



Parts Manual

DOOB, DOOC, & DOOD

JENSALES.COM



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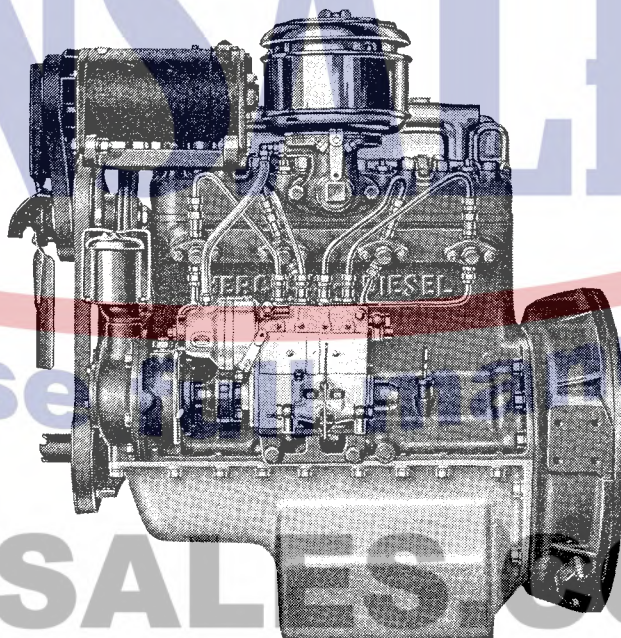
PARTS LIST

HERCULES

FOUR CYLINDER DIESEL ENGINE

of the

“DOO” SERIES



JENSALLES.COM
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HERCULES MOTORS CORP.

CANTON, OHIO, U.S.A.

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Group Index

SECTION I

Ford and Chevrolet Special Parts—See Sections II—III—IV—V—VI

(Section II Index on Page 32)

(Section III Index on Page 45)

(Section IV Index on Page 60)

(Section V Index on Page 71)

(Section VI Index on Page 86)

A	Text Page	L	Text Page
Air Cleaners.....	18-30-31	Lubricating Oil Filter.....	16-17
Air Inlet Pipe.....	17-18	Lubricating Oil Viscometer.....	17
Air Inlet Venturi and Valve.....	18		
B		M	
Bearings, Main.....	7	Main Bearing Caps and Studs.....	7
Bellhousing.....	14	Main Bearings.....	7
Bellhousing Adapter Ring.....	14	Manifold, Exhaust.....	19
Breather.....	11		
C		O	
Camshaft.....	8-9	Oil Filler and Breather.....	11
Connecting Rod.....	7-8	Oil Filter, Lubricating.....	16-17
Crankshaft.....	8	Oil Level Gauge.....	7-16
Cylinder Block and Crankcase.....	6-30	Oil Pan.....	14-15
Cylinder Block and Crankcase Accessories.....	7	Oil Pan and Pump (Base Type).....	16
Cylinder Block Expansion and Pipe Plugs.....	7	Oil Pipe.....	15
Cylinder Head.....	9-30-31	Oil Pump.....	15
Cylinder Head Cover.....	10	Oil Viscometer, Lubricating.....	17
E		P	
Exhaust Manifold.....	19	Pistons.....	8-30®
F		R	
Fan Assemblies.....	28	Rocker Arms.....	9
Fan Drive Belts.....	28		
Fan Driving Parts.....	13	S	
Flywheel.....	14	Seals.....	6
Front Support.....	28-29		
Fuel Lines.....	21	T	
Fuel Nozzle.....	20	Tachometer Drive.....	27
Fuel Nozzle Leakoff Manifold.....	21	Thermostat and Bypass.....	28
Fuel Pump.....	21-22-26	Tools.....	31
Fuel Pump Bracket.....	20	Turning Crank.....	28
Fuel Pump Attaching Parts.....	27		
Fuel Pump Drive.....	19-20	V	
Fuel Pump Drive Chain Adjustment.....	20	Vacuum Pump and Drive.....	29
Fuel Pump Drive Coupling.....	27	Valve Rocker Arms.....	9
Fuel Strainer.....	21	Valves.....	9
G		Viscometer Instrument.....	17
Gasket Assemblies.....	6	W	
Gear Compartment Cover.....	10-11	Water Outlet Manifold.....	28
Generator Drive.....	29	Water Outlet Pipes.....	28
Governor Assembly.....	22-23-24-25-26	Water Pump Assembly.....	11-12-13
		Wrenches and Tools.....	31

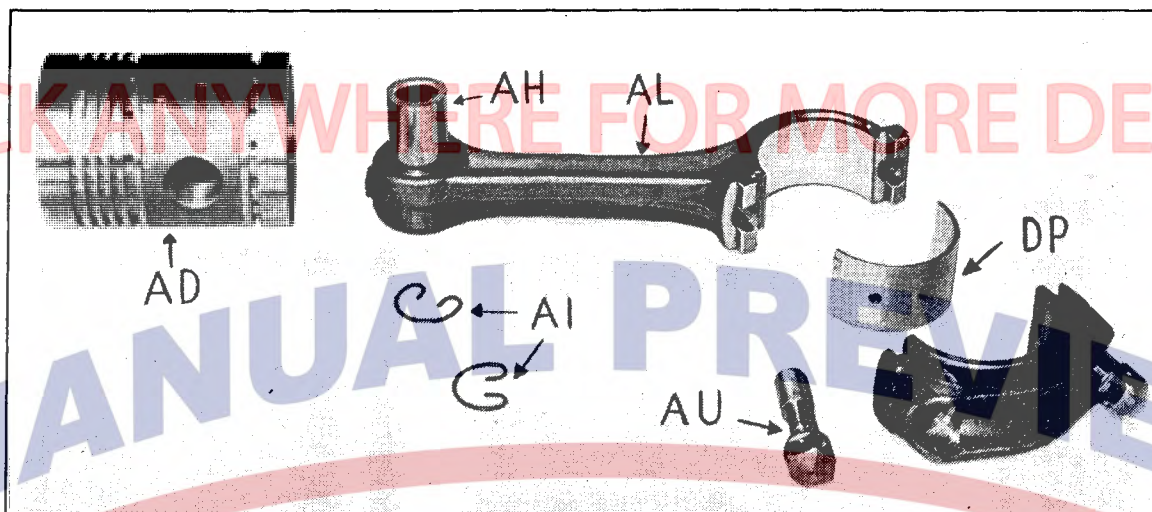
INDEX FOR DIFFERENT MODELS

Internal parts not affected by bore changes are shown on pages 6 to 29.

SPECIAL PARTS

Model "DOOC".....	Page 30
Model "DOOD".....	Pages 30-31

Wrenches and Tools.....	Page 31
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Piston and Connecting Rod

CONNECTING ROD (GROUP 8)—Continued

Part No.	No. Req'd	PART NAME	Illustration Reference
267-A	4	Connecting rod cap screw lockwire.....	
76021-A	4	Connecting rod piston pin bushing—upper end.....	UW
78693-B	8	*Connecting rod bearing shell—hi-lead.....	DP & UZ

PISTONS—FOR 3 $\frac{3}{4}$ " BORE (GROUP 9)

77215-C	4	Piston—3 $\frac{3}{4}$ " (Supersedes 76215-C).....	AD & SH
76219-A	4	Piston pin—3.208" long.....	AH & SK
76019-A	8	Piston pin retaining ring.....	AI & SL
3811-A	16	Piston ring—compression— $\frac{1}{8}$ "x3 $\frac{3}{4}$ " (supersedes and interchangeable with 76216-A).....	SI
3911-A	4	Piston ring—oil $\frac{3}{16}$ "x3 $\frac{3}{4}$ "—above pin—has undercut slots (supersedes and interchangeable with 76217-A).....	SJ
40116-A	4	Piston ring—oil $\frac{3}{16}$ "x3 $\frac{3}{4}$ "—below pin—has plain slots.....	SM

CRANKSHAFT (GROUP 10)

Give engine number when ordering crankshaft
Counterweighted and non-counterweighted crankshafts of same type are interchangeable.

75604-D	1	Crankshaft—standard—counterweighted—Replaces 74600-D.....	TO
74601-D	1	Crankshaft—standard—no counterweights.....	
74602-D	1	Crankshaft—drilled for oil wick at rear—counterweighted.....	
74616-B	1	Crankshaft—drilled for oil wick—no counterweights.....	
22104-A	4	Crankshaft flywheel bolt— $\frac{1}{2}$ "x1 $\frac{11}{32}$ ".....	SS
1656-A	4	Crankshaft flywheel bolt nut.....	SR
1710-A	4	Crankshaft flywheel bolt nut cotter.....	
1707-A	2	Crankshaft flywheel dowel.....	SV
665-A	2	Crankshaft flywheel expansion plug.....	SW
44026-B	1	Crankshaft gear—Replaces 22039-B.....	TM
4642-A	1	Crankshaft dowel.....	
4265-A	1	Crankshaft gear key—No. 91 Woodruff.....	
40076-A	1	Crankshaft oil thrower.....	
74603-AS	1	Oil wick and sleeve assembly for 74602-D and 74616-D shafts.....	

CAMSHAFT (GROUP 11)

74060-D	1	Camshaft.....	TS
76049-B	1	Camshaft gear.....	TV
4265-A	1	Camshaft gear key.....	
76054-A	1	Camshaft drive sprocket.....	TT
4265-A	1	Camshaft drive sprocket key.....	

Give Engine Number with Each Parts Order

GEAR (AND CHAIN) COMPARTMENT COVER (GROUP 16)—Cont'd

Part No.	No. Req'd	PART NAME	Illustration Reference
30064-A	30	Gear cover thrust plate shim—.005 shim.....	
14715-A	9	Gear cover thrust plate screw— $\frac{3}{8}$ "-16x1 $\frac{9}{32}$ ".....	
342-A	9	Gear cover thrust plate lock washer— $\frac{3}{8}$ " S. A. E.....	
31244-A	1	Gear cover chain inspection plug—brass.....	
31245-A	1	Gear cover chain inspection plug gasket.....	
14147-A	1	Gear cover chain stop pin— $\frac{1}{4}$ " dia. x $\frac{1}{16}$ ".....	
		Chain adjustment parts are listed under Groups 34-A and 34-B	

OIL FILLER AND BREATHER (GROUP 17)

76359-CS	1	Breather assembly (Includes parts marked *).....	
76931-B	1	*Breather body.....	
19065-B	1	*Breather cap.....	
19067-A	1	*Breather cap gasket—cork.....	
19066-A	1	*Breather cap bail wire.....	
4647-A	1	*Breather cap rivet— $\frac{3}{16}$ x 1 $\frac{3}{4}$ ".....	
10-A	1	*Breather cap rivet cotter pin — $\frac{1}{16}$ x $\frac{1}{2}$ ".....	
8442-A	1	*Breather body hair.....	

WATER PUMP ASSEMBLY (GROUP 18)

(Blind End—Standard Pump)

74195-DS	1	Water pump assembly (Includes parts marked *).....	
76189-A	1	Water pump attaching gasket.....	
315-A	4	Water pump attaching screw— $\frac{3}{8}$ "-16x $\frac{7}{8}$ ".....	
342-A	4	Water pump attaching screw lock washer— $\frac{3}{8}$ " S. A. E.....	
74175-B	1	Water pump discharge pipe.....	VI
76190-A	1	Water pump discharge pipe gasket.....	

Give Engine Number with Each Parts Order

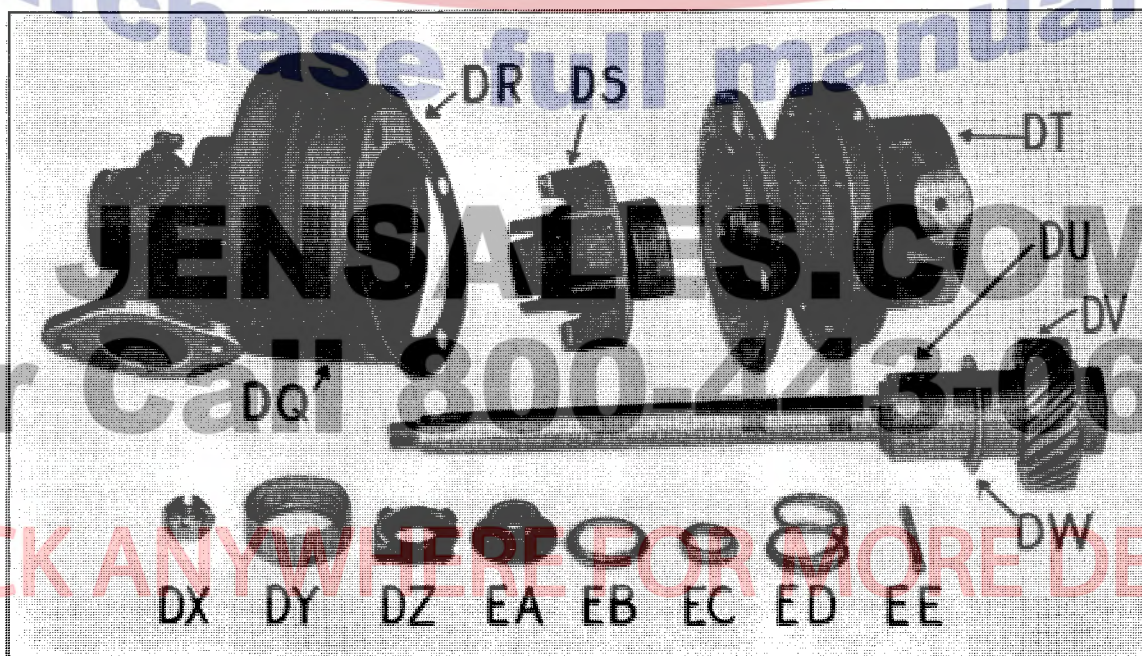


Water Pump Assembly

WATER PUMP ASSEMBLY (GROUP 18)—Continued

Part No.	No. Req'd	PART NAME	Illustration Reference
14099-A	2	Water pump discharge pipe screw— $\frac{3}{8}$ "-16x1 $\frac{7}{8}$ "	
342-A	2	Water pump discharge pipe screw lock washer— $\frac{3}{8}$ " S. A. E.	
14452-A	1	Water pump discharge pipe hose—1 $\frac{3}{4}$ " ID x 2 $\frac{1}{4}$ " OD x 2"	
8159-A	2	Water pump discharge pipe hose clamp—2 $\frac{1}{4}$ " ID wire type	
60-A	1	Water pump discharge pipe plug— $\frac{1}{4}$ " std.—slotted	
75191-AS	1	*Water pump body and stud assembly, includes parts marked #	
74196-A	1	#Water pump body	1 & FA
14609-A	4	#Water pump body attaching stud— $\frac{5}{16}$ "x1 $\frac{1}{8}$ "	16
74197-B	1	*Water pump cover	13 & FD
74198-B	1	*Water pump impeller	7-FC
74199-B	1	*Water pump shaft	26-FM
75190-AS	1	*Water pump sleeve and bushing assembly—includes parts marked †	
74194-C	1	†Water pump sleeve	22-FE
74193-B	1	†Water pump shaft bushing	21
74192-A	1	*Water pump oil seal	20-FG
4622-A	1	*Water pump shaft nut— $\frac{1}{2}$ "-20—slotted	3-FH
301-A	1	*Water pump shaft cotter— $\frac{3}{32}$ "x $\frac{3}{4}$ "	2
3310-A	1	*Water pump impeller key—No. 3 Woodruff	4-FN
74191-AS	1	*Water pump seal assembly (Includes parts marked **)	
16852-A	1	**Water pump seal clamp ring— $\frac{59}{64}$ " dia.	8-FP
16851-A	1	**Water pump flexible seal	9-FQ
76193-A	1	**Water pump seal spring	10-FO
40685-A	1	**Water pump spring guide—1 $\frac{15}{32}$ " dia.	11-FR
76192-A	1	**Water pump seal carbon washer	5-FS
46807-A	1	*Water pump impeller snap ring	6-FT
76189-A	1	*Water pump body gasket	12-FB
28-A	4	*Water pump body attaching stud nut— $\frac{5}{16}$ "-24 Hex.	15
615-A	4	*Water pump body attaching stud lockwasher— $\frac{5}{16}$ " S. A. E.	14
14911-A	1	*Water pump shaft bearing—New Departure No. 88504	19-FF
16841-A	1	*Water pump shaft bearing lock nut	17-FI
16839-A	1	*Water pump shaft bearing lockwasher	18-FJ
76183-B	1	*Water pump drive gear	25-FL
4265-A	1	*Water pump drive gear key—No. 91 Woodruff	24-FU
76187-A	1	*Water pump drive gear thrust washer	23-FK

Give Engine Number with Each Parts Order



Water Pump Assembly