

Established 1909

Price 4 cents

Heath Ford Motored Airplane

MANUFACTURED BY

HEATH AIRPLANE CO., Inc.

2856 BROADWAY

Phone Lake View 6196

CHICAGO, ILLINOIS

Everything for Aircraft



Complete ready to fly crates and motor - \$1550.00

Send \$3.00 for the three General Assembly Blueprints of Ford Motored Airplane

COMPLETE SET OF
detailed construction and shop erection blueprints of Ford Motored
Airplane consisting of 35 large sheets \$22.00

Send 15 cts. for our large Aeronautical Supply Catalog.

GET OUR MOTOR LIST

HEATH FORD MOTORED BIPLANE

The extreme reliability of the Ford motor has caused many airplane builders to turn to this wonderfully cheap little power plant as a source of energy for their airplanes.

The power output of these motors has been steadily increased in late years, until by the application of certain accessories, as high as 50 H. P. has been obtained.

Another redeeming feature of the Ford motor is the fact that practically any replacements or new parts may be purchased at once from a local garage.

There has been considerable success with this type of motor, but in many cases the machine was designed for an aviation power plant and when the builder's funds ran out he used a Ford.

Now the first thing the aeronautical engineer does in laying out any machine is to determine the motor he intends to use, and next, the requirements of the machine.

Upon these features hinge success or failure. If you build a machine, and then you look for your motor, you will probably find the one you get is either too heavy, too powerful, too light, or too weak.

As the oldest aeronautical engineers in America, we have given careful attention to the perfection of a Ford-driven airplane for over five years. The result is that we now have a product so perfect in detail that absolute success is sure.

The weights and stresses have been carefully calculated and proven. Not only is this machine a success as a perfect job, but it is as easy to learn to operate, as our Motorcycle driven airplane, and the average amateur can teach himself to fly it with less trouble than a more powerful machine.

Specifications of HEATH FORD MOTORED BIPLANE

Number of Passengers.....1	Gross weight with fuel, oil and water.....750 lbs.
Span (top and bottom).....26 ft.	Useful Load.....225 lbs.
Chord (top and bottom).....4 ft.	Weight empty without motor.....325 lbs.
Gap.....4 ft.	Weight empty with motor.....525 lbs.
Length.....18 ft., 8 in.	High speed.....60 m. p. h.
Height.....8 ft.	Landing speed.....315 m. p. h.
Total Wing area (including ailerons).....210 sq. ft.	Climb (in ten minutes).....2,000 ft.
Total Aileron area.....28 sq. ft.	Weight crated.....1000 lbs.
Area of Stabilizer.....17.5 sq. ft.	Number of crates.....4
Area Elevators.....15 sq. ft.	Price of crates.....\$ 57.00
Area of Vertical Fin.....2 sq. ft.	Price of machine (without power plant).....1,050.00
Area of Rudder.....7 sq. ft.	Price of machine (with power plant).....1,550.00
Wing loading.....3.57 lbs. per sq. ft.	Price of material for this machine.....325.00

KNOCKDOWN MACHINE HARDWARE FOR FUSELAGE

1 Bucket Seat.....\$4.50	8 $\frac{3}{16}$ " x $1\frac{1}{2}$ " Bolts......12
1 Fuel Tank.....6.00	8 $\frac{9}{16}$ " x $1\frac{3}{4}$ " Bolts......12
3 lbs. No. 12 Aviator Wire.....1.80	18 ga. Sheet Steel......32
2 lbs. No. 14 Aviator Wire.....1.20	16 ga. Sheet Steel......21
2 lbs. No. 10 Aviator Wire.....1.20	14 ga. Sheet Steel......90
156 Tube Ferrules.....3.12	1 $\frac{1}{4}$ " x $1\frac{1}{2}$ " Cap Screw......05
34 No. 0 Spoke Type Turnbuckles.....3.06	8 $\frac{3}{4}$ " x 28" Castellated Nuts......08
24 No. 3 Spoke Type Turnbuckles.....3.36	8 $\frac{1}{2}$ " x $\frac{3}{4}$ " Cap Screws......28
8 No. 326 SFS Turnbuckles.....2.40	Sheet Metal for Cowling and Firewall.....4.00
6 ft. $\frac{1}{4}$ " Rod for Tie Rods......24	1 Pair Tail Skid Swivel Bolts.....1.00
25 $\frac{5}{32}$ " x $1\frac{1}{2}$ " Bolts......38	8 ft. $\frac{5}{8}$ " Rod for Angle Bolts......20
2 $\frac{5}{32}$ " x $1\frac{3}{4}$ " Bolts......03	58 $\frac{5}{8}$ " x $\frac{1}{8}$ " Clevis Pins......87
8 $\frac{5}{32}$ " x 2" Bolts......12	Total.....\$35.56

HARDWARE FOR WINGS

8 No. 328 L. F. S. Turnbuckles.....\$2.40	3 $\frac{5}{16}$ " x $2\frac{3}{16}$ " Bolts......08
18 Gauge Sheet Steel......50	$1\frac{1}{2}$ lbs. No. 14 Aviator Wire......90
14 Gauge Sheet Steel.....1.17	$\frac{1}{2}$ lb. Special Nails......50
20 Gauge Sheet Steel......10	36 Tube Ferrules......72
10 No. 3 Spoke Type Turnbuckles.....1.40	20 $\frac{5}{8}$ " x $\frac{1}{8}$ " Clevis Pins......30
18 No. 0 Spoke Type Turnbuckles.....1.62	44 $\frac{1}{8}$ " x $\frac{3}{8}$ " Clevis Pins......66
20 Drop Forge Shackles.....3.00	2 Pc. 22 ga. $\frac{1}{4}$ " x 11' Steel Tubing.....3.88
40 Shackle Pins......60	2 Pc. 22 ga. $\frac{1}{4}$ " x 3' 3" Steel Tubing.....1.15
12 $\frac{5}{32}$ " x $1\frac{3}{8}$ " Bolts......18	2 Pc. 22 ga. $\frac{1}{4}$ " x 8' Steel Tubing.....2.82
2 $\frac{5}{32}$ " x $2\frac{1}{16}$ " Bolts......04	1 Pc. 22 ga. $\frac{1}{4}$ " x 4' Steel Tubing......70
12 $\frac{5}{32}$ " x $1\frac{3}{4}$ " Bolts......18	25 ft. $\frac{3}{8}$ " Cable Strand.....1.15
2 $\frac{5}{32}$ " x $2\frac{3}{4}$ " Bolts......04	150 ft. $\frac{1}{8}$ " Cable Strand.....5.25
8 $\frac{3}{16}$ " x $1\frac{3}{8}$ " Bolts......12	40 $\frac{1}{8}$ " Cable Thimbles.....1.20
4 $\frac{3}{16}$ " x $1\frac{3}{4}$ " Bolts......06	Total.....\$30.80
2 $\frac{3}{16}$ " x $2\frac{7}{16}$ " Bolts......04	
2 $\frac{3}{16}$ " x $2\frac{3}{4}$ " Bolts......04	

HARDWARE FOR TAIL PLANE

$\frac{1}{2}$ lb. No. 16 Aviator Wire.....\$ 0.30	8 $\frac{3}{8}$ " x $\frac{3}{8}$ " Clevis Pins......12
8 Tube Ferrules......16	4 $\frac{1}{8}$ " Shackles......60
4 No. 0 Spoke Type Turnbuckles......36	15 ft. $\frac{1}{8}$ " Cable Strand......60
14 $\frac{5}{32}$ " x $1\frac{3}{4}$ " Bolts......21	8 $\frac{1}{8}$ " Cable Thimbles......24
2 $\frac{5}{32}$ " x $1\frac{5}{8}$ " Bolts......03	4 No. 326 SFS Turnbuckles.....1.20
2 $\frac{5}{32}$ " x $1\frac{3}{8}$ " Bolts......03	1 Pc. 18 ga. $\frac{3}{4}$ " x 4' Steel Tubing.....1.60
3 $\frac{5}{32}$ " x $1\frac{5}{16}$ " Bolts......05	18 Gauge Sheet Steel......13
8 $\frac{5}{32}$ " x $1\frac{1}{8}$ " Bolts......12	14 Gauge Sheet Steel......65
6 $\frac{1}{4}$ " x $\frac{7}{8}$ " Hinge Pins.....1.17	Total.....\$7.57

HARDWARE FOR LANDING GEAR

4 No. 327 LFS Turnbuckles	\$1.20	8 $\frac{7}{16}$ " x $\frac{3}{8}$ " Clevis Pins .....	.12
4 $\frac{7}{8}$ " Drop Forge Steel Shackles .....	.60	2 $\frac{3}{16}$ " x $1\frac{1}{4}$ " Bolts .....	.05
15 ft. $\frac{1}{2}$ " Cable Strand .....	.70	2 Axle Washers .....	.40
8 $\frac{3}{8}$ " Cable Thimbles .....	.24	4 $\frac{3}{16}$ " x $6\frac{1}{2}$ " Tie Rods .....	.70
2 26" x 4" Clincher Wheels with tires	29.00	22 $\frac{1}{4}$ " x 2" Bolts .....	.44
2 Axle Cap Castings	1.00	6 $\frac{1}{4}$ " x 1" Bolts .....	.12
16 ga. Sheet Steel	1.05		
12 ga. Sheet Steel .....	.31	Total	\$35.93

HARDWARE FOR CONTROL

6 $\frac{3}{16}$ " x $\frac{1}{4}$ " Clevis Pins	\$ 0.54	2 $\frac{3}{16}$ " x $1\frac{1}{16}$ " Clevis Pins .....	.40
10 gauge Sheet Steel .....	.20	6 Cable Pulleys, D. G. 3"	4.20
1 $\frac{1}{4}$ " x $1\frac{1}{16}$ " Clevis Pin .....	.19	1 Fiber for Bushing .....	.10
1 Control Handle with short button .....	.75	1 $\frac{3}{16}$ " x $1\frac{3}{8}$ " Bolt .....	.02
1 Pc. 16 ga. $\frac{7}{8}$ " x 31" Steel Tubing	1.00	4 $\frac{3}{16}$ " x $1\frac{3}{4}$ " Bolts .....	.06
1 Pc. 14 ga. $\frac{3}{4}$ " x $1\frac{1}{2}$ " Steel Tubing .....	.18	4 $\frac{9}{32}$ " x 1" Bolts .....	.04
1 Pc. 20 ga. $\frac{7}{8}$ " x $14\frac{1}{8}$ " Steel Tubing .....	.40	1 $\frac{1}{4}$ " x $1\frac{1}{2}$ " Bolt .....	.02
200 ft. $\frac{3}{8}$ " Flexible Cable	9.00	22 $\frac{3}{8}$ " Cable Thimbles .....	.66
12 No. 326 SFS Turnbuckles	3.60	2 Control Support Brackets Castings	3.00
9 $\frac{3}{16}$ " Shackles, Pressed Steel	1.35	Total	\$26.02
21 $\frac{3}{8}$ " x $\frac{3}{8}$ " Clevis Pins .....	.31		

MISCELLANEOUS ACCESSORIES

5 Yds. Shock Absorber Cord	\$0.75	1 Box Assorted Wood Screws .....	.75
1 Gal. Spar Varnish	3.25	5 Gal. Aero Proof	10.00
1 Spool Rib Sewing Cord	2.50	80 Yds. Fabric	31.20
1 Lb. No. 2 Swedish Tacks .....	.65	1 Lb. Waterproof Glue .....	.75
1 Long Straight Needle .....	.30	1 Complete Set of Detailed Construction Blue Prints	22.00
1 Box Flat Head Wire Nails	1.15	Total	\$73.30

WOOD FOR FUSELAGE

4 Longerons, rear	\$ 2.56	Wood for Dash Board	1.00
4 Longerons, front	4.86	Wood for Turtle Back Former	2.00
31 Fuselage Struts	3.96	Wood for 12 side and bottom Formers	4.80
1 Sternpost .....	.50	280 Fl. Fairing Batten	8.40
2 Seat Rails .....	.60	1 Tail Skid	1.50
2 Seat Supports .....	.32	2 Pieces Wood for Cowl Formers	1.50
2 Floor Supports .....	.40	2 Engine Beams $1\frac{1}{2}$ " x 3"	1.80
Plywood for Floor	1.20	Total	\$35.40

WOOD FOR WINGS

24 Long Ribs	\$6.92	2 Aileron Stringers .....	.90
10 Short Light Ribs	4.00	Wood for 2 Aileron Box Ribs	1.50
10 Aileron Ribs	2.10	4 Interplane Struts	1.44
36 Sub Ribs	7.56	50 Ft. Wood for Internal Braces	2.50
2 I Beam Long Wing Tip Ribs .....	.72	Wing Beams	14.88
2 I Beam Short Wing Tip Ribs .....	.60	2 Aileron Spars	1.12
6 Special Short Box Ribs	4.80	8 Internal Panel Struts .....	.80
4 Special End Ribs	1.32	4 Center Section Struts .....	.72
4 Wing End Curves	16.00	Total	\$70.38
5 Entering Edges	2.50		

WOOD FOR TAIL PLANE

2 Front Stabilizer Beams	\$.96	2 Fin Edges .....	.30
2 Rear Stabilizer Beams .....	.80	20 Ft. Bracing	1.00
2 Elevator Beams .....	.80	Wood for Elevator Box Ribs	1.50
2 Elevator Stringers .....	.40	Wood for Rudder Box Ribs .....	.72
70 Ft. Battening for Elevator and Rudder Ribs	2.80	2 Stabilizer Leading Edges .....	.30
1 Rudder Stringer .....	.20	2 End Curves	3.50
1 Rudder Post .....	.35	Total	\$13.98
1 Fin Beam .....	.35		

WOOD FOR LANDING GEAR

4 Long Landing Gear Struts	\$3.60
2 Landing Gear Spreaders	2.40
Total	\$6.00

FOOT BAR

1 Foot Bar Support	\$1.20
1 Foot Bar	1.00
Total	\$2.20

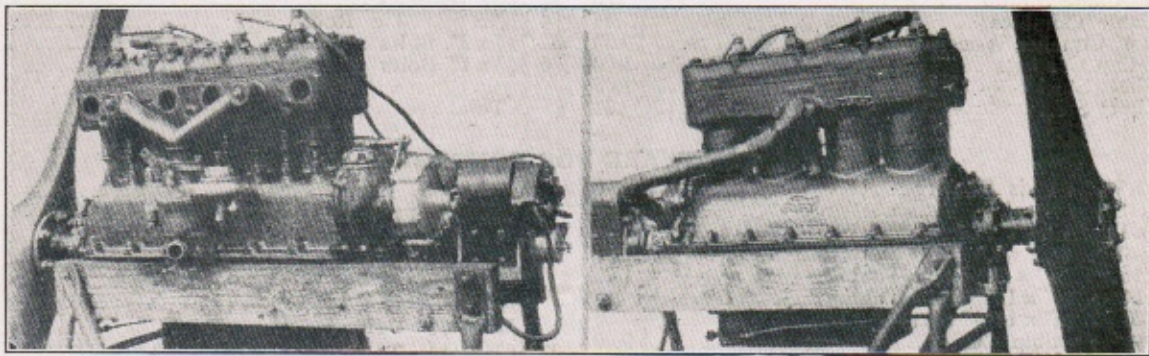
TOTALS

Hardware for Fuselage	\$35.56
Hardware for Wings	30.80
Hardware for Tail Plane	7.57
Hardware for Landing Gear	35.93
Hardware for Control	26.02
Miscellaneous Accessories	73.30
Wood for Fuselage	35.40
Wood for Wings	70.38
Wood for Tail Plane	13.98
Wood for Landing Gear	6.00
Wood for Foot Bar	2.20
GRAND TOTAL	\$337.14

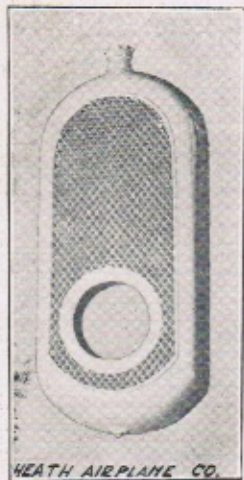
COMPLETE BILL AS ABOVE

\$325.00

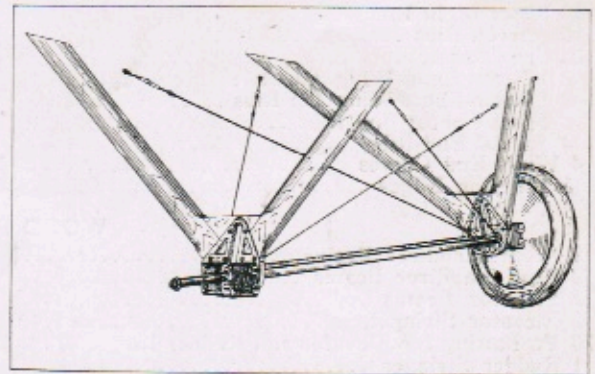
FORD MOTORS Accessories and Equipments



Remodeled Ford Motor, including radiator, propeller, magneto, water pump and oil pump, alloy pistons and propeller shaft extension, as per illustration.....	\$375.00
Zenith carburetor and aluminum intake manifold. A special light and efficient carburetor and aluminum intake manifold, ready to attach to the engine. Price.....	30.00
Set of Lynite pistons. Price.....	30.00
Aluminum oil pan, drilled to fit crankcase. Price.....	35.00
Water circulating pump. Price.....	9.00
Forced Feed Oil Pump.....	9.00
Steel propeller hub extension. Price.....	18.00
Special Ford Motor propeller, 6 ft. 3 in. x 4½ pitch. Price.....	17.00
16 valve head which displaces regular cylinder head and doubles the speed and power of Ford Motor.	
It carries the propeller shaft and thrust bearing. The shaft is chain driven from the crankshaft at half the engine speed.	
Two inlets and two exhaust valves are supplied per cylinder, or sixteen valves in all. The igniter, oil pump and water circulating pump are incorporated in this head as a unit, and there is no connection to make except for fitting the head on the cylinders and keying the sprocket on the crankshaft.	
Price complete, including sprocket and chain, but without propeller	\$200.00
High tension magneto. Price.....	18.00
Thrust Bearing	\$ 3.00
Radiator round corners	60.00



Ford Airplane Radiator
Round Corners



The Style of Landing Gear we Furnish with Ford Knockdown Mach.



Set of crankshaft counterweights adds to the life and power of motor and takes place of the flywheel. Complete as per illustration. Price..... \$ 12.00

TERMS

One-third cash with order, balance C. O. D.
Deliveries can be made in 30 days on completely assembled machines and usually in one week on knockdown machines.
Other terms in accordance with our Supply Catalogue.