



FOR OUTSTANDING
PERFORMANCE
IN OUTBOARD
RACING or
PLEASURE BOATING

MICHIGAN
MACHINED-PITCH
PROPELLERS



The KEY TO BETTER OUTBOARD PERFORMANCE

The contents of this booklet constitute a means whereby most every owner of an outboard outfit can determine whether he is obtaining maximum pleasure, performance and service from his unit. Due to the inexperience of many outboard owners, lack of really reliable information on properly "setting up" a unit, we have in the following pages gone to considerable length in attempting to be of assistance along these lines. Outboarding is a grand sport and we want to help everyone to get as much pleasure from his particular outfit as possible.

Obviously the propeller of an outboard or an inboard is of most critical importance and this is the reason why many manufacturers of outboard engines and inboard boats leave their propeller problems in the hands of propulsion experts — usually the Michigan Wheel Company.

WHAT MAKES A GOOD PROPELLER?

FIRST, a propeller must be accurate. Certainly a propeller that is not perfect in pitch, balance, machining, blade uniformity, indexing, etc., cannot operate without vibration and maximum efficiency. Michigan propellers are accurate in every detail. They are manufactured under our Machined-Pitch method of manufacture by machines especially designed for one purpose only — to make propellers. Space does not permit going into detail here, but on request literature will be sent descriptive of Michigan's M-P method of propeller manufacture. Supplementing our unequalled equipment we have 45 years of experience and an organization of skilled craftsmen and propulsion engineers whose abilities are directed solely to propellers.

SECONDLY, a propeller must be of correct size and design FOR THE BOAT, LOAD and SERVICE. In the following tables you will note we offer standard propellers for almost every motor; that is, they are similar to the original equipment in shape and dimensions. In many cases this propeller is entirely satis-

factory. Due to great variations in hulls and conditions, however, the standard propeller oftentimes is found not too good, or even entirely wrong for the job. That is why for the larger motors especially we offer a range of sizes and styles.

In recommending various propellers for certain engines with different hulls and loads, consideration has been given to the gear ratio of the lower unit, its contour, engine's power, RPM range, etc. May we emphasize, however, that the specific recommendations are not all theory! In fact, we maintain a test crew who operate 12 months of the year actually checking propellers and their results under all conditions, as described on pages 4 and 5.

THIRD, precise accuracy, good design and correct size are of little use if not supplemented with material that will not fail. For small motors we recommend aluminum propellers due to the weight factor. Here we have the best propeller aluminum obtainable. High in strength, non-corrosive and ductile enough not to bend from every little impact. For larger engines Michigan's "MICHALLOY" bronze is used. This is a metal of unusually high physical properties (75,000 lbs. tensile strength per sq. in.,) engineered specifically by ourselves for propellers. Its corrosion resistance in fresh and salt water and its ability to withstand flexing under high speed operation and resistance to shock make it the perfect propeller metal.

WARNING: Too often an owner will order from his dealer the highest pitch propeller listed, whether it be an Aqua-Jet or an Aqua-Master, in the hope he will go faster. The result can only be failure. Remember, too, that boats and engines vary greatly as to ability and performance and a poor combination never can be made to operate like a unit inherently correct.

Note: While we believe the accuracy of the contents of this catalog is incontestable, specific results cannot be guaranteed due to variations in boats, engine conditions, fuels, etc. As stated, the information on propellers is based on our experience and engineering information on stock engines and well designed boats. For special conditions we invite your inquiries in detail — or write for our Outboard Analysis Form.

9 CHECK POINTS FOR IMPROVED OUTBOARD PERFORMANCE

Naturally every owner of an outboard outfit does not expect or want competitive racing speeds. However, hardly any are adverse to getting better all around performance and the following facts are presented as an aid in generally bringing up performances for those outfits where complete satisfaction is not presently being derived.

The first thought that comes to many outboarders is that a propeller change may accomplish a miracle or be a cure-all. Though of prime importance, no propeller by itself can make an outfit, inherently incorrect in one or more details, perform in competition with outfits in which all factors are ideal.

Each owner interested in greatest possible performance should check every one of the following points. Each are vital. One or more bad features in your outfit can detract as much as 10 to 50% in boat speeds and all around performance.

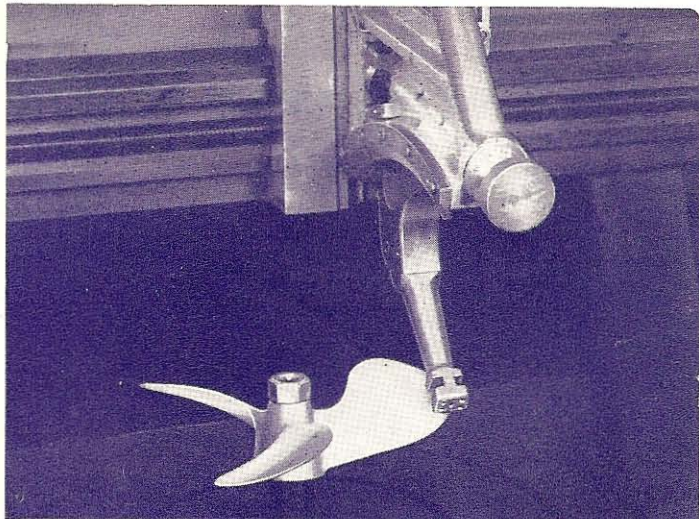
1. MOTOR TILT

Every outboard motor has an adjustment for tilt. When the motor is set on the transom with the lower unit too far forward, the boat will have a tendency to throw the bow too far into the water and over-plane the boat. This slows the boat up considerably although it will stabilize a wild boat, especially with the larger more powerful engines. For maximum racing speeds there is one point of proper motor angle and this is with the lower unit cocked back as far as possible. This can be briefly summed up as "trimming." However, no two hulls are alike and the exactly correct point can be determined only by trial and error. Motors tilted too far aft will cause propeller to cavitate.

2. TRANSOM HEIGHT

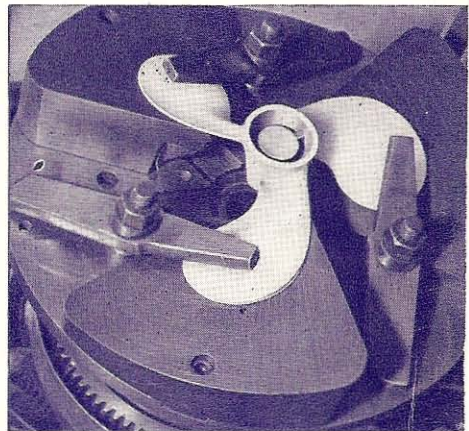
No single one of these 9 factors has more effect on general performance than the proper transom height. While most manufacturers of boats provide 15" transoms and most engines operate satisfactorily on these transoms, it is definitely true that owners of some boats will gain from $\frac{1}{4}$ to a mile or more in speed by blocking up or increasing the boat transom. For average family runabouts it is a good rule of thumb to run the anti-cavitation plate slightly below the bottom of the keel; or if there is no keel, below the bottom of the boat. Everyone interested in the last fraction of a mile for competitive racing, and this applies to hydroplanes and racing runabouts, should experiment to see how high he can run his outfit without encountering excessive cavitation when underway. It will be found harder to get up on top at the start with very highly mounted motors. There is no general rule that can be applied as motor lower units and boats vary in the ability to run high for this specialized racing

Continued on Page 8

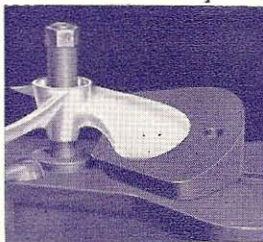


The Helical Planer, an exclusive development of Michigan Wheel Company, eliminates the human error element and carves the original patterns of Michigan Propellers and Pitch Blocks with unfailing precision and accuracy.

Boring a wheel on PITCH BLOCKS insures absolute accuracy. A perfect casting otherwise bored can be out of center and the blades badly out of track resulting in undue vibration, loss of power, etc.



Below is shown a propeller being checked on a PITCH BLOCK. PITCH BLOCKS have true screw surfaces carved by the helical planer and corresponding to the contours of the propellers with which they are used to check the accuracy of each and every propeller throughout the manufacturing process.



**NO OTHER
PROPELLERS
ARE MADE
THIS WAY**

CONTINUOUS TESTING TO INSURE MAXIMUM

When you buy a Michigan propeller, you may be sure that you are getting, not what some theorist hopes will give you more speed or better performance, but a wheel bound to give you what you want because it has proven its ability to do so under the most exacting tests that can be devised.

At one of the nearby Michigan lakes, and another in Tennessee, the winter location, the testing of Michigan propellers goes on the year around. At these proving grounds a whole fleet of boats including practically every type, size and kind of construction (plank, plywood, metal) used in outboard motoring is maintained. Here the propeller designs evolved by our engineering staff are thoroughly established or disproved under actual running conditions. Here every make and model of outboard motor is matched with the propeller that will enable it to develop the maximum efficiency under given conditions. These include boat size, design and load. Results are measured with minute accuracy with the

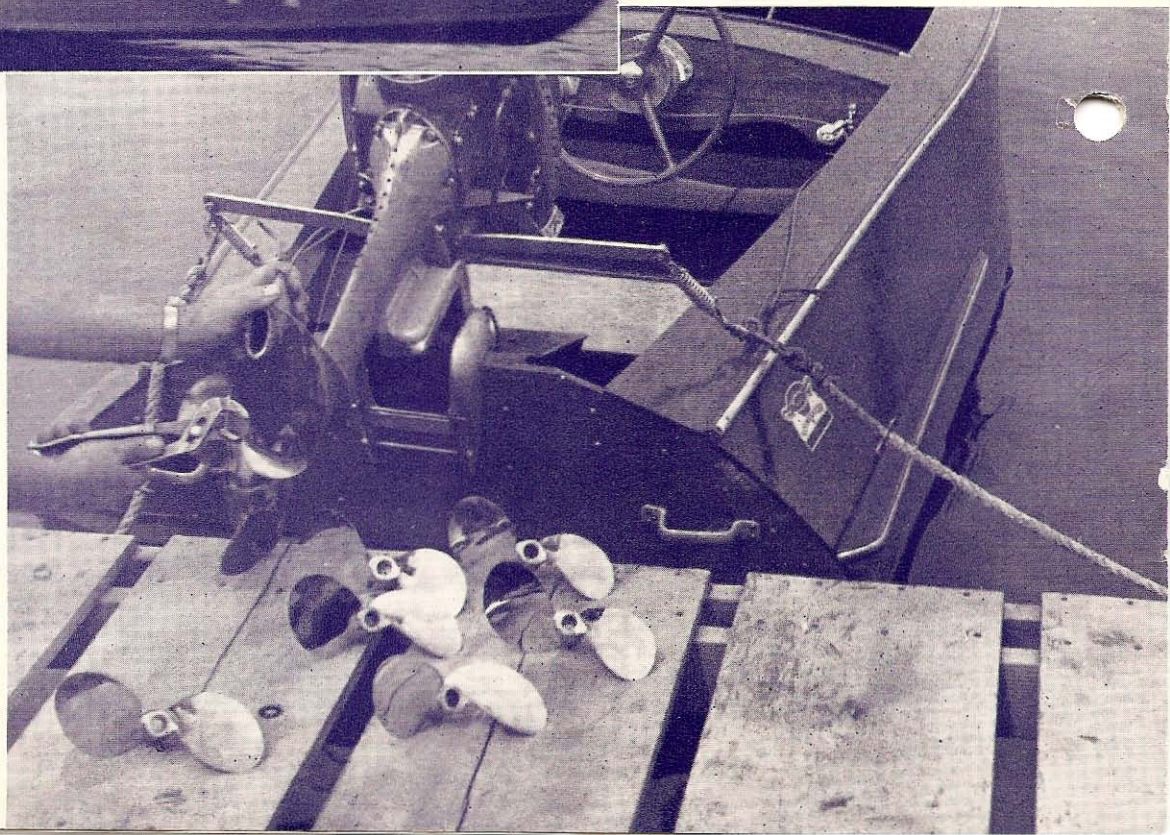
finest of scientific instruments and tests are truly exhaustive.

Each testing engineer runs an average of 150 miles per day, more than the equivalent of a marathon, and the testing goes on day after day, the year around. Testing is considered complete only when decidedly superior results have been obtained and both the engineering and field staffs are thoroughly satisfied that maximum performance has been obtained. Often this means very long periods of testing, as much as six weeks for a single propeller as was the case in the development of one of our new "Aqua-Jet" racing wheels for a certain motor.

The recommendations contained in the Propeller Selector Charts on pages 9 to 20 therefore, are founded on the soundest possible basis and can be relied upon to give you the ultimate in performance. Be sure, however, to read the "9 CHECK POINTS" pertaining to your outfit to insure getting the best possible results.

Test engineers run an average of 150 miles per day, day after day. It's data thus obtained that insures the outstanding performance of all Michigan wheels.

Seven propellers with variations so slight the average layman would be unable to detect them. All will be tested to determine the one that gives maximum effectiveness for the given motor, hull and load.

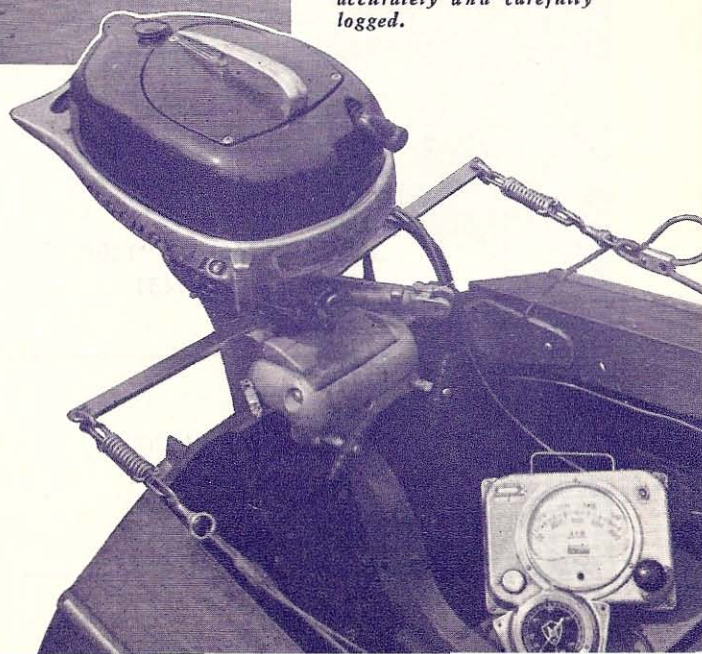


PERFORMANCE UNDER ALL CONDITIONS

Part of our testing fleet that includes every type of hull and motors of all makes and sizes.



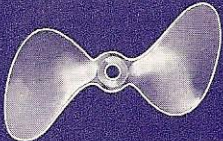


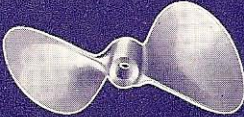
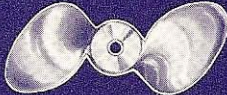
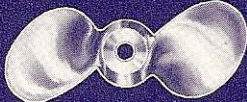


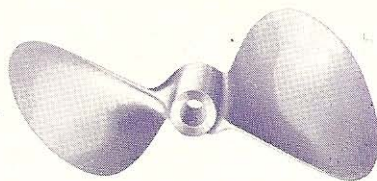
Performance of each propeller tested is measured accurately and carefully logged.



"AQUA-JET"

Some of the Models available

	MERCURY SUPER 10 AND HURRICANE AJ48 AJ49 AJ50
	MERCURY 25 H.P. QUICK SILVER KD2 KD5
	SCOTT-ATWATER 7 1/2 H.P. AJ8
	JOHNSON - EVINRUDE "25" AJC 460 AJC 461
	CHRIS-CRAFT "10" AJ430 AJ431
	EVINRUDE SPEEDITWIN 22 H.P. AJ289 AJ323 AJ288
	MARTIN "100" AJ451
	AJC200 AJC201



RACING TYPE PROPELLERS

A TREMENDOUSLY SUCCESSFUL WHEEL FOR STOCK BOAT RACING

Michigan "AQUA-JET" propellers are super deluxe racing wheels, virtually custom built to fit the specific, individual motors on which they are to be used, yet priced to sell at practically the cost of a stock propeller. Their design is such that no cutting or rebuilding of the lower unit is necessary — a tremendously important feature, particularly to the driver who wishes to maintain his outfit for stock racing.

Built, like all Michigan propellers, it has tremendous thrust, yet maintains that silky smooth operation at high speeds so necessary to top performance.

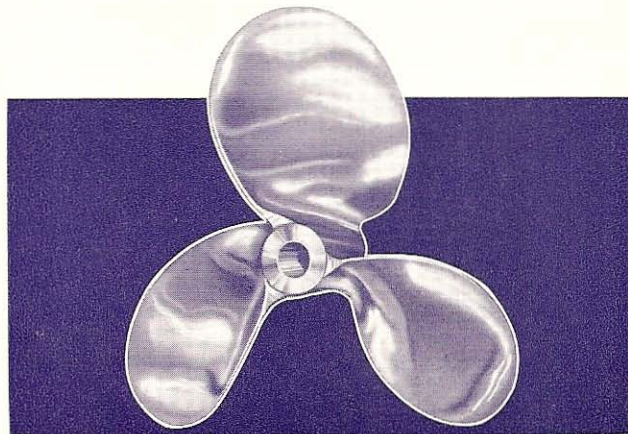
The tremendous success of this wheel, which was originally brought out as a semi-custom job for a few of the 7 1/2 HP and 10 HP motors led to the expansion of sizes by popular demand. It is now available for such motors as the Evinrude, Lightfour, Speeditwin, Speedifour and Big Four; Johnson "22", Mercury 7 1/2 and 10 HP and Scott Atwater 7 1/2 HP and, in fact, nearly all of the newer motors in the above sizes and larger. Some of the "AQUA-JET" models are shown at the left. All of them are listed under the make of motor with which they are available in the propeller selector listings on the following pages.

It should be definitely understood, however, that the "AQUA-JET" in no way displaces the "AQUA-MASTER" propellers described on the opposite page. The "AQUA-JET" is designed primarily for racing runabouts and step-bottom hydroplanes and for this type of application is **unequaled**. The "AQUA-MASTER" remains the ideal propeller for the average runabout, utility or family boat.

The "AQUA-MASTER"

IDEAL PROPELLER FOR THE LARGER MOTORS IN USE ON THE AVERAGE RUNABOUT, UTILITY OR FAMILY BOAT!

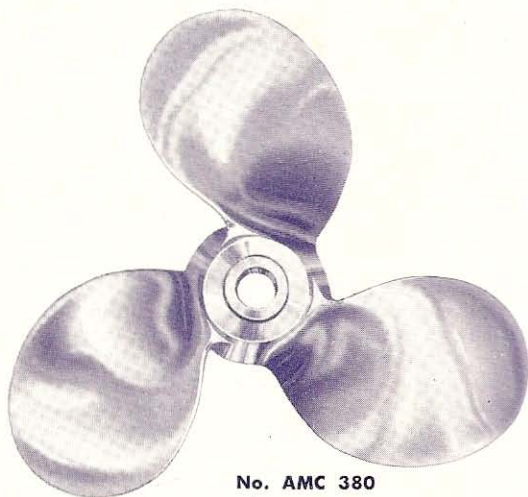
A few years ago Michigan introduced the Outboard version of our highly popular inboard "AQUA-MASTER." It immediately became recognized as the most sensationally performing propeller ever offered for service motors. In the following pages many new "AQUA-MASTERS" will now be found listed, and the range has been expanded to include motors down to the 6 h.p. jobs of some makes. Any owner of a motor of this size using a well designed runabout or utility certainly owes it to himself to own one of these propellers. It will provide better boat speeds, smoother performance and more flexible operation under varying load conditions. Furthermore the "AQUA-MASTER" is more sturdy in design and construction. It tends to deflect or ward off drift



and debris with less damage to blades than would be suffered by the conventional propeller. Its usual shorter diameter and greater blade width permits its use closer to the surface, a real advantage as explained under "9 Check Points" (page 3).

CUSHION-HUB PROPELLERS for MOTORS with GEAR SHIFTS

Greatly reduce or eliminate pin sheering in all shifting operations



No. AMC 380

In 1951 Michigan successfully introduced its new Cushion-Hub propellers as adapted to certain Aqua-Master propellers. For 1952 we offer an improved model which is available for most motors and approved by leading motor manufacturers. It has been incorporated in both bronze and aluminum Aqua-Masters and for the first time in Aqua-Jet propellers. Tests with service motors and their types of lower units indicate that the large cone hub (necessary to incorporate the Cushion-Hub arrangement) actually improved speeds. This resulted from better fairing or streamlining of the large hub as compared to the normal small hub of the Aqua-Jet.

In the pages following, wherever "C" occurs in part numbers it indicates a Cushion-Hub style propeller for Aqua-Master or Aqua-Jet. Examples: AMC 260, AJC 13, etc.

9 CHECK POINTS FOR IMPROVED OUTBOARD PERFORMANCE

Continued from Page 3

service. It is readily apparent to everyone that a highly mounted motor will cause less drag or skin friction, give better shallow water operation, and safer operation on sharp banks, since the propeller will break loose and the boat automatically straighten itself. You will also reduce back pressure with the underwater exhaust close to the surface.

3. SPARK LEVER SETTING

All outfits definitely do not operate best with the spark lever fully advanced. In fact, more often they do not. Many drivers simply throw the lever way over when they want most speed, whereas if they will feel out the last inch or so and find the correct spark lever setting, they will find a point that will be best.

4. THE KEEL

The purpose of a keel is to brace or stiffen the bottom, offering protection to the bottom, and on faster boats to stabilize it on the turns. Unfortunately this also adds drag and provides a route for air bubbles to flow back and be picked up by the propeller, thus greatly effecting propeller performance. This is why on some of the faster boats, intended for racing, you will find the keel inside the boat. These jobs generally are run with a fin. Where a substantial keel is built on the bottom, the aft end should be faired from an eighth to a quarter inch at the transom on a taper to about 30" forward. Fortunately most boat builders today have recognized the importance of faired keels and are sending them from the factory this way, but there are still thousands of boats in use with keels causing propeller inefficiencies.

5. BOAT BOTTOMS

90% of all well designed runabouts are straight line bottom boats. These have been proven definitely the most efficient and fastest. Unfortunately, however, many of these boat bottoms are not perfectly true and have built-in, or developed through use, a hook or curve which normally appears just forward of the transom. Usually the tremendous pull of a big engine or a medium size engine has drawn the bottom out of true and it has taken a permanent set. Some flexible bottom boats may straighten themselves up when out of the water but under operation be running with the hook. This hook developed in the bottom has two very serious effects in the outfit's performance.

First, it often is the entire reason for galloping at high speed and difficult control on the turns.

Secondly, it slows the boat up. If you have determined that you have an untrue boat bottom it should be straightened up. This can be done by most anyone by adding one x six's and wedging, and permanently installing these bottom bracings. Time and again we have seen difficult hulls made into fine-running and faster boats by getting the aft $\frac{1}{3}$ of the boat bottom into the condition that it should be, namely a straight line.

6. PASSENGER WEIGHT

The average outboard is most sensitive to weight distribution. Some in fact are so sensitive that with motors of medium power, it is only by throwing weights way forward that the boat can be gotten into a plane where it will run best. In others, weights must be shifted aft. Here again variations in design, power and type of set-up will all vary so much that individuals will have to try out their own outboards and determine the weight compensation required. An excellent example of proper and improper weight distribution is offered by the owner of a flat bottom rowboat who sits in the stern, way aft, with a 5 H.P. motor and chugs along at 6 miles an hour with the bow 3' in the air. Sitting in the middle seat driving with a long handled stick he finds that he is actually able to plane out at 12 to 15 miles per hour.

7. CAVITATION

Cavitation is often called the curse of outboarding. What is it? Briefly it simply is a condition where the propeller sucks air or motor gases and runs wild in the "pocket". Most cavitation is caused by the motor being tilted too far aft or too high on the transom. Other common causes of high slip or cavitation are extreme "lift" of boat on turns, a bent propeller, wrong propeller size, weeds on lower unit, etc.

8. CARBURETOR ADJUSTMENT

Though indirectly related to propellers this subject deserves special emphasis. Always adjust carburetor to the rich point. It is inadvisable to attempt final carburetor adjustment until the motor has run 100 yards or more wide open. The reason for this is that a two cycle engine will overfill the crank case every time you slow it down or start off, and it takes a 100 yards or more to clear the crankcase to the point where correct adjustment can be obtained. Our recommendation above of setting the carburetor to the rich point is contrary to general tendency, but doing so will result in better lubrication.

9. THE BOAT ITSELF

Present day manufacturers of outboard boats offer a huge range of hulls for the American outboard enthusiast to choose from. They range from various metals, plastics, solid woods and plywoods. Each has its merit. Some are intended as family pleasure boats, some as all around utility boats and some strictly as speed boats. Many of our inquiries here have to do with owners of inherently relatively slow-speed, nice family boats of good safe design who want to compete with the speed boys. While we sometimes can bring up speeds appreciably through propeller alteration or some other changes mentioned above, it certainly isn't in the cards for a 400 pound plank boat to compete with hulls designed for one purpose only, namely top speed, without thought to riding qualities or maximum stability.

MICHIGAN PROPELLER SELECTOR AND PRICE LIST

Prices Subject To Change Without Notice

ELTO

MOTOR	MODEL No.	YEAR	Part No.	Price	Dia. and Pitch	Metal	No. Blades	RECOMMENDATION
Ace.....	4145, 4205 4256, 4301, 4329, 4351, 4352	1936-37 1938-39-40-41	E22 E27	\$ 3.30 3.30	7 x 6 7 x 6	AL AL	2 2	General purpose General purpose
Big Quad.....	800, 820	1931-32	AJ335 AM60 AM62	18.00 14.40 13.50	9 1/2 x 15 10 1/2 x 12 1/2 10 x 13	BR BR BR	2 3 3	AJ racing for light runabout AM for heavier boats and pas- sengers AM for medium boats and light loads
Cub.....	4264	1939-40-41	E2	3.90	5 1/2 x 4 3/4	AL	2	General purpose
Fleetwin.....	4038 For all Fleetwin.....	1934 1932-41	E291 AM80 AM81	7.50 9.60 9.90	9 x 8 8 x 9 8 1/4 x 9	BR BR BR	2 3 3	General purpose AM for medium boats and medium light loads AM for heavier boats with passengers
Foldlight.....	162, 404	1930-31	B10	4.80	8 1/2 x 8	AL	2	General purpose
Handitwin.....	4158, 4212, 4261 4307, 4332, 4357, 4358	1936-37-38 1939-40-41	E32	3.30	7 1/2 x 6	AL	2	General purpose
Lightweight.....	90000, 309 401, 411	1929-30 1931-32	E242	3.90	8 3/4 x 8	AL	2	General purpose
Lightwin.....	4020 4313, 4314	1934 1939-40-41	E196 E198 E199 AM120 AM121	5.10 6.60 6.00 8.40 8.40	7 1/2 x 8 7 1/2 x 9 8 1/4 x 6 7 1/2 x 6 1/2 7 1/2 x 7 1/2	AL BR AL BR BR	2 2 2 3 3	General purpose 75 lb. class boats Rowboat AM heavier boats 14' class AM light planing boats with light load
Pal.....	4203, 4253, 4266	1937-38- 39-40-41	E40	3.00	6 x 5	AL	2	General Purpose
Service A.....	424	1932-33	E291 AM80 AM81	7.50 9.60 9.90	9 x 8 8 x 9 8 1/4 x 9	BR BR BR	2 3 3	General purpose AM medium boats - medium and light loads AM heavier boats with pas- sengers
Speeditwin.....	6004, 6015, 6018, 6034 .788" shaft.....	1934-35-36-38	AJ290 AM50	18.00 13.50	9 1/2 x 12 10 x 10	BR BR	2 3	AJ racing for light runabouts AM light runabout, light and medium load
Speediquad and Senior Quad.....	7004, 7013 314, 700, 721, 732, .788" shaft.....	1934-35 1930-33	AJ335 AM60 AM62	18.00 14.40 13.50	9 1/2 x 15 10 1/2 x 12 1/2 10 x 13	BR BR BR	2 3 3	AJ racing light runabout AM for heavier boats with passengers AM medium boats and me- dium and light loads
Sportfour.....	9004, 9013	1934-35	AJ345 AM41 AM45	13.20 11.40 12.00	8 3/4 x 10 8 3/4 x 10 9 1/2 x 10	BR BR BR	2 3 3	Racing for light runabouts AM planing boats medium loads AM heavier boats with pas- sengers
Speedster, 12 H.P.....	5101	1949-50	AJ23 AJ22 AJ20 AM240 AM241 AM242	13.20 13.20 13.20 10.50 10.50 10.50	8 3/4 x 10 1/2 8 3/4 x 9 1/2 8 3/4 x 10 8 3/4 x 10 1/2 8 3/8 x 10 8 3/4 x 9	BR BR BR BR BR BR	2 2 2 3 3 3	AJ speed wheel souped engine AJ speed wheel 12' class boats AJ speed wheel extra light runabouts AM average runabout light loads AM average runabout 2 pas- sengers AM heavier boats and passen- gers
Sportster, 5 H.P.....	4432	1949-50	Y10 AM120 AM121	5.10 8.40 8.40	7 1/2 x 8 7 1/2 x 6 1/2 7 1/2 x 7 1/2	AL BR BR	2 3 3	General purpose AM heavier boats 14' class AM light planing boats, light loads
Super "A".....	422, 456	1932-33	E291 AM80 AM81	7.50 9.60 9.90	9 x 8 8 x 9 8 1/4 x 9	BR BR BR	2 3 3	General purpose AM medium boats, medium and light loads AM heavier boats with pas- sengers
Super "C".....	605, 624, 638, .788" shaft.....	1931-32-33	AJ290 AM50	18.00 13.50	9 1/2 x 12 10 x 10	BR BR	2 3	AJ racing for light runabouts AM light runabout, light and medium loads

What's a vacation or fishing trip without the use of your motor — carry a spare propeller.

MICHIGAN PROPELLER SELECTOR AND PRICE LIST

Prices Subject To Change Without Notice

EVINRUDE

MOTOR	MODEL No.	YEAR	Part No.	Price	Dia. and Pitch	Metal	No. Blades	RECOMMENDATION	
Big Four.....	802, 814, .788" shaft	1931-32	AJ335	\$18.00	9 1/2 x 15	BR	2	AJ racing for light runabouts	
			AM60	14.40	10 1/2 x 12 1/2	BR	3	AM for heavier boats with passengers	
			AM62	13.50	10 x 13	BR	3	AM medium boats and medium light loads	
	8015, 1" shaft.....	1945-50	AJ326	18.00	9 1/2 x 14 1/2	BR	2	AJ racing runabouts, light loads	
			AJ325	18.00	9 1/2 x 14	BR	2	AJ racing runabouts, light loads	
			AJ327	18.00	9 1/2 x 15	BR	2	AJ racing, souped engines	
			AJ303	18.00	10 x 14	BR	2	AJ racing runabouts, light loads	
			AM173	15.30	10 1/2 x 11	BR	3	AM heavy boats and loads	
			AM174	14.40	10 x 12 1/2	BR	3	AM 14' class boats and passengers	
			AM175	14.40	10 x 13 1/2	BR	3	AM medium boats, medium loads	
	Big-Twin, 25 H.P.....		1951-52	AMC380	15.60	10 3/8 x 10	BR	3	Workboats and Ex. Heavy Loads
				AMC381	15.60	10 3/8 x 11 1/2	BR	3	Medium Boats-Med. Loads
AMC382				15.60	10 3/8 x 12 1/2	BR	3	General purpose, bronze	
AJC460				18.00	10 x 15	BR	2	14'-15' runabouts, light loads (cushion hub)	
AJC461				18.00	10 x 15 1/2	BR	2		
AMC383				11.40	10 3/8 x 11 1/2	AL	3	Alum. AM 16' boats and loads	
AMC384				14.40	11 x 10	AL	3	Alum. for barges and extra heavy loads	
AMC385				11.40	10 3/8 x 10	AL	3	Workboats and extra heavy loads	
Fastwin.....				H, 1H, 13H.....	1928-29	V823	10.50	10 x 10	BR	3	Runabout, medium and light loads
Fastwin.....	4438.....	1950-51-52	AMC330	13.20	8 1/2 x 11	BR	3	Medium boats, medium loads	
			AMC331	13.20	8 1/2 x 10 1/2	BR	3	Heavier boats, with passengers	
			AMC332	13.20	8 3/4 x 9	BR	3	Work Boat, Heavy Passenger load	
			AMC333	9.90	8 1/2 x 11	AL	3	Alum. AM medium boats and loads	
			AMC334	9.90	8 3/4 x 9	AL	3	Alum. AM workboats and heavy passenger loads	
			AJC410	13.20	8 1/2 x 11 1/2	BR	2	AJ racing, runabouts, light loads, hydroplanes	
			AJC411	13.20	8 1/2 x 12	BR	2		
AMC266	11.40	9 x 7	AL	3	Work Boats, Barges, Extra heavy loads				
Fisherman.....	4309.....	1939	E196	5.10	7 1/2 x 8	AL	2	General purpose	
			E198	6.60	7 1/4 x 9	BR	2	75 lb. class boats	
			E199	6.00	8 1/4 x 6	AL	2	Row boats	
			AM120	8.40	7 1/2 x 6 1/2	BR	3	AM heavier boats, 14' class	
			AM121	8.40	7 1/2 x 7 1/2	BR	3	AM light planing boats with light load	
Fleetwin.....	418, 450, 4034.....	1932-33-34	E291	7.50	x 8	BR	2	General purpose	
			AM80	9.60	8 x 9	BR	3	AM medium boats with medium and light loads	
			AM81	9.90	8 1/4 x 9	BR	3	AM heavier boats with passengers	
	4434.....	1950-51-52	AM340	8.40	7 3/4 x 7	BR	3	AM medium boats, medium loads	
			AM341	8.40	7 3/4 x 6	BR	3	AM heavier boats, with passengers	
			AJ420	12.00	7 3/4 x 9 1/2	BR	2	AJ racing, runabouts, light loads	
			AJ421	12.00	7 3/4 x 9	BR	2	A J Racing, runabouts,	
Foldlight.....	162, 403.....	1930-31	B10	4.80	8 1/2 x 8	AL	2	General purpose	
Light Four.....	4231, 4271, 4315, 4316, 4317, 4322, 4323, 4324, 4375, 4377, 4389, 4111, 4178.....		AJ349	13.20	8 1/2 x 9 1/2	BR	2	AJ speed wheel, 12' class boats	
			AJ350	13.20	8 1/2 x 10	BR	2	AJ speed wheel, extra light runabouts	
	402, 407.....	1935-50	E446	8.10	9 x 6 1/2	AL	2	14'-16' boats with heavy loads	
			AM72	9.60	8 x 9	BR	3	AM light runabout, light load	
			AM73	9.60	8 x 8 1/2	BR	3	AM runabout, medium load	
Lightwin.....	402, 407.....	1931-32	E242	3.90	8 3/4 x 8	AL	2	General purpose	
Mate.....	4263.....	1939-40-41	E2	3.90	5 1/2 x 4 3/4	AL	2	General purpose	
Ranger.....	4252, 4265, 4334, 4406, 4407.....	1938-47	E40	3.00	6 x 5	AL	2	General purpose	
Scout.....	4201.....	1937	E40	3.00	6 x 5	AL	2	General purpose	

No propeller will perform smoothly, efficiently if bent or thrown out of balance. Own a spare to use while damaged wheel is reconditioned.

MICHIGAN PROPELLER SELECTOR AND PRICE LIST

Prices Subject To Change Without Notice

EVINRUDE (Continued)

MOTOR	MODEL No.	YEAR	Part No.	Price	Dia. and Pitch	Metal	No. Blades	RECOMMENDATION		
Speedifour.....	728, 7022, 7026, 7031, (Serial No. under 3000), 7032, 7033, .788" shaft.....	1932-41	AJ332	18.00	9 1/2 x 13	BR	2	AJ racing for light runabouts		
			AJ333	18.00	9 1/2 x 13 1/2	BR	2	AJ racing for light runabouts		
			AJ334	18.00	9 1/2 x 14	BR	2	AJ racing, souped engines		
			AM60	14.40	10 1/2 x 12 1/2	BR	3	AM heavier boats with passengers		
	7031, Serial 3001 up, 1" shaft.....	1946-50	AM62	13.50	10 x 13	BR	3	AM medium boats and medium and light loads		
			EW6	14.40	10 1/2 x 13	BR	3	Model 7026, 7031, 7032, general purpose weedless		
			EW20	14.40	10 1/2 x 12 1/2	BR	3	General purpose weedless		
			AJ323	18.00	9 1/2 x 13	BR	2	AJ racing runabouts, light loads		
			AJ324	18.00	9 1/2 x 13 1/2	BR	2	AJ racing runabouts, light loads		
			AJ325	18.00	9 1/2 x 14	BR	2	AJ racing, souped engines		
			AJ301	18.00	10 x 13	BR	2	AJ racing runabouts, light loads		
			AM173	15.30	10 1/2 x 11	BR	3	AM 16' boats and loads		
Speeditwin.....	1U, 15U, 143, 156, 167.....	1929-30-31	V841	9.60	10 x 13	AL	3	General purpose		
			AM130	13.50	16 x 11	BR	3	AM light runabouts, light and medium loads		
Speeditwin.....	634, 6000, 6011, 6039, 6041 to No. 5000, .788" shaft.....	1933-34-35	AM50	13.50	10 x 10	BR	3	AM light runabout, light and medium loads		
			AJ290	18.00	9 1/2 x 12	BR	2	AJ speedwheel, souped-up motor		
Speedtwin.....	6039-6041, Serial No. over 5000, 1" shaft.....	1946-51	EW10	14.40	10 1/2 x 10 1/2	BR	3	General purpose weedless		
			E285	14.40	10 x 11	BR	2	Speedwheel, medium boats, light loads		
			AM161	14.40	10 1/2 x 9 1/2	BR	3	AM heavy boats and loads		
			AM162	14.40	9 3/4 x 11	BR	3	AM medium boats, light loads		
			AM163	14.40	9 3/4 x 10	BR	3	AM medium boats, heavier loads		
			AJ288	18.00	9 1/2 x 12	BR	2	AJ racing, light loads		
Sportfour.....	For all Sportfour.....	1932-41	AJ289	18.00	9 1/2 x 12 1/2	BR	2	AJ racing, light loads		
			AJ323	18.00	9 1/2 x 13	BR	2	AJ racing, souped engines		
			E286	14.40	10 x 10	BR	2	Speedwheel, medium boats and loads		
			AJ345	13.20	8 3/4 x 10	BR	2	Racing, light runabouts		
Sportsman.....	4091.....	1935	AM41	11.40	8 3/4 x 10	BR	3	AM planing boats, medium loads		
			4146, 4207, 4285, 4296, 4346, 4364, 4365, 4366, 4367, 4416.....	1936-37	E22	3.30	7 x 6	AL	2	General purpose
					E27	3.30	7 x 6	AL	2	General purpose
Sportwin.....	4156, 4209, 4287, 4303, 4353, 4368.....	1938-47	E4	3.90	7 x 6	AL	2	General purpose		
			4369, 4371, 4372, 4421.....	1936-37	E32	3.30	7 1/2 x 6	AL	2	General purpose
Sturditwin.....	420.....	1932-33			E8	3.90	7 1/2 x 6	AL	2	General purpose
			E291	7.50	9 x 8	BR	2	General purpose		
			AM80	9.60	8 x 9	BR	3	AM medium boats with medium and light loads		
Weedless Sportsman.....	4418.....	1947-51	AM81	9.90	8 1/4 x 9	BR	3	AM heavier boats with passengers		
			EW30	3.60	6 7/8 x 5 1/2	AL	2	General purpose		
Weedless Sportwin.....	4422.....									
Zephyr.....	4359, 4361, 4362, 4363, 4378, 4379, 4381, 4382, 4402, 4403, 4404, 4405.....	1940-50	E196	5.10	7 1/2 x 8	AL	2	General purpose		
			E198	6.60	7 1/4 x 9	BR	2	75 lb. class boats		
			E199	6.00	8 1/4 x 6	AL	2	Rowboat		
			AM120	8.40	7 1/2 x 6 1/2	BR	3	AM heavier boats 14' class		
			AM121	8.40	7 1/2 x 7 1/2	BR	3	AM light planing boats with light load		

Carry a spare propeller to slip on when a damaged propeller would otherwise spoil your boating pleasure.

MICHIGAN PROPELLER SELECTOR AND PRICE LIST

Prices Subject To Change Without Notice

JOHNSON (Continued)

MOTOR	MODEL No.	YEAR	Part No.	Price	Dia. and Pitch	Metal	No. Blades	RECOMMENDATION	
	TD15, 20, TS15.....	.....	J2	\$5.40	8 x 7 1/2	BR	2	General purpose 75 lb. class, light loads	
			J7	7.50	8 x 8 1/2	BR	2		
			AM90	8.40	7 3/4 x 6 1/2	BR	3		
	V45, 65, 70, VA, VE50.....	.....	.....	AM91	8.40	7 3/4 x 7	BR	3	AM fast wheel, light boats and loads
				J174	18.00	12 x 13	BR	3	General purpose
				J176	18.00	12 x 10	BR	3	Work boat or heavy passenger load
				J1708	14.40	10 1/2 x 16	BR	2	Hydroplane racing
				AM30	14.70	10 1/2 x 12 1/2	BR	3	AM heavier boats with passengers
				AM33	14.70	9 7/8 x 14	BR	3	AM fast wheel, light boats and loads
	200, 210..... TN, with Neutral, forward.....	.....	1950-52	AM34	14.70	9 7/8 x 13	BR	3	AM heavier boats, medium loads
				J74	3.60	7 7/8 x 5 1/2	AL	3	General purpose
				J8	3.30	8 x 7 1/4	AL	2	General purpose
	Sea Horse "25"	Twin "RD".....	1951-52	AM92	8.40	7 3/4 x 6 1/2	BR	3	AM heavier boats, medium loads
				AM93	8.40	7 3/4 x 7	BR	3	AM fast wheel, light boats and loads
				AMC380	15.60	10 3/8 x 10	BR	3	Work boats Ex. heavy loads
AMC381				15.60	10 3/8 x 11 1/2	BR	3	Medium boats, medium loads	
AMC382				15.60	10 3/8 x 12 1/2	BR	3	General purpose	
AJC460				18.00	10 x 15	BR	2	14'-15' runabouts, light loads (cushion hub)	
AJC461				18.00	10 x 15 1/2	BR	2		
			AMC383	11.40	10 3/8 x 11 1/2	AL	3	Alum. AM 16' boats and medium loads	
			AMC384	14.40	11 x 10	AL	3	Alum. for barges and extra heavy loads	
			AMC385	11.40	10 3/8 x 10	AL	3	Work boats and extra heavy loads	

CHAMPION

Standard Single.....	A.....	1935	P44	\$3.60	7 1/2 x 6 1/2	AL	2	General purpose
	1B.....	1936						
	S1C.....	1937						
	S1D.....	1938						
Lite Twin.....	2B.....	1936	P45	5.10	7 1/2 x 6 1/2	BR	2	General purpose, bronze
	S2C.....	1937						
	S2D.....	1938						
Red Flash.....	R1C.....	1937						
DeLuxe Lite Twin up to Model D2D3000.....	D2D.....	1938	P50	4.80	8 1/4 x 6	AL	3	General purpose
Standard Single.....	S1E.....	1939	P51 P52	3.60 5.10	7 1/2 x 6 1/2	AL	2	General purpose General purpose, bronze
DeLuxe Single.....	D1E.....	1939						
Standard Single (Kingfisher).....	S1F.....	1940						
Standard Lite Twin (Fish Hawk).....	S2F.....	1940						
DeLuxe Single Blue Streak.....	B1F.....	1940						
Standard Single (Kingfisher).....	S1G.....	1941						
DeLuxe Single (Challenger).....	D1G.....	1941						
Single (Ensign).....	M1G.....	1941						
Super Single.....	1H.....	1942						
DeLuxe Lite Twin from 152D3000 up....		1938						
Standard Single, Model 400.....	S4G.....	1941	P91	4.80	7 1/2 x 6 1/2	AL	3	General purpose
DeLuxe Single, Model 400.....	D4G.....	1941						
DeLuxe Lite Twin.....	D2D.....	1939						
Single (Commodore).....	M4G.....	1941						
DeLuxe Challenger Single.....	D1F.....	1940						

MICHIGAN PROPELLER SELECTOR AND PRICE LIST

Prices Subject To Change Without Notice

CHAMPION (Continued)

MOTOR	MODEL No.	YEAR	Part No.	Price	Dia. and Pitch	Metal	No. Blades	RECOMMENDATION	
Standard Single.....	1J and 1L-1K.....	1946-50	P90	\$ 5.40	8 x 5 1/2	AL	2	General purpose Rowboats and heavier loads, weedless	
*DeLuxe Single.....	4.2 H.P., 2J and 2K.....	1946-50		P94	6.60	8 x 4 1/2	AL		3
*DeLuxe Twin.....	7.9 H.P., 4K.....	1948-50	P120	6.60	8 x 10	AL	2	General purpose General purpose, bronze AJ racing, light runabouts AM fast wheel, light boats and loads AM heavier boats, medium loads	
			P122	8.10	8 x 10	BR	2		
			AJ125	12.00	8 x 9 1/2	BR	2		
			AM230	8.40	8 1/4 x 9	BR	3		
			AM231	8.40	8 1/4 x 8 1/2	BR	3		
Hot Rod.....	4KS and 4LS.....	1949-52	AJ130	12.00	8 1/8 x 10	BR	2	AJ racing, light runabouts AJ racing, souped up Racing runabouts	
Hot Rod Special.....	4L-S-1X.....	1950-52	AJ131	12.00	8 1/8 x 11	BR	2		
			AJ470	13.50	7 x 9	BR	2		
Super Deluxe Hydrodrive.....	2L-HD.....	1950-52	P140	6.00	7 1/2 x 6 1/2	AL	3	General purpose General purpose, bronze General purpose, weedless General purpose	
			P141	7.50	7 1/2 x 6 1/2	BR	3		
			P142	7.50	7 1/2 x 6	BR	2		
			AM232	8.40	7 1/2 x 9 1/2	BR	3		
Deluxe.....	4L.....	1952	AM233	8.40	7 1/2 x 10	BR	3	Light runabouts and loads AJ racing, light runabouts AJ racing, souped up	
Super Deluxe Hydrodrive.....	4L-HD.....	1950-52		AJ130	12.00	8 1/8 x 10	BR		2
				AJ131	12.00	8 1/8 x 11	BR		2

*These models interchangeable with MAJESTIC and VOYAGER.

MUNCIE, NEPTUNE, SEAGULL, GAMBLE

Jr. Single, 1.2 and 1.5 H.P.....	1A38, 1A39, 10A1, 11A1, 11B1, 15A1, 15B1, 17A1, 17B1.....	1938-47	E40	\$ 3.00	6 x 5	AL	2	General purpose
Single, 2 and 2.5 H.P.....	0B1, 0B11, 0B12, 2A38, 2A39, 10A2, 11A2, 11AA2, 11B2, 15B2, 17A2.....	1933-41	M10 M11 M12	3.60	7 3/8 x 5 1/8	AL	2	General purpose General purpose, bronze Rowboats and loads
				6.60	7 3/8 x 5 1/8	BR	2	
				3.90	8 1/2 x 4	AL	2	
2.5 H.P.....	0B2.....	1930-31	M30	3.60	9 x 9	AL	2	General purpose
3-4-5 H.P.....	0B3, 0B4, 0B5.....	1931-32						
Jr. Twin.....	0B31, 0B32, 0B34, 0B35, 4A38, 4A39, 10A4, 11B4, 15B4.....	1933-41	M20 M21	\$ 3.90	8 x 7	AL	2	General purpose General purpose, bronze
				6.60	8 x 7	BR	2	
Alternate, 5 and 6 H.P.....	5A39, 10A6, 11A6, 11AA6, 15A6, 15AA6, 15B4.....	1939-41	M60	7.50	9 x 9	AL	3	General purpose
Imp. Twin, 6 H.P.....	6A38, 6A39, 15A6, 15AA6.....	1938-47-48						
Alternate.....	9A38, 9A39, 10A10, 11A9.....	1938-47-48	M62 M65	8.70	8 1/2 x 10 1/2	BR	2	Racing light runabouts Heavier boats and loads
	11AA9, 11A10, 11- AA10, 15A10, 15AA10.....			8.70	9 x 9	BR	2	
	15A9, 15AA9.....							
Master Twin..... 16 H.P.....	0B15, 0B16, 0B17, 16A-38.....	1931-41-46	AJ400	13.20	9 x 12 1/2	BR	2	AJ racing light runabouts
Alternate Twin, 3 1/2 H.P.....	11A3, 11AA3, 15A3, 15AA3, 17AA3, 17A3.....	1941-51	J154	13.20	10 x 10	BR	3	General purpose
			M70	3.60	6 1/2 x 5	AL	2	General purpose
			M71	6.60	6 1/2 x 5	BR	2	General purpose, bronze
H.P.....	AA4.....	1948-51	M72	3.60	6 1/2 x 6 1/2	AL	2	General purpose
			M73	6.60	6 1/2 x 6 1/2	BR	2	General purpose, bronze
			M74	3.60	7 1/2 x 5	AL	2	Best-all round propeller

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MICHIGAN PROPELLER SELECTOR AND PRICE LIST

Prices Subject To Change Without Notice

BENDIX

MOTOR	MODEL No.	YEAR	Part No.	Price	Dia. and Pitch	Metal	No. Blades	RECOMMENDATION
Singles.....	2¼ H.P.....	1940	X5	\$ 4.80	7½ x 5	AL	2	General purpose
Twins.....	4½ H.P.....	1940	X20	5.10	8¼ x 6	AL	2	General purpose

CHRIS CRAFT

Challenger, 5 H.P.....	J.....	1949-52	C514	\$ 6.00	8¼ x 9½	AL	2	General purpose and speed Racing, light runabouts
			AJ500	12.00	7¾ x 10	BR	2	
Commander, 10 H.P.....	K.....	1950-52	AJ430	14.40	8½ x 10	BR	2	Racing, light runabouts Racing, light runabouts AM heavier boats and passengers AM medium boats, light loads AM heavy boats or skis
			AJ431	14.40	8½ x 10½	BR	2	
			AM390	10.50	8 x 9	BR	3	
			AM391	9.90	7½ x 9½	BR	3	
			AM392	10.50	8 x 8	BR	3	

CORSAIR

All Single Cyl. Models.....	All Models.....	1948-52	SA10	\$ 3.60	7¾ x 6	AL	2	General purpose
All 5.0 H.P. Models.....	All Models.....	1949-52	SA20	4.50	7½ x 7	AL	2	General purpose Medium boats, light loads Heavier boats, medium loads
			AMC270	9.60	6¾ x 7½	BR	3	
			AMC271	9.60	6¾ x 7	BR	3	
All 7½ H.P. Models.....	All Models.....	1948-52	SA3	5.10	8 x 7½	AL	2	General purpose General purpose, bronze 75 lb. class, light loads AJ racing, light runabouts AM medium boats, light loads AM medium boats with loads General purpose Medium boats and medium loads Heavy boats or loads
			SA4	6.60	8 x 7½	BR	2	
			SA1	5.40	8 x 9	AL	2	
			AJ8	12.00	7¾ x 8½	BR	2	
			AM210	8.40	7¾ x 8	BR	3	
			AM211	8.40	7¾ x 7	BR	3	
			SA6	5.40	7¾ x 8	AL	3	
			AMC400	9.60	7¾ x 7½	BR	3	
			AMC401	9.60	7¾ x 6½	BR	3	
All 10 H.P. Models.....	All Models.....	1950-52	SA15	6.10	8 x 10	AL	2	General purpose Racing runabouts Work boats, heavy loads
			AJ510	13.20	7½ x 9	BR	2	
			AMC410	10.50	8½ x 7	BR	3	

ELGIN

Single, 1¼ H.P.....	571, 58301.....	1946-50	G10	\$3.30	6½ x 5	AL	2	General purpose
Single, 2½ H.P.....	571, 58401.....	1947-50	G20	3.60	7½ x 4½	AL	2	General purpose
Twin, 3½ H.P.....	571, 58501 and 21.....	1947-50	G30	3.60	7½ x 5½	AL	2	General purpose
Twin, 5, 5½-6 H.P.....	571, 58601, 11 and 21 571, 58541.....	1947-48	G40	3.60	7½ x 7½	AL	2	General purpose Racing, light runabouts AM medium boats, light loads
		1949-52	G70	8.70	7¼ x 7	BR	2	
			AM380	6.60	6¾ x 6	BR	3	
Twin, 7½ H.P.....	571, 58731.....	1949-52	G50	4.80	7½ x 8½	AL	2	General purpose AJ racing, light runabouts AM medium boats, light loads
			AJ52	10.50	7¼ x 8½	BR	2	
			AM290	8.40	6¾ x 8½	BR	3	
Twin, 16 H.P.....		1949-52	AJC440	14.40	9x11	BR	2	AJ racing, light runabouts Medium boats, light loads Heavier boats and passengers, skis General purpose, cushion hub
			AMC350	14.40	9½x9	BR	3	
			AMC351	14.40	9½x8	BR	3	
			AMC352	9.90	9½ x 9	AL	3	

Propeller damage won't lay up your boat if you own a spare propeller.

MICHIGAN PROPELLER SELECTOR AND PRICE LIST

Prices Subject To Change Without Notice

FIRESTONE

MOTOR	MODEL No.	YEAR	Part No.	Price	Dia. and Pitch	Metal	No. Blades	RECOMMENDATION
Single Cyl. 3.5 H.P.	460, 462	1946	{ P51 P52	\$ 3.60 5.10	7½ x 6½ 7½ x 6½	AL BR	2 2	General purpose General purpose, bronze
Single Cyl. 3.5, 3.6, 4 H.P.	All Singles except 460, 462	1946-52	SA10	3.60	7¾ x 6	AL	2	General purpose
All 5 H.P. Twins	All Models	1949-52	{ SA20 AMC270 AMC271	4.50 9.60 9.60	7½ x 7 6¾ x 7½ 6¾ x 7	AL BR BR	2 3 3	General purpose Medium boats, light loads Heavier boats, medium
All 7½ H.P. Twins	All Models	1946-52	{ SA3 SA4 SA1 AJ8 AM210 AM211 SA6 AMC400 AMC401	5.10 6.60 5.40 12.00 8.40 8.40 5.40 9.60 9.60	8 x 7½ 8 x 7½ 8 x 9 7¾ x 8½ 7¾ x 8 7¾ x 7 7¾ x 8 7¾ x 7½ 7¾ x 6½	AL BR AL BR BR BR AL BR BR	2 2 2 2 3 3 3 3 3	General purpose General purpose, bronze 75 lb. class, light loads AJ racing, light runabouts AM medium boats, light loads AM medium boats with loads General purpose Med. boats and med. loads Heavy boats or loads
All 10 H.P. Twins	All Models	1950-52	{ SA15 AJ510 AMC410	6.10 13.20 10.50	8 x 10 7½ x 9 8½ x 7	AL BR BR	2 2 3	General purpose Racing runabouts Work boats, heavy loads

FLAMBEAU

Single	2½-3 H.P.	1947-52	FL10	\$ 3.60	7 x 6	AL	2	General purpose
Twin	5-6 H.P.	1947-52	FL20	5.40	8 x 8½	AL	2	General purpose

LAUSON

Single	2½-3 H.P.	1940-52	{ L30 L31	\$ 4.20 5.40	7½ x 5½ 7½ x 5½	AL BR	2 2	General purpose General purpose, bronze
Twin	6 H.P.	1948-52	{ L50 L51 AM310	5.40 6.60 8.40	8 x 6 8 x 6 7½ x 6½	AL BR BR	2 2 3	General purpose General purpose, bronze AM medium boats and light loads

LE JAY

Electric, 5/8" shaft		Thru 1945	H50	\$ 2.70	6 x 5	AL	2	General purpose
Electrol, 7/16" shaft	46-A	1946-50	H60	3.30	6 x 5	AL	2	General purpose

LOCKWOOD

Foldlight		1930	B10	\$ 4.80	8½ x 8	AL	2	General purpose
Ace		1929-30	L411	9.90	9¼ x 8½	AL	2	General purpose
Chief	82B-92B	1928-29	L420	9.90	9 x 14	BR	2	General purpose

MARTIN

Single, 2.3 H.P.	"20"	1948-51	Q20	\$ 4.20	6½ x 4¼	AL	2	General purpose
Twin, 4½ H.P.	"40" and "45"	1946-51	Q40	4.80	7½ x 6	AL	2	General purpose
Twin, 7.2 H.P.	"60", "66" and "75"	1946-51	{ Q10 Q31 QW32 AJ34 AM181	5.40 6.00 6.60 12.00 8.40	8 x 8 8 x 9½ 8 x 7 7¾ x 8½ 7½ x 8	AL AL AL BR BR	2 2 3 2 3	General purpose 75 lb. class, light loads Rowboats and medium runabouts, weedless AJ racing, light runabouts AM fast wheel, light boats and loads
Twin, Twist Shaft, 7.5 H.P.	"75"	1952	{ O51 O50	6.00 5.40	8 x 6½ 8 x 8½	AL AL	2 2	Heavy boats and loads General purpose
Twin	Hi-Speed "60"	1950-52	AJ37	12.00	7½ x 9½	BR	2	Racing runabouts
Twin, 10 H.P.	100	1950-51	{ AJ451 AM362 AM363	13.20 9.90 9.90	7½ x 9 8½ x 8 8½ x 7	BR BR BR	2 3 3	AJ racing, light runabouts, disc clutch AM medium runabouts, light loads, disc clutch Work boats, heavy loads and skis, disc clutch
Twin, Twist Shaft, 10 H.P.	"100"	1952	Q60	6.00	8 x 9	AL	2	General purpose

MICHIGAN PROPELLER SELECTOR AND PRICE LIST

Prices Subject To Change Without Notice

SEA KING

MOTOR	MODEL No.	YEAR	Part No.	Price	Dia. and Pitch	Metal	No. Blades	RECOMMENDATION
Single, 2.8 H.P.			K8	\$ 3.30	7 $\frac{1}{8}$ x 6	AL	2	General purpose
Single, 1 H.P.	377, 381, 469		E40	3.00	6 x 5	AL	2	General purpose
Single, 1.8 H.P.	477		E27	3.30	7 x 6	AL	2	General purpose
Single, 1.8 H.P.	367		E4	3.90	7 x 6	AL	2	General purpose
Twin, 2.5 H.P.	498		W8	3.60	7 $\frac{1}{2}$ x 6	AL	2	General purpose
Twin, 2.8 H.P.	449	}	E32	3.30	7 $\frac{1}{2}$ x 6	AL	2	General purpose
Twin, 3.3 H.P.	378							
Twin, 3 H.P.	369, 378, 379, 8814		E8	3.90	7 $\frac{1}{2}$ x 6	AL	2	General purpose
Twin, 4 H.P.	400, 416, 491, 494, 499		E242	3.90	8 $\frac{3}{4}$ x 8	AL	2	General purpose
Twin, 5 H.P.	371		E196	5.10	7 $\frac{1}{2}$ x 8	AL	2	General purpose
			E198	6.60	7 $\frac{1}{4}$ x 9	BR	2	75 lb. class boats, light loads
			E199	6.00	8 $\frac{1}{4}$ x 6	AL	2	Rowboat
			AM120	8.40	7 $\frac{1}{2}$ x 6 $\frac{1}{2}$	BR	3	AM heavier boats, 14' class
			AM121	8.40	7 $\frac{1}{2}$ x 7 $\frac{1}{2}$	BR	3	AM light planing boats with light loads
Twin, 5 H.P.	Neutral-Forward	1951-52	AM98	3.30	8 x 7 $\frac{1}{2}$	AL	2	General purpose
			AM92	8.40	7 $\frac{3}{4}$ x 6 $\frac{1}{2}$	BR	3	Heavier boats or loads
			AM93	8.40	7 $\frac{3}{4}$ x 7 $\frac{1}{2}$	BR	3	Fast wheel for light boats and loads
Twin, 8.5 H.P.	471, 492, 473		E291	7.50	9 x 8	BR	2	General purpose
			AM80	9.60	8 x 9	BR	3	AM medium boats, medium and light loads
			AM81	9.90	8 $\frac{1}{4}$ x 9	BR	3	AM heavier boats with passengers
Twin, 12 H.P.	9017	1949-50	AJ20	13.20	8 $\frac{3}{4}$ x 10	BR	2	AJ speed wheel, extra light runabouts
			AJ22	13.20	8 $\frac{3}{4}$ x 9 $\frac{1}{2}$	BR	2	AJ speed wheel, 12' class boats
			AJ23	13.20	8 $\frac{3}{4}$ x 10 $\frac{1}{2}$	BR	2	AJ speed wheel, souped engine
			AM240	10.50	8 $\frac{3}{4}$ x 10 $\frac{1}{2}$	BR	3	AM average runabouts, light loads
			AM241	10.50	8 $\frac{3}{4}$ x 10	BR	3	AM average runabout, 2 passengers
			AM242	10.50	8 $\frac{3}{4}$ x 9	BR	3	AM heavier boats and passengers
Twin, 12 H.P.	Shift Model	1951-52	AMC330	13.20	8 $\frac{1}{2}$ x 11	BR	3	Medium boats, medium loads
			AMC331	13.20	8 $\frac{1}{2}$ x 10 $\frac{1}{2}$	BR	3	Heavier boats with passengers
			AMC332	13.20	8 $\frac{3}{4}$ x 9	BR	3	Workboats, heavy loads or skis
			AMC333	9.90	8 $\frac{1}{2}$ x 11	AL	3	Medium boats, medium loads
			AMC334	9.90	8 $\frac{3}{4}$ x 9	AL	3	Workboats, heavy loads or skis
			AJC410	13.20	8 $\frac{1}{2}$ x 11 $\frac{1}{2}$	BR	2	AJ, racing runabouts, hydroplanes
			AJC411	13.20	8 $\frac{1}{2}$ x 12	BR	2	

SCOTT-ATWATER

All Single Cyl. Motors	1-12, 1-14	1946-52	SA10	\$ 3.60	7 $\frac{3}{8}$ x 6	AL	2	General purpose
All 5 H.P. Twins	1-16	1949-52	SA20	4.50	7 $\frac{1}{2}$ x 7	AL	2	General purpose
			AMC270	9.60	6 $\frac{3}{4}$ x 7 $\frac{1}{2}$	BR	3	Medium boats, light loads
			AMC271	9.60	6 $\frac{3}{4}$ x 7	BR	3	Heavier boats, medium loads
All 7 $\frac{1}{2}$ H.P. Twins	1-20	1946-52	SA1	5.40	8 x 9	AL	2	75 lb. class, light loads
			SA3	5.10	8 x 7 $\frac{1}{2}$	AL	2	General purpose
			SA4	6.60	8 x 7 $\frac{1}{2}$	BR	2	General purpose, bronze
			AJ8	12.00	7 $\frac{3}{4}$ x 8 $\frac{1}{2}$	BR	2	AJ racing, light runabouts
			AM210	8.40	7 $\frac{3}{4}$ x 8	BR	3	AM medium boats, light loads
			AM211	8.40	7 $\frac{3}{4}$ x 7	BR	3	AM medium boats, with loads
			SA6	5.40	7 $\frac{3}{4}$ x 8	AL	3	General purpose
			AMC400	9.60	7 $\frac{3}{4}$ x 7 $\frac{1}{2}$	BR	3	Medium boats, medium loads
			AMC401	9.60	7 $\frac{3}{4}$ x 6 $\frac{1}{2}$	BR	3	Heavy boats or loads
			All 10 H.P. Twins	1-25	1950-52	SA15	6.10	8 x 10	AL	2	General purpose
AJ510	13.20	7 $\frac{1}{2}$ x 9				BR	2	Racing runabouts
AMC410	10.50	8 $\frac{1}{2}$ x 7				BR	3	Work boat, heavy loads
All 16 H.P. Twins	1-30	1950-52	AJ12	13.20	8 $\frac{1}{4}$ x 9	BR	2	AJ racing, light runabout
			AJC13	13.20	9 x 9	BR	2	AJ cushion, hub speed wheel light boats
			SAC29	12.00	9 $\frac{1}{2}$ x 6 $\frac{1}{2}$	BR	3	Heavy boats or loads, skis
			SAC30	10.50	9 $\frac{1}{2}$ x 6 $\frac{1}{2}$	AL	3	Heavy boats or loads, skis

MICHIGAN PROPELLER SELECTOR AND PRICE LIST

Prices Subject To Change Without Notice

WATERWITCH

MOTOR	MODEL No.	YEAR	Part No.	Price	Dia. and Pitch	Metal	No. Blades	RECOMMENDATION
Single, 3/4-1 H.P.		1938-41	S5	\$ 3.60	6 1/2 x 4	AL	2	General purpose
Single, 2 1/2-2 3/4 H.P.		1936-41	S10	3.60	7 1/2 x 7	AL	2	General purpose
Single, 3.5 H.P.		1940-41	S15	3.60	8 1/2 x 7	AL	2	General purpose
Twin, 4-4 3/4 H.P.		1936-39	S20	3.90	8 x 8	AL	2	General purpose
Twin, 5 3/4 H.P.		1940-41	S15	3.60	8 1/2 x 7	AL	2	General purpose
			S23	4.80	8 1/4 x 7	AL	3	Rowboat
Twin, 10 H.P.		1941	S50	6.90	9 x 10 1/2	AL	2	General purpose

HIAWATHA, SEA BEE, ROYAL, BUCCANEER, BROOKLURE

Single, 3-3 1/2 H.P.		1947-51	Y1	\$ 3.90	6 7/8 x 5	AL	2	General purpose
Twin, 5 H.P.		1947-50	Y10	5.10	7 1/2 x 8	AL	2	General purpose
			AM120	8.40	7 1/2 x 6 1/2	BR	3	AM heavier boats, 14' class
			AM121	8.40	7 1/2 x 7 1/2	BR	3	AM light planing boats, light loads
Twin, 5 H.P.	Neutral-Forward	1951-52	J8	3.30	8 x 7 1/2	AL	2	General purpose
			AM92	8.40	7 3/4 x 6 1/2	BR	3	Heavier boats or loads
			AM93	8.40	7 3/4 x 7	BR	3	Fast wheel for light boats and loads
Twin, 12 H.P.		1948-50	AJ22	13.20	8 3/4 x 9 1/2	BR	2	AJ speed wheel, 12' class boats
			AJ23	13.20	8 3/4 x 10 1/2	BR	2	AJ speed wheel, souped engine
			AJ20	13.20	8 3/4 x 10	BR	2	AJ speed wheel, extra light boats
			AM240	10.50	8 3/4 x 10 1/2	BR	3	AM average runabouts, light loads
			AM241	10.50	8 3/4 x 10	BR	3	AM average runabouts, 2 passengers
			AM242	10.50	8 3/4 x 9	BR	3	AM heavier boats and passengers
Twin, 12 H.P.	Shift Model	1951-52	AMC330	13.20	8 1/2 x 11	BR	3	Medium boats, medium loads
			AMC331	13.20	8 1/2 x 10 1/2	BR	3	Heavier boats with passengers
			AMC332	13.20	8 3/4 x 9	BR	3	Workboats, heavy loads or skis
			AMC333	9.90	8 1/2 x 11	AL	3	Medium boats, medium loads
			AMC334	9.90	8 3/4 x 9	AL	3	Workboats, heavy loads or skis
			AJC410	13.20	8 1/2 x 11 1/2	BR	2	AJ, racing runabouts, hydroplanes
			AJC411	13.20	8 1/2 x 12	BR	2	

WIZARD (Western Auto)

Single, 3-2 H.P.		1950-51	K8	3.30	7 7/8 x 6	AL	2	General purpose
Twin, 6 H.P.		Thru 1951	K15	\$ 3.60	7 7/8 x 7	AL	2	General purpose
			K16	6.30	7 7/8 x 7	BR	2	General purpose, bronze
			K17	6.30	7 7/8 x 8	BR	2	75 lb. class, light loads
			K19	6.60	7 1/2 x 6 1/2	AL	3	Medium boats, medium and heavy loads
			K21	8.40	7 1/2 x 6 1/2	BR	3	General purpose
Twin, 10 H.P.		1950-51	K40	6.00	7 1/2 x 9	AL	3	Heavy boats, heavy loads, skis
			K41	9.90	7 1/2 x 8	BR	3	General purpose, bronze
			K44	9.90	7 1/2 x 9	BR	3	Racing runabouts
			AJ42	14.40	7 3/4 x 10	BR	2	AJ racing, light boats, light loads
			AJ45	13.20	8 1/8 x 9	BR	2	AJ racing light boats, light loads
			AJ46	13.20	8 1/8 x 9 1/2	BR	2	AJ racing, fast light hulls
			AJ47	13.20	8 1/8 x 10	BR	2	AM medium boats, light loads
			AM191	9.90	7 1/2 x 10	BR	3	AM medium boats, heavier loads
			AM192	9.90	7 1/2 x 9 1/2	BR	3	AM heavier boats and loads
			AM194	10.50	8 x 8 1/2	BR	3	

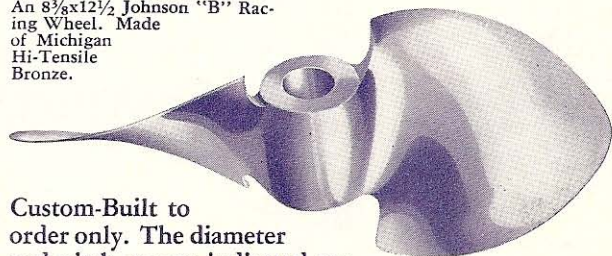
RACING PROPELLERS FOR RACING MOTORS

(Order by Diameter, Pitch, Motor Make and Class)

Hi Tensil Bronze

	DIAMETER RANGE	PITCH RANGE	PRICE
Midget Evinrude	6 7/8" to 7"	9" to 9 1/4"	\$15.00
"A" Johnson	7 1/2" to 7 3/4"	11 1/2" to 12"	18.00
"B" Johnson	8 1/4" to 8 1/2"	12 1/2" to 13"	20.00
"C" Johnson	8 3/4" to 9"	14 1/2" to 15"	20.00
"C" Evinrude	8 3/4" to 9"	14 1/2" to 15"	20.00

An 8 3/8 x 12 1/2 Johnson "B" Racing Wheel. Made of Michigan Hi-Tensile Bronze.



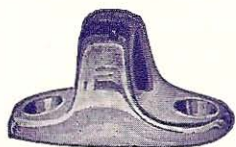
Custom-Built to order only. The diameter and pitch ranges indicated are normally within the range required for hydroplane racing installations.

Michigan outboard racing wheels hold more world's records and important wins than all others combined. All propeller sizes listed above are of the two blade style, from special racing design patterns and are

QUALITY FITTINGS THAT DRESS UP YOUR BOAT AND ADD TO YOUR BOATING PLEASURE



No. 319



No. 301



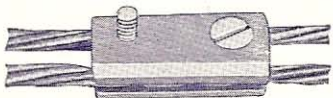
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No. 313



No. 311



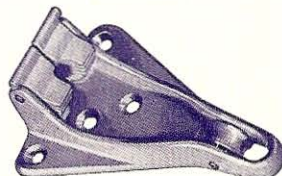
No. 306



No. 304 & 5



No. 303



No. 310



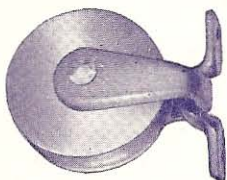
No. 308



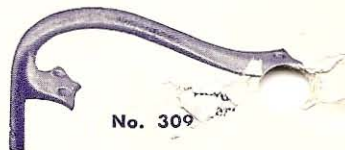
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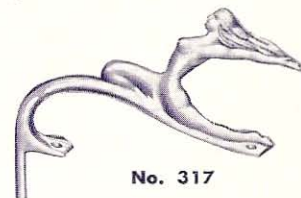
No. 323



No. 316



No. 309



No. 317



No. 318



No. 321



No. 324

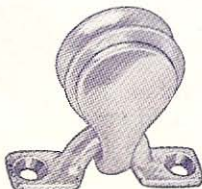
NO.	POLISHED			
	ALUM.	PLAIN BRASS	POLISHED BRASS	CHROME
301		\$.24	\$.64	\$.70
302	\$1.70	.70	2.00	2.15
303	2.65 Pr.	1.40 Pr.	3.20 Pr.	3.55 Pr.
304	.90	.45	1.05	1.15
305	1.15	.80	1.45	1.50
306		.28		
307		1.45	2.05	2.20
308		2.10	3.90	4.15
309	3.10	1.35	3.40	3.55
310				\$2.05
311		.95	1.55	1.65
312				.35
313	.70	.25	.75	.85
314	2.05	1.20	2.70	2.85
315				.50
316				1.40
317				1.10
318	2.25			2.25
319		.24	.63	.68
320	1.35	.85	1.75	1.85
321	2.45	.90	2.75	2.90
322		1.25	1.90	2.10
323		.85	1.30	
324				2.25



No. 315



No. 302



No. 322



No. 320



No. 314



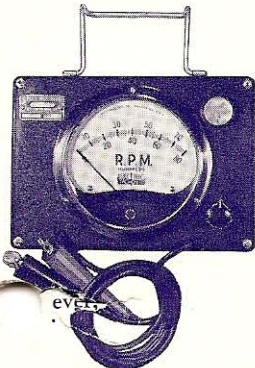
QUALITY FITTINGS THAT DRESS UP YOUR BOAT AND ADD TO YOUR BOATING PLEASURE



No. 510
No. 512

No. 510 FIN. (for class M & A boats.) Area 23 sq. in. High Tensile Aluminum Plain\$1.25 With Buffed Finish.. 1.75 (Screw holes provided)

No. 512 FIN. (for class B & larger.) Area 38 sq. in. High Tensile Aluminum Plain\$1.50 With Buffed Finish.. 2.00 (Screw holes provided)



No. 206
Tachometer

(Racing Type)

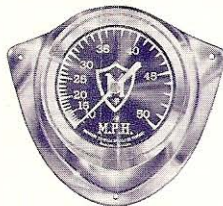
No. 410 Red\$15.30
No. 411 Ivory 15.30
No. 412 Black 15.30



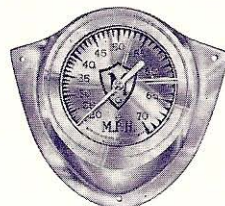
No. 410
No. 411
No. 412



No. 201
Speedometer



No. 202
Speedometer



No. 205
Speedometer



No. 204
Speedometer

WATER SPEEDOMETERS

No. 201, 202, 205 Polished Aluminum case. Precision instruments — accurate within 1%. Corrosion Resistant Throughout. Easily installed on any outboard boat. Essential in trimming your boat, checking propellers, fuels, etc.

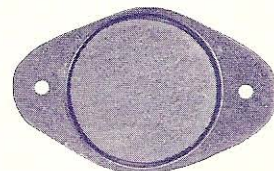
No. 201 Registers 0-35 mph — complete with 14' plastic tube.....\$12.00

No. 202 Registers 10-50 mph — complete with 14' plastic tube.....\$14.00

No. 205 Registers 20-70 mph — complete with 14' plastic tube.....\$18.90 Deluxe model.

No. 204 Red Steel case. Registers 0-35 mhp — complete with 8' plastic Tube — Same precision as No's. 201, 202, 205\$7.00 (Spare parts furnished as ordered)

Spare Parts fit All Models
Pilot Tube\$3.30
Transom Clip50
Tygon Tubing, per foot..... .18

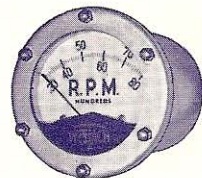


No. 516
Transom Plate
(With leathers) \$1.00 pr.

TACHOMETERS

No. 206 Tachometer (2 cycle) portable. Accurate readings from 0-8000 r.p.m. Installed by attaching to spark plug and spark wire lead.....\$58.00

No. 207 Tachometer (2 cycle) permanent installation. Accurate readings 0-8000 r.p.m. Installed by attaching to magneto terminal and ground. Waterproof\$38.00



No. 207
Tachometer

STEERING WHEELS

Fine quality low cost steering wheels made of corrosion resistant high tensile aluminum, hard rubber covered with non-slip grip. Bright clear lacquer finish.

(Runabout Type)

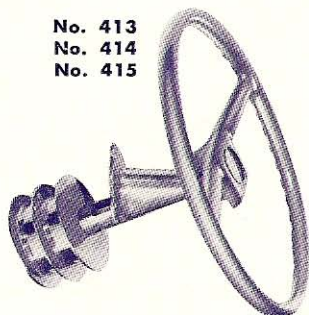
No. 413 Red\$15.30
No. 414 Ivory 15.30
No. 415 Black 15.30

(Runabout Type)

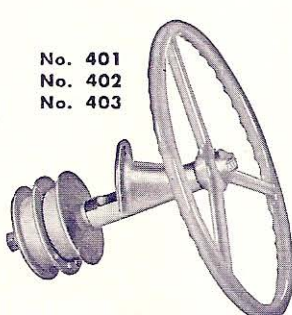
No. 401 Black ..\$15.30
No. 402 Red 15.30
No. 403 Ivory 15.30

(Racing Type)

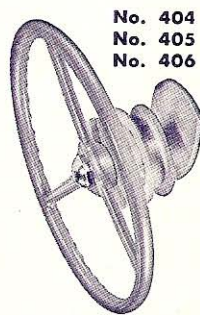
No. 404 Red .. \$15.30
No. 405 Ivory 15.30
No. 406 Black .. 15.30



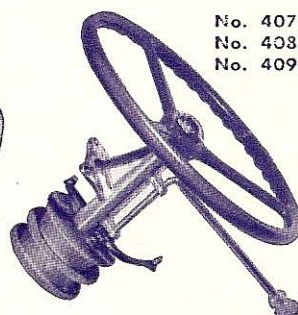
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No. 414
No. 415



No. 401
No. 402
No. 403



No. 404
No. 405
No. 406



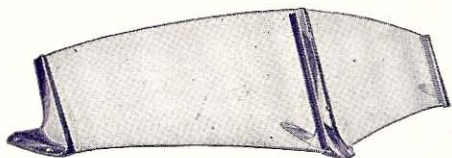
No. 407
No. 408
No. 409

STEERING ASSEMBLY COMPLETE

\$31.20

Includes: 1 No. 408 Red Wheel with Throttle, 4 No. 316 Pulleys, 2 No. 312 Snap Clamps, 2 No. 306 Rope Clamps, 25 Ft. No. 701 Tiller Rope and 10 Ft. No. 702 Bowden Wire and Casing.

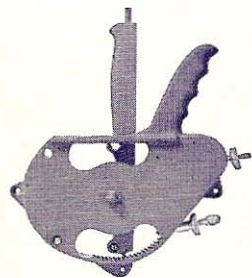
QUALITY FITTINGS THAT DRESS UP YOUR BOAT AND ADD TO YOUR BOATING PLEASURE



No. 501

No. 501 WINDSHIELD BRACKETS — Three piece set. Grooves for 1/4" glass. Glass not included. Ht. ends 4 3/4", Center 8".

Polished Brass\$14.45 Chrome.....\$15.40
Polished Aluminum.....\$12.50



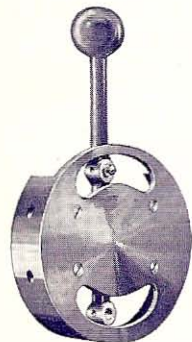
No. 506

No. 506 RACING THROTTLE — Red crinkle, no slip finish, automatic cut off on pressure release.....\$7.25



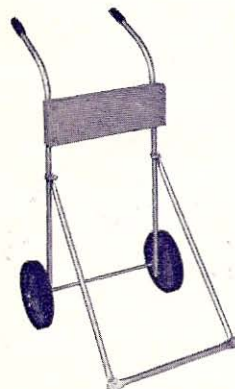
No. 325

No. 325 UNIVERSAL DRIP PAN— Aluminum. Large enough for all motors\$3.50



No. 507

No. 507 THROTTLE — Four-way, ratchet action, aluminum.....\$4.20



No. 801

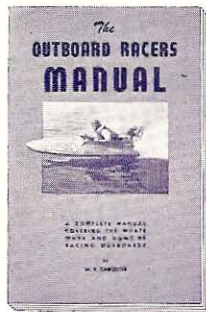
No. 801 MOTOR CARRIER

NOT AVAILABLE

No. 508 BILGE PUMP
—Zinc coated steel. 1 1/2" diameter, 24" long. Pumps 10 gallons per minute\$4.25

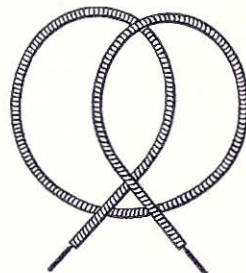


No. 508



No. 502

No. 502 OUTBOARD RACERS MANUAL (How to soup all motors)....\$3.75



No. 702

No. 702 BOWDEN WIRE...\$15 ft. Cadmium plated steel casing, wire core.

No. 701 TILLER ROPE 1/8" (wire core). Color Mahogany.....\$.12 ft.



No. 701

No. 703 NYCABE CABLE 1/8" Nylon covered steel 1,000-lb. test. Will not fray — \$.30 ft.



No. 703



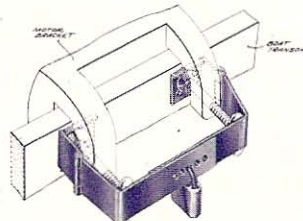
No. 606

No. 606 UNIVERSAL FLYWHEEL PULLER — Cast aluminum. Nuts and bolts included\$3.00

No. 503 WATER PUMP — Double action heavily constructed, really throws water (brass). 5' hose.....\$9.00



No. 503



No. 513-514 MOTOR-Dub-L-Ock

NOT AVAILABLE