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# FOREIGN EQUIPMENT CATALOG

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SECTION II
ENGINE & ENGINE ACCESSORIES



### RETURN TO

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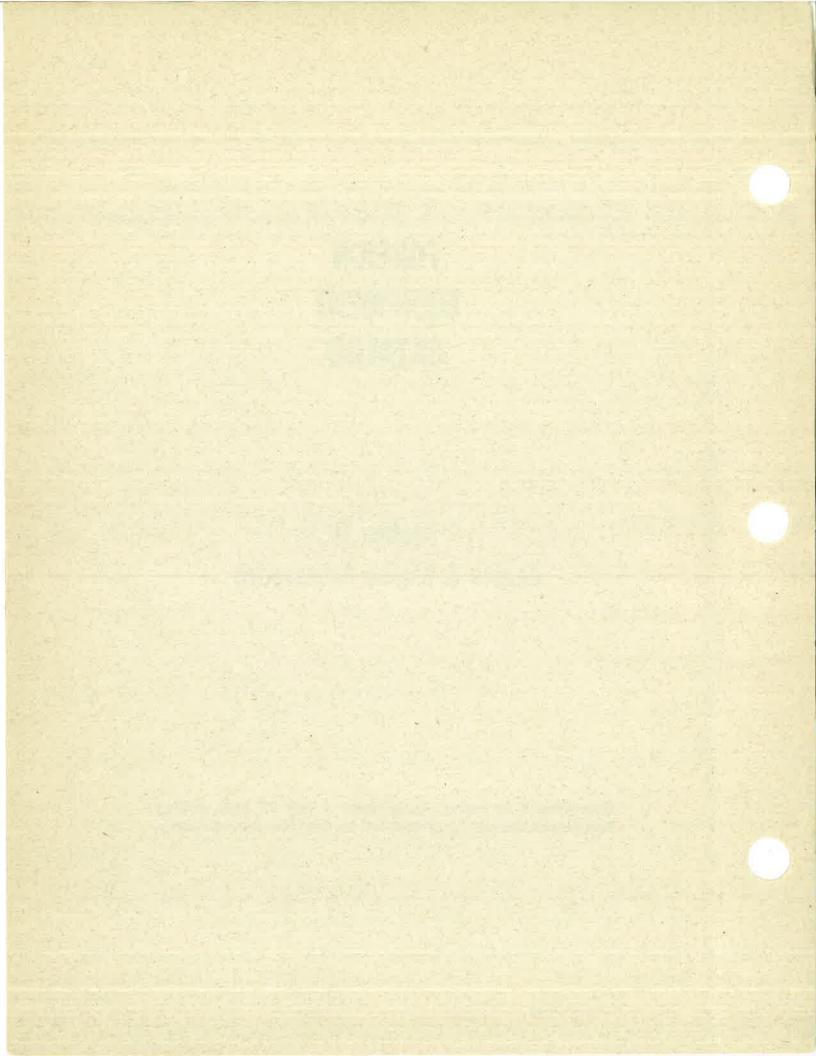
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## FOREIGN EQUIPMENT CATALOG

Section II
Engine & Engine Accessories

Reciprocating & Jet Engines, Rocket Motors & Take-Off Units, Auxiliary Superchargers, Controls, Carburetors, Fuel Injectors, Magnetos and Starters.



#### INSTRUCTIONS FOR ORDERING

In order to further the advancement of the Aeronautical Industry and to further the national defense, the equipment described in these pages is available to interested activities for the express purpose of experimental research, test, development, display, or gift. However, before shipment can be made, it is necessary that (1) the government know and approve the purpose for which the equipment is desired, and (2) a bailment contract be executed protecting the proprietory interest of the government. If the test to be conducted will necessitate eventual destruction of the property, no return of the equipment is required nor does the government expect reimbursement for that property destroyed. If the test does not require destruction, the material will be returned. Reports on findings will be submitted to the government. Transportation costs will be borne by the government to and from the point of destination indicated in the bailment contract.

#### REQUESTS FOR EQUIPMENT

A contract to be executed and returned will be supplied upon receipt of a written request which must include the following information:

- a. Name (nomenclature), Catalog <u>Section</u> number, <u>Stock</u> number, and the descriptive noun which appears at the top center of the page.
- <u>b</u>. The desired condition of the equipment which will serve the purpose; serviceable or non-serviceable.
- c. Whether or not tests to be conducted will necessitate eventually destruction of equipment.
- d. Specific purpose for which the equipment is desired, and a reasonably detailed description of any modification it is desired to make in or on the particular property.
- e. Location or locations at which the particular property will be delivered.

<u>f</u>. The approximate date the equipment will be available for return.

Equipment requested will be delivered as soon as possible after the completion of the proper forms, etc. In some cases however there is a limited quantity of some items. In such cases delivery will be delayed pending availability of such items.

Communications concerning equipment should be addressed to the Commanding General, Air Materiel Command, Wright Field, Ohio, Attention Chief, Collection Division.

The Stock List at the rear of each section will be revised periodically, additions made and copies supplied to all on distribution list without request.

#### REQUEST FOR DOCUMENTS

Requests for documents pertaining to this equipment should specify the type of document desired, ie: Maintenance Handbook, Operation Handbook, Parts Stock List, etc. Documents need not be returned unless requested.

Communications concerning documents should be addressed to the Commanding General, Air Materiel Command, Wright Field, Ohio, Attention Chief, Air Documents Division.

#### REQUESTS FOR CATALOG

Requests for sections or pages of catalog must specify the nomenclature and section number desired, and the stock number if single pages are requested.

Communications concerning catalog should be addressed to the Commanding General, Air Materiel Command, Wright Field, Ohio, Attention Chief, Collection Division

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- 1. Nomenclature: Engine, Jet Axial flow
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany
- 4. Manufacturer: Bavarian Motorenwerk Munchen
- 5. Identification Numbers: Werks No: 394646 Fl. or Ln. No.

Gerat No: 109-003 E-1

Serial No:

- Models available: BMW 003-E-1
   Documents: See "Instructions For Ordering".
   Description: Overall length 140". Overall width 26-3/4". No further information is available at present as to this model's specifications. Description of the 003C which is similar inappearance is as follows: TYPE AND CAPACITY: 7 stage axial compressor, single stage turbine, annular combustion chamber 16 burners.

WEIGHT: 1,252 lbs.

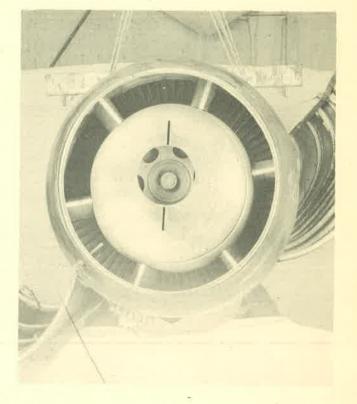
PERFORMANCE: Static thrust 1,760-1,980 lbs.

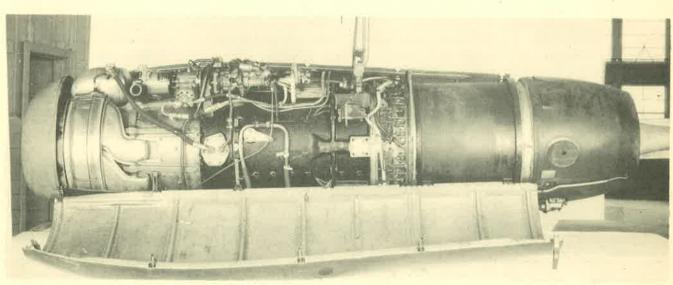
FUEL CONSUMPTION: 2,500 lb./hr. ROTATIONAL SPEED: 9500 r.p.m.

FUEL: J2 (diesel oil) or 87 octane gasoline.

THRUST: 1,980 lbs.

The 003D has a designed thrust of 2400 lbs.





For ordering: See "Instructions for Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention of Chief, Collection Division (TSICD).

Stock No. 3609-02-1106-JUMO 004

1. Nomenclature: Engine, Jet, Axial flow

2. Foreign Nomenclature:

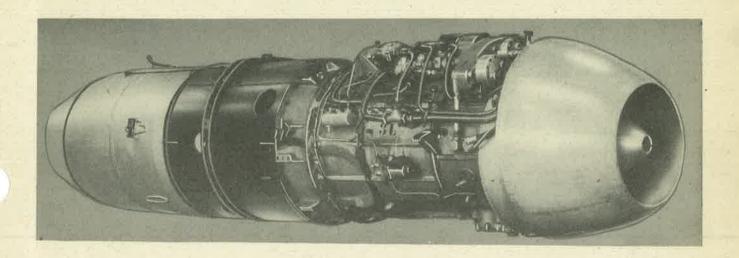
3. Country of Origin: Germany

4. Manufacturer: Junkers Flugzeng-und-motorenwerke A.G. Dessau

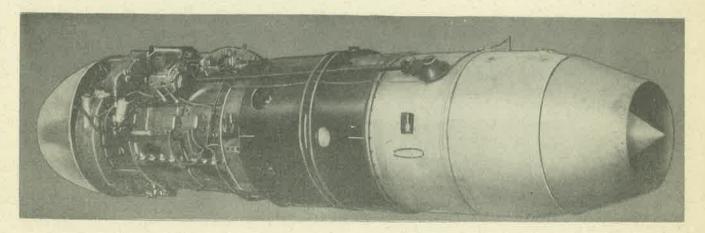
5. Identification Numbers: Werks No: 1113013673 Fl. or Ln. No.

Gerat No: Serial No:

6. Models Available: JUMO 004
7. Documents: See "Instructions For Ordering".
8. Description: Axial flow, turbo jet engine, eight stages in the compressor, one stage in the turbine; 6 annular combustion chambers are utilized; the over-all length is 152 inches, diameter is 34 inches, and its weight is 1775 lbs.; the maximum RPM is 8700, and maximum sea level thrust is 1980 lbs.; the fuel consumption at maximum thrust is 1.38 to 1.40 lbs./lb. of thrust/hour.



Front one-quarter view above Rear one-quarter view below



For ordering: See "Instructions for Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-02-0601-AS 411-A

- 1. Nomenclature: Engine Inverted Vee, 12 cylinder,
- 2. Foreign Nomenclature: Flugzeugmotoren Argus 411-A.

3. Country of Origin: Germany.

4. Manufacturer: Argus Motoren Gesellschaft m.b.h., Flottenstrasse 28-49. Berline-Reinickendorg-ost.

5. Identification Numbers: Werks No.: 114251

Gerat No.: 9-411-A

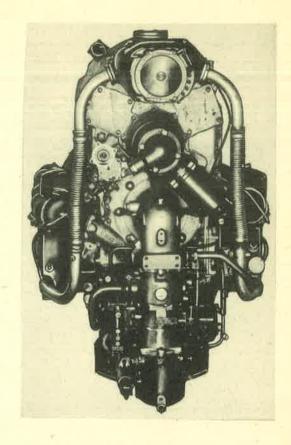
6. Models Available: As 411-A.7. Documents: See "Instructions For Ordering". 8. Description: In-line, inverted 60°V, Air cooled 12 steel-barreled cylinders, 4.13" bore, 4.53" stroke, piston displacement 732 cu in.; length 64" height 39" width 27.5", weight 1135 lbs.. Compression ratio 6.4 to 1; supercharger centrifugal, single stage, 1 speed, engine driven type; valve gear 1 inlet valve, 1 exhaust valve per cylinder. Fuel burned 92 octane gasoline, ignition dual magneto with 2 spark plugs per cylinder. Crankshaft rotates on 7 plain bearings. Note: Model As 410-A1 is similar to As 411-A but burns 87 octane fuel.

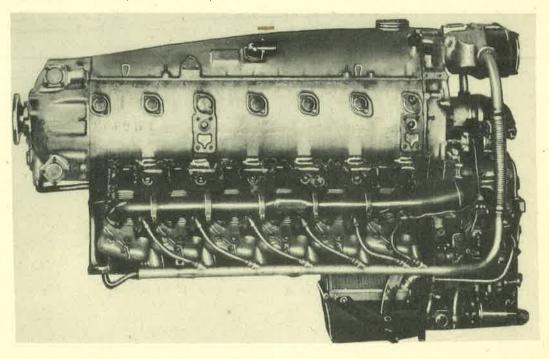
#### PERFORMANCE (As 411-A)

Take-off BHP 500 RPM 3,400 ALT ----BHP 450 Combat RPM 3,200 ALT 13,100

#### PERFORMANCE (AS 410-A1)

Take-off	BHP 450	RPM 3,210	ALT	
Climb	BHP 360	RPM 3,000	ALT	9,800
Cruise	BHP 320	RPM 2,820	ALT	9,800





Stock No. 3609-02-0602-BMW-V

1. Nomenclature: Engine-Erect Vee 12 cyl liquid cooled 2. Foreign Nomenclature: Flugzeug Motoren BMW-V

3. Country of Origin: Germany

4. Manufacturer: Bavarian Motoren Werke

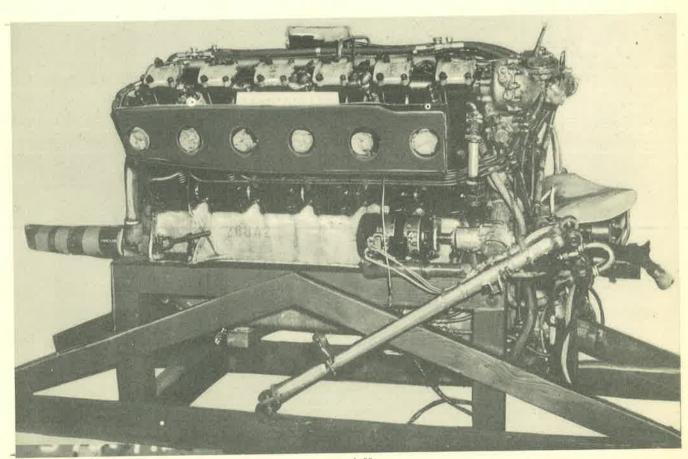
5. Identification Numbers:

Werks No: Fl. or In. No: Gerat No: Serial No:

6. Models Available: BMW-V

7. Documents: See "Instructions for Ordering."

8. Description: In-line erect Vee engine, liquid cooled, 12 cylinders, with a 6.3 inch bore, 7.48 inch stroke, and a piston displacement of 1380 cubic inches; the dry weight of the engine is 699 lb.; this engine was made with three compression ratios, 5.5 to 1, 6.0 to 1, and 7.3 to 1; the fuel system includes a Zenith or BMW carburetor and the fuel used depends upon the compression ratio, for compression ratios of 5.5 to 1 and 6.0 to 1 use a mixture of 50% benzol and 50% gasoline, for a compression ratio of 7.3 to 1 use a mixture of 80% benzol and 20% gasoline; no supercharger or blower of any type is employed; the valve gear consists of one inlet valve and one exhaust valve per cylinder and are actuated by rocker arms and a cam; ignition is supplied to the spark plugs by a magneto; the engine was developed in 1922 and 1923.



BMW-V

Stock No. 3609-02-0102-BMW-132

- 1. Nomenclature: Engine-Radial Single Row 9 cyl air-cooled
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany
- 4. Manufacturer: Bavarian Motoren Werke
- 5. Identification Numbers:

Werks No:

Gerat No:

Fl. or Ln. No:

Serial No:

- 6. Models Available:
- 7. Documents: See "Instructions for Ordering."
- 8. Description: Nine cylinder air-cooled supercharged radial with direct fuel injection, 1690 cu. in. displacement. Single speed centrifugal supercharger driven by spur gear at rearend of crankshaft with single intermediate compound pinon-Weight 1155 lb. Diameter 54.5 in. Length 49.5 in.

Performance

Take Off

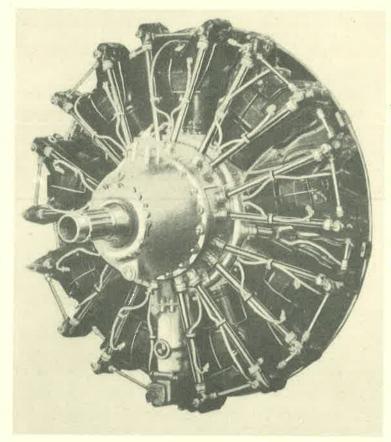
830 h,p./2450 r.p.m./38" hg

920 h.p./2550 r.p.m./37" hg

Normal

810 h.p./2550 r.p.m.

830 h.p./2350 r.p.m./32" hg



**BMW 132** 

- 1. Nomenclature: Engine, Radial, Double Row, 14 cylinder, Air-cooled.
- 2. Foreign Nomenclature: Flugzeugmotoren BMW-801

3. Country of Origin: Germany

4. Manufacturer: Bayerische Flugmotorenbau G. M. B. H. Lerchenauerstrasse 76, Munich 13

5. Identification Numbers: Werks No: 306149 Fl. or Ln. No.

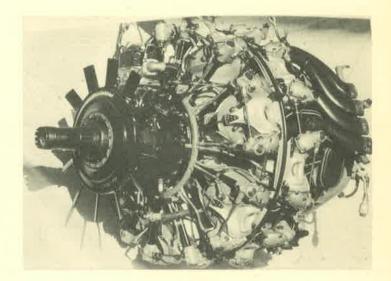
Gerat No: Serial No:

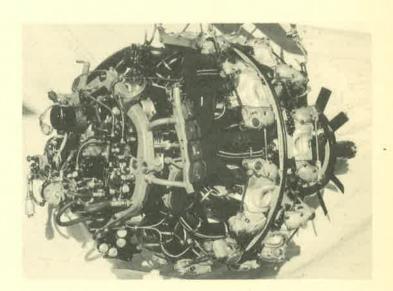
6. Models Available: BMW 801

7. Documents: See "Instructions For Ordering."

8. Description: Double row radial, air-cooled, 14 cylinders, with a 6.140 in. bore, a 6.140 in. stroke, piston displacement-2550 cu. in.; engine diameter 52 in., length 59 in., weight 1940 lbs., compression ratio 6.50 to 1; supercharger consists of the centrifugal, single stage, 2 speed, engine driven type; 1 inlet valve and 1 exhaust valve per cylinder actuated by push rods and rocker arms; fuel 87 octane gasoline, directly injected into each cylinder through 1 nozzle, Bosch dual magneto. Crankshaft rotates on 2 roller bearings and 1 centerball bearing. Propeller rotates clockwise. Fan-assisted cooling. Note: Model 801-D1 (92 octane fuel) develops greater power but is similar to 801-A1. See performance. Model 801-B is same as 801-A but propeller rotates counter-clockwise. Model 801-C is same as 801 - A but has no oil cooler.

001-11	Date Har He			
	PERFORM	MANCE (801	A1)	
	B.H.P.	R.P.M.	ALT.	
Take-off	1580	2700		
Climb	1500	2400	15,750	
Cruise	1460	2400	16,400	
PERFORMANCE (801-D1)				
	B.H.P.	R.P.M.	ALT.	
Take-off	1700	2700		
Climb	1600	2600	13,100	
Cruise	1200	2100	19,800	





Stock No. 3609-02-0103 - Bramo 323-P1

1. Nomenclature: Engine, Radial, Single Row, 9 Cylinders, Air Cooled.

2. Foreign Nomenclature: Bramo Fafnir 323-P1

3. Country of Origin: Germany

4. Manufacturer: B.M.W. Flug Motorern-Werke, Brandenburg, G.m.b.H. AM. Juliusturm - 14-38 - Berlin-Spandau

5. Identification Numbers:

Werks No: 23066 Fl. or Ln. No.

Gerat No: 9-323 Serial No: 23066

6. Models available: Bramo 323-P17. Documents: See "Instructions For Ordering".

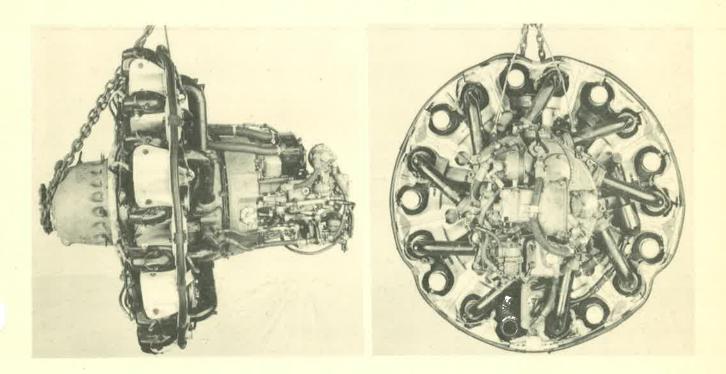
8. Description: TYPE: 9 cylinders, 1-row radial, air cooled, geared drive, supercharged, 4-cycle. CONSTRUCTION: 2-piece aluminum-alloy crankcase. Cylinders with steel barrels and aluminum-alloy heads.

1 inlet valve and 1 exhaust valve (sodium cooled) per cylinder actuated by push rods. 1-throw 2-piece counterbalanced crankshaft supported in 2 roller bearings. Epicyclic bevel reduction gear, ratio 0-62:1. Equipped for V.D.M. electric-type propeller.

SUPERCHARGER: Gear-driven 2-speed supercharger, Askania variable datum boost control.

INJECTION: Direct fuel injection. 1 Bosch 9-plunger injection pump with automatic mixture control. Fuel deaerator. 1 pintle type injector per cylinder. Bore: 6.06 in., Stroke 6.30 in., Displacement 1,636 cu. in., Compression ratio 6.23:1, Diameter 55.5 in., Length 67.5 in., Weight 1,320 lb., Weight/horsepower 1.34 lb./h.p., Gasoline grade 87 octane.

PERFORMANCE:	HP	RPM	ALTITUDE
Take Off	985	2,500	
Mil. Low	810	2,500	8,500
Mil. High	775	2,500	13,900
Nor, Low	670	2,100	8,500
Nor. High	625	2,100	16,400



For ordering: See "Instructions for Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC Wright Field, Ohio, Attention of Chief, Collection Division (TSICD).

Stock No. 3609-02-0103-Bramo Sh 14A

Nomenclature: Engine-Radial 7 cyl air-cooled
 Foreign Nomenclature: Luftgekühlter 7 Zyl.-Sternmotor Bramo Sh 14A

3. Country of Origin: Germany

4. Manufacturer: Bramo-Brandenburgische-Motorenwerke Berlin-Spandau

5. Identification Numbers:

Werks No:

Gerat No:

Fl. or Ln. No:

Serial No:

Models Available: Bramo Sh 14A
 Documents: See "Instructions for Ordering."
 Description: Seven cylinder air-cooled radial, four stroke, unsupercharge with 415 cu. in displacement.

Weight 298 lb. Length 38.4 in. Diameter 36.9 in.

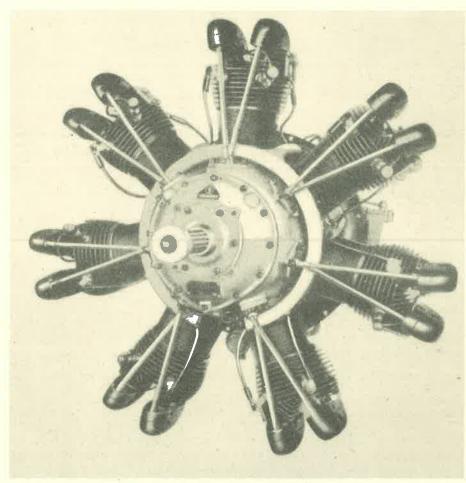
PERFORMANCE

Max. h.p.

160 at 2200 r.p.m.

Normal h.p.

150 at 2200 r.p.m.



Bramo Sh 14A

Section II

Stock No. 3609-02-0604 DB 601 E-1

1. Nomenclature: Engine, Inverted Vee, 12 cyl, liquid cooled.

2. Foreign Nomenclature: Damler Benz 601 E-1.

3. Country of Origin: Germany.

4. Manufacturer: Damler Benz (Mercedes Benz) Aktiengesellschaft, Stuttgart-Unterturkheim.

5. Identification Numbers:

Werks No.: 24 398 Gerat No.: DB 601 E-1 Serial No.: 24398

6. Models available: DB 601 E-1.7. Documents: See "Instructions For Ordering."

8. Description: TYPE: 12 cylinders, inverted vee 60 degrees, pressure liquid cooled, geared drive, supercharged,

4-cycle.

CONSTRUCTION: Steel cylinder liners. 2 inlet valves and 2 exhaust valves (sodium cooled) per cylinder actuated by overhead camshaft. Roller bearings in connecting rod big-ends. Hollow propeller shaft for cannon.

SUPERCHARGER: Gear-driven variable speed 1-stage supercharger. Hydraulic coupling to impeller with degree of slip regulated by automatic altitude control.

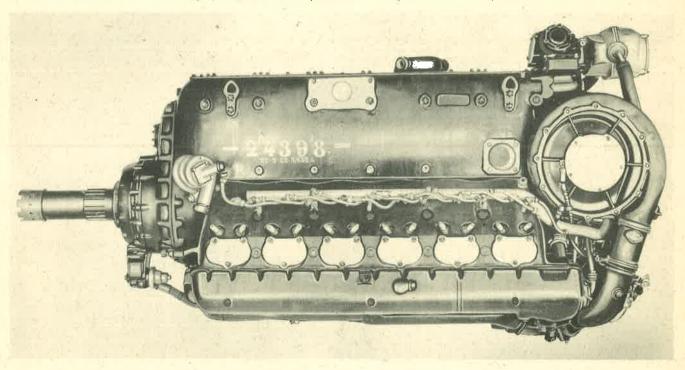
INJECTION: Direct fuel injection. 1 Bosch closed type 4-orifice injector per cyl.

IGNITION: 1 Bosch dial magneto. 2 spark plugs per cylinder.

Bore 5.90 in., Stroke 6.30 in., Displacement 2,069 cu. in., Compression ratio 7.2:1 Width 28.0 in., Height 39.4 in., Length 67.7 in., Weight 1,576 lb., Weight/horsepower 1.15 lb/hp, Gasoline grade 92 octane.

#### PERFORMANCE

	ВНР	RPM	ALT
Take-off	1,375	2,700	
Military	1,375	2,700	18,000 ft
Max. Cruise	1,000	2,200	18,000 ft



Stock No. 3609-02-0604-DB603A-2

1. Nomenclature: Engine, Inverted Vee, 12 Cyls., liquid Cooled.

2. Foreign Nomenclature: Flugzeugmotoren DB 603 A-2.

3. Country of Origin: Germany.

4. Manufacturer: Daimler-Benz Aktiengesellschaft, Stuttgart-Unterturkheim.

5. Identification Numbers: Werks No.: 500401

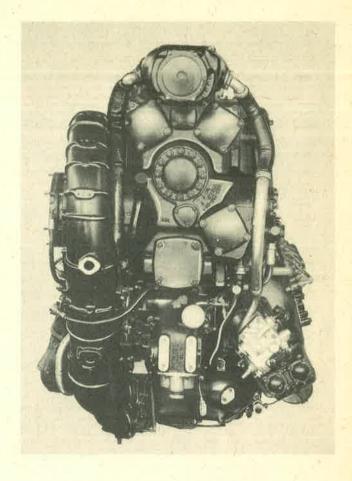
Gerat No.: 9-603A-2

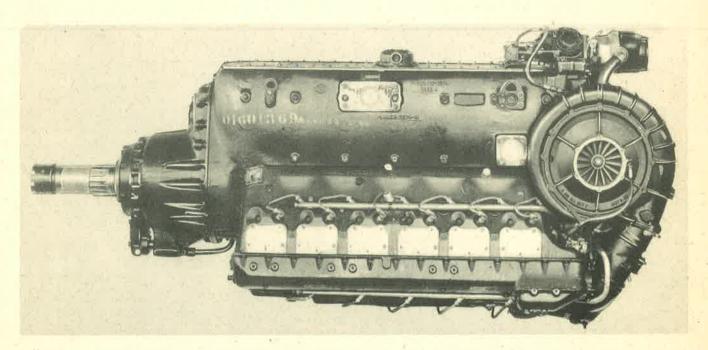
6. Models Available: DB603 A-2.7. Documents: See "Instructions For Ordering."

8. Description: In-line, inverted 60° V, liquid cooled, 12 cylinders with steel liners. 6.38 inch bore, 7.09 Inch stroke, piston displacement of 2720 cubic inches; the engine over-all length is 101 inches, height is 45 inches, width is 32 inches, and its weight is 2120 lbs; the compression ratio is 7 to 1; the supercharger is single stage, centrifugal, variable speed, engine driven through a hydraulic coupling; the valve gear consists of two inlet valves and two sodium cooled exhaust valves per cylinder, and are actuated by rocker arms and overhead cam; the fuel burned is 92 octane gasoline, and it is directly injected into each cylinder by one multihole nozzle; ignition is supplied by a Bosch dual magneto. Crankshaft carried on 7 double-row roller bearings, Two spark plugs per cylinder. Electric inertia starter.

#### PERFORMANCE

	ВНР	RPM	ALT
Take-off	1,800	2,700	
Climb	1,680	2,700	18,000
Cruise	1,350	2,300	18,000





- 1. Nomenclature: Engine, Inverted Vee, 12 cyl., Liquid cooled.
- 2. Foreign Nomenclature: Flugzeugmotoren DB 605-A-1
- 3. Country of Origin: Germany
- 4. Manufacturer: Daimler Benz Aktiengesellschaft, Stuttgart-Unterturkheim
- 5. Identification Numbers: Werks No: 27142

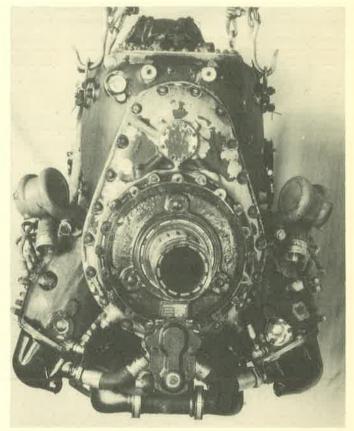
Fl. or Ln. No.

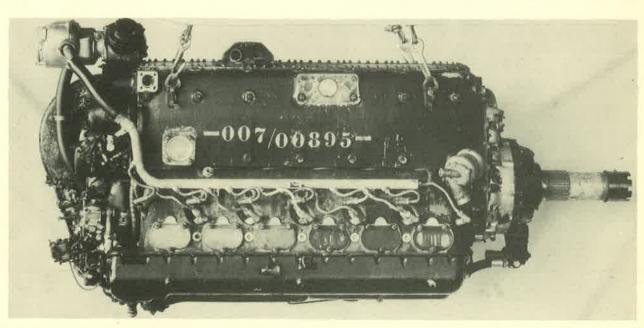
Gerat No: Serial No:

6. Models Available: DB 605 A-17. Documents: See "Instructions For Ordering".

 Description: In-line, inverted 60°V, liquid cooled, 12 cylinders with steel liners, 6.06" bore, 6.30" stroke, piston displacement 2180 cu. in., weight 1642 lbs. Compression ratio 7.2 to 1; supercharger-centrifugal, single stage, variable speed, engine driven through a hydraulic coupling; valve geartwo inlet valves and two sodium cooled exhaust valves per cylinder, actuated by rocker arms and overhead cam; fuel-92 octane gasoline directly injected into each cylinder by one multihole nozzle; ignition-Bosch dual magneto. Propeller shaft is hollow for cannon. Crankshaft has 7 plain bearings. Electric inertia starter. Width-28", height-39.8", length-68.5". Note: Model DB 605-B1 is similar to DB 605-A1 but has different reduction gear ratio.

	PERFOR	MANCE	
	B.H.P.	R.P.M.	ALT.
Take-off	1500	2700	
Climb	1350	2600	19,700
Cruise	1000	2100	19,700





For ordering: See "Instructions for Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention of Chief, Collection Division (TSICD).

Stock No. 3609-02-0604 DB 610 A-1

- 1. Nomenclature: Engine, Double inverted Vee, 24 cyl., liquid cooled.
- 2. Foreign Nomenclature: Flugzeugmotor, Fliissigkeitsgekiihlt.

3. Country of Origin: Germany.

4. Manufacturer: Daimler Benz (Mercedes Benz) Aktiengesellschaft, Stuttgart-Unterturkheim.

5. Identification Numbers:

WERKS No.: 207-00669

Gerat No.: 9-610 A1

6. Models Available: DB 610.

7. Documents: See "Instructions For Ordering."

8. Description: TYPE: Two DB 605 A, B engines coupled together.

DIMENSIONS: Width 63.8 in., Length 85.0 in., Height 40.8 in., Weight: A - 3,400 lbs., B - 3,480 lbs.

MODEL: DB 605 A&B

TYPE: 12 cylinders, inverted vee 60 degrees, pressure liquid cooled, geared drive.

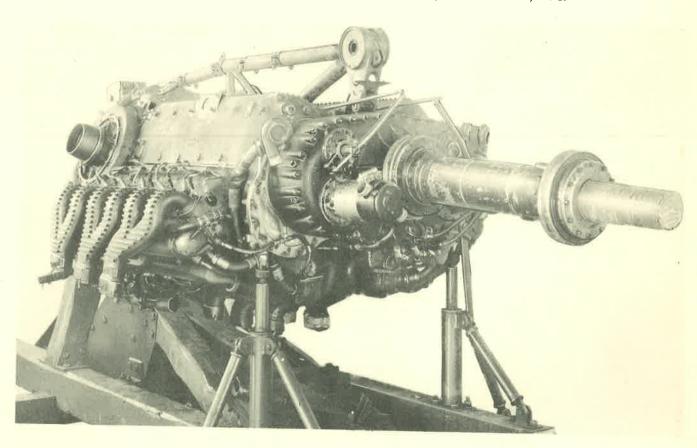
CONSTRUCTION: 2 cylinder blocks with integral heads. 2 inlet valves and 2 exhaust valves (sodium cooled). Hollow propeller shaft for cannon.

SUPERCHARGER: Gear-driven variable speed 1-stage supercharger. Hydraulic coupling to impeller with degree of slip regulated by automatic altitude control.

INJECTION: Direct fuel injection. 12-plunger injection pump with automatic mixture control. 1 closed-type 6 orifice injector per cylinder.

Bore 6.06 in., Stroke 6.30 in., Displacement 2,180 cu. in., Compression ratio 7.2:1, Gasoline grade 92 octane.

#### PERFORMANCE (DB-610)



Stock No. 3609-02-0102-GR14M

- 1. Nomenclature: Engine-Radial Double Row 14 cyl. air-cooled
- 2. Foreign Nomenclature:
- 3. Country of Origin: France
- 4. Manufacturer: Gnome Rhone 14M
- 5. Identification Numbers:

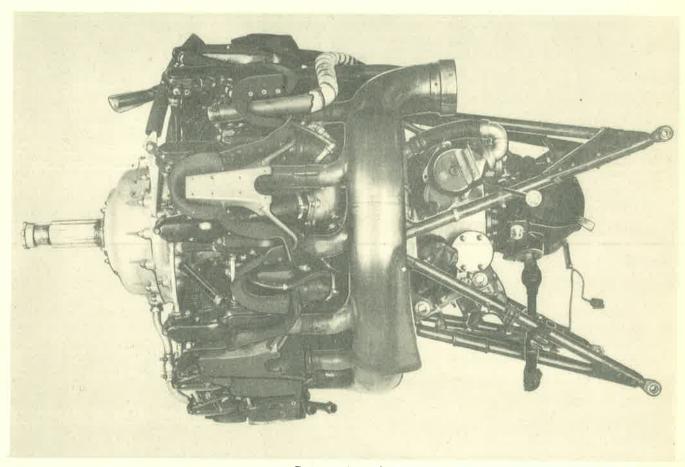
Werks No:

Gerat No:

Fl. or Ln. No:

Serial No:

- 6. Models Available: Gnome Rhone 14M7. Documents: See "Instructions for Ordering."
- 8. Description: 14 cylinder, twin row air-cooled radial. 1175 cu. in. displacement. Weight 920 lb. Diameter 39 in. Performance not known. Installed in the following types of aircraft: HS129, G0244 and ME323. This engine was built by the French for the Germans during the occupation.



Gnome Rhone 14

ENGINES

Stock No. 3609-02-1418-109-509A

- 1. Nomenclature: Rocket Engine bi-fuel. 2. Foreign Nomenclature: Ruckstossmotor.
- 3. Country of Origin: Germany. 4. Manufacturer: H. Walter, Kiel.
- 5. Identification Numbers:

6. Models Available: HWK 109-509A.7. Documents: See "Instructions for Ordering."

8. Description: Controllable liquid-cooled rocket engine, used on ME163 fighter. Uses T-stoff (80 percent hydrogen peroxide) and C-stoff (30 percent hydrazine hydrate in methyl alcohol) as fuel. Uses potassium cuprocyanide as catalyst. Fuel flow effected by pumps.

Dimensions: length 100 in., width 35.4 by 28.8 in., weight (dry) 368.5 lbs.

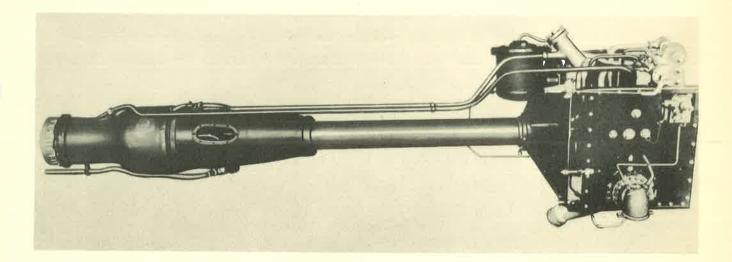
#### PERFORMANCE

Thrust:

220 to 3,306 lbs

17.5 lbs/sec full thrust Propellant rate:

Time of operation: 15-20 min max. (4 min 11 sec full thrust) 5,800 ft/sec Set of velocity:



Stock No. 3609-02-0404-Hirth R504A

- 1. Nomenclature: Engine-Inverted 4 cyl air-cooled
- 2. Foreign Nomenclature: Flugzeugmotoren-Hirth 504A

3. Country of Origin: Germany

4. Manufacturer: Hirth-Motoren-Stuttgartzuffenhausen Zweigwerk Waltersdorf

5. Identification Numbers:

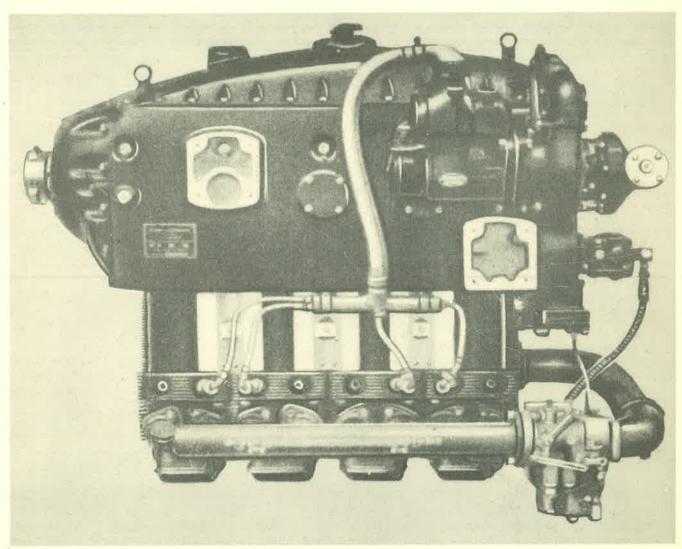
Werks No:

Gerat No:

Fl. or Ln. No:

Serial No:

- 6. Models Available: Hirth R504A
- 7. Documents: See "Instructions for Ordering."
- 8. Description: Four cylinder inverted in line, air-cooled, four stroke engine of 243 cu. in. displacement. Weight 245 lb. Length 37.75 in. Height 30.7 in. Width 30 in. Maximum h.p. 160 at 2500 r.p.m. Normal 145 h.p. at 2420 r.p.m.



Hirth p04A

- 1. Nomenclature: Engine, vertical opposed, 6 cyl. (12 pistons), liquid cooled.
- 2. Foreign Nomenclature:

3. Country of Origin: Germany

4. Manufacturer: Junkers Flugzeug-UND-Motornwerke, A.G.; Dessau

5. Identification Numbers:

Werks No: OMW 3 Fl. or Ln. No. Gerat No: 207 D V Serial No: 207405001

6. Models Available: Jumo 207 DV

7. Documents: See "Instructions For Ordering."

8. Description: TYPE: Six-cylinder compression-ignition liquid-cooled engine. Two stroke cycle. Opposed pistons. Upper and lower crankshafts. Two centrifugal superchargers in series, the first being driven by an exhaust turbine. After-cooler fitted between engine driven supercharger and induction galleries.

INDUCTION SYSTEM: Fuel (diesel oil) injected into each cylinder by means of four nozzles.

CYLINDERS: 4.33 in. bore. Piston Stroke: 6.30 in. Dis. 1.014 cu. in.

PROPELLER DRIVE: Right-handed rotation.

PISTONS: Crown of heat-resisting steel secured to aluminum alloy skirt by four anchor bolts. An un-split junk ring is located between the stepped crown and the skirt. Five compression and scraper rings positioned in grooves lower down piston.

CONNECTION RODS: 'H'-section with double row, splash lubricated needle bearings at the small ends.

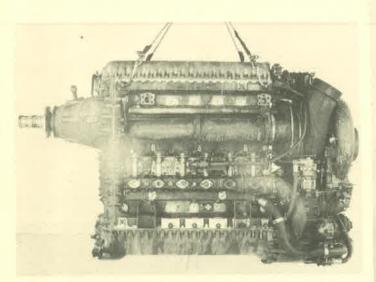
BEARINGS: Big-end and main bearings have steel shells with copper-lead alloy linings. Lubricated by high-pressure oil.

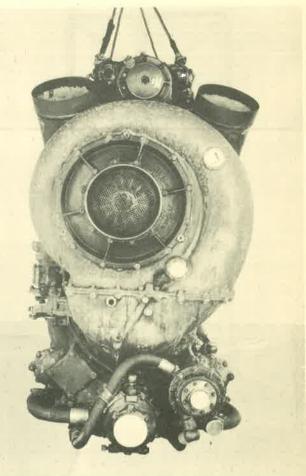
SUPERCHARGERS: Engine driven centrifugal supercharger plus exhaust driven turbine.

DIMENSIONS: Width 35.85 in. Length 85.4 in. Height 58.27 in.

WEIGHT: (without propeller) 1,907 lbs.

PERFORMANCE: T. O.: 1,200 h.p., 3,000 r.p.m., S.L





- 1. Nomenclature: Engine, Inverted Vee, 12 Cylinder, Liquid-Cooled.
- 2. Foreign Nomenclature: FLUGZEUG MOTOREN JUNKERS JUMO 210-D
- 3. Country of Origin: GERMANY
- 4. Manufacturer: JUNKERS FLUGZEUG-UND-MOTOREN WERKE A.G. DESSAU
- 5. Identification Numbers:

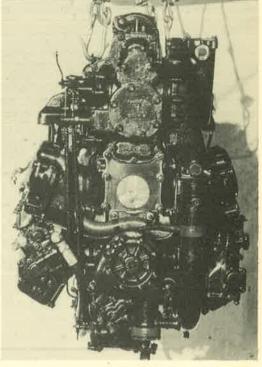
Werks No: 40982 Fl. or Ln. No.

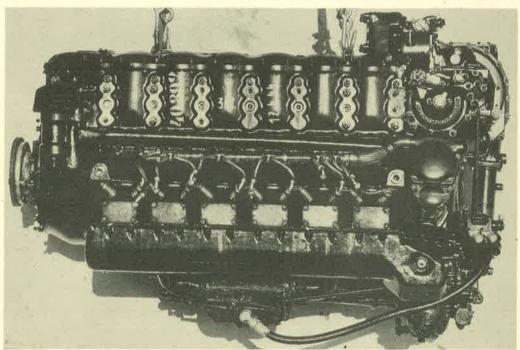
Gerat No: Serial No:

- 6. Models Available: Jumo 210-D7. Documents: See "Instructions For Ordering".
- 8. Description: In-line, inverted 60°V, liquid cooled, 12 cylinders, 4.88" bore, 5.35" stroke, piston displacement 1202 cu. in.; over-all length 58.3 in., height 37.8 in., width 26.8 in., weight 970 lbs., compression ratio 6.5 to 1; supercharger is centrifugal, single stage, two speed, engine driven type; valve gear consists of two inlet valves and one exhaust (sodium cooled stem) per cylinder, rocker arm and cam actuated; the fuel burned 87 octane, through a pressure type updraft carburetor; ignition is supplied by two magnetos. Cylinders have steel barrels.

#### PERFORMANCE

B.H.P. R.P.M. Take-off: 680 2700 Climb: 210 2600 545 Cruise: 2500





For ordering: See "Instructions for Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention of Chief, Collection Division (TSICD).

Stock No. 3609-02-0606-Jumo 211F-1

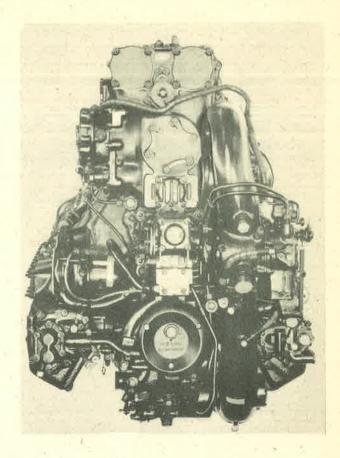
- 1. Nomenclature: Engine, Jumo 211 F-1.
- 2. Foreign Nomenclature: Flugzeug motoren Junkers Jumo 211.
- 3. Country of Origin: Germany.
- 4. Manufacturer: Junkers Flugzeug-und-Motorenwerke A.G. Dessau.
- 5. Identification Numbers:

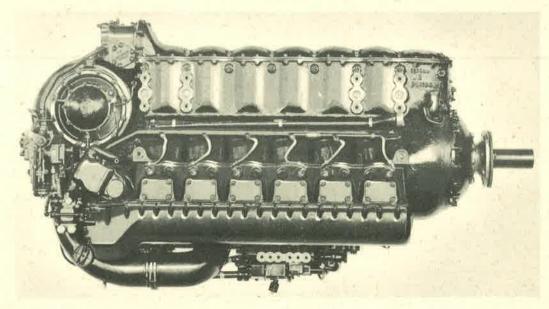
Gerat No.: 9-211 F-1 Werks No.: F-1/5

- 6. Models Available: Jumo 211F-1.7. Documents: See "Instructions For Ordering."
- 8. Description: 12 cylinders, inverted V, 600 pressure liquid cooled, geared drive, 4-cycle. Steel cylinder lines, 2 sodium cooled exhaust and 2 intake valves per cyl, overhead cam crankshaft has 7 plain bearings. Hollow propeller shaft for cannon. Two speed supercharger. Automatic boost pressure regulator. Has no intercooler. Direct fuel injection, fuel deaerator, one injector per cylinder. 92 octane fuel. Two magnetos. Two spark plugs per cyl. Electric inertia starter. Bore 5.9 in., stroke 6.5 in. Piston displacement 2136 cu. in. Comp. ratio 7 to 1. Width 31.5 in., height 41.3 in., length 69.7 in., weight dry 1429 lb.

#### PERFORMANCE

	внр	RPM	ALT
	DIIP		VDI
Take-off	1,350	2,600	
Climb &	1,300	2,500	12,500
Combat	1,260	2,500	16,400
Cruise	1,000	2,200	16,400





- 1. Nomenclature: Engine, inverted Vee, 12 cyl., liquid
- 2. Foreign Nomenclature: Flugzeug motoren Jumo 213-A.
- 3. Country of Origin: Germany
- 4. Manufacturer: Junkers Fluezeug-UN-Moternwenke, A.G., Dessau.
- 5. Identification Numbers:

Werks No: Fl. or Ln. No.

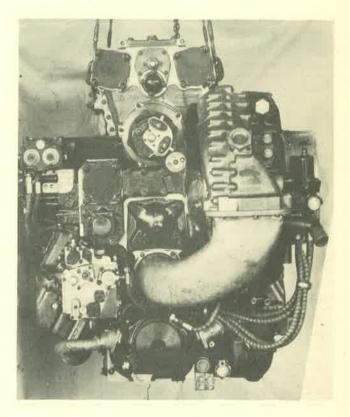
Gerat No: Serial No:

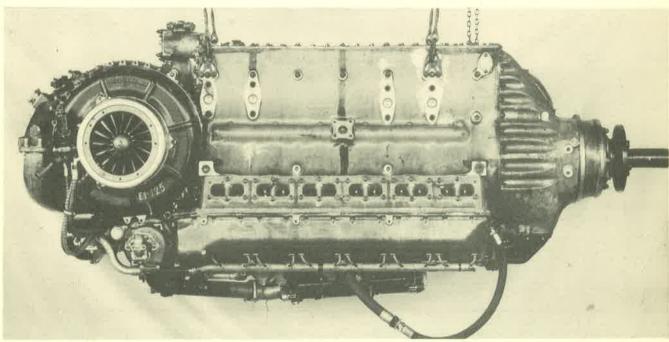
6. Models Available: Jumo 213-A7. Documents: See "Instructions For Ordering".

8. Description: In-line, inverted 60° V, liquid cooled, 12 steel-lined cylinders, 6.06 in. bore, 6.50 in. stroke, piston displacement: 2250 cu. in.; length 70.9 in., height 41.3 in., width 32 in., weight 1543 lbs; compression ratio: 7 to 1; supercharger: centrifugal, single stage, two speed, engine driven type; valve gear: two inlet valves and one exhaust valve (sodium cooled stem) per cylinder, actuated by rocker arms and a cam; fuel 92 octane gasoline, directly injected into each cylinder through one nozzle. Two magnetos with 2 spark plugs per cylinder. Crankshaft rotates on 7 plain bearings. Propeller shaft is hollow for cannon. Electric inertia starter.

$\mathbf{p}_{\mathbf{r}\mathbf{r}}$	FOL	₹МА	NCE

	B.H.P.	R.P.M.	ALT.
Take-off	1700	2700	
Climb	1500	2700	19,800
Cruise -	1200	2200	19,700





1. Nomenclature: Engine, Parallel Radial, 24 Cyl., Liquid Cooled.

2. Foreign Nomenclature: Flugzeugmotoren Junkers Jumo 222

3. Country of Origin: Germany

4. Manufacturer: Junkers Flugzeug-und-Motoren Werke A G, Dessau

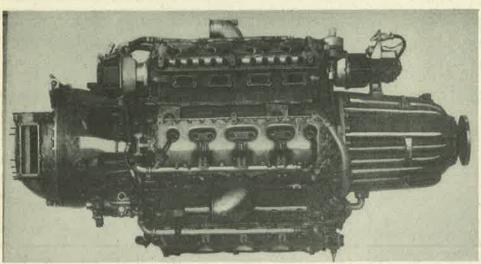
5. Identification Numbers:

Werks No: 3196 Fl. or Ln. No.

Gerat No: Serial No:

6. Models Available: Jumo 2227. Documents: See "Instructions For Ordering".

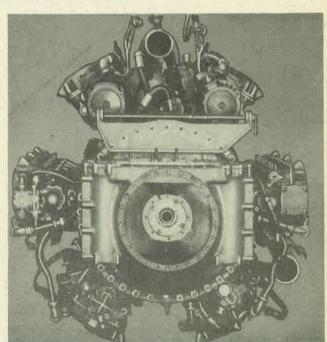
8. Description: Parallel radial. 24 cylinder, 6 banks of 4 cylinders each, arranged equidistantly around the crankcase, bore: 5.3 inches, stroke: 5.3 inches, piston displacement 2800 cubic inches. C/R 6.5 to 1. Liquid cooled, rotation clockwise (from accessories end), one exhaust valve (sodium cooled) and two inlet valves per cylinder. Rocker arm valve action, single stage, 2-speed, engine driven centrifugal supercharger; fuel system: Gasoline, direct injection, one nozzle per cylinder. Ignition: two individual magnetos. Length 89 inches, diameter 46 inches, weight 4030 pounds.



#### PERFORMANCE

RPM BHP ALT. 3200 2500 16,500

Take-off Combat & Climb 2900 2060 16,500 2700 1700 16,500 Cruise



Stock No. 3609-02-1418-109-500A1

- 1. Nomenclature: Take-off unit-Jet assist.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: H. Walter, Kiel.

5. Identification Numbers:

Werks No.: 13648

Gerat No.: 109-500A1

6. Models Available: 109-500A17. Documents: See "Instructions For Ordering."

8. Description: This take-off assistor was used to assist in take-off of JU88, HE111, BV138, ME321 - 323 type aircraft. The apparatus is dropped by parachute after take-off and can be used repeatedly. Weight: Fuels:

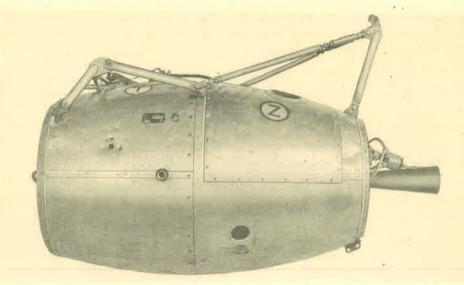
(Empty) 260.15 lbs.

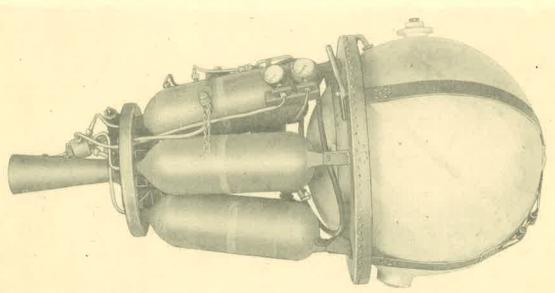
(Full) No parachute, 610.68 lbs

T-Stoff (Peroxide) 286.6 lbs Z-Stoff (Permanganate) 14.5 lbs.

Length: 59-1/4 in. Width: 23-1/2 in.

Thrust: 1,102.3 lbs. for 30 Sec.





Stock No. 3609-01-1416-109-513

Nomenclature: Rocket Engine bi-fuel liquid.
 Foreign Nomenclature: Racketenantriebmotor.

3. Country of Origin: Germany.

4. Manufacturer: Wilhelm Schmidding, Bodenbach.

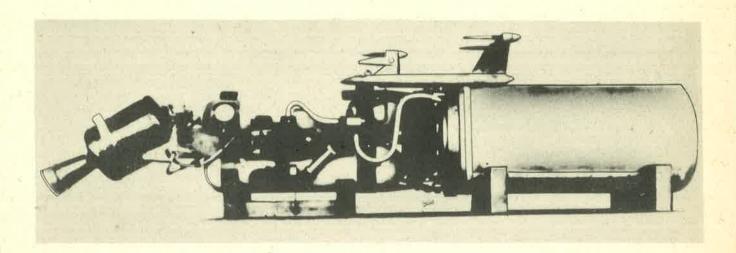
5. Identification Numbers:

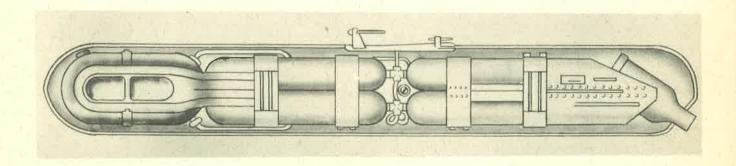
Gerat No.: 109-513

6. Models Available:

7. Documents: See "Instructions for Ordering."

8. Description: Bi-fuel liquid rocket engine employed as power unit for HS293 glide bomb. Fuel: Gaseous oxygen 317. lb. Meth-anol 49.3 lbs. Thrust 1474 lbs, Jet velocity 5600 ft/sec, oxygen bottle pressure 3300 lbs/sq in., total impulse 16,214 lbs/sec, weight 185 lbs, diameter 13.8 in. and length 88.5 in.



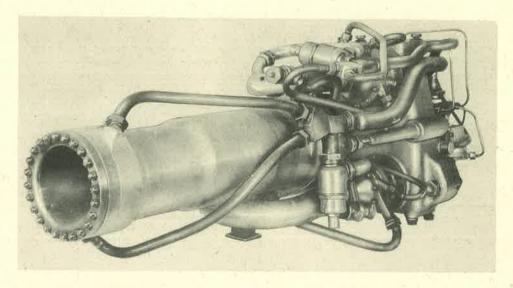


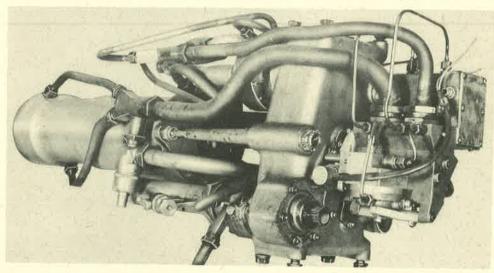
Stock No. 3609-02-1403-109-718

- 1. Nomenclature: Rocket Engine bi-fuel liquid.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Bavarian Motoren Werke, Allach and Bruckmuhl, Near Munich.
- 5. Identification Numbers:

Gerat No.: 109-718

- 6. Models Available: 109-7187. Documents: See "Instructions for Ordering."
- 8. Description: Jet assist take-off unit for the ME262 employing the BMW003 jet engine. It is a bi-fuel liquid rocket unit using Sr Stoff (nitric acid) and R Stoff as fuel. Fuel weight 1,760 lbs. Thrust 2,750 lbs. Thrust time 3 minutes. This unit's fuel pumps are driven from the accessories section of the jet engine and can be operated while jet turbine is operating. This combination of the two engines produces the BMW003R jet engine.





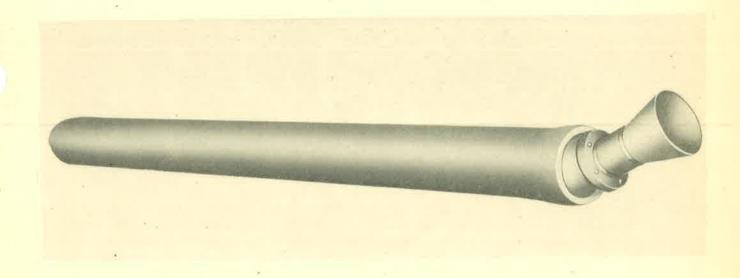
Stock No. 3609-02-1303-109-558

- 1. Nomenclature: Bi-fuel liquid rocket engine.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Bavarian Motern Werke Berlin-Munich.
- 5. Identification Numbers:

Gerat No: 109-558

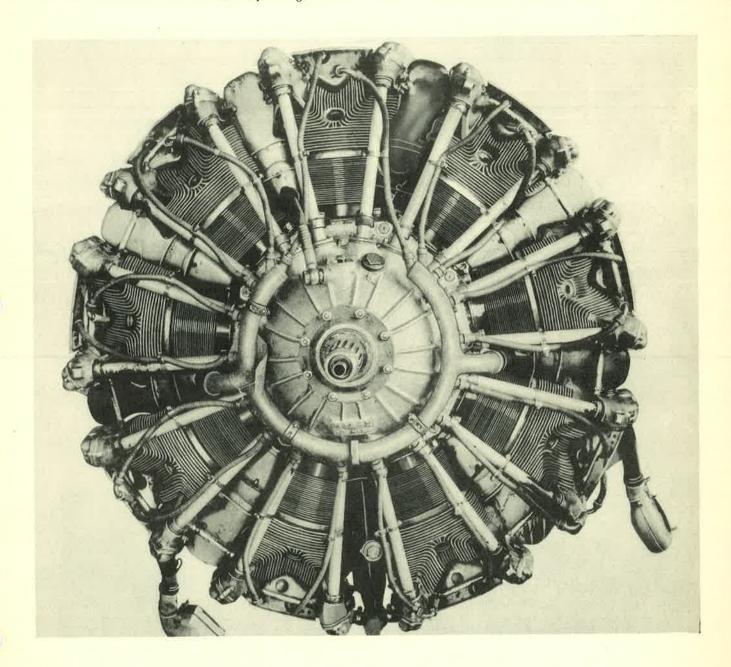
- 6. Models Available: As illustrated.
  7. Documents: See "Instructions for Ordering."
  8. Description: Bi-fuel liquid rocket engine used as propulsion unit on Schmetterling HS117 remotely controlled.

  7. Order of thrust from 57 and to 33 and (full thrust). Order of thrust from 57 and to 33 and (full thrust). flak rocket. Variable thrust from 132 lb. to 836 lb.. Time of thrust from 57 sec. to 33 sec. (full thrust). Oxidizer 130 lb. Sv. stoff. Fuel Tonka 28 lb.. Jet velocity 5600 ft./sec.. Dry weight 176 lb. with tanks. Spontaneous ignition. Electric powder bursting diaphragm for starting feed.



Stock No. 3612-02-0108-Amakaze-31

- 1. Nomenclature: Radial-18 Cylinder Air Cooled.
- 2. Foreign Nomenclature: Amakaze-31.
- Country of Origin: Japan.
   Manufacturer: Hitachi.
- 5. Identification Numbers:
  - - Serial No: 31501
- 6. Models Available: As illustrated.7. Documents: See "Instructions for Ordering."
- 8. Description: 18 cylinder air cooled radial engine used in Lorna 11 twin-engine reconnaissance aircraft. No other information available at time of printing.



Stock No. 3612-02-0102-HA33-62

- Nomenclature: Engine-Radial 14 Cylinder Air Cooled
   Foreign Nomenclature: Kensei Mod. 62 (HA112 Mod. 2)
- Country of Origin: Japan
   Manufacturer: Mitsubishi
   Identification Numbers:

Serial

Serial No: 24061

6. Models Available: As illustrated.

7. Documents: See "Instructions for Ordering."

8. Description: 14 cylinder air cooled radial engine. Fuel used is 92 octane gasoline plus water and menthol injection. Fuel is delivered to cylinders by direct injection. Uses two speed supercharger.

#### DIMENSIONS

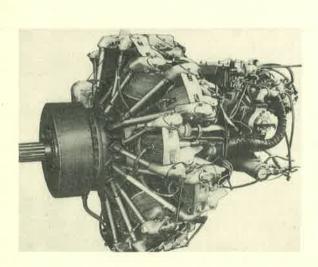
Total weight: 1340 lbs.
Bore: 5.49 in.
Stroke: 5.91 in.
Displacement: 1965 cu. in.

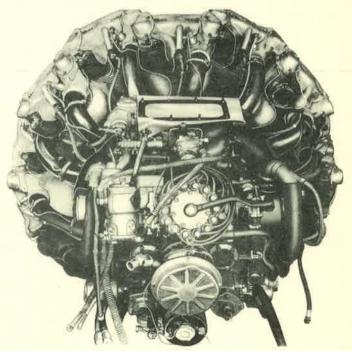
#### PERFORMANCE

Take-off: 1580 h.p. 2600 r.p.m. at sea level War Emergency: 1490 h.p. 2600 r.p.m. at 16,700 ft. Military: 1185 h.p. 2500 r.p.m. at 19,700 ft.

This engine was used on the following aircraft:

Navy Army
Dinah 3 Randy B
Dinah 4 Judy 43
Zeke 54 KI-100





Stock No. 3612-02-0101-HA35-21

- 1. Nomenclature: Engine-Radial 14 Cylinder Air Cooled.
- 2. Foreign Nomenclature: Sakae model 21 (NK1F).
- Country of Origin: Japan.
   Manufacturer: Ishikawajima.
- 5. Identification Numbers:

Serial No: 211011

- 6. Models Available: As illustrated.
- 7. Documents: See "Instructions for Ordering."
- 8. Description: 14 cylinder air cooled radial engine using 92 octane fuel. Two speed supercharge.

#### DIMENSIONS

Total weight:

1,300 lbs.

Bore:

5.12 ins.

Stroke:

5.91 ins.

Displacement:

1,700 cubic inches

#### PERFORMANCE

Take-off:

1115 h.p.

2750 r.p.m. at sea level

War emergency:

1040 h.p.

2750 r.p.m. at 18,000 ft.

Military:

965 h.p.

2700 r.p.m. at 19,700 ft.

This engine was used in the following aircraft:

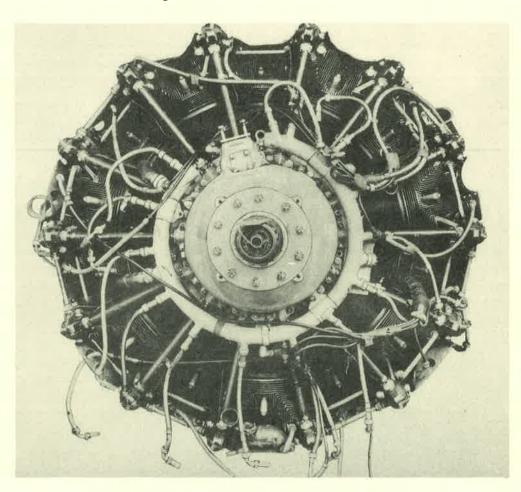
Zeke 22

Zeke 32

Zeke 52

Rufe 12

Irving 11



For Ordering: See "Instructions for Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

- 1. Nomenclature: Engine, Radial, Double Row, 14 cylinder, Air-cooled
- 2. Foreign Nomenclature:
- 3. Country of Origin: Japan
- 4. Manufacturer: Nakajima Aircraft Co., Ltd., Yurakukan, Marunouchi, Tokyo.
- 5. Identification Numbers:

Werks No: Fl. or Ln. No.

Gerat No:

Serial No: 25155

- 6. Models available: Sakae 12
- 7. Documents: See "Instructions For Ordering."

8. Description: TYPE: 14 cylinders, 2-row radial, air cooled, geared drive, supercharged, 4-cycle.

CONSTRUCTION: Cylinders with steel barrels and aluminum alloy heads. 1 inlet valve and 1 exhaust valve (sodium cooled) per cylinder actuated by push rods. 2-throw 3-piece counterbalanced crankshaft supported in 2 roller bearings and 1 central ball bearing.

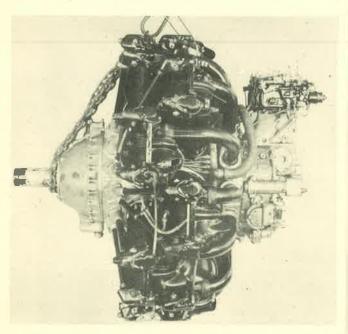
SUPERCHARGER: Gear-driven 1-speed supercharger.

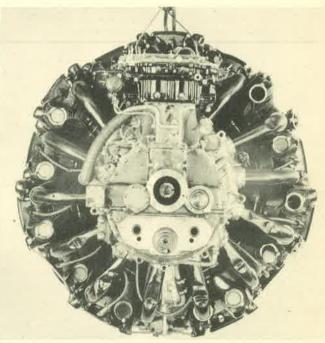
STARTER: Electric inertia starter.

Bore 5.12 in., stroke 5.90., Displacement 1,700 cu. in., Compression ratio 6.5:1, Diameter 44.1 in., Length 66.2 in., Weight 1,190 lb., Weight/horsepower 1.04 lb/h.p., Gasoline grade 92 octane.

PERFORMANCE:

	HP	RPM	ALTITUDE
Take Off	1,000	2,600	
Military Rating	900	2,600	13,000 ft





1. Nomenclature: Engine, Radial, Double Row, 14 Cylinder, Air-cooled.

2. Foreign Nomenclature:

3. Country of Origin: Italy

4. Manufacturer: Societa Anomina F.I.A.T. Via Nizza 250, Turin.

5. Identification Numbers:

Werks No: Fl. or Ln. No. Gerat No:

Serial No: 26178

A 74-RC 38

6. Models available: Fiat A-74

7. Documents: See "Instructions For Ordering."

8. Description: TYPE: 14 cylinders, 2-row radial, air cooled, geared drive, supercharged, 4-cycle.

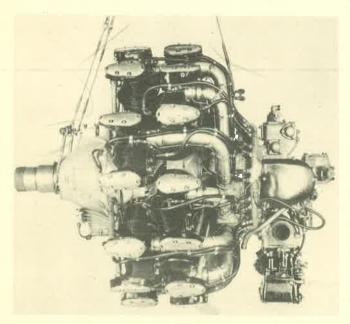
CONSTRUCTION: Cylinders with steel barrels and aluminum alloy heads. 1 inlet valve and 1 exhaust valve (sodium cooled) per cylinder actuated by push rods. 2-throw 1-piece counterbalanced crankshaft supported in 3 roller bearings. Epicyclic bevel reduction gear, ratio 0.67:1.

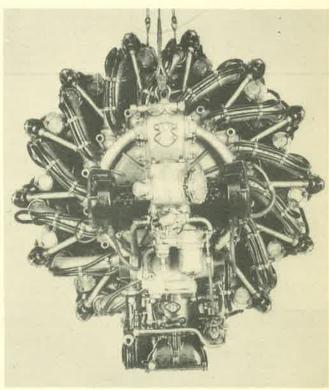
SUPERCHARGER: Gear-driven 1-speed supercharger. STARTER: Garelli compressed air starting system.

Bore 5.50 in., Stroke 5.71 in., Displacement 1,904 cu. in., Compression Ratio 6.7:1, Diameter 46.8 in., Length 59.4 in., Weight 1,257 lb., Weight/horsepower 1.41 lb./h.p., Gasoline grade 87 octane.

PERFORMANCE:

	HР	RPM	ALTITUDE
Take off	890	2,550	
Normal	840	2,400	12,500
Cruising	620	2,000	13,100





- 1. Nomenclature: Engine, Vee type, 12 cyl., liquid
- 2. Foreign Nomenclature:

3. Country of Origin: France

4. Manufacturer: Societé Français, Bois Colombes. Paris

5. Identification Numbers:

Werks No: Fl. or Ln. No. Gerat No: Serial No:

6. Models Available: Hispano-Suiza 12Y50

7. Documents: See "Instructions For Ordering."

8. Description: TYPE: 12 cylinders, vee 60 degrees, ethylene glycol cooled, geared drive, supercharged, 4-cycle.

CONSTRUCTION: Steel cylinder liners. 1 inlet valve and 1 exhaust valve (sodium cooled) per cylinder actuated by overhead camshaft. 6-throw 1-piece crankshaft supported in 7 plain bearings. Hollow propeller shaft for cannon.

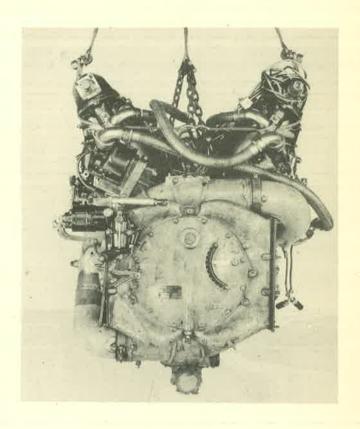
SUPERCHARGER: Gear-driven 1-speed super-

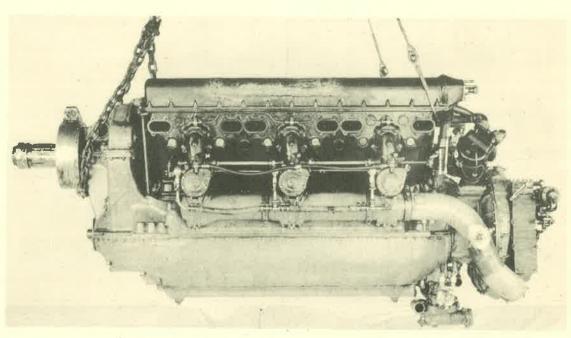
charger.

STARTER: Compressed gas starting system. Bore 5.90 in., Stroke 6.69 in., Displacement 2,197 cu. in., Compression ratio 7.0:1, Width 29.9 in., Height 37.0 in., Length 84.3 in., Weight 1,085 lb., Weight/horsepower 0.99 lb./h.p., Gasoline Grade 87 octane.

#### PERFORMANCE

	H.P.	R.P.M.
Rating (take-off):	1,100	2,500
Rating (military):	1,000	2,500
Rating (cruising):	770	2,250





For ordering: See "Instructions for Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention of Chief, Collection Division (TSICD).

Stock No. 3604-02-0806 Saber IIA

- 1. Nomenclature: Engine, "H" Type, 24 cyl., liquid cooled.
- 2. Foreign Nomenclature: Napier Saber IIA.
- 3. Country of Origin: Great Britain.
- 4. Manufacturer: D. Napier & Son, Ltd., Acton, London, W3.
- 5. Identification Numbers:

Serial No.: S 5029

A.M. Eng. #448981

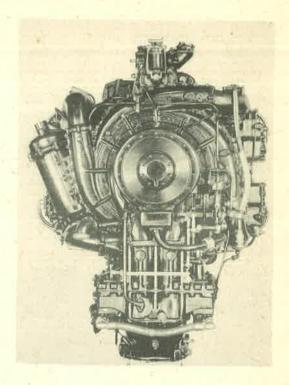
- 6. Models Available: Saber IIA7. Documents: See "Instructions For Ordering".
- 8. Description: TYPE: 24 cylinders, horizontal H with 4 banks, pressure liquid cooled, geared drive, supercharged, 4-cycle.

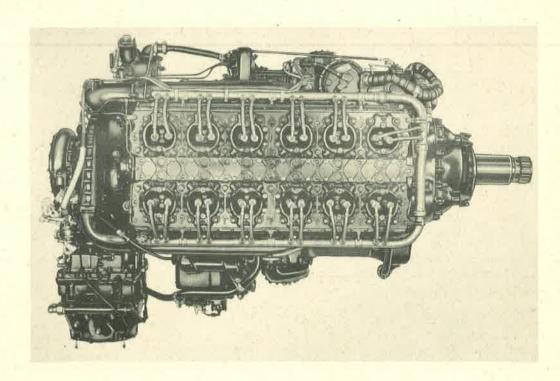
CONSTRUCTION: 2 interchangeable aluminum alloy cylinder blocks each containing 6 upper and 6 lower cylinder bores, Steel cylinder liners. Individual jacketed detachable cylinder heads. 14-port reciprocating single-sleeve valve per cylinder. 3 inlet ports and 2 exhaust ports per cylinder. 26-throw 1-piece crankshafts supported in plain bearings. Compound helical reduction gear, ratio 0.274.1. Equipped for De Havilland Hydromatic propeller.

SUPERCHARGER: Gear-driven 2-speed supercharger. Double entry impeller. Automatic boost control.

CARBURETION: 1 4-barrel up draft carburetor with automatic mixture control and altitude control.

STARTER: Combustion type starter with 5-cartridge magazine. Bore 5.00 in., Stroke 4.75 in., Displacement 2,240 cu. in., Compression ratio 7.0:1, Width 40.0 in., Height 51.1 in., Length 81.1 in., Weight 2,360 lb., Weight/horsepower 1.07 lb./hp, hr., Gasoline grade 100/130., Rating (take-off) 2,200 hp/3,700 rpm.





Stock No. 3609-01-0000-FE 002

- 1. Nomenclature: Flame dampner, exhaust.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.

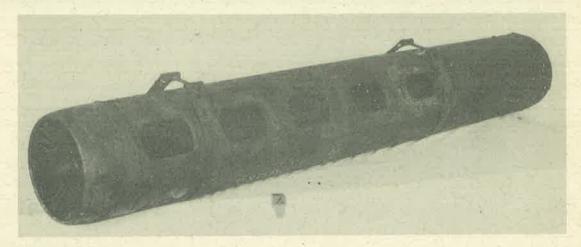
5. Identification Numbers:

Gerat No:

Werks No. Fl. or Ln. No.

Serial No:

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length 60 in., Width 9-3/4 in. No other information available at time of printing.

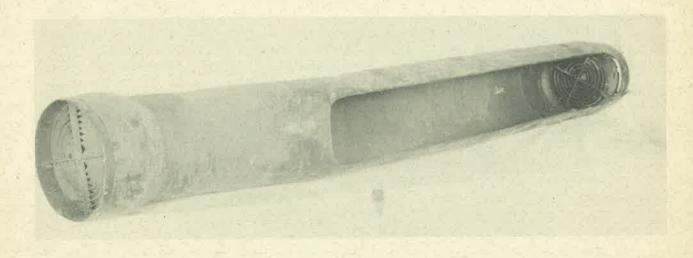


Stock No. 3609-01-0000-FE 001

- 1. Nomenclature: Flame dampner, exhaust.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

Werks No: Gerat No: Serial No:

- Fl. or Ln. No.
- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length 75-3/8 in., Width 13 in. No other information available at time of printing.



For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-02-1200-FE1000

- 1. Nomenclature: Impeller Section, Jet.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

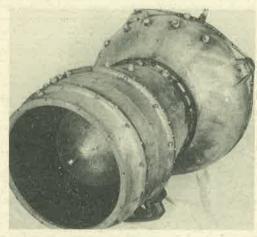
Werks No.

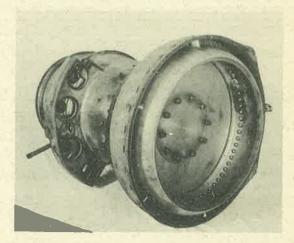
Gerat No:

Fl. or Ln. No.

Serial No:

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Used for experimentation. Length 32 in., Width 32 in. No other information available at time of printing.





Stock No. 3609-02-1200-FE 1001

- 1. Nomenclature: Jet Impeller Unit.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

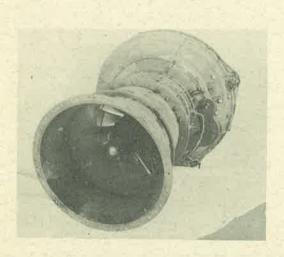
Werks No:

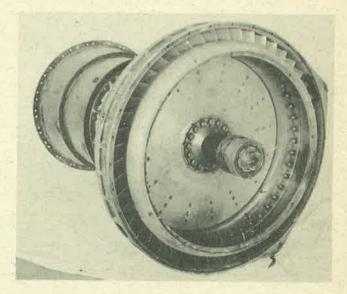
Gerat No:

Fl. or Ln. No.

Serial No:

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Centrifugal Jet Impeller Unit. Length: 41-1/2 in., Diam: 32 in. No further information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-42-0000-9-7004-C

1. Nomenclature: Starter, Aircraft engine, Electric inertia.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Unknown.

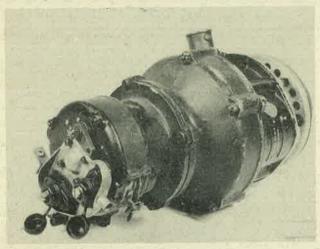
5. Identification Numbers: Werks No. 268156A

Gerat No: 9-7004-C

Serial No: Fl. or Ln. No.

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Used on DB 601. No other information available at time of printing.





Stock No. 3609-42-0000-9-2346 A-1

1. Nomenclature: Starter, Aircraft engine, Air operated.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Unknown.

5. Identification Numbers:

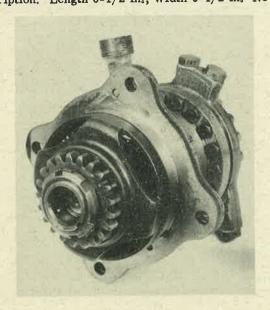
Gerat No: 9-2346A-1

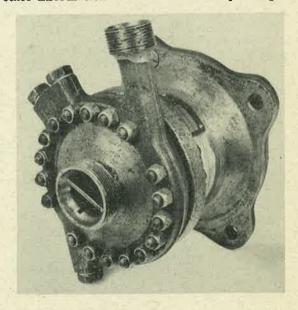
Werks No: 5779 Fl. or Ln. No. Serial No:

6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Length 6-1/2 in., Width 6-1/2 in. No other information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-42-0080-9-7034A

1. Nomenclature: Starter, Gasoline, Jet Engine

2. Foreign Nomenclature:

3. Country of Origin: Germany. 4. Manufacturer: Riedel K. G.

5. Identification Numbers:

Werks No.

Gerat No: 9-7034A

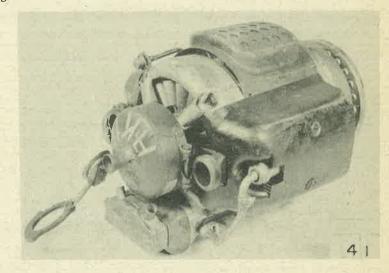
Fl. or Ln. No.

Serial No:

6. Models Available: AK11

7. Documents: See "Instructions For Ordering."

8. Description: Two cylinder, 2 cycle, horizontally opposed, air cooled, battery ignition, engine. Maximum dog speed: 2000 R.P.M. maximum crankshaft speed: 9,600 - 10,000 R.P.M. B.H.P. 10 at 1200 -1500 R.P.M. (Dog Speed). Weight 36 lbs., length 37-1/2 in., Width 9-1/2 in. Piston Displacement 16.48 cu. in. Stroke 1.38 in. Bore 2.755 in. Fuel is 20 parts gasoline to one part oil. This type starter is generally used on Jumo 004 and BMW 003 Jet engines.



Stock No. 3609-42-0080-9-033A-95

1. Nomenclature: Starter, gasoline, Jet Engine.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Riedel K.G.

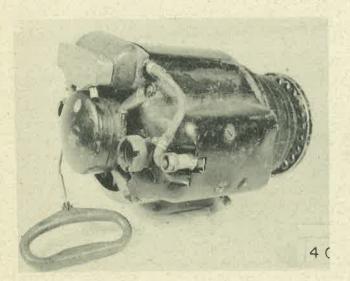
5. Identification Numbers: Werks No: Fl. or Ln. No.

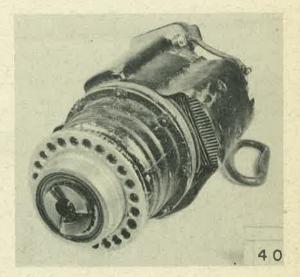
Gerat No: 9-033A-95

Serial No:

6. Models Available: AK17. Documents: See "Instructions For Ordering."

8. Description: Length 15-1/4 in., Width 10 in. This starter is almost identical to the type AK11 starter and for the lack of a more complete description, reference is made to that Model shown at the top of this page.





Stock No. 3609-44-0001-9-601-561-001.12

- 1. Nomenclature: Boost Control.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: J.G. Farbinindustrie.
- 5. Identification Numbers:

Werks No.

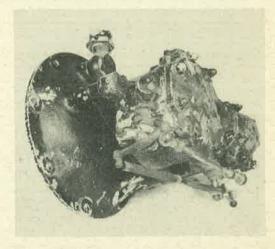
Gerat No: 9-601-561-001.12

Fl. or Ln. No.

Serial No:

- 6. Models Available: As illustrated,7. Documents: See "Instructions For Ordering."
- 8. Description: Length 8-1/4 in., Width 6 in. Used on DB 601-A Engine. No other information available at time of printing.





Stock No. 3609-44-0009-9-211745

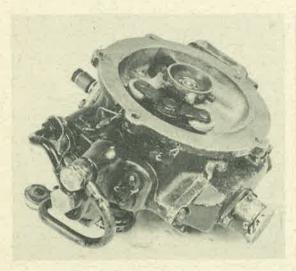
- 1. Nomenclature: Boost Control, Automatic.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Junkers Flugzeug Motorenwerke, A.G., Dessau.
- 5. Identification Numbers:

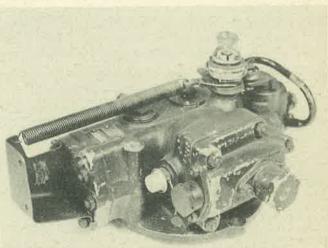
Gerat No: 9-211745 Werks No:

Serial No: Fl. or Ln. No.

6. Models Available: As illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Length 11-3/4 in., Width 8-3/8 in. Used on Jumo 211 Engine. No other date available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-44-0000-9-2281C-0

1. Nomenclature: Supercharger, exhaust driven.

2. Foreign Nomenclature:

3. Country of Origin: Germany,

4. Manufacturer: Unknown,

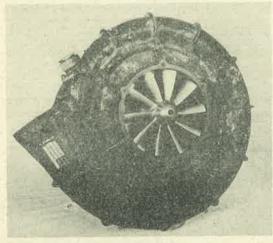
5. Identification Numbers: Werks No. 041

Gerat No: 9-2281C-0

Serial No: Fl. or Ln. No.

6. Models Available: As Illustrated7. Documents: See "Instructions For Ordering."

8. Description: Length 24 in., Width 18 in. No other information available at time of printing.





Stock No. 3609-44-0000-9-2216A/0

1. Nomenclature: Supercharger, exhaust driven.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Unknown.

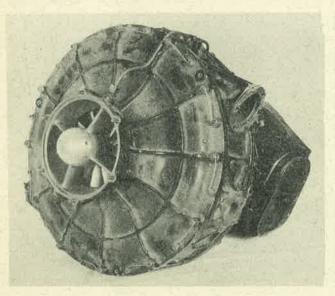
5. Identification Numbers:

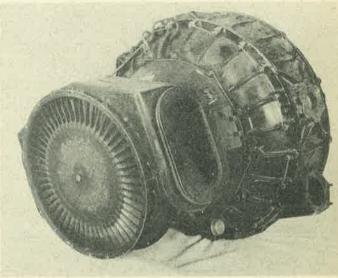
Gerat No: 9-2216 A/0 Werks No: 030

Fl. or Ln. No. Serial No:

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Length 25 in., Width 22 in. No other information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-44-0000-9-2426

- 1. Nomenclature: Supercharger, exhaust driven.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

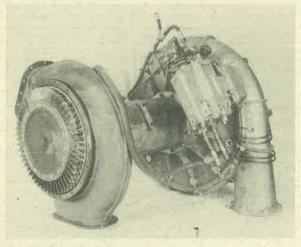
Werks No. V22

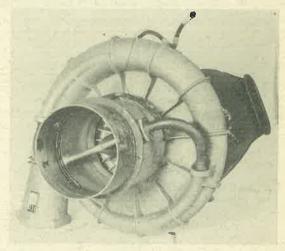
Gerat No: 9-2426

Fl. or Ln. No.

Serial No: Wg M 5861

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length 42 in., Width 35 in. No other information available at time of printing.





Stock No. 3609-44-0000-9-2216 B/O

- 1. Nomenclature: Supercharger, exhaust driven.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

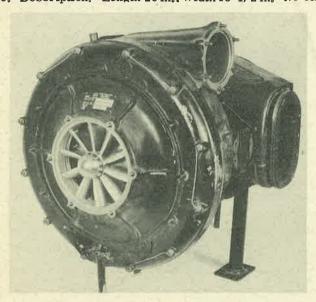
Werks No: 029

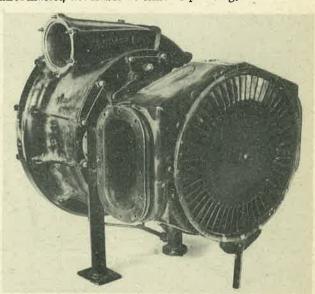
Gerat No: 9-2216 B/O

Fl. or Ln. No.

Serial No:

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length 20 in.. Width 18-1/2 in. No other information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-44-0000-9-801-642-901.

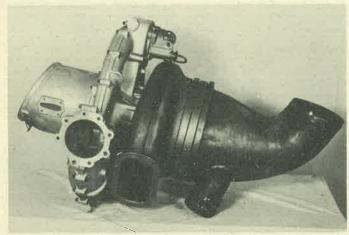
- 1. Nomenclature: Supercharger, exhaust driven.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

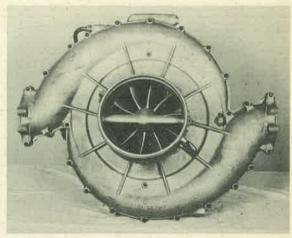
Werks No. 638

Gerat No: 9-801-642-901

Serial No: Fl. or Ln. No.

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length 45 in., Width 33 in. This supercharger is used on BMW 801 engine. No other information available at time of printing.





Stock No. 3609-44-0000-9-603-447-001

- 1. Nomenclature: Supercharger, Gear driven.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

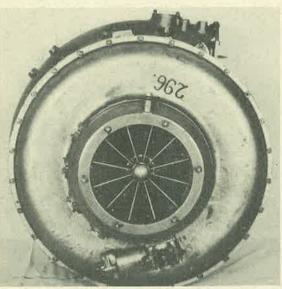
Werks No:

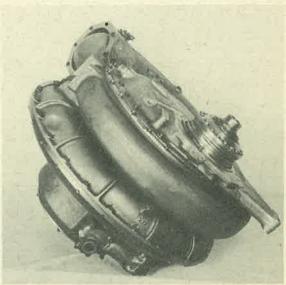
Gerat No: 9-603-447-001

Serial No: Fl. or Ln. No.

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Length 26-1/2 in., Width 20 in. Used on DB603 engine. No other information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-47-0029-9-4035-P-2.

1. Nomenclature: Magneto, Aircraft engine.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Robert K. Bosch K.G. Stuttgart.

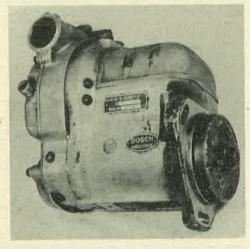
5. Identification Numbers:

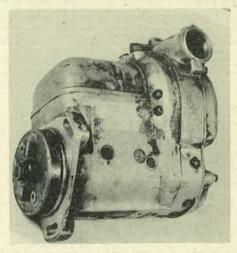
Gerat No: 9-4035 P-2 Werks No. 388660 Serial No: GE 12 DRS 196 Fl. or Ln. No.

6. Models Available: As Illustrated.

7. Documents: See "Instructions for Ordering."

8. Description: Length 9-1/2 in., Width 5-3/4 in. No other information available at time of printing.





Stock No. 3609-47-0029-9-4034C

1. Nomenclature: Magneto, Aircraft engine.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

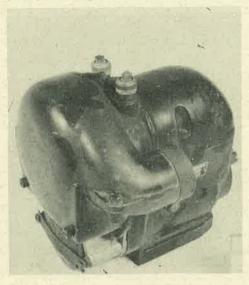
4. Manufacturer: Robert K. Bosch, K.G. Stuttgart

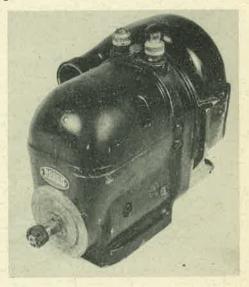
5. Identification Numbers:

Werks No: Fl. or Ln. No. Gerat No: 9-4034C Serial No: GE 9BRS 123

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Length 9 in., Width 6-1/2 in. This magneto greatly resembles the American Bosch Model SF9LU. No other information available at time of printing.





For Ordering: See "Instructions For Ordering." page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-47-0029-9-4056 B-2

1. Nomenclature: Magneto, Aircraft Engine.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Robert K. Bosch K. G. Stuttgart.

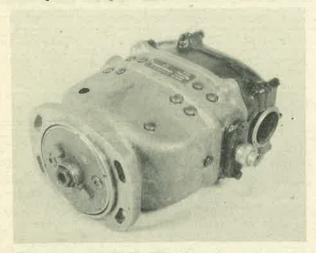
5. Identification Numbers:

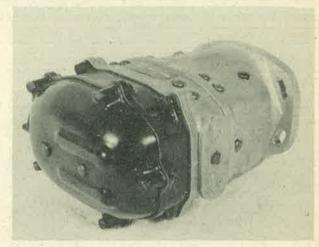
Werks No. 479893 Gerat No: 9-4056 B-2

Serial No: Fl. or Ln. No.

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Length 9 in., Width 7-1/2 in. No other information available at time of printing.





Stock No. 3609-47-0029-9-4051C-6

1. Nomenclature: Magneto, Aircraft Engine.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

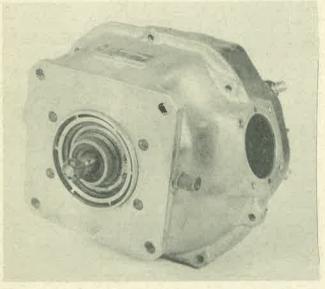
4. Manufacturer: Robert K. Bosch K. G. Stuttgart.

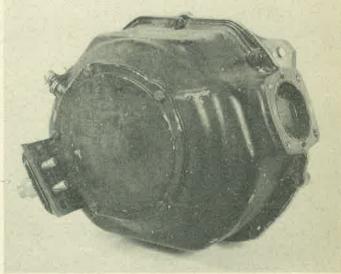
5. Identification Numbers:

Gerat No: 9-4051C-6 Werks No. 479535 Serial No: Fl. or Ln. No.

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Length 10 in., Width 10 in. No other information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

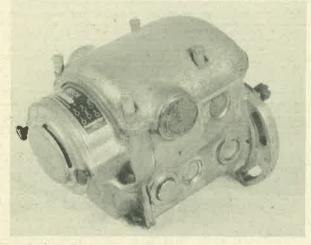
Stock No. 3609-47-0029-MZ3Ez4/4P/1

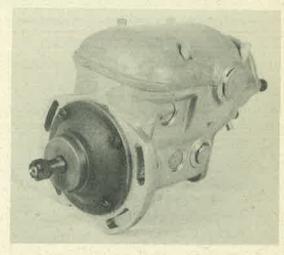
- 1. Nomenclature: Magneto, 6 cylinder, Aircraft engine.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Robert K. Bosch K.G. Stuttgart.
- 5. Identification Numbers:

Werks No. E91933 Identification No: MZ3Ez4/4P/1

Fl. or Ln. No. Serial No:

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length 10 in., Width 5-3/4 in. No other information available at time of printing.





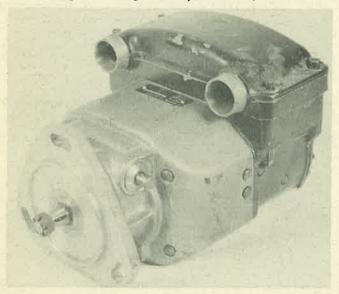
Stock No. 3609-47-0029-9-4039-C

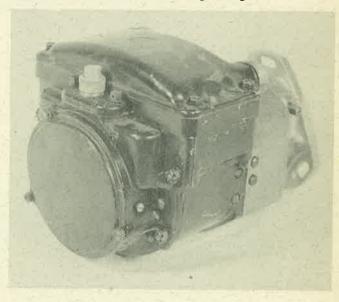
- 1. Nomenclature: Magneto, Aircraft Engine.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Robert K. Bosch K. G. Stuttgart.
- 5. Identification Numbers:

Werks No: 476077 Gerat No: 9-4039-C

Fl. or Ln. No. Serial No:

- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering."
- 8. Description: Length 11 in., Width 7-1/4 in. No other information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-48-0000-9-2453A-1

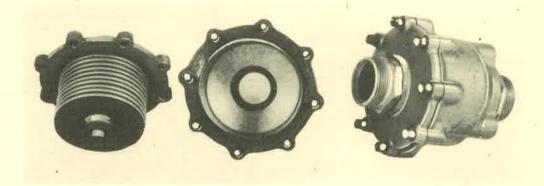
- 1. Nomenclature: Filter, Fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:

Gerat No: 9-2453A-1

6. Models Available:

7. Documents: See "Instructions For Ordering."

8. Description: A milti-screen fuel filter used on Jumo 004 jet engine. One inlet and one outlet male openings: Diameter: 3.8 mm. Thread pitch: 1.50. No other information available at time of printing.



Stock No. 3609-48-0015-8-4518B

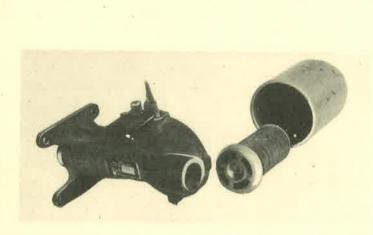
- 1. Nomenclature: Filter, Fuel.
- 2. Foreign Nomenclature:
- Country of Origin: Germany.
   Manufacturer: Seimens.
- 5. Identification Numbers:

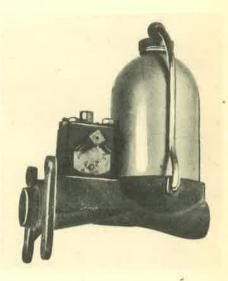
Gerat No: 8-4518-B

6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Multi-disk type filter. One female inlet and one female outlet. Diameter: 26 mm. Thread pitch: 1.50. No other information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-48-0013-19-2106A

- 1. Nomenclature: Filter, Fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: H. Lehmann
- 5. Identification Numbers:

Werks No: 1073

Gerat No: 19-2106A

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering".

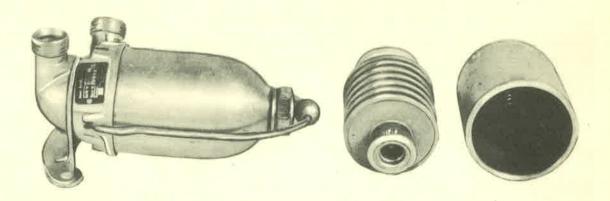
8. Description: Multi-screen filter with one male inlet and one male outlet.

Openings: 22 mm diameter

Thread pitch: 1.50

Length 6-1/2 in. Width 3-1/2 in.

No other information available at time of printing.



Stock No. 3609-48-0013-19-2107A

- 1. Nomenclature: Filter, Fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: H. Lehmann
- 5. Identification Numbers:

Gerat No: 19-2107A

6. Models Available: As Illustrated.

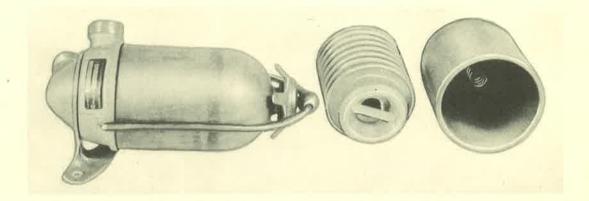
7. Documents: See "Instructions For Ordering".

8. Description: Multi-screen filter with one male inlet and one male outlet opening.

Openings: 26 mm diameter

Thread pitch: 1.50

No other information available at time of printing.

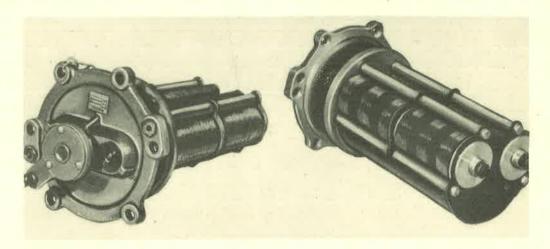


Stock No. 3609-48-0000-9-2138C

- 1. Nomenclature: Filter, oil.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Mann & Hummel. Ludwigsburg.
- 5. Identification Numbers:

Fl. No: 2900 Gerat No: 9-2138C

- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering."
- 8. Description: Double oil filter, used in oil return line on Jumo 211 engines. Length 10 in. Width 5-1/4 in.



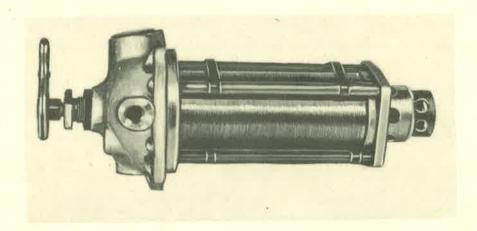
Stock No. 3609-48-0000-9-2088C

- 1. Nomenclature: Filter, oil.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:

Gerat No: 9-2088C

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Multi-screen oil filter. 5 small ports with 3/8 in. openings. 1 large port with 7/8 in. opening. Width 4-1/2 in. Length 10 in.

No other information available at time of printing.



Stock No. 3609-48-0000-9-2417A

- 1. Nomenclature: Filter, oil.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

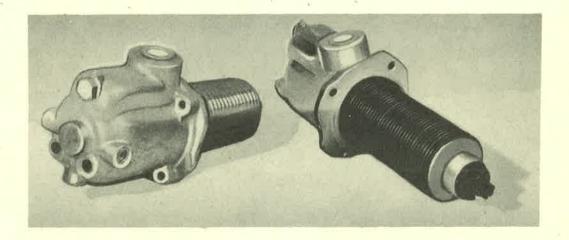
Gerat No: 9-2417A

- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering."
- 8. Description: Multi-screen oil filter. Length 16-1/2 in. Width 6-3/4 in. No other information available at time of printing.



Stock No. 3609-48-0000-FE3169

- 1. Nomenclature: Filter, oil.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:
- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering."
- 8. Description: Multi-screen oil filter. 6 ports. 5 ports 7/16 in, opening, 1 port 3/4 in. opening. Length 12-1/4 in. Width 5 in. No other information available at time of printing.



Stock No. 3609-48-0000-9-2417B

- 1. Nomenclature: Filter, oil.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:

Gerat No: 9-2417B

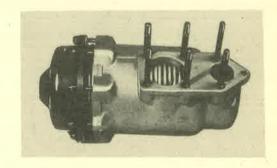
- 6. Models Available: As illustrated.
- 7. Documents: See "Instructions for Ordering."
- 8. Description: Multi-screen, cuno type oil filter.

Length 10 in.

Width 5-1/2 in.

No other information available at time of printing.





Stock No. 3609-48-0000-9-20900

- 1. Nomenclature: Filter, oil.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Knecht.
- 5. Identification Numbers:

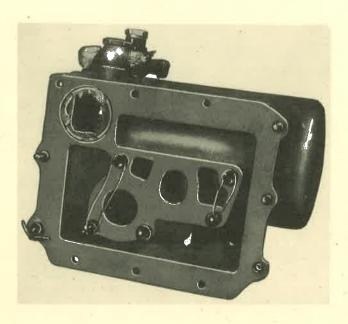
Gerat No: 9-20900

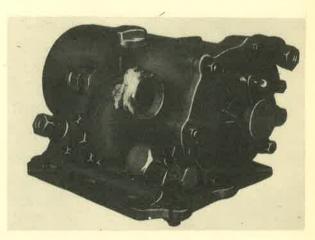
- 6. Models Available: As illustrated.7. Documents: See "Instructions for Ordering."
- 8. Description: Cuno type oil filter.

Length 10-1/2 in.

Width 8-1/2 in.

No other information available at time of printing.





Stock No. 3609-48-0000-9-2057

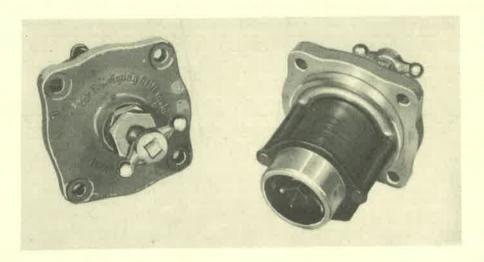
- 1. Nomenclature: Filter, oil.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.

5. Identification Numbers:

Gerat No: 9-2057

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Length 4-1/2 in. Width 3 in. No other information available at time of printing.

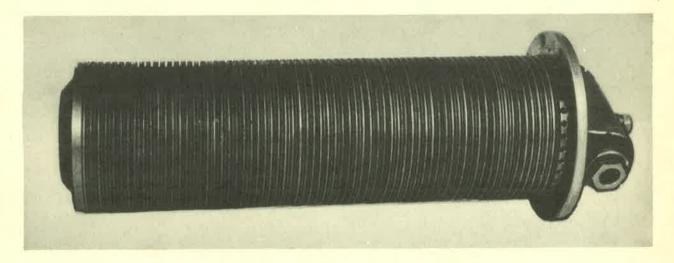


Stock No. 3609-48-0000-9-22608

- 1. Nomenclature: Filter, oil.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:

Gerat No: 9-22608

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Multi-screen oil filter. Length 15-3/4 in. Width 5-3/8 in. No other information available at time of printing.



For Ordering: See "Instructions for Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-48-0009-9-2021 E-1

- 1. Nomenclature: Injector, fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Junkers Flugzeug Und Motorenwerke, Dessau.
- 5. Identification Numbers:

Werks No: 1046090 6859

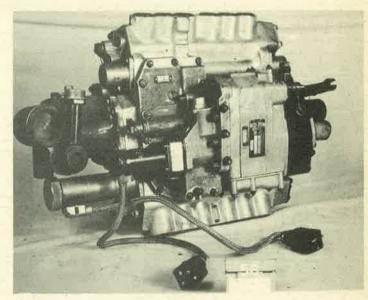
Gerat No: 9-2021 E-1

Fl. or Ln. No:

Serial No:

- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering."
- 8. Description: Fuel Injector with automatic control unit. Twelve plungers arranged in a 150° "V", six plungers on each side. The injector is mounted between the banks of the Jumo 211 inverted "V" engine.

Length 17 in. Width 13 in.



Stock No. 3609-48-0009-9-2132293 C-1

- 1. Nomenclature: Injector, fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Junkers Flugzeug Und Motorenwerke, Dessau.
- 5. Identification Numbers:

Werks No: 10863B 03141 Fl. or Ln. No:

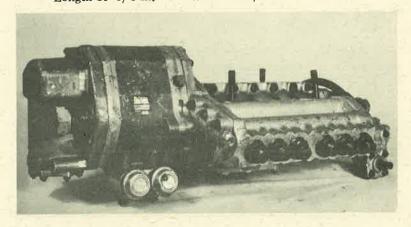
Gerat No: 9-2132293 C-1

Serial No:

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Fuel Injector with automatic control unit. Twelve plungers arranged in a 150° "V", six plungers on each side. The injector is mounted between the banks of the Jumo 213 inverted "V" engine.

Length 19-3/4 in.

Width 12-1/4 in.



Stock No. 3609-48-0000-9-2106G-3

- 1. Nomenclature: Injector, fuel, 14 port.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.

5. Identification Numbers: Werks No: 151 6865

Gerat No: 9-2106G-3

Fl. or Ln. No:

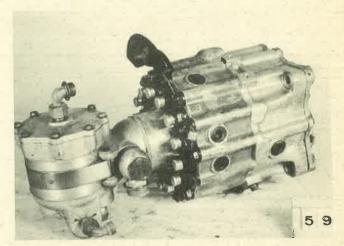
Serial No:

6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Deckel fuel injection pump with Bosch Centrifugal De-aerator. Installed on the accessory drive gear box below centrifugal starter on BMW 801. Fourteen plunger units are arranged in a circle and are activated by cam plate with three cam lobes.

Length 15-1/4 in. Width 7 in.



Stock No. 3609-0029-9-2305-E-2

- 1. Nomenclature: Injector, fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Robert K. Bosch. Stuttgart.
- 5. Identification Numbers:

Werks No: 109594 Fl. or Ln. No: Gerat No: 9-2305-E-2

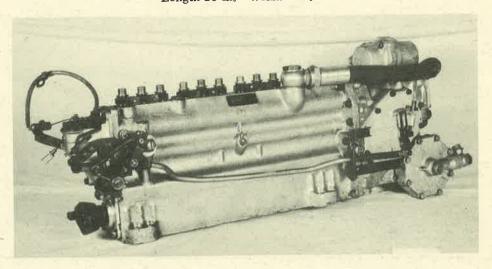
Serial No:

6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Bosch fuel injector and automatic control unit used on DB-603 engine. Injector is a twelve cylinder in-line design mounted between the two banks of six cylinders.

Length 28 in. Width 7 in.



For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-48-0029-9-2280-B

1. Nomenclature: Injector, fuel, 12 port, In-line.

2. Foreign Nomenclature:

- 3. Country of Origin: Germany.
- 4. Manufacturer: Robert K. Bosch.

5. Identification Numbers:

Werks No: 668513

Gerat No: 9-2280-B

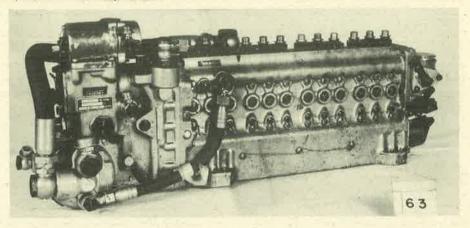
Fl. or Ln. No:

Serial No:

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Injector is of twelve cylinder in-line design, and is mounted between the two banks of the DB-603 Engine.

DIMENSIONS: Length 27-3/4 in., Width 7 in.



Stock No. 3609-48-0029-9-2053B-1

- 1. Nomenclature: Injector, fuel, 12 port, In-line.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Robert K. Bosch.
- 5. Identification Numbers:

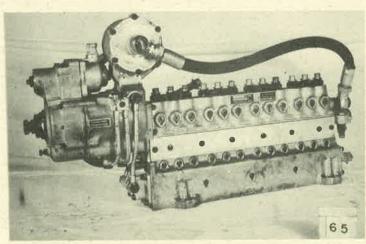
Werks No: 502133

Gerat No: 9-2053 B-1

Serial No:

- Fl. or Ln. No:
- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Injector is of twelve cylinder in-line design and is mounted between the two banks of the DB-601

DIMENSIONS: Length 27-1/4 in., Width 6 in. Total weight of injector and automatic control is 46.5 pounds.



For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-48-0029-9-2274A-1

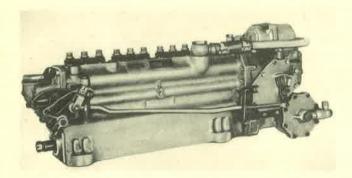
- 1. Nomenclature: Injector, fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Robert K. Bosch, Stuttgart.
- 5. Identification Numbers:

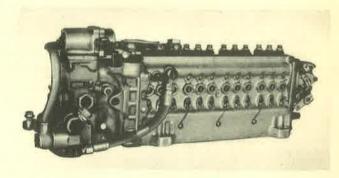
Gerat No: 9-2274A-1

- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering."
- 8. Description: Bosch fuel injector and automatic control unit used on DB603 and/or DB605 engine. Injector is a twelve cylinder in-line design mounted between two banks of six cylinders.

Length 27-1/2 in.

Width 7-3/4 in.





Stock No. 3609-48-0029-2196C-1

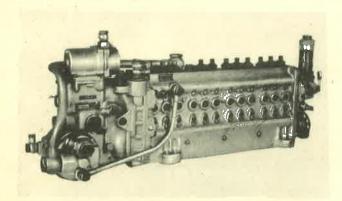
- 1. Nomenclature: Injector, fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Robert K. Bosch. Stuttgart.
- \*5. Identification Numbers:

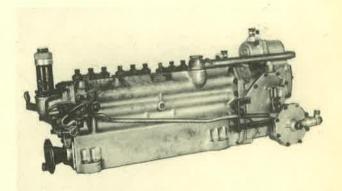
Gerat No: 9-2196C-1

- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering."
- 8. Description: Bosch fuel injector and automatic control unit used on DB605 engine. Injector is a twelve cylinder in-line design mounted between two banks of six cylinders.

Length 27-3/4 in.

Width 7 in.





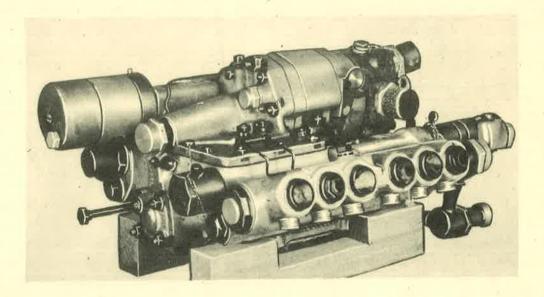
Stock No. 3609-48-0009-9-2009-D1

- 1. Nomenclature: Injector, fuel.
- 2. Foreign Nomenclature: Einspritzung, Junkers, W9-207-204.
- 3. Country of Origin: Germany.
- 4. Manufacturer: Junker Flugzeug und Motorenwerke A.G.
- 5. Identification Numbers:

Werks No: M2M679

Gerat No: 9-2009-D1

- 6. Models Available: As illustrated.
- 7. Documents: See "Instructions for Ordering."
- 8. Description: Junkers fuel injector for Jumo 211A engine. Twelve plunger units and ports, horizontally opposed, six per side. Installed on left rear of engine. Length 16-1/4 in. and width 13-1/2 in.

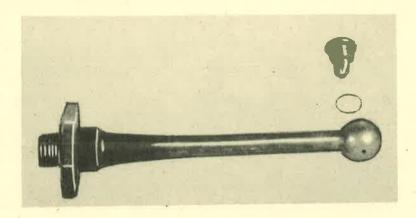


Stock No. 3609-48-0000-EVD-SK14136G

- 1. Nomenclature: Nozzle, fuel injector.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:

Gerat No: EVD-SK14136G

- 6. Models Available: As illustrated.
- 7. Documents: See "Instructions for Ordering."
- 8. Description: Fuel injection nozzle used on Junkers Jumo 004 jet engine. Has one fuel outlet. Length 5-1/4 in. Male fitting - diameter 14 mm Thread pitch 1.5.



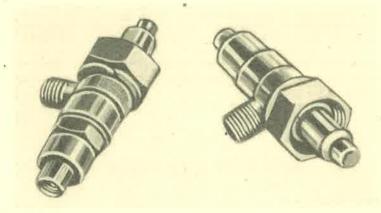
Stock No. 3609-48-0029-9-2076C

- 1. Nomenclature: Nozzle Fuel injection.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Robert K. Bosch.
- 5. Identification Numbers:

Gerat No.: 9-2076C

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Used on Bramo Fafnir 323 P-1 and R-2 engines.

Large female nut: 24 mm., thread pitch: 1.50 Small female nut: 6.7 mm., thread pitch: 1.10 Male : 12 mm., thread pitch: 1.50



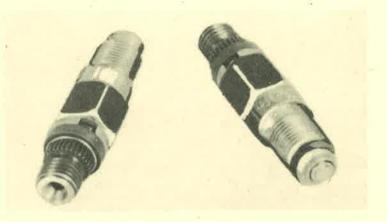
Stock No. 3609-48-0029-9-2143B-1

- 1. Nomenclature: Nozzle Fuel injection.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Robert K. Bosch.
- 5. Identification Numbers:

Gerat No.: 9-2143B-1

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Desc. otion: Used on BMW 801 engine.

Engine end: 14 mm. diameter, 1.25 thread pitch Inlet end: 12 mm. diameter, 1.50 thread pitch



For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Gerat No: 1135

Stock No. 3609-48-0000-1135

- 1. Nomenclature: Nozzle, Fuel injection.
- 2. Foreign Nomenclature:
- Country of Origin: Germany.
   Manufacturer:
- 5. Identification Numbers:

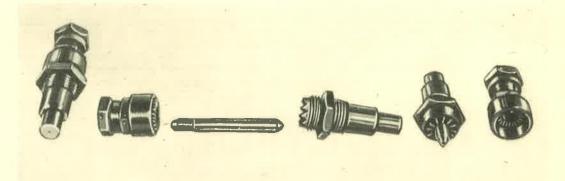
6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Thread pitch: 1.50

Diameter: 18 mm Length: 3-1/2 in.

No other information available at time of printing.



Stock No. 3609-48-0000-9-2137G

- 1. Nomenclature: Nozzle, Fuel injection.
- 2. Foreign Nomenclature:
- Country of Origin: Germany.
   Manufacturer:
- 5. Identification Numbers:

Gerat No: 9-2137G

- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering."
- 8. Description: 6 jets. Used on DB610 engine.

Thread pitch: 1.50

Diameter: 12 mm

Length: 3-3/8 in.

No other information available at time of printing.



Stock No. 3609-48-0009-2015A-2

1. Nomenclature: Pump, fuel.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Junker Flugzeug Und Motoren Werke.

5. Identification Numbers:

Werks No:

Gerat No: 73924

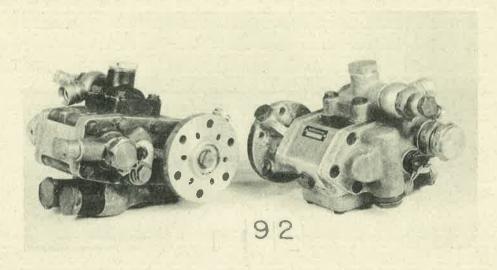
Fl. or Ln. No:

Serial No:

6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Engine driven gear type pump, used on Jumo 2015A-2. No further information available at time of printing.



Stock No. 3609-48-0017-9-2002B-1.

1. Nomenclature: Pump, fuel.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Ehrich and Graetz A.G.

5. Identification Numbers:

Werks No: 12763

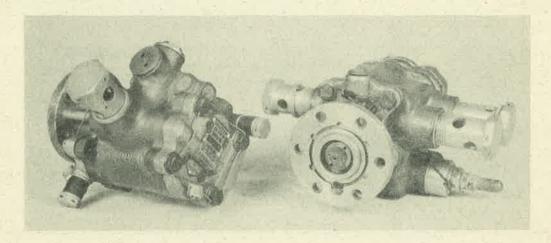
Gerat No: 9-2002B-1

Fl. or Ln. No:

Serial No:

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Engine driven gear type pump. No further information available at time of printing.



For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-48-0000-9-2135-B-4

- 1. Nomenclature: Pump, fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

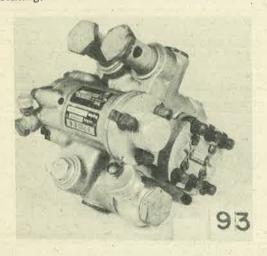
Werks No:

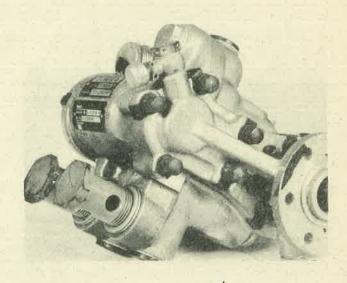
Gerat No: 9-2135-B-4

Fl. or Ln. No: Serial No:

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Engine driven gear type pump, used on DB-601. No further information available at time of printing.





Stock No. 3609-61-0000-9-2097-C-4

- 1. Nomenclature: Pump, fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

Werks No:

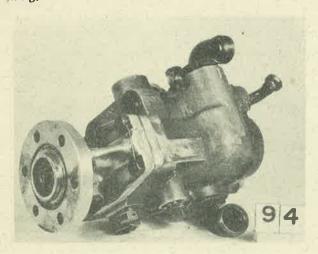
Gerat No: 9-2097-C-4

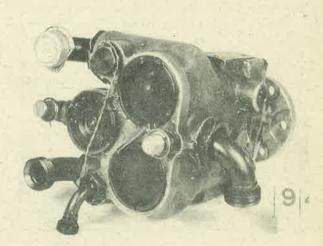
Serial No:

Fl. or Ln. No: 6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Engine driven gear type pump, used on BMW 801. No further information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-48-0000-9-2433A

1. Nomenclature: Pump-Fuel.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Unknown. 5. Identification Numbers:

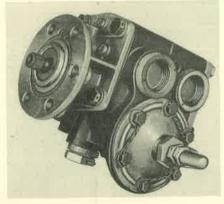
Werks No: Fl. or Ln. No: Gerat No: 9-2433A

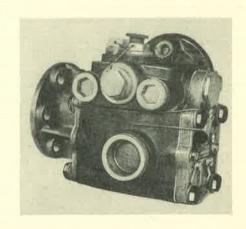
Serial No:

6. Models Available: As Illustrated.7. Documents: See "Instructions for Ordering."

8. Description: Engine driven gear type fuel pump. Used on Jumo 222 engines. No further information available

at time of printing.





Stock No. 3609-48-0000-8-4517-A

1. Nomenclature: Pump-Fuel With Filter Bowl.

2. Foreign Nomenclature: Filter.Brandhahn Armatur.

3. Country of Origin: Germany.

4. Manufacturer: Unknown.

5. Identification Numbers:

Werks No. 106895

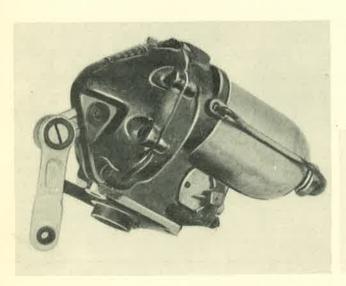
Gerat No: 8-4517-A

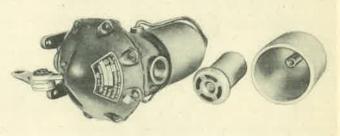
Serial No:

Fl. or Ln. No:

6. Models Available: As Illustrated.7. Documents: See "Instructions for Ordering."

8. Description: Hand operated diaphragm type fuel pump with multi-disk filter. Maximum pressure: 1.0 kg/CM2. Two female openings: 26 mm diameter, 1.50 (metric) thread pitch. Used on ME 109-G aircraft.





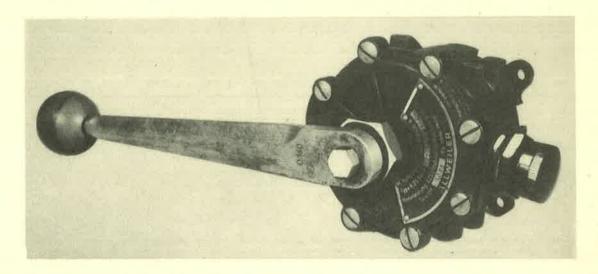
For Ordering: See "Instructions for Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-48-0012-8-4567A

- 1. Nomenclature: Pump, Fuel, hand wobble
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Allweiler
- 5. Identification Numbers:

Werks No: 423 Gerat No: 8-4567A

- 6. Models Available:7. Documents: See "Instructions For Ordering."
- 8. Description: Rated horsepower, 0.251 per stroke. Capacity, 90 strokes per minute, delivers 290.6 gals./hr. Length 12-1/2 in., width 4-1/4 in. No other information available at time of printing.



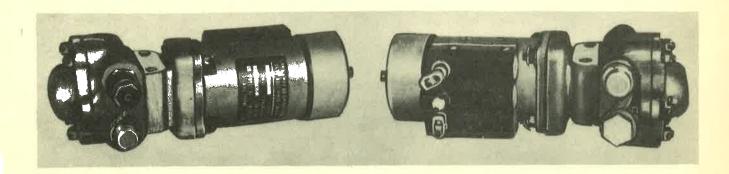
Stock No. 3609-48-0014-19-5760A-1

- 1. Nomenclature: Pump, Electric, gasoline
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Wurtt Metallwerke
- 5. Identification Numbers:

Werks No: 249 311

Gerat No: 19-5760A-1

- 6. Models Available:7. Documents: See "Instructions For Ordering."
- 8. Description: 24 volt electric gasoline pump used on the starter engine of the Jumo 004 jet engine. Length
- 8-1/2 in., width 3 in. No other information available at time of printing.



Stock No. 3609-48-0000-19-1151A-1

1. Nomenclature: Pump, Oil.

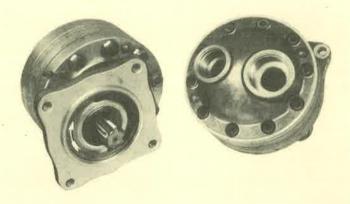
- 2. Foreign Nomenclature: Olpumpe (Schmierpumpe).
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:

Gerat No: 19-1151A-1

6. Models Available:

7. Documents: See "Instructions For Ordering."

8. Description: Gear type, engine driven oil pump installed on Jumo 004 Jet engine, clock-wise rotation. Inlet opening 38 mm, thread pitch 1.5 mm. Outlet opening 30 mm thread pitch 1.5 mm. No other information available at time of printing.



Stock No. 3609-48-0000-109-0046

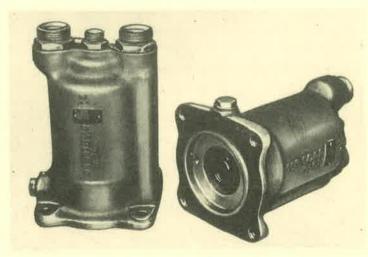
- 1. Nomenclature: Pump, Oll separator.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:

. Gerat No: 109-0046

6. Models Available:

7. Documents: See "Instructions For Ordering."

8. Description: Gear type, engine driven pump installed on Jumo 004 Jet engine. Two male openings 28 mm, thread pitch 1.5 mm. One male opening 14 mm, thread pitch 1.5. No other information available at time of printing.



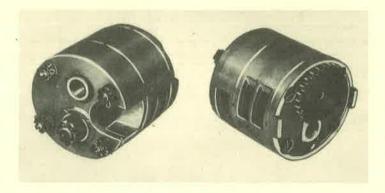
Stock No. 3609-48-0000-BA10350

- 1. Nomenclature: Pump, Oil, gear type.
- 2. Foreign Nomenclature: Olpumpe.
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:
- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering."
- 8. Description: A high pressure, gear driven pump used to lubricate the Jumo 004 engine. Supplies 30 lbs/sq.in. at normal operating temperatures. Contains two gear pumps, one circulating oil to the front compressor bearing, bevel gears, and main gear box; the other supplying the rear compressor bearing, turbine bearings, and also cooling the turbine shaft. A light mineral oil is used as a lubricant.

Length 3-1/4 in.

Width 2-7/8 in.

#3138 stamped on housing



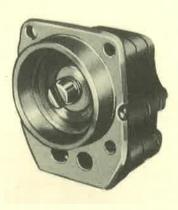
Stock No. 3609-48-0000-FE3158

- 1. Nomenclature: Pump, Oil, lubricating.
- 2. Foreign Nomenclature: Olpumpe.
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:
- 6. Models Available; As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: A small gear type oil pump used to lubricate the Bosch fuel injector pump. Located on end of camshaft with automatic control unit. One outlet and one inlet, threaded, 3/8 in.

Length (overall) 3-1/4 in.

Width 2-5/8 in.

Height 3-1/8 in.





Stock No. 3609-48-0074-125-159E-1

- 1. Nomenclature: Pump, Vacuum
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Knoir Bremse.
- 5. Identification Numbers:

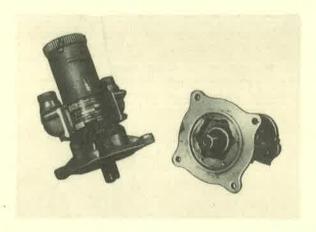
Werks No: 35841 Gerat No: 125-159E-1

Serial No:

Fl. or Ln. No: 22465-1

6. Models Available: As illustrated.7. Documents: See "Instructions for Ordering."

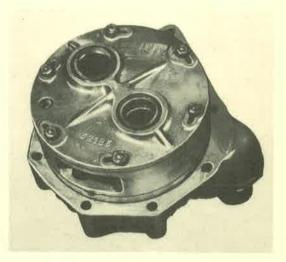
8. Description: Length 8 in., width 5-1/2 in. Two ports 1/2 in. outside thread. No further information available at time of printing.



Stock No. 3609-48-0000-32183

- 1. Nomenclature: Pump, Oil
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:
- 6. Models Available: As illustrated.7. Documents: See "Instructions for Ordering."
- 8. Description: Engine driven gear type pump. Length 5-3/4 in., width 6-1/2 in. No further information available at time of printing.





Stock No. 3609-48-0074-127-159E-1

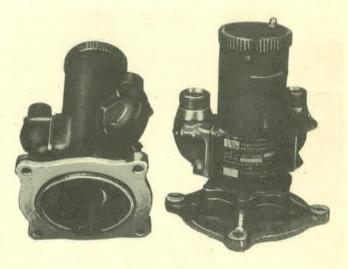
- 1. Nomenclature: Pump Suction.
- 2. Foreign Nomenclature: Saugpumpe.
- 3. Country of Origin: Germany. 4. Manufacturer: H. Maihag, A.G.
- 5. Identification Numbers:

Gerat No: 127-159E-1

6. Models Available:

7. Documents: See "Instructions For Ordering".

8. Description: Rotor type, engine driven suction pump. Male inlet 24 mm, thread pitch 1.5. Male outlet 22 mm, thread pitch 1.5. Overall length 8-1/2 in. Overall width 4-1/4 in. No other information available at time of printing.



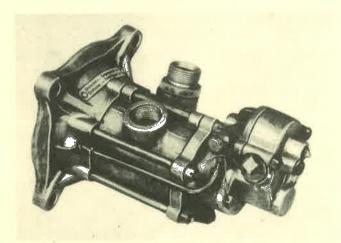
Stock No. 3609-48-0021-127-152A-3

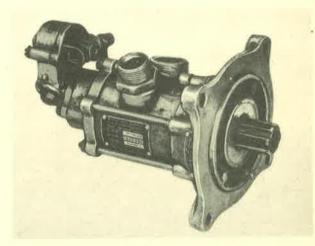
- 1. Nomenclature: Pump Suction.
- 2. Foreign Nomenclature: Saugpumpe.
- 3. Country of Origin: Germany.
- 4. Manufacturer: Askania.
- 5. Identification Numbers:

Gerat No: 127-152A-3

6. Models Available:7. Documents: See "Instructions For Ordering"

8. Description: Rotor type, engine driven suction pump. Female inlet and outlet 22 mm, thread pitch 1.5. Overall length 8 in., overall width 4-3/4 in. No other information available at time of printing.





Stock No. 3609-48-0000-110318

1. Nomenclature: Servo Motor-Thrust Regulator Oil Operated

2. Foreign Nomenclature: Schraubenzugregelmotor.

3. Country of Origin: Germany.

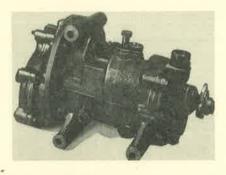
4. Manufacturer: Unknown. 5. Identification Numbers:

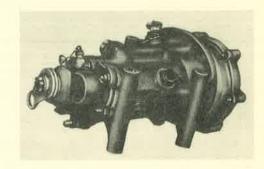
Werks No: 3293 Gerat No: 110318

6. Models Available: As Illustrated.
7. Documents: See "Instructions For Ordering".

8. Description: A thrust regulator (serv omotor) used on Jumo 004 and 003 engines. Controls fuel valve which meters fuel to burner nozzles. Oil operated from gear pump on governor. Controlled by cam mechanically linked to throttle, and by pressure differential on capsule diaphragm.

Length 13-1/4" Width 8-1/2'





Stock No. 3609-48-0000-110320

1. Nomenclature: Regulator-Fuel

2. Foreign Nomenclature: Kraftstoffregel.

3. Country of Origin: Germany.

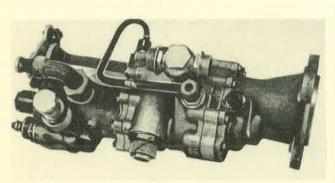
4. Manufacturer: Unknown. 5. Identification Numbers:

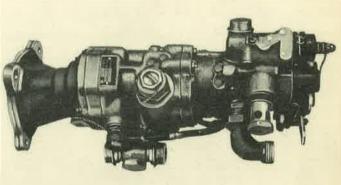
Gerat No: 110320 Werks No: 0289

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering".

8. Description: Fuel regulator, or governor, used on Jumo 004 engine. All-speed control type. Complete unit consists of five parts: oil pump, centrifugal governor, spill valve, throttle, and pressure control valve.

Length: 15-1/2'' Width 7''





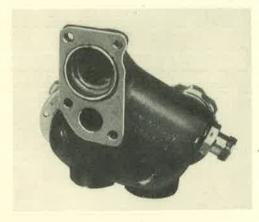
Stock No. 3609-48-0000-FE3155

- 1. Nomenclature: Valve-Filler Ball Check
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany
- 4. Manufacturer: Unknown
- 5. Identification Numbers:

 Models Available: As illustrated
 Documents: See "Instructions for Ordering".
 Description: Ball check filler valve for outside hot oil heater. Used on Argus 410A-1 engines. DIMENSIONS

Length 6-3/4 in.

Width 4-1/4 in.



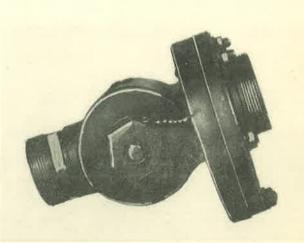




Stock No. 3609-48-0000-8-190-622

- 1. Nomenclature: Valve-Breather Oil Tank
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany
- 4. Manufacturer: Unknown
- 5. Identification Numbers:
- 6. Models Available: As illustrated.
- 7. Documents: See "Instructions for Ordering".
- 8. Description: Oil tank breather valve for FW190 aircraft. Has circular metal plate that closes openings during inverted flight.





Stock No. 3609-48-0016-8-3230A-2

- 1. Nomenclature: Valve, pressure relief, distributor.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Scheker & Glesecke A.G, Ledzig W-31.
- 5. Identification Numbers:

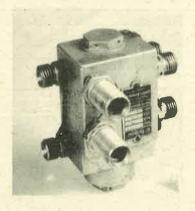
Werks No: 1387

Gerat No: 8-3230A-2

Fl. or Ln. No: B.F. 109

Serial No:

- 6. Models Available: As Illustrated,7. Documents: See "Instructions For Ordering."
- 8. Description: Length 4 in., Width 3-1/4 in. No other information available at time of printing.





Stock No. 3609-48-0013-8-4687(CE)

- 1. Nomenclature: Valve, fuel transfer.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Aerobrau H. LEHMANN K. G.
- 5. Identification Numbers:

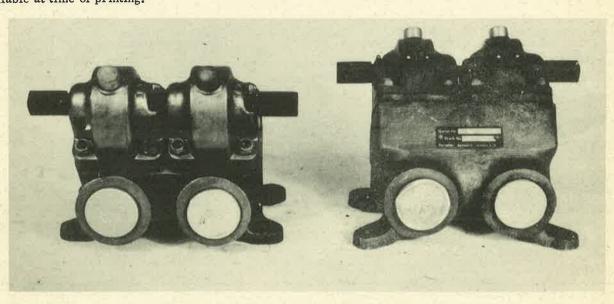
Werks No: 8435

Gerat No: 8-4687 (CE)

Fl. or Ln. No:

Serial No:

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Fuel transfer valve used on ME 262 aircraft. Length 6 in., Width 4 in. No other information available at time of printing.



For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3609-48-0000-FE3132

1. Nomenclature: Valve, Fuel Selector.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Unknown.

5. Identification Numbers:

Gerat No:

Werks No. Fl. or Ln. No.

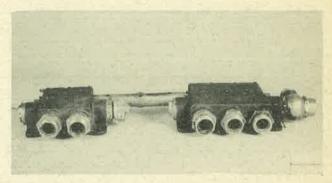
Serial No:

6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Length: 17-1/4 in., Width: 5 in. No other information available at time of printing.





Stock No. 3609-48-0000-8-4-573C (HG)

1. Nomenclature: Valve, Fuel Selector.

2. Foreign Nomenclature:

3. Country of Origin: Germany.

4. Manufacturer: Unknown.

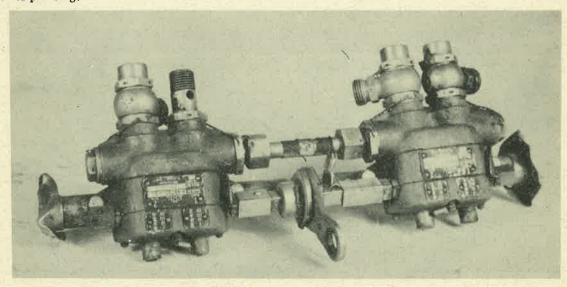
5. Identification Numbers:

Werks No: 1678 Gerat No: 8-4573C (HG)

Fl. or Ln. No. Serial No:

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Length: 13-3/4 in., Width: 5-1/4 in. Four tank selector. No other information available at time of printing.



For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

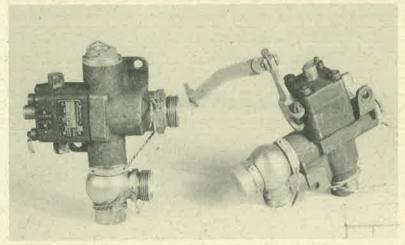
Stock No. 3609-48-0000-8-4531C(M)

- 1. Nomenclature: Valve, Fuel Selector.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

Werks No. 24277 Gerat No: 8-4531C (M)

Fl. or Ln. No. Serial No:

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length 5-3/4 in., Width: 5 in. No other information available at time of printing.

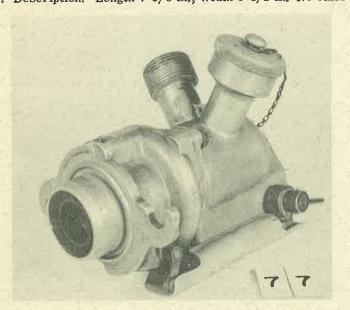


Stock No. 3609-48-0000-FE31029

- 1. Nomenclature: Valve, Fuel Check.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

Werks No: Gerat No: Serial No: Fl. or Ln. No.

- 6. Models Available: As Illustrated,7. Documents: See "Instructions For Ordering."
- 8. Description: Length 7-3/8 in., Width 5-1/2 in. No other information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

### Stock No. 3609-48-0016-FE3186

- 1. Nomenclature: Valve-Selector
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Elektron Co. M.b.H.
- 5. Identification Numbers:
- 6. Models Available: As illustrated.
- 7. Documents: See "Instructions for Ordering".
- 8. Description: Two position selector valve with 4 ports. Inside dimensions of ports 3/16 in. Length of valve
- 4-3/8 ins. Width 2-1/2 ins.



## Stock No. 3609-48-0062-8-3306D-2

- 1. Nomenclature: Valve-Hydraulic Pressure Relief
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany
- 4. Manufacturer: Vereingitz Deutsche Metallwerke
- 5. Identification Numbers:

## Gerat No: 8-3306D-2

- 6. Models Available: As illustrated.7. Documents: See "Instructions for Ordering".
- 8. Description: Hydraulic pressure relief valve. 2 male, 1 female and 1 female nut connections.

## CONNECTION DIMENSIONS

#### Male

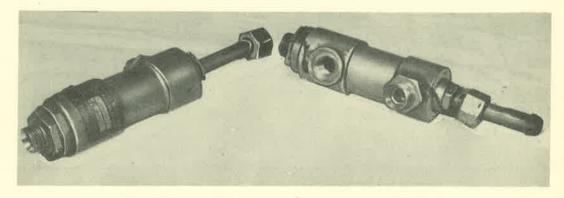
16 mm. diameter 1.5 in. thread pitch

#### Female

14 mm. diameter 1.5 in. thread pitch

### Female Nut

14 mm. diameter 1.5 in. thread pitch



For Ordering: See "Instructions for Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division.

Stock No. 3609-48-0000-109-004-800-001.23

- 1. Nomenclature: Valve, Fuel, pressure relief.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:

Gerat No: 109-004-800-001.23

- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering."
- 8. Description: Pressure relief valve with built in screen filter. Used on Jumo 004 engine. 4 male connections.

2. diameter openings 18 mm thread pitch 1.5 16 mm

1. diameter opening thread pitch 1.5

26 mm 1. diameter opening thread pitch 1.5

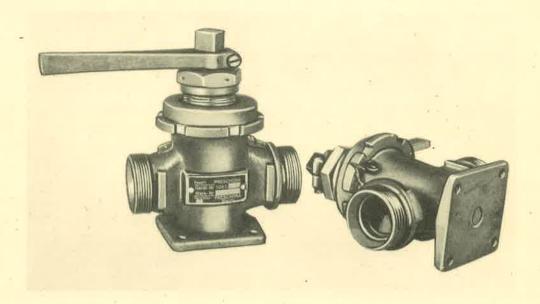


Stock No. 3609-48-0072-1093A25

- 1. Nomenclature: Valve, Shut off.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Preschona, Berlin.
- 5. Identification Numbers:

Gerat No: 1093A25

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: No information available at time of printing.



Stock No. 3609-61-0078-127-1030-A-1

- 1. Nomenclature: Gauge, fuel tank.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Hartman and Braun A.G.
- 5. Identification Numbers:

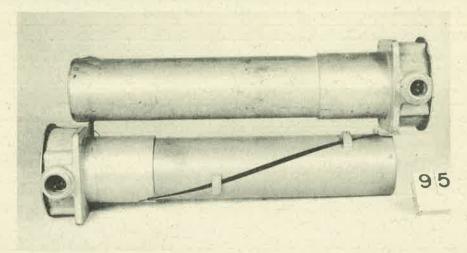
Werks No:

Gerat No: 127-103-A-1

Fl. or Ln. No:

Serial No:

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: No information available at time of printing.



Stock No. 3609-48-0000-8-4533A

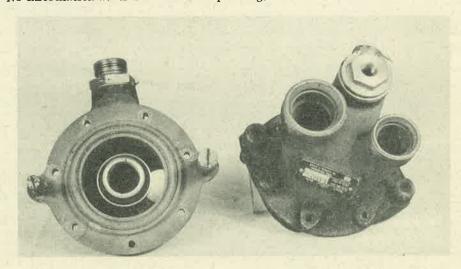
- 1. Nomenclature: Outlet, fuel tank.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer: Deutsche Benzenuhren-Gesellschaft m.b.h.
- 5. Identification Numbers:

Werks No:

Gerat No: 8-4533A

Serial No:

- Fl. or Ln. No:
- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: No information available at time of printing.



For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

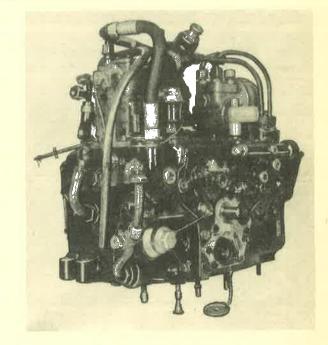
Stock No. 3609-49-0000-9-801-700-901

- 1. Nomenclature: Engine Control, single lever.
- 2. Foreign Nomenclature: Kommando Gerat.
- 3. Country of Origin: Germany.
- 4. Manufacturer: BMW Flugmoternbrau, G.M.J.H.
- 5. Identification Numbers:

Werks No. 20440

Gerat No: 9-801-700-901

- 6. Models Available: As illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Fully automatic boost, pitch, and engine control built into one unit. Variable datum mixture and boost control. Has own circulating fluid for its hyd. servos, stored in the engine mounting ring of the FW 190 type aircraft. Special small throttle for starting engine due to main throttle working hydraulically and can be opened only after engine is started. All settings depend upon throttle setting. Installed on DO 217, FW 190 aircraft and BMW 801 type engines.

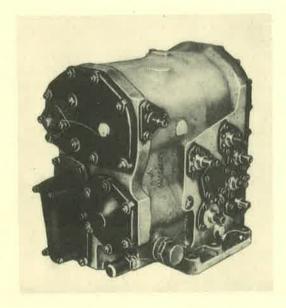


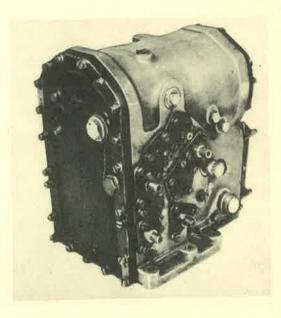
Stock No. 3609-49-0000-803/56100

- 1. Nomenclature: Engine Control, single lever.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Germany.
- 4. Manufacturer:
- 5. Identification Numbers:

Gerat No: 803/56100

- 6. Models Available: As illustrated7. Documents: See "Instructions For Ordering."
- 8. Description: Length 10-1/2 in., width 7-1/2 in. This control gives manifold Hg., rpm etc., according to throttle setting. Used on BMW 803 engine. No other information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3612-47-0000-FE 30509

- 1. Nomenclature: Magneto, Aircraft Engine.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Japan.
- 4. Manufacturer: Unknown.

5. Identification Numbers: Werks No.

Gerat No: Serial No:

Fl. or Ln. No.

6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."

8. Description: Length 8-1/2 in., Width 7 in. No other information available at time of printing.





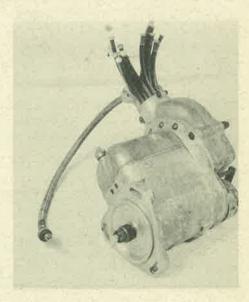
Stock No. 3612-47-0000-FE 31507

- 1. Nomenclature: Magneto, Aircraft Engine.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Japan.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

Werks No. Gerat No: Serial No: Fl. or Ln. No.

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length 8-1/2 in.. Width 7 in. No other information available at time of printing.





For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

Stock No. 3612-48-0000-FE3130

- 1. Nomenclature: Control, carburetor mixture.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Japan.
- 4. Manufacturer: Unknown. 5. Identification Numbers:

Werks No.

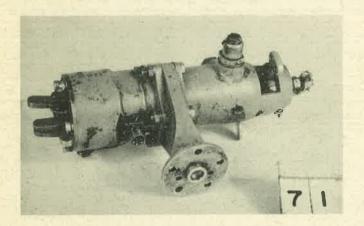
Gerat No:

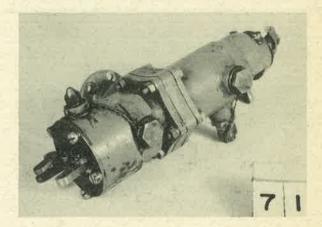
Identification No: 1308 Fl. or Ln. No.

6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Length 9-1/2 in., Width: 5 in. No other information available at time of printing.





Stock No. 3612-48-0000-FE3131

- 1. Nomenclature: Control, carburetor mixture.
- 2. Foreign Nomenclature:
- 3. Country of Origin: Japan.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

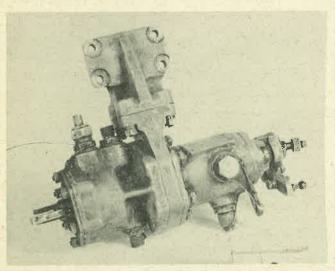
Werks No:

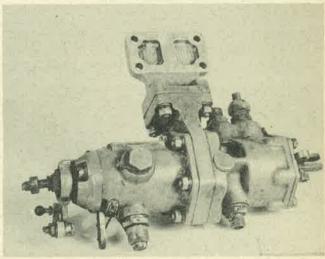
Gerat No:

Fl. or Ln. No.

Identification No: 137

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length 10-1/4 in., Width: 7 in. No other information available at time of printing.





Stock No. 3604-42-0000-L4S/1

1: Nomenclature: Starter Electric inertia.

- 2. Foreign Nomenclature: Starter, Electric inertia.
- Country of Origin: England.
   Manufacturer: Unknown.

5. Identification Numbers:

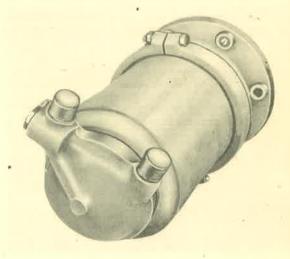
Reference No. L4S/1

6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Length 13-1/4 in., width 6-3/4 in. No other information available at time of printing.





Stock No. 3604-42-0000-CA4750.

1. Nomenclature: Starter, Aircraft engine, electric.

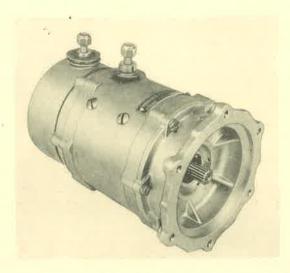
- 2. Foreign Nomenclature: Starter, aircraft engine, electric.
- 3. Country of Origin: England.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

Serial No.: NR87043

6. Models Available: As Illustrated.

7. Documents: See "Instructions For Ordering."

8. Description: Length 8-1/2 in., width 5-3/4 in., 12 volt. No other information available at time of printing.



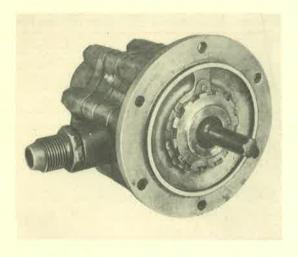
For Ordering: See "Instructions For Ordering" page. Communications concerning this equipment should be addressed to Commanding General, AMC, Wright Field, Ohio, Attention: Chief, Collection Division (TSICD).

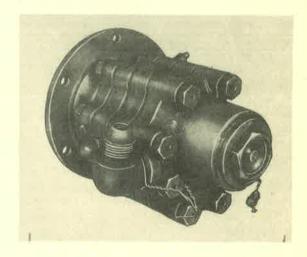
Stock No. 3604-48-0000-37J504

- 1. Nomenclature: Pump, Fuel.
- 2. Foreign Nomenclature:
- 3. Country of Origin: English.
- 4. Manufacturer:
- 5. Identification Numbers:

Serial No: 37]504

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering".
- 8. Description: Gear type fuel pump. No other information available at time of printing.



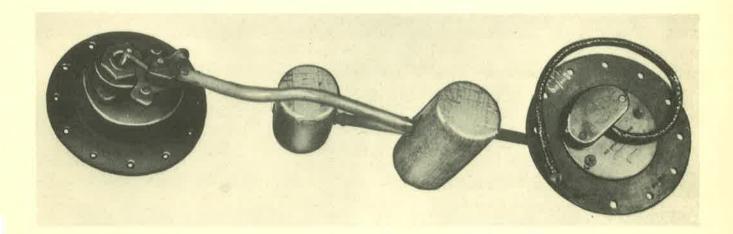


Stock No. 3604-48-0000-A54703

- 1. Nomenclature: Float Assy, Electric fuel gage.
- 2. Foreign Nomenclature:
- 3. Country of Origin: English.
- 4. Manufacturer:
- 5. Identification Numbers:

Serial No: A54703

- 6. Models Available: As Illustrated.
- 7. Documents: See "Instructions For Ordering".
- 8. Description: No information available at time of printing.

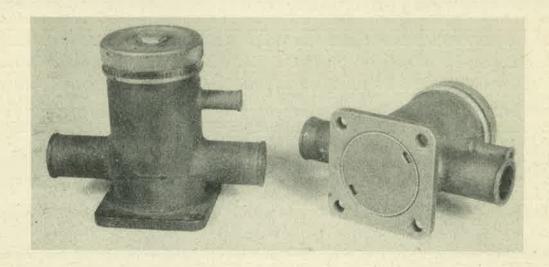


Stock No. 3604-48-0000-FAZ/A/71

- 1. Nomenclature: Valve, fuel pressure control.
- 2. Foreign Nomenclature:
- 3. Country of Origin: British.
- 4. Manufacturer: Unknown.
- 5. Identification Numbers:

Reference No: FAZ/A/71.

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length: 5 in., Width: 4-1/8 in. No other information available at time of printing.



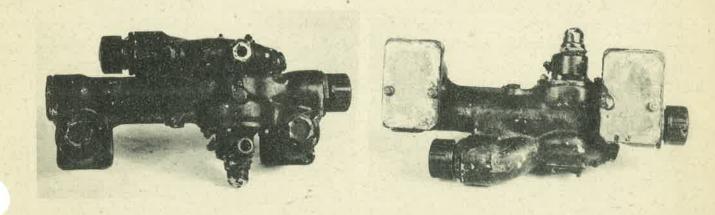
### Stock No. 3604-48-0000-7465/3B

- 1. Nomenclature: Valve, fuel regulator.
- 2. Foreign Nomenclature:
- 3. Country of Origin: British.
- 4. Manufacturer; Unknown.
- 5. Identification Numbers:

Werks No: Fl. or Ln. No: Gerat No:

Serial No: 7465/3B

- 6. Models Available: As Illustrated.7. Documents: See "Instructions For Ordering."
- 8. Description: Length: 10-3/4 in., Width: 5-1/4 in. No other information available at time of printing.



# STOCK LIST SECTION II CLASS 31 (02)

# German Engines

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N	OID	en	c.I	at	.11	re

Stock Number

ENGINE-RADIAL DOUBLE ENGINE-INVERTED 4 CYL ENGINE-VERTICAL OPPOS	2 CYLINDER AIR-COOLED YL LIQUID COOLED ROW 9 CYL AIR-COOLED ROW 9 CYL AIR-COOLED ROW 9 CYL AIR-COOLED IR-COOLED 2 CYL LIQUID COOLED 2 CYL LIQUID COOLED D VEE 24 CYL LIQUID COOLED ROW 14 CYL AIR COOLED AIR-COOLED	3609-02-1102-BMW003-E-1 3609-02-1106-JUMO 004 3609-02-0601-AS411-A 3609-02-0602-BMW-V 3609-02-0102-BMW-132 3609-02-0103-BMW-801 3609-02-0103-BRAMO 323-P1 3609-02-0103-BRAMO Sh 14A 3609-02-0604-DB601E-1 3609-02-0604-DB61CA-1 3609-02-0102-GR14M 3609-02-0404-HIRTH R504A 3609-02-1006-JUMO 207DV
ENGINE-VERTICAL OPPOSI LIQUID COOLED ENGINE-INVERTED VEE 1		3609-02-1006-JUMO 207DV 3609-02-0606-JUMO 210-D
ENGINE-JUMO 211 F-1 ENGINE-INVERTED VEE 1 ENGINE-PARALIEI RADIA	C CYL LIQUID COOLED	3609-02-0606-JUMO 211F-1 3609-02-0606-JUMO 213-A 3609-02-0206-JUMO 222
TAKE OFF UNIT-JET ASS ENGINE-ROCKET BI-FUEL ENGINE-ROCKET BI-FUEL ENGINE-ROCKET BI-FUEL	LIQUID LIQUID	3609-02-1418-109-500A1 3609-02-1418-109-509A 3609-01-1416-109-513 3609-02-1403-109-718
ENGINE-ROCKET BI-FUEL	LIQUID	3609-02-1303-109-558

# Japanese Engines

ENGINE-RADIAL	18	CYL	AIR	COOLED	3612-02-0108-AMAKAZE-31
ENGINE-RADIAL	14	CYL	AIR	CCCLED	3612-02-0102-HA33-62
ENGINE-RADIAL	14	CYL	AIR	COOLED	3612-02-0101-HA35-21
ENGINE-RADIAL	DOU	JBLE	ROW	14 CYL AIR CCOLED	3612-02-0101-SAKAE 12

## Italian Engines

ENGINE-RADIAL	DOUBLE.	RCiev	71.	CYT	ATR	COOLED	3611-02-01	02-FIAT-A-74
THE OFTER PROPERTY	DOODED	70011	-	011	A Brade L V		<b>プロエエーロゲーウエ</b>	OV-1 TVI-V-14

# French Engines

ENGINE-VEE TYPE 12 C	AT ITOUTH COOFFE
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# 3608-02-0502-Hispano Suiza 12Y50

# Great Britain Engines

ENGINE-"H" TYPE 24 CYL LIQUID COOLED

3604-02-0806-Saber IIA

# STOCK LIST SECTION II CLASS 31

# German Engine Accessories

## Nomenclature

## Stock Number

FLAME DAMPNER-EXHAUST	3609-01-0000-FE002
FLAME DAMPNER-EXHAUST	3609-01-0000-FE001
IMPELLER SECTION-JET	3609-02-1200-FE1000
IMPELLER UNIT-JET	3609-02-1200-FE1COL
STARTER-AIRCRAFT ENGINE ELECTRIC INERTIA	3609-42-0000-9-7004-C
STARTER-AIRCRAFT ENGINE AIR OPERATED	3609-42-0000-9-2346A-1
STARTER-GASOLINE JET ENGINE	3609-42-0080-9-7034A
	3609-42-0080-9-003A-95
STARTER-GASOLINE JET ENGINE	3609-44-0001-9-601-561-001.12
CONTROL-BOOST	3609-44-0009-211745
CONTROL-BOOST AUTOMATIC	
SUPERCHARGER-EXHAUST DRIVEN	3609-44-0000-9-22810-0
SUPERCHARGER-EXHAUST DRIVEN	3699-44-0000-9-2216A/0
SUPERCHARGER-EXHAUST DRIVEN	3609-44-0000-9-2426
SUPERCHARGER-EXHAUST DRIVEN	3609-44-0000-9-2216B/0
SUPERCHARGER-EXHAUST DRIVEN	3 609-44-0000-9-801-642-901
SUPERCHARGER-EXHAUST DRIVEN	3609-44-0000-9-603-447-001
MAGNETO-AIRCRAFT ENGINE	3 609-47-0029-9-4035-P-2
MAGNETO-AIRCRAFT ENGINE	3609-47-0029-9-4034C
MAGNETO-AIRCRAFT ENGINE	3609-47-0029-9-4056B-2
MAGNETO-AIRCRAFT ENGINE	3609-47-0029-9-4051C-6
MAGNETO-6 CYLINDER AIRCRAFT ENGINE	3609-47-0029-MZ3Ez4/4P/1
MAGNETO-AIRCRAFT ENGINE	3609-47-0029-9-4039-C
FILTER-FUEL	3609-48-0000-9-2453A-1
FILTER-FUEL	3609-48-0015-8-4518B
FILTER-FUEL	3609-48-0013-19-2106A
FILTER-FUEL	3609-48-0013-19-2107A
FIT TEP_OII	3609-48-0000-9-2138C
FILTER-OIL	3609-48-0000-9-2088C
FILTER-OIL	3 609-48-0000-9-2417A
FILTER-OIL	3609-48-0000-FE3169
FILTER-OIL	3609-48-0000-9-2417B
FILTER-OIL	3609-48-0000-20900
FILTER-OIL	3 609-48-0000-9-2057
	3609-48-0000-9-22608
FILTER-OIL INJECTOR-FUEL	3609-48-0009-2021E-1
	3609-48-0009-9-21322930-1
INJECTOR-FUEL	3609-48-0000-9-2106G-3
INJECTOR-FUEL 14 PORT	
INJECTOR-FUEL	3609-48-0029-9-2305-E-2
INJECTOR-FUEL 12 PORT IN-LINE	3 609-48-0029-9-2280-B
INJECTOR-FUEL 12 PORT IN-LINE	3609-48-0029-9-2053B-1
INJECTOR-FUEL	3609-48-0029-9-22744-1
INJECTOR-FUEL	3609-48-0029-2196C-1
INJECTOR-FUEL	3609-48-0009-9-2009-51
NOZZLE-FUEL INJECTOR	3609-48-0000-EVD-SK14136G
NOZZIE-FUEL INJECTION	3609-48-0029-9-2076C
NOZZLE-FUEL INJECTION	3609-48-0029-9-2143B-1
NOZZLE-FUEL INJECTION	3 609-48-0000-1135
NOZZLE-FUEL INJECTION	3 609-48-0000-9-2137G
	100

# German Engine Accessories Cont'd

## Nomenclature

### Stock Number

PUMP-FUEL	3609-48-0009-2015 <b>A</b> -2
PUMP-FUEL	3609-48-0017-9-2002B-1
PULP-FUEL	3609-48-0000-9-2135-B-4
PUMP-FUEL	3609-61-0000-0-2097-C-4
PUMP-FUEL	3609-48-0000-9-2433A
PUMP-FUEL W/FILTER BOWL	3609-48-0000-8-4517-A
PUMP-FUEL HAND WOBBLE	3 609-48-0012-8-4567A
PUMP-ELECTRIC GASOLINE	3609-48-0014-19-5760A-1
PUMP-OIL	3609-48-0000-19-1151A-1
PUMP-OIL SEPARATOR	3 609-48-0000-109-0046
PUMP-OIL GEAR TYPE	3609-48-0000-BA10350
PUMP-OIL LUBRICATING	3609-48-0000-FE3158
PUMP-VACUUM	3609-48-0074-125-159E-1
PUMP-OIL	3609-48-0000-32183
PUMP-SUCTION	3609-48-0074-127-159E-1
PUMP-SUCTION	3609-48-0021-127-152A-3
SERVO-MOTOR-THRUST REGULATOR OIL OPERATED	3609-48-0000-110318
REGULATOR-FUEL	3 609-48-0000-110320
VALVE-FILLER BALL CHECK	3609-48-0000-FE3155
VALVE-BREATHER OIL TANK	3609-48-0000-8-190-622
VALVE-PRESSURE RELIEF DISTRIBUTOR	3609-48-0016-8-3230A-2
VALVE-FUEL TRANSFER	3609-48-0013-8-4687 (CE)
VALVE-FUEL SELECTOR	3609-48-0000-FE3132
VALVE-FUEL SELECTOR	3609-48-0000-8-4-573C (HG)
VALVE-FUEL SELECTOR	3609-48-0000-8-4531C (M)
VALVE-FUEL SELECTOR	3609-48-0000-FE31029
VALVE-FUEL SELECTOR	3609-48-0016-FE3186
VALVE-HYDRAULIC PRESSURE RELIEF	3609-48-0062-8-3306D-2
VALVE-FUEL PRESSURE RELIEF	3609-48-0000-109-004-800-001.23
VALVE-SHUT-OFF GAUGE-FUEL TANK	3609-48-0072-1093A25
OUTLET-FUEL TANK	3609-61-0078-127-1030-A-1
CONTROL-ENGINE SINGLE LEVER	3609-48-0000-8-4533A
CONTROL-ENGINE SINGLE LEVER	3609-49-0000-9-801-700-901
CONTINUE STROKE PEACE	3609-49-0000-803/56100

# Japanese Engine Accessories

MAGNETO-AIRCRAFT ENGINE	3612-47-0000-FE30509
MAGNETO-AIRCRAFT ENGINE	3612-47-0000-FE31507
CONTROL-CARBURETOR MIXTURE	3612-48-0000-FE3130
CONTROL-CARBURETOR MIXTURE	3612-48-0000-FE3131

## British Engine Accessories

STARTER-ELECTRIC INERTIA STARTER-AIRCRAFT ENGINE ELECTRIC PUMP-FUEL FLOAT ASSY-ELECTRIC FUEL GAGE VALVE-FUEL PRESSURE CONTROL VALVE-FUEL REGULATOR	3604-42-0000-145/1 3604-42-0000-CA4750 3604-48-0000-37J504 3604-48-0000-A54703 3604-48-0000-FAZ/A/71 3604-48-0000-7465/3B
VALUE OEL INCOLLION	J004-40-0000-7405/JB

