

MICHIGAN  
MACHINED-DITCH  
PROPELLERS



002  
**MAXIMUM PERFORMANCE**  
**OUTBOARD CATALOG**

MICHIGAN WHEEL COMPANY, GRAND RAPIDS 2, MICHIGAN



## PROPELLER ACCURACY

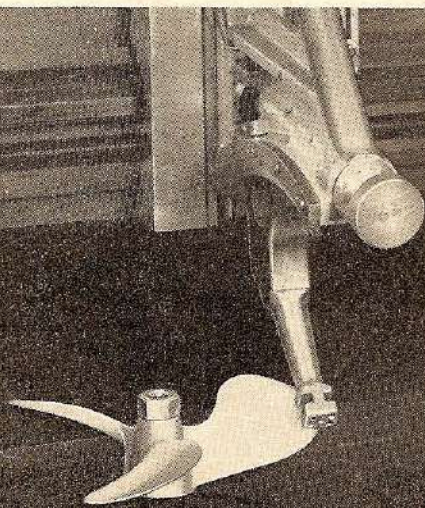
### A Prime Essential to Smooth, Efficient Operation

Leading builders and marine architects select their propellers with the greatest possible care, knowing full well that in addition to matching correctly the power and hull, the propeller itself must be perfectly balanced, spaced and pitched if the ultimate in power, speed, economy and smooth operation is to be secured. Consequently it is most gratifying to us to note that leaders in this field are turning in constantly greater numbers to our products in recognition of the greater accuracy built into Michigan Machined-Pitch Propellers and the better results that they provide.

## ABSOLUTE ACCURACY

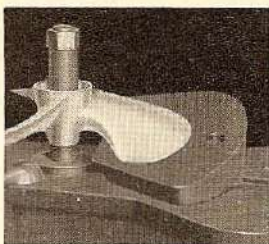
### Is Positively Assured by Michigan's Exclusive Machined-Pitch Process

**PERFECT PATTERNS.** Accuracy in a propeller is born in the original pattern. If this is not perfect neither can be the finished product. Recognizing that inaccuracies and variables were bound to creep in when patterns are made in the accepted fashion, Michigan Wheel Corporation about seven years ago developed the Helical Planer shown below. This machine, used exclusively by us, eliminates the human element, carves the original wood pattern with unerring precision. From this is cast a metal pattern which in turn is fully machined on the Helical Planer. The result is a precisely accurate, perfect pattern from which every one made will be uniformly perfect.



## EVERY MICHIGAN PROPELLER IS CHECKED ON PITCH BLOCKS AT EVERY STAGE OF MANUFACTURE

Pitch Blocks are testing fixtures which have been machined with precision accuracy on the Helical Planer to conform to the identical pitch of the original perfect pattern. After the machining, boring and finishing operations, practically at every step of the manufacturing process, each propeller is checked on these fixtures. Blades are checked over their entire area and they must conform to the undeviating gauge provided by the exact and precise pitch block. (The same equipment is used both at our own plant and our seventeen service stations to supply a super type of repair service. See page 2).



### Bored on Pitch Blocks to Assure Perfect Alignment

An otherwise perfect wheel can be spoiled in the boring. To prevent this Michigan Propellers are bored by the Pitch Block method. The

fixtures used are identical to those described above and assure perfect alignment of bore to the pitch of each blade.

## FULLY GUARANTEED FOR PRECISION ACCURACY

The exactness of the Machined-Pitch Process enables us to unhesitatingly guarantee each Michigan Propeller to be of precision accuracy, and thousands of users have been amazed at what such accuracy means in better, smoother performance. In fact, for many of the larger outboard motors, where speed increases are more noticeable, we guarantee certain minimum speed improvements through the use of these precisely accurate propellers. Details for various motors are available on request.





In the super service stations listed below each propeller received is first fully inspected. Proper machined-pitch block is then selected and blades are individually made to conform to the pitch block. Propeller is welded as required and edges are built up in thickness and ground out to full diameter.

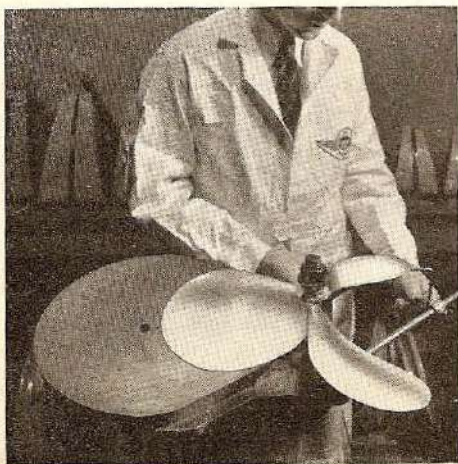
## 17 SUPER SERVICE STATIONS for Perfect Reconditioning of Propellers of ANY Style — ANY Make!

Equipped with the precisely accurate Michigan Machined-Pitch equipment illustrated—and guaranteeing accuracy! One of these, at least, is near you. Just tag your propeller and send it in.

1. BOSTON—New England Propeller Service, 88 Commercial Wharf.
2. NEW YORK CITY—Oluf Mikkelsen, 393 Fourth Avenue.
3. WASHINGTON, D. C.—Bazzuro Employees Co., 2361 Sherman, N. W.
4. NORFOLK—Russ Equipment Co., 310 W. 21st St.
5. MIAMI NUTAS YACHT BASIN—1884 NW N. River Dr.
6. NEW ORLEANS—Higgins Industries, Inc., 1755 St. Charles Ave.
7. HOUSTON—Walker Baumann Propeller Service, 609 So. 80th St.
8. BREWERTON, N. Y.\*\*
9. BUFFALO, N. Y.—Rich Marine Sales, Foot Amherst St.
10. CLEVELAND, OHIO.\*\*
11. TOLEDO—J. A. Lickendorf Co., 2726 Monroe St.
12. CHICAGO—W. L. Masters & Son, 210 W. Chicago Ave.
13. ST. LOUIS—Schneider Sales and Service, 4919 S. Kingshighway.
14. SEATTLE—Motor Boat Marina, Inc., 1117 E. N. Lake.
15. SAN FRANCISCO—Thomson Machine Works, 235 First St.
16. TULSA, OKLA.\*\*
17. GRAND RAPIDS, MICH.—Michigan Wheel Co.

\*\*These stations have been discontinued temporarily due to the war.

## MICHIGAN WHEEL COMPANY GRAND RAPIDS — MICHIGAN



Next comes careful inspection for flaws, balancing and checking for proper spacing and equalizing of blades. Then back on the patented pitch block it goes for a final inspection; and it leaves this block only when it can be checked as 100% accurate. There is no guesswork. Accuracy is guaranteed, and accuracy in a propeller is of vital importance!

## PROPELLER SELECTION

Too great emphasis cannot be placed on the correct propeller for your outboard outfit if maximum results are desired. The propeller directly controls the speed of the boat, r.p.m. of the motor, and the degree of smoothness of operation; and on some motors, even the cooling of the motor. The forepart of this catalog describes briefly the extent "Michigan" has gone to build propellers of absolute accuracy. The size of the propeller (diameter, pitch, design, and number of blades) is the next important point to consider in your replacement or spare propeller.

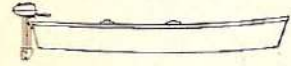







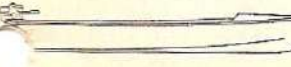



It is readily apparent that the propeller as furnished with the motor cannot possibly provide maximum results with every boat and load condition. By the adaptation of correct size and style propeller, we have time and again increased the speed of outfits one to five miles per hour and in some cases as much as six and eight m.p.h. All recommendations are based on turning the motor at or very close to the engine manufacturer's r.p.m. rating.

Briefly, heavy boats or loads require propellers of greater diameter and blade area with low pitch, and vice versa for light installations. Our experience in many thousands of installations enables us to determine accurately, with boats of proven design, the correct diameter and pitch combination when full data on the hull and load is given.

Write for Michigan's special pamphlet entitled, "HOW TO GET THE MOST OUT OF YOUR OUTBOARD MOTOR AND BOAT," which contains a wealth of information on simple "kinks" to improve performance.

Available this year are the new three blade outboard Aqua-Masters, guaranteed on a money-back basis to provide from 2 to 5 m.p.h. greater speed for runabouts and fast utilities. Available for motors above 9 h.p. only. Write for descriptive pamphlet.

General recommendations are given in the last column in following pages, although careful analysis of each job will be given if full information on boat and motor is submitted. Data cards to fill out are available on request.

 <p><b>1</b></p> <p><b>ROWBOAT</b> — 11' to 14' flat bottom — normally limited in speed after 8 to 10 M.P.H., irrespective of power used.</p> 	 <p><b>4</b></p> <p><b>RUNABOUT</b> — and fast Utility — 14' to 17', "V" bottom, Clinker or smooth — Average weight 225 to 300 lbs.</p> 
 <p><b>2</b></p> <p><b>KYAK</b> — very small planing hulls in 60 to 85 lbs. class.</p> 	 <p><b>5</b></p> <p><b>HYDROPLANE</b> — (step-bottom) for highest speeds, with one or two persons in boat.</p> 
 <p><b>3</b></p> <p><b>RUNABOUT</b> — and fast Utility — 11' to 14', weighing between 160 to 225 lbs.</p> 	 <p><b>6</b></p> <p><b>LARGE FAMILY BOATS</b> — outboard cruisers, launches, etc. — fairly heavy.</p> 



Note: Prices Subject To Change Without Notice.

All are F.O.B. Grand Rapids, Mich.

## ELTO

Up to and including 1933 Motors  
See Pages 7, 8 and 9 for Later Models

MODEL ENGINE	Propeller Dimension D. P.	2 or 3 Blade	Material	Price	Order No.	Note: See Page 3	
Super Single.....	7½x 6	2	Al.	\$3.80	E237*	1	
(Give Motor No.)	7½x 6	2	Br.	3.80	E328	1	
Fold Light.....	8½x 8	2	Al.	3.80	B10*	1	
Holes in blades for water outlet	8½x 8	2	Br.	4.75	B11	1	
1929-30 Light Weight	9 x 9	2	Al.	3.80	E232*	1	
Shaft size .563	9 x 9	2	Br.	5.00	E233	1	
1931-32 Light Weight	8¾x 8	2	Al.	3.80	E242*	1	
	8¾x 8	2	Br.	3.80	E243	1	
Shaft size .563	8¾x 7	} Weedless	2	Br.	5.00	E244	1
1933 Light Weight and Fisherman.....	7½x 8	2	Al.	5.00	E296*	1	
	7½x 8	2	Br.	5.50	E297	1	
Super "A"	9 x 8	2	Br.	7.00	E291*	1-3	
Service "A" and	9 x 6	3	Br.	7.00	E293	6	
EL. Str. Super "A".....	8½x 9½	2	Br.	8.80	E294†	5	
1928 Speedster and	10 x 10	2	Br.	7.00	E201*	3	
1929 Hi-Speed	10 x 8	2	Br.	7.00	E202	4	
Speedster.....	10 x 8	3	Br.	8.80	E204		
Shaft size .670	8½x 11½	2	Br.	9.90	E206†		
Service Speedster.....	10 x 10	2	Br.	7.00	E222*	3	
Shaft size .676	10 x 8	2	Br.	7.00	E223	4	
	10 x 8	3	Br.	8.80	E306	6	
	10 x 12	2	Br.	7.00	E307	3	
	8½x 12	2	Br.	9.90	E226†	5	
Special Speedster.....	10 x 10	2	Br.	7.00	E246*	3	
Shaft size .788	10 x 12	2	Br.	7.00	E247	3	
	10 x 8	3	Br.	8.80	E248	4-6	
	8½x 12	2	Br.	9.90	E249†	5	
Senior Speedster and	10 x 10	3	Br.	8.80	E251*	3	
1931 Junior Quad.....	10 x 9	3	Br.	8.80	E252	3-4	
Shaft size .788	10 x 8	3	Br.	8.80	E248	4-6	
	10 x 12	2	Br.	7.00	E247	3	
	9½x 11½	2	Br.	9.00	E258†	5	
1932-33 Junior Quad.....	10 x 10	3	Br.	8.80	E304*	3	
Shaft size .676	10 x 9	3	Br.	8.80	E305	3-4	
	10 x 8	3	Br.	8.80	E306	4-6	
	10 x 12	2	Br.	7.00	E307		
	9½x 11½	2	Br.	9.90	E309†		

Note: \*Identical with propeller which comes with motor as standard.

†A special Racing Style Propeller.

## ELTO — Continued

MODEL ENGINE	Propeller Dimension D. P.	2 or 3 Blade	Material	Price	Order No.	Note: See Page 3
Super "C".....	11 x11	3	Br.	\$9.90	E261*	3-4
(except rac'g models)	11 x10	3	Br.	9.90	E262	6-4
Shaft size .788	11 x 9	3	Br.	9.90	E263	6
	10½x11	3	Br.	9.90	E264	3-4
	11 x13	2	Br.	8.25	E265	3
	10 x12	2	Br.	11.00	E260†	3
	9¾x16	2	Br.	11.00	E266†	5
<b>1928 Quad</b> .....	11 x14	2	Br.	8.25	E211*	3
Shaft size .6718	11 x12	2	Br.	8.25	E212	3
	11 x10	3	Br.	9.90	E214	6-4
	9½x14	2	Br.	9.90	E216†	5
<b>1929 to 1933 Quads and Senior Quads</b> .....	10½x13	3	Br.	9.90	E272*	3
Shaft size .788	11 x11	3	Br.	9.90	E261	6-4
	11 x10	3	Br.	9.90	E262	6-4
	11 x14	2	Br.	8.25	E276	3
	10½x17½	2	Br.	11.00	E274†	5
	10½x15	2	Br.	11.00	E279	3-5
<b>Big Quads and 1931 "4-60"</b> .....	11 x14½	3	Br.	11.00	E281*	4
Shaft size .788	11 x13	3	Br.	9.90	E271	4-6
	11 x17	2	Br.	11.00	E286	5
	10½x18	2	Br.	11.00	E287†	5
	10½x17	2	Br.	11.00	E283†	5

## EVINRUDE

(Up to and including 1933 motors. See pages  
7, 8 and 9 for later Evinrude Motors)

<b>Sport Single</b> .....	7½x 6	2	Al.	3.80	E237*	1
(Give Motor No.)	7½x 6	2	Br.	3.80	E238	1
<b>Fold Light</b> .....	8½x 8	2	Al.	3.80	B10*	1
Holes in blades for water outlet	8½x 8	2	Br.	4.75	B11	1
<b>Old Sportwin</b> .....	8½x 6	2	Al.	4.00	V128*	1
	8½x 6	2	Br.	5.50	V129	1
<b>Sportwin and 1933 Lightwin</b> .....	7½x 8	2	Al.	4.75	E296*	1
	7½x 8	2	Br.	5.50	E297	1
<b>1931-32 Lightwin and Folding Sportwin</b> .....	8¾x 8	2	Al.	3.80	E242*	1
	8¾x 8	2	Br.	3.80	E243	1
Shaft size .563	9 x 7 ½	2	Br.	4.75	E244	1
	Weedless (					
<b>1928-29 Fleetwin</b> .....	9 x 9	2	Al.	8.25	V818*	1
Holes in blades for water circulation	9 x 9	2	Br.	8.25	V819	1



## EVINRUDE — Continued

MODEL ENGINE	Propeller Dimension D. P.	2 or 3 Blade	Material	Price	Order No.	Note: See Page 3
<b>Fleetwin and Sturditwin 1932-33</b>	9 x 8	2	Br.	\$7.00	E291*	1
	9 x 6	3	Br.	7.00	E293	1
	8½ x 9½	2	Br.	8.80	E294†	1
<b>1927 Fastwin</b>	8 x 9	2	Al.	6.60	V836*	1
<b>Model R.-4 H.P.</b>	8 x 9	2	Br.	7.70	V837	1
<b>1928-32 Fastwin</b>	*10 x 12	2	Al.	7.00	V821*	3
Shaft size .750	*10 x 12	2	Br.	8.80	V822	3
*Holes in blades for water outlet	*10 x 10	3	Br.	9.90	V823	3-4
	*10 x 9	3	Br.	9.90	V824	4-6
	9 x 13½	2	Br.	8.80	V825†	5
<b>1932-33 Sportfour</b>	10 x 10	3	Br.	8.80	E304*	3
Shaft size .676	10 x 8	3	Br.	8.80	E306	4-6
Propeller blades solid	9½ x 12½	2	Br.	8.80	VS896*	5
	9½ x 11	2	Br.	8.80	VS897†	3-5
<b>1928 Speeditwin</b>	10 x 13	3	Al.	9.25	V831*	3
	10 x 13	3	Br.	9.25	V832	3
	10 x 11	3	Br.	9.25	V833	4-6
	10 x 15	2	Br.	9.90	V834†	5
<b>20, 22 and 18.9 H.P. Speeditwins</b>	10 x 13*	3	Al.	8.80	V841*	3
Shaft size .750	10 x 13*	3	Br.	9.90	V842	3
*Holes in propeller blades for water outlet	10 x 11*	3	Br.	9.90	V843	6-4
	10½ x 10*	3	Br.	9.90	V844	6
	10½ x 11*	3	Br.	9.90	V845	6-4
	9½ x 15	2	Br.	11.00	V848	6
	9½ x 14	2	Br.	11.00	V849†	5
	9½ x 13	2	Br.	11.00	V847†	5-3
<b>25 and 21.1 H.P. Speeditwins 1931-32</b>	11 x 11*	3	Br.	9.90	V851*	3-4
Shaft size .788	11 x 10*	3	Br.	9.90	V852	4-5
*Holes in propeller blades for water outlet	11 x 9*	3	Br.	9.90	V853	4-6
	10½ x 11*	3	Br.	9.90	V854	3-4
	10 x 14	2	Br.	11.00	V859†	3
	9¾ x 16	2	Br.	11.00	V857†	5
<b>25 and 21.1 H.P. Speeditwins 1932-33</b>	11 x 11	3	Br.	9.90	E261*	3-4
Shaft size .788	11 x 10	3	Br.	9.90	E262	4-6
Propeller blades solid	11 x 9	3	Br.	9.90	E263	4-6
	10½ x 11	3	Br.	9.90	E264	6-4
	10 x 12	2	Br.	11.00	E260†	3
	9¾ x 16	2	Br.	11.00	E266†	5
<b>1931-32 Speedifours</b>	11 x 13*	3	Br.	9.90	V861*	3-4
Shaft size .788	10½ x 13*	3	Br.	9.90	V869	3
*Holes in propeller blades for water outlet	11 x 11*	3	Br.	9.90	V851	4-6
	11 x 9*	3	Br.	9.90	V853	6
	10½ x 15	2	Br.	11.00	V862†	6

**Note:** \*Identical with propeller which comes with motor as standard.

†A special Racing Style Propeller.



## EVINRUDE — Continued

MODEL ENGINE	Propeller Dimension		2 or 3 Blade	Material	Price	Order No.	Note: See Page 5	
	D.	P.						
1932-33 Speedifours	11	x13	3	Br.	\$9.90	E271*	4	
Shaft size .788	10½	x13	3	Br.	9.90	E272	4	
Propeller blades	11	x11	3	Br.	9.90	E261	4-5	
solid	11	x 9	3	Br.	9.90	E263	6	
		10½	x15	2	Br.	11.00	E279†	3
		10½	x17	2	Br.	11.00	E283†	5
Big Fours	11	x14½	3	Br.	11.00	E281*	4	
Shaft size .788	11	x13	3	Br.	9.90	E271	4-6	
Propeller blades	11	x17	2	Br.	11.00	E286	5	
solid	10½	x18	2	Br.	11.00	E287	5	
		10½	x17	2	Br.	11.00	E283†	5
<b>1934 THRU 1941 ELTO AND EVINRUDE</b>								
1934 Single	7½	x 6	2	Al.	3.80	E237*	1	
(Flanged nut)	7½	x 6	2	Br.	3.80	E238	1	
1935 Sportsman***	7	x 6	2	Al.	1.90	E22*	1	
1936-7 Ace—½" shaft	7	x 6	2	Br.	2.75	E23	1	
1936-7 Evinrude***								
Sportsman and 1938-41	7	x 6	2	Al.	1.90	E27*	1	
Elto Ace—⅝" shaft	7	x 6	2	Br.	2.75	E28	1	
Sportsman**—***	7	x 6	2	Al.	2.20	E4*	1	
(1938 to 42)—⅝" shaft	7	x 6	2	Br.	3.10	E5	1	
1937 Scout***	6	x 5	2	Al.	1.65	E40*	1	
1937 to 42 Pal & Ranger	6	x 5	2	Br.	2.75	E41	1	
1937 Elto Handifour	8¾	x 9	2	Al.	6.00	E522*	3	
	8¾	x 9	2	Br.	6.50	E523	3	
1939-42 Cub and Mate.	5½	x 4¾	2	Al.	1.65	E2*	1	
	5½	x 4¾	2	Br.	2.75	E3	1	
Weedless	5½	x 4½	2	Al.	2.00	E2W	1	
	5½	x 4½	2	Br.	3.00	E3W	1	
1936-37 Evinrude, Sportwin, and 1936 to 41	7½	x 6	2	Al.	2.20	E32*	1	
Elto Handitwin***	7½	x 6	2	Br.	2.75	E33	1	
1938 to 42 Sportwin***	7½	x 6	2	Al.	2.75	E8*	1	
⅝" shaft	7½	x 6	2	Br.	3.30	E9	1	
	7½	x 5½	3	Al.	4.40	E10	1	
1934-5-7-8 Fisherman	7½	x 8	2	Al.	4.75	E296*	1	
36-37 Servicetwin	7½	x 8	2	Br.	5.50	E297	1	
	8¼	x 6	2	Br.	6.50	E298	1-4	
1935-36 Weedless	7½	x 8	2	Br.	4.75	E313*	1	
Fisherman**	7½	x 7	2	Br.	5.50	E315	1	
	7½	x 9	2	Br.	5.50	E317	5-2	
1934 Fleetwin	9	x 8	2	Br.	7.00	E291*	1-3	
	9	x 6	3	Br.	7.00	E293	6	
	8½	x 9½	2	Br.	8.80	E294†	5	
1939-42 Fleetwin	9	x 8¼	2	Br.	7.00	EW40*	1-3	
	9	x 6	2	Br.	7.00	EW41	6	
	9	x 6	3	Br.	7.00	E293	6	
	8½	x 9½	2	Br.	8.80	E294†	5	

\*Identical in size and style to propeller that comes as standard equipment.

These replacement propellers are not furnished with slip-clutch or rubber hub. Use shear pin, as in conventional drive.

\*\*\*These propellers are not die-cast, but are manufactured under the Machined-Fitch process, and are furnished in highest grade alloy obtainable—which is warranted due to service a propeller is expected to give.

†A special propeller, designed and finished for racing and highest speeds, recommended only for light fast hulls, especially step-planes.

# ELTO AND EVINRUDE — Continued

MODEL ENGINE	Propeller Dimension D. P.	2 or 3 Blade	Material	Price	Order No.	Note: See Page 3	
1935-36 Lightwin**	7½x 8	2	Al.	\$4.40	E322*	1	
	7½x 8	2	Br.	4.75	E323	1	
	9 x 6	2	Al.	5.50	E324	3-	
	9 x 6	2	Br.	6.00	E325	3-	
	7¼x 9	2	Br.	8.25	E326†	5-2	
1935-36 Lightwin	8¼x 8	2	Al.	5.50	E332*	1	
Imperial**	8¼x 8	2	Br.	6.00	E333	1	
	9 x 6	2	Al.	5.50	E344	1-3	
	9 x 6	2	Br.	6.00	E345	1-3	
	7½x 9	2	Br.	8.25	E336†	2-5	
Lightwin** (1937-8) ⅝" shaft	7½x 8	2	Al.	5.50	E422	1	
	7½x 8	2	Br.	6.50	E423	1	
	7¼x 9	2	Br.	7.70	E426†	2-5	
1939 Fisherman	7½x 8	2	Al.	4.75	E196*	1	
1939-42 Lightwin	7½x 8	2	Br.	5.50	E197	1	
1940-42 Zephyr and	7¼x 9	2	Br.	6.00	E198	2-5	
Weedless Lightwin	8¼x 6	2	Br.	5.50	E199	1-4	
	8¼x 7	2	Br.	5.50	E195	3	
1934 Lightfour	8¾x 8	2	Br.	6.50	E512*	3	
Imperial	9 x 6	2	Br.	6.50	E513	3-4	
	8¼x10	2	Br.	8.80	E514†	5	
1935-42 Lightfour	8¾x 9	3	Al.	6.00	E342*	3	
Imperial**	8¾x 9	2	Br.	6.50	E343	3	
	8¾x 8	2	Br.	6.50	E348	3-4	
	9 x 6	2	Al.	6.50	E444	4-6	
	9 x 6	2	Br.	7.70	E445	4-6	
	9 x 6½	2	Br.	7.70	E447	3-4	
	9 x 7	2	Br.	7.70	E447½	3	
	8¼x10	2	Br.	7.70	E346†	3	
	9 x 6	3	Br.	8.80	E347	4-5	
1934-8 Sportfour to	9¾x10	3	Br.	8.80	E360*	3	
Serial No. 00499	9¾x 9½	3	Br.	8.80	E364	3	
	Shaft size .676	9¾x 8	3	Br.	8.80	E361	3-4
		9 x11	2	Br.	8.80	E362†	5
	8¾x12	2	Br.	8.80	E363†	5	
	10¼x 8	3	Br.	9.90	E365	6	
	1938-42 Sportfour	9¾x10	3	Br.	8.80	EW7*	3
Above Serial No. 00499	9¾x 8½	3	Br.	8.80	EW8	3	
	Shaft size .676	9 x11	2	Br.	8.80	E362†	5
		10¼x 8	3	Br.	9.90	E365	6
	Small Hub	9½x 9½	2	Br.	9.90	E367†	3-4
9½x10		2	Br.	9.90	E368†	3-4	
1934-5-6-7 Speeditwin	11 x11	3	Br.	9.90	E261*	3	
	11 x 9	3	Br.	9.90	E263	4-3	
	11 x10	3	Br.	9.90	E262	4-6	
	10½x11	3	Br.	9.90	E264	3-4	
	10 x12	2	Br.	11.00	E260†	3	
	.788 shaft	9¼x14	2	Br.	11.00	E267†	5
Speeditwin	10½x10½	3	Br.	9.90	EW2*	3	
	(1938-42)	10½x 9½	3	Br.	9.90	EW3	3
Small Hub	(.788 shaft)	11 x 8	3	Br.	9.90	E253	3
		10 x12	2	Br.	11.00	E260†	3
	9¼x14	2	Br.	11.00	E267†	5	
	10 x11	2	Br.	11.00	E257†	3-4	
	9½x12	2	Br.	11.00	E259†	3	



# ELTO AND EVINRUDE — Continued

MODEL ENGINE	Propeller Dimension D. P.	2 or 3 Blade	Material	Price	Order No.	Note: See Page 3
1934-5-6-7 Speedifour and Speedifour also 1938 to Serial No. 00500 .788 shaft	11 x13	3	Br.	\$9.90	E271*	4
	10½x13	3	Br.	9.90	E272*	4
	10⅞x14	2	Br.	9.90	E278	4
	11 x11	3	Br.	9.90	E261	4-6
	11 x10	3	Br.	9.90	E262	4-6
	11¾x10	3	Br.	13.00	E277	6
	10½x17½	2	Br.	11.00	E274†	5
	10½x15	2	Br.	11.00	E279†	3
1938-42 Speedifour Above Ser'l No. 00500	10½x13	3	Br.	11.00	EW6*	4
	10½x12	3	Br.	11.00	EW9	4
Small Hub	11 x10	3	Br.	9.90	E262	4-6
	10½x13½	2	Br.	11.00	E280†	4
	10½x14	2	Br.	11.00	E273†	4
	10½x14½	2	Br.	11.00	E275†	3-4
	10⅞x14	2	Br.	9.90	E278	4
.788 Shaft						

## JOHNSON

All Old Single Cylinders	7⅝x 5⅛	2	Al.	\$4.40	J90*	1
	7⅝x 5⅛	2	Br.	5.25	J91	1
1934 Single Cylinder J70	7⅝x 5⅛	2	Al.	4.75	J94*	1
	7⅝x 5⅛	2	Br.	5.50	J95	1
1935 Single Cylinder J75	8 x 8	2	Al.	4.40	J96*	1
	8 x 8	2	Br.	5.25	J97	1
Old Light Twins	8 x 7	2	Al.	4.40	J110*	1
	8 x 7	2	Br.	5.50	J111	1
	8¼x 7.7	3	Al.	6.50	J109	1
A-25 and AB-25 Twin	8⅝x 6½	2	Al.	5.50	J112*	1
	8⅝x 6½	2	Br.	5.50	J113	1
A-35 Lt. Twins and A-45 Sea Horse "3"	9⅛x 7.7	3	Al.	6.00	J114*	1
	9⅛x 7.7	3	Br.	7.00	J115	1
	9⅛x 6	3	Br.	7.00	J117	1
K-35 Stand. Twin	10 x10	3	Al.	9.90	J118*	3
	10 x10	3	Br.	11.00	J119	3
	10 x 8	3	Br.	11.00	J121	4-6
	9 x12	2	Br.	9.90	J120†	3-5
K-40 Stand. Twin and K-45 Sea Horse "10"	10¼x13.02	3	Al.	8.80	J122*	3
	10¼x13.02	3	Br.	9.90	J123	3
	10¼x11	3	Br.	9.90	J125	6
	9 x15	2	Br.	9.90	J122†	5
PR and P-40 Big Twin and	10⅛x12½	3	Al.	9.90	J126*	3-4
	10⅛x12½	3	Br.	11.00	J127	3-4
PR and P-45 Sea Horse "14"	10⅛x 9	3	Br.	11.00	J129	6
	9½x14	2	Br.	9.90	J131†	5
	10 x12½	2	Br.	9.90	J128†	3
P-30, PB-30, P-35 and P-40 Big Twin and P-45 Sea Horse "14"	10¼x12¼	3	Al.	9.90	J164*	3-4
	10¼x12¼	3	Br.	11.00	J165	3-4
	10¼x10½	3	Br.	11.00	J162	6
	9½x14	2	Br.	9.90	J131†	5
	10 x12½	2	Br.	9.90	J128†	3

\*Identical in size and style to propeller that comes as standard equipment.  
 †These replacement propellers are not furnished with slip-clutch or rubber hub. Use shear pin, as in conventional drive.

\*\*\*These propellers are not die-cast, but are manufactured under the Machined-Pitch process, and are furnished in highest grade alloy obtainable—which is warranted due to service a propeller is expected to give.

†A special propeller, designed and finished for racing and highest speeds, recommended only for light fast hulls, especially step-planes.

# JOHNSON — Continued

MODEL ENGINE	Propeller Dimension		2 or 3 Blade	Material	Price	Order No.	Note: See Page 3
	D.	P.					
F-70 Sea Horse..... (1934)	8 1/4 x 6		2 Al.		\$4.75	J80*	1
	8 1/4 x 6		2 Br.		5.50	J81	1
F-75 Light Twin..... (1935)	8 x 9		2 Al.		4.75	J84*	1
	8 x 9		2 Br.		5.50	J85	1
Model 100 and 110*** (1936-7)	7 1/4 x 4 1/2		2 Al.		2.75	J64*	1
	7 1/4 x 4 1/2		2 Br.		3.25	J65	1
Model 200 and 210*** (1936-7-8)	7 5/8 x 5 1/2		3 Al.		3.00	J74*	1
	7 5/8 x 5 1/2		3 Br.		3.80	J75	1
Weedless.....	{	7 5/8 x 5 1/2	3 Al.		3.80	J76	1
		7 5/8 x 5 1/2	3 Br.		4.40	J77	1
Model 300*** and J80 (1935-6)	8 x 6 1/4		2 Al.		4.75	J86*	1
	8 x 6 1/4		2 Br.		5.50	J87	1
Model LS-DS..... (1937-8)	8 x 4 3/4		2 Al.		4.40	J10*	1
	8 x 4 3/4		2 Br.		5.50	J11	1
Model LT-DT-AT..... (1937-38-9-40)	8 x 7 1/2		2 Al.		4.40	J14*	1
	8 x 7 1/2		2 Br.		5.50	J15	1
Weedless.....	{	7 1/2 x 9	2 Br.		6.50	J16	2
		8 x 7 1/2	2 Al.		5.50	J18	1
		8 x 7 1/2	2 Br.		6.00	J19	1
		8 x 6	3 Al.		6.50	J17	1-3
		8 x 6	3 Br.		7.00	J20	1-3
		8 x 7	3 Br.		7.00	J13	1-3
		8 x 7 1/2	2 Al.		5.00	J1*	1
Model TD-TS** (1941-42)	8 x 7 1/2		2 Br.		5.50	J2	1
	8 x 6		2 Br.		5.50	J3	1
Model KA..... (1937-8-9-40) and	9 3/4 x 7 1/4		3 Al.		8.80	J21	6
	9 3/4 x 7 1/4		3 Br.		11.00	J22	6
KD and KS (1941-42)	9 1/2 x 9		3 Al.		8.80	J25*	
	9 1/2 x 9		3 Br.		8.80	J23	
Weedless.....	{	9 1/2 x 10	2 Br.		9.90	JW27	3
		9 1/2 x 9	2 Br.		9.90	JW28	3-4
		9 x 11	2 Br.		9.90	J24†	5-2
		9 x 10	2 Br.		9.90	J26†	5
MD-MS*** (1938-9)	6 1/2 x 3 1/2		2 Al.		1.65	J5*	1
	6 1/2 x 3 1/4		2 Br.		2.75	J6	1
MD-MS*** (1940)	6 1/2 x 4 1/4		2 Al.		1.65	J58*	1
	6 1/2 x 4 1/4		2 Br.		2.75	J59	1
Model MD-MS** (1941-2)	6 5/8 x 4 1/2		2 Al.		2.00	J45*	1
	6 5/8 x 4 1/2		2 Br.		3.00	J46	1
Model HD-HA-HS*** (1939)	6 5/8 x 5 1/4		2 Al.		2.20	J30*	1
	6 5/8 x 5 1/4		2 Br.		3.00	J31	1
Weedless.....	{	6 5/8 x 6 1/4	2 Br.		3.30	J32	1-2
		6 5/8 x 4 1/2	2 Al.		2.75	J33	1
		6 5/8 x 4 1/2	2 Br.		3.30	J34	1
1940 HA-HD-HS.....	{	6 5/8 x 5 1/4	2 Al.		2.75	J40*	1
		6 5/8 x 5 1/4	2 Br.		3.30	J41	1
		6 5/8 x 6 1/4	2 Br.		3.80	J42	1
Model HD-HS** (1941-42)	6 5/8 x 5 1/4		2 Al.		3.30	J52*	1
	6 5/8 x 5 1/4		2 Br.		3.80	J53	
A-50, A-65, A-70, A-75, A-80, AA Sea Horse "4"..... (Weedless)	{	9 1/8 x 6	3 Al.		6.00	J140*	1
		9 1/8 x 6	3 Br.		7.00	J143	1
		9 1/8 x 7	2 Al.		7.70	J141	1-2-3
		9 1/8 x 7	2 Br.		8.80	J142	1-2-3



# JOHNSON — Continued

MODEL ENGINE	Propeller Dimension D. P.	2 or 3 Blade	Material	Price	Order No.	Note: See Page 3	
OA-55 and OA-60	9 1/8 x 8	2	Al.	\$5.50	JA1*	1	
Light Twin	9 1/8 x 8	2	Br.	6.50	JA2	1	
DA65 Litetwin	8 5/8 x 7 1/2	3	Al.	6.50	JA6*	1	
	8 5/8 x 7 1/2	3	Br.	7.70	JA7	1	
K-50, K-65, K-70, K-75 and K-80	9 1/2 x 7 3/4	3	Al.	7.70	J144	4-6	
	9 1/2 x 7 3/4	3	Br.	8.80	J148	4-6	
Sea Horse "12"	9 1/2 x 9 1/2	3	Al.	7.70	J145*	3	
	9 1/2 x 9 1/2	3	Br.	8.80	J146	3	
	9 1/2 x 9	3	Al.	7.70	J182*	3	
	9 1/2 x 9	3	Br.	8.80	J183	3	
	9 x 11	2	Br.	9.90	J149†	5	
	9 1/4 x 10 1/2	2	Br.	9.90	J1499†	5	
	(Weedless)	9 x 10	2	Br.	8.80	J147	3
OK-55, OK-60 and OK-75 Standard Twin	10 1/4 x 13	2	Al.	6.60	JK1*	1-3	
	10 1/4 x 13	2	Br.	7.70	JK2	1-3	
	10 1/4 x 10	2	Br.	7.70	JK4	1-6	
All Sea Horse "16"	10 x 10	2	Br.	8.80	J150	3	
S-45, S-65, S-70, S-75 (Except racing models)	10 x 11	2	Br.	8.80	J151	3	
	10 x 12	2	Br.	8.80	J152	3	
	10 x 14	2	Br.	8.80	J153	5	
	10 x 10	3	Br.	9.90	J154*	4-3	
	10 x 8	3	Br.	9.90	J155	4-6	
	9 x 12 1/2	2	Br.	9.90	J156†	5	
	9 x 14 1/2	2	Br.	9.90	J157†	5	
All Sea Horse "24"	11 x 15	2	Br.	9.90	J1201	3	
P-50, P-65, P-70, P-75, P-80 and PC-37 through 42 (Except racing models)	12 x 12	2	Br.	9.90	J1200		
	12 x 15	2	Br.	9.90	J1202		
	12 x 17	2	Br.	9.90	J1203		
	11 x 11	3	Br.	12.00	J192	3	
	11 x 12	3	Br.	12.00	J1799	3	
	12 x 12	3	Br.	13.00	J175*	3	
	12 x 13	3	Br.	13.00	J174*	3	
	12 x 10	3	Br.	13.00	J176	6	
	10 x 14	2	Br.	11.00	J1197†	4	
	10 1/2 x 13	2	Br.	11.00	J1196†	4	
	9 3/4 x 16	2	Br.	11.00	J1198†	5	
	SD (1940-1942) ***	10 x 11	3	Br.	9.90	J271	3-4
		10 x 10	3	Br.	9.90	J272	6
	10 x 12	3	Br.	9.90	J273	3	
	10 x 13	3	Br.	9.90	J277	3	
All Sea Horse "32"	12 x 12	2	Br.	9.90	J1200		
V-45, V-65, V-70 (Except racing models)	12 x 15	2	Br.	9.90	J1202	4	
	12 x 17	2	Br.	9.90	J1203		
	11 x 12	3	Br.	12.00	J1799	3-4	
	12 x 12	3	Br.	13.00	J175*	3-4	
	12 x 13	3	Br.	13.00	J174*	3-4	
	12 x 10	3	Br.	13.00	J176	6	
	12 x 8	3	Br.	13.00	J177	6	
	10 1/2 x 16	2	Br.	11.00	J1708†	3-5	
	10 1/2 x 17 1/2	2	Br.	11.00	J1709†	5	

\*Identical in size and style to propeller that comes as standard equipment.  
 †These replacement propellers are not furnished with slip-clutch or rubber hub. Use shear pin, as in conventional drive.

\*\*\*These propellers are not die-cast, but are manufactured under the Machined-Pitch process, and are furnished in highest grade alloy obtainable—which is warranted due to service a propeller is expected to give.

†A special propeller, designed and finished for racing and highest speeds, recommended only for light fast hulls, especially step-planes.

# MUNCIE — NEPTUNE — MOTORGO —

## WATERWITCH — SEA GULL

MODEL ENGINE	Propeller Dimension D. P.	2 or 3 Blade	Material	Price	Order No.	Note See Page
Jr. Single*** (1938 to 42) (1 h.p.)	6 x 5	2	Al.	\$1.65	E40*	1
	6 x 5	2	Br.	2.75	E41	1
Muncie, Neptune and Waterwitch Singles OB-1 Series, OB12-A, 10A2 (1933 to 1942) ***2 h.p.	7 $\frac{5}{8}$ x 5 $\frac{1}{4}$	2	Al.	2.75	M10*	1
	7 $\frac{5}{8}$ x 5 $\frac{1}{4}$	2	Br.	3.80	M11	1
	8 $\frac{1}{2}$ x 4	2	Al.	3.80	M12	1-6
1930, 1931 Muncie, Neptune and Motorgo (OB2 Series)	9 x 9	2	Al.	2.75	M30*	1
	9 x 9	2	Br.	3.80	M31	1
	9 x 7	3	Br.	6.50	M39	1-6
1931-32-33 Muncie, Neptune, Motorgo .... and Waterwitch (OB4, OB3, OB5 Series)	9 x 9	2	Al.	3.50	M34*	1
	9 x 9	2	Br.	4.50	M35	1
	9 x 7	3	Br.	6.60	M39	1-6
1933 to 1942 Muncie, Neptune & Waterwitch OB-31, OB-32, OB-63, OB-64, 10A4, 10A6 and S&R (M-B)*** (4-5-6 h.p.)	8 x 7	2	Al.	3.80	M20*	1
	8 x 7	2	Br.	4.40	M21	1
	8 $\frac{1}{4}$ x 7.7	3	Al.	5.50	M23	1
	8 $\frac{1}{4}$ x 7.7	3	Br.	6.50	M24	1
	8 $\frac{1}{4}$ x 6	3	Br.	6.50	M27	1
	8 x 8	2	Br.	4.75	M26	2
1934-5 Muncie, Nep- tune and Waterwitch (OB61 Series)	9 x 8 $\frac{1}{2}$	2	Al.	3.50	M37*	1
	9 x 8 $\frac{1}{2}$	2	Br.	4.50	M38	1
	9 x 7	3	Br.	6.60	M39	1-6
Alternate Firing (1938 to 1942)	9 x 9	3	Al.	7.00	M60*	3
	9 x 9	3	Br.	7.70	M64	3
9A-39	9 x 9	2	Br.	8.25	M65	3
10A10 (9 h.p.)	8 $\frac{1}{2}$ x 10 $\frac{1}{2}$	2	Br.	8.25	M62†	2-5
	9 $\frac{1}{2}$ x 7 $\frac{3}{4}$	3	Al.	8.80	M63	4-6
1931 to 1942 Muncie, Neptune, Motorgo and Water- witch .....	10 x 10	2	Br.	8.80	J150	3
	10 x 11	2	Br.	8.80	J151	3
	10 x 12	2	Br.	8.80	J152	3
	10 x 10	3	Br.	9.90	J154*	3-4
(OB15 and OB16 Series) .....	10 x 8	3	Br.	9.90	J155	4
	10 $\frac{1}{2}$ x 9	3	Br.	11.00	J160	3-4
(16 h.p.)	9 x 12 $\frac{1}{2}$	2	Br.	9.90	J156†	5
	9 x 13 $\frac{1}{2}$	2	Br.	9.90	J159†	5



# LOCKWOOD

MODEL ENGINE	Propeller Dimension D.	2 or 3 P.	Blade	Material	Price	Order No.	Note: See Page 3
Lockwood Ace.....	9¼x 8½		2	Al.	\$3.80	L411*	3
	9¼x 8½		2	Br.	8.80	L412	3
	8 x 11½		2	Br.	8.80	L410†	5
Lockwood Chief.....	9 x 14		2	Br.	9.25	L420*	3-5
	9 x 15		2	Br.	9.25	L421	5
	9 x 16		2	Br.	9.25	L422	5
	10 x 12½		2	Br.	9.25	L423	3-4
Lockwood 72-T**	9 x 7		2	Br.	8.80	L606	3

## THOR

1935-6 Thor Single.....	6½x 4½		2	Al.	\$3.30	T20	1
	6½x 4½		2	Br.	3.30	T21*	1
1936 Thor Twin .....	7½x 5½		2	Al.	3.30	T24	1
	7½x 5½		2	Br.	4.40	T25*	1
1937-8-9 Thor Single and '39 Twin	7 x 5¾		2	Al.	2.25	T26	1
	7 x 5¾		2	Br.	2.75	T27*	1
1937-8 Thor Twin.....	9 x 7		2	Al.	3.30	T28	1
	9 x 7		2	Br.	3.80	T29*	1
1938 Thor.....	7½x 7		2	Al.	3.30	T35	1
2 cyl. Pyramid.....	7½x 7		2	Br.	4.40	T36*	1
1938-9 Thor .....	9½x 7		2	Al.	4.40	T45	1
3 cyl. Pyramid.....	9½x 7		2	Br.	5.50	T46*	1

## CAILLE

All Single Cylinders, Models 79, 88 and 99 (1933-34)	8½x 8		2	Al.	\$6.50	C14	1
	8½x 8		2	Br.	6.50	C15	1
	8 x 8		2	Br.	6.50	C18	1
	8 x 6½		3	Br.	8.80	C16	1
Class A—7-10 h.p. Model 16 and 144 (1931-32-33-34)	8½x 10		2	Al.	6.50	C32	3
	9 x 8		2	Br.	6.50	C33	3
	9 x 6½		3	Br.	9.90	C34	3-6
	8 x 8		3	Br.	8.80	C37	3-4
Class B—16 h.p. Models 27 and 197 (1931-32-33-34)	10 x 10		2	Br.	8.25	C42	3-4
	10 x 9		3	Br.	8.80	C43	4
	9½x 13		2	Br.	11.00	C44	5
Class C—23 h.p. Models 48 and 249 (1931-32-33-34)	10½x 13		2	Br.	8.80	C52	3-4
	10½x 11		3	Br.	9.90	C53	4-6
	9¾x 14		2	Br.	11.00	C54	5
Class C—20 h.p. Model 42 (1930-31)	10½x 10		3	Br.	9.90	C62	3-4
	10½x 8		3	Br.	9.90	C63	4-6
	10 x 10		3	Br.	9.90	C64	3-4

We can furnish "solid-type" props to replace Caille Multi-flex. For Caille models not shown, send in old prop as sample or sketch showing hub construction.

# CHAMPION

MODEL ENGINE	Propeller		2 or 3 Blade	Material	Price	Order No.	Note: See Page 3
	Dimension D.	P.					
<b>Single</b>							
1935 1-A	7½x	6½	2	Al.	\$3.30	P44*	1
1936 1-B	7½x	6½	2	Br.	4.40	P45	1
1937 S-1-C	7½x	5½	3	Br.	4.75	P46	1
1937 D-1-C							
1938 S-1-D							
<hr/>							
1938 D-1-D	7½x	5½	3	Al.	3.80	P47*	1
	7½x	5½	3	Br.	4.75	P46	1
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1939, S-1-E, D-1-E	7½x	6½	2	Al.	2.75	P51*	1
1940, S-1-F, D-1-F, S-2-F	7½x	6½	2	Br.	3.80	P52	1
1941, S-1-G, D-1-G	7½x	6½	3	Al.	4.40	P91	1
L. H. ½-inch shaft	7½x	5½	3	Br.	4.75	P93	1
<hr/>							
<b>Lite Twin</b>							
1936 2-B	7½x	6½	2	Al.	3.30	P44*	1
1937 S-2-C	7½x	6½	2	Br.	4.40	P45	1
1938 S-2-D	7½x	5½	3	Br.	4.75	P46	1
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1937 D-2-C	7¾x	6	3	Al.	3.80	P48*	1
	7¾x	6	3	Br.	4.40	P49	1
	7½x	6½	2	Br.	4.40	P45	1
	8¼x	5	3	Br.	4.75	P55	1
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1938 D-2-D	8¼x	6	3	Al.	4.40	P50*	1
1939 D-2-D (Before June)	8¼x	6	3	Br.	4.75	P53	1
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1939 D-2-D (After June)	7½x	6½	2	Al.	2.75	P51	1
½-inch Shaft	7½x	6½	2	Br.	3.80	P52	1
L. H.	7½x	6½	3	Al.	4.40	P91	1
	7½x	5½	3	Br.	4.75	P93	1
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<b>Senior Twin</b>							
1936 3-B	9	x 6	3	Al.	4.40	P60*	1
1937 D-3-C	9	x 6	3	Br.	4.75	P61	1
1938 D-3-D	8	x 9	2	Br.	6.00	P62	2
1939 D-3-D (Weedless)	9	x 8	2	Br.	6.00	P65	1
<hr/>							
1940—D-2-F	8¼x	7	3	Al.	5.50	P70*	1
1941—D-2-G	8¼x	7	3	Br.	6.00	P71	1
	8	x 8½	2	Al.	6.60	P73†	2-3
	8	x 8½	2	Br.	7.70	P74†	2-3
<hr/>							
1941—3-G	8½x	7	2	Br.	6.00	P80*	1

## CROSS

1931 Seagull.....	10	x10	3	Al.	\$8.80	CR2*	3-4
	10	x12	3	Br.	8.80	CR3	3
	10	x 8	3	Br.	8.80	CR4	4-6
1932 and 1933 Seagull	10	x12	3	Br.	8.80	CR6*	3
	10	x10	3	Br.	8.80	CR9	3-4
	9½	x13	2	Br.	12.00	CR5	5

## INDIAN (Silver Arrow)

10	x10	2	Br.	\$9.90	120	3-4
10	x12½	2	Br.	9.90	121	3-4



## BENDIX (Eclipse)

MODEL ENGINE	Propeller Dimension		2 or 3 Blade	Material	Price	Order No.	Note: See Page 3
	D.	P.					
1937-8-9-40 Single.....	7½x	5	2	Al.	\$4.40	X5*	1
Standard and DeLuxe..	7½x	5	2	Br.	5.50	X6	1
¾ h.p. (Weedless)	8¼x	4½	2	Al.	5.50	X7	1
1938-9-40 Twin.....	8¼x	6	2	Al.	4.75	X20*	1
T. M. D .	8¼x	6	2	Br.	6.00	X21	1
4½ h.p.	7¾x	8	2	Br.	6.00	X23	5
(Weedless)	8½x	5	3	Al.	6.00	X24	1-6

## SEA KING (Wards)

Single .....	7	x	6	2	Al.	\$1.90	E27*	1
Catalog No. 60-8763	7	x	6	2	Br.	2.75	E28	1
and Twin No. 60-8764, 60-8765, 60-8766								
.563 Shaft Size								
Single, Catalog	7	x	6	2	Al.	1.90	T26	1
No. 260A8805, 2 h.p.	7	x	6	2	Br.	2.75	T27*	1
Single, 8812	6	x	5	2	Al.	1.65	E40*	1
No. 60-8809, 1 h.p.	6	x	5	2	Br.	2.75	E41	1
Single, 2.8 h.p.	7½x		6	2	Al.	3.30	K8*	1
8820	7½x		6	2	Br.	4.40	K9	1
Single 1.8 h.p.	7	x	6	2	Al.	2.20	E4*	1
**	7	x	6	2	Br.	3.10	E5	1
Twin								
Catalog No. 60-8806	7½x		6	2	Al.	2.20	W8*	1
.500 Shaft Size	7½x		6	2	Br.	2.75	W9	1
Twin, 3 h.p.—8814	7½x		6	2	Al.	2.75	E8*	1
8815**	7½x		6	2	Br.	3.30	E9	1
	7½x		5½	3	Al.	4.40	E10	1
Twin 5 h.p.—8816	7½x		8	2	Al.	4.75	E196*	1
8817**	7½x		8	2	Br.	5.50	E197	1
	8¼x		6	2	Br.	5.50	E199	1-4
Twin	8¾x		8	2	Al.	3.80	E242*	1
Catalog No. 60-8807	8¾x		8	2	Br.	3.80	E243	1
60-8810	8¾x		7	2	Br.	4.75	E245	1
Shaft size .563 Weedless								
Twin	9	x	8	2	Br.	7.00	E291*	3
Catalog No. 60-8808	9	x	6	3	Br.	7.00	E293	6
8.5 h.p.—60-8811	8½x		9½	2	Br.	8.80	E294	5
Twin 15.2 h.p. 8818	10	x	10	2	Br.	7.00	E222*	3
	10	x	9	3	Br.	8.80	E305	4-6
	9½x		11½	2	Br.	9.90	E309†	5
	10¼x		8	3	Br.	9.90	E365	6

# 1936-7-8-9-40-41 WATERWITCH (Sears-Roebuck)

(See Muncie & Caille for previous years)

MODEL ENGINE	Propeller Dimension D. P.	2 or 3 Blade	Material	Price	Order No.	Note See Page
All 3/4 h.p. Singles	6 1/2 x 4	2	Al.	\$1.65	S5*	1
1938-40 and 41 1 h.p.	6 1/2 x 4	2	Br.	2.75	S6	1
All 2 1/2 h.p. Singles	7 1/2 x 7	2	Al.	2.75	S10*	1
1936-40 & 41 2 3/4 h.p.	7 1/2 x 7	2	Br.	3.80	S11	1
1940-41 3 1/2 h.p. Single	8 1/2 x 7	2	Al.	3.30	S15*	1
	8 1/2 x 7	2	Br.	3.80	S16	1
All 4 h.p. Twins	8 x 8	2	Al.	3.80	S20*	1
1936-38 & 39 4 3/4 h.p.	8 x 8	2	Br.	4.40	S21	1
	8 1/4 x 7	3	Al.	5.50	S23	1-6
	7 1/2 x 9	2	Br.	5.50	S25	2
1940-41 5 3/4 h.p. Twin	9 x 8	2	Al.	4.40	S30*	1
	8 1/4 x 7	3	Al.	5.50	S33	1-6
1941 5 3/4 h.p. Twin	8 1/2 x 7	2	Al.	4.40	S40*	1
	8 1/2 x 7	2	Br.	5.50	S41	1
1941 10 h.p. Twin	9 x 10 1/2	2	Al.	6.50	S50*3-4-6	
	9 x 10 1/2	2	Br.	7.70	S513-4-6	
KM-5810	10 1/4 x 13	2	Al.	6.50	JK1*	1-3
LM-5810	10 1/4 x 13	2	Br.	7.70	JK2	1-3
1 win	10 1/4 x 10	2	Br.	7.70	JK4	1-3
8 1/2 h.p.	9 x 15	2	Br.	8.80	JK7†	2-5

## LAUSON

1940-42	7 1/2 x 6	2	Al.	\$3.30	L.5	
2 1/2 h.p. Single	7 1/2 x 6	2	Br.	4.40	L.4	

## MERCURY (Kiekhaefer)

1940 Singles—						
K-1, 2, 3 and	7 5/8 x 6	2	Al.	\$3.30	K8*	1
KB1, KB1A	7 5/8 x 6	2	Br.	4.40	K9	1
1940—Twins	7 5/8 x 7	2	Al.	\$3.30	K10*	1
Models K-4, K-5	7 5/8 x 7	2	Br.	4.40	K11	1
	7 1/2 x 8	2	Br.	4.75	K12	2
1941**						
KB-2, 3, 4, 5 and	7 5/8 x 7	2	Al.	3.30	K15*	1-3
Wizzard WB-6	7 5/8 x 7	2	Br.	4.40	K16	1-3

## DETROITER

1940	10 x 12	3	Al.	\$8.80	D10*	
18 h.p. Twin	10 x 12	3	Br.	9.90	D11	

**TROLLING WHEELS** for practically every one of the smaller motors (1 to 8 h.p.) are available. These trolling wheels are available only in bronze, and are similar to the standard wheel in diameter and blade area. However, they are provided with 1 1/2" to 2" less pitch which alone reduces the boat speed considerably, but the high pitch also relieves the load from the motor, enabling it to be run a lower r.p.m. without stalling. These trolling wheels take a list price \$1.00 higher than the standard bronze propeller. NOTE: The lower pitch of the trolling wheels which means higher motor r.p.m. when the throttle is fully advanced. Most motors will operate satisfactorily and without harm at such higher r.p.m. but normally we recommend partial throttle when using the trolling wheels.



drivers who take their racing seriously, or who can afford to do so, are using late model motors. And yet, many of the older models of racing motors are pretty consistent performers. We therefore list popular sizes for these motors. So, many of these motors are being converted to "Service" type and we have shown a few sizes of service propellers for such installations.

## PROPELLERS FOR OLD MODEL RACING MOTORS

MODEL ENGINE	Propeller Dimension		2 or 3 Blade	Material	Price	Order No.	Note: See Page 3
	D.	P.					
Johnson "B" Sr. 13:20 Gear Ratio	9	x14	2	Br.	\$11.00	RA5	5
	8½	x14½	2	Br.	11.00	RA6	5
	9¼	x13	3	Br.	13.00	RA8	4
Johnson "C" PR	9¾	x16½	2	Br.	11.00	RC5	5
	9¾	x17	2	Br.	11.00	RC6	5
	10	x14	2	Br.	11.00	RC9	4
	10	x14	3	Br.	13.00	RC10	3-4
	10	x13	3	Br.	13.00	RC12	3
Johnson "D" VR Gear Ratio	9¾	x17	2	Br.	11.00	RD6	5
	9¾	x18	2	Br.	11.00	RD2	5
	9½	x18½	2	Br.	11.00	RD3	5
	10	x14	3	Br.	13.00	RC10	3-4
	10¾	x14	3	Br.	13.00	RC11	4-6
Elto and Evinrude "C" 12:21 Gear Ratio (St'g't Prop'r Shaft)	9¾	x17	2	Br.	11.00	RC20	5
	9¾	x18	2	Br.	11.00	RC21	5
	9½	x18	2	Br.	11.00	RC22	5
	10	x14	3	Br.	13.00	RC23	3-4
Elto and Evinrude "C" 13:22 Gear Ratio (Counter-Bore Propeller Shaft)	9¾	x16	2	Br.	11.00	RC24	5
	9¾	x17	2	Br.	11.00	RC25	5
	9½	x17	2	Br.	11.00	RC26	5
	10	x13	3	Br.	13.00	RC27	3-4
Elto and Evinrude "F" 4-60 (Counter-Bore Propeller Shaft)	10½	x18	2	Br.	13.00	RF2	5
	10⅝	x18½	2	Br.	13.00	RF3	5
	10½	x17	2	Br.	13.00	RF4	5
	11	x15	3	Br.	13.00	RF5	3
	10½	x16	3	Br.	13.00	RF6	3

**Note:**—All of the props listed above are right hand propellers. That is, standing in back of the motor, looking forward, the prop turns clockwise. If your Elto or Evinrude racing motor turns prop in the opposite direction do not use these order numbers, but advise accordingly and we will ship correct left hand propeller.

# POPULAR PROPELLERS FOR LATE MODEL RACING MOTORS

## MIDGET EVINRUDE

	Bronze	Order
6 $\frac{7}{8}$ x 9 —2 blade .....	\$ 8.80	RM
6 $\frac{7}{8}$ x 9 $\frac{1}{4}$ —2 blade .....	8.80	RM
6 $\frac{7}{8}$ x 9 $\frac{1}{2}$ —2 blade .....	8.80	RM
7 x 9 —2 blade .....	8.80	RM
(*Extra for custom-built) .....	3.00	

## A JOHNSON

7 $\frac{1}{2}$ x12 —2 blade .....	\$ 8.80	RA 1
7 $\frac{1}{2}$ x11 $\frac{1}{2}$ —2 blade .....	8.80	RA 2
7 $\frac{3}{4}$ x11 $\frac{1}{2}$ —2 blade .....	8.80	RA 3
7 $\frac{1}{2}$ x11 $\frac{3}{4}$ —2 blade .....	8.80	RA 4
(*Extra for custom-built) .....	3.00	

## B JOHNSON 13:19 Gear Ratio

8 $\frac{3}{8}$ x12 $\frac{3}{8}$ —2 blade .....	\$11.00	RB 1
8 $\frac{3}{8}$ x12 $\frac{1}{2}$ —2 blade .....	11.00	RB 2
8 $\frac{1}{2}$ x12 —2 blade .....	11.00	RB 3
8 $\frac{1}{4}$ x13 —2 blade .....	11.00	RB 4
(*Extra for custom-built) .....	3.00	

## C JOHNSON 13:19 Gear Ratio

8 $\frac{3}{4}$ x14 $\frac{1}{2}$ —2 blade .....	\$11.00	RC 1
8 $\frac{3}{4}$ x14 $\frac{3}{4}$ —2 blade .....	11.00	RC 2
(*Extra for custom-built) .....	4.00	

## C EVINRUDE 13:19 Gear Ratio

8 $\frac{3}{4}$ x14 $\frac{1}{2}$ —2 blade .....	\$11.00	RC 7
8 $\frac{3}{4}$ x14 $\frac{3}{4}$ —2 blade .....	11.00	
(*Extra for custom-built) .....	4.00	

\*The sizes shown above are standard sizes and have been developed after years of careful test and experimenting, and are used by the majority of Amateur and Professional racing drivers. They hold, and have held for many years, practically all records and important races. Variations in the diameters and pitches can be made up, at no extra price, but for those drivers who wish special blade areas and widths, hub locations, etc., these will be made up at the extra prices shown for custom-built wheels.

For these special wheels we must have complete specifications, preferably by sketch or a paper template. Three to seven days must be allowed for shipment. Such custom-built propellers were made available upon the demand of many drivers who have ideas or theories they wish to work on in relation to their own outfits.

Write for special folder on Aqua-Master propellers—guaranteed better speeds on motors above 9 h.p.

Represented By