

AERONAUTICAL PARTS&SUPRLIES

Everything for the Airplane Owner, Operator & Manufacture

CATALOG

NICHOLAS-BEAZLEY AIRPLANE CO. 12

HOME OFFICE ENGLISH AT NORTH ST. MARSHALL, MO.

WESTERN BRANCH
6235 SAN FERNANDO ROAD
OPPOSITE GRAND CENTRAL AIRPORT
GLENDALE, CALIF.

EASTERN BRANCH FLOYD BENNETT FIELD HANGAR NO.3 BROOKLYN, NEW YORK

LOVE FIELD
DALLAS, TEXAS

CATALOG M

AIRPLANE MOTORS—PARTS SUPPLIES

Including Complete Parts Lists of Curtiss OX 5, Curtiss OXX6, Velie, Lambert, Kinner and Genet Engines

AUTHORIZED WRIGHT ENGINE PARTS DEALERS



The spacious hangar type ENN-BEE factory and warehouse at Marshall, Missouri, occupies nearly one square block, for our complete stock of aeronautical supplies. In addition, we maintain branches in New York, California and Texas, all of which carry complete stocks at all times. The geographical location of these four sources of supply combined with convenient arrangement to expedite filling your orders, enable us to give you same day shipments. Upon this service our large list of completely satisfied customers has been built.

NICHOLAS-BEAZLEY AIRPLANE COMPANY, Inc.

Phone, 1400

HOME OFFICE - - - MARSHALL, MISSOURI

Cable Address: NIBCO MARSHALLMO

EASTERN BRANCH

Hangar No. 3, Floyd Bennett Field, Brooklyn, New York New York Phone: NIghtingale 4-2701 Cable Address: NIBPLANE NEWYORK

BENTLEY CODE

WESTERN BRANCH

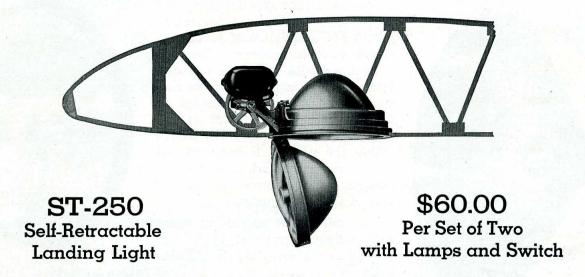
6235 San Fernando Road, Glendale, California
Los Angeles Phone: CApital 8212
Glendale Phone: Douglass 264
Cable Address: NIBDALE GLENDALECALIF

SOUTHERN BRANCH

Love Field, Dallas, Texas Dallas Phone: 5-4651



GRIMES LANDING LIGHTS



Easy Installation
Very Efficient
Reasonably Priced
Interchangeable

Completely Automatic
Will Open at 250 M.P.H.
Light in Weight
Properly Designed

The Grimes Self-Retractable Landing Lights are adaptable to all planes having a wing thickness of 4 inches or more. They are completely automatic; when the switch is turned on the lamps light and emerge from the wing casting two light rays visible for a great distance; when the switch is turned off the lamps become dark and retract into the wing. Emergence of these lights is guaranteed against an air resistance caused by a speed of 250 M.P.H. The only exposed surface is the rim on outside of wing held in place with twelve screws. This surface is nickel plated, resistant to rust and the effects of exposure. The silvered metal reflector is highly polished and encased with lamp in a dirt and dust proof container. No corrosion or deterioration to reflecting surface.

The ST-250 landing light is substantially built throughout and moderately priced.

Installation of the ST-250 landing light in the wing is very easily accomplished either when recovering or as a separate operation. A piece of ¼ inch veneering is required between two ribs. A round eight-inch hole is cut for the rim which holds the light.

Three wires extend from the switch to rear of light; the ground, light and motor wires. These wires are soldered into the terminals for permanency, the terminals being held in place by spring pressure. The three terminal posts are plainly marked ground, light and motor.

Light operation is with a 12-volt, 315 C.P. lamp which draws only 15 amperes and is interchangeable. The lamps are equipped with a ring instead of a shield, which eliminates the necessity of having a right and left hand lamp. The weight per unit is only 3½ pounds. Wiring and installation drawings accompany each set.

LANDING LIGHT PARTS AND LAMPS

For planes using the Grimes Landing and Position Lights either of the two Exide batteries 6-XT-13-1 or 6-TS-13-1 are recommended for the planes' requirements.

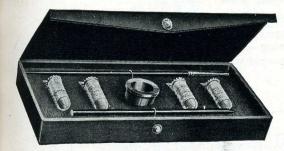
ST-250	Glass Lens (individually packed)Each	\$1.50
ST-250	Silvered Reflector (individually packed)Each	2.00
ST-250	Gaskets (3 required)Each	.05
ST-250	Outside Band (12 holes)Each	1.50
ST-250	3-way Switch	1.50
ST-250	2-gang Switch PlateEach	.50
ST-250	Lamps 315 C.P., 12-16 volt (individually packed)Each	4.50

WE SHIP THE SAME DAY-EVERY DAY



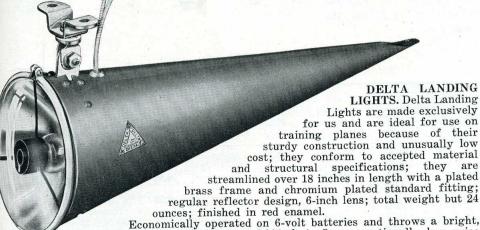
LIGHTING EQUIPMENT

ILLUMINATE YOUR DIALS



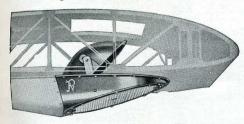
This is a handy set for making your own instrument dials luminous. It consists of 1 bottle containing ½ gram of Undark Radium Luminous material of 20 microlambert luminosity, which is standard Army-Navy requirement for aeronautical instruments; 1 bottle of practice material, 1 bottle of adhesive, 1 bottle thinner, a mixing cup, a glass mixing rod and a No. 00 brush. Undark Illuminating Set.....\$5.60

DELTA LANDING LIGHTS



intense wide beam over 2,000 feet. Our exceptionally low price places night flying equipment within reach of every one; you should have your plane equipped with landing lights. Completely equipped with bulbs and fittings all ready to install.

PYLE-NATIONAL LANDING LIGHTS are designed on proven aerodynamic, optical and mechanical principles to insure minimum weight and head resistance. Furnished in three sizes with either silver or chromium plated copper reflectors.



TYPE LANR-1250-SR LANDING LIGHTS. Designed to be built into the wings. Has 12-inch prismatic lens and silver plated copper reflector. Adjustable both up and down or to right or left. Used with 12-volt, 20 amp. medium prefocal base type lamp. Complete less bulbs. (Use Mazda A-19.)

Type LANR-1250-SR Light.each \$100.00



TYPE LAN-605 LANDING LIGHT. The short shell permits installation in the leading edge, giving a very neat appearance. The smooth blend of the shell and wing keeps head resistance to the minimum. Priced less bulb (use Mazda A-19).

Type LAN-605 Light.....each \$60.00

Res APPLE DE

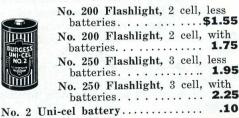
TYPE LAN-600 LANDING LIGHT. 6-inch, reflector arranged for 10-12-volt prefocused lamp base, complete with streamline body. Less bulbs. (Use Mazda A-19.)

Type LAN-600 Light.....each \$70.00

FOCUSING FLASHLIGHT



This dependable, efficient focusing flashlight is especially adapted for use in all parts of the aviation industry. Encased in rubber, with unbreakable, non-inflammable lens, it is positively waterproof and dust-proof, and is not affected by climatic conditions. Positive switch of brass and blue steel clock spring. Scientific reflector gives condensed center and broad light. Inner case of treated steel and cadmium plated to resist corrosion. Sturdy and substantial high grade materials used throughout. Carries standard flashlight batteries.



INSTRUMENT BOARD LIGHT



The No. 1948 Dash Lamp is regularly used by Aircraft manufacturers and is U. S. Army Air Corps Number AC-31-193. The switch is operated by turning the hood. Mounts in one ¾" hole, comes without bulb and is finished dull bronze.

No. 1948 Cockpit Lamp.....(Use Mazda No. 68 bulb.)

IGNITION BATTERY



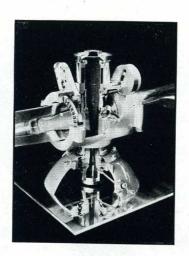
No. 4F4H Burgess battery contains 16 cells and has a rated voltage of 6 volts. This battery replaces the old type hot-shot and is 40% less in weight. Built in water-proof metal container for rough usage and vibration. Weight 6 lb. 4 oz. Size 5¾"x 8¼"x2½".

No. 4F4H Ignition Battery \$1.80

HAMILTON STANDARD

HAMILTON STANDARD PRO-PELLERS represent the results of years of extensive research and development. The design of these propellers allows the highest aerodynamic efficiency and torque - resisting strength, without excessively increasing the weight.

They are available in two types. In the adjustable type (illustrated below) the pitch of the blades can be changed on the ground. The controllable type allows changing the pitch of the blades in flight by means of the hydraulic method of operation. Engine oil pressure is used to move



the blades into low pitch position. The blades are shifted into high pitch position by means of centrifugal counterweights attached directly to the blade ends when the oil pressure is released. By means of adjustment within the counterweight, the blade angle can be set to any two desired pitches within any arc of from 6 to 10 degrees, depending upon design. A cut-away section of the controllable hub assembly and blade-end is illustrated at the left. These propellers are offered for sale at Brooklyn, Dallas and Marshall.

(Not listed for export shipment.)



PRICES AND DATA ON HAMILTON STANDARD ADJUSTABLE PROPELLERS

				H	UB				BLADE			Complete	Propeller
ENGINE	Shaft End	No. of Blades	Design No.	A.T.C. H.P.	A.T.C. R.P.M.	List Price	Design No.	A.T.C. H.P.	A.T.C. R.P.M.	List Price	Max. Prop. Dia.	Prop. Wt., Lbs.	Complet List Price
60-200 H. P. American Cirrus Lambert R-266		2 2	7020 7029	125 125	2400 2400	\$ 60.00 60.00	25V2 25V2	63	2400	\$ 45.00	7' 7'	33	\$150.00
Warner-Scarab, Jr Warner-Scarab Kinner K-5		2 2 2	7005 7005 7005	125 125 125	2400 2400	60.00	25V2 19V2	63 63 63	2400 2400 2200	45.00 45.00 70.00	7' 7' 8'4"	34 33 42	150.00 150.00 200.00
Kinner B-5 or R-5 Warner Super Scarab. Menasco C-4 or B-6 Menasco B-4	No. 1 Taper No. 1 Taper No. 10 Spline	2 2 2 2	7056 7056 7061 5008	125 195 195 195 125	2400 2200 2200 2200 2500	60.00 80.00 80.00 80.00	$19V2$ $19B\frac{1}{2}$ $19B\frac{1}{2}$ $19B\frac{1}{2}$	63 98 98 98	2200 2200 2200 2200	70.00 85.00 85.00 85.00	8'4" 8'6" 8'6" 8'6"	42 63.2 63.2 63.2	200.00 250.00 250.00 250.00
201-450 H. P.	***************************************			125	2500	80.00		63	2200	85.00	8'6"	50	250.00
Continental R-670	No. 20 Spline	2	5404	250	2200	120.00	5B1	125	2400	120.00	9'	79	360.00
Lycoming R-680	No. 20 Spline	2	5404	250	2200	120.00	A3A1 5B1	$\frac{350}{125}$	$\frac{2500}{2400}$	140.00 120.00	10' 9'	88 79	400.00 360.00
Jacobs L-4	No. 20 Spline	2	5404	250	2200	120.00	A3A1 5B1	350 125	$\frac{2500}{2400}$	140.00 120.00	10'	88 79	400.00 360.00
Kinner L-5	No. 30 Spline	2	5406	500	2500	130.00	A3A1 5B1	350 125	2500 2400	140.00 120.00	10'	88 79	400.00 370.00
201-450 H. P. Wasn Jr	No. 30 Spline	2	5406	500	2500	130.00	A3A1 5B1	$\frac{350}{125}$	$\frac{2500}{2400}$	140.00 120.00	10′	88 79	410.00 370.00
Series	No. 30 Spline	2	5406	500	2500	130.00	A3A1 5B1	350 125	$\frac{2500}{2400}$	140.00 120.00	10' 9'	88 79	410.00 370.00
Wasp C	No. 30 Spline	2	5406	500	2500	130.00	A3A1 A3A1 A1C1	350 350 250	2500 2500	140.00 140.00	10' 10'	88 88	410.00 410.00
151-600 H. P. Wasp "D" D. D	No. 30 Spline	2	5903	750	2500	160.00	D7C1½ 33C1½	350 300	2200	190.00	10′9″	128	430.00
	No. 30 Spline	3	5909	750	2500	250.00	41A1½ A3A1	300 300 350	2400 2400 2500	160.00 160.00 140.00	9′0″ 9′6″ 10′	98 110 128	480.00 480.00 670.00
Wasp "H" D. D	No. 40 Spline	2	5976	750	2500	160.00	A1C1 D7C1½	250 350	2200 2200	150.00 190.00	10' 10'9"	153 128	760.00 540.00
Wasp Geared	No. 40 Spline	3	5977	1125	2500	275.00	33C1½ 41A1½ D7C1½ 41A1½	300 300 350 300	2400 2400 2200 2400	160.00 160.00 190.00 160.00	9' 9'6" 10'9" 9'6"	98 110 185.5 158.5	480.00 480.00 845.00 755.00
Hornet D. D.	No. 40 Spline	2	5978	1000	2500	240.00	17A2	355	2000	190.00	11'	140	620.00
Twin Wasp, Jr., Geared 4:3 and 3:2 Wright Cyclone D. D	No. 40 Spline	3	5977	1125	2500	275.00	D7C1½ 33C1½	350 300	2200 2400	190.00 160.00	10'9"	185.5 140.5	845.00 755.00
Wright Cyclone, Geared 16:11	No. 50 Spline	3	5985	1500	2500	400.00	41A1½	300	2400	160.00	9'6"	158.5	755.00
Wright Cyclone.	No. 50 Spline	3	5985	1500	2500	400.00 400.00	43A2 43A2	300 300	1500 1500	350.00 350.00	13' 13'	267.5 267.5	1450.00 1450.00
Geared 8:5 Twin Wasp Geared	No. 40 Spline No. 50 Spline	3	5979 5985	1500 1500	2500 2500	400.00 400.00	43A2 43A2	300 300	1500 1500	350.00 350.00	13' 13'	263 267.5	1450.00 1450.00

Above Prices F.O.B. East Hartford, Conn.—Subject to Change Without Notice.



GENUINE KINNER ENGINE PARTS

AS AUTHORIZED PARTS DEALERS we stock and supply only GENUINE KINNER PARTS. The parts are listed by assembly to help you determine the correct number and price. It covers the K-5, 100 H.P.; B-5, 125 H.P. (front exhaust type), and R-5, 160 H.P. (front exhaust type), Kinner Engines. Parts that regularly require replacing are carried in stock for immediate delivery. All the graphs of the parts or prices will be supplied. others will be secured promptly. Parts or prices will be supplied for other models on request. Prices are established by the factory

	CRANK CASE REAR CO	VEI	2		
	CHAIN CASE REAR OC		nber	Used	Price
Part No.	Description of Part	K-5	B-5	R-5	Each
560 11 7 1	Rear cover assemblyRear cover assembly	. 1	1	1	\$ 75.00 107.25
1137	Rear cover oil passage plug			2	.28
1138	Oil relief passage plug			1	.28
1172	Plug, oil thermometer			$_{1}^{1}$	1.10 .06
1173 F-89	Gasket, oil thermometer	1	1	i	1.93
F-89B	Starter cover plate gasket	1	1	1	.06
253_	Starter cover cap screw	4	4	4	.22
1217 1183	Stud, rear cover to case			6	.55
103	bosses on cover)			2	.55
	CRANK CASE MAIN SEC	TIO	N		
01	Crank case assembly w/studs and bearing	1			330.00
67	Crank case assembly w/studs and bearing		1		357.50
170	Crank case assembly w/studs and hearing			1	396.00
4-2	Rear main bearing	1	1 1		4.20 4.20
A-2Z .119	Rear main bearing, .020 OS (O.D.) Rear main bearing	Ţ	T	1	7.15
272	Dean main beautism (seeman lead tyme)	1,.		1	21.00
350	Pipe plug, %"	1	1	1	.28
394 216	Stud. 5"x11/2"	1	41	41 1	.30 .30
80	Rear main bearing (copper lead type) Pipe plug, %" Stud, ½"x1½" Stud, ½"x1½" Stud, %"x1½" Stud, %"x1½" Stud, %"x1½" Bearing lock screw.	40	40	40	.30
08W	Stud, %"x116", .005 OS	40	40	40	.30
-7 -48	Bearing lock screw	1	1 1	1 1	.22
12	Motor mount stud, .005 OS	10	10	10	.30
12W	Motor mount stud, .005 OS	10	10	10 10	.30
02 79	Stud for Stromberg carburetor	4	10	4	.11
41	¾" Welch plug	1	. 1	3	.06
28	Rear cover dowel	2.	2	2	.22
9 12	Breather pipe Breather gasket	1 1		. 1	3.14 .09
135	Breather pipe	-	1		6.99
2134	Breather gasket		1		.09
00	CRANK CASE FRONT CO		R		20.00
	Front cover assemblyFront cover assembly	VE 1	R 1		39.00 63.00
73 156	Front cover assemblyFront cover assembly	1	1	1	63.00 107.25
73 156 \-1	Front cover assembly Front cover assembly Front main bearing	1	1	1	63.00 107.25 6.00
73 156 \-1 \-1Z	Front cover assembly	1	1	1	63.00 107.25 6.00 6.00
000 73 156 A-1 A-1Z 271 F-48	Front cover assembly	1 1 1	1 1 1	1 1 1 1	63.00 107.25 6.00 6.00 25.50
73 156 1-1 1-1Z 271 1-48 95	Front cover assembly	1 1 1	1 1 1	1 1 1 1 6	63.00 107.25 6.00 6.00 25.50 .06
73 156 -1 -1Z 271 -48 95 136	Front cover assembly	1 1 1	1 1 1	1 1 1 1	63.00 107.25 6.00 6.00 25.50
73 156 -1 -1Z 271 -48 95 136	Front cover assembly	1 1 1 6 1	1 1 1 6	1 1 1 6 1	63.00 107.25 6.00 6.00 25.50 .06 .30 .28
73 156 1 1Z 271 48 95 136 41	Front cover assembly Front cover assembly Front cover assembly Front main bearing Front main bearing, .020 OS (O.D.) Front main bearing (copper lead type) Bearing lock screw Stud, ½"x1½" Front cover oil passage plug Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly	1 1 1 6 1	1 1 1 6 1	1 1 1 6 1	63.00 107.25 6.00 25.50 .06 .30 .28 5.34
73 156 -1 -1Z 271 -48 95 136 -41	Front cover assembly Front cover assembly Front cover assembly Front main bearing Front main bearing, .020 OS (O.D.) Front main bearing (copper lead type) Bearing lock screw Stud, ½ "X1½". Front cover oil passage plug Front cover plate CRANK SHAFTS AND PROPEL	1 1 1 6 1	1 1 1 6	1 1 1 6 1	63.00 107.25 6.00 6.00 25.50 .06 .30 .28 5.34
73 156 1-1 1-1 271 271 28 95 136 -41 04 69 120	Front cover assembly Front cover assembly Front cover assembly Front main bearing Front main bearing, .020 OS (O.D.) Front main bearing (copper lead type) Bearing lock screw Stud, ½"x1½" Front cover oil passage plug Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly Crank shaft assembly Crank shaft assembly Counter weight screw	1 1 1 6 1	1 1 1 6 1	1 1 1 6 1 JBS	63.00 107.25 6.00 6.00 25.50 .06 .30 .28 5.34 272.25 272.25 272.25 294.25
73 156 1-1 1-1 271 -48 95 136 -41 04 69 120 -5	Front cover assembly Front cover assembly Front cover assembly Front main bearing Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw Stud, ½"X1½" Front cover oil passage plug Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly Crank shaft assembly Crank shaft assembly Counter weight screw Counter weight screw	1 1 1 6 1 LER 1	1 1 1 6 1 1 R HU	1 1 1 6 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71
73 156 1-1 1-1 271 1-48 95 136 1-41 04 69 120 120 127	Front cover assembly Front cover assembly Front cover assembly Front main bearing Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw Stud, ½"X1½" Front cover oil passage plug Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly Crank shaft assembly Crank shaft assembly Counter weight screw Counter weight screw	1 1 1 6 1 LER	1 1 1 6 1 R HU	1 1 1 6 1 JBS	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71
73 156 1-1 1-1 2 271 1-48 95 136 1-41 004 69 120 5-5 127 91	Front cover assembly Front cover assembly Front cover assembly Front main bearing Front main bearing (200 OS (O.D.). Front main bearing (200 OS (O.D.). Front main bearing (200 OS (O.D.). Front cover oil passage plug Front cover oil passage plug Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly Crank shaft assembly Crank shaft assembly Counter weight screw Counter weight screw Counter weight tubular dowel. Counter weight tubular dowel. Counter weight lock pin	1 1 1 6 1 1 LER 1 6 4 6	1 1 1 6 1 1 R HU	1 1 1 1 6 1 1 JBS	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71 1.71 .17
73 156 1-1 1-1 271 148 95 136 1-41 04 120 120 127 91 135 331 331	Front cover assembly Front cover assembly Front cover assembly Front main bearing. Front main bearing, .020 OS (O.D.) Front main bearing (copper lead type) Bearing lock screw. Stud, ½"X1½". Front cover oil passage plug Front cover oil passage plug. Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly Crank shaft assembly Crank shaft assembly Counter weight screw Counter weight screw Counter weight tubular dowel. Counter weight tubular dowel. Counter weight lock pin Counter weight	1 1 1 6 1 LER 1 6	1 1 1 6 1 1 8 HU 1 6 4	1 1 1 1 6 1 1 1 6 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 274.25 294.25 1.71 1.71 1.71 .17 .06 16.50
73 156 1-1 1-12 271 1-48 95 136 1-41 04 659 120 127 91 127 91 135 31 31 35 31	Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, ½"X1½" Front cover oil passage plug. Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel Counter weight tubular dowel Counter weight lock pin Counter weight	1 1 1 6 1 LEF 1 6 4 6 2	1 1 1 6 1 1 6 4 6	1 1 1 1 6 1 1 1 6 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71 1.71 .17 .06 16.50
73 156 -1 156 -1 -1 271 -48 95 95 96 96 91 90 91 91 91 91 91 91 91 91 91 91 91 91 91	Front cover assembly Front cover assembly Front cover assembly Front main bearing Front main bearing, .020 OS (O.D.) Front main bearing (copper lead type) Bearing lock screw. Stud, ½"x1½". Front cover oil passage plug Front cover plate. CRANK SHAFTS AND PROPEL Crank shaft assembly Crank shaft assembly Crank shaft assembly Counter weight screw Counter weight screw Counter weight tubular dowel. Counter weight tubular dowel. Counter weight lock pin Counter weight Counter weight Counter weight Counter weight Counter weight Counter weight Propeller hub key dowel.	1 1 1 6 1 LEF 1 6 4 6 2 1	1 1 1 6 1 1 6 4 6	1 1 1 1 6 1 1 1 6 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 274.25 294.25 1.71 1.71 1.71 1.71 .06 16.50 18.50 .06
73 73 74 75 76 77 77 77 77 77 77 77 77 77 77 77 77	Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, %"X1%" Front cover oil passage plug. Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel Counter weight tubular dowel Counter weight Propeller hub key dowel. Propeller hub key Timing pinion nut.	1 1 1 6 1 LEF 1 6 4 6 2 1 1 2	1	1 1 1 1 6 1 1 1 6 4 6 2 1 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71 1.71 .17 .06 16.50 18.50 .55
78 78 78 71 76 76 77 77 78 78 78 78 78 78 78 78 78 78 78	Front cover assembly. Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud. ½"X1½" Front cover oil passage plug. Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel Counter weight tubular dowel Counter weight lock pin Counter weight Counter weight Counter weight Propeller hub key dowel Propeller hub key Timing pinion nut. Timing pinion bolt.	1 1 1 6 1 LEF 1 6 4 6 2 1 1 2 1	1	1 1 1 1 6 1 1 1 6 1 1 6 1 6 1 6 1 6 1 6	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71 1.71 .17 .06 16.50 18.50 1.38 2.09
78 78 78 156 1-1 157 1-1 158 159 169 169 169 169 169 169 170 185 170 185 170 185 170 185 185 185 185 185 185 185 185 185 185	Front cover assembly. Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, %"X1%" Front cover oil passage plug. Front cover plate. CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel. Counter weight tubular dowel. Counter weight tubular dowel. Counter weight Counter weight Counter weight Propeller hub key dowel. Propeller hub key Timing pinion bolt. Timing pinion bolt. Timing pinion washer Crank shaft pin oil plug nut.	1 1 1 6 1 LEF 1 6 4 6 2 1 1 2	1	1 1 1 1 6 1 1 1 6 4 6 2 1 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71 1.71 .17 .06 16.50 18.50 .55
78 78 78 71 76 76 77 77 78 78 78 78 78 78 78 78 78 78 78	Front cover assembly Front cover assembly Front cover assembly Front main bearing Front main bearing, .020 OS (O.D.) Front main bearing (copper lead type) Bearing lock screw Stud, Front cover oil passage plug Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly Crank shaft assembly Crank shaft assembly Counter weight screw Counter weight screw Counter weight tubular dowel Counter weight tubular dowel Counter weight tubular dowel Counter weight tubular dowel Counter weight Lock pin Counter weight Lock pin Counter weight Propeller hub key dowel. Propeller hub key dowel. Propeller hub key dowel. Timing pinion nut. Timing pinion bolt. Timing pinion washer. Crank shaft pin oil plug nut Crank shaft pin oil plug stud	1 1 1 6 1 LEF 1 6 4 6 2 1 1 2 1 1 2 1	1	1 1 1 1 6 1 1 1 6 1 1 6 1 6 1 6 1 6 1 6	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71 1.71 .17 .06 16.50 18.50 1.38 2.09 .11
73 73 74 75 76 77 77 77 77 77 77 77 77 77 77 77 77	Front cover assembly. Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, %"X1%" Front cover oil passage plug. Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel Counter weight tubular dowel Counter weight Counter weight Counter weight Propeller hub key dowel. Propeller hub key dowel. Propeller hub key Timing pinion nut Timing pinion bolt Timing pinion washer Crank shaft pin oil plug nut Crank shaft pin oil plug stud Crank shaft plug bolt	1 1 1 1 6 1 1 6 4 6 2 1 1 2 1 2 1 2 1 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 2 1 2 2 2 2 1 2 2 2 2 2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1	1 1 1 1 6 1 1 1 6 1 1 6 1 2 1 2 3	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 294.25 294.25 1.71 1.71 .17 .06 16.50 18.50 .06 .1.38 2.09
78 78 78 71 76 76 77 77 78 78 78 78 78 78 78 78 78 78 78	Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, ½"X1½" Front cover oil passage plug. Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel Counter weight tubular dowel Counter weight tubular dowel Counter weight Counter weight Counter weight Counter weight Topeller hub key dowel Propeller hub key dowel Propeller hub key Timing pinion nut. Timing pinion bolt. Timing pinion washer Crank shaft pin oil plug stud. Crank shaft plug bolt Crank pin oil plug bolt Crank pin oil plug bolt Crank pin oil plug	1 1 1 6 1 LEF 1 6 4 6 2 1 1 2 1 1 2 1	1	1 1 1 1 6 1 1 1 6 1 1 6 1 6 1 6 1 6 1 6	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71 1.77 .17 .06 16.50 .55 1.38 2.09 .11 1.38 .83 2.09 .28
73 73 74 75 76 77 77 77 77 77 77 77 77 77 77 77 77	Front cover assembly. Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, %"X1%" Front cover oil passage plug. Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel Counter weight tubular dowel Counter weight Counter weight Counter weight Propeller hub key dowel. Propeller hub key dowel. Propeller hub key Timing pinion nut. Timing pinion bolt. Timing pinion washer. Crank shaft pin oil plug nut. Crank shaft pin oil plug stud. Crank shaft pin oil plug stud. Crank shaft oil plug. Crank pin oil plug bolt. Crank pin oil plug bolt. Crank pin oil plug bolt. Crank pin oil plug	1 1 1 6 1 1 6 4 6 2 1 1 2 2 1 1 2 1	1	1 1 1 1 6 1 1 6 1 1 6 4 6 6 2 1 1 2 3 3 3 3 3 1 1 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 294.25 294.25 1.71 1.71 .17 .06 16.50 18.50 .06 .138 2.09 .11 1.38 2.09 .28
78 78 78 71 76 76 77 77 78 78 78 78 78 78 78 78 78 78 78	Front cover assembly. Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, fa xi fa Front cover oil passage plug. Front cover plate. CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel. Counter weight tubular dowel. Counter weight lock pin. Counter weight Propeller hub key dowel. Propeller hub key Timing pinion holt. Timing pinion bolt. Timing pinion bolt. Timing pinion washer Crank shaft pin oil plug stud. Crank shaft pin oil plug stud. Crank shaft pin oil plug stud. Crank pin oil plug bolt. Crank pin oil plug. Ccter pin	1 1 1 6 1 LEF 1 6 4 6 2 1 1 2 1 1 2 1	1	1 1 1 1 6 1 1 6 4 6 2 1 1 2 3	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 274.25 294.25 1.71 1.77 .17 .06 16.50 .06 .55 1.38 2.09 .11 1.38 2.09 .28 .83 2.09
73 73 74 75 76 77 77 77 77 77 77 77 77 77 77 77 77	Front cover assembly. Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, %"X1%" Front cover oil passage plug. Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel Counter weight tubular dowel Counter weight tubular dowel Counter weight Counter weight Propeller hub key dowel. Propeller hub key dowel. Propeller hub key Timing pinion nut. Timing pinion bolt. Timing pinion washer. Crank shaft pin oil plug stud. Crank shaft pin oil plug stud. Crank shaft pin oil plug stud. Crank shaft oil plug. Crank pin oil plug bolt. Crank pin oil plug bolt. Crank pin oil plug cotter pin. Propeller hub lock put	1 1 1 6 1 1 6 4 6 2 1 1 2 2 1 1 2 1	1	1 1 1 1 6 1 1 6 1 1 6 4 6 6 2 1 1 2 3 3 3 3 3 1 1 1	63.00 107.25 6.00 6.00 25.50 .30 .30 5.34 272.25 294.25 272.25 294.25 1.71 1.71 .17 .06 16.50 18.50 .06 .1.38 2.09 .28 .28 .38 .38 .39 .468
73 73 74 75 76 77 77 77 77 77 77 77 77 77 77 77 77	Front cover assembly. Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing (copper lead type) Bearing lock screw. Stud. fa"XI fa" Front cover oil passage plug. Front cover plate. CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel. Counter weight tubular dowel. Counter weight lock pin. Counter weight Propeller hub key dowel. Propeller hub key Timing pinion nut. Timing pinion bolt. Timing pinion washer Crank shaft pin oil plug stud. Crank pin oil plug bolt. Crank pin oil plug bolt. Crank pin oil plug bolt. Crank pin oil plug Crank pin oil plug Propeller hub lock nut. Propeller hub nut lock. Propeller hub nut lock. Propeller nut, puller type.	1 1 1 6 1 1 6 4 6 2 1 1 2 2 1 1 2 1	1	1 1 1 1 6 1 1 6 1 1 6 4 6 6 2 1 1 2 3 3 3 3 3 1 1 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 274.25 294.25 1.71 1.77 .17 .06 16.50 .06 .55 1.38 2.09 .11 1.38 2.09 .28 .83 2.09
73 156 151 151 151 152 151 151 152 153 153 153 153 153 153 153 153 153 153	Front cover assembly. Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, %"X1%" Front cover oil passage plug. Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel Counter weight tubular dowel Counter weight tubular dowel Counter weight Counter weight Propeller hub key dowel Propeller hub key dowel Propeller hub key Timing pinion nut Timing pinion bolt. Timing pinion washer Crank shaft pin oil plug nut Crank shaft plug bolt Crank shaft oil plug Cotter pin Propeller hub lock nut Propeller hub lock nut Propeller hub lock nut Propeller hub nut lock Propeller nut, puller type	1 1 1 6 1 1 6 4 6 2 1 1 1 2 1 1 2 1 1 4 4 1 1 1 2 1 1 1 1	1	1 1 1 1 6 1 1 6 1 1 6 4 6 6 2 1 1 2 3 3 3 3 3 1 1 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 294.25 294.25 1.71 1.71 .17 .06 16.50 18.50 .06 .1.38 2.09 .28 .83 .20 .28 .83 .28 .01 4.68 .44 5.89 5.89
73 73 74 75 74 75 74 75 74 75 76 76 76 76 76 76 76 76 76 76 76 76 76	Front cover assembly. Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, %"X1%" Front cover oil passage plug. Front cover plate. CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel. Counter weight tubular dowel. Counter weight lock pin. Counter weight Counter weight Propeller hub key dowel. Propeller hub key dowel. Propeller hub key Timing pinion bolt. Timing pinion bolt. Timing pinion washer Crank shaft pin oil plug stud. Crank shaft pin oil plug stud. Crank shaft pin oil plug stud. Crank shaft pin oil plug bolt. Crank pin oil plug bolt. Crank pin oil plug bolt. Crank pin oil plug Cotter pin Propeller hub lock nut Propeller hub lock nut Propeller hub lock nut Propeller hub lock nut Propeller hub nut lock Propeller nut, puller type Oil retaining ring Thrust bearing	1 1 1 6 1 1 6 4 6 2 1 1 1 2 1 1 2 1 1	1 1 1 1 6 1 1 6 4 6 6 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 6 1 1 6 1 1 6 4 6 6 2 1 1 2 3 3 3 3 3 1 1 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71 1.71 1.77 .17 .16 16.50 18.50 .55 1.38 2.09 .11 1.38 2.09 .11 1.38 8.33 2.09 4.64 5.89 5.89 5.89 4.62
73 73 73 74 75 76 76 77 77 77 77 77 77 77 77 77 77 77	Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.) Front main bearing (copper lead type) Bearing lock screw. Stud, %"X1%" Front cover oil passage plug. Front cover plate CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel Counter weight tubular dowel Counter weight tubular dowel Counter weight Counter weight Counter weight Toopeller hub key dowel Propeller hub key dowel Propeller hub key Timing pinion nut. Timing pinion bolt. Timing pinion washer Crank shaft pin oil plug stud. Crank shaft plug bolt Crank pin oil plug Propeller hub lock nut Propeller hub lock nut Propeller nut, puller type Oil retaining ring Thrust bearing	1 1 1 6 1 1 6 4 6 2 1 1 1 2 1 1 2 1 1 4 4 1 1 1 2 1 1 1 1	1	1 1 1 1 6 1 1 6 1 1 6 4 6 6 2 1 1 2 3 3 3 3 3 1 1 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 274.25 1.71 1.71 .17 .17 .06 16.50 18.50 1.38 2.09 .11 1.38 2.09 .28 .28 .28 .28 .28 .28 .28 .28 .28 .28
78 78 78 71 76 76 77 78 78 78 78 78 78 78 78 78 78 78 78	Front cover assembly. Front cover assembly. Front cover assembly. Front cover assembly. Front main bearing. Front main bearing, .020 OS (O.D.). Front main bearing (copper lead type) Bearing lock screw. Stud, %"X1%" Front cover oil passage plug. Front cover plate. CRANK SHAFTS AND PROPEL Crank shaft assembly. Crank shaft assembly. Crank shaft assembly. Counter weight screw. Counter weight screw. Counter weight tubular dowel. Counter weight tubular dowel. Counter weight lock pin. Counter weight Counter weight Propeller hub key dowel. Propeller hub key dowel. Propeller hub key Timing pinion bolt. Timing pinion bolt. Timing pinion washer Crank shaft pin oil plug stud. Crank shaft pin oil plug stud. Crank shaft pin oil plug stud. Crank shaft pin oil plug bolt. Crank pin oil plug bolt. Crank pin oil plug bolt. Crank pin oil plug Cotter pin Propeller hub lock nut Propeller hub lock nut Propeller hub lock nut Propeller hub lock nut Propeller hub nut lock Propeller nut, puller type Oil retaining ring Thrust bearing	1 1 1 6 1 6 4 6 2 1 1 2 1 1 2 1 1	1	1 1 1 1 6 1 1 6 1 1 6 4 6 6 2 1 1 2 3 3 3 3 3 1 1 1	63.00 107.25 6.00 6.00 25.50 .30 .28 5.34 272.25 272.25 294.25 1.71 1.71 1.77 .17 .16 16.50 18.50 .55 1.38 2.09 .11 1.38 2.09 .11 1.38 8.33 2.09 4.64 5.89 5.89 5.89 4.62

	KINNER ENGINE PARTS	(Co	ntin	ued)	
Dont No.	MASTER ROD	Nu K-f	mber B-5		Price
Part No. 410	Master rod assembly, complete	. 1			Each \$126.50
434 706	Master rod assembly, complete		1	1 1	171.00 181.50
224 532	Master bearing dowel		1	1	.22
607 607Z	Master rod hearing	1			9.00
749 1273	Master rod bearing, .020 OS	7	1	1	12.00 27.00
370	Master rod bolt	- 4	4	4	1.65
371 336-21	Master rod nut cotter pin	. 4	4	4 4	.83
G-18 527	Bushing, piston pin Bushing, piston pin	. 1	1	1	.90 1.05
	CONNECTING ROD				
411 1165	Connecting rod and bushing assembly Connecting rod and bushing assembly	7 4		4	19.64 35.20
1154 G-18	Connecting rod Piston pin bushing			4	35.20 .90
527 553	Piston pin bushing Link rod pin (forced lubrication)		4	4	1.05 2.70
553M	Link rod pin (forced lubrication) .002 OS				
553W	Link rod pin (forced lubrication)				2.70
553X	.007 OSLink rod pin (forced lubrication)				2.70
603	.012 OSLink rod pin (forced lubrication)		4	4	2.70 2.85
	CYLINDER AND CYLINDE	R H	IEAD	coi.	
819	Cylinder head and barrel assembly, complete				177.00
639	Cylinder head and barrel assembly, complete		5		198.00
1159	Cylinder head and barrel assembly,		5	100	
818	completeCylinder head assembly, complete	. 5		5	242.00 132.00
491 1168	Cylinder head assembly, complete Cylinder head assembly, complete		5	5	150.00 187.00
260 629	Cylinder barrel Cylinder barrel Cylinder barrel (4%" bore)	5	5		48.13 49.50
1106	Cylinder barrel (4 %" bore)	_		5	55.00
817 478	Cylinder head assembly Cylinder head assembly		5		75.00 75.00
1169 2274	Cylinder head assembly Lock pin, spark plug bushing	10	10	5 10	104.50 .01
2141 E-14	Spark plug bushing	10	10	10	.83 1.20
E-14X 719	Valve stem bushing, intake, .010 OS	5		5	1.20
567	Valve stem bushing, intake Valve stem bushing, exhaust	5	5 5	5	1.65
225 233	%" brass plug Valve seat Valve seat, .020 OS	$\begin{matrix} 5 \\ 10 \end{matrix}$	5 10	$\begin{matrix} 5 \\ 10 \end{matrix}$.17 4.62
233Z 238	Valve seat, .020 OS Starter plug	10 5	10	10	4.62 .28
321 578	Starter plug washer Bushing, rocker arm axle	5	5	5	.03
2274	Lock pin bushing, rocker arm	20		0.0	.01
2283 395	Lock pin bushing, rocker arm %, ½5x1½ stud ½8,1½ stud	10	80 20	80 15	.33 .30
395W 2170	16x116 Stud, .005 OS Dowel pin	10	20 10	15 10	.30 .06
373 394	½x3/8 x1 ½ stud		20 5	20	.27 .30
394W 399	16x1½ stud 16x1½ stud, .005 OS	-	5	5	.30
587	Gasket, cylinder head	5	5	11.	.30 .30
1110	Gasket, cylinder head (4%" dia. bore)	NOC	-19	5	.61
409	Piston assembly	5			12.00
1166 G-21	Piston	5		5	27.23 7.80
645 110 7	Piston		5	5	15.00 20.35
482 482 M	Piston pin assembly—.875 Piston pin assembly—.877	5 5			2.70 2.70
482Z 449	Piston pin assembly—879	5			2.70
1111	Piston pin assembly (4 % dia, bore)		5	5	4.20 8.36
590 1112	Piston pin		5	5	3.00 7.26
524 G-20	Piston pin button Piston pin button	10	10	10	.60 .60
288 591	Piston ring, compression Piston ring, compression	15	1.5		.33
1109	Piston ring, compression (4 %" dia.		15		.30
289	bore) Piston ring, oil	5		15	.50 .44
592 1108	Piston ring, oil		5	5	.36 .61
744	INTAKE PIPE	10			
744 537	Intake pipe Nut, ½	$\begin{smallmatrix} 5\\95\end{smallmatrix}$	$\begin{smallmatrix} 5\\95\end{smallmatrix}$	$\frac{5}{95}$	4.24 .06
316-3 240-2	Lock washer &"	80	80 15	80 30	.01
795 740	Cap screw, ½"x1¼"	10	10	10	.21
741	Flange, intake pipe—lower	5	5 5	5 5	1.93 1.93
582 387	Gasket, intake pipe	$\frac{5}{15}$	$\begin{array}{c} 5 \\ 15 \end{array}$	5 15 ,	.06 .01
504 771	Nut, brass, ½-24 Packing, intake pipe	$^{15}_{5}$	$^{15}_{5}$	15 5	.11 .33
					(Service)



VELIE M-5 AND LAMBERT R-266 PARTS



There are many Velie M-5 and Lambert R-266 parts which are interchangeable. We are listing below all of the Velie M-5 parts, and the items which are interchangeable with the Lambert are starred (*). The parts not starred in the Velie listing are used only on the Velie engines. Following this list of the Velie parts is a listing of the parts which are used only on the Lambert engines.

We stock and supply only genuine factory parts for these engines. It is impractical to stock all parts for both motors, but the ones most frequently replaced are carried in stock for immediate shipment and we can ship the others direct from the factory with the minimum of delay.

ALWAYS GIVE THE MOTOR NUMBER WHEN ORDERING **PARTS**

	CRANK CASE	
Number	No. Required	Price Each
M-101A	Crank case assembly with studs, valve	
	lifter guides and bearing sleeve 1	\$165.00
*M-105	Crank shaft rear bearing sleeve 1	6.30
X-1269B	Crank shaft rear bearing sleeve screw 3	.01
M-109	Valve lifter guide 10	1.40
M-511	Valve lifter guide lock screw 10	.12
M-1003	Cylinder base stud 40	.30
M-1003	Crank case cover stud 15	.30
M-1004	Gear case stud 10	.30
M-1004	Intake tube stud 10	.30
M-1004	Carburetor adapter stud 4	.30
M-1004	Oil sump stud 4	.30

M-102A	Crank case cover assembly with studs		
	and bearing sleeves	1	38.50
M-105	Crank shaft front bearing sleeve	1	6.30
X-1269B	Crank shaft front bearing sleeve screw	3	.01
M-104	Crank shaft thrust bearing sleeve		5.95
M-1016	Crank shaft thrust cover stud	6	.25
M-146	Crank shaft thrust bearing sleeve gasket	1	.06
M-123	Crank case cover gasket	ī	.12
M-1012	5-24 S. A. E. plain nut	6	.06
M-1019	$\frac{5}{16}$ x_{16}^9 x_{16}^1 plain washer	5	.01
X-4553	16 X 1/8 X 16 S. A. E. lock washer 1	5	.01
M-605	Crank shaft thrust bearing (S. R. B. 210)		7.70
M-103	Crank shaft thrust bearing cover		3.85
M-146	Crank shaft thrust bearing cover gasket	1	.06
M-1012	⁵ / ₁₆ -24 S. A. E. plain nut	6	.06
M-1019	Avava plain wacher	6	.00

FRONT CRANK CASE COVER

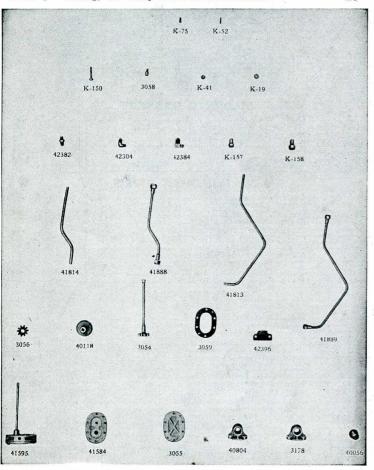
*M-1019 *X-4553	${}^{5_6}_{1_6}x_{1_6}$ ${}^{1_6}_{1_6}x_{1_6}$ plain washer	6		.01 .01
	GEAR CASE			
M-111A M-124 *M-112 *M-138	Gear case, studs and bushings assm Gear case gasket Cam shaft and cam drive shaft bushing Magneto drive shaft bushing	4		.00 .12 .80
*X-3127 *X-4101A	½ pipe plug, headless	1		06
* M-835	%x45 Deg. flared tube ell	1		06
M-1008	Starter flange plate stud (long)	3		30
M-1004 M-1027	Gear case cover stud Oil pump stud (after motor No. 269) (before No. 1006)	4		30
M-1027	Oil pump stud	2		30
* M-1011	14-28 S. A. E. plain nuts	10		06
* M-1018	½ x½ x½ plain washer	10		01
*X-4552	½ x 32 x 16 S. A. E. lock washer	10		01
M-501A	Cam assembly w/bushing		16.	
M-502	Cam bushing	1		60
M-503 * M-509	Cam shaft			00
*M-505	Cam thrust washer	1		70
*X-2305	Cam drive shaft drive gear key	1		00
M-506	Cam drive shaft drive gear nut	i		06 40
*M-507	Cam drive shaft drive gear nut taper pin	i		40
M-504	Cam drive shaft (15 tooth gear integral)	î		35
M-513	Cam drive shaft thrust washer	î		50
M-508	Cam drive shaft gear (40 teeth)	1		80
M-510	Cam timing flange	1	4.	75
M-514	Cam timing flange washer	1		40
M-516		1		50
M-512	Cam timing flange screw	4		25
* M-137	Magneto drive shaft (16 tooth gear	2		
*M-141	integral)	$\frac{2}{2}$	8.	
*M-143	Magneto drive shaft washer	2		35
* M-131	Magneto drive shaft oil slinger.	$\frac{2}{2}$		30
*X-2110	32x1 cotter pin	3		01
X-2305	No. 5 Woodruff key	2		96
M-154	Carburetor adapter		5.0	
M-129	Carburetor adapter gasket	1		06
M-1034	Carburetor stud	2		30
		500.0	• • • • • • • • • • • • • • • • • • • •	

		VELIE M-5 PARTS (Continu	ued)	
		CARBURETOR ADAPTER		
	Number *M-1011	4-28 S. A. E. plain nut	4	Price Each
	* X-4552 * M-1018	$\frac{1}{4}$ x_{32}^3 x_{15}^3 S. A. E. lock washer	4 4	.01 .01
		GEAR CASE COVER		
	M-114A *M-125	Gear case cover assembly	1	34.65
ı	M-1016 M-1031	Starter flange plate stud (short)	3	.10 .25
1	* M-142 * M-358	Magneto drive shaft oil retainer	2	.30 .12
1	* M-357 * X-1179C	Magneto drive shaft felt washer retainer Magneto drive shaft felt washer	2	.12 .12
١	*X-4567 *M-1048	No. 10-24x %" rd. hd. machine screws	8	.01 .01
١	* M-115			.12 1.40
١	* M-127 * M-1012	Starter flange plate Starter flange plate gasket. \$\frac{x}{2} \cdot 24 \text{ S. A. E. plain nut.} \$\frac{x}{2} \cdot x \frac{1}{2} \cdot S \text{ A. E. lock washer.} \$\frac{x}{2} \cdot x \frac{1}{2} \cdot S \text{ A. E. lock washer.}	$\frac{1}{6}$.06 .06
I	*M-1019 *X-4553	16x16x16 plain washer 16x16x16 S. A. E. lock washer Breather tube adapter	12 6	.01
١	M-151 *M-1011	Breather tube adapter	$\frac{1}{2}$	2.45
١	*M-1018 *X-4552	¼ x28 S. A. E. plain nut ¼ x½ x⅓ plain washer ¼ x¾ x⅓ x⅓ S. A. E. lock washer	2	.01
		OIL PUMP		
l		(Engine No. 1 to 268, Inclusive)		
I	M-800 M-821	Oil pump assembly Oil pump gasket Oil return pump body	1	49.50 .06
l	M-801 M-802	Oil return pump body Oil pump driver gear shaft	1	8.25 4.30
1	* M-803 * M-804	Oil pump gears	$\frac{2}{1}$	1.45
١	* M-805 * M-806	By-pass valve spring By-pass adjusting screw	1	.06 .45
l	* M-808 M-809	By-pass valve spring By-pass adjusting screw Oil pump plate gasket. Oil pump screw Oil pump screw Oil pressure pump body Oil pressure pump gear drive. Oil pump gasket complete consisting	2 2	.06
l	* M-810 * M-811	Oil pump plate	1	1.65 8.25
l	* M-812	Oil pressure pump gear drive Oil pump gasket complete, consisting	î	1.65
l	* M-814	of—M-124-127, M-125-821 Oil pump drive gear	1 set	.30 2.75
ľ	M-817 * M-818	Oil pump driven gear shaftOil connections	1	.95 .60
l	M-819 * M-820	Oil connection stud Oil connection gasket	2	.85 .12
l	M-822 * M-823	Oil pump driven gear shaft nut	1	.12
l	* M-824 * X-2303	By-pass valve adjusting screw washer No. 3 Woodruff key	1 2	.06
l	*X-2539 M-117	½" ball Tachometer drive sleeve	1 .	.06
	* M-122 M-119		2	.95 .06
١	*M-1012 *M-1019	Tox24 S. A. E. plain nut	1 2	.35 .06
ı	*M-833 *X-4103D	Tachometer drive sleeve packing. Tachometer drive sleeve nut \$x24 S. A. E. plain nut. \$x\six_1\six_5 S. A. E. lock washer. \$\sum_{\six_1\six_5} \text{deg. flared tube ell.} \$\sum_{\six_1\six_5} \text{deg. flared tube ell.}	2 1	.01
l	X-4103D	(Engine No. 269 and up)	1	.25
	M-830 * M-821	Oil pump assembly	1	55.00
	M-829 M-826	Gear case oil pump body	1	.06 8.25
	M-827 M-807	Oil pump driver gear shaft	1	4.30 .95
	* M-808 M-831	Oil pump driven gear—small Oil pump plate gasket	3	1.10 .06
	*M-812	Crank case oil pump body Oil pump gear driver Oil pump gear-driven No 2 Woodruff koy	1 2	4.40 1.65
	* M-803 * X-2303	110. 5 Woodfull Rey	3	1.45 .06
	*M-810 *M-811	Oil pressure pump body	1	1.65 8.25
	* M-828 M-822	Oil pump screwOil pump driven gear shaft nut	3	.30
	M-1020 X-4554	%x½x½ plain washer %x½x¾x 32 S. A. E. lock washer	1	.01 .01
	*M-818 *M-820	Oil connection gasket	2 4	.60 .12
	*M-819 *M-832	Oil connection stud-outletOil connection stud-inlet	1	.85 .85
	M-1035 *X-2539	¼ Std. brass pipe plug ½" steel ball	1	.20
	* M-804 * M-805	By-pass valve spring	1	.40 .06
	* M-806 * M-823	By-pass adjusting screw By-pass adjusting screw nut	1 1	.45
	*M-824 M-117	By-pass adjusting screw washer Tachometer drive sleeve	1	.06 .95
	* M-122 * M-119	Tachometer drive sleeve packing	2 1	.06 .35
4	*M-1012 *M-1019	$\frac{1}{16}X_{0}^{6}X_{16}^{1}$ 24 S. A. E. plain nut	2 2	.06 .01
+	*M-814 M-860	Danie Boat	1	2.75
	M-865	Oil line assembly (sump to pump)	î	1.10
	M-130	OIL SUMP	1	5.20
4	M-128 * M-187	Oil sump gasket	1 1	.06 .12
- 84	X-4103D M-1011	% flared tube ell	1	.25
4	X-4552 M-1018	14 X 32 X 16 S. A. E. lock washer	4 4	.01
_		- 10 Krour Henrich	*	.01



CURTISS OX-5 (Continued)
UPPER CASE—CONTINUED

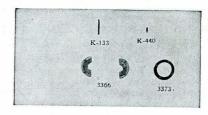
	UPPER CASE—CONTINUED	
Part No.	Part Name Quantity	Price Each
41731	Cap, Front Main Bearing 1	\$ 1.00
41732	Cap, Center Main Bearing 1	1.00
41733	Cap, Rear Main Bearing	1.00
41735	Bearing, Center Main (Lower)	.25
41736	Bearing, Rear Main (Lower)	.25
41737	Bearing, Front Main (Lower)	.25
41740	Key, Front and Rear Main Bearing	
		.05
41741		.05
41760	Cap, Rear Main Bearing Assembly 4	1.00
41784	Plate, Bearing Cap 1	.05
41857	Bearing, Front Main (Upper) 1	.25
41858	Bearing, Center Main (Upper) 3	.25
41859	Bearing, Rear Main (Upper) 1	.25
	CRANK CASE (LOWER HALF)	
K-44	Nut Tappet 3	\$.01
	Cotton non dozon	
K-52	Cotter, per dozen 8	.01
K-65	Screw 4	.01
K-215	Stud, Attaching 6	.02
K-218	Stud, Carb. Brace (Short) 1	.03
K-255	Screw1	.05
2853	Collar, Retaining 8	.01
2857	Indicator Hand 1	.10
3045	Baffle Plate 2	.50
3160	Plug, Oil Drain 1	.15
3225	Gasket, Sector 1	.01
41371	Oil Drain Strainer Assembly 1	2.75
41372	Gasket	.03
41373	Flange, Oil Drain Strainer 1	.65
41374	Crank Case Assembly (Lower Half) 1	
		20.00
41375	Oil Drain Screen Assembly 1	2.00
41376	Case, Lower Half	10.00
41578	Sector1	.20
41727	Pan, Oil Drain 1	.15
41839	Oil Float Assembly 1	.50
41840	Float 1	.30
41841	Float Lever 1	.25
42108	Gasket1	.01
42109	Plug, Crank Case 1	.05
42110	Plug, Thumb 1	.05
42111	Plate, Oil Level	.05
42112	Thumb Plug Assembly 1	.10
42456	Nut, Oil Conn	
K-382	Screw, Attaching 6	.10
	Strew, Attaching 6	.02
K-424	Stud, Carb. Brace (Long)	.08
K-427	Washer, Oil Conn. Nut 1	.03
K-487	Pin, Plug 1	.03
K-517	Pin 1	.03
K-469	Gasket, Plug 1	.01
K-371	Nut 1	.03
K-382	Screw, Attaching 24	.02
OX-88 .	Casing, Oil Pump Drive Shaft 1	.20
1005-5-5-5-5- 3 4		



CURTISS OX-5 (Continued)

	OILING SYSTEM		
Part No.		Quantity	Price Each
K-19	Lock Washer	2	\$.01
K-41	Lock, Attaching Stud		.02
K-52	Cotterper de	oz. 2	.01
K-75	Screw Oil Pump Cover	2	.01
K-150	Screws, Oil Pump Attaching	6	.03
K-157	Union Nut	2	.07
K-158	Union Nut	2	.07
3054	Master Gear	1	.90
3055	Cover	1	.30
3056	Idler Gear		.25
3058	Stud Idler Gear	1	.10
3059	Gasket	1	.02
3178	Bracket, Oil Drive Shaft	1	1.00
40056	Bushing		.20
40118	Pinion Oil Pump Drive	1	.75
40804	Oil Drive Shaft Bearing Assembly		1.25
41584	Gear Case	1	1.25
41595	Oil Pump Assembly	1	4.00
41813	Outlet Pipe	1	.25
41814	Inlet Pipe	1	.15
41888	Oil Pump Inlet Pipe Assembly	1	.35
41889	Oil Pump Outlet Pipe Assembly		.35
42304	Elbow, Outlet Conn.		.10
42383	Nut, Oil Conn. Rear Camshaft Bearing	1	.10
42384	Elbow, Inlet Conn.	1	-10
42396	Shim, Oil Drive Shaft Bracket	1	.03
AIR	PRESSURE PUMP AND TACHOM	ETER D	RIVE
K-1	Lock Washer		\$.001/2
2470	Cover, Tachometer Gear Housing		.10
2470-A	Screw Type Tachometer Gear Housing		.50
3008	Gasket Pump		.01

AIK		DRIVE
K-1	Lock Washer 6	\$.001/2
2470	Cover, Tachometer Gear Housing 1	.10
2470-A	Screw Type Tachometer Gear Housing 1	.50
3008	Gasket Pump 1	.01
3023	Gear, Tachometer Drive 1	.30
3043	Bushing 1	.15
3064	Gear, Tachometer Driven 1	.50
3084	Gasket, Cover 1	.01
40057	Screw, Shaft Retaining 1	.01
40217	Ring, Piston 2	.15
40218	Connecting Rod 1	.60
40275	Screw, Retaining 1	.02
40279	Coupling, Center Member 1	.45
40282	Piston, Air Pump 1	.50
40364	Tachometer Gear Housing 1	1.25
40439	Gasket, Tachometer Gear Housing 1	.02
40496	Screw 1	.35
40497	Screw1 Guide, Valve1	.60
40499	Spring, Relief 1	.05
40500	Valve, Relief 1	.50
40600	Air Pressure Pump Assembly 1	3.50
40621	Shaft, Air Pump Crank 1	.60
40624	Case, Air Pump Clamp 1	1.00
40631	Key. Gear	.10
41047	Chamber, Compression 1 Washer, Tachometer Gear 1	.75
41056	Washer, Tachometer Gear 1	.03
41296	Air Pressure Pump Piston Assembly 1	1.25
41317	Check Valve Assembly 1	.75
41318	Check Valve Body 1	.50
41319	Screw, Valve	.10
41320	Valve, Check1	.15
41321	Spring, Valve	.05
41991	Tachometer Drive Gear Housing	.00
	Assembly	3.50
42387	Coupling, Pump	.60
42709	U. S. Tachometer Drive Assembly,	.00
	Straight J. M	5.00
42709	U. S. Tachometer Drive Assembly, Angle	5.00
	J. M 1	6.50
2470-A	Screw Type Tachometer Gear Housing	0.50
	Cover 1	.50
K-23	Nut	.01
K-37	Nut	.02
K-44	Nut Attaching 2	.02
K-52	Cotterper doz. 2	.01
K-64	Screw, Cover Retaining 2	.02
K-75	Screw Attaching 6	
K-232	Stud, Tachometer Attaching 2	.01
K-264		.05
K-278		.01
K-309		.10
K-325		.03
K-338	Plug, Pump Case	.05
K-365	Screw, Gear Retaining 1	.03
K-464	Screw, Attaching 2	.02
0-60	Gasket 1	.01
U-00	Gear Retaining Screw 1	.01



OIL RETAINING COVER

Felt Packing	2		\$.01
Screw, Attaching	4		.03
Oil Retaining Cover, Each Half	2		.50
Gasket	1		.01

K-133 K-440 3366 3373