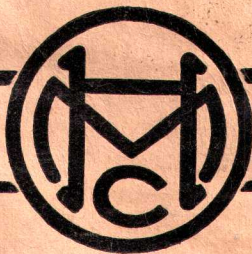


DFX

DFX



Parts List

HERCULES

DIESEL ENGINE

of the

"DFX" Series

DFXB — 5" x 6"

DFXC — 5¹/₄" x 6"

DFXD — 5¹/₂" x 6"

DFXE — 5⁵/₈" x 6"

OCTOBER 1, 1944

Supersedes All Previous Parts Lists

HERCULES MOTORS CORPORATION

CANTON, OHIO, U. S. A.

DFX

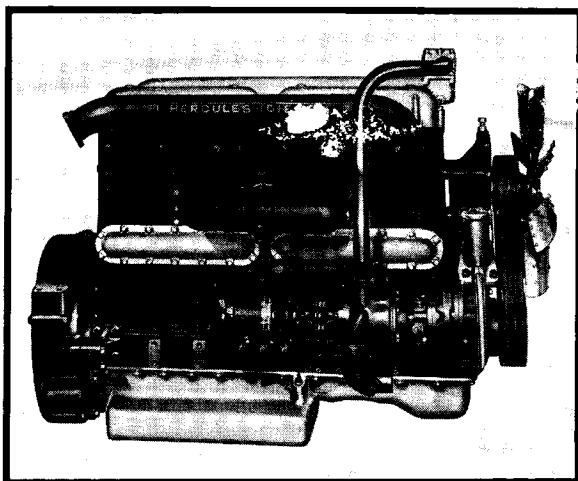
DFX

PARTS LIST
HERCULES

SIX CYLINDER DIESEL ENGINE

of the

“DFX” Series
(VERTICAL TYPE)



HERCULES MOTORS CORP.

CANTON, OHIO, U.S.A.

HERCULES MOTORS CORPORATION

Canton, Ohio

STANDARD WARRANTIES, FIELD SERVICE, RETURNS AND EXPENSES ISSUED BY THE INTERNAL COMBUSTION ENGINE INSTITUTE, OCTOBER 20, 1933

HERCULES MOTORS CORPORATION is a MEMBER of THE INTERNAL COMBUSTION ENGINE INSTITUTE and all engines, power units, parts and accessories are sold by us subject to the terms of the "STANDARD WARRANTIES, FIELD SERVICE, RETURNS AND EXPENSES" of said Institute adopted and issued October 20, 1933 and all amendments thereof which may be in effect from time to time hereafter. The following is a copy of the terms of the "Standard Warranties, Field Service, Returns and Expenses" issued October 20, 1933, but it is subject, however, to future amendment without notice. Notwithstanding any different terms or conditions which may be contained in any customer's purchase order received by us, we will be governed by and conform to the terms and provisions of the "Standard Warranties, Field Service, Returns and Expenses" of The Internal Combustion Engine Institute.

1. STANDARD SERVICE WARRANTIES

The term "member of this industry" as used herein means a member of the Internal Combustion Engine Institute.

The term "Buyer" as used herein means a customer of a member of this Institute.

- a) The members of this industry shall guarantee their engines and parts thereof against defective material or workmanship as prescribed in paragraph 1-(b).
- b)

Type of Application	Warranty Period
Bus and Truck Equipment	Six months from date of shipment but not to exceed ninety days or 15,000 miles of service.
Rail Cars and Locomotives	Six months from date of shipment but not to exceed ninety days or 15,000 miles of service.
Agricultural Equipment	Six months from date of shipment but not to exceed ninety days of service.
Industrial and Oil Field Equipment	Six months from date of shipment but not to exceed ninety days of service.
Marine Equipment	One year from date of shipment.
Fire Equipment	One year from date of shipment.
- c) Parts returned to any member of this industry, transportation charges prepaid, which are found by the member to be defective in material or workmanship, shall at the member's option be repaired, replaced or credited. No claims will be allowed which, in the opinion of the member, result from engines or parts having been subjected to abuse or neglect or where failure has been caused by accident
- d) Warranty on accessories furnished by each member shall be limited to the warranty of the accessory manufacturer.
- e) Any warranty is void unless the Buyer or his agents provide proper care and storage of engines and parts from date of shipment to date placed in service.

- f) Each member reserves the right to improve his product through changes in design or materials without being obligated to incorporate such changes in engines of prior manufacture.
- g) No responsibility for contingent liability through the failure of any engine or engine part will be assumed by a member of this industry

2. FIELD SERVICE

- a) The responsibility of maintaining or arranging for adequate and proper field service facilities shall be with the Buyer, and he shall not request the assistance of any member of this industry except in cases of a complex character
- b) All requests for service in the field shall emanate from the Buyer of the engines. Requests received from a Buyer's dealer or the ultimate user shall, under normal conditions, be referred to the Buyer.
- c) If a member renders field service at the request of the Buyer and the fault is found not to be with the engine, the Buyer shall pay the time and expense of the member's field representative
- d) No member shall accept bills for service, labor or other expense that has not previously been approved and authorized.
- e) Before consideration can be given to requests for adjustments covering field service and alleged defective material, the Buyer shall furnish the member with the following data:

- Owner's name and address.
- Engine model.
- Serial number.
- Information as to the nature of the trouble.
- Date actually placed in service
- Accumulated days or miles of service.

3. THE RETURN OF NEW MATERIAL

- a) Any member of this industry may at his option accept the return of any part or parts provided such return has been authorized, and at prices agreed upon, transportation charges prepaid. Such authorized returns shall be subject to the member's inspection and to a handling charge to ten percent (10%) of the cost of the part or parts returned.

4. LABOR AND OTHER EXPENSES

- a) No member of this industry shall assume any expense except direct labor in replacing parts or servicing engines within the warranty period, and in no case shall such expense be assumed unless authorized by the member.

The obligation hereinabove provided to repair, replace or credit at the option of Hercules Motors Corporation any engines, power units or parts that are found by it to be defective in material or workmanship is in lieu of any and all other warranties expressed or implied by law and all other obligations or liabilities on the part of Hercules Motors Corporation to the Buyer or to any other party.

HERCULES MOTORS CORPORATION
Canton, Ohio, U. S. A.

INSTRUCTIONS *for* ORDERING PARTS

This parts list supersedes all others of previous date.

All prices are subject to change without notice.

All shipments are strictly C. O. D., except when otherwise agreed to by contract with our company.

All parts are shipped F. O. B. Canton, Ohio, except Parcel Post packages, which are prepaid and billed to customer on the invoice.

When ordering by telegram or telephone, be sure to send us confirming order.

DO NOT order anything in sets; for example, "One set of Piston Rings" might be understood as meaning Six—a set for one Piston—or Thirty-Six—a set for one Engine.

When in doubt as to whether you can order from this parts book, send in a sketch, or the old part (prepaid) and specify on order "as per sketch," or "as per sample".

When ordering parts, give engine number.

If you return old part as sample be sure to advise us that you are doing so, and put a tag on the part with your name and address, so it may be quickly identified.

PARTS RETURNED FOR CREDIT

All claims must be made within **three** days after receipt of goods. Transportation charges must be prepaid. Never return a part to our factory without writing us a letter informing us what you are returning and why. Place on outside of box or package, tag showing name and address. Tag each article in box or package, stating what, how many, and why returned, specifying number of engine from which part was removed.

Your careful attention and adherence to the above instructions will assist us in giving you prompt and correct service.

**HERCULES MOTORS CORPORATION
CANTON, OHIO, U. S. A.**

OCTOBER 1, 1944

Supersedes All Previous Parts Lists

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MODEL "DFXD" — 5½" x 6"

GASKET ASSEMBLIES (Group 1)

Note—These assemblies do not include gaskets for cylinder head, air compressor and bracket, fans, special filters, etc.

Part No.	No. Req'd	PART NAME	Illustration Reference
88998-AS	1	Gasket Assembly—Primary—Includes parts marked *	
88427-C	1	*Bellhousing Gasket—Use with Cast Oil Pan	
88430-C	1	*Bellhousing Gasket—Use with Pressed Steel Oil Pan	
88099-B	2	*Head Cover Gasket	XC
88633-A	4	*Air Intake Gasket	
85035-A	6	*Exhaust Manifold Gasket	XZ
88007-B	2	*Valve Cover Gasket	
88580-B	1	*Oil Pan Gasket—R.H.	
88581-B	1	*Oil Pan Gasket—L.H.	
8146-A	1	*Oil Pan Strainer Gasket	
88360-A	1	*Oil Pan Cover Gasket	
88183-A	10	*Oil Line Gasket	
88767-A	1	*Oil Line Gasket	
14602-A	2	*Oil Filter Case Gasket	
88405-B	1	*Water Pump Gasket	
4841-A	1	*Discharge Pipe Gasket	
88677-B	1	*Sleeve Gasket (Water Pump)	V-21
88714-A	2	*Water Manifold Gasket	
85557-A	1	*Thermostat Housing Gasket	
829-A	1	*Water Pipe Gasket	
88035-C	1	*Gear Cover Gasket	
88999-AS	1	Gasket Assembly—Secondary—Includes parts marked **	
88248-A	2	**Oil Line Flange Gasket	
88753-A	1	**Breather Gasket	
19067-A	1	**Breather Cap Gasket	
31245-A	1	**Plug Gasket (Inspection Hole)	
85332-B	1	**Companion Flange Gasket	
8575-A	3	**Valve Screw Gasket	
88239-A	1	**Regulator Attaching Gasket	
88230-A	1	**Regulator Attaching Gasket	
4980-A	1	**Pipe Gasket	
11322-A	1	**Pipe Gasket	
14405-A	1	**Viscometer Gasket	
14603-A	2	**Case Nut Gasket	
88351-A	2	**Oil Filter Gasket	
14801-A	1	**Plug Gasket (Cooler Relief)	
88363-A	1	**Cover Gasket	
40247-A	2	**Cooler Unit Gasket	
14676-A	4	**Oil Line Gasket	
88527-A	1	**Fuel Pump Drive Gasket	
3312-A	1	**Chain Adjusting Gasket	
14569-A	1	**Plug Gasket	
14571-A	1	**Plug Gasket	
4893-A	1	**Plug Gasket (Drain)	

CYLINDER BLOCK AND CRANKCASE (Group 2)

88012-ES	1	Cylinder Block Assembly—Includes Sleeves, Studs, Camshaft, and Main Bearings, Caps and Plugs	
88008-C	6	Cylinder Sleeve	
88098-AS	1	Main Bearing Assembly—Includes parts marked *	
88612-B	1	*Cylinder Main Bearing—Front Upper—Grooved	XJ
88608-B	1	*Cylinder Main Bearing—Front Lower—Not Grooved	XN
88091-C	1	Cylinder Main Bearing Cap—Front	XP
88107-B	2	Cylinder Main Bearing Stud—Front—1"x9½"	
88613-B	1	*Cylinder Main Bearing—Center Upper—Grooved	XV
88609-B	1	*Cylinder Main Bearing—Center Lower—Not Grooved	XW

Give Engine Number with Each Parts Order

CYLINDER BLOCK AND CRANKCASE—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
88093-C	1	Cylinder Main Bearing Cap—Center	XX
88614-B	1	*Cylinder Main Bearing—Rear Upper—Grooved	WU
88610-B	1	*Cylinder Main Bearing—Rear Lower—Not Grooved	WW
88094-C	1	Cylinder Main Bearing Cap—Rear	WZ
88116-B	4	*Cylinder Main Bearing Rear Thrust Flange	
4765-A	2	*Cylinder Main Bearing Thrust Flange Dowel	
88615-B	4	*Cylinder Main Bearing—Intermediate Upper—Grooved	XR
88611-B	4	*Cylinder Main Bearing—Intermediate Lower—Not Grooved	XS
88092-C	4	Cylinder Main Bearing Cap—Intermediate	XT
88106-B	12	Cylinder Main Bearing Stud—Center, Intermediate, Rear—1"x8⅝"	
88105-A	14	Cylinder Main Bearing Cap Stud Nut—1"-14	YX
88104-A	14	Cylinder Main Bearing Nut Retainer Washer	
88071-B	1	Cylinder Camshaft Bearing—Front	
88072-B	2	Cylinder Camshaft Bearing—Center	
88070-B	5	Cylinder Camshaft Bearing—Intermediate and Rear	
11348-A	8	Cylinder Camshaft Bearing Lockscrew	
3285-A	8	Cylinder Camshaft Bearing Lockscrew Washer	
86319-A	6	Cylinder Block Combustion Liner—Upper	WB
86318-A	6	Cylinder Block Combustion Liner—Lower	WA
14141-A	6	Cylinder Block Combustion Liner Pin—¼"x⅞"	
88219-A	40	Cylinder Block Cylinder Head Stud—¾"x7¼"	
80992-A	6	Cylinder Block Spray Nozzle Sleeve	
14145-A	12	Cylinder Block Spray Nozzle Stud—⅞"x2⅞"	
59-A	1	Cylinder Block Pipe Plug—Cylinder Head Deck—⅛"	
59-A	1	Cylinder Block Pipe Plug—Generator Pad—⅛"	
59-A	1	Cylinder Block Pipe Plug—Nozzle Side—⅛"	
14196-A	8	Cylinder Block Pipe Plug—Nozzle Side—1¼"	
14196-A	2	Cylinder Block Pipe Plug—Front End—1¼"	
4746-A	2	Cylinder Block Pipe Plug to Oil Header—Both Ends—¾"	
59-A	1	Cylinder Block Pipe Plug—Front Side—⅛"	
14196-A	2	Cylinder Block Pipe Plug—Rear End—1¼"	
4746-A	13	Cylinder Block Pipe Plug—In Top—¾"	
14196-A	1	Cylinder Block Pipe Plug—In Top—1¼"	
11547-A	1	Cylinder Block Cup Plug—1⅛"	
4598-A	5	Cylinder Block to Bellhousing Stud—⅝"x2¼"	
4802-A	2	Cylinder Block Oil Pump Attaching Dowel	
88278-A	2	Cylinder Block Oil Line Cover Flange	
88248-A	2	Cylinder Block Oil Line Flange Gasket	
59-A	2	Cylinder Block Oil Line Cover Pipe Plug—⅞"	
14386-A	8	Cylinder Block Cover Flange Attaching Screw—⅞"-14x1⅛"	
335-A	8	Cylinder Block Cover Flange Attaching Lockwasher—⅞"	
1707-A	2	Cylinder Block Gear Cover Dowel—⅝"x1⅞"	
4283-A	1	Cylinder Block Water Pump Attaching Stud—½"x3⅜"	
14258-A	4	Cylinder Block Oil Filter Attaching Stud—½"x7⅞"	
88825-C	1	Torque Arm Support—Left Hand	
88826-C	1	Torque Arm Support—Right Hand	
4928-A	6	Torque Arm Support Screw—⅝"-11x2"	
66196-A	4	Torque Arm Support Dowel	
1126-A	8	Torque Arm Support Screw Lockwasher—⅝" SAE	
4923-A	2	Torque Arm Support Stud	
1124-A	2	Torque Arm Support Stud Nut—⅝"-18 SAE	

BREATHER AND OIL FILLER (Group 3)

88752-CS	1	Breather and Oil Filler Assembly—Includes parts marked *	
88753-A	1	Breather and Oil Filler Attaching Gasket	
4064-A	4	Breather and Oil Filler Attaching Screw—½"-13x1¼"	
312-A	4	Breather and Oil Filler Attaching Lockwasher—½" SAE	
88754-B	1	Breather Ventilating Tube	
4480-A	1	Breather Ventilating Tube Screw—¼"-20x1"	
628-A	1	Breather Ventilating Tube Screw Lockwasher—¼" SAE	
88755-C	1	*Breather and Oil Filler Body	

Give Engine Number with Each Parts Order

BREATHER AND OIL FILLER—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
19065-B	1	*Breather and Oil Filler Cap	
19067-A	1	*Breather and Oil Filler Cap Gasket	
19066-A	1	*Breather and Oil Filler Cap Bail Wire	
4647-A	1	*Breather and Oil Filler Cap Rivet— $\frac{3}{8}$ " x $1\frac{3}{4}$ "	
10-A	1	*Breather and Oil Filler Cap Cotter Pin— $\frac{1}{8}$ " x $1\frac{1}{2}$ "	
8442-A	1	*Breather and Oil Filler Body Hair	

PISTON (Group 4)

(FOR 5½" BORE)

88019-C	6	Piston—5½" Diameter	WN
86020-B	6	Piston Pin	WQ
86021-A	24	Piston Ring—Compression— $\frac{1}{8}$ "	WO
30199-A	12	Piston Ring—Oil Regulating— $\frac{1}{4}$ "	WP
86017-A	12	Piston Pin Retainer Ring	

CONNECTING ROD (Group 5)

89095-CSY	6	Connecting Rod Assembly—Includes Parts Marked *	WR
4803-A	12	*Connecting Rod Cap Dowel— $\frac{1}{8}$ " x $1\frac{1}{8}$ " long	
86103-A	12	*Connecting Rod Cap Nut— $\frac{3}{4}$ x 16"	WY
302-A	12	*Connecting Rod Cap Nut Cotter— $\frac{1}{8}$ " x $1\frac{1}{4}$ "	
88607-B	12	Connecting Rod Bearing	
85291-A	6	*Connecting Rod Bushing	YO

CAMSHAFT (Group 6)

88069-D	1	Camshaft	XI
88062-B	1	Camshaft Gear	XG
72-A	1	Camshaft Gear Key	
30061-A	3	Camshaft Gear Screw— $\frac{5}{8}$ "-18 x $1\frac{1}{8}$ "	
267-A	1	Camshaft Gear Screw Lockwire	
30564-A	1	Camshaft Thrust Washer	
4765-A	2	Camshaft Thrust Washer Lock Pin—.1875 Dia. x $\frac{1}{8}$ "	
30890-A	1	Camshaft Oil Metering Plug	
88540-A	1	Camshaft Fuel Pump Drive Sprocket	XH
1247-A	1	Camshaft Fuel Pump Drive Sprocket Key	

(See Cylinder Block—Group 2 for Camshaft Bearings)

CRANKSHAFT AND FLYWHEEL (Group 7)

88605-D	1	Crankshaft—Counterweighted	
88600-D	1	Crankshaft	XL
88039-B	1	Crankshaft Gear	XK
4561-A	1	Crankshaft Gear Key	
3587-A	8	Crankshaft Flywheel Screw	WX
267-A	1	Crankshaft Flywheel Screw Lockwire	
1707-A	2	Crankshaft Flywheel Dowel	WV
665-A	2	Crankshaft Flywheel Expansion Plug	
14621-AS	1	Crankshaft Oil Wick Assembly	
88473-C	1	Flywheel—Special	WT
88474-C	1	Flywheel—No. 0 for B-2-14	WT
88476-C	1	Flywheel—Special	WT
88478-C	1	Flywheel—No. 0 for Hydraulic Coupling	WT
85471-C	1	Flywheel Ring Gear	
85478-C	1	Flywheel Ring Gear	

GEAR (AND CHAIN) COVER (Group 8)

88034-E	1	Gear Cover	XF
88035-C	1	Gear Cover Gasket	
88884-A	1	Gear Cover Crankshaft Seal (Replaces 88036-A)	XM

Give Engine Number with Each Parts Order

GEAR (AND CHAIN) COVER—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
88066-A	1	Gear Cover Camshaft Thrust Plate	
88067-A	1	Gear Cover Camshaft Thrust Plug	
88068-A	20	Gear Cover Camshaft Thrust Plate Shims	
88066-A	1	Gear Cover Fuel Pump Drive Thrust Plate	
88067-A	1	Gear Cover Fuel Pump Drive Thrust Plug	
88068-A	20	Gear Cover Fuel Pump Drive Thrust Plate Shim	
4072-A	4	Gear Cover Thrust Plate Attaching Screw— $\frac{3}{8}$ "-16x $\frac{5}{8}$ "	
342-A	4	Gear Cover Thrust Plate Attaching Screw Lockwasher— $\frac{3}{8}$ " SAE	
31244-A	1	Gear Cover Chain Inspection Plug	
31245-A	1	Gear Cover Chain Inspection Plug Gasket	
4339-A	10	Gear Cover Attaching Screw— $\frac{1}{2}$ "-13x1 $\frac{1}{2}$ "	
4384-A	4	Gear Cover Attaching Screw— $\frac{1}{2}$ "-13x3 $\frac{3}{8}$ "	
4524-A	2	Gear Cover Attaching Screw— $\frac{1}{2}$ "-13x4 $\frac{3}{8}$ "	
312-A	16	Gear Cover Attaching Screw Lockwasher— $\frac{1}{2}$ " SAE	

FRONT ENGINE SUPPORT (Group 9)

88626-C	1	Front Engine Support	
11210-A	1	Front Support Clamp Bolt— $\frac{3}{4}$ "-16x6"	
996-A	1	Front Support Clamp Bolt Nut— $\frac{3}{4}$ "-16	
8490-A	1	Front Support Clamp Bolt Lockwasher— $\frac{3}{4}$ " SAE	
88627-B	1	Front Engine Support	
11332-A	1	Front Engine Support Clamp Screw— $\frac{3}{4}$ "-10x4"	
8490-A	1	Front Engine Support Clamp Screw Lockwasher— $\frac{3}{4}$ " SAE	

BELLHOUSING (FLYWHEEL HOUSING) (Group 10)

88431-D	1	Bellhousing No. 0 SAE—Foot Type	WS
88424-D	1	Bellhousing No. 1 SAE—Arm Type	WS
88423-D	1	Bellhousing No. 0 SAE—Arm Type	WS
88432-D	1	Bellhousing No. 1 SAE—Special	WS
88429-D	1	Bellhousing No. 1 SAE—Special Arm Type	WS
88427-C	1	Bellhousing Gasket—Used with Cast Oil Pan	
88430-C	1	Bellhousing Gasket—Used with Pressed Steel Oil Pan	
4570-A	3	Bellhousing to Crankcase Screw— $\frac{5}{8}$ "-11x1 $\frac{1}{2}$ "	
1124-A	5	Bellhousing to Crankcase Stud Nuts— $\frac{5}{8}$ "-18	
1126-A	8	Bellhousing to Crankcase Lockwasher— $\frac{5}{8}$ " SAE	
86353-A	1	Bellhousing Oil Seal	
4571-A	4	Bellhousing to Torque Arm Screw— $\frac{5}{8}$ "-11x3 $\frac{1}{2}$ "	
1126-A	4	Bellhousing to Torque Arm Screw Lockwasher— $\frac{5}{8}$ " SAE	
85055-B	1	Bellhousing Starter Hole Cover	
86354-A	1	Bellhousing Timing Pointer	
1536-A	2	Bellhousing Timing Pointer Attaching Screw— $\frac{1}{4}$ "-20x $\frac{3}{8}$ "	
628-A	2	Bellhousing Timing Pointer Attaching Screw Lockwasher— $\frac{1}{4}$ " SAE	

(See Cylinder Block—Group 2 for Attaching Studs)

CYLINDER HEAD (Group 11)

88308-E	2	Cylinder Head—Includes Valve Guides, Plugs and Studs.....	XD
88218-D	2	Cylinder Head Gasket	XE
82098-A	40	Cylinder Head Attaching Nut— $\frac{3}{4}$ "-16	WJ
11260-A	40	Cylinder Head Attaching Stud Plain Washer	
85009-A	6	Cylinder Head Valve Guide—Intake	WL
85029-A	6	Cylinder Head Valve Guide—Exhaust	WL
7165-A	8	Cylinder Head Pipe Plug—Top Deck—1"	
59-A	4	Cylinder Head Pipe Plug—End— $\frac{1}{8}$ "	
4746-A	10	Cylinder Head Pipe Plug— $\frac{3}{4}$ "	
14155-A	12	Cylinder Head Manifold Stud— $\frac{1}{2}$ "x1 $\frac{7}{8}$ "	
76757-A	6	Glow Plug Aperture Plug—Used on some engines	YL
80758-A	6	Glow Plug Retaining Nut—Used on some engines	YK
88746-A	2	Lifting Eye	

(See Cylinder Block—Group 2 for Attaching Studs)

Give Engine Number with Each Parts Order

CYLINDER HEAD COVER (Group 12)

Part No.	No. Req'd	PART NAME	Illustration Reference
88101-D	2	Cylinder Head Cover—Replaces 88100-D	XA
88099-B	2	Cylinder Head Cover Gasket	XC
11354-A	18	Cylinder Head Cover Attaching Screw— $\frac{3}{8}$ "-16x4½"	YB
4877-A	8	Cylinder Head Cover Attaching Screw— $\frac{3}{8}$ "-16x2½"	XB
14416-A	26	Cylinder Head Cover Screw Plain Washer— $\frac{1}{8}$ "x $\frac{3}{16}$ "x $\frac{1}{16}$ "	
342-A	26	Cylinder Head Cover Screw Lockwasher— $\frac{3}{8}$ " SAE	YA
60-A	2	Cylinder Head Cover Oil Drain Plug—¼" Std.	

AIR INTAKE MANIFOLD (Group 13)

(Also See Next Group)

88632-D	1	Air Intake Manifold	YI
88633-A	4	Air Intake Manifold Attaching Gasket	
4603-A	8	Air Intake Manifold Attaching Screw—½"-13x1 $\frac{5}{8}$ "	
14532-A	4	Air Intake Manifold Attaching Screw—½"-13x3 $\frac{3}{4}$ "	
312-A	12	Air Intake Manifold Lockwasher—½" SAE	
88751-A	2	Air Cleaner Adapter Screw— $\frac{3}{4}$ "x2 $\frac{1}{8}$ "	

AIR INTAKE MANIFOLD AND STARTING BURNER (Group 14)

88646-D	1	Air Intake Manifold—Used with Starting Burner	
88633-A	4	Air Intake Manifold Gasket	
4603-A	8	Air Intake Manifold Screw—½"-13x1 $\frac{5}{8}$ "	
14532-A	4	Air Intake Manifold Screw—½"-13x3 $\frac{3}{4}$ "	
312-A	12	Air Intake Manifold Lockwasher—½" SAE	
88751-A	2	Air Cleaner Adapter Screw	
88997-AS	1	Starting Burner Assembly—Includes parts marked *	
1151-A	6	Starting Burner Attaching Stud— $\frac{3}{8}$ "x1 $\frac{1}{16}$ "	
752-A	6	Starting Burner Attaching Stud Nut— $\frac{3}{8}$ "-24	
342-A	6	Starting Burner Attaching Stud Nut Lockwasher	
70852-B	1	Starting Burner Attaching Gasket	
70804-C	1	*Starting Burner Housing	
88988-C	1	*Starting Burner Cover—Replaces 70805-C	
14395-A	3	*Starting Burner Cover Screw—¼"-20x1½"	
4195-A	1	*Starting Burner Cover Screw—¼"-20x1½"	
14162-A	4	*Starting Burner Cover Screw Washer	
628-A	4	*Starting Burner Cover Screw Lockwasher	
70806-A	1	*Starting Burner High Tension Electrode	
70807-A	1	*Starting Burner High Tension Electrode Retainer	
85204-A	1	*Starting Burner High Tension Electrode Gasket	
70808-A	1	*Starting Burner Ground Electrode	
628-A	1	*Starting Burner Ground Electrode Lockwasher	
51363-AS	1	*Starting Burner Spark Coil	
12222-A	1	*Starting Burner Spark Coil Felt Pad	
51371-AS	1	*Starting Burner Spark Coil High Tension Cable	
70799-A	1	*Starting Burner Nozzle	
70795-A	1	*Starting Burner Nozzle Adapter	
70794-A	1	*Starting Burner Nozzle Lock Nut	
304-A	1	*Starting Burner Nozzle Lock Nut Wire	
51372-AS	1	*Starting Burner Ground Wire	
14069-A	1	*Starting Burner Ground Screw—¼"-20x $\frac{3}{4}$ "	
628-A	1	*Starting Burner Ground Screw Lockwasher	
51376-A	2	*Starting Burner Terminal Connector	
9367-A	2	*Starting Burner Insulating Nipple	
11535-A	2	*Starting Burner Terminal Insulator	
11627-A	1	*Starting Burner Insulating Tube	
14670-A	1	*Starting Burner Fuel Tee	
4414-A	1	*Starting Burner Fuel Nipple	
51315-AS	1	Pressure Switch	
51373-AS	1	Cable—Pressure Switch to Coil	
70797-BS	1	Priming Pump	

Give Engine Number with Each Parts Order

AIR INTAKE HEATING UNIT ASSEMBLY (Group 15)

(ELECTRICAL)

Part No.	No. Req'd	PART NAME	Illustration Reference
88642-BS	4	Air Intake Heating Unit Assembly—Includes parts marked*	
88643-B	4	*Air Intake Heating Unit Terminal Plate	
88644-B	8	*Air Intake Heating Unit Insulating Plate	
88645-B	4	*Air Intake Heating Unit Element	
2362-A	8	*Air Intake Heating Unit Terminal Screw	
4200-A	8	*Air Intake Heating Unit Terminal Screw Nut	
11164-A	8	*Air Intake Heating Unit Terminal Screw Washer	
4578-A	8	*Air Intake Manifold Attaching Screw—Replaces 8942-A	
4354-A	4	Air Intake Manifold Attaching Screw—Replaces 4495-A	

AIR CLEANER (Group 16)

88800-CS	2	Air Cleaner Assembly—552-OBN	YJ
88803-CS	2	Air Cleaner Assembly—557-OBN	YJ

EXHAUST MANIFOLD (Group 17)

88331-D	1	Exhaust Manifold—Center Outlet	
88623-D	1	Exhaust Manifold—Front Half	
88624-D	1	Exhaust Manifold—Rear Half	
30544-A	1	Exhaust Manifold Connecting Ring	
85035-A	6	Exhaust Manifold Gasket	XZ
13125-A	12	Exhaust Manifold Stud Nut—½"-20—Replaces 1317-A	
794-A	12	Exhaust Manifold Stud Plain Washer	
85331-B	1	Companion Flange	
85332-B	1	Companion Flange Gasket	
88048-B	1	Companion Flange	

VALVE ROCKER ARM (Group 18)

88073-BS	12	Valve Rocker Arm Assembly—Includes parts marked *	
88074-A	12	*Valve Rocker Arm	YE
14232-A	12	*Valve Rocker Arm Expansion Plug—½"	
88075-A	12	*Valve Rocker Arm Bushing	
14307-A	12	*Valve Rocker Arm Felt Plug	
85164-AS	12	*Valve Rocker Arm Cup Assembly	YF
85084-A	12	Valve Rocker Arm Adjusting Screw—½"-20	YC
4828-A	12	Valve Rocker Arm Adjusting Screw Nut—½"-20	YD
88076-C	2	Valve Rocker Arm Shaft	WF
88087-A	6	Valve Rocker Arm Shaft Bracket	WH
14234-A	12	Valve Rocker Arm Shaft Bracket Screw—½"-13x¾"	WC
267-A	6	Valve Rocker Arm Shaft Bracket Screw Lockwire	
85067-A	4	Valve Rocker Arm Shaft Inner Spring	WG
85066-A	4	Valve Rocker Arm Shaft Outer Spring	WI
14230-A	4	Valve Rocker Shaft Spring Washer—1½"x¾"x½"	
14231-A	4	Valve Rocker Shaft Washer Screw	WE
85160-A	2	Valve Rocker Shaft Lockscrew	WD

VALVE (Group 19)

85520-A	6	Intake Valve	WM
85510-A	6	Exhaust Valve	WK
86220-A	12	Valve Spring—Inner	YH
86221-A	12	Valve Spring—Outer	YH
85513-A	12	Valve Spring Seat	YG
85551-A	24	Valve Spring Seat Lock	
88088-A	12	Valve Tappet	ZG
88006-C	2	Valve Tappet Cover	ZE
88007-B	2	Valve Tappet Cover Gasket	
1864-A	28	Valve Tappet Cover Screw—¾"-16	
14416-A	28	Valve Tappet Cover Screw Plain Washer—¾"x¾"x½"	
342-A	28	Valve Tappet Cover Screw Lockwasher—¾" SAE	

Give Engine Number with Each Parts Order

VALVE—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
88009-A	12	Valve Tappet Guide	ZF
3599-A	6	Valve Tappet Guide Washer	
8533-A	6	Valve Tappet Guide Screw—½"-13x1½"	
312-A	6	Valve Tappet Guide Screw Lockwasher—½" SAE	
88080-BS	12	Valve Push Rod Assembly	ZD

OIL PANS (Group 20)

There are two types of lubricating systems used on the DFX series engines, the type which has a sump to hold the oil which we will designate here as "Wet Sump Type;" the other is the type which catches the oil and holds it only long enough for the scavenging pump to return it to the outside oil reservoir, this type will be designated as the "Dry Sump Type." Give engine serial number with each order.

OIL PAN—CAST (WET SUMP TYPE) (Group 21)

88089-E	1	Oil Pan—Cast	YY
88580-B	1	Oil Pan Attaching Gasket—Right Hand	
88581-B	1	Oil Pan Attaching Gasket—Left Hand	
8533-A	22	Oil Pan Attaching Screw—½"-13x1½"	
794-A	22	Oil Pan Attaching Screw Plain Washer—7/8"x1½"x3/8"	
312-A	22	Oil Pan Attaching Lockwasher—½" SAE	
4570-A	5	Oil Pan to Bellhousing Attaching Screw—5/8"-11x1½"	
4023-A	5	Oil Pan to Bellhousing Attaching Washer	
1126-A	5	Oil Pan to Bellhousing Screw Lockwasher—5/8" SAE	
88582-BS	1	Oil Pan Strainer Assembly	ZK
7165-A	1	Oil Pan Strainer Plug—1" Std.	
8146-A	1	Oil Pan Strainer Gasket	
4156-A	6	Oil Pan Strainer Stud—½"x1 7/8"	
312-A	6	Oil Pan Strainer Lockwasher—½" SAE	
626-A	6	Oil Pan Strainer Nut—½"-20 SAE	
88586-AS	1	Oil Pan Bayonet Gauge Assembly	ZH
88279-A	1	Oil Pan Bayonet Gauge Bushing	ZI
3136-A	6	Oil Pan Attaching Screw—½"-13x1¼"	

Note—Assemble 3-3136-A Screws on each side at rear.

OIL PAN—STEEL (WET SUMP TYPE) (Group 21-A)

88078-E	1	Oil Pan—Pressed Steel	
88580-B	1	Oil Pan Attaching Gasket—Right Hand	
88581-B	1	Oil Pan Attaching Gasket—Left Hand	
4593-A	8	Oil Pan Attaching Screw	
2100-A	20	Oil Pan Attaching Screw	
312-A	20	Oil Pan Attaching Lockwasher	
4570-A	5	Oil Pan to Bellhousing Attaching Screw	
4023-A	5	Oil Pan to Bellhousing Attaching Plain Washer	
1126-A	5	Oil Pan to Bellhousing Screw Lockwasher	
88582-BS	1	Oil Pan Strainer Assembly	
7165-A	1	Oil Pan Strainer Cap Plug	
8146-A	1	Oil Pan Strainer Cap Gasket	
2100-A	6	Oil Pan Strainer Cap Attaching Capscrew	
312-A	6	Oil Pan Strainer Cap Lockwasher	
88880-BS	1	Oil Pan Bayonet Gauge Assembly	
88888-BS	1	Oil Pan Bayonet Gauge Tube Assembly	
296-A	1	Oil Pan Bayonet Gauge Tube Sleeve Gasket	

OIL PAN—CAST (DRY SUMP TYPE) (Group 22)

88083-E	1	Oil Pan—Cast	
88580-B	1	Oil Pan Attaching Gasket—Right Hand	
88581-B	1	Oil Pan Attaching Gasket—Left Hand	

Give Engine Number with Each Parts Order

OIL PAN—CAST (DRY SUMP TYPE)—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
8533-A	28	Oil Pan Attaching Screw—½"-13x1½"	
794-A	28	Oil Pan Attaching Screw Plain Washer	
312-A	28	Oil Pan Attaching Screw Lockwasher—½" SAE	
4570-A	5	Oil Pan to Bellhousing Attaching Screw—⅝"-11x1½"	
4023-A	5	Oil Pan to Bellhousing Attaching Plain Washer	
1126-A	5	Oil Pan to Bellhousing Attaching Lockwasher—⅝" SAE	
88359-C	1	Oil Pan Bottom Cover	
88360-C	1	Oil Pan Bottom Cover Gasket	
14058-A	16	Oil Pan Bottom Cover Attaching Screw—⅜"-16x1½"	
342-A	16	Oil Pan Bottom Cover Attaching Lockwasher—⅜" SAE	
565-A	1	Oil Pan Drain Plug	

**OIL PRESSURE REGULATOR (WET SUMP TYPE)
(Group 23)**

88237-BS	1	Oil Pressure Regulator Assembly—Includes parts marked * YW	
88238-B	1	*Oil Pressure Regulator Body	
15243-A	1	*Oil Pressure Regulator Valve Piston	
8571-A	1	*Oil Pressure Regulator Valve Spring	
31242-A	1	*Oil Pressure Regulator Valve Adjusting Screw	
8573-A	1	*Oil Pressure Regulator Valve Adjusting Screw Locknut	
8574-A	1	*Oil Pressure Regulator Valve Cap Nut	
8575-A	2	*Oil Pressure Regulator Valve Gasket—¾"x1"x1⅛"	
88239-A	1	Oil Pressure Regulator Attaching Gasket	
1864-A	4	Oil Pressure Regulator Attaching Screw—⅜"-16	
342-A	4	Oil Pressure Regulator Attaching Lockwasher—⅜" SAE	

**OIL PRESSURE REGULATOR (DRY SUMP TYPE)
(Group 24)**

88231-BS	1	Oil Pressure Regulator Assembly—Includes parts marked * YW	
88232-B	1	*Oil Pressure Regulator Body	
88371-A	1	*Oil Pressure Regulator Valve Piston	
8571-A	1	*Oil Pressure Regulator Valve Spring	
31242-A	1	*Oil Pressure Regulator Valve Adjusting Screw—¾"-16x1⅝"	
8573-A	1	*Oil Pressure Regulator Valve Adjusting Screw Locknut—¾"-16	
8574-A	1	*Oil Pressure Regulator Valve Cap Nut—¾"-16	
8575-A	2	*Oil Pressure Regulator Valve Cap Nut Gasket—¾"x1"x1⅛"	
88230-A	1	Oil Pressure Regulator Attaching Gasket	
4728-A	4	Oil Pressure Regulator Attaching Screw—⅜"-16x1⅝"	
342-A	4	Oil Pressure Regulator Attaching Screw Lockwasher—⅜" SAE	
88368-AS	1	Pressure Relief Pipe Assembly	
4980-A	1	Pressure Relief Pipe Gasket	
303-A	2	Pressure Relief Pipe Screw—⅞"-18x¾"	
615-A	2	Pressure Relief Pipe Screw Lockwasher—⅞" SAE	
11323-A	1	Pressure Relief Pipe Nut	
11324-A	1	Pressure Relief Pipe Nut Ferrule	
11325-A	1	Pressure Relief Pipe Elbow	
88233-A	1	Pressure Relief Oil Inlet Pipe	
11322-A	1	Pressure Relief Oil Inlet Pipe Gasket	
303-A	2	Pressure Relief Oil Inlet Pipe Screw—⅞"-18x¾"	
615-A	2	Pressure Relief Oil Inlet Pipe Screw Lockwasher—⅞" SAE	
14971-A	1	Pressure Relief Oil Inlet Pipe Union	

**OIL PUMP OIL LINE ASSEMBLY (WET SUMP TYPE)
(Group 25)**

88588-DS	1	Oil Pump Oil Line Assembly	XU
88183-A	4	Oil Pump Oil Line Assembly Attaching Gasket	

Give Engine Number with Each Parts Order

OIL PUMP ASSEMBLY (WET AND DRY SUMP)—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
4039-A	6	Oil Pump Oil Line Attaching Screw— $\frac{5}{16}$ "-18x $\frac{3}{4}$ "	
267-A	3	Oil Pump Oil Line Attaching Screw Lockwire	
615-A	10	Oil Pump Oil Line Lockwasher— $\frac{1}{8}$ " SAE	
14017-A	3	Oil Pump Oil Line Assembly Attaching Screw— $\frac{3}{8}$ "-16x $\frac{3}{4}$ "	
267-A	3	Oil Pump Oil Line Assembly Attaching Screw Lockwire	
342-A	3	Oil Pump Oil Line Assembly Attaching Screw Lockwasher— $\frac{3}{8}$ " SAE	
11556-A	2	Oil Pump Oil Line Assembly Attaching Screw— $\frac{5}{16}$ "-18x3 $\frac{1}{4}$ "	
267-A	1	Oil Pump Oil Line Assembly Attaching Screw Lockwire	
12153-A	2	Oil Pump Oil Line Attaching Screw— $\frac{5}{8}$ "-18x1 $\frac{1}{2}$ "	
267-A	2	Oil Pump Oil Line Attaching Screw Lockwire	

OIL PUMP OIL LINES (DRY SUMP TYPE) (Group 26)

88595-DS	1	Oil Pump Pressure Line Assembly	
4039-A	4	Oil Pump Oil Line Flange Attaching Screw— $\frac{5}{16}$ "-18x $\frac{3}{4}$ "	
267-A	2	Oil Pump Oil Line Flange Attaching Lockwire	
615-A	4	Oil Pump Oil Line Flange Lockwasher— $\frac{1}{8}$ " SAE	
88183-A	2	Oil Pump Oil Line Flange Gasket	
14017-A	2	Oil Pump Pressure Line Bracket Attaching Screw— $\frac{3}{8}$ "-16x $\frac{3}{4}$ "	
267-A	2	Oil Pump Pressure Line Bracket Attaching Lockwire	
342-A	2	Oil Pump Pressure Line Bracket Lockwasher— $\frac{3}{8}$ " SAE	
88598-DS	1	Oil Pump Suction Line Assembly	
88183-A	2	Oil Pump Suction Line Flange Gasket	
4039-A	4	Oil Pump Suction Line Flange Attaching Screw— $\frac{5}{16}$ "-18x $\frac{3}{4}$ "	
267-A	2	Oil Pump Suction Line Flange Attaching Lockwire	
615-A	4	Oil Pump Suction Line Flange Lockwasher— $\frac{1}{8}$ " SAE	
88766-B	1	Oil Pump Suction Line Flange	
88767-A	1	Oil Pump Suction Line Flange Gasket	
4039-A	4	Oil Pump Suction Line Flange Attaching Screw— $\frac{5}{16}$ "-18x $\frac{3}{4}$ "	
267-A	2	Oil Pump Suction Line Flange Attaching Lockwire	
615-A	4	Oil Pump Suction Line Flange Attaching Lockwasher— $\frac{1}{8}$ " SAE	
88756-DS	1	Oil Pump Suction Screen Assembly	
14017-A	2	Oil Pump Suction Screen Attaching Screw	
267-A	2	Oil Pump Suction Screen Attaching Lockwire	
342-A	2	Oil Pump Suction Screen Attaching Screw Lockwasher	
88375-BS	1	Oil Pump Scavenging Discharge Line	
88183-A	2	Oil Pump Scavenging Discharge Line Gasket	
4039-A	2	Oil Pump Scavenging Discharge Line Attaching Screw— $\frac{5}{16}$ "-18x $\frac{3}{4}$ "	
267-A	2	Oil Pump Scavenging Discharge Line Attaching Lockwire	
615-A	4	Oil Pump Scavenging Discharge Line Attaching Lockwasher	
11556-A	2	Oil Pump Scavenging Line Screw— $\frac{5}{16}$ "-18x3 $\frac{1}{2}$ "	
267-A	1	Oil Pump Scavenging Line Lockwire	

OIL PUMP ASSEMBLY (WET AND DRY SUMP TYPE) (Group 27)

88148-DS	1	Oil Pump Assembly—Includes parts marked *	XQ
88779-D	1	*Oil Pump Body	WB
88774-B	1	*Oil Pump Front Cover	WE
88778-C	1	*Oil Pump Rear Cover	WO
11364-A	11	*Oil Pump Rear and Front Cover Attaching Screw— $\frac{5}{16}$ "-18x $\frac{3}{8}$ "	WD & WP
266-A	11	*Oil Pump Rear and Front Cover Attaching Screw Lockwire	
88777-B	1	*Oil Pump Drive Gear	XO & WA
88773-A	1	*Oil Pump Drive Shaft	WJ
11307-A	1	*Oil Pump Drive Shaft Snap Ring	
88145-A	1	*Oil Pump Drive Gear Thrust Washer	WF

Give Engine Number with Each Parts Order

OIL PUMP ASSEMBLY (WET AND DRY SUMP)—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
11134-A	1	*Oil Pump Drive Gear Clamp Washer	WH
11132-A	1	*Oil Pump Drive Gear Clamp Nut—¾"-16	WI
302-A	1	*Oil Pump Drive Gear Clamp Nut Cotter—½"x1¼"	
2165-A	1	*Oil Pump Drive Gear Key	WG
88769-A	4	*Oil Pump Gear	WK
2165-A	4	*Oil Pump Gear Key	
88768-A	1	*Oil Pump Intermediate Shaft	WL
88772-A	1	*Oil Pump Idler Shaft	WM
88149-A	1	*Oil Pump Screen	
14529-A	4	*Oil Pump Screen Washers—11/16"x11/16"x1/16"	
11304-A	4	*Oil Pump Screen Screw—15/16"-18x1½"	
11305-A	1	*Oil Pump Screen Screw Lockwire	
11306-A	4	*Oil Pump Rear and Front Cover Dowel Pin	
89135-A	As Req.	Oil Pump Spacing Shim	

VISCOMETER AND GAUGE (Group 28)

85721-BS	1	Viscometer Instrument Assembly—Includes parts marked *
14409-B	1	*Viscometer Instrument
14405-A	1	*Viscometer Instrument Gasket
13150-AS	1	*Viscometer Instrument Screw and Lockwasher Assembly
85943-A	1	*Viscometer Instrument Tube
85944-A	1	*Viscometer Instrument Tube Insulation
14406-AS	1	*Viscometer Instrument Elbow Assembly—Includes parts marked **
14406-A	1	**Viscometer Instrument Elbow
14407-A	1	**Viscometer Instrument Tube Nut
14408-A	1	**Viscometer Instrument Tube Nut Ferrule
81807-AS	1	Viscometer Gauge Assembly
80786-AS	1	Viscometer Gauge Assembly

Give Engine Number with Each Parts Order

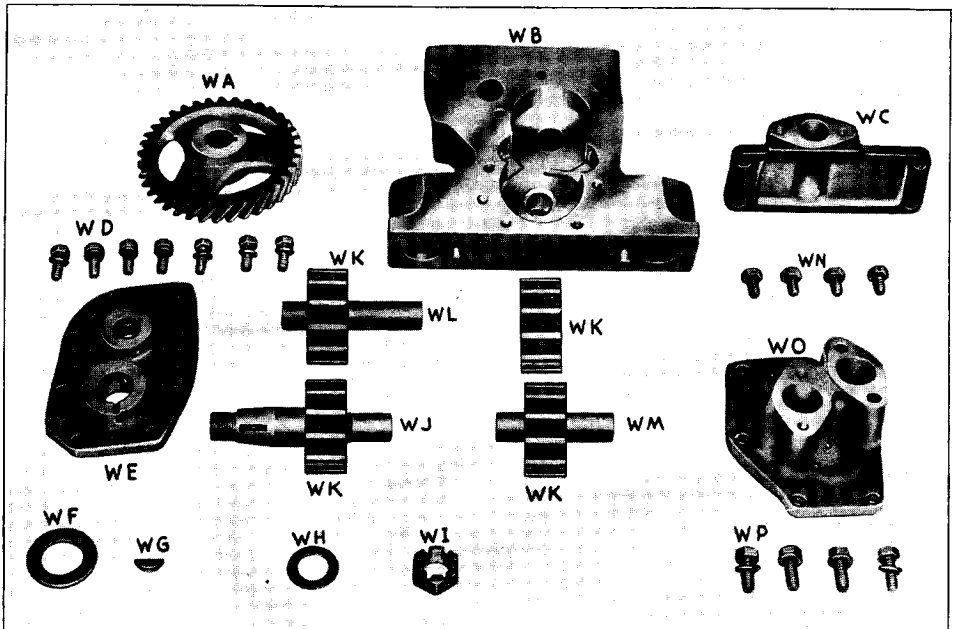


Illustration Reference WA to WP

OIL FILTRATOR AND OIL COOLER ASSEMBLY (Group 29)

(OIL FILTRATOR MAY BE USED WITHOUT COOLER)

Part No.	No. Req'd	PART NAME	Illustration Reference
88350-DS	1	Lubricating Oil Filtrator Assembly—Includes parts marked*	ZB
88352-DS	1	*Lubricating Oil Filtrator Base Assembly—Includes parts marked**	
88353-D	1	**Lubricating Oil Filtrator Base	
305-A	1	**Lubricating Oil Filtrator Base Pipe Plug	
80252-A	1	**Lubricating Oil Filtrator Case Retaining Stud Adapter	
14570-A	1	**Lubricating Oil Filtrator Drain Plug	
4893-A	1	**Lubricating Oil Filtrator Drain Plug Gasket	
85247-A	1	**Lubricating Oil Filtrator Relief Valve Piston	
14604-A	1	**Lubricating Oil Filtrator Relief Valve Spring	
14605-A	1	**Lubricating Oil Filtrator Relief Valve Pipe Plug	
14573-AS	1	**Lubricating Oil Filtrator Vent Valve Assembly	ZX
61-A	1	**Lubricating Oil Filtrator Pipe Plug—¾" Std.	
85538-BS	2	*Lubricating Oil Filtrator Combination Filtering Element Assembly—Includes parts marked †	
85678-BS	2	†Lubricating Oil Filtrator Filtering Element Inside Assy.	
85679-BS	2	†Lubricating Oil Filtrator Filtering Element Outside Assy. ..	
88356-B	2	*Lubricating Oil Filtrator Case	
14602-A	2	*Lubricating Oil Filtrator Case Gasket	
76252-AS	2	*Lubricating Oil Filtrator Case Retainer Stud Assembly—Includes parts marked ‡	
14786-A	2	‡Lubricating Oil Filtrator Case Retainer Stud—⅝"x7¾"	
76253-A	2	‡Lubricating Oil Filtrator Case Retainer Stud Nut	
14619-A	2	‡Lubricating Oil Filtrator Case Retainer Stud Nut Pin	
14603-A	2	*Lubricating Oil Filtrator Case Retainer Stud Nut Gasket ..	
4156-A	4	Lubricating Oil Filtrator Attaching Stud	
88351-A	1	Lubricating Oil Filtrator Attaching Gasket	
626-A	4	Lubricating Oil Filtrator Attaching Stud Nut—½"-20	
312-A	4	Lubricating Oil Filtrator Attaching Stud Lockwasher—½" SAE	
14919-A	4	Oil Filtrator Attaching Stud—½"x3⅜"—Replaces 4156-A when Cooler is used	
88358-C	1	Oil Cooler Adapter	
88351-A	1	Oil Cooler Adapter Gasket—Adapter to Cylinder Block	
61-A	4	Oil Cooler Adapter Pipe Plug—¾" Std.	
31247-A	1	Oil Cooler Adapter Relief Ball—¾"	
85587-A	1	Oil Cooler Adapter Relief Spring	
31241-A	1	Oil Cooler Adapter Relief Plug	
14801-A	1	Oil Cooler Adapter Relief Plug Gasket	
88361-DS	1	Oil Cooler Assembly—Includes parts marked §	
88362-D	1	§Oil Cooler Cover	
88363-C	1	§Oil Cooler Cover Gasket	
4191-A	2	§Oil Cooler Cover Screw—⅝"-18x2"	
14900-A	9	§Oil Cooler Cover Screw—⅝"-18x1"	
2075-A	11	§Oil Cooler Cover Screw Washer	
61-A	4	§Oil Cooler Cover Plug	
88365-D	1	§Oil Cooler Body	
81260-B	2	§Oil Cooler Unit	
14084-A	6	§Oil Cooler Unit Attaching Nut—¾"-24	
3255-A	6	§Oil Cooler Unit Attaching Nut Washer—¾" Copper	
40247-A	2	§Oil Cooler Unit Attaching Gasket	
1173-A	8	Oil Cooler Attaching Screw—⅞"-14x1¼"	
335-A	8	Oil Cooler Attaching Screw Lockwasher—⅞" SAE	
88366-AS	2	Oil Cooler Inlet and Outlet Line Assembly	
85589-A	2	Oil Cooler Inlet and Outlet Line Union	
14676-A	4	Oil Cooler Inlet and Outlet Line Gasket	
60-A	1	Oil Cooler Drain Plug—¼" Std.	
4834-A	1	Oil Cooler Water Outlet Hose	
8846-A	2	Oil Cooler Water Outlet Hose Clamp	
88402-A	1	Water Pump Inlet Pipe	

Give Engine Number with Each Parts Order

FUEL PUMP DRIVE ASSEMBLY (Group 30)

Part No.	No. Req'd	PART NAME	Illustration Reference
88523-CS	1	Fuel Pump Drive Shaft Sleeve Assembly—Includes parts marked *	
88518-C	1	*Fuel Pump Drive Shaft Sleeve	
88524-A	2	*Fuel Pump Drive Shaft Sleeve Bushing	
88525-B	1	*Fuel Pump Drive Shaft	
88526-A	1	*Fuel Pump Drive Shaft Oil Seal	
14144-A	1	*Fuel Pump Drive Shaft Thrust Washer	
88540-A	1	*Fuel Pump Drive Shaft Sprocket	
1247-A	1	*Fuel Pump Drive Shaft Sprocket Key	
72-A	1	*Fuel Pump Drive Shaft Coupling Key	
4357-A	1	*Fuel Pump Drive Shaft Coupling Nut—½"-20	
298-A	1	*Fuel Pump Drive Shaft Coupling Cotter Key—⅜"x1"	
59-A	1	*Fuel Pump Drive Sleeve Pipe Plug—½" Std.	
88527-A	1	Fuel Pump Drive Shaft Sleeve Attaching Gasket	
4064-A	3	Fuel Pump Drive Shaft Attaching Screw—½"-13x1¼"	
312-A	3	Fuel Pump Drive Shaft Attaching Lockwasher—½" SAE ..	
88541-C	1	Fuel Pump Drive Chain	
77299-B	1	Fuel Pump Drive Chain Adjusting Clamp	
3312-A	1	Fuel Pump Drive Chain Adjusting Gasket	
14715-A	1	Fuel Pump Drive Chain Adjusting Retaining Screw— ⅜"-16x⅜"	
4867-A	1	Fuel Pump Drive Chain Adjusting Screw Lockwasher	
88542-B	1	Chain Idler Support Bracket	
88543-B	1	Chain Idler Support Shaft	
4064-A	3	Chain Idler Support Bracket Screw—½"-13x1¼"	
312-A	3	Chain Idler Support Bracket Screw Lockwasher—½" SAE ..	
88544-B	1	Chain Idler Eccentric Bushing	
3313-A	1	Chain Idler Eccentric Stop Pin	
88545-A	1	Chain Idler Sprocket	
77166-A	1	Chain Idler Eccentric Threaded Bushing	
1179-A	1	Chain Idler Eccentric Threaded Key	
3311-A	1	Chain Idler Eccentric Threaded Screw—⅝"-18x2¼"	
14326-A	1	Chain Idler Eccentric Screw Nut—⅞"-18	
4644-A	1	Chain Idler Eccentric Nut Cotter—⅜"x½"	

FUEL PUMP BRACKET (Group 31)

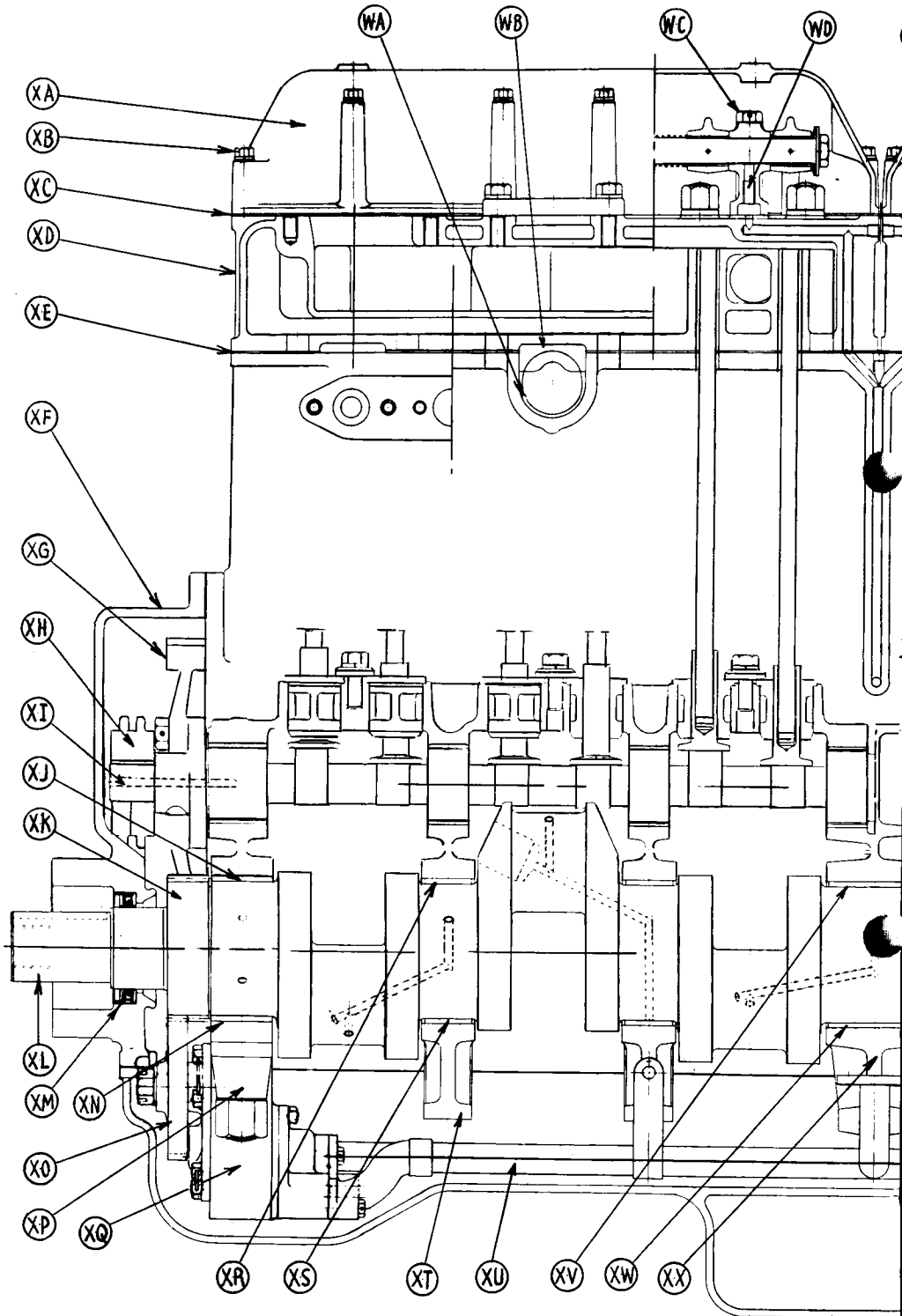
88528-C	1	Fuel Pump Bracket	YV
1701-A	2	Fuel Pump Bracket Attaching Screw—½"-13x2"	
8533-A	2	Fuel Pump Bracket Attaching Screw—½"-13x1½"	
2210-A	2	Fuel Pump Bracket Dowel Ring	
312-A	4	Fuel Pump Bracket Attaching Screw Lockwasher—½" SAE ..	

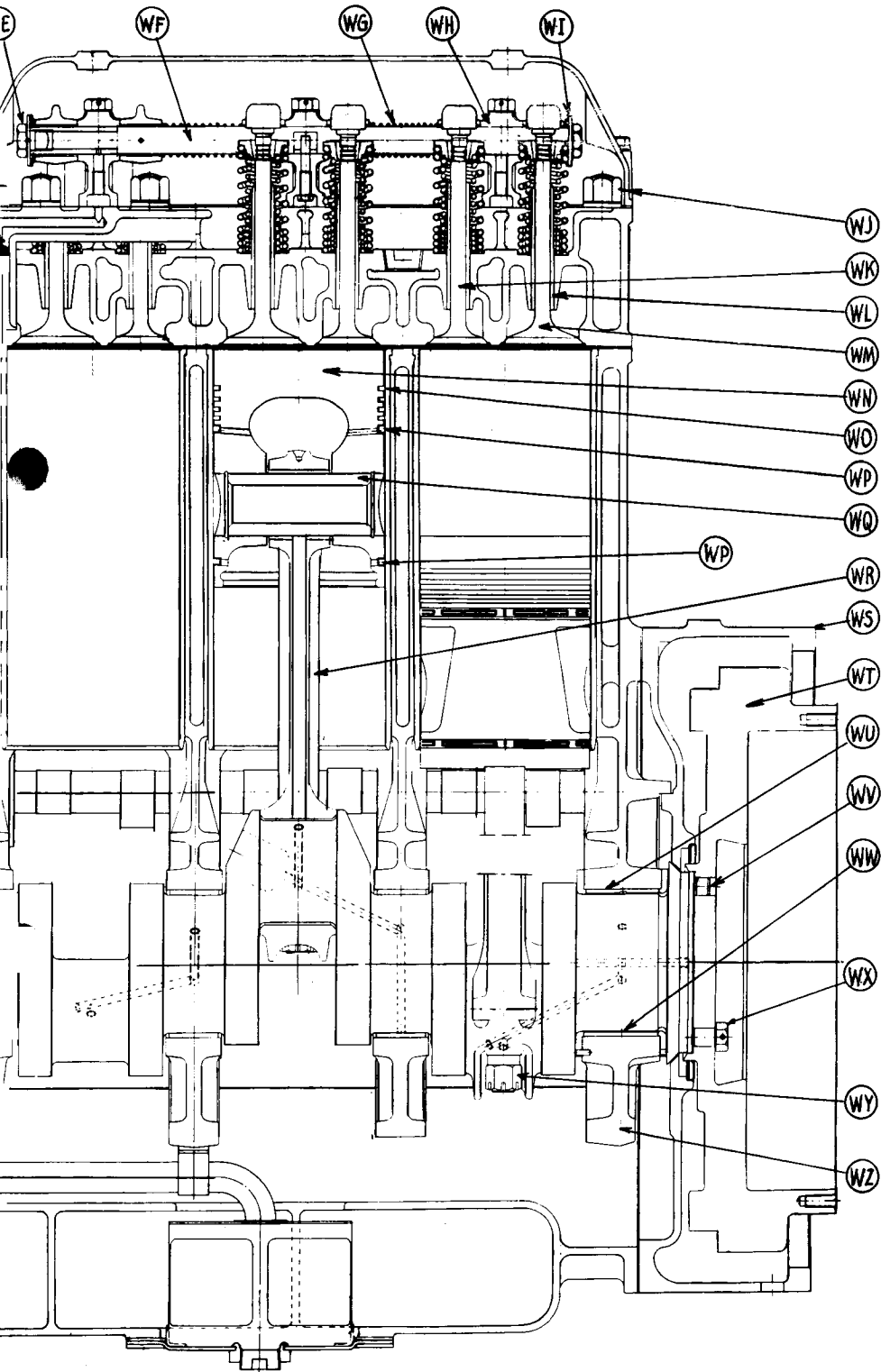
FUEL PUMP ASSEMBLY (MECHANICAL INDUSTRIAL GOVERNOR) (Group 32)

(FOR USE WITH SWEDGED TYPE FUEL LINES)

89512-DS	1	Fuel Pump Assembly—Includes parts marked *	
75800-DS	1	*Fuel Pump Governor Assembly—See Page 22 for Details— Supersedes 74904-DS	
82508-AS	1	*Fuel Pump Transfer Pump—Positive Prime—Supersedes 77686-AS	
77587-A	1	*Fuel Pump Control Rod Stop—Dustproof	
76569-A	1	*Fuel Pump End Cover	
88959-A	1	*Fuel Pump Check Valve—with Adapter supersedes 76503-A	YS
13238-A	1	*Fuel Pump Check Valve Adapter	
76508-A	1	*Fuel Pump Inlet Fitting	
88534-B	1	*Fuel Pump Coupling Front Hub	
85134-A	1	*Fuel Pump Coupling Flange	
85135-A	1	*Fuel Pump Coupling Flange Disc—Fiber	
88549-B	1	*Fuel Pump Coupling Rear Hub	
14138-A	2	*Fuel Pump Coupling Screw	

Give Engine Number with Each Parts Order





ence WA to XX

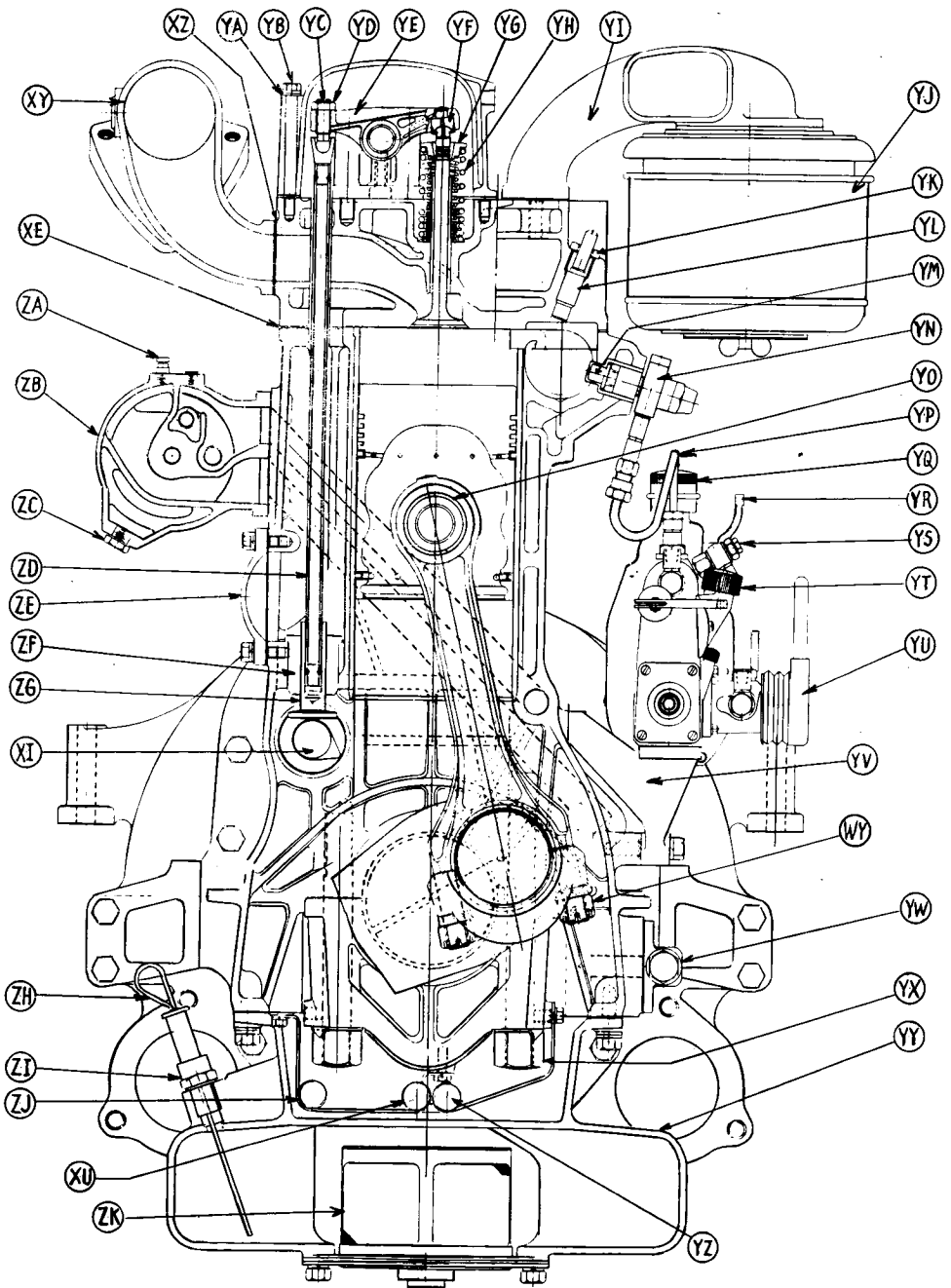


Illustration Reference XY to ZK

FUEL PUMP ASSEMBLY (MECHANICAL INDUSTRIAL GOVERNOR—Cont'd)

Part No.	No. Req'd	PART NAME	Illustration Reference
14299-A	2	*Fuel Pump Coupling Screw Washer— $\frac{3}{16}$ "x $\frac{7}{8}$ "x $\frac{3}{16}$ "	
615-A	2	*Fuel Pump Coupling Screw Lockwasher— $\frac{3}{16}$ " SAE	
1864-A	4	Fuel Pump Assembly Attaching Screw— $\frac{3}{8}$ "-16x1"	
14416-A	4	Fuel Pump Assembly Attaching Screw Plain Washer— $\frac{3}{8}$ "x $\frac{3}{16}$ "x $\frac{1}{16}$ "	
342-A	4	Fuel Pump Assembly Attaching Screw Lockwasher— $\frac{3}{8}$ " SAE	
81051-AS	1	*Fuel Pump Drain Tube Assembly—Includes parts marked **	
14406-A	1	**Fuel Pump Drain Tube Elbow	
14408-A	1	**Fuel Pump Drain Tube Ferrule	
14407-A	1	**Fuel Pump Drain Tube Nut	

FUEL PUMP ASSEMBLY (AUTOMOTIVE GOVERNOR) (Group 33)

(FOR USE WITH SWEDGED TYPE FUEL LINES)

88548-DS	1	Fuel Pump Assembly—Includes parts marked *	
88555-DS	1	*Fuel Pump Governor Assembly—Bosch GVA	
82508-AS	1	*Fuel Pump Transfer Pump—Positive Prime—Supersedes 77686-AS	
77587-A	1	*Fuel Pump Control Rod Stop—Dustproof	
76569-A	1	*Fuel Pump End Cover	
88959-A	1	*Fuel Pump Check Valve—Replaces 76503-A	YS
13238-A	1	*Fuel Pump Check Valve Adapter	
76508-A	1	*Fuel Pump Inlet Fitting	
88120-B	1	*Fuel Pump Coupling Rear Hub	
88534-B	1	*Fuel Pump Coupling Front Hub	
85134-A	1	*Fuel Pump Coupling Flange	
85135-A	1	*Fuel Pump Coupling Flange Disc	
14138-A	2	*Fuel Pump Coupling Screw	
14299-A	2	*Fuel Pump Coupling Screw Washer	
615-A	2	*Fuel Pump Coupling Screw Lockwasher	
81051-AS	1	*Fuel Pump Drain Tube Assembly—Includes parts marked **	
14406-A	1	**Fuel Pump Drain Tube Elbow	
14408-A	1	**Fuel Pump Drain Tube Ferrule	
14407-A	1	**Fuel Pump Drain Tube Nut	

(Attaching Parts same as listed Above)

FUEL PUMP ASSEMBLY (MECHANICAL INDUSTRIAL GOVERNOR) (Group 34)

(FOR USE WITH ERMETO SAFETY FITTING TYPE FUEL LINES)

88569-DS	1	Fuel Pump Assembly—Includes same parts as 88548-DS listed above and is the same except the delivery valve holders are machined for the Ermeto Safety Fitting Type Fuel Lines	
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FUEL PUMP ASSEMBLY (AUTOMOTIVE GOVERNOR) (Group 35)

(FOR USE WITH ERMETO SAFETY FITTING TYPE FUEL LINES)

89510-DS	1	Fuel Pump Assembly—Includes same parts as 88548-DS listed above and is the same except the delivery valve holders are machined for the Ermeto Safety Fitting Type Fuel Lines—Supersedes 88570-DS	
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Give Engine Number with Each Parts Order

GOVERNOR—INDUSTRIAL TYPE (Group 36)

Note—Give type number found on plate on Governor as well as serial number of engine when ordering Governor Parts.

Part No.	No. Req'd	PART NAME	Illustration Reference
75800-DS	1	Governor Assembly—Supersedes and Replaces 74904-DS— Includes parts marked *	
74523-B	1	*Control Lever—2" Arm (2682)	HW
74628-B		Control Lever—4" Arm (2988)—Alternate replace 74523	
14404-A	1	*Control Lever Clamp Screw (11444)	IH
74524-B	1	*Control Lever Stop (2045)	IG
14404-A	1	*Control Lever Stop Clamp Screw (11444)	IH
74529-B	1	*Control Lever Stop Plate (2046)	IL

Give Engine Number with Each Parts Order

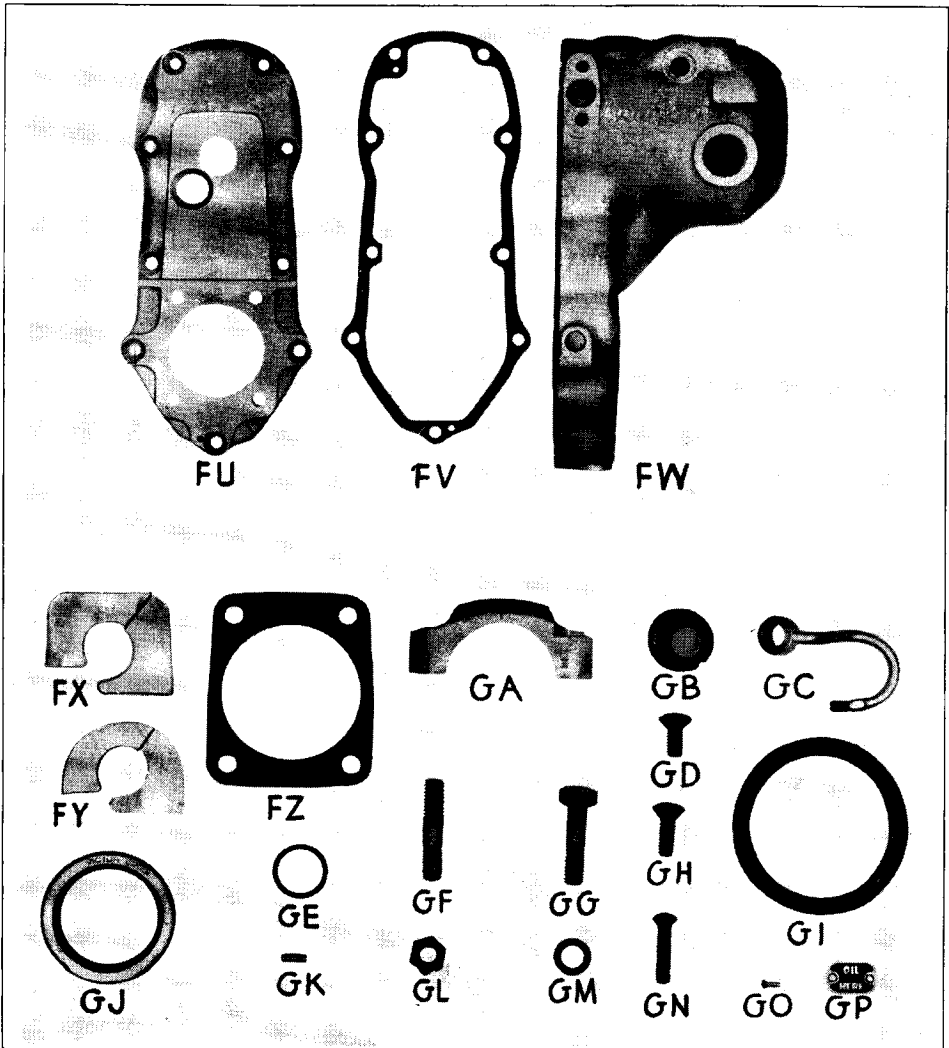


Illustration Reference FU to GP

GOVERNOR—INDUSTRIAL TYPE—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
3385-A	2	*Control Lever Adjusting Screw (10716)	JD
3386-A	2	*Control Lever Adjusting Screw Nut (10029)	JC
628-A	2	*Control Lever Adjusting Screw Lockwasher (10018)	JE
7458-A	1	*Control Lever Adjusting Screw Seal (10577)	
74527-B	1	*Control Shaft Open Bushing (2048)	JB
3387-A	2	*Control Shaft Bushing Screw (10702)	JA
74528-A	1	*Control Shaft Bushing Gasket (10725)	IO
74530-A	1	*Control Shaft Bushing Seal (10718)	IM
74528-B	1	*Control Shaft Bushing Closed (2049)	
74528-A	1	*Control Shaft Bushing Gasket (10725)	IO
3387-A	2	*Control Shaft Bushing Screw (10702)	JA

Give Engine Number with Each Parts Order

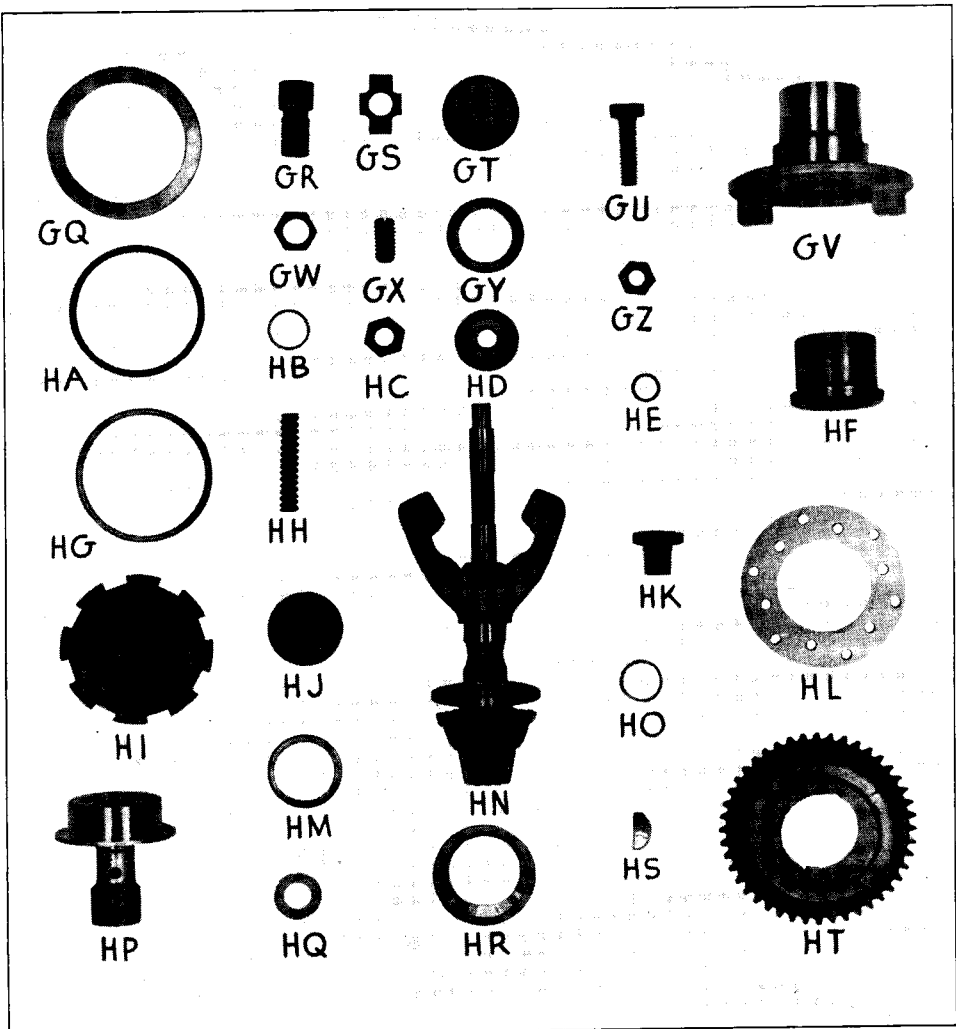


Illustration Reference GQ to HT

GOVERNOR—INDUSTRIAL TYPE—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
74525-B	1	*Control Shaft (2047)	IS
11395-A	As Req.	*Control Shaft Shim 1/64"	
11396-A	As Req.	*Control Shaft Shim 1/32"	
14403-A	2	*Control Lever and Stop Clamp Screw Lockwasher (10050)	
74979-BS	1	*Housing and Bearing Cap Assembly—Includes parts marked ** (2603)	
74999-D	1	**Housing (18190)—Not Serviced Separately	FW
74531-B	1	**Housing Bearing Cap (2056)	GA
11356-A	1	**Housing Bearing Cap Screw (11375)	GG
3389-A	1	**Housing Bearing Cap Screw Washer (10447)	GM
3391-A	1	**Housing Bearing Cap Screw Lockwire (10756)	

Give Engine Number with Each Parts Order

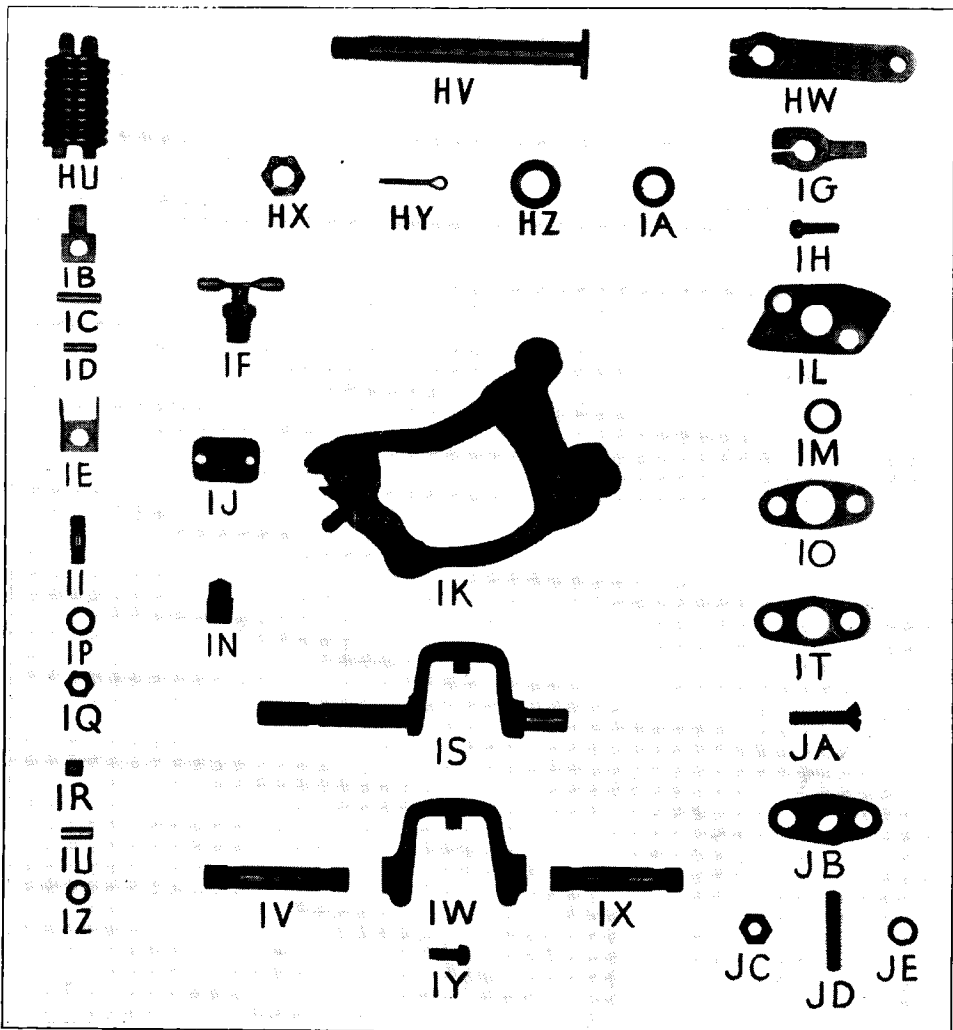


Illustration Reference HU to JE

GOVERNOR—INDUSTRIAL TYPE—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
3662-A	1	**Housing Bearing Cap Screw (10774)	GG
305-A	1	**Housing Oil Drain Plug (11023)	IN
3641-A	1	*Housing Oil Level Plug (10129)	IF
3392-A	1	*Housing Oil Filler Plug (10468)	HK
14311-A	1	*Housing Oil Filler Plug Gasket (10418)	HO
3660-A	1	*Housing Sleeve Adjusting Hole Plug (11114)	HJ
3659-A	1	*Housing Sleeve Adjusting Hole Plug Gasket (11115)	HM
3642-A	6	*Housing Mounting Screw—Long (10701)	GH
3387-A	3	*Housing Mounting Screw—Short (10702)	GD
74969-B	1	*Housing Gasket (2602)	FV
75801-C	1	*Housing (Mounting Plate) (15438) Supersedes 71965-C	FU
75803-A	1	*Housing Gasket (Mounting Plate) (10722) Supersedes 74534-A	FZ
74535-A	1	*Housing Rack Hole Seal (10697)	GE
3643-A	4	*Housing Mounting Screw (10723)	GN

Give Engine Number with Each Parts Order

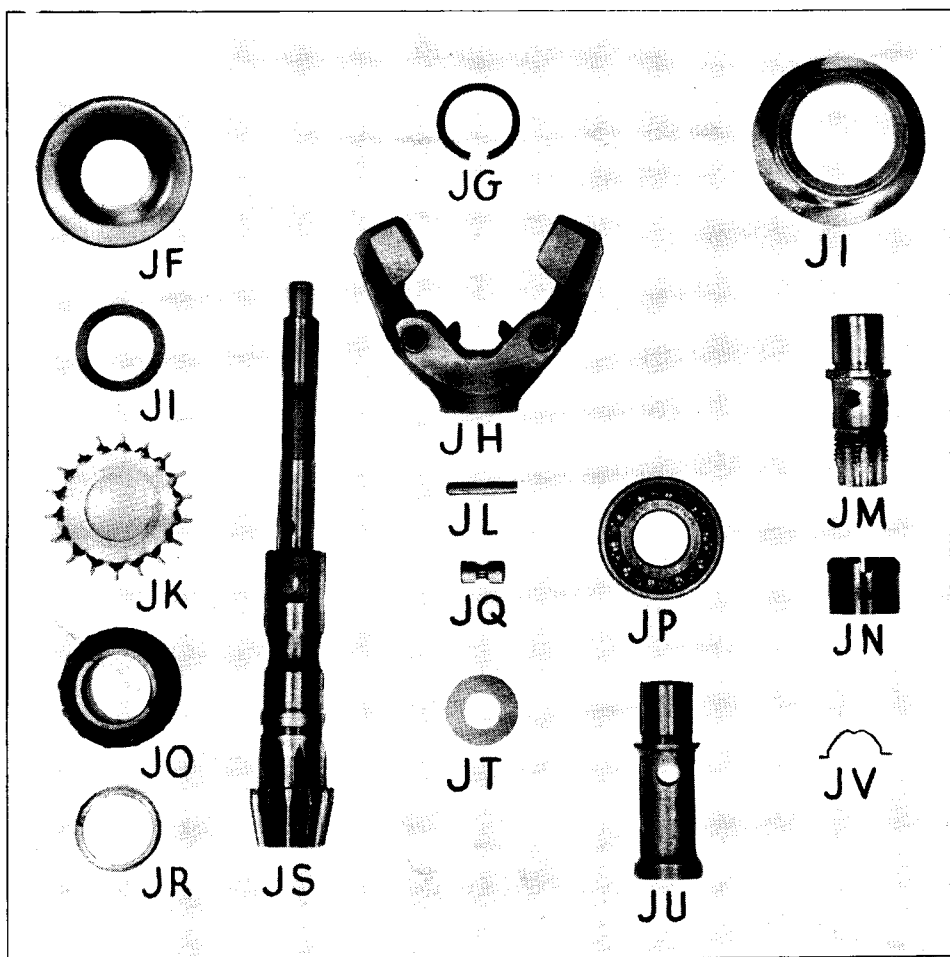


Illustration Reference JF to JV

GOVERNOR—INDUSTRIAL TYPE—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
74563-A	1	*Housing Mounting Screw (2086)	GB
11413-A	2	*Housing Dowel Pin (11322)	GK
74966-BS	1	*Governor Drive Gear Hub and Key Assembly—Includes parts marked † (2679)	
74964-C	1	†Governor Drive Gear Hub—Rear (15416)	GV
3649-A	2	†Governor Drive Gear Key (11128)	HS
74967-B	1	†Governor Drive Gear (2573)	HT
74538-B	1	*Governor Drive Gear Hub Oil Seal (2057)	GJ
74566-A	1	*Governor Drive Gear Hub Dust Seal (10709)	GI
74539-B	1	*Governor Drive Gear Washer (2070) Furnished in following thicknesses—.186"—.191"—.196"—.210"—.217"	HL
74901-B	1	*High Speed Spring (2582)	HU
74540-B	1	*High Speed Spring Link—Upper (2087)	
3644-A	1	*High Speed Spring Link Pin (10753)	IC
74541-B	1	*High Speed Spring Link—Lower (2088)	
3651-A	1	*High Speed Spring Link Pin (11160)	ID
74542-A	1	*High Speed Spring Link Eye (2094)	IB
628-A	1	*High Speed Spring Link Washer (10018)	IP
3645-A	1	*High Speed Spring Link Nut (10766)	IQ
74993-A	1	*High Speed Spring Link Pin Retaining Cage (2397)	IE
74902-B	1	*Idling Spring—Standard (2588)	HH
74903-B	1	*Idling Spring—Close Regulation (2810)	HH
74573-A	1	*Idling Spring Adjusting Screw (2084)	GR
3650-A	1	*Idle Spring Adjustment Screw Nut (10244)	GW
14311-A	1	*Idle Spring Adjusting Screw Gasket (10418)	HB
74560-B	1	*Instruction Plate—"Oil Here" (1760)	GP
74992-A	1	*Oil Instruction Plate (2419)	IJ
74562-B	1	*Governor Name Plate (1759)	
3439-A	6	*Plate Attaching Screws (10032)	GO
3654-AS	1	*Pinion Shaft Bearing (11122)	GY & HD
74977-B	1	*Pinion Shaft Bearing Adjusting Cap (2584)	GT
3656-A	1	*Pinion Shaft Bearing Adjusting Screw (11118)	GX
3655-A	1	*Pinion Shaft Bearing Adjusting Screw Nut (11119)	HC
3664-A	1	*Pinion Shaft Bearing Adjusting Screw Seal (11249)	
74994-B	1	*Pinion Shaft Bearing Adjusting Screw Lockwasher (11186)	GS
74971-BS	1	*Pinion Shaft Assembly—Includes parts marked § (2581)	HN
74978-C	1	§Pinion Shaft (2572)	JS
74545-A	1	§Pinion Shaft Bearing—Lower (10699)	HR & JO
3653-A	1	§Pinion Shaft Snap Ring (11129)	JG
3652-A	1	§Pinion Shaft Bearing Backing Washer (11132)	JI
74547-A	1	§Pinion Shaft Oil Impeller (10773)	JK
74997-A	1	§Pinion Shaft Oil Cap (11182)	JF
75537-AS	1	§Pinion Shaft Spider and Weight Assembly—Includes parts marked *§ (2883)	
74546-B	1	*§Pinion Shaft Weight Spider (2055)	JH
74574-A	1	*§Pinion Shaft Weight Spider Plug (10752)	JQ
14524-A	1	*§Pinion Shaft Weight Spider Pin (10410)	JL
74937-C	2	*§Pinion Shaft Weight (14258)	
74998-A	2	*§Pinion Shaft Weight Pin (10416)	
74976-A	1	§Pinion Shaft Spring Washer (11313)	JR
74961-BS	1	*Oil Tube and Union Assembly (2095)	GC
3640-A	1	*Rack Pin (10703)	IU
74572-A	2	*Rack Roller (10698)	IZ
74125-AS	1	*Adjusting Thrust Sleeve and Bearing Assembly—Includes parts marked † (11518)	HP
74127-A	1	†Adjusting Thrust Sleeve (3042)	JM
74128-A	1	†Adjusting Thrust Sleeve Nut (11442)	JN
74129-B	2	†Adjusting Thrust Sleeve Locking Spring (11422)	JV
74130-A	1	†Adjusting Thrust Sleeve Washer (11306)	HQ

Give Engine Number with Each Parts Order

GOVERNOR—INDUSTRIAL TYPE—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
14533-A	1	‡Adjusting Thrust Sleeve Bearing (i0382)	JP
74968-B	1	‡Adjusting Thrust Sleeve Bearing Ring (2636)	JI
74126-A	1	‡Adjusting Thrust Sleeve Lock (11441)	
74553-CS	1	*Yoke Assembly—Includes parts marked ¶ (15253)	IK
74554-C	1	¶Yoke (15242)	
74555-A	2	¶Yoke Pivot Bearing (10755)	
74556-C	1	¶Yoke Rack Roller Guide (15246)	
3639-A	1	¶Yoke Rack Roller Guide Rivet (11312)	
3638-A	1	¶Yoke Rack Roller Guide Rivet (11311)	
3637-A	1	¶Yoke Rack Roller Guide Stud (10765)	
74996-A	2	¶Yoke Rack Roller Guide Pilot Plug (11093)	
74972-B	1	*Yoke Shaft (2574)	HV
3657-A	2	*Yoke Shaft Seal (11117)	IA
3658-A	1	*Yoke Shaft Washer (11116)	HZ
3663-A	1	*Yoke Shaft Nut (10048)	HX
299-A	1	*Yoke Shaft Cotter Pin (10107)	HY
75539-A As Req.		*Yoke Shim—Thin	
75540-A As Req.		*Yoke Shim—Thick	

FUEL NOZZLE (Group 37)

(FOR SWEDGED HEAD TYPE FUEL LINES LISTED BELOW)

85972-BS	6	Fuel Nozzle and Holder Assembly—Includes parts marked *	
85895-BS	6	*Fuel Nozzle Holder Assembly—Bosch KB-35-S-27	YN
85151-A	6	*Fuel Nozzle Body with Valve—Bosch ADN-8-S2	YM
85154-A	6	Fuel Nozzle Clamp	
14142-A	12	Fuel Nozzle to Cylinder Block Stud Nut—7/8"-20 SAE	
85856-A	6	Fuel Nozzle Flared Tube Union	
1532-A	6	Fuel Nozzle Flared Tube Union Nut	
88733-DS	1	Fuel Nozzle Leakoff Manifold	

FUEL LINE ASSEMBLY (Group 38)

(SWEDGED HEAD TYPE)

88320-DS	1	Fuel Pump Fuel Line Assembly—Cylinder No. 1	YP
88321-DS	1	Fuel Pump Fuel Line Assembly—Cylinder No. 2	YP
88322-DS	1	Fuel Pump Fuel Line Assembly—Cylinder No. 3	YP
88323-DS	1	Fuel Pump Fuel Line Assembly—Cylinder No. 4	YP
88324-DS	1	Fuel Pump Fuel Line Assembly—Cylinder No. 5	YP
88325-DS	1	Fuel Pump Fuel Line Assembly—Cylinder No. 6	YP
88133-A	1	Fuel Pump Fuel Line Clamp—For 3 Lines	
4187-A	2	Fuel Pump Fuel Line Clamp Screw—1/4"-20x7/8"	
628-A	2	Fuel Pump Fuel Line Clamp Screw Lockwasher—1/4" SAE	

FUEL NOZZLE (Group 39)

(FOR ERMETO SAFETY FITTING TYPE FUEL LINES)

88562-BS	6	Fuel Nozzle and Holder Assembly—Includes parts marked *	
88563-BS	6	*Fuel Nozzle Holder Assembly—Includes part marked **	YN
85151-A	6	*Fuel Nozzle Body with Valve	YM
88829-B	6	**Fuel Nozzle Fuel Inlet Stud—SD7828	
85154-A	6	Fuel Nozzle Clamp	
14142-A	12	Fuel Nozzle Clamp Nut	
1533-A	6	Fuel Nozzle Flared Tube Union	
1532-A	6	Fuel Nozzle Flared Tube Nut	
88840-DS	1	Fuel Nozzle Leakoff Manifold—Replaces 88733-DS	
3550-A	1	Fuel Nozzle Leakoff Connection Tee Assembly—Replaces Following Three Parts	
3131-A	1	Fuel Nozzle Leakoff Connection Tee	
5313-A	1	Fuel Nozzle Leakoff Connection Reducing Bushing	
1533-A	1	Fuel Nozzle Leakoff Connection Union	

Give Engine Number with Each Parts Order

FUEL LINE (Group 40)

(ERMETO SAFETY FITTING TYPE)

Order Fittings Separately — Not Included with Fuel Lines

Part No.	No. Req'd	PART NAME	Illustration Reference
88341-DS	1	Fuel Pump Fuel Line—Cylinder No. 1	YP
88342-DS	1	Fuel Pump Fuel Line—Cylinder No. 2	YP
88343-DS	1	Fuel Pump Fuel Line—Cylinder No. 3	YP
88344-DS	1	Fuel Pump Fuel Line—Cylinder No. 4	YP
88345-DS	1	Fuel Pump Fuel Line—Cylinder No. 5	YP
88346-DS	1	Fuel Pump Fuel Line—Cylinder No. 6	YP
88118-A	6	Fuel Pump Fuel Line Nut—Nozzle End	
88119-A	6	Fuel Pump Fuel Line Nut—Pump End	
12220-A	12	Fuel Pump Fuel Line Ferrule	
88133-A	1	Fuel Pump Fuel Line Clamp—For 3 Lines	
4187-A	2	Fuel Pump Fuel Line Clamp Screw	
628-A	2	Fuel Pump Fuel Line Clamp Lockwasher	

FUEL OIL STRAINER—SINGLE (Group 41)

88547-B	1	Fuel Strainer Bracket	
11294-A	2	Fuel Strainer Bracket Attaching Stud— $\frac{5}{16}$ "x1 $\frac{3}{4}$ "	
335-A	2	Fuel Strainer Bracket Attaching Lockwasher— $\frac{5}{16}$ " SAE	
845-A	2	Fuel Strainer Attaching Stud Nut	
85664-CS	1	Fuel Strainer Assembly—Includes parts marked *	
1864-A	2	Fuel Strainer Attaching Screw— $\frac{3}{8}$ "-16x1"	
342-A	2	Fuel Strainer Attaching Screw Lockwasher— $\frac{3}{8}$ " SAE	
85667-C	1	*Fuel Strainer Head	
14573-A	2	*Fuel Strainer Vent Valve	
620-A	2	*Fuel Strainer Pipe Plug— $\frac{1}{4}$ " Std.	
85666-BS	1	*Fuel Strainer Inner Element Assembly	
85669-A	1	*Fuel Strainer Inner Element Gasket	
85665-BS	1	*Fuel Strainer Outer Element Assembly	
85663-A	1	*Fuel Strainer Outer Element Gasket	
85644-BS	1	*Fuel Strainer Case Assembly	
85670-BS	1	*Fuel Strainer Clamping Ring Assembly—Includes parts marked **	
85645-B	1	**Fuel Strainer Clamping Ring	
14567-A	4	**Fuel Strainer Clamping Ring Stud— $\frac{5}{16}$ "x1 $\frac{1}{2}$ "	
12062-A	4	**Fuel Strainer Clamping Ring Stud Nut— $\frac{5}{16}$ "-24	
13258-A	4	**Fuel Strainer Clamping Ring Stud Washer— $\frac{11}{32}$ "x $\frac{11}{16}$ "x $\frac{1}{16}$ "	
85668-A	1	*Fuel Strainer Clamping Ring Gasket	
14568-A	1	*Fuel Strainer Drain Plug	
14569-A	1	*Fuel Strainer Drain Plug Gasket	
14570-A	1	*Fuel Strainer Filler Plug	
14571-A	1	*Fuel Strainer Filler Plug Gasket	
88327-BS	1	Fuel Strainer Pipe—From Transfer Pump	
246-A	2	Fuel Strainer Union	
88326-BS	1	Fuel Strainer Pipe—To Injection Pump	
785-A	4	Fuel Strainer Pipe Nut	
280-A	2	Fuel Strainer Elbow	

Note—In addition and exception to the above parts use the following when automotive type governor is used—

88357-A	1	Oil Filter Offset Plate	
5497-A	2	Oil Filter to Offset Plate Screw— $\frac{3}{8}$ "-16x1 $\frac{1}{4}$ "	
300-A	2	Oil Filter to Offset Plate Screw Nut— $\frac{3}{8}$ "-16	
342-A	2	Oil Filter to Offset Plate Screw Lockwasher— $\frac{3}{8}$ " SAE	
88329-BS	1	Fuel Strainer Pipe—From Transfer Pump	
88328-BS	1	Fuel Strainer Pipe—To Injection Pump	
785-A	4	Fuel Strainer Pipe Nut	
246-A	1	Fuel Strainer Pipe Union—In Injection Pump	

Give Engine Number with Each Parts Order

FUEL OIL STRAINER—DUAL (Group 41-A)

Part No.	No. Req'd	PART NAME	Illustration Reference
86665-CS	1	Fuel Strainer—Includes parts marked *	
88930-A	1	Fuel Strainer Support Plate	
4064-A	2	Fuel Strainer Support Plate Attaching Screw	
312-A	2	Fuel Strainer Support Plate Screw Lockwasher	
4064-A	2	Fuel Strainer Attaching Screw	
312-A	2	Fuel Strainer Screw Lockwasher	
76525-AS	1	Fuel Strainer to Transfer Pump Line	
280-A	1	Fuel Strainer Elbow	
14051-A	1	Fuel Strainer Reducer	
86666-C	1	*Fuel Strainer Head	
86635-B	1	*Fuel Strainer Bracket	
2100-A	2	*Fuel Strainer to Bracket Screw	
312-A	2	*Fuel Strainer to Bracket Screw Lockwasher	
86623-BS	2	*Fuel Strainer Case Assembly	
85668-A	2	*Fuel Strainer Case Gasket	
85670-AS	2	*Fuel Strainer Clamping Ring Assembly (Includes Parts marked †)	
85645-B	2	†Fuel Strainer Clamping Ring	
14567-A	8	†Fuel Strainer Clamping Ring Stud	
12062-A	8	†Fuel Strainer Clamping Ring Stud Nut	
13258-A	8	†Fuel Strainer Clamping Ring Stud Washer	
82594-A	2	*Fuel Strainer Decal	
86047-AS	2	*Fuel Strainer Drain Plug Assembly	
14569-A	2	*Fuel Strainer Drain Plug Gasket	
82593-DS	2	*Fuel Strainer Element Assembly	
305-A	2	*Fuel Strainer Pipe Plug	
14570-A	1	*Fuel Strainer Head Plug	
14571-A	1	*Fuel Strainer Head Plug Gasket	

WATER PUMP (FIRST TYPE) (Group 42)

(HAS SHAFT SERRATED AT IMPELLER)

Note—A few of the first engines were supplied with water pump which did not have the shaft splined for generator coupling, this makes it essential to supply engine serial number when ordering parts.

88708-DS	1	Water Pump Assembly—Includes parts marked *	
88405-B	1	Water Pump Attaching Gasket	
626-A	1	Water Pump Attaching Stud Nut—½"-20	
352-A	4	Water Pump Attaching Screw—½"-13x1¼"	
312-A	5	Water Pump Attaching Screw Lockwasher—½" SAE	
88403-B	1	Water Pump Discharge Pipe	
4841-A	1	Water Pump Discharge Pipe Gasket	
14512-A	1	Water Pump Discharge Pipe Screw—½"-13x1½"	
4339-A	1	Water Pump Discharge Pipe Screw—½"-13x1¾"	
312-A	2	Water Pump Discharge Pipe Attaching Lockwasher—½" SAE	
4834-A	2	Water Pump Discharge Pipe Hose	
8846-A	4	Water Pump Discharge Pipe Hose Clamp	
415-A	1	Water Pump Discharge Pipe Plug	
19499-A	1	Water Pump Discharge Pipe Extension Tube	
88416-C	1	*Water Pump Drive Gear	AL
88670-D	1	*Water Pump Bearing Sleeve	AF
88671-D	1	*Water Pump Body	R
11342-A	6	*Water Pump Body to Bearing Sleeve Stud—⅜"x1⅜"	Y
752-A	6	*Water Pump Body to Bearing Sleeve Stud Nut—⅜"-24	X
342-A	6	*Water Pump Body to Bearing Sleeve Stud Lockwasher	W
88677-B	1	*Water Pump Body to Bearing Sleeve Gasket	V
88691-C	1	*Water Pump Shaft	AM
4563-A	1	*Water Pump Drive Gear Key	AK
88679-A	1	*Water Pump Shaft Bearing—At Drive End	AI
88678-A	1	*Water Pump Shaft Bearing Snap Ring	AJ
88680-A	1	*Water Pump Shaft Bearing Spacer	AH
88683-A	1	*Water Pump Shaft Oil Slinger	AG

Give Engine Number with Each Parts Order

WATER PUMP (FIRST TYPE)—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
88682-A	1	*Water Pump Tachometer Drive Gear	AE
513-A	1	*Water Pump Tachometer Drive Gear Key	AD
3741-A	1	*Water Pump Shaft Bearing—Center	AC
88692-A	1	*Water Pump Shaft Bearing Locknut	AA
11341-A	1	*Water Pump Shaft Bearing Locknut Lockwasher	AB
12150-A	1	*Water Pump Oil Seal	Z
88693-BS	1	*Water Pump Seal Assembly—Large at Front—Includes parts marked **	
11340-A	1	**Water Pump Seal Snap Wire	U
88676-A	1	**Water Pump Seal Washer	T
88675-A	1	**Water Pump Seal Flexible Seal	S
88689-A	1	**Water Pump Seal Spring Guide	Q
88674-A	1	**Water Pump Seal Spring	P
88673-A	1	**Water Pump Seal Clamp Ring	N
88672-B	1	**Water Pump Impeller	M
11334-A	1	*Water Pump Impeller Pin— $\frac{3}{16}$ "x2½"	L
88694-BS	1	*Water Pump Seal Assembly—Small at Rear—Includes parts marked †	
88685-A	1	†Water Pump Seal Clamp Ring	K
88687-A	1	†Water Pump Seal Spring	J
88686-A	1	†Water Pump Seal Spring Guide	I
88688-A	1	†Water Pump Seal Flexible Seal	H
88690-A	1	†Water Pump Seal Washer	G
11339-A	1	†Water Pump Seal Snap Wire	F
11336-A	1	*Water Pump Cork Retaining Washer	E
11337-A	1	*Water Pump Cork Washer	D
11335-A	1	*Water Pump Cork Retainer	C
59-A	1	*Water Pump Grease Plug— $\frac{1}{8}$ "	B
11338-A	1	*Water Pump Shaft Bearing	A
61-A	1	*Water Pump Pipe Plug— $\frac{3}{8}$ "	O
60-A	4	*Water Pump Pipe Plug— $\frac{1}{4}$ "	AN

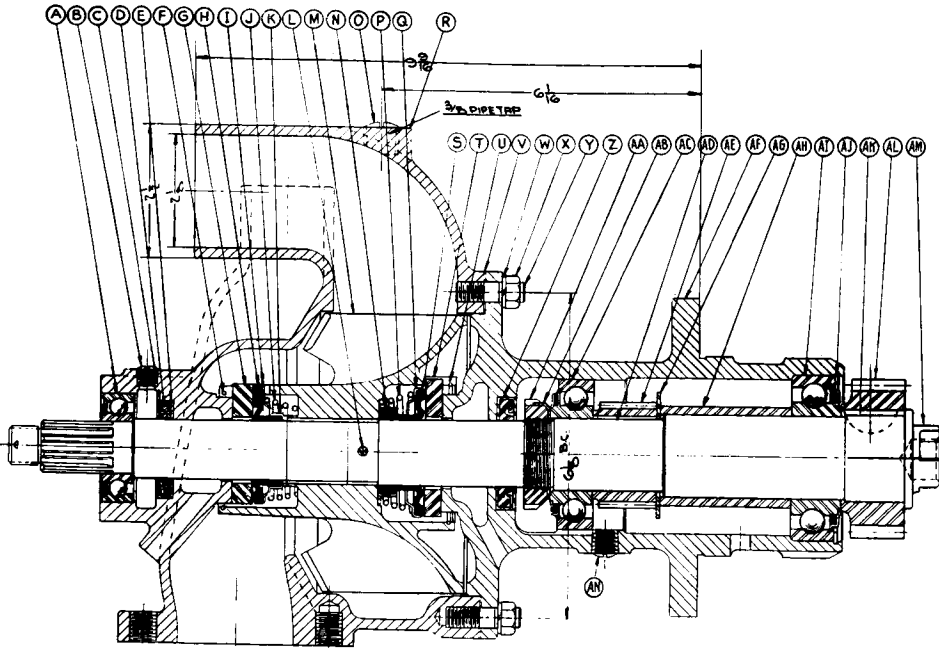


Illustration Reference A to AN

WATER PUMP (SECOND TYPE) (Group 43)
(SHAFT NOT SERRATED)

Part No.	No. Req'd	PART NAME	Illustration Reference
88663-DS	1	Water Pump Assembly—Same as 88708-DS except the following parts replace similar parts in 88708-DS	
88665-C	1	Water Pump Shaft—Replaces 88691-C	
88668-C	1	Water Pump Impeller—Replaces 88672-B	
11540-A	1	Water Pump Impeller Pin—Replaces 11334-A	
88944-BS	1	Water Pump Seal Assembly—At Front—Includes parts marked *—Replaces 88693-BS	
11340-A	1	*Water Pump Seal Snap Ring	
88666-A	1	*Water Pump Seal Washer—Replaces 88676-A	
88675-A	1	*Water Pump Seal Flexible Seal	
88689-A	1	*Water Pump Seal Spring Guide	
88674-A	1	*Water Pump Seal Spring	
88673-A	1	*Water Pump Seal Clamp Ring	
88667-A	1	*Water Pump Seal Spacer	

(Attaching Parts same as listed on Page 28)

WATER PUMP (THIRD TYPE) (Group 44)
(SHAFT NOT SERRATED. BOTH SEALS SAME SIZE.)

88662-DS	1	Water Pump Assembly—Includes parts marked *	1
88940-D	1	*Water Pump Body	2
88941-D	1	*Water Pump Bearing Sleeve	21
88677-B	1	*Water Pump Bearing Sleeve Gasket	19
315-A	6	*Water Pump Bearing Sleeve Screw—¾"-16x⅞"	20
342-A	6	*Water Pump Bearing Sleeve Lockwasher—¾"	3
88943-C	1	*Water Pump Shaft	4
88942-C	1	*Water Pump Impeller	22
11540-A	1	*Water Pump Impeller Pin No. 4 Taper x 2½"	5
88416-A	1	*Water Pump Drive Gear	10
4563-A	1	*Water Pump Drive Gear Key—No. 13 Woodruff	

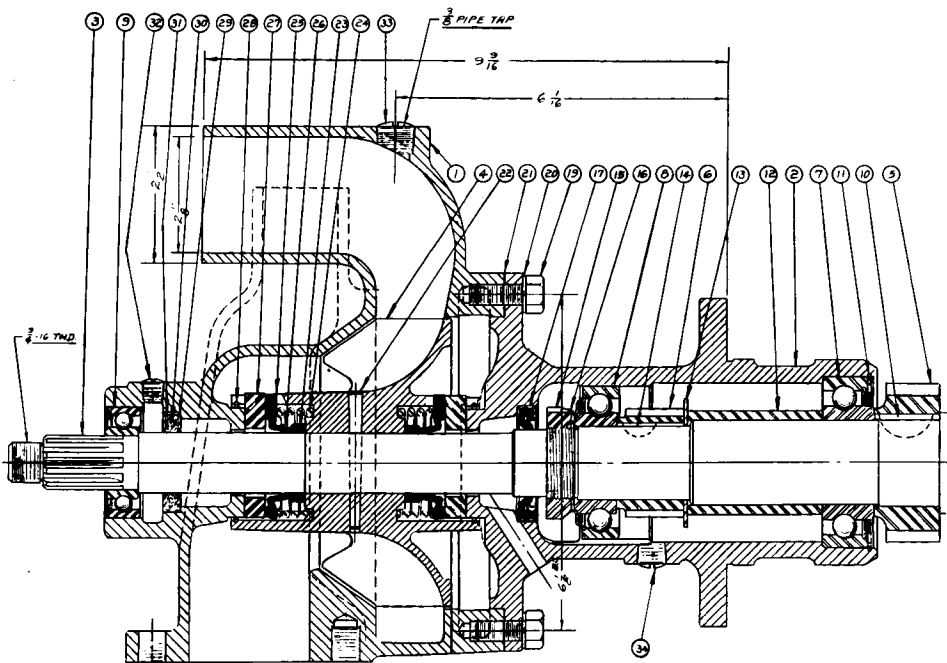


Illustration Reference 1 to 34

WATER PUMP (THIRD TYPE)—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
88679-A	1	*Water Pump Bearing—At Drive End	7
11541-A	1	*Water Pump Bearing Snap Ring	11
88680-A	1	*Water Pump Bearing Spacer	12
88683-A	1	*Water Pump Oil Slinger	13
88682-A	1	*Water Pump Tachometer Drive Gear	6
513-A	1	*Water Pump Tachometer Drive Gear Key	14
3741-A	1	*Water Pump Bearing—Center	8
88692-A	1	*Water Pump Bearing Locknut	15
11341-A	1	*Water Pump Bearing Lockwasher	16
12150-A	1	*Water Pump Oil Seal	17
88945-BS	2	*Water Pump Seal Assembly—Includes parts marked **	
88685-A	2	**Water Pump Seal Clamp Ring	23
88689-A	2	**Water Pump Seal Spring	24
88686-A	2	**Water Pump Seal Spring Guide	25
88688-A	2	**Water Pump Seal Flexible Seal	26
88950-A	2	**Water Pump Seal Washer—Replaces 88690-A	27
11339-A	2	**Water Pump Seal Snap Wire	28
11336-A	1	*Water Pump Cork Retainer Washer	29
11337-A	1	*Water Pump Cork Washer	30
11335-A	1	*Water Pump Cork Retainer	31
11338-A	1	*Water Pump Bearing	9
59-A	1	*Water Pump Pipe Plug—½"	32
60-A	4	*Water Pump Pipe Plug—¼"	34
61-A	2	*Water Pump Pipe Plug—⅜"	33

(Attaching Parts same as listed on Page 29)

WATER OUTLET MANIFOLD, BY-PASS TUBE AND THERMOSTAT (Group 45)

88703-D	1	Water Outlet Manifold	
88714-A	2	Water Outlet Manifold Attaching Gasket	
352-A	4	Water Outlet Manifold Attaching Screw—½"-13x1½"	
312-A	4	Water Outlet Manifold Attaching Lockwasher—½" SAE	
565-A	1	Water Outlet Manifold Pipe Plug—¾" Std.	
3351-A	1	Thermostat	
88704-C	1	Thermostat Housing	
85557-A	1	Thermostat Housing Gasket	
4776-A	4	Thermostat Housing Attaching Stud—¾"x3⅞"	
752-A	4	Thermostat Housing Attaching Nut—¾"-24	
342-A	4	Thermostat Housing Attaching Lockwasher—¾" SAE	
88797-D	1	Thermostat By-Pass Tube—Does not have Air Compressor Connection	
88705-D	1	Thermostat By-Pass Tube—Used with Air Compressor	
4452-A	2	Thermostat By-Pass Tube Hose	
11609-A	1	Thermostat By-Pass Tube Hose—Used with 88705-D—Replaces 4452-A	
8159-A	4	Thermostat By-Pass Tube Hose Clamp	
88709-B	1	Thermostat By-Pass Tube Clamp	
14982-A	1	Thermostat By-Pass Tube Clamp Screw—¾"-24x¼"	
752-A	1	Thermostat By-Pass Tube Clamp Screw Nut—¾"-24	
342-A	1	Thermostat By-Pass Tube Clamp Screw Lockwasher—¾" SAE	
60-A	1	Water Outlet Manifold Pipe Plug—¼" Std.	
4312-A	1	Water Outlet Manifold Pipe Plug ½"	

WATER INLET PIPE (Group 46)

88402-A	1	Water Inlet Pipe—Used with Oil Cooler	
88706-B	1	Water Inlet Pipe	
829-A	1	Water Inlet Pipe Gasket	
352-A	2	Water Inlet Pipe Screw	
312-A	2	Water Inlet Pipe Lockwasher	
415-A	1	Water Inlet Pipe Plug	

Give Engine Number with Each Parts Order

AIR COMPRESSOR DRIVE (Group 47)
 (BELT DRIVEN FOR 7¼" CU. FT. COMPRESSOR)

Part No.	No. Req'd	PART NAME	Illustration Reference
86276-B	1	Air Compressor Driven Pulley	
88156-D	1	Air Compressor Bracket	
88753-A	1	Air Compressor Bracket Gasket	
4064-A	4	Air Compressor Bracket Screw—½"-13x1¼"	
312-A	4	Air Compressor Bracket Lockwasher—½"	
15795-A	1	Air Compressor to Bracket Gasket	
1173-A	4	Air Compressor to Bracket Screw—¾"-14x1¼"	
335-A	4	Air Compressor to Bracket Lockwasher—¾"	
59-A	1	Air Compressor Bracket Pipe Plug—⅜"	
88157-AS	1	Air Compressor Lubricating Tube Assembly	
4280-A	1	Air Compressor Lubricating Tube Nipple	
14670-A	1	Air Compressor Lubricating Tube Tee	
3375-A	1	Air Compressor Lubricating Tube Metering Elbow	
1533-A	1	Air Compressor Lubricating Tube Union	
23042-CS	1	Breather Assembly	
Water cooling parts furnished on some engines are as follows—			
85175-BS	1	Water Tube Assembly—Water Pump to Compressor	
85176-BS	1	Water Tube Assembly—Compressor to Water Outlet Pipe	
246-A	2	Water Tube Union	
280-A	2	Water Tube Elbow	

AIR COMPRESSOR DRIVE (Group 48)
 (BELT DRIVEN FOR 12 CU. FT. COMPRESSOR)

88159-C	1	Air Compressor Driven Pulley	
88158-D	1	Air Compressor Bracket	
88753-A	1	Air Compressor Bracket Gasket	
352-A	4	Air Compressor Bracket Screw—½"-13x1¼"	
312-A	4	Air Compressor Bracket Lockwasher—½"	
14386-A	4	Air Compressor to Bracket Screw—¾"-14x1¼"	
335-A	4	Air Compressor to Bracket Lockwasher—¾"	
74866-A	1	Air Compressor Lubricating Tube Assembly	
1659-A	1	Air Compressor Lubricating Tube Elbow	
88796-BS	1	Breather Assembly	
88786-A	1	Breather Tube	
5871-A	1	Breather Chain Attaching Screw	
5043-A	1	Breather Chain Attaching Screw Nut	
1219-A	1	Breather Chain Attaching Screw Nut Lockwasher	
Water cooling parts furnished on some engines are as follows—			
88648-BS	1	Water Tube Assembly—Water Pump to Compressor	
2396-A	2	Water Tube Union	
3204-A	1	Compressor Water Outlet Nipple	
11546-A	1	Compressor Water Outlet Hose	
14391-A	2	Compressor Water Outlet Hose Clamp	

(Use these parts with By-Pass Tube 88705-D)

GENERATOR DRIVE COUPLING (SMALL TYPE GENERATOR) (Group 49)

Note—A few of the first engines were supplied with water pump which did not have the splined shaft, this makes it essential to supply engine serial number when ordering parts.

88550-BS	1	Generator Drive Coupling Assembly—Includes parts marked *
88551-A	1	*Generator Drive Front Hub
76966-B	1	*Generator Drive Rear Hub
15731-A	1	*Generator Drive Flexible Disc
15527-A	6	*Generator Drive Cup
15734-A	6	*Generator Drive Cup

Give Engine Number with Each Parts Order

GENERATOR DRIVE COUPLING—Cont'd

Part No.	No. Req'd.	PART NAME	Illustration Reference
4108-A	3	*Generator Drive Bolt—Replaces 3230-A	
309-A	6	*Generator Drive Nut— $\frac{7}{8}$ "-24	
299-A	6	*Generator Drive Cotter Pin— $\frac{11}{16}$ "x $\frac{3}{4}$ "	
11345-A	1	Generator Drive Nut—Front Hub— $\frac{3}{4}$ "-16	
72-A	1	Generator Drive Key—Front Hub	
3420-A	1	Generator Drive Nut Cotter— $\frac{3}{2}$ "x1½"	
2210-A	2	Generator Attaching Dowel	

**GENERATOR DRIVE COUPLING
(Large Type Generator) (Group 49-A)**

88550-BS	1	Generator Drive Coupling Assembly (At Water Pump) (Includes parts marked *)	
88551-A	1	*Generator Drive Coupling Front Hub	
76966-A	1	*Generator Drive Coupling Rear Hub	
15731-A	1	*Generator Drive Coupling Flexible Disc (Rubber)	
15527-A	6	*Generator Drive Coupling Cup	
15734-A	6	*Generator Drive Coupling Cup	
4108-A	6	*Generator Drive Coupling Bolt	
309-A	6	*Generator Drive Coupling Bolt Nut	
299-A	6	*Generator Drive Coupling Bolt Cotter Pin	
4622-A	1	Generator Drive Shaft Nut	
298-A	1	Generator Drive Shaft Nut Cotter	
14744-A	1	Generator Drive Shaft Washer	
88552-B	1	Generator Drive Shaft	
11345-A	1	Generator Drive Shaft to Coupling Nut	
3420-A	1	Generator Drive Shaft to Coupling Nut Cotter	
4017-AS	1	Generator Drive Coupling Assembly (At Generator) (In- cludes parts marked †)	
4019-A	1	†Generator Drive Coupling Front Hub	
4018-A	1	†Generator Drive Coupling Rear Hub	
4021-A	6	†Generator Drive Coupling Cup	
4108-A	6	†Generator Drive Coupling Bolt	
309-A	6	†Generator Drive Coupling Bolt Nut	
299-A	6	†Generator Drive Coupling Bolt Cotter	
4020-A	1	†Generator Drive Coupling Flexible Disc (Fibre)	
4022-A	1	Generator Drive Coupling to Shaft Nut	
4023-A	1	Generator Drive Coupling to Shaft Plain Washer	
2210-A	2	Generator Attaching Dowel	

TURNING CRANK ASSEMBLY (Group 50)

88775-CS	1	Turning Crank Assembly—Includes parts marked *	
7201-A	1	*Turning Crank Grab	
2036-A	1	*Turning Crank Grab Pin	
88776-B	1	*Turning Crank Shaft	
7290-B	1	*Turning Crank Handle	
375-A	1	*Turning Crank Handle Clamp Screw	
342-A	1	*Turning Crank Handle Clamp Screw Lockwasher	
752-A	1	*Turning Crank Handle Clamp Screw Nut	
2042-A	1	*Turning Crank Handle Key	
2038-A	1	*Turning Crank Handle Grip	
2037-A	1	*Turning Crank Handle Grip Shaft	

FAN DRIVING PARTS (Group 51)

88294-C	1	Fan Drive Pulley—4 Vee—8 $\frac{3}{8}$ " and 9 $\frac{1}{8}$ " O.D.	
88288-C	1	Fan Drive Pulley—2 Vee—9 $\frac{1}{8}$ " O.D.	
22920-A	1	Fan Drive Pulley Key	
85624-A	1	Fan Drive Pulley Retainer Screw	
88289-A	1	Fan Drive Pulley Retainer Washer	
3229-A	1	Fan Drive Pulley Retainer Screw Pin	
1739-A	1	Fan Drive Pulley Retainer Screw Pin Set Screw	

Give Engine Number with Each Parts Order

FAN ASSEMBLIES AND BELTS (Group 52)

Part No.	No. Req'd	PART NAME	Illustration Reference
88290-CS	1	Fan Assembly—8 Blade 26" Dia.—Height 16 3/4"	.....
88292-CS	1	Fan Assembly—6 Blade 30" Dia.—Height 21 1/2"	.....
88296-CS	1	Fan Assembly—8 Blade 26" Dia.—Height 21 1/2"	.....
88824-CS	1	Fan Assembly—8 Blades 34" Dia.—Height 24 1/2"	.....
88295-CS	1	Fan Assembly—6 Blade 30" Dia.—Height 21 1/2"	.....
30324-B	2	Fan Belt—67 1/2" Outside Circumference	.....
88293-B	2	Fan Belt—68 3/4" Outside Circumference	.....
31563-B	2	Fan Belt—60" Outside Circumference	.....
86288-A	2	Fan Belt—81" Outside Circumference	.....

TOOLS (Group 53)

88745-AS	1	Tool and Wrench Set—Includes parts marked *	.....
3100-B	1	*Wrench Ratchet Handle—HR-1	.....
3101-A	1	*Wrench Ratchet Handle 4" Extension—HE-12	.....
3102-A	1	*Wrench Ratchet Handle 8" Extension—HE-14	.....
3189-A	1	*Wrench Ratchet Handle 1/2"—SR-4	.....
3168-A	1	*Wrench Ratchet Handle 6" Extension—SE-6	.....
3107-A	1	*Socket Wrench Adapter 3/4" to 1/2"—SA-8	.....
3169-A	1	*Sliding T Bar Handle—HH-4	.....
3112-A	1	*Socket—1"—HS-6	.....
3104-A	1	*Socket—1 5/8"—HS-4	.....
3113-A	1	*Socket—1 1/8"—HS-8	.....
3108-A	1	*Socket—1 1/8"—SS-4	.....
3170-A	1	*Socket—1 1/8"—SS-8	.....
11258-A	1	*Socket—1 1/2"—HS-22	.....
3171-A	1	*Socket—5/8"—SS-10	.....
3109-A	1	*Socket—3/4"—SS-14	.....
3172-A	1	*Socket—7/8"—SS-18	.....
3173-A	1	*Socket—1 1/8"—SS-20	.....
3111-A	1	*Box Socket Wrench—3/4" and 7/8"—BW-38	.....
3110-A	1	*Box Socket Wrench—1 1/8" and 5/8"—BW-24	.....
3175-A	1	*Open End Wrench—1/2" and 3/8"—EW-16	.....
3177-A	1	*Open End Wrench—5/8" and 3/4"—EW-28	.....
3178-A	1	*Open End Wrench—1 1/8" and 1 1/8"—EW-38	.....
3179-A	1	*Open End Wrench—1" and 1 1/8"—EW-40	.....
11036-A	2	*Open End Wrench—3/4" and 7/8"	.....
77900-DS	1	Nozzle Testing Kit Assembly	.....
77906-DS	1	Nozzle Cleaning Kit Assembly	.....
13266-AS	1	Cylinder Sleeve Fixture—Model DFXB (TA-3784)	.....
13267-AS	1	Cylinder Sleeve Fixture—Model DFXC (TA-3785)	.....
13361-AS	1	Cylinder Sleeve Fixture—Model DFXD (TA-3786)	.....
13370-AS	1	Cylinder Sleeve Fixture—Model DFXE (TA-3787)	.....

Model "DFXC"
5 1/4" x 6"

Supplement showing parts which differ from the DFXD model.
The DFXC has 5/4" Cylinders.

CYLINDER BLOCK AND CYLINDER HEAD (Group 54)

88013-ES	1	Cylinder Block Assembly—Includes Sleeves, Studs, Camshaft and Main Bearings, Caps and Plugs	.....
88004-C	6	Cylinder Sleeve	.....
88335-A	6	Cylinder Block Combustion Chamber Liner—Upper	WB
88336-A	6	Cylinder Block Combustion Chamber Liner—Lower	WA
88310-D	2	Cylinder Head	XD
88223-D	2	Cylinder Head Gasket	XE

Give Engine Number with Each Parts Order

PISTON (Group 55)(FOR 5 $\frac{1}{4}$ " BORE)

Part No.	No. Req'd.	Description	Illustration Reference
88214-C	6	Piston—5 $\frac{1}{4}$ " Diameter	WN
88216-B	6	Piston Pin	WQ
86017-A	12	Piston Pin Retaining Ring	
88217-A	24	Piston Ring—Compression— $\frac{1}{8}$ "	WO
30198-A	12	Piston Ring—Oil Regulating— $\frac{1}{4}$ "	WP

Model "DFXE"5 $\frac{5}{8}$ " x 6"

Supplement showing parts which differ from the DFXD model.
The DFXE has 5 $\frac{5}{8}$ " Cylinders

CYLINDER BLOCK AND CYLINDER HEAD (Group 56)

88025-E	1	Cylinder Block Assembly—Includes Sleeves, Studs, Camshaft and Main Bearings, Caps and Plugs	
88021-C	6	Cylinder Sleeve	
88303-E	2	Cylinder Head	XD
88301-D	2	Cylinder Head Gasket	XE

(Combustion Chamber Liners same as DFXD Model)

PISTON (Group 57)(FOR 5 $\frac{5}{8}$ " BORE)

88022-C	6	Piston—5 $\frac{5}{8}$ " Diameter	WN
86020-B	6	Piston Pin	WQ
86017-A	12	Piston Pin Retaining Ring	
3846-A	24	Piston Ring—Compression— $\frac{1}{8}$ "	WO
3932-A	12	Piston Ring—Oil Regulating— $\frac{1}{4}$ "	WP

Model "DFXB"

5" x 6"

Supplement showing parts which differ from the DFXD model.
The DFXB has 5" Cylinders.

CYLINDER BLOCK AND CYLINDER HEAD (Group 58)

88014-ES	1	Cylinder Block Assembly—Includes Sleeves, Studs, Camshaft and Main Bearings, Caps and Plugs	
88225-C	6	Cylinder Sleeve	
85322-A	6	Combustion Chamber Liner—Upper	WB
86313-A	6	Combustion Chamber Liner—Lower	WA
88309-D	2	Cylinder Head	XD
88221-D	2	Cylinder Head Gasket	XE

PISTON (Group 59)

(FOR 5" BORE)

86018-C	6	Piston—5" Diameter	WN
88215-B	6	Piston Pin	WQ
86017-A	12	Piston Pin Retaining Ring	
85015-A	24	Piston Ring—Compression	WO
30197-A	12	Piston Ring—Oil Regulating	WP

Give Engine Number with Each Parts Order