

GERMAN VOLKSWAGEN

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WAR DEPARTMENT TECHNICAL MANUAL TM E9-803

GERMAN VOLKSWAGEN



WAR DEPARTMENT

6 JUNE 1944

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WAR DEPARTMENT Washington 25, D. C., 6 June 1944

TM E9-803, German Volkswagen, is published for the information and guidance of all concerned.

By order of the Secretary of War:

G. C. MARSHALL,

Chief of Staff.

OFFICIAL:

J. A. ULIO,

Major General,

The Adjutant General.

DISTRIBUTION: As prescribed in par. 9.a., FM 21-6: X.

(For explanation of symbol, see FM 21-6.)

CONTENTS

PART ONE—INTRODUCTION

		Paragraphs		Pages		
SECTION I.	General	1-	2	-1- 2		
II.	Description and data	3–	5	2- 6		
III.	Tools, parts, and accessories	6–	7	6– 7		
PART	TWO—OPERATING INSTRUCTIONS					
SECTION IV.	Controls and instruments	8-	9	8- 11		
V.	Operation under ordinary conditions	10-	12	12- 13		
VI.	Operation under unusual conditions	13–	17	13- 18		
PART THREE—MAINTENANCE INSTRUCTIONS						
SECTION VII.	Lubrication	18-	19	19- 23		
VIII.	First echelon preventive maintenance services	20-	24	23- 32		
IX.	Second echelon preventive maintenance		25	32- 47		
X.	Trouble shooting	26–	43	48- 60		
XI.	Engine description and maintenance in vehicle	44–	49	60– 68		
XII.	Engine, removal and installation	50-	52	69- 72		
XIII.	Clutch	53-	57	72- 75		
XIV.	Engine lubrication system	58-	62	76– 81		
XV.	Fuel and air intake and exhaust systems	63–	69	81- 87		
XVI.	Cooling system	70-	71	87- 88		
XVII.	Ignition system	72–	76	88- 91		
XVIII.	Starting and generating system	77–	80	91– 94		
XIX.	Battery and lighting systems	81-	88	94– 99		

TM E9-803

CONTENTS—Contd.

		Paragraphs	Pages
SECTION X	XX. Transmission and differential	89- 90	99–102
X	XI. Rear axle	91- 93	103-105
XX	XII. Front axle	94–100	106–111
XX	III. Service and parking brakes	101–103	111-117
XX	IV. Steering system	104-107	117-120
XX	V. Tires, tubes, and wheels	108-110	121-123
XX	VI. Shock absorbers	111–113	123-124
XXV	VII. Instrument panel and instruments	114–115	125
XXV	III. Body and frame	116–125	125–127
	APPENDIX		
SECTION XX	IX. Shipment and temporary		
	storage	126–128	128-132
XX	XX. References	129–131	133–134
INDEX			135–140

RESTRICTED

PART ONE—INTRODUCTION

Section I

GENERAL

1. SCOPE.

- a. These instructions are published for the information and guidance of the personnel to whom this equipment is assigned. They contain information on the operation and maintenance of the German Volkswagen as well as descriptions of the major units and their functions in relation to the other components of the vehicle.
 - b. This manual has the following arrangement.
 - (1) Part One, Introduction, contains description and data.
- (2) Part Two, Operating Instructions, contains instructions for the operation of the vehicle, with description and location of the controls and instruments.
- (3) Part Three, Maintenance Instructions, contains information needed for the performance of the scheduled lubrication and preventive maintenance services, and instructions for maintenance operations which can ordinarily be performed by using organizations (first and second echelons).
- (4) The Appendix contains instructions for shipment and limited storage, and a list of references which may provide helpful information concerning operation or maintenance.
- c. The operations described in this manual are based on the availability of necessary parts, accessories, and tools. Conditions will arise in which the items referred to in the manual are not available since they cannot be requisitioned through usual channels. In these cases, individual initiative must be resorted to when repairs are required.

2. RECORDS.

- a. Forms and records which may be provided for use in performing prescribed operations are listed below with brief explanations of each. In case of Volkswagen, use of these forms will be governed by tactical situation and extent to which vehicle is employed.
- (1) STANDARD FORM No. 26, DRIVER'S REPORT—ACCIDENT, MOTOR TRANSPORTATION. One copy of this form should be kept with the vehicle at all times. In case of an accident resulting in injury or property damage, it should be filled out by the driver on the spot, or as promptly as practical thereafter.
- (2) WAR DEPARTMENT FORM No. 48, DRIVER'S TRIP TICKET AND PREVENTIVE MAINTENANCE SERVICE RECORD. This form, prop-

GERMAN VOLKSWAGEN

erly executed, is furnished to the driver when his vehicle is dispatched on non-tactical missions. The driver and the official user of the vehicle complete, in detail, appropriate parts of this form. These forms need not be issued for vehicles in convoy or on tactical missions. The reverse side of this form contains the driver's daily and weekly preventive maintenance service reminder schedule.

- (3) W.D., A.G.O. FORM No. 6, DUTY ROSTER. This form, slightly modified, is used for scheduling and maintaining a record of vehicle maintenance operations. It may be used for lubrication records.
- (4) W.D., A.G.O. FORM No. 461, PREVENTIVE MAINTENANCE SERVICE AND TECHNICAL INSPECTION WORK SHEET FOR WHEELED AND HALF-TRACK VEHICLES. This form is used for all 1,000-mile (monthly) and 6,000-mile (semiannual) maintenance services and all technical inspections performed on wheeled or half-track vehicles.

Section II

DESCRIPTION AND DATA

3. DESCRIPTION.

- a. General. The Volkswagen is a four-wheeled, rubber-tired, rear axle drive personnel carrier and reconnaissance car, comparable in purpose and size to the American \(^1\frac{1}{4}\)-ton 4x4 truck. No propeller shaft, as such, is used; the engine, transmission, and differential comprise a unit structure which is secured to the floor at the extreme rear end of the vehicle. Access to the engine is provided by a hinged door at the rear of the body. The vehicle has no frame. Instead, a base stamping comprising the floor of the vehicle is ribbed and provided with a central tunnel to give desired stiffness, to form the foundation of the vehicle. The main fuel tank is located under the front body panel on the right-hand side of the vehicle. The spare tire is carried on top of the front body panel.
- b. Engine. The engine is an air-cooled, four-cyclinder, four-cycle, horizontally-opposed type. Intake and exhaust valves are located in the cylinder head and are operated by conventional rocker arms and push rods.
- c. Transmission. The transmission is the selective, sliding-gear type. Four speeds forward and one reverse are available. Differing from American vehicles, no direct drive is used. The fourth speed forward is an overdrive, having a ratio of 0.80 to 1. A detailed description of the transmission is contained in section XX.

TM E9-803

DESCRIPTION AND DATA

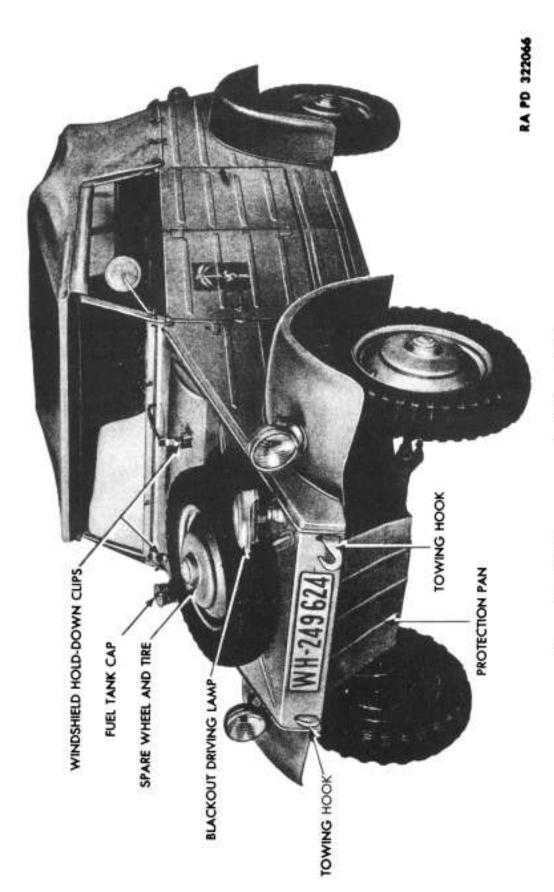


Figure 1-Volkswagen-Left Front View

GERMAN VOLKSWAGEN

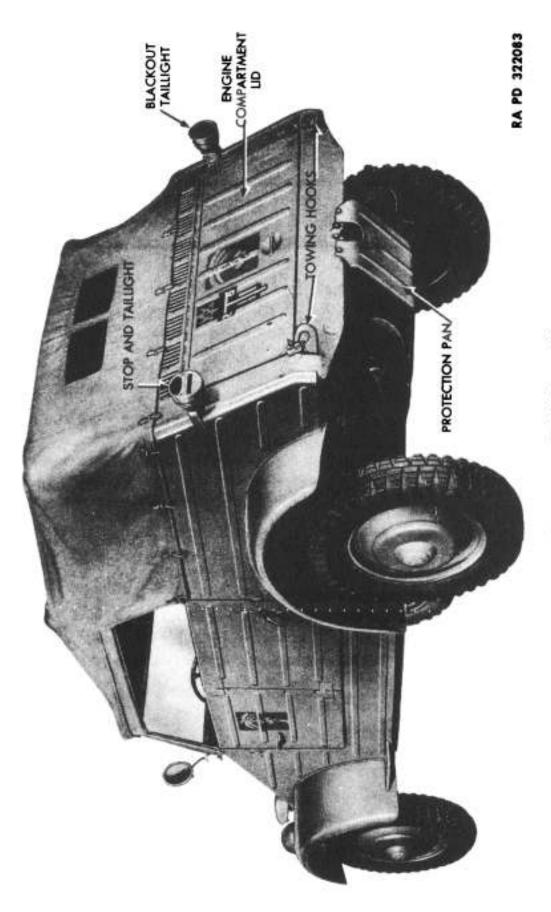


Figure 2—Volkswagen—Left Rear View