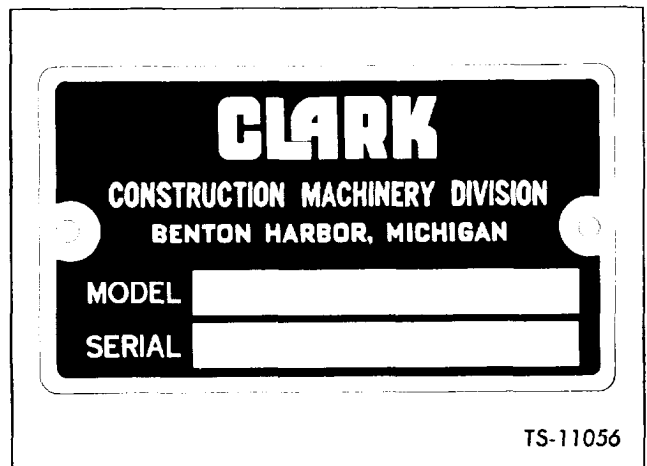


Fig. 6. Torque Converter or Transmission Serial Number Plate