

*The Key
to Greater
Boating
Satisfaction*



OUTBOARD CATALOG NO. O-48 MICHIGAN WHEEL CO. Grand Rapids, Mich.

The KEY TO GREATER BOATING SATISFACTION

The contents of this booklet constitute an almost infallible key wherewith nearly every owner of an outboard motor has quick and easy access to achieving far more enjoyment from his outboard motor and boat — smoother and better performance, more speed, greater carrying capacity, economy of fuel and upkeep, and even additional safety.

To say that all this may be accomplished by simply substituting a MICHIGAN MACHINED-PITCH propeller for the one which came with your motor, or the one you are now using, may seem like a far cry at this point. Yet it is a sound, indisputable fact proven beyond the shadow of doubt, times without number, that these results are almost invariably accomplished when a MICHIGAN propeller, scientifically selected to coordinate the motor, boat and conditions of service, is used.

The reasons for the vast superiority of MICHIGAN MACHINED-PITCH propellers over any other the market affords will be apparent from the description which follows. The means of quickly and easily ascertaining the specific model and size to give best results with your motor and boat, under the conditions in which you will use it, is to be found in the Propeller Selector Chart on pages 8 to 13. The recommendations it contains are soundly based on engineering facts and over 40 years of experience. They have been proven time and again by thousands of motor owners.

With these facts at hand, and a reasonable accurate analysis of your boat and conditions of service, you have the key to a whale of a lot more pleasure from your outboard motor; particularly if you are the owner of one of the medium or larger motors.

Note: While the accuracy of the data in our Propeller Selector Chart in our opinion, is incontestable, variations in hull design, load conditions, fuels and owners' own analysis of his individual unit make it impossible for us to assume responsibility for results obtained. These will be in direct relation to the care and accuracy of the individual's analysis of his boat and service conditions.

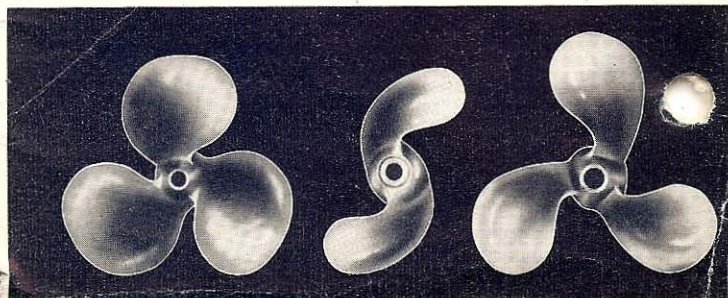
WHY MICHIGAN MACHINED-PITCH PROPELLERS ARE OUTSTANDING PERFORMERS

In any propeller there are four prime factors essential to perfect functioning. These are, Accuracy, Design, Size and the material of which it is made. Imperfection of any one of these factors makes for a poorly performing propeller. Through its patented and exclusive MACHINED-PITCH process of manufacture, which excludes the human variable element, and the development of special alloys these factors are unerringly controlled in the production of MICHIGAN propellers.

The FACTOR of ACCURACY

In 1930 Michigan astounded the marine field in its announcement of the first MACHINED-PITCH in-board propeller. The improvement in performance was so sensational and so enthusiastically received that subsequently we adapted this method to all outboard propellers of our manufacture, as well.

The basis of the MACHINED-PITCH method of propeller manufacture was the development of the Helical Planing Machine (see illustration). These machines, patented and exclusively a Michigan development, as we have previously stated, eliminate the human element of error or inaccuracy. It carved the original propeller patterns with ABSOLUTE ACCURACY. From these perfect patterns every casting made is bound to be perfect. The process that guarantees perfect accuracy in Michigan Propellers goes much further, however, by applying the precise and undeviating accuracy of the helical planer to every step of the production. This is done through the medium of PITCH BLOCKS having true screw surfaces precisely machined by the helical planer, upon which Michigan propellers are checked through every step of manufacture. For example: Castings are bored on Pitch Blocks, and thus chucked to the pitch of the blade, perfect assurance is had that the shaft hole

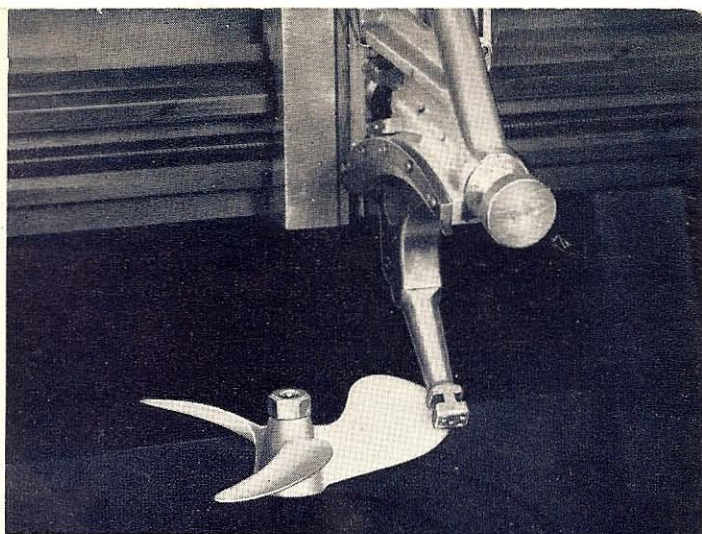


will be perfectly aligned to the pitch. A perfect casting otherwise bored can be out of center and the blades badly out of "track" which results in turbulence of slip stream, loss of power and speed together with excessive vibration. There simply is no possibility of a Michigan Propeller being bored out of true.

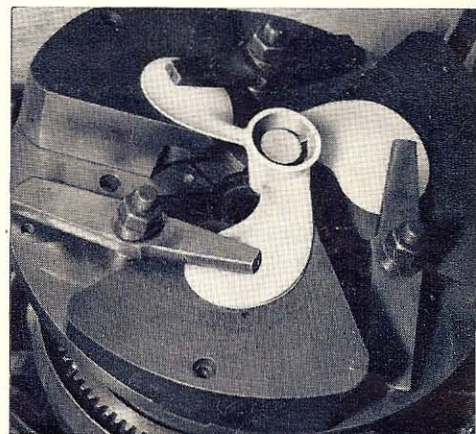
After being machined for the shaft, the casting is carefully checked throughout for balance, the blade extremities are brought to a fine feather-edge and it is buffed and polished to mirror-like surfaces. During these operations it is checked again and again on Pitch Blocks — similar to the Pitch Blocks on which it was bored to insure retention accuracy of pitch, blade spacing and layout; for even the slightest variation of these factors can result in excessive vibration and poor performance. Thus it will be seen that absolute accuracy of all manufacturing factors are insured in Michigan as in no other propellers. (For a complete description of the MACHINED-PITCH process write for our inboard propeller catalog.)

The FACTOR of DESIGN

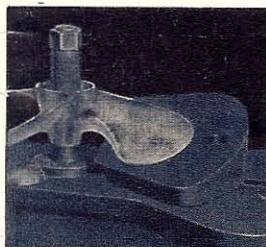
Michigan's entire engineering staff, backed by over 40 years of experience, is devoted exclusively to making the finest propellers money will buy. And since we are propeller specialists with no distracting side-lines, it is only natural that Michigan should be recognized as the outstanding leaders in the propeller field. This is duly attested to by the fact that we are not only consulted by nearly every manufacturer of outboard motors in relation to propellers for new motors as brought out, but also by the fact that we provide pilot or test propellers. What this all adds up to is that Michigan design is tops — that it provides a generous margin of extra speed, power, durability and smoothness of operation beyond compare. Its designing skill is further attested to by the phenomenal success of our "AQUA-MASTER" propellers, of which more will be said later, and the fact that in the highly competitive outboard racing field, Michigan wheels have consistently driven in the majority of winners, and in fact, in some classes such as "A", "B" and "M" have held *every* record and important win for many years.



*The Helical Planer Machining
a Michigan Propeller Pattern*

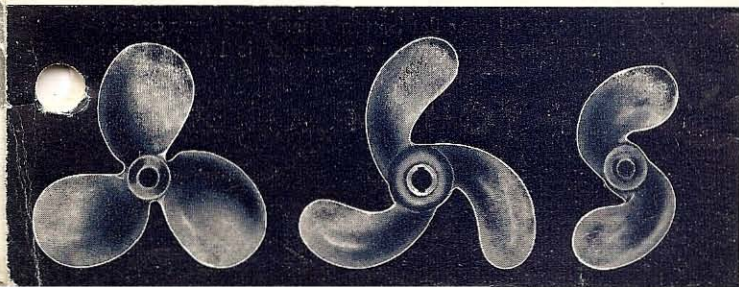


*Boring a propeller by the
Pitch Block Method*



*Checking a propeller
on a Pitch Block*

**NO OTHER PROPELLERS
ARE MADE THIS WAY**



The FACTOR of SIZE

When the outboard motor you buy comes from the dealer's shelf, it is fitted with a propeller that can be only an average satisfactory size and design for the many types of boats on which it can be used. If it is a real small motor the chances are that little can be done in a propeller change to improve results. This is especially true if it is operated on rowboats or other displacement boats where speeds are limited regardless of propeller or power applied. For the medium and large sized motors, however, frequently undreamed of improvements are possible by intelligently coordinating the proper Michigan propeller with the type of boat and service desired. Many times actual boat speed improvements of 4, 6 or even 8 miles per hour have thus been attained.

The Propeller Selector pages following will be found of real aid to every owner in determining whether he can obtain improvements with his outfit. Where a size has been suggested other than that which is now being used, he can be pretty certain that a change of propellers will be productive of decidedly worthwhile results. All recommendations are based on turning the motor at or very close to the engine manufacturer's r.p.m. rating, at full throttle. We do not obtain the results that we do from our propellers through permitting excessive motor speed!

Where requested, individual recommendations will be provided by our engineering department, and analysis forms are available for you to fill out. Simply write for "Outboard Analysis Form."

The FACTOR of MATERIAL

Due to the weight factor we recommend only aluminum alloy for propellers for the very small outboard motors. Here Michigan's cast pure aluminum stands head and shoulders in quality above the die cast aluminum used in most conventional propellers. More costly to manufacture, these propellers necessarily sometimes sell at a higher price, but considering the important function of the propeller and the great affect it has on your boating pleasure, the Michigan aluminum propeller is well worth the small difference in cost.

For heavier motors Michigan propellers are all cast of "MICHALLOY," a special propeller bronze, an exclusive Michigan development which is far higher in tensile strength than ordinary bronze, is readily repairable, and is far more resistant to fresh and salt water corrosion. This is the same outstanding alloy used in our famous inboard propellers.

HELPFUL HINTS ON HOW TO GET THE MOST FROM YOUR OUTBOARD MOTOR AND BOAT

FIRST FACTOR TO CONSIDER

An outboard owner should decide first of all just what he desires from his boat — the extreme speed possible, to the exclusion of other features, or a shade less speed with acceleration, load carrying with minimum loss of speed and handling qualities that make it seem an entirely different outfit. When the last bit of speed, such as is desired for racing, is not required, the latter features are highly desirable and can usually be secured with a propeller that is only a shade less than the fastest.

BOATS AND ENGINE R. P. M.

All dimensions, features and characteristics of a boat greatly influence engine R.P.M. and this is best illustrated by experience in our recent test work. In the test of one popular model engine using the equipment propeller, engine R.P.M. upon two boats (each of different makes), was 4900. However, upon all other of many boats used the R.P.M. ranged from 4000 to 4300. The many factors making up the "character" of a boat makes classification impossible but this example will illustrate our contention that "with most outboard engines one propeller size cannot possibly meet the varying conditions encountered in actual use."

TRANSOM HEIGHTS

Generally speaking, upon boats of proper size, design and good turn of speed for the size engine involved (and reference here is not to racing jobs), the greatest acceleration and speed from any design propeller can be obtained with the wheel running up close to the surface of the water. This is particularly true of many of Michigan's specially designed wheels which can be run nearer the surface of the water without slippage.

There are numerous reasons for running a motor as high on the boat as possible.

FIRST, you can navigate very shallow water with more safety.

SECOND, it is almost impossible to turn over a boat with the propeller operating close to the bottom of the boat. When you throw a boat into a quick sharp turn, it goes into a bank (except flat and near flat bottom boats) and long before this bank becomes dangerous, the propeller is lifted out to

SELECT YOUR PROPELLER

the slipping point and the boat will right itself even if you hold the throttle wide open (which, of course, is not the correct thing to do). On some of the new extremely wide-beam boats, 58" or more, the motor will have to be run some deeper in the water than we would recommend for boats 56" and under. This is due to the wide boat lifting the propeller out too quick and thus really hindering turning ability.

THIRD, your motor can turn the same propeller 100 to 200 R.P.M. more by only raising the motor one inch, if it happens to be running one inch too deep (and most are). This is caused by having to pull one inch more lower unit through the water plus forcing the propeller to run down in solid heavy water instead of up in loose water.

FOURTH, and most important, is Back Pressure. Since the advent of the underwater exhaust, back pressure has been a big problem and the running of the cavitation plate, from which the exhaust is released, as near the surface as possible has given the best answer in all tests that have been made. And with the new design, low pitch, large area Michigan Propellers you are able to run the cavitation plate anywhere from $\frac{1}{2}$ " below the keel to right up level with the bottom of the keel, and on some jobs higher, giving you a *positive easy carburetor adjustment on an easier starting motor — a cooler running motor — a smoother running motor — a safe outfit — and a positive increase in speed of 2 M.P.H. and up, and in many cases a lot up.*

The best actual height of transom depends upon the motor involved. The safest guide is to carry the cavitation plate $\frac{1}{4}$ " below the keel or where some of the keel is cut off the motor can still be brought up to $\frac{1}{4}$ " of keel after cutting. For example, on the Johnson PO and P65 series we have consistently used $17\frac{1}{2}$ " transom (in some cases as high as $18\frac{1}{2}$ " without slippage). With the Evinrude Speeditwin and Speedifour, a $16\frac{1}{2}$ " transom. At these heights you will not get slippage until you pass a 58" beam. On these wide beams somewhat lower transoms will be necessary. In our opinion most standard outboard boats have transoms too low for any motor above 5 H.P.

BACK PRESSURE

This is supplemental to back pressure discussion above. Another way of relieving back pressure and getting better performance at both high and low speeds, especially in small trolling motors, together with better starting and much easier carburetor adjustments in both large and small motors, is to drill a row of relief holes in the exhaust, beginning just below where top of boat transom is level with the exhaust pipe. Drill holes one half to one inch apart from just below top of transom down to the cavitation plate, starting with $\frac{1}{8}$ " holes at the top and increasing size as you go down to $\frac{3}{16}$ " or $\frac{1}{4}$ ", or drill $\frac{1}{8}$ " holes all the way down. This will improve the motor in every way and if the relief holes are kept below the top of the transom any difference in exhaust noises will be extremely small. Even in the most particular locality, this exhaust relief will not be noticeable enough to be even questioned, *unless you drill too large holes.*

YOUR BOAT

Now comes the question of your boat in general. In event of a deep keel, you can cut the keel down to about $\frac{1}{2}$ " at the transom and taper it up to original height about two feet forward of transom without changing the performance in any manner. This will allow you to raise the motor another inch or so giving additional speed and performance.

Most of the later design Michigan Propellers are intended to give maximum results on a *straight lined boat bottom*. Many boats today have or develop a hook in the bottom or an inverted curve upward just forward of the transom. This hook is intended to give the boat easy planing and a level ride with a small motor, let us say, under 16 H. P. This curve is not necessary for a level ride and is very detrimental with larger motors, except where there is a very narrow beam. The faster you drive it the more and more the nose of the boat is pulled down in the water causing it to push water and dive through waves and an extreme hook will cause a boat to gallop at high speed.

Also, this hook will develop in a new or old boat that was originally straight. It is caused by warpage, swelling of transom, placing on trailer or hoisting with load being taken one or more feet forward of the transom and from the natural pull of the motor which pulls out at the top of transom causing the knee attached to transom to lift upward on bottom of boat. This strain, naturally, is much greater with the larger and more powerful motors and many boats on which the larger motors are used are not sufficiently rigid to resist this "pull" and the hook described above is constantly present under operation. In some instances, a flexible bottom boat will check straight but when running the bottom is hooked or lifted.

If you have a boat with which a series of propellers will not show a reasonable improvement in speed or if you want top performance and riding qualities, turn your boat upside-down, new or old and check the keel line and bottom lines with a straightedge. If you find it out of line, put in one-by-six pieces across boat under front and back of rear seat anchored to sides of boat seat rail and put permanent wedges under these one-by-sixes until you have forced the bottom in line and it will stay that way. If bottom happens to be out of line the opposite way, pull the bottom up until in line and anchor to the one-by-sixes, then put her on the water and nine times out of ten, you will be repaid more than you even dream of for your simple job. Then and then only will you be able to get the benefit of a propeller designed to run on a straight lined boat bottom.

INFLUENCE OF WEIGHT DISTRIBUTION

Most outboard boats are sensitive to weight distribution. Again, an example is the best explanation: in the test of an Evinrude Speeditwin on a 1940 model 14 ft. by 54 in. boat with a 240 pound man driving and a 160 pound man in the front seat, the speed was one full M.P.H. faster than with the 160 pound man driving and the 240 pound man in front. This is typical of the result of "putting down" the nose of the boat.

from the Propeller Chart on Pages 8 to 13

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

TWO BLADE vs. THREE BLADE PROPELLERS

Hundreds of exhaustive tests have proven that in power ranges above 4—5 h.p. the average outboard gives better speeds, acceleration, load carrying, smoothness, and all-round performance with a three blade propeller of proper design and size as compared to two blade propellers.

True, two blade propellers are unhesitatingly recommended for step-bottom and three point hydroplanes for racing and also on extremely small outboards where advantage cannot be taken of the three blade design due to limitations of power. On some motors such as the Johnson 10 h.p., 22 h.p. and 32 the cooling of the motor itself is dependent entirely on the pumping action of the propeller blades. Thus a three blade at low or medium speeds is essential for proper motor cooling.

Due to peculiarities of lower unit construction of some motors such as the late model Evinrude Speeditwins, Speedifours, and Big Fours we have been able to get a better "fit" with special designed two blade propellers of quite large diameter and blade area. (See propeller recommendation charts showing E292, E295, E285, E286 propellers.) These are exceptions however, and as stated, normally a three blade wheel will get you there first, easiest, and best.

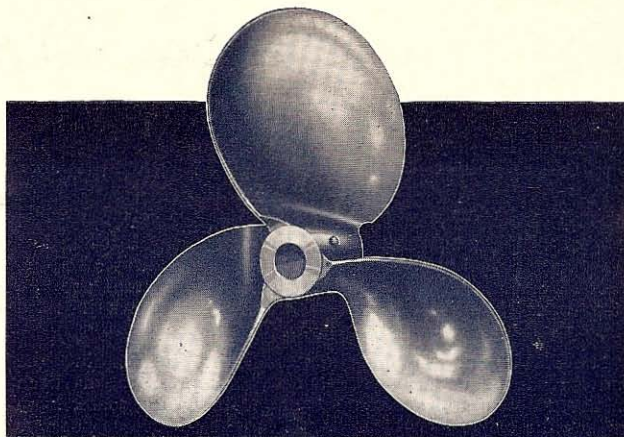
SPARK AND THROTTLE SETTING

If you, like many owners, are trying to bring your outfit to peak performance, do not forget that in installing a new propeller or working on your boat, the correct spark lever setting and carburetor setting must be found. For example if a change is made resulting in 200 or 300 more R.P.M. this will allow you to run more spark advance which, if not set correctly, will not show you the results you should get.

CARBURETOR ADJUSTMENT

This subject, although only indirectly related to propellers, is so important it deserves emphasis. The tendency of many outboard owners is to adjust the carburetor to the leanest point — a very definite fallacy, for the leaner the adjustment, the less lubrication there is, and it is safe to say that many motors have been burned out for this very reason. Often, an owner tries to lean up a carburetor to eliminate smoking when excessive oil is used, or an oil that smokes easily (there is much difference in oils in this respect).

Always adjust your carburetor to the rich point. It is not advisable to attempt a final adjustment until the motor has run 100 yards or more wide open (in fact, it is impossible until then). The reason is that a two cycle engine will overfill the crankcase every time you slow it down or start it off and it takes 100 yards or more to clean the crankcase to where correct adjustment can be obtained.



The MICHIGAN "AQUA-MASTER" The Propeller of Propellers for Larger Outboard Motors

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.

The prime reasons for this statement are: Better boat speeds, smoother performance and more flexible operation under varying load conditions. Every "AQUA-MASTER" carries Michigan's guarantee of complete satisfaction. If on trial it does not thoroughly come up to your expectations, if it doesn't give you far better boating performance, you are entitled to return it to the dealer from whom you purchased it for full refund or credit on a standard style propeller. No other outboard propeller in the world carries such a guarantee!

In addition to the above there are several other reasons for preferring the "AQUA-MASTER." They are more sturdy in design and construction. Their design is practically full weedless and it tends to deflect or ward off drift and debris with less damage to the blades than would be suffered by the conventional propeller. Furthermore, their usual shorter diameter and greater blade width enables their use closer to the surface (see preceding paragraphs regarding Transom Heights and Back Pressure on page 5).

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

What Others Say About The Michigan Aqua-Master Outboard

A FEW AQUA-MASTER EQUIPPED BOATS

"The AM191 on my 10 h.p. stock Mercury and 12' moulded plywood gave enough extra speed to win every race entered in my class. On short courses even beat larger class motors."

"Received my AM220 and AM221 wheels for Johnson SD and results far exceeded expectations. Time tested on my Century the average increased speeds were 3 miles per hour. Was also pleased to note this bronze solid blade gave perfect cooling even at low throttle."

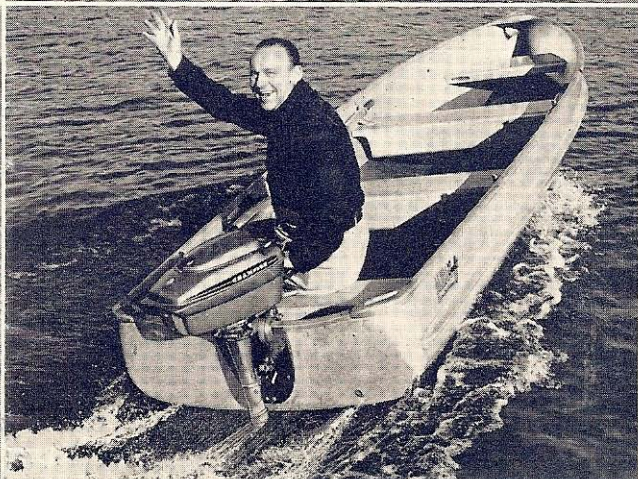
"Find order inclosed for 75 more AM180 propellers for Martin '60". Most owners in this area will not have anything for these motors but the three bladed bronze wheels. They would sell even if they didn't improve results."

"Ran the AM33 for Johnson 1947 PO today and must say this is the best wheel by far for average runabouts. Its improvement over even the AM32's used previously was remarkable. Also the blade shape now gives best cooling of any wheel used to date. It's a honey."

". . . and I never saw a broken outboard Aqua-Master . . ."

". . . Have sold hundreds of Aqua-Master wheels . . . complete customer satisfaction in all cases . . ."

"AM70 brought my hull with Evinrude Lightfour over the 'hump' so she now easily planes, saved buying bigger motor. Thanks!"



MICHIGAN PROPELLER SELECTOR — FOR ELTO MOTORS

MOTOR	MODEL NO.	YEAR	Michigan Equiv. Original Propeller	Row Boat	Kayak and Car- Top	RUNABOUT 11'-14'		RUNABOUT 14'-17'		Racing Hydro.	Outboard Cruiser, Work Boat, Etc.
						150 to 350 lbs.*	350 to 600 lbs.*	150 to 350 lbs.*	350 to 600 lbs.*		
Ace	4145, 4205 4256, 4301, 4329, 4351, 4352	1936-37 1938-39-40-41	E22 E27	E22 E27	E22 E27	----- -----	----- -----	----- -----	----- -----	----- -----	----- -----
Big Quad	800, 820	1931-32	E281	-----	-----	AM61	AM61	AM61	AM60	E283	E277
Cub	4264	1939-40-41	E2	E2	E2	-----	-----	-----	-----	-----	-----
Fisherman	413, 4018, 4095	1932-33-34-35	E296	E296	E296	-----	-----	-----	-----	-----	-----
Fleetwin	4038 4335, 4336	1934 1939-40-41	E291 EW40	-----	-----	AM80 AM80	AM80 AM80	AM80 AM80	AM81 AM81	E294 E294	E293 E293
Foldlight	162, 404	1930-31	B10	B10	B10	-----	-----	-----	-----	-----	-----
Handifour	4219	1937	E522	-----	-----	E522	E522	E522	-----	-----	-----
Handitwin	4158, 4212, 4261 4307, 4332, 4357, 4358	1936-37-38 1939-40-41	E32	E32	E32	-----	-----	-----	-----	-----	-----
Junior Quad	900 914, 924	1931 1932-33	E251 E304	-----	-----	AM10 AM42	AM10 AM41	AM11 AM45	E248 AM45	E258 E309	E248 E365
Lightweight	90000, 309 401, 411 444	1929-30 1931-32 1933	E232 E242 E296	E232 E242 E296	-----	-----	-----	-----	-----	-----	-----
Lightweight Special	360	1931	E242	E242	-----	-----	-----	-----	-----	-----	-----
Lightwin	4020 4099 4313, 4314	1934 1935 1939-40-41	E512 E322 E196	-----	E198	-----	-----	-----	-----	E198	-----
Lightwin Imperial	4032 4106	1934 1935	E512 E322	-----	-----	-----	-----	-----	-----	-----	-----
Lightfour Imperial	4044	1934	E512	-----	-----	E512	E512	E512	E512	-----	-----
Pal	4203, 4253, 4266	1937-38-39- 1940-41	E40	E40	E40	-----	-----	-----	-----	-----	-----
Quad	70000-75000	1928	E211	-----	-----	E211	E211	E214	E214	E216	E214
Service A	424	1932-33	E291	-----	-----	AM80	AM80	AM80	AM81	E294	E293
Service Speedster	60000-69999 8000011-89999H, 300, 348	1928 1929	E201	-----	-----	E201	E201	E201	E204	E206	-----
Service Speedster Hi Speed	302	1930	E201	-----	-----	E201	E201	E201	E204	E206	-----
Special Speedster	340, 905	1929-31-32-33	E246	-----	-----	E246	E246	E246	E246	E249	-----
Senior Speedster	310	1930-31-32	E251	-----	-----	AM10	AM10	AM11	E248	E258	E248
Service Twin	4161, 4163, 4151 4216, 4229	1936 1937	E296 E296	E296 E296	E296 E296	-----	-----	-----	-----	-----	-----
Speeditwin	6004, 6015, 6018 6034	1934-35-36 1938	E261 EW2	-----	-----	AM50 AM50	AM50 AM50	AM50 AM50	AM51 AM51	E267 E267	E263 E263
Speediquad	7004, 7013	1934-35	E271	-----	-----	AM62	AM62	AM61	AM60	E283	E277
Senior Quad	314, 700, 721, 732	1930-33	E272	-----	-----	AM62	AM62	AM61	AM60	E283	E277
Sportfour	9004, 9013	1934-35	E360	-----	-----	AM42	AM41	AM45	AM45	E309	E365
Super Single	436, 4008, 4010	1933-34	E237	E237	E237	-----	-----	-----	-----	-----	-----
Super "A"	422, 456	1932-33	E291	-----	-----	AM80	AM80	AM80	AM81	E294	E293
Super "C"	605, 624, 638	1931-32-33	E261	-----	-----	AM50	AM50	AM50	AM51	E267	E263

*Weights indicated are passenger and equipment loads exclusive of motor.

See prices on pages 14 to 19.

MICHIGAN PROPELLER SELECTOR — FOR EVINRUDE MOTORS

MOTOR	MODEL NO.	YEAR	Michigan Equiv. Original Propeller	Row Boat	Kayak and Car-Top	RUNABOUT 11'-14'		RUNABOUT 14'-17'		Racing Hydro.	Outboard Cruiser, Work Boat, Etc.
						150 to 350 lbs.*	350 to 600 lbs.*	150 to 350 lbs.*	350 to 600 lbs.*		
Big Four.....	802,814.....	1931-32	E281	.....	.....	AM61	AM61	AM60	AM60	E283	E277
Big Four and Army Storm Boat Model.....	.....	1945-46-47	E125	.....	.....	.....	.....	.....	E295	E292	AM173
Fastwin.....	R-RS H-1H-13H.....	1927 1928-29	V836 V821	V836	.....	V821	V821	V823	V823	V825	.....
Fisherman.....	4016, 4093, 4227, 4267, 4309.....	1934-35 1937-38 1939	E296 E196	E296 E196	E296 F198	..... AM121	..... AM120	..... AM120	..... E199	..... E198	.....
Fleetwin.....	F, 1F, 4F 418, 450, 4034.....	1928-29 1932, 33, 34	V818 E291	V818	.....	V818 AM80	V818 AM80	V818 AM180	V818 AM81	E294	E293
Foldlight.....	162, 403.....	1930-31	B10	B10	B10	.....	.....	.....	.....	.....	.....
Lightfour.....	4231, 4271, 4315, 4316, 4317, 4322, 4323, 4324, 4375-7, 4389.....	1937-38-39- 1940-41-46-47- 1948	E342	.....	.....	AM70	AM71	AM71	E446	E346	E446
Lightfour Imperial.....	4042, 4111-4178.....	1934 1935-36	E512 E342	.....	.....	E512 AM70	E512 AM71	E512 AM71	E513 E446	E346	E513 E446
Lightwin.....	402,407 442, 4020 4097, 4153 4221, 4289.....	1931-32 1933-34 1935-36 1937-38	E242 E296 E322 E422	E242 E296 E322 E422	E242 E296 E322 E422	..... E322 E422	.....	.....	.....	.....	.....
Lightwin Imperial.....	4102, 4165.....	1935-36	E332	E332	E332	E332	.....	.....	.....	.....	.....
Mate.....	4263.....	1939-40-41	E2	E2	E2	.....	.....	.....	.....	.....	.....
Ranger.....	4252, 4265, 4334, 4406, 4407.....	1938-39-40-41 1946-47	E40	E40	E40	.....	.....	.....	.....	.....	.....
Scout.....	4201.....	1937	E40	E40	E40	.....	.....	.....	.....	.....	.....
Speedifour.....	704, 715, 728, 7022, 7026, 7031, 7032.....	1931-32 1932-37 1939-40-41 1946-47-48	V861 E271 EW6 EW20	.....	.....	AM150 AM62 AM62 E292	AM150 AM62 AM62 E295	AM150 AM61 AM61 E292	V851 AM60 AM60 E295	V862 E283 E277 E292	V853 E277 E277 AM173
Speeditwin.....	U1-U5 1U,15U, 143, 156, 167, 601, 618, 634, 6000, 6011, 6039-6041 to No. 05000, 6039-6041 over No. 05001.....	1928 1929-30-31 1931-32 1933-34-35 1939-40-41 1946-47-48	V831 V841 V851 E261 EW2 EW10	.....	.....	V831 AM130 AM140 AM50 AM50 E285	V831 AM131 AM141 AM50 AM50 E286	V831 AM130 AM140 AM51 AM50 E285	V833 V844 V853 AM51 AM51 AM161	V849 V857 E267 E267 E269	V833 V844 V853 E263 E263 AM161
Sportfour.....	912, 9200, 9000, 9008, 9015, 9022, 9026, 9031, 9035.....	1932-33-34 1935-36-37 1938-39-40-41	E304 E360 EW7	.....	.....	AM42 AM42 AM42	AM41 AM41 AM41	AM45 AM45 AM45	AM45 AM45 AM45	E309 E363 E363	E365 E365 E365
Sport Single.....	432 4000, 4002.....	1933-34	E237	E237	E237	.....	.....	.....	.....	.....	.....
Sportsman.....	4091, 4146, 4207, 4285, 4296, 4346, 4364, 4365, 4366, 4367, 4416.....	1935 1936-37 1938-39-40 1941-46-47	E22 E27 E4	E22 E27 E4	E22 E27 E4	.....	.....	.....	.....	.....	.....
Sportwin N-NS.....	1500-10,000 10500-14750 183, 409, 476, 4156, 4209, 4287, 4303, 4353, 4368, 4369, 4371, 4372, 4421.....	1923-25 1926-27 1931 1932-33 1936-37 1938-39-40 1941-46-47	V128 E296 E32 E8	V128	V128	.....	.....	.....	.....	.....	.....
Sturditwin.....	420.....	1932-33	E291	.....	.....	AM80	AM80	AM80	AM81	E294	E293
Weedless Fisherman.....	4092, 4152, 4269, 4312.....	1935-36-38-39	E313	E313	.....	.....	.....	.....	.....	.....	.....
Weedless Sportsman.....	4418.....	1947 48	EW30	EW32	EW30	.....	.....	.....	.....	.....	.....
Weedless Sportwin.....	4422.....	1947-48	EW30	EW32	EW30	.....	.....	.....	.....	.....	.....
Zephyr.....	4359, 4361, 4362, 4363, 4378, 4379, 4381, 4382, 4402, 4403, 4404, 4405.....	1940-41-46-47	E196	E196	E196	AM121	AM121	AM120	E199	E198	.....

*Weights indicated are passenger and equipment loads exclusive of motor.

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

MICHIGAN PROPELLER SELECTOR — FOR JOHNSON MOTORS

MODEL NO. OF MOTOR	Johnson Propeller Part No.	Michigan Equivalent Original Propeller	Row Boat	Kayak and Car-Top	RUNABOUT 11'-14'		RUNABOUT 14'-17'		Racing Hydro.	Outboard Cruiser, Work Boat, Etc.
					150 to 350 lbs.*	350 to 600 lbs.*	150 to 350 lbs.*	350 to 600 lbs.*		
A Lightwin	13-67	J110	J110	M26	J110	J110	M27			
A 25	13-569	J112	J112	J110	J112	J112				
A 35, 45	13-378	J114	J114	J114	J114	J114				
A 50, 65, 70, 75, 80, AA 37..	25-73	J140	J141	J141	J141	J141	J140	J140		
AB 25	13-623	J113	J112	J110	J112	J112				
AT 39, 10	41-279	J14	J17	J18	J18	J17	J17			
BN Lightwin	13-67	J110	J110	M26	J110	J110	M27			
DS 37, 38	41-277	J10	J10	J10	J10					
DT 37, 38, 39, 10	41-279	J14	J17	J18	J18	J17	J17			
F 70	38-64	J80	J80	J80						
F 75	37-159	J84	J84	J84						
HA 39, 10	43-260	J30	J30	J30						
HA 15	300-034	J40	J40	J40						
HD 22-25	300-558	J52	J52	J52						
HD 39, 10	43-260	J30	J30	J30						
HD 15	300-034	J40	J40	J40						
HD 20, 25	300-558	J52	J52	J52						
HS 39, 10	43-260	J30	J30	J30						
HS 15	300-034	J40	J40	J40						
HS 20	300-558	J52	J52	J52						
J 25, 65	11-22	J90	J90	J90						
J 70	12-78	J94	J94	J94						
J 75	11-123	J96	J96	J96						
J 80	39-91	J86	J86	J86						
K 35	15-103	J118	J118		J118	J118	J121	J121	J120	
K 40, 45	15-153	J122	J122		J122	J122	J125	J125	J1222	J125
	27-57	J144								
K 50, 65, 70, 75, 80	27-73	J145			AM100	AM101	AM100	AM101	J149	J144
	27-207	J182								
KA 37, 38, 39, 10	27-275	J23								
	27-277	J22			AM21	AM20	AM21	AM20	J24	J21
KD 15	300-431	JW 27			AM21	AM20	AM21	AM20	J24	J21
KS 15	300-431	JW 27			AM21	AM20	AM21	AM20	J24	J21
LS 37, 38	41-277	J10	J10	J10						
LT 37, 38, 39, 10	41-279	J14	J17	J18						
MD 15	300-247	J58	J58	J58	J18	J17	J17			
MD 15, 20 Shock Absor.	300-275	J45	J45							
MD 38, 39	43-2	J5	J5							
MS 15	300-247	J58	J58	J58						
MS 15, 20 Shock Absor.	300-275	J45	J45							
MS 38, 39	43-2	J5	J5							
OA 55, 60	32-11	JA 1	JA 1	JA 1						
OA 65	31-149	JA 6	JA 6	JA 6						
OK 55, 60	34-11	JK1			JK1	JK1	JK1	JK4		JK4
	17-92	J165								
P 30, 35, 40, 45	17-94	J162			J128	J164	J128	J162	J131	J162
	7-109	J126								
	23-39	J175								
	23-28	J1202								
P 50, 65, 70, 75, 80, PO 37, 38, 39, 10, 15	23-38	J176			AM33	AM34	AM33	AM34	J1198	J176
	23-126	J174								
	29-175	J178								
PO (1948)		J151			AM33	AM34	AM33	AM34	J1198	J176
	21-288	J153			AM110	AM111	AM110	J155	J156	J160
S 45, 65, 70, SA, SE	21-292	J154								
	21-452	J277								
SD 10		J270			J277	J277	J277	J273		
SD-15 (1946-47-48)		J1	J1	J1	J275	AM220	AM220	AM221	J275	AM221
TD 15-20	300-559	J1	J1	J1	AM91	AM90	AM91	AM90	J7	J4
TS 15	300-559	J1	J1	J1	AM91	AM90	AM91	AM90	J7	J4
	23-39	J175								
	23-32	J1203								
V 45, 65, 70, VA, VE50	23-28	J1202			AM33	AM34	AM33	AM34	J1708	J176
	23-38	J174								
	23-126	J176								
100, 110	11-176	J64	J64	J64						
200, 210	37-170	J74	J76	J76						
300	39-91	J86	J86	J86						

*Weights indicated are passenger and equipment loads exclusive of motor.

See prices on pages 14 to 19.

MICHIGAN PROPELLER SELECTOR — FOR CHAMPION OUTBOARD MOTORS

MODEL OR SERIAL	MOTOR	YEAR	Champion's Part No.	Michigan's Part No.	Rowboat — Round or Flat Bottom	Kayak and Cartop to 75 Lbs.	RUNABOUT 11'-14'	
							150 to 350 lbs.*	350 to 600 lbs.*
Standard Single.....	A	1935	1A126	P44	P44	P44	.....	.....
Standard Single.....	1B	1936	1A126	P44	P44	P44	.....	.....
Lite Twin.....	2B	1936	1A126	P44	P44	P44	.....	.....
Senior Twin.....	3B	1936	3B126	P60	P60	P62	P60	P60
Standard Single.....	S1C	1937	1A126	P44	P44	P44	.....	.....
DeLuxe Single.....	D1C	1937	D1C126	P47	P47	P47	.....	.....
Standard Lite Twin.....	S2C	1937	1A126	P44	P44	P44	.....	.....
DeLuxe Lite Twin.....	D2C	1937	D2C126	P48	P48	P48	.....	.....
DeLuxe Senior Twin.....	D3C	1937	3C126	P60	P60	P62	P60	P60
Red Flash.....	R1C	1937	1A126	P44	P44	P44	.....	.....
Standard Single.....	S1D	1938	1A126	P44	P44	P44	.....	.....
DeLuxe Single.....	D1D	1938	D1C126	P47	P47	P47	.....	.....
Standard Lite Twin.....	S2D	1938	1A126	P44	P44	P44	.....	.....
DeLuxe Lite Twin up to Model No. D2D3000.....	D2D	1938	D1C126	P50	P50	P50	.....	.....
From D2D3000 up.....	.....	.....	D1F126	P91	P91	P91	.....	.....
DeLuxe Senior Twin.....	D3D	1938	3C126	P60	P60	P62	P60	P60
Standard Single.....	S1E	1939	1E126	P51	P51	P51	.....	.....
DeLuxe Single.....	D1E	1939	1E126	P51	P51	P51	.....	.....
DeLuxe Lite Twin.....	D2D	1939	D1F126	P91	P91	P91	.....	.....
DeLuxe Senior Twin.....	D3D	1939	3C126	P60	P60	P62	P60	P60
Standard Single Kingfisher.....	S1F	1940	1E126	P51	P51	P51	.....	.....
DeLuxe Challenger Single.....	D1F	1940	D1F126	P91	P91	P91	.....	.....
Standard Lite Twin Fish Hawk.....	S2F	1940	1E126	P51	P51	P51	.....	.....
DeLuxe Lite Twin-Playboy.....	D2F	1940	D2F126	P70	P70	P73	P73	.....
DeLuxe Single Blue Streak.....	B1F	1940	1E126	P51	P51	P51	.....	.....
Standard Single Kingfisher.....	S1G	1941	1E126	P51	P51	P51	.....	.....
DeLuxe Single Challenger.....	D1G	1941	1E126	P51	P51	P51	.....	.....
Standard Single — Model 400.....	S4G	1941	4G126	Sub. P91	P91	P91	.....	.....
DeLuxe Single — Model 400.....	D4G	1941	4G126	Sub. P91	P91	P91	.....	.....
Standard Lite Twin — Viking.....	S2G	1941	D2F126	P70	P70	P73	P73	.....
DeLuxe Senior Twin — Electra (Alternate Firing).....	3G	1941	3G126	P80	P80	P80	P80	P80
Single — Ensign.....	M1G	1941	1E126	P51	P51	P51	.....	.....
Single — Commodore.....	M4G	1941	4G126	Sub. P91	.....	.....	.....	.....
Lite Twin — Admiral.....	M2G	1941	D2F126	P70	P70	P73	P73	.....
Super Single.....	1H	1942	1H126	Sub. P51	.....	.....	.....	.....
Alternate Firing Twin (Electra)....	3H	1942	3G126	P80	P80	P80	P80	P80
Standard Single 4.2 h.p.....	1J	1946-47-48	1J8	P90	P94	P90	P94	.....
Deluxe Single 4.2 h.p.....	2J	1946-47-48	1J8	P90	P94	P90	P94	.....
Standard Twin 7.9 h.p.....	4J	1948	4K8	P120	P120	.....	P120	P121
DeLuxe Twin 7.9 h.p.....	5J	1948	4K8	P120	P120	.....	P120	P121

*Weights indicated are passenger and equipment loads exclusive of motor.

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

Michigan Propeller Selector for MUNCIE, NEPTUNE, SEAGULL GAMBLE

MODEL OR SERIAL	Muncie's Part No.	Michigan's Equivalent	Rowboat Round or Flat Bottom	Kayak and Cartop to 75 lbs.	RUNABOUT 11'-14'		RUNABOUT 14'-17'		Racing Hydro.	Outboard Cruiser, Work Boats, Etc.
					150 to 350 lbs.*	350 to 600 lbs.*	150 to 350 lbs.*	350 to 600 lbs.*		
Jr. Single 1938-41-46-47 1A38, 1A39, 10A1, 11A1, 11B1, 15A1, 15B1, 17A1, 17B1 (1.2 and 1.5 h.p.)	OB100-99	E40	E40	E40	-----	-----	-----	-----	-----	-----
Singles 1933-41 OB1, OB11, OB12, 2A38, 2A39, 10A2, 11A2, 11AA2, 11B2, 15B2, 17A2 (2 and 2.5 h.p.)	OB1-99	M10	M10	M10	M12	-----	-----	-----	-----	-----
OB2 1930-31 (2.5 h.p.)	OB2-99	M30	M30	M30	-----	-----	-----	-----	-----	-----
OB3, OB4, OB5 (1931-32) (3-4-5 h.p.)	OB4-99	M34	M34	M34	-----	-----	-----	-----	-----	-----
Junior Twin 1933-41 OB31, OB32, OB34, OB35, 4A38, 4A39, 10A4, 11B4, 15B4	OB31-99	M20	M20	M26	M27	-----	-----	-----	-----	-----
Twin 1933-36 (6 h.p.) OB51, OB61, OB63, OB64, OB65	-----	M37	M37	M37	-----	-----	-----	-----	-----	-----
Alternate 1939-41 (5 and 6 h.p.) 5A39, 10A6, 11A6, 11AA6, 15A6, 15AA6, 15B4	OB31-99	M20	M20	M26	M27	-----	-----	-----	-----	-----
Imp. Twin 1938-47-48 (6 h.p.) 6A38, 6A39, 15A6, 15AA6	OB31-99	M20	M20	M26	M27	-----	-----	-----	-----	-----
Alternate 1938-47-48 9A38, 9A39, 10A10, 11A9, 11AA9, 11A10, 11AA10, 15A10, 15AA10, 15A9, 15AA9	OB9-99	M60	-----	-----	M65	M65	M65	M65	M62	-----
Master Twin 1931-41-46 OB15, OB16, OB17, 16A-38, 16A39, 10A16, 11A16, 11B16, 15A16, 15B16	OB16-99	J154	-----	-----	J151	J150	J154	J160	J156	J160
1941 and 1946-47-48 3 1/2 h.p. Alt. Twin 11A3, 11AA3, 15A3, 15AA3, 17AA3, 17A3	2-33	M-70	M-70	M-70	-----	-----	-----	-----	-----	-----
13A12 (1943-44 Army Special Storm 16 h.p.)	-----	J175	-----	-----	AM33	AM33	AM33	AM33	-----	AM30

*Weights indicated are passenger and equipment loads exclusive of motor.

See prices on pages 14 to 19.

Michigan Propeller Selector for OTHER MOTORS

MOTOR AND MODEL NO.	Standard Michigan Duplicate	Rowboat Round or Flat Bottom	Kayak and Cartop to 75 Lbs.	RUNABOUT 11'-14'		RUNABOUT 14'-17'		Racing Hydro.	Outboard Cruiser, Work Boat, Etc.
				150 to 350 lbs.*	350 to 600 lbs.*	150 to 350 lbs.*	350 to 600 lbs.*		
BENDIX									
All Singles, 1940, 2 1/4 h.p.	X5	X7	X5						
All Twins, 1940, 4 1/2 h.p.	X20	X24	X20						
ELGIN									
Single 1 1/4 h.p. 571.58301 (1946-47)	G10	G10	G10						
Single 2 1/2 h.p. 571.58401 (1947)	G20	G20	G20						
Twin 3 1/2 h.p. 571.58501 (1947)	G30	G30	G30						
Twin 5 1/2 h.p. 571.58601 (1947)	G40	G40	G40						
FIRESTONE									
Single 3.6 h.p. 1946-47-48, 460, 462-463, 464-476, 477, 486, 487	SA10	SA10	SA10						
Twin 7 1/2 h.p., 1947-48, 479, 489	SA3	SA3	SA1	AM210					
FLAMBEAU									
Single 2 1/2 h.p., 1947-48	FL10	FL10	FL10						
Twin 5 h.p., 1947-48	FL20	FL20	FL21						
LAUSON									
Single 1940-41-42 and 1946-47-48, 2 1/2-3 h.p.	L30	L30	L30						
Twin 1948, 6 h.p.	L40	L40							
LEJAY									
Electric	H50	H50	H50						
Electrol 1946-47, "46-A"	H60	H60	H60						
LOCKWOOD									
Foldlight 1930	B10	B10	B10						
Ace 1929-30	L411			L411	L411	L411	L411		
Chief 1928-29, 82B-92B	L420			L420	L420	L423	L423	L421	L423
"72-T" 1927	L606	L606		L606	L606				
MARTIN									
Twin 1946-47-48, "60"	Q10	QW32		AM180	QW32			Q31	QW32
Twin 1947-48, "40"	Q40	Q40	Q40						
Single 1948, "20"	Q20	Q20	Q20						
MERCURY									
Singles, 1940-48, K1, 2, 3, KB1, 2, 3, KB1A, WA2, 3, WB2, 3, KE3	K8	K8	K8						
Twins, 6 h.p., 1940-47, K4, 5, KB4, 5, WA6, WB6, KD4, WB4, WD4	K15	K19	K17	K19					
Twin, 7 1/2 h.p., 1947, KE4	K50	K50		AM200					
Twin, 10 h.p., 1947-48, KE7	K40			AM191	AM190	AM190	AM190	K42	K41
Twin, 25 h.p., 1948	K60								
SEA KING (Montgomery-Ward)									
Single 2.8 h.p. (by Kiekhaefer)	K8	K8	K8						
Single 2 h.p. (by Thor)	T26	T26	T26						
Single 1 h.p. No. 377, 381, 469	E40	E40	E40						
Single 1.8 h.p., No. 477	E27	E27	E27						
Single 1.8 h.p., No. 367	E4	E4	E4						
Single, 2.2 h.p., No. 489, 490	E237	E237	E237						
Twin, 2.5 h.p., No. 498	W8	W8	W8						
Twin, 2.8 h.p., No. 449	E32	E32	E32						
Twin, 3.3 h.p., No. 378	E32	E32	E32						
Twin, 3 h.p., No. 369, 378, 379	E8	E10	E8						
Twin, 4 h.p., No. 400, 416, 491, 494, 499	E242	E242	E242						
Twin, 5 h.p., No. 371	E196	E199	E196	AM121	AM120	AM120	AM120	E198	
Twin, 8.5 h.p., No. 471, 492, 473	E291			AM80	AM81	AM81	AM81	E294	
Twin, 15.2 h.p., No. 375, 376	E222			AM42	AM41	AM45	AM45	E309	E365
Twin, 21.0 h.p., No. 615	V841			AM130	AM131	AM130	V844	V849	V844
SCOTT-ATWATER									
Single 3.6 h.p., 1946-47-48, 461, 467-470, 471-480, 481	SA10	SA10	SA10						
Twin, 7 1/2 h.p., 1947-48, 473, 483	SA3	SA3	SA1	AM210					
THOR									
Single, 1935-36	T20	T20	T20						
Single, 1937-38-39	T26	T26	T26						
Twin, 1936	T24	T24	T24						
Twin, 1937-38	T28	T28	T28						
Twin, 1939	T26	T26	T26						
WATERWITCH (Sears-Roebuck)									
Single, 3/4 1938-39-40 and 1941 1 h.p.	S5	S5	S5						
Single 2.5 h.p. 1936-40 and 1941 2 3/4 h.p.	S10	S10	S10						
Single, 3.5 h.p. 1940-41	S15	S15	S15						
Twin, 4.0 h.p. 1936-37-38 and 1939 4 3/4 h.p.	S20	S20	S25	S23					
Twin, 5 3/4 h.p., 1940-41	S15	S15		S15					
Twin, 10 h.p. 1941	S50			S50	S50	S50	S50		
Twin, 8.5 h.p.	JK-1			JK-1	JK-1	JK-1	JK-4		JK-4
HIAWATHA, SEA BEA, SEA-KING, MARINER									
Single, 3 1/2 h.p., 1947-48	Y1	Y1	Y1						
Twin, 5 h.p., 1947-48	Y10	Y10	Y10	AM121	AM120				

*Weights indicated are passenger and equipment loads exclusive of motor.

Own a spare propeller to use while the original is reconditioned.

MICHIGAN PROPELLER PRICE LIST

(All prices are subject to change without notice)

EVINRUDE — ELTO

Michigan Part No.	Price	Dia. and Pitch	Metal	No. Blades	PROPELLER TO BE USED ON MOTOR MODEL NO.
E 2	\$ 3.60	5 1/2 x 4 3/4	AL	2	Evin Mate 4263-Elto Cub 4264-SeaKing Single 1.8 H.P. 367 Evin Sportsman 4285, 4296, 4346, 4364, 4365, 4366, 4367, 4416 Evin Sportwin 4287, 4303, 4353, 4368, 4369, 4371, 4372, 4421 and Seaking Twin 3 H.P. 369, 3.3 H.P. 378, 379 Evin Sportsman 4091-Elto Ace 4145, 4205
E 4	3.60	7 x 6	AL	2	
E 8	3.60	7 1/2 x 6	AL	2	
E 10	4.40	7 1/2 x 5 1/2	AL	3	
E 22	3.00	7 x 6	AL	2	
E 27	3.00	7 x 6	AL	2	Evin Sportsman 4146, 4207-Elto Ace 4256, 4301, 4329, 4351, 4352, Sea King Single 1.8 H.P. 477
E 32	3.00	7 1/2 x 6	AL	2	Evin Sportwin 4156, 4209-Elto Handitwin 4158, 4212, 4261, 4307, 4332, 4357, 4358-SeaKing Twin 2.8 & 3 H.P. 449, 3.3 H.P. 378
E 40	2.70	6 x 5	AL	2	Evin Ranger 4252, 4265, 4334, 4406, 4407, Scout 4201-Elto Pal 4203, 4253, 4266-SeaKing Single 1 H.P. 377, 381, 469-Muncie Jr. Single 1A38, 1A39, 10A1, 11A1, 11B1, 15A1, 15B1, 17A1, 17B1
E 196	4.75	7 1/2 x 8	AL	2	Evin Fisherman 4309, Zephyr 4359, 4361, 4362, 4363, 4378, 4379, 4381, 4382, 4402, 4403, 4404, 4405-Elto Lightwin 4313, 4314-SeaKing Twin 5 H.P. 371
E 198	6.00	7 1/4 x 9	BR	2	
E 199	5.50	8 1/4 x 6	AL	2	
E 201	7.00	10 x 10	BR	2	Elto Service Speedster 60000-69999, 80000H-89999H, 300, 348, HiSpeed Service Speedster 302 Elto Quad 70000-75000
E 204	8.80	10 x 8	BR	3	
E 206	9.90	8 1/2 x 11 1/2	BR	2R	
E 211	8.25	11 x 14	BR	2	
E 214	9.90	11 x 10	BR	3	
E 216	9.90	9 1/2 x 14	BR	2R	
E 222	7.00	10 x 10	BR	2	
E 232	3.80	9 x 9	AL	2	Elto Special Speedster 340-SeaKing Twin 15.2 H.P. 375 Elto Lightweight 90000.309
E 237	3.80	7 1/2 x 6	AL	2	
E 242	3.80	8 3/4 x 8	AL	2	Evin Sport Single 432,4000, 4002-Elto Super Single 436, 4008, 4010 SeaKing Single 2.2 H.P. 489, 490
E 246	7.00	10 x 10	BR	2	Evin Lightwin 402 407-Elto Lightweight 401, 411, 360-SeaKing Twin 4 H.P. 400, 416, 491, 494, 499 Elto Special Speedster 340, 905
E 248	8.80	10 x 8	BR	3	
E 251	8.80	10 x 10	BR	3	Evin Sportfour 902-Elto Sr. Speedster 310, Jr. Quad 900
E 258	9.90	9 1/2 x 11 1/2	BR	2R	
E 260	11.00	10 x 12	BR	2R	
E 261	9.90	11 x 11	BR	3	
E 263	9.90	11 x 9	BR	3	Evin Speeditwin 634, 6000, 6011, 6039, 6041-Elto Super "C" 605, 624, 638, Speeditwin 6004, 6034, 6015, 6018
E 267	11.00	9 1/4 x 14	BR	2R	
E 271	9.90	11 x 13	BR	3	Evin Speedifour 728, 7022-Elto Speediquad 7004, 7013 Elto Sr. Quad 314, 700, 721, 732
E 272	9.90	10 1/2 x 13	BR	3	
E 277	13.00	11 3/4 x 10	BR	3	Evin Big Four 802, 814, Speedifour 728, 7022, 7026, 7031, 7032-Elto Sr. Quad 314, 700, 721, 732, SpeediQuad 7004, 7013, Big Quad 800, 820
E 279	11.00	10 1/2 x 15	BR	2	
E 281	11.00	11 x 14 1/2	BR	3	
E 283	11.00	10 1/2 x 17	BR	2R	
E 285	13.20	10 x 11	BR	2R	
E 286	13.20	10 x 10	BR	2R	Evin 1946-47-48 Speeditwins, 6039-6041 above Serial 05001
E 291	7.00	9 x 8	BR	2	
E 292	13.20	11 x 14	BR	2R	Evin Sturditwin 420, Fleetwin 418, 450, 4034-Elto Service "A" 424, Super "A" 422, Fleetwin 4038, 4335, 4336-SeaKing Twin 8.5 H.P. 471, 473, 492 Evin 1946-474-8 Speedifours and Big Fours, All Army Storm Boat Motors Same as E291 Series
E 293	7.00	9 x 6	BR	3	
E 294	8.80	8 1/2 x 9 1/2	BR	2R	
E 295	13.20	11 x 13	BR	2R	
E 296	4.75	7 1/2 x 8	AL	2	
E 304	8.80	10 x 10	BR	3	Evin 1946-47-48 Speedifours and Big Fours, All Army Storm Boat Motors Evin Fisherman 4016, 4093, 4227, 4267, Sportwin 409, 476, Lightwin 422, 4020-Elto Lightweight 444, Fisherman 413, 4018, 4095, Service Twin 4161, 4163, 4151, 5216, 4229
E 306	8.80	10 x 8	BR	3	
E 309	9.90	9 1/2 x 11 1/2	BR	2R	
E 313	4.75	7 1/2 x 8	AL	2	Evin Sportfour 912, 90000, 9200-Elto Jr. Quad 914, 924-SeaKing Twin 15.2 H.P. 375, 376
E 322	4.40	7 1/2 x 8	AL	2	
E 332	5.50	8 1/4 x 8	AL	2	
E 342	6.00	8 3/4 x 9	AL	2	
E 346	9.00	8 1/4 x 10	BR	2	
E 360	8.80	9 3/4 x 10	BR	3	
E 363	8.80	8 3/4 x 12	BR	2R	
E 365	9.90	10 1/4 x 8	BR	3	
E 422	5.50	7 1/2 x 8	AL	2	
E 446	7.70	9 x 6 1/2	AL	2	
E 512	6.50	8 3/4 x 8	AL	2	
E 513	6.50	9 x 6	AL	2	
E 522	6.00	8 3/4 x 9	AL	2	
EW 2	9.90	10 1/2 x 10 1/2	BR	3	Evin Lightwin 4221, 4289 Evin Lightfour 4231, 4271, 4314, 4316, 4317, 4322, 4323, 4324, 4375, 4376, 4377, Lightfour Imperial 4111, 4178, 4389 Evin Lightfour Imperial 4042-Elto Lightfour Imperial 4044, Lightwin 4020, 4032 Elto Handifour 4219
EW 6	11.00	10 1/2 x 13	BR	3	
EW 7	8.80	9 3/4 x 10	BR	3	
EW 10	9.90	10 1/2 x 10 1/2	BR	3	
EW 20	11.00	10 1/2 x 13	BR	3	

R Indicates Racing Type Propeller
W Indicates Weedless Type Propeller

MICHIGAN PROPELLER PRICE LIST

(All prices are subject to change without notice)

EVINRUDE — ELTO

Michigan Part No.	Price	Dia. and Pitch	Metal	No. Blades	PROPELLER TO BE USED ON MOTOR MODEL NO.	
EW 40	\$7.00	9 x 8	BR	2	Elto Fleetwin 4335, 4336	
B 10	4.50	8½ x 8	AL	2	Evin Foldlight 162, 403-Elto Foldlight 162, 403-Sea King 162,403 Evin Sportwin 1500-10000, 183, 10500-14750 Evin Fleetwin F. 1F, 4F Evin Fastwin H1001-H2500, 1H001-13H250	
V 128	4.00	8½ x 6	AL	2		
V 818	8.25	9 x 9	AL	2		
V 821	7.00	10 x 12	AL	2		
V 823	9.90	10 x 10	BR	3		
V 825	8.80	9 x 13½	BR	2R		
V 831	9.25	10 x 13	AL	3		Evin Speeditwin U1-U5
V 832	9.25	10 x 13	BR	3		
V 833	9.25	10 x 11	BR	3		
V 836	6.60	8 x 9	AL	2		Evin Fastwin 1-4429 Model R
V 841	8.80	10 x 13	AL	3		
V 842	9.90	10 x 13	BR	3	Evin Speeditwin 1U-15U, 143, 156, 167-Sea King 21H.P. 615	
V 844	9.90	10½ x 10	BR	3		
V 849	11.00	9½ x 14	BR	2R		
V 851	9.90	11 x 11	BR	3		Evin Speeditwin 601, 618, Speedifour 704, 715
V 853	9.90	11 x 9	BR	3		
V 857	11.00	9¾ x 16	BR	2R		
V 861	9.90	11 x 13	BR	3	Evin Speedifour 704, 715	
V 862	11.00	10½ x 15	BR	2R		
AM 10	10.45	8¾ x 10	BR	3	Elto Jr. Quad 900, Sr. Speedster 310	
AM 11	11.00	9½ x 10	BR	3		
AM 41	10.45	8¾ x 10	BR	3	Evin Sportfour 912, 9000, 9008, 9015, 9022, 9026, 9031, 9035-Elto Sportfour 9004, 9013, Jr. Quad 914, 924-Sea King 15.2 H.P. 375, 376	
AM 42	10.45	8¾ x 10½	BR	3		
AM 45	11.00	9½ x 10	BR	3		
AM 50	12.65	10 x 10	BR	3		Evin Speeditwin 634, 6000, 6011, 6039, 6041-Elto Speeditwin 6004 6015, 6018, 6034, Super "C" 605, 624, 638 Evin Big Four 802, 814, Speedifour 728, 7022, 7026, 7031, 7032-Elto Sr. Quad 314, 700, 721, 732, Speediquad 7004, 7013, Big Quad 800, 820
AM 51	13.20	10½ x 9½	BR	3		
AM 60	13.20	10½ x 12½	BR	3		
AM 61	13.20	10½ x 13½	BR	3		
AM 62	12.65	10 x 13	BR	3		
AM 70	8.80	8 x 8½	BR	3	Evin Lightfour 4231, 4271, 4315, 4316, 4317, 4322, 4323, 4324, 4375, 4376, 4377, Lightfour Imperial 4111, 4178, 4389 Evin Fleetwin 418, 450, 4034, Sturdtwin 420-Elto Service "A" 424, Super "A" 422, 456, Fleetwin 4038, 4335, 4336-Sea King Twin 8.5 H.P. 471, 473, 492 Evin Fisherman 4309, Zephyr 4359, 4361, 4362, 4363, 4378, 4379, 4381, 4382, 4402, 4403, 4404, 4405-Elto Lightwin 4313, 4314-Sea King Twin 5 H.P. 371, Hiawatha 5 H.P.	
AM 71	9.35	8 x 8	BR	3		
AM 80	8.80	8 x 9	BR	3		
AM 81	9.35	8½ x 9	BR	3		
AM 120	8.00	7½ x 6½	BR	3		
AM 121	8.00	7½ x 7½	BR	3		
AM 130	12.65	10 x 11	BR	3		Evin Speeditwin 156, 143, 167, 1U-15U-Sea King Twin 21 H.P. 615
AM 131	12.65	10 x 10½	BR	3		
AM 140	12.65	10 x 10	BR	3		Evin Speeditwin 601, 618
AM 141	12.65	10 x 10½	BR	3		
AM 150	12.65	10 x 13	BR	3	Evin Speedifour 704, 715	
AM 160	13.20	10 x 10	BR	3	Evin Speeditwin 1946-47-48 Models Evin 1946-47-48 Speedifours and Big Fours, All Army Storm Boat Motors	
AM 161	13.20	10½ x 9½	BR	3		
AM 170	14.00	10½ x 12½	BR	3		
AM 171	14.00	10½ x 13½	BR	3		
AM 172	14.00	10 x 13	BR	3		
AM 173	14.00	10½ x 11	BR	3		

THOR

T 20	\$3.30	6½ x 4½	AL	2	Single 1935, 36
T 24	3.30	7½ x 5½	AL	2	Twin 1936
T 26	3.30	7 x 6	AL	2	Single 1937, 38, 39, Twin 1939-Sea King Single 2 H.P.
T 28	4.30	9 x 7	AL	2	Twin 1939

WATERWATCH

S 5	\$3.30	6½ x 4	AL	2	Single 1938, 39, 40 ¾ H.P., 1941 1 H.P. Motor Nos.: 571.30, 571.31, 571.33, 571.34, 571.35, 571.36. (Replaces Sears Part Nos.: MB2265, MB2265-1, MB2265-2, MB2265-11)
S 10	3.30	7½ x 7	AL	2	
S 15	3.30	8½ x 7	AL	2	Single 1936-40, 2½ H.P., 1941 2¾ H.P. Motor Nos.: MB10, 571.10, 571.11, 571.40, 571.41, 571.42, 571.43, 571.44. (Replaces Sears Part Nos.: MB265, MB7265).
S 20	3.80	8 x 8	AL	2	Single 1940, 41 3.5 H.P. and 5¾ H.P. Motor Nos.: 571.12, 571.13, 571.14, 571.15, 571.20, 571.24, 571.26. (Replaces Sears Part Nos.: MB265-5, MB765-11).
S 23	5.50	8½ x 7	AL	3	
S 25	5.50	7½ x 9	AL	2	Twin 1936, 37, 38 4 H.P., 39 4¾ H.P. Motor Nos.: 5807, 571.21, 571.22, 571.23. (Replaces Sears Part Nos.: MB765 (2-Blade), 765-2 (3-Blade)).
S 50	6.50	9 x 10½	AL	2		Twin 1941 10 H.P. Motor No.: 571.45, 571.50 (Replaces Sears Part No.: MB9265-1)

R Indicates Racing Type Propeller
W Indicates Weedless Type Propeller

AM In part number indicates AQUAMASTER design.

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

MICHIGAN PROPELLER PRICE LIST

(All prices are subject to change without notice)

JOHNSON

Michigan Part No.	Price	Dia. and Pitch	Metal	No. Blades	PROPELLER TO BE USED ON MOTOR MODEL NO.
J 1	\$ 5.00	8 x 7 1/2	AL	2	TD 15-20, TS 15
J 4	5.00	8 x 6	AL	2	TD 15-20, TS 15
J 5	3.30	6 1/2 x 3 1/2	AL	2	MD 38, 39-MS 38, 39
J 7	7.00	8 x 8 1/2	BR	2	TD 15-20, TS 15
J 10	4.40	8 x 4 3/4	AL	2	DS 37, 38-LS 37, 38
J 14	4.40	8 x 7 1/2	AL	2	
J 17	6.50	8 x 6	AL	3W	AT 39, 10-DT, 37, 38, 39, 10-LT 37, 38, 39, 10
J 18	5.50	8 x 7 1/2	AL	2W	
J 21	8.80	9 3/4 x 7 1/4	AL	3	
J 22	11.00	9 3/4 x 7 1/4	BR	3	
J 23	8.80	9 1/2 x 9	BR	3	KA 37, 38, 39, 10-KD 15-KS 15
J 24	9.90	9 x 11	BR	2R	
J 25	8.80	9 1/2 x 9	AL	3	
J 26	9.90	9 x 10	BR	2R	
J 30	3.30	6 5/8 x 5 1/4	AL	2	HA-HD-HS 39, 10
J 40	3.30	6 5/8 x 5 1/4	AL	2	HA-HD-HS 15
J 45	3.30	6 5/8 x 4 1/4	AL	2	MD 15, 20-MS 15, 20
J 52	3.30	6 5/8 x 5 1/4	AL	2	HD 20-25, HS 20
J 58	3.30	6 1/2 x 4 1/4	AL	2	MD 15-MS 15
J 64	3.30	7 1/4 x 4 1/2	AL	2	100-110
J 74	4.50	7 5/8 x 5 1/2	AL	3	200-210
J 76	4.50	7 5/8 x 5 1/2	AL	3W	
J 80	4.75	8 1/4 x 6	AL	2	F 70
J 84	4.75	8 x 9	AL	2	F 75
J 86	4.75	8 x 6 1/4	AL	2	J 80, 300
J 90	4.40	7 5/8 x 5 1/8	AL	2	J 25, 65
J 94	4.75	7 5/8 x 5 1/8	AL	2	J 70
J 96	4.40	8 x 8	AL	2	J 75
J 110	4.40	8 x 7	AL	2	A Lightwin-A 25-BN Lightwin-AB 25
J 112	5.50	8 5/8 x 6 1/2	AL	2	A 25-AB 25
J 114	6.00	9 1/8 x 7.7	AL	3	A 35, A 45
J 118	9.90	10 x 10	AL	3	
J 119	11.00	10 x 10	BR	3	
J 120	9.90	9 x 12	BR	2R	K 35
J 121	11.00	10 x 8	BR	3	
J 122	8.80	10 1/4 x 13.02	AL	3	K 40, 45
J 123	9.90	10 1/4 x 13.02	BR	3	
J 125	9.90	10 1/4 x 11	BR	3	
J 126	9.90	10 1/8 x 12 1/2	AL	3	
J 127	11.00	10 1/8 x 12 1/2	BR	3	
J 128	9.90	10 x 12 1/2	BR	2R	P 35, 40, 45-PB 35
J 131	9.90	9 1/2 x 14	BR	2R	
J 140	6.00	9 1/8 x 6	AL	3	A 50, 65, 70, 75, 80-AA 37
J 141	7.70	9 1/8 x 7	AL	2W	
J 144	7.70	9 1/2 x 7 3/4	AL	3	
J 145	7.70	9 1/2 x 9 1/2	AL	3	K 50, 65, 70, 75, 80
J 146	8.80	9 1/2 x 9 1/2	BR	3	
J 148	8.80	9 1/2 x 7 3/4	BR	3	
J 149	9.90	9 x 11	BR	2R	
J 150	8.80	10 x 10	BR	2	
J 151	8.80	10 x 11	BR	2	
J 153	8.80	10 x 14	BR	2	
J 154	9.90	10 x 10	BR	3	Johnson S 45, 65, 70-SA-SE; Muncie OB15, OB16, OB17, 16A-38, 16A-39, 10A-16, 11B-16
J 155	9.90	10 x 8	BR	3	
J 156	9.90	9 x 12 1/2	BR	2R	
J 157	9.90	9 x 14 1/2	BR	2R	
J 160	11.00	10 1/2 x 9	BR	3	
J 162	11.00	10 1/4 x 10 1/2	BR	3	
J 164	9.90	10 1/4 x 12 1/4	AL	3	P 30, 35, 40, 45
J 165	11.00	10 1/4 x 12 1/4	BR	3	
J 174	\$13.00	12 x 13	BR	3	
J 175	13.00	12 x 12	BR	3	P 50, 65, 70, 75, 80-PO 10, 15, 37, 38, 39-V45, 65, 70-VA-VE50
J 176	13.00	12 x 10	BR	3	
J 178	8.10	10 3/8 x 12 1/2	AL	3	1948 PO
J 182	7.70	9 1/2 x 9	AL	3	K 50, 65, 70, 75, 80
J 270	8.00	10 x 10	AL	3	SD Models, 1946-47-48
J 272	12.00	10 x 10	BR	3	SD Models, 1946-47-48

(Continued on next page)

R Indicates Racing Type Propeller
W Indicates Weedless Type Propeller

MICHIGAN PROPELLER PRICE LIST

(All prices are subject to change without notice)

JOHNSON (Continued)

Michigan Part No.	Price	Dia. and Pitch	Metal	No. Blades	PROPELLER TO BE USED ON MOTOR MODEL NO.
J 273	12.00	10 x 12	BR	3	SD 10
J 275	9.00	10 x 12	BR	2R	SD Models 1946-47-48
J 277	12.00	10 x 13	BR	3	SD 10
J 1197	11.00	10 x 14	BR	2R	P 50, 65, 70, 75, 80-PO 10, 15, 37, 38, 39-V45, 65, 70-VA-VE50
J 1198	11.00	9 3/4 x 16	BR	2R	
J 1202	9.90	12 x 15	BR	2	V 45, 65, 70-VA-VE 50
J 1203	9.90	12 x 17	BR	2	
J 1222	9.90	9 x 15	BR	2	K 40, 45
J 1499	9.90	9 1/4 x 10 1/2	BR	2R	K 50, 65, 70, 75, 80
J 1708	11.00	10 1/2 x 16	BR	2R	
J 1709	11.00	10 1/2 x 17 1/2	BR	2R	P 50, 65, 70, 75, 80, PO 10, 15, 37, 38, 39, V45, 65, 70, VA-VE50
JA 1	5.50	9 1/8 x 8	AL	2	
JA 6	6.50	8 5/8 x 7 1/2	AL	3	OA 55, 60
					OA 65
JK 1	6.60	10 1/4 x 13	AL	2	OK 55, 60-Waterwitch Twin 8 1/2 H.P.
JK 4	7.70	10 1/4 x 10	BR	2	
JW 27	9.90	9 1/2 x 10	BR	2W	KA 37, 38, 39, 10 KD 15 KS 15
M 26	4.75	8 x 8	AL	2	
M 27	6.50	8 1/4 x 6	BR	3	A-BN Lightwin
					A-BN Lightwin
AM 20	11.00	9 1/2 x 8 1/2	BR	3	KA 37, 38, 39, 10-KD 15 KS 15
AM 21	11.00	9 1/2 x 9	BR	3	
AM 30	13.20	10 1/2 x 12 1/2	BR	3	P 50, 65, 70, 75, 80-PO 10, 15, 37, 38, 39-V45, 65, 70-VA-VE50
AM 31	12.65	10 x 13	BR	3	
AM 32	12.65	10 x 13 1/2	BR	3	
AM 33	13.50	9 7/8 x 14	BR	3	All PO 22 h.p. models, Seahorse "24" and "32"
AM 34	13.50	9 7/8 x 13	BR	3	
AM 90	8.00	7 3/4 x 6 1/2	BR	3	TD 15-20, TS 15
AM 91	8.00	7 3/4 x 7	BR	3	
AM 100	11.00	9 1/2 x 8 1/2	BR	3	K 50, 65, 70, 75, 80
AM 101	11.00	9 1/2 x 8	BR	3	
AM 110	11.00	9 1/2 x 9 1/2	BR	3	S 45, 65, 70-SA-SE
AM 111	11.00	9 1/2 x 9	BR	3	
AM 220	11.00	9 1/2 x 11	BR	3	SD Models 1946-47-48
AM 221	11.00	9 1/2 x 10 1/2	BR	3	

MUNCIE (Also see Johnson for partial listing)

M 10	\$3.30	7 5/8 x 5 1/8	AL	2	OB1, OB11, OB12, 2A38, 2A39, 10A2, 11A2, 11AA2, 11B2, 15B2, 17A2
M 12	3.80	8 1/4 x 4	AL	2	
M 20	3.80	8 x 7	AL	2	OB31, OB32, OB34, OB35, OB38, OB39, 10A4, 11B4, 4A38, 4A39, 5A39, 10A6, 11A6, 11AA6, 6A38, 6A39, 15A6, 15AA6, 15B4
M 26	4.75	8 x 8	AL	2	
M 27	6.50	8 1/4 x 6	BR	3	
M 30	3.30	9 x 9	AL	2	OB2
M 34	3.50	9 x 9	AL	2	OB3, OB4, OB5
M 37	3.50	9 x 8 1/2	AL	2	OB51, OB61, OB63, OB64, OB65
M 60	7.00	9 x 9	AL	3	9A38, 9A39, 10A10, 11A9, 11AA9, 11A10, 11AA10, 15A10, 15AA10, 15A9, 15AA9, 11A3, 11AA3, 15A3, 15AA3, 17A3, 17AA3, A2, AA2, AA4
M 62	8.25	8 1/2 x 10 1/2	BR	2R	
M 65	8.25	9 x 9	BR	2R	
M 70	3.30	6 1/2 x 5	AL	2	

CHAMPION

P 44	\$3.30	7 1/2 x 6 1/2	AL	2	A, 1B, 2B, S1C, S2C, R1C, S1D, S2D
P 47	3.80	7 1/2 x 5 1/2	AL	3	
P 48	3.80	7 3/8 x 6	AL	3	D1D, D1C
P 50	4.40	8 1/4 x 6	AL	3	D2C
P 51	3.30	7 1/2 x 6 1/2	AL	2	D2D, Up to Model D2D3000
					S1E, D1E, S1F, S2F, B1F, S1G, D1G, M1G
P 60	4.40	9 x 6	AL	3	D3C, D3D, 3B
P 62	6.00	8 x 9	AL	2	
P 70	5.50	8 1/4 x 7	AL	3	D3C, 3B, D3D
P 73	6.60	8 x 8 1/2	AL	2R	D2F, S2G, M2G
P 80	6.00	8 1/2 x 9	AL	2	D2F, S2G, M2G
P 91	4.40	7 1/2 x 6 1/2	AL	3	3G, 3H
					D2D, from 3060 up, D1F
P 90	5.10	8 x 5 1/2	AL	2	1J, 2J
P 94	6.00	8 x 4 1/2	AL	3	
P 120	6.00	8 x 10	AL	2	4J, 5J
P 121	6.00	8 x 9	AL	2	

R Indicates Racing Type Propeller
W Indicates Weedless Type Propeller

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

LET MICHIGAN RECONDITION YOUR DAMAGED WHEEL

MICHIGAN PROPELLER PRICE LIST

(All prices are subject to change without notice)

BENDIX

Michigan Part No.	Price	Diã. and Pitch	Metal	No. Blades	PROPELLER TO BE USED ON MOTOR MODEL NO.
X 5	\$4.40	7 1/2 x 5	AL	2	All Singles 1940 2 1/4 H.P.
X 7	5.50	8 1/4 x 4 1/2	AL	2W	
X 20	4.75	8 1/4 x 6	AL	2	All Twins 1940 4 1/2 H.P.
X 24	6.00	8 1/2 x 5	AL	3W	

ELGIN

G 10	\$3.00	6 1/2 x 5	AL	2	Single 1946-47, 1 1/4 H.P., No. 571.58301 Single 1947, 2 1/2 H.P., No. 571.58401 Twin 1947, 3 1/2 H.P. No. 571.58501 Twin 1947, 5 1/2 H.P., No. 571.58601
G 20	3.30	7 1/2 x 4 1/2	AL	2	
G 30	3.30	7 1/2 x 6	AL	2	
G 40	3.30	7 1/2 x 7 1/2	AL	2	

FLAMBEAU

FL 10	\$3.30	7 x 6	AL	2	Single 1947-48, 2 1/2 H.P. Twin, 1947-48, 5 H.P.
FL 20	5.10	8 x 8 1/2	AL	2	
FL 21	5.40	8 x 9	AL	2	

HIAWATHA, SEA BEA, SEA-KING, MARINER

Y 1	\$3.60	6 7/8 x 5	AL	2	Single, 1947, 3 1/2 H.P. Twins, 1947, 5 H.P.
Y 10	4.80	7 1/2 x 8	AL	2	

LAUSON

L 30	\$4.00	7 1/2 x 6	AL	2	Single 1940, 41-46-47-48, 2 1/2 H.P. Twin 1948, 6 H.P.
L 40	5.00	8 x 8	AL	2	

LE JAY

H 50	\$2.50	6 x 5	AL	2	Electric Troller Electric Troller Model 46A, 1946-47 (Weedless)
H 60	3.00	6 x 5	AL	2	

LOCKWOOD

L 411	\$8.80	9 1/4 x 8 1/2	AL	2	Ace 1929, 30
L 412	8.80	9 1/4 x 8 1/2	BR	2	
L 420	9.25	9 x 14	BR	2	Chief 1928, 29-82B-92B-Sea King 11 and 15 H.P. No. 500 1927 "72-T"
L 421	9.25	9 x 15	BR	2	
L 423	9.25	10 x 12 1/2	BR	2	
L 606	8.80	9 x 7	BR	2	

MERCURY

K 8	\$3.00	7 5/8 x 6	AL	2	Singles K1, 2, 3, KB1, 2, 3, KB1A, WA2,3, WB2,3, KE3; 3.2 H.P.
K 15	3.30	7 5/8 x 7	AL	2	
K 16	7.00	7 5/8 x 7	BR	2	
K 17	7.00	7 5/8 x 8	BR	2	Twins K4,5, KB4,5, WA6, WB6, KD4, WB4, WD4, 6 H.P.
K 19	7.00	7 1/2 x 6 1/2	AL	3	
K 40	7.00	7 1/2 x 9	AL	3	Twins KE7, 10 H.P.
K 41	8.00	7 1/2 x 8	BR	3	
K 42	8.00	7 1/2 x 10 1/2	BR	2	
K 50	3.30	7 5/8 x 8	AL	2	Twins KE4, 7 1/2 H.P.
K 51	7.00	7 5/8 x 8	BR	2	
K 60	12.00	9 x 12	BR	3	Twin, 25 H.P. Twin KE7, 10 H.P. Twin KE4, 7 1/2 H.P.
AM 190	8.00	7 1/2 x 9	BR	3	
AM 191	8.01	7 1/2 x 10	BR	3	
AM 200	8.00	6 3/4 x 8	BR	3	

R Indicates Racing Type Propeller
W Indicates Weedless Type Propeller

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

MICHIGAN PROPELLER PRICE LIST

MARTIN

Michigan Part No.	Price	Dia. and Pitch	Metal	No. Blades	PROPELLER TO BE USED ON MOTOR MODEL NO.
Q 10	\$5.00	8 x 8	AL	2	1946-47-48, 7.2 H.P., Model "60" 1948, 2 1/3 H.P., Model "20" 1946-47-48, 7.2 H.P., Model "60" 1947-48, 4.5 H.P., Model "40" 1946-47-48, 7.2 H.P., Model "60"
Q 20	4.00	6 1/2 x 4 1/4	AL	2	
Q 31	5.50	8 x 9 1/2	AL	2	
Q 40	4.50	7 1/2 x 6	AL	2	
AM 180	8.00	7 1/2 x 9	BR	3	
QW 32	6.00	8 x 7	AL	3	

SCOTT-ATWATER

SA 1	\$5.10	8 x 9	AL	2	Twins 1947-48, 7 1/2 H.P., 473, 483 and Firestone 479, 489 Single 1946-47-48, 3.6 H.P., 461, 467-470, 471-480, 481 and Firestone 460, 462, 464-476, 477-486, 487 Twins 1947-48, 7 1/2 H.P., 473, 483 and Firestone 479, 489
SA 3	4.80	8 x 7 1/2	AL	2	
SA 10	3.50	7 3/8 x 6	AL	2	
AM 210	8.00	7 1/2 x 8	BR	3	

SEA KING (Also see E, K, & T Part Nos.)

W 8	\$3.30	7 1/2 x 6	AL	2	Twin 2.5 H.P. No. 498
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RACING PROPELLERS FOR RACING MOTORS

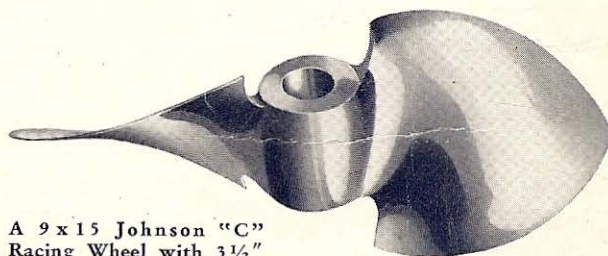
(Order by Diameter, Pitch, Motor Make and Class)

Michigan outboard racing wheels hold more world's records and important wins than all others combined. Most of the country's leading drivers use them exclusively. The reasons: 1. Unsurpassed speed. 2. Uniformity. 3. Dependability. A Michigan racing wheel of proper size for the job cannot be beat! Write for information on propellers for other racing engines.

	DIAMETER RANGE	PITCH RANGE	PRICE
Midget Evinrude	6 7/8" to 7"	9" to 9 1/2"	\$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

All propeller sizes listed above are of the two blade style, from special racing design patterns and are Custom-Built to order only. The diameter and pitch ranges indicated are normally within the range required for hydroplane racing installations.

Prices cover our furnishing propellers of an entirely new super high tensile bronze alloy having physical properties approximately that of stainless steel, and because of this new development stainless steel is no longer offered — thus we are offering a propeller for the racing driver equal in performance at approxi-



A 9 x 15 Johnson "C" Racing Wheel with 3 1/2" Blade width. Made of Michigan Hi-Tensile Bronze.

mately half the steel prices formerly charged. This new alloy for racing propellers is high in tensile strength, yield strength, with good elongation, plus having the unusual characteristic of being *readily repaired and welded* should it become banged up.

Michigan offers a COMPLETE propeller repair service. Write for information.

