

DEPARTMENT OF THE ARMY
TECHNICAL MANUAL

DEPARTMENT OF THE AIR
FORCE TECHNICAL ORDER

TM 5-1185
TO 19-40ABB-35

ROLLER, ROAD

GASOLINE-DRIVEN
TANDEM, 2-AXLE
5-TO 8-TON
GALION MODEL T5G
WITH ENGINE

CONTINENTAL MODEL F-244

*DEPARTMENTS OF THE ARMY AND THE AIR FORCE
10 JANUARY 1955*

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WASHINGTON 25, D. C., 10 January 1955

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CHAPTER 1 INTRODUCTION

Section I. GENERAL

1. Scope

a. These instructions are published for the information and guidance of the personnel to whom this road roller is issued. They contain information on the operation and organizational maintenance of the road roller as well as a description of the major units and their function in relation to other components of the materiel. They apply only to the Roller, Road, Gasoline Driven, Tandem, 2 Axle, 5 to 8 Ton, Galion Model T5G, with Engine, Continental Model F-244.

b. Supply manuals, technical manuals, and other publications applicable to the equipment covered by this manual are listed in appendix I. Appendix II tabulates the replaceable parts available for the equipment. Appendix III lists the tools and spare parts issued with and carried on or with the equipment.

2. Record and Report Forms

Maintenance record forms listed and briefly described in a through I below will be used in the maintenance of this equipment.

a. *DD Form. 110, Vehicle and Equipment Operational Record.* This form is used by equipment operators for reporting the accomplishment of daily preventive maintenance services, and for reporting any equipment deficiencies observed during operation.

b. *Standard Form 91, Operator's Report of Motor-Vehicle Accident.* One copy of this form is kept with the equipment at all times. In case of an accident resulting in injury or property damage, Form No. 91 is filled out immediately (or as promptly thereafter as is practical) by the operator.

c. *DA Form 464, Work Sheet for Preventive Maintenance and Technical Inspection of Engineer Equipment.* This form is used by personnel of the using organization and higher echelons for reporting the results of preventive maintenance services and technical inspections.

d. *DA Form 460, Preventive Maintenance Roster.* This form is used for scheduling preventive maintenance services at proper intervals. Refer to TM 5-505.

e. *DA Form 478, Organizational Equipment File.* Major repairs or rebuilding, replacement of major unit assemblies, and accomplishment of equipment modifications are recorded on this form.

f. *DA Form 468, Unsatisfactory Equipment Report.* This form is used for reporting manufacturing, design, or operational defects in the materiel, with a view to correcting such defects; it is also used for recommending modifications of the materiel. Form No. 468 is not used for reporting failures, isolated materiel defects, or malfunctions of materiel resulting from fair wear and tear or accidental damage. Form No. 468 is not used to report issue of parts and equipment, or for reporting replacements and/or repairs.

g. *DD Form 6, Report of Damaged or Improper Shipment.* This form is used for reporting damages incurred in shipment.

h. *DA Form 9-81, Exchange Part or Unit Identification Tag.* This form is used to accomplish the direct exchange of unserviceable for serviceable parts.

i. *DA Form 811, Work Request and Job Order.* This form is used to request work done by higher echelon organizations.

j. *DA Form 867, Statue of Modification Work Order.* This form is used to maintain records of all modification work performed on equipment.

k. *DA Form 5-13, Spot Check Inspection Report of Organizational Maintenance of Engineer Equipment.* Organizations having engineer field maintenance responsibility use this form for reporting the results of semiannual spot-check inspections.

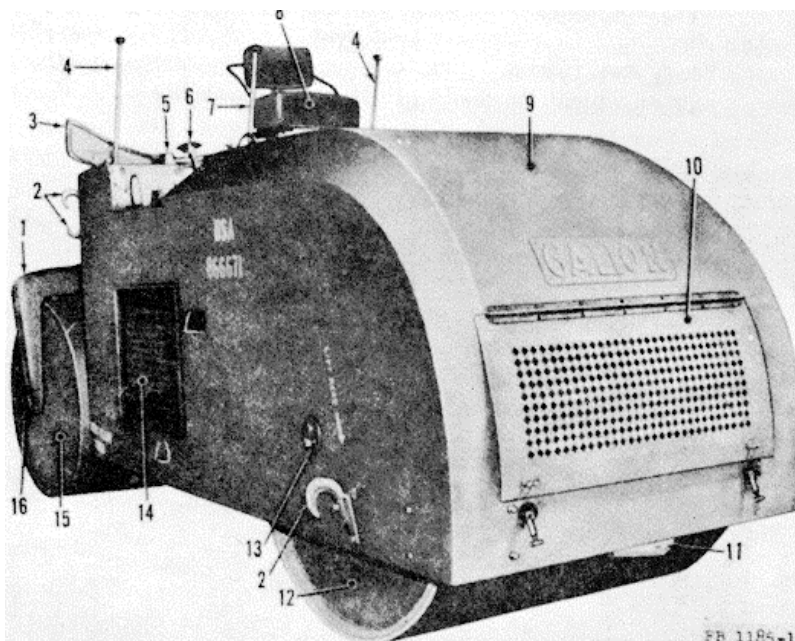
l. *DA Form 5-14, Annual Technical Inspection Report of Engineer Equipment.* Organizations having engineer field maintenance responsibility use this form for reporting the results of annual technical inspections.

Section II. DESCRIPTION AND DATA

3. Description

a. *General.* The Galion road roller Model T5G is a 5-8 ton variable-weight tandem roller, complete with all controls, switches, and indicators necessary for normal road rolling operations. The compression roll (12, fig. 1) and the steering roll (15) can be filled with water ballast to change the compression factor for any rolling job. The engine and transmission are accessible through hinged side doors (14). All operating controls and gages are contained on the operator's platform. Reference to "right" and "left" refer to a view of the roller from the operator's seat (8) facing the compression roll (12).

- (1) *Steering roll.* The steering roll (15, fig. 1) consists of two separate compression rolls mounted on a single axle (16). The steering roll is hydraulically operated and controlled by the steering lever (7) on the operator's platform.
- (2) *Compression roll.* The compression roll (12, fig. 1) consists of a single welded roll mounted on a single axle (13). The compression roll can be inspected and cleaned by opening the compression roll door (10).

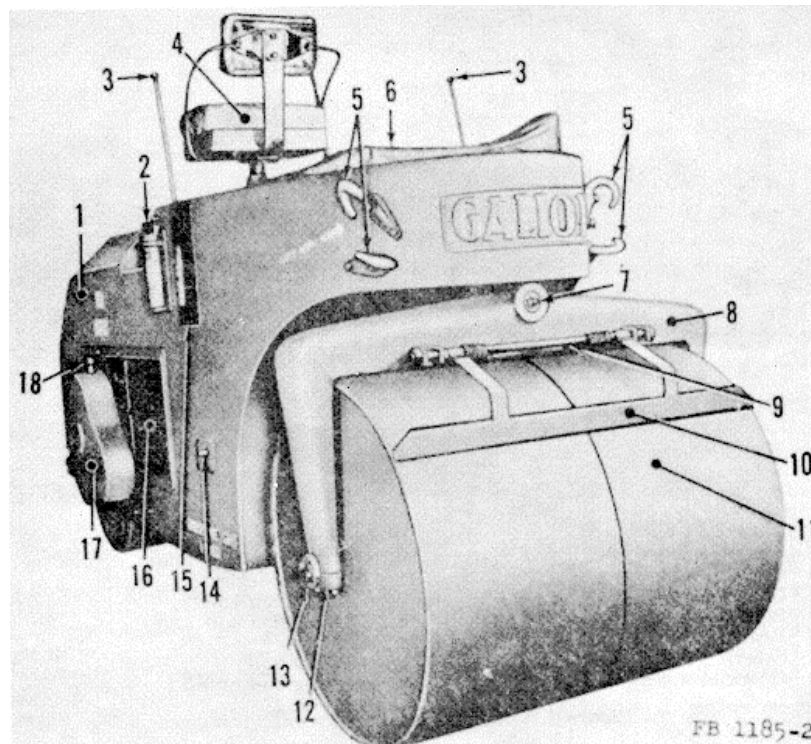


- | | |
|-------------------|--------------------------|
| 1 Steering yoke | 9 Compression roll cover |
| 2 Lifting hook | 10 Compression roll door |
| 8 Carbine rack | 11 Towing bracket |
| 4 Clutch lever | 12 Compression roll |
| 5 Seat post | 18 Compression roll axle |
| 6 Brake pedal | 14 Side door |
| 7 Steering lever | 15 Steering roll |
| 8 Operator's seat | 16 Steering roll axle |

Figure 1. Road roller, right front view.

- (3) *Clutch levers.* The forward and reverse clutch levers (4, fig. 1) are located at each side of the operator's platform. Either lever controls the forward or reverse movement of the roller.
- (4) *Steering lever.* The steering lever (7, fig. 1), is located in the center of the operator's platform. The steering lever (7) controls the steering roll (15) hydraulically.

- (5) *Brake pedals.* The brake pedals (6, fig. 1) are located at each side of the operator's platform. The brake pedals are the lockable ratchet type and can be used during operation and for parking.
- (6) *Operator's seat.* The operator's seat (8, fig. 1) can be mounted on the seat posts (5) on either side of the roller. The seat has four height adjustments.
- (7) *Lifting hooks.* The lifting hooks (2, fig. 1) are mounted on the left and right sides in the front and rear of the roller. They are used for lifting, loading, and unloading purposes.
- (8) *Steering yoke.* The steering yoke (8, fig. 2) is made of a heavy steel casting. The yoke supports the stationary front axle on which the steering roll (11) is mounted.



- | | | | |
|---|------------------------|----|------------------------|
| 1 | Compression roll cover | 10 | Steering roll scraper |
| 2 | Fire extinguisher | 11 | Steering roll |
| 3 | Clutch lever | 12 | Steering axle bracket |
| 4 | Operator's seat | 13 | Steering roll axle cap |
| 5 | Lifting hook | 14 | Cranking shaft |
| 6 | Carbine rack | 15 | Identification plates |
| 7 | Steering yoke kingpin | 16 | Side door |
| 8 | Steering yoke | 17 | Gear cover |
| 9 | Scraper shaft | 18 | Grease pipe |

Figure 2. Road roller, left rear view.