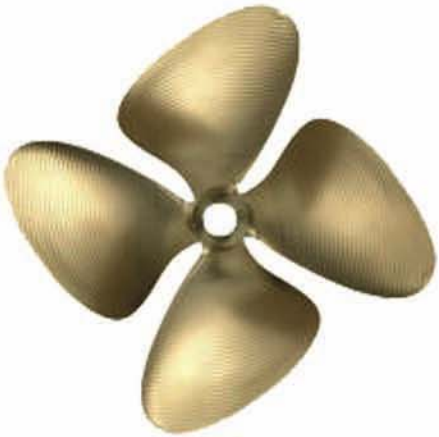
Michigan Wheel Corporation

OUTBOARD & STERNDRIVE PROPELLERS
2010 CATALOG



Ambush 4

Evinrude® • Johnson® • OMC • Force • Chrysler • U.S. Marine • Mercruiser® • Mercury • Mariner®
Nissan • Tohatsu • Suzuki • Honda • SX Cobra™ • Volvo Penta® • Yamaha

NEW FOR 2010

VORTEX XHS™ PERFORMANCE PROPELLERS

EVINRUDE / JOHNSON

40-50 HP (4-STROKE) • 3-1/4" GEARCASE	D
40-75 HP • SMALL (3-3/8") GEARCASE	C
45-75 HP • LARGE (4-1/4") GEARCASE	B
85-140 HP • V-4 (4-1/4") GEARCASE	B
90, 115, 140 HP (4-STROKE) • 4-1/4" GEARCASE	B

MERCURY / MARINER / SEA RAY

MODELS 402-500 (1974-76), 650, 60 HP	D
40-140 HP • 4-1/4" GEARCASE	B

FORCE / CHRYSLER / U.S. MARINE

85-150 HP • DUAL EXHAUST • 4-1/4" GEARCASE	B
75-150 HP • USING MERCURY 4-1/4" GEARCASE	B

HONDA

35-50 HP • 3-1/4" GEARCASE	D
75-130 HP • 4-1/4" GEARCASE	B

NISSAN / TOHATSU

35-50 HP • 3-1/4" GEARCASE	D
60-140 HP • 4-1/4" GEARCASE	B

SUZUKI

35-65 HP • 3-1/4" GEARCASE	D
60-140 HP • 4-1/4" GEARCASE	B
70-140 HP (4-STROKE) • 4-1/4" GEARCASE	B

YAMAHA

30-60 HP • 3-1/4" GEARCASE	D
50-130 HP • 4-1/4" GEARCASE	B

PROPELLER SERIES B

992109 - 14" x 10" 3-Blade Aluminum Vortex

PROPELLER SERIES C

992311 - 12-1/4" x 13" 3-Blade Aluminum Vortex
992312 - 12-1/2" x 15" 3-Blade Aluminum Vortex

PROPELLER SERIES D

992601 - 12-1/4" x 9" 3-Blade Aluminum Vortex
992602 - 11-3/4" x 10" 3-Blade Aluminum Vortex
992603 - 11-5/8" x 11" 3-Blade Aluminum Vortex
992604 - 11-3/8" x 12" 3-Blade Aluminum Vortex
992605 - 11-1/8" x 13" 3-Blade Aluminum Vortex
992606 - 11-1/4" x 14" 3-Blade Aluminum Vortex

MICHIGAN MATCH REPLACEMENT PROPELLERS

EVINRUDE / JOHNSON

40-50 HP (4-STROKE) • 3-1/4" GEARCASE	2
90, 115, 140 HP (4-STROKE) • 4-1/4" GEARCASE	1

MERCURY / MARINER / SEA RAY

MODELS 402-500 (1974-76), 650, 60 HP	2
25-70 HP • 3-1/4" GEARCASE	3
40-140 HP • 4-1/4" GEARCASE	4

FORCE / CHRYSLER / U.S. MARINE

45-75 HP • 3-1/4" GEARCASE	3
75-150 HP • USING MERCURY 4-1/4" GEARCASE	4

HONDA

75-130 HP • 4-1/4" GEARCASE	4

SUZUKI

35-65 HP • 3-1/4" GEARCASE	2
70-140 HP (4-STROKE) • 4-1/4" GEARCASE	1

YAMAHA

30-60 HP • 3-1/4" GEARCASE	2

PROPELLER SERIES 1

061020 - 14" x 15" 3-Blade Aluminum Michigan Match
061024 - 14" x 17" 3-Blade Aluminum Michigan Match
061028 - 14" x 19" 3-Blade Aluminum Michigan Match
061032 - 14" x 21" 3-Blade Aluminum Michigan Match

PROPELLER SERIES 2

032046 - 12-1/4" x 9" 3-Blade Aluminum Michigan Match

PROPELLER SERIES 3

032143 - 12-1/4" x 9" 3-Blade Aluminum Michigan Match

PROPELLER SERIES 4

031061 - 14" x 10" 3-Blade Aluminum Michigan Match

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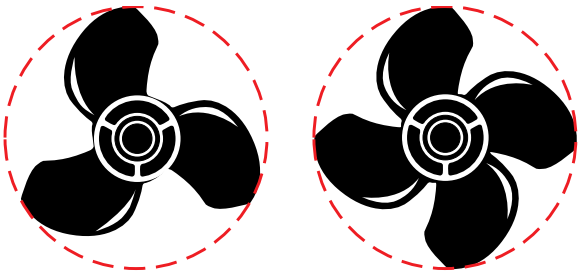
PROPELLER BASICS

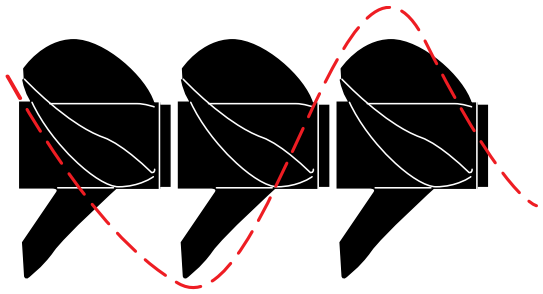
Diameter

Diameter is two times the distance from the center of the hub to the tip of the blade. It also can be looked at as the distance across the circle that the propeller would make when rotating. It is the first number listed when describing a propeller.



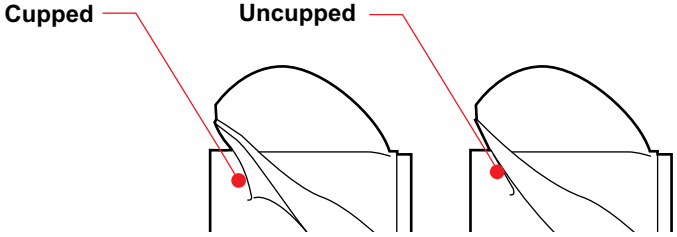
Pitch

Pitch is defined as the theoretical forward movement of a propeller during one revolution — assuming there is no "slippage" between the propeller blade and the water. For most boats, there is slippage and therefore the distance advanced is less than the design pitch. The amount of slippage varies from boat to boat. Pitch is the second number listed in the propeller description.



Cupping

Many of today's propellers incorporate a cup at the trailing edge of the propeller blade. This curved lip on the propeller allows it to get a better bite on the water. This results in reduced ventilation, slipping, and allows for a better hole shot in many cases. A cupped propeller also works very well where the motor can be trimmed so that the propeller is near the surface of the water. The cup will typically result in higher top end speed on one of these applications.

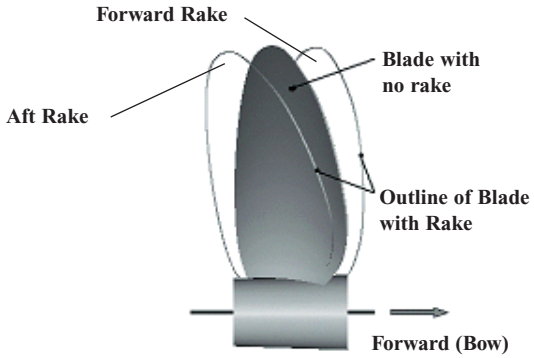


Rake

Rake is the degree that the blades slant forward or backwards in relation to the hub. Rake can affect the flow of water through the propeller, and as implications with respect to boat performance.

Aft Rake helps to trim the bow of the boat upwards, which often results in less wetted surface area and therefore higher top end speed. Aft rake propellers also typically "bite" better on ventilating type applications.

Forward, or negative rake, helps hold the bow of the boat down. This is more common in workboat type applications.



Ventilation

Ventilation is a situation where surface air or exhaust gasses are drawn into the propeller blades. When this situation occurs, boat speed is lost and engine RPM climbs rapidly. This can result from excessively tight cornering, a motor that is mounted very high on the transom, or by over-trimming the engine.

Cavitation

Cavitation, (which is often confused with ventilation), is a phenomena of water vaporizing or "boiling" due to the extreme reduction of pressure on the back of the propeller blade. Many propellers partially cavitate during normal operation, but excessive cavitation can result in physical damage to the propeller's blade surface due to the collapse of microscopic bubbles on the blade.

There may be numerous causes of cavitation such as incorrect matching of propeller style to application, incorrect pitch, physical damage to the blade edges, etc...

Be advised disturbances in the water flow forward of the propeller can result in blade damage which appears to be blade cavitation, but is actually due to non-favorable water flow into the propeller.

PROPELLER BASICS

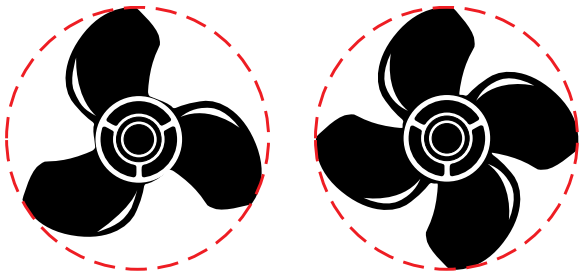
Finding the right match between the propeller, engine type and boat size will optimize the following performance factors — increased top end, faster planing speed, improved low end punch and load carrying capability.

If you want to modify your boat's performance, consider the following before making your selection.

3-Blade vs. 4-Blade?

We recommend 3-blade propellers for recreational boats with 3, 4, and 6 cylinder outboards and I/O engines. These propellers provide good hole shot and top-speed performance.

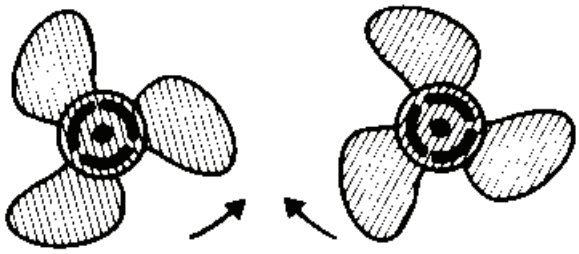
We recommend 4-blade propellers for practical, all-around boat performance. These propellers enhance handling, hole shot, load-carrying performance, and fuel efficiency.



What's the advantage of a left-hand prop?

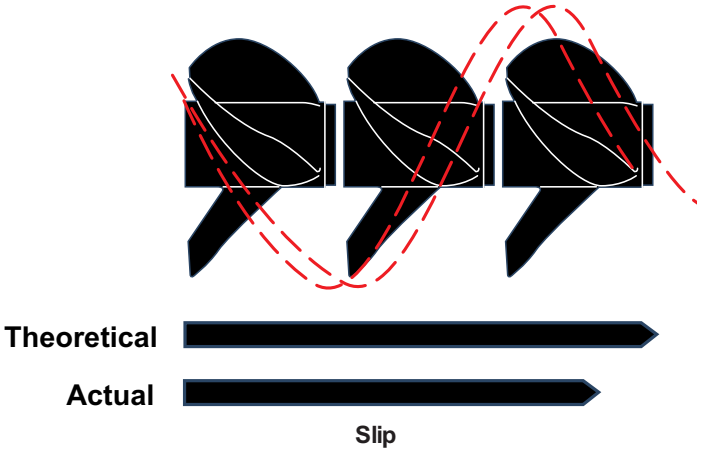
Two propellers spinning the same direction on twin engine boats will create steering torque. In other words, two right-hand propellers pull the stern hard to the right and the bow to the left.

Two opposite-direction propellers on twin engines eliminate this steering torque because the left-hand propeller balances out the right-hand propeller. This results in better straight-line tracking and helm control at high speed.



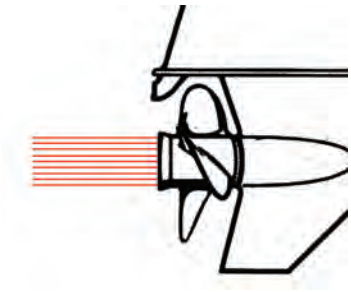
How does wheel diameter, pitch, and slip affect performance? How is it measured?

Slip is the difference between actual and theoretical travel of the propeller blades through water. A properly matched propeller will actually move forward about 80 to 90 percent of the theoretical pitch.



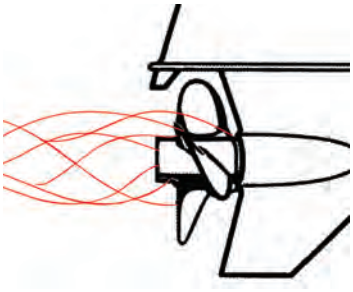
What is the difference between thru-hub exhaust, over-hub exhaust, and non thru-hub exhaust?

Thru-hub exhaust propellers consist of a round barrel to which the blades are attached. The exhaust passes through the barrel and out the back, without making contact with the propeller blades. This provides provides a good clean water flow to the blades, usually resulting in good acceleration and hole shot.



THRU-HUB EXHAUST PROPELLERS

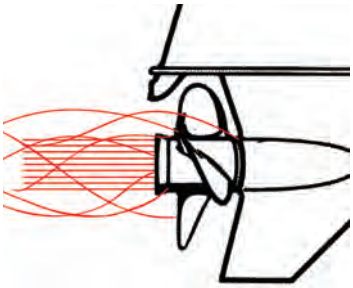
Over-hub exhaust propellers have the blades attached directly to the smaller tube that fits over the propeller shaft, eliminating the larger exhaust tube. These types of propellers are often used for attaining maximum top speeds. (On some boats, the hole shot can often suffer due to the extreme exhaust flooding that occurs around the propeller blades during acceleration.)



OVER-HUB EXHAUST PROPELLERS

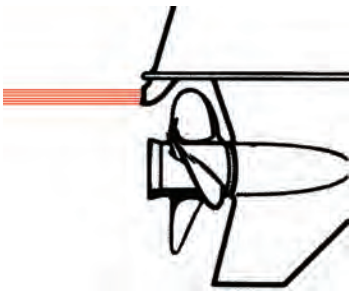
Thru-hub exhaust and **over-hub exhaust** propellers are used on boats where the exhaust passes out though the rear of the "torpedo" on the lower unit, around the propeller shaft. Most outboards utilize this type of exhaust.

Over/Thru-hub exhaust propellers are a combination of thru-hub and over-hub exhaust propellers. This allows some exhaust to escape at lower RPM, providing a controlled amount of exhaust flooding. These types of propellers will allow the propeller to be slightly easier to turn during initial acceleration, allowing for a better hole shot on some engine/boat combinations.



OVER/THRU-HUB EXHAUST PROPELLERS

Non thru-hub exhaust propellers are used for inboards using shaft driven propellers, sterndrives using through hull exhaust, and on some outboards that don't route the exhaust through the lower unit torpedo.



NON THRU-HUB EXHAUST PROPELLERS

Aluminum vs. Stainless Steel?

Most pleasure boats are factory equipped with aluminum propellers. Aluminum propellers are relatively inexpensive, easy to repair, and under normal conditions can last for many years.

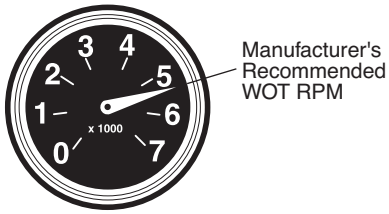
Stainless steel is more expensive, but much stronger and durable than aluminum. If you are looking for better performance than can be provided by your aluminum propeller, such as ultimate top speed or better acceleration, a stainless steel propeller may be required.

CHOOSING THE CORRECT PITCH PROPELLER

For safety and efficient performance, it is critical that your engine operates within the RPM range recommended by the manufacturer. Matching the right prop for the load is the most significant factor when choosing a new propeller.

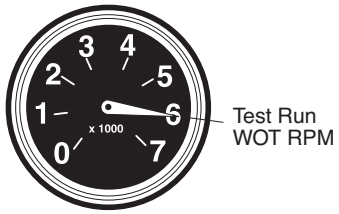
First, Determine Manufacturer's Recommended RPM

Find the manufacturer's recommended RPM range in the owner's manual or ask your dealer. A reference chart showing common engine applications is shown on Page A6 of this catalog.



Test for Maximum RPM

Using the existing propeller or a new propeller, make test runs to determine the maximum RPM and boat speed. Vary the trim angle for optimum performance.



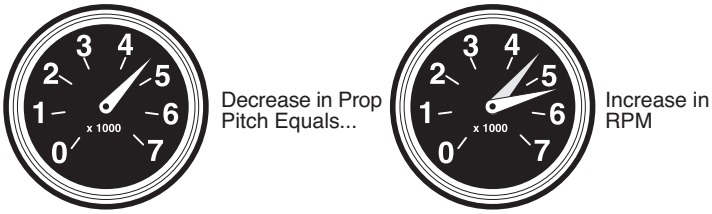
RPM Higher Than Recommended

If the actual WOT RPM are ***above*** the recommended RPM range, install the next larger pitch propeller to ***decrease*** your WOT RPM. Re-test the WOT RPM.

RPM Lower Than Recommended

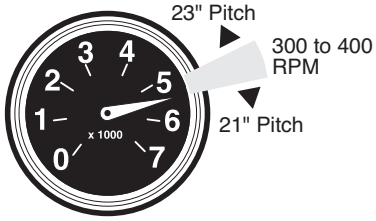
If the actual WOT RPM range is ***below*** the recommended range, install the next smaller pitch propeller to ***increase*** your WOT RPM. Re-test the WOT RPM.

When you combine all these factors, you have the information you need to select the correct propeller for maximum performance, safety, and fuel efficiency.



Effect of Prop Pitch on RPM

A pitch change can increase or decrease the RPM and bring RPM into the recommended range. A 2" ***increase*** in pitch (for example, from 21" to 23") typically results in a ***decrease*** of approximately 300-400 RPM.



ENGINE RPM CHART

EVINRUDE RPM CHART

HP/Model	WOT RPM	Gear Ratio
5 4-Stroke	5500-6500	2.23
6 4-Stroke	5500-6500	2.23
8 4-Stroke	5000-6000	2.42
9.9 4-Stroke	5000-6000	2.42
9.9 HT 4-Stroke	4000-5000	2.42
15 4-Stroke	5000-6000	2.42
25 4-Stroke	4700-5300	2.09
30 4-Stroke	5200-5800	2.09
40 4-Stroke	5200-5800	2.27
50 4-Stroke	5900-6500	2.27
65 Commercial	5500-6000	2.67
70 4-Stroke	5200-5800	2.42
75 Ficht	4750-5250	2
90 Commercial	4500-5500	2
90 Ficht	5250-5750	2
115 Ficht	5250-5750	2
135 Ficht	4750-5250	1.86
150 Ficht	4750-5250	1.86
175 Ficht	5250-5750	1.86
200 Ficht	5500-6000	1.86
225 Ficht	5500-6000	1.86
225 Ficht HO	5500-6000	1.86
250 Ficht	5500-6000	1.86
250 H.O.	4500-6000	1.71
250 V6	4500-5800	1.85

EVINRUDE E-TEC RPM CHART

HP/Model	WOT RPM
40	5500-6000
50	5500-6000
60	5500-6000
75	4500-5500
90	4500-5500
115	5500-6000
130	5000-6000
150	4850-5850
150 H.O.	4850-5850
175	4850-5850
200	4750-5750
200 H.O.	4500-5800
200	4850-5850
225	4500-5800
225 H.O.	4500-5800

HONDA RPM CHART

HP/Model	WOT RPM	Gear Ratio
2	4000-5000	2.4
5	4000-5000	2.1
8	4950-5500	2.4
9.9	4500-5500	2.1
15	5000-6200	2.1
20 4-Stroke	5000-6000	2.08
25	5000-6000	2.08
30	5500-6000	2.08
35 4-Stroke	5500-6000	
40	5000-6000	2.09
50	5500-6000	2.09
65 4-Stroke	5000-6000	
75	5000-6000	2.3
90	5000-6000	2
105 4-Stroke	5000-6000	
115	5000-6000	2
130	5000-6000	2
150 4-Stroke Inline	5000-6000	2.14
200	5000-6000	1.86
225	5000-6000	1.86

JOHNSON RPM CHART

HP/Model	WOT RPM	Gear Ratio
2	4000-5000	1.85
3.3	4500-5500	1.85
3.5	4500-5500	1.85
4	4500-5500	2.08
4 4-Stroke	4000-5000	1.92
5	4600-5400	1.92
6	4500-5500	2.23
6 4-Stroke	5500-6500	2.23
8	5000-6000	2.23
8 4-Stroke	5000-6000	2.42
9.9	5000-6000	2.23
9.9 4-Stroke	4500-5500	1.92
15	5000-6000	2.23
15 4-Stroke	5400-6000	1.92
25	4500-5500	2.15
25	5200-5800	2.15
25 4-Stroke	5000-5600	2.09
30	5200-5800	2.15
30 4-Stroke	5500-6100	2.09
35	5200-5800	2.15
40	4500-5500	2.23
40 4-Stroke	5200-5800	2.27
50	4500-5500	2.23
50 4-Stroke	5900-6500	2.27
60	5000-6000	2.23
60 4-Stroke	4700-5300	2.42
70	5000-6000	2.23
70 4-Stroke	5200-5800	2.42
90	4500-5500	2
90 4-Stroke	4500-5500	2.59
90 OP	4500-5500	2
115	4500-5500	2
115 4-Stroke	5000-6000	2.59
115 OP	4500-5500	2
135	5000-6000	2.25
135 OP	5000-6000	2.25
140 4-Stroke	5600-6200	2.38
150	4500-5500	1.86
150 OP	4500-5500	1.86
175	4500-5500	1.86
175 OP	4500-5500	1.86
200	5000-6000	1.86
200 4-Stroke	5000-6000	2.29
200 OP	5000-6000	1.86
225	5000-6000	1.86
225 4-Stroke	5000-6000	2.29
225 OP	5000-6000	1.86
225 HO	5000-6000	1.86
250 OP	5000-6000	1.86

MERCRUISER RPM CHART

HP/Model	WOT RPM	Gear Ratio
3.0 L 135	4400-4800	2.00 A1
4.3 L 190	4400-4800	1.81 A1
4.3 LH 205	4400-4800	1.62 A1
4.3 L EFI 210	4400-4800	1.62 A1
4.3 L MPI 220 HP	4400-4800	1.62 A1
5.0 L 220	4400-4800	1.62 A1
5.0 L 220	4400-4800	1.65 B1
5.0 L EFI 240	4400-4800	1.47 A1
5.0 L EFI 240	4400-4800	1.65 B1
5.0 L MPI 260 HP	4600-5000	1.62 A1
5.0 L MPI 260 HP	4600-5000	1.50 B1
5.7 L 250	4400-4800	1.47 A1
5.7 L 250	4400-4800	1.65 B1
5.7L EFI 260	4400-4800	1.47 A1
5.7L EFI 260	4400-4800	1.65 B1
350 Mag MPI 300	4800-5200	1.47 A1
350 Mag MPI 300	4800-5200	1.50 B1
350 Mag MPI Horizon 300 HP	4800-5200	1.5 B1
350 Horizon 300	4600-5000	1.47 A1
350 Horizon 300	4600-5000	1.50 B1
MX 6.2 L MPI 320	4800-5200	1.65 B1
496 Mag 375	4400-4800	1.5 B1
496 Mag HO 425	4600-5000	1.5 B1

MERCURY RPM CHART

HP/Model	WOT RPM	Gear Ratio
2.5	4000-5000	1.85
2.5 4-Stroke	5000-6000	2.15
3.3	4500-5500	2.15
3.5 4-Stroke	5000-6000	2.15
4	4500-5500	2.15
4 4-Stroke	4500-5500	2.15
5	4000-5000	2.15
5 4-Stroke	4500-5500	2.15
6	4000-5000	2
6 4-Stroke	5000-6000	2.15
8	4500-5500	2
8 4-Stroke	5000-6000	2.08
9.9	5000-6000	2
9.9 4-Stroke	4500-5500	2.01
9.9 Big Foot	4500-5500	2.42
9.9 Prokicker 4-Stroke	5000-6000	2.42
9.9 Saltwater	4500-5500	2.42
15	5000-6000	2
15 4-Stroke	4500-5500	2
15 Big Foot	4500-5500	2.42
20	4500-5500	2.25
20 4-Stroke	5400-6100	2.15
25 Classic	5000-6000	2.25
25 Big Foot	5500-6000	2.4
25 EFI 4-Stroke Jet Drive	5000-5500	
25 EFI 4-Stroke	5000-6000	1.92
30	4500-5500	2
30 4-Stroke	5500-6000	2
30 EFI 4-Stroke	5200-6200	1.92
40 Classic	4500-5500	2
40	5000-5500	1.83
40 4-Stroke	5500-6000	2
40 Big Foot	5500-6000	2.3
40 EFI 4-Stroke	5000-5500	
50 Classic	5000-5500	1.83
50 4-Stroke	5500-6000	1.83
50 Big Foot	5500-6000	2.3
50 EFI Big Foot 4-Stroke	5500-6000	2.33
60 Classic	5000-5500	1.64
60 Big Foot	5000-5500	2.3
60 4-Stroke	5500-6000	1.83
60 EFI Big Foot 4-Stroke	5500-6000	2.33
75 Classic	4750-5250	2.3
75 4-Stroke	5000-6000	2.3
75 EFI 4-Stroke	5000-6000	2.33
75 OptiMax	5000-5750	2.33
90 Classic	5000-5500	2.3
90 SW	5000-5500	2.3
90 4-Stroke	5000-6000	2.3
90 4-Stroke SW	5000-6000	2.3
90 OptiMax	5000-5750	2.33
90 EFI 4-Stroke	5000-6000	2.33
115	4750-5250	2.07
115 4-Stroke	5000-6000	2.07
115 4-Stroke SW	5000-6000	2.07
115 EFI 4-Stroke	5800-6400	2.07
115 OptiMax	5000-5700	2.07
125 Classic	4750-5250	2.07
125 SW	4750-5250	2.07
135 OptiMax	5000-5600	2
135 SW OptiMax	5000-5600	2
150 XR6	5000-5600	1.87
150 SW	5000-5600	1.87
150 EFI	5000-5600	1.87
150 SW EFI	5000-5600	1.87
150 OptiMax	5250-5750	1.87
175 EFI	5000-5600	1.87
175 OptiMax	5250-5750	1.87
175 OptiMax Pro XS	5500-6000	1.87
200 Classic	5000-5600	1.87
200 SW	5000-5600	1.87
200 EFI	5000-5800	1.87
200 EFI SW	5000-5600	1.87
200 OptiMax	5000-5750	1.75
225 EFI	5000-5800	1.75
225 EFI SW	5000-5500	1.75
225 OptiMax	5000-5750	1.75
225 OptiMax Pro XS	5500-6000	1.75
225 XL OptiMax SW	5000-5750	1.75
250 XL EFI SW	5000-5800	1.75
250 OptiMax	5500-6000	1.75
250 OptiMax Pro XS	5500-6000	1.75
300 Verado	5800-6400	1.75

ENGINE RPM CHART

MERCURY VERADO RPM CHART

HP/Model	WOT RPM	Gear Ratio
135	5200-6400	2.08
150	5800-6400	2.08
175	5800-6400	2.08
200	5800-6400	2.08
225	5800-6400	1.85
250	5800-6400	1.85
275	5800-6400	1.85

NISSAN/TOHATSU RPM CHART

HP/Model	WOT RPM	Gear Ratio
2.5	3800-5200	1.85
2.5 4-Stroke	4500-5500	2.15
3.5	5000-6000	2.15
4 4-Stroke	4500-5500	2.15
5	4500-5500	2.15
5 4-Stroke	4500-5500	2.15
6 4-Stroke	5000-6000	2.15
8	4500-5500	2.08
8 4-Stroke	5000-6000	2.08
9.8	5000-5800	2.08
9.8 4-Stroke	5000-6000	2.08
9.9 4-Stroke	4500-5500	2.08
15 4-Stroke	5000-6000	1.85
15 4-Stroke	5000-6000	2.15
18	4750-5500	1.85
20 4-Stroke	5400-6100	2.15
25	4800-5500	1.92
25 4-Stroke	5000-6000	1.92
30	4800-5500	1.92
30 4-Stroke	5250-6250	1.92
40	4500-5500	1.85
40 TLDI	5150-5850	1.85
50	5000-5700	1.85
50 Orbital	5000-5700	1.85
50 TLDI	5150-5850	1.85
70	4900-5600	2.3
70 TLDI	5150-5850	2.3
90	5000-5500	2.3
90 TLDI	5150-5850	2
115	5200-5700	2
115 TLDI	5150-5850	2
120	5200-5700	2
140	5200-5700	2

SUZUKI RPM CHART

HP/Model	WOT RPM	Gear Ratio
5	4500-5400	1.91
6	4500-5500	1.91
DF9.9	4500-5500	1.91
DF15	5400-6000	1.91
DT25	4500-5500	1.91
DF25	4700-5300	2.09
DF30	5500-6100	2.09
DF40	5200-5800	2.09
DF50	5500-6500	2.09
DF60	4700-5300	2.42
DF70	5200-5800	2.42
DT85	5000-5600	2.08
DF90	4500-5500	2.59
DT100	5250-5750	2.08
115 EFI	5500-6000	2.08
DF115	5000-6000	2.59
140 EFI	5250-5750	2.08
DF 140	5600-6200	2.59
150 EFI	5200-6000	1.86
DF 150	5000-6000	2.5
DF 175	5500-6100	2.5
DF 200	5000-6000	2.29
225 EFI	5000-5600	1.86
DF 225	5000-6000	2.29
DF 250	5500-6100	2.29
DF250 SS	5300-6300	2.08
DF300	5700-6300	2.08

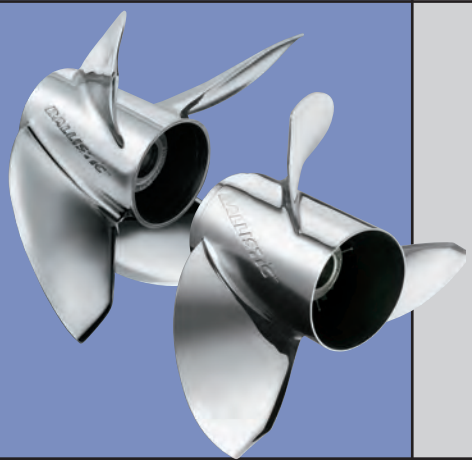
YAMAHA RPM CHART

HP/Model	WOT RPM	Gear Ratio
2	4000-5000	2.08
3	4500-5500	2.08
4 4-Stroke	4000-5000	2.08
5	4500-5500	2.08
6 4-Stroke	4500-5500	2.08
8	4500-5500	2.08
8 4-Stroke	5000-6000	2.08
8 4-Stroke HT	5000-6000	2.92
9.9	4500-5500	2.08
9.9 4-Stroke	4500-5500	2.92
9.9 4-Stroke HT	4000-5000	2.92
15	4500-5500	2.08
15 4-Stroke	4500-5500	2.08
25	4500-5500	2.08
25	4500-5500	1.85
25 4-Stroke	5500-6000	2.08
25 4-Stroke HT	5000-6000	2.41
30	4500-5500	1.85
30 4-Stroke	5000-6000	2
40	4500-5500	1.85
C40	4500-5500	1.85
F40 4-Stroke	5000-6000	2
50	4500-5500	1.85
C50	4500-5500	1.85
F50 4-Stroke	5000-6000	1.85
T50 HT	5000-6000	2.33
60	4500-5500	2.33
C60	4500-5500	2.33
70	5000-6000	2.33
C70	5000-6000	2.33
F80 4-Stroke	5000-6000	2.31
90	4500-5500	2
F90	4500-5500	2
F100 4-Stroke	5000-6000	2.31
115	4500-5500	2
F115 4-Stroke	5000-6000	2.15
130	5000-6000	2
150 SW EFI	4500-5500	1.86
150 HPDI	4500-5500	1.86
F150 4-Stroke	5000-6000	2
V Max 150 HPDI	4500-5500	2
V Max 150 TRP	4500-5500	2
V Max 150	4500-5500	2
V Max 150 EFI	4500-5500	2
175 HPDI	4500-5500	1.86
V Max 175	4500-5500	1.86
V Max 175 HPDI	4500-6000	1.86
200 SW EFI	4500-5500	1.86
200 HPDI	4500-5500	1.86
F200 4-Stroke V6	5000-6000	2
V Max 200 HPDI	4500-5500	1.86
V Max 200 3.1 EFI	4500-5500	1.81
V Max 200 3.3 HPDI Series 2	5000-6000	1.81
225 SW EFI	4500-5500	1.81
F225 4-Stroke V6	5000-6000	2
V Max 225 3.1 EFI	4500-5500	1.81
V Max 225 3.3 HPDI Series 2	5000-6000	1.75
V Max 250 3.1	4500-5500	1.81
V Max 250 3.3 HPDI Series 2	5000-6000	1.75
250 SW EFI	4500-5500	1.81
F250 4-Stroke V6	5000-6000	2
F300 4-Stroke V8 5.3L	5000-6000	1.73
V Max 300 3.3 HPDI Series 2	4500-6000	1.75

Volvo RPM Chart

HP/Model	WOT RPM	Gear Ratio
3.0 GL	4200-4600	1.85
3.0 GS	4200-4600	1.97
3.0 GS	4200-4600	2.18
3.0 GS	4400-4800	1.85
4.3 GL	4400-4800	1.66
4.3 GL	4200-4600	1.79
4.3 GL	4200-4600	1.85
4.3 GL	4200-4600	1.89
4.3 Gi	4400-4800	1.85
4.3 Gi	4400-4800	1.79
4.3 Gi	4400-4800	1.66
4.3 GS	4400-4800	1.66
4.3 GS	4400-4800	1.79
4.3 GS	4400-4800	1.85
5.0 FL	4200-4600	1.6
5.0 Fi	4200-4800	1.6
5.0 Fi	4200-4800	1.66
5.0 GL	4400-4800	1.51
5.0 GL	4400-4800	1.6
5.0 Gi	4600-5000	1.51
5.0 Gi	4600-5000	1.6
5.7 Gi	4200-4600	1.51
5.7 GL	4200-4600	1.6
5.7 GS	4400-4800	1.43
5.7 GS	4200-4600	1.51
5.7 GS	4400-4800	1.51
5.7 Gsi	4600-5100	1.51
5.7 Gsi	4600-5000	1.43
5.8 FL	4000-4400	1.51
5.8 Fi	4200-4600	1.51
5.8 Fsi	4600-5000	1.51
7.4 GL	4200-4600	1.43
7.4 Gi	4200-4600	1.43

2010 MICHIGAN PROPELLERS

	INFLATABLE	ALUMINUM	BASS BOAT	BAY BOAT	FLA
MICHIGAN MATCH® We pass the savings on to you in the form of a high quality, better-performing propeller that typically costs less than the motor manufacturer prop you're replacing. Every Michigan Match prop features a NAVAL brass spindle with rubber cushioned hub which absorbs impact and the stress caused by shifting gears. The rubber bushing is designed to spin free under significant impact, reducing the potential for lower unit damage. Great primary prop, yet priced as a weekend-saver spare! • ***Improved powder coating and beefier bushing*** • ***Perfect replacement propeller*** • ***Available in aluminum.***		√	√			
VORTEX™ 3-BLADE High performance aluminum propeller utilizing the XHS exchangeable hub system. Features such as high performance blade geometry, precision balanced blades and high gloss powder coat and interchangeability with the Mercury Flo-Torq II™ system, make the Vortex XHS™ a great choice for a replacement or spare propeller for boaters. • ***V6/V8 applications (15" - 23" pitch)*** • ***V4 applications (10" - 21" pitch)*** • ***20-70 HP applications (9" - 17" pitch)*** • ***All in RH rotations***		√	√			
VORTEX™ 4-BLADE For quicker planing, improved handling and acceleration. These Vortex 4-blade aluminum propellers are a great alternative to a comparable 3-blade propeller, offering enhancing performance when towing water skiers, tubers, knee and wakeboarders. • ***High performance blade geometry*** • ***Precision performance*** • ***V6/V8 applications (16", 18", 20" pitch)*** • ***20-70 HP applications (8" - 10" pitch)*** • ***All in RH rotations***		√	√			
BALLISTIC™/3- & 4-blade * Gold Metal Winner * Bass & Walleye Boats Magazine February 2004 High performance stainless steel prop with proven Power Tip for peak efficiency. Blade tip and cup combine to improve bite and reduce power losses caused by cavitation. Highly cambered blade sections provide for higher speed and better bow lift. • ***Tapered leading edges minimizes drag*** • ***Performance characteristics of racing style props*** • ***Maintains optimum blade strength and thickness.***				√	√	

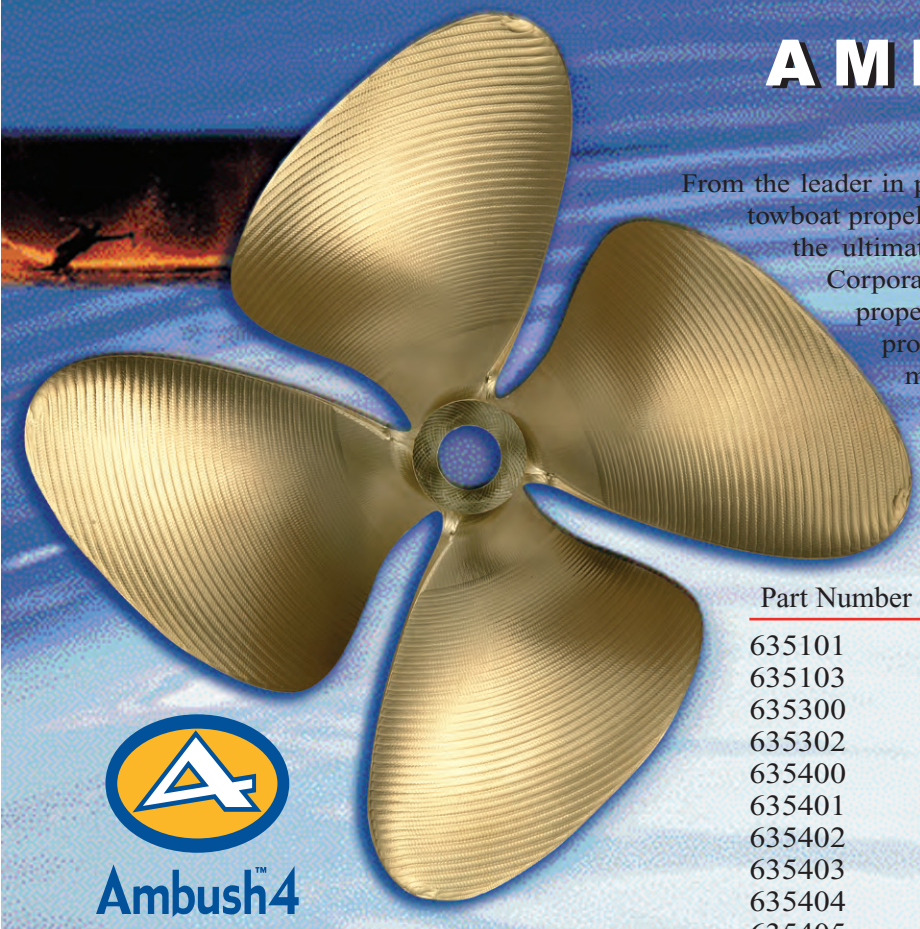
TS BOAT	WALLEYE BOAT	OFFSHORE SINGLE	OFFSHORE DUAL	SPORT BOAT SINGLE	SPORT BOAT DUAL	PONTOON	SKI BOAT	FAMILY CRUISER	HOUSEBOAT	WORKBOAT
	√	√				√	√	√	√	√
	√	√				√	√	√		
	√	√				√	√	√		
√				√	√		√			

2010 MICHIGAN PROPELLERS

	INFLATABLE	ALUMINUM	BASS BOAT	BAY BOAT	FLA
APOLLO XHS™/ 3-blade Highly polished, ultimate performance, stainless steel propeller. Designed to use Michigan Wheel's XHS hub system or Mercury's Flo-Torq II™ hub system. Standard 3-blade propeller can be utilized on typical outboard and sterndrive applications. • ***30-70 HP - 12" to 15" pitch, RH rotations*** • ***V4 OB - 15" to 21" pitch, RH & LH rotations*** • ***V6/V8 OBSD - 15" to 23" pitch, RH & LH rotations***	√	√	√		
APOLLO XHS™ / Lg. Diameter 3-blade large diameter is great for heavier applications that require increased blade area. • ***High performance blade geometry*** • ***V6/V8 applications (17" - 23" pitch) RH & LH rotations***				√	
APOLLO XHS™ / 4-blade 4-blade improves hole shot on heavier loads and great for pulling/towing in water sports. • ***High performance blade geometry*** • ***V6/V8 applications (16" - 22" pitch) RH & LH rotations***		√		√	

TS BOAT	WALLEYE BOAT	OFFSHORE SINGLE	OFFSHORE DUAL	SPORT BOAT SINGLE	SPORT BOAT DUAL	PONTOON	SKI BOAT	FAMILY CRUISER	HOUSEBOAT	WORKBOAT
√				√	√					
		√	√	√	√	√		√	√	√
	√	√	√	√	√		√			

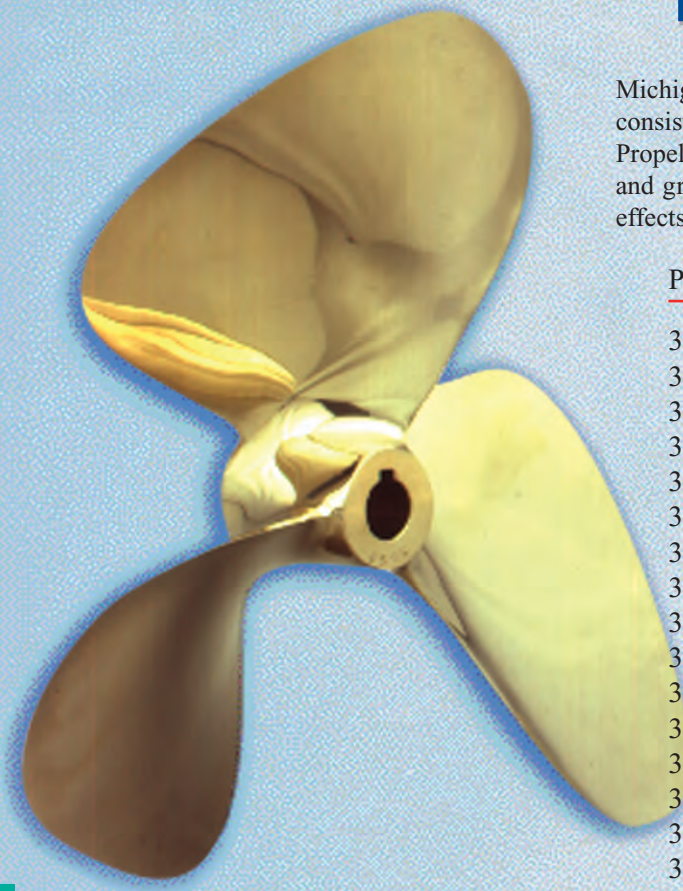
AMBUSH-2010



From the leader in propeller manufacturing technology comes Ambush towboat propellers. These propellers are 100% CNC machined for the ultimate in accuracy and consistency. Michigan Wheel Corporation developed the CNC machining process for propellers in the mid -1980's and revolutionized the way propellers were manufactured. Originally, the CNC machining technology was used to manufacture custom propellers for large mega-yachts where accuracy is critical and design geometry is complex. Now, that same technology is being used to provide the best towboat propeller on the market.

Part Number	Dia. x Pitch	Rotation	Bore
635101	13 x 13	LH	1"
635103	13 x 13	LH	1-1/8"
635300	13 x 16	RH	1"
635302	13 x 16	RH	1-1/8"
635400	14 x 18	RH	1"
635401	14 x 18	LH	1"
635402	14 x 18	RH	1-1/8"
635403	14 x 18	LH	1-1/8"
635404	14 x 18	RH	1-1/4"
635405	14 x 18	LH	1-1/4"

Dyna-Jet Cupped



Michigan Wheel Corporation's Federal Series ski boat propellers provide consistent response to your throttle commands. The 3-blade Dyna-Jet Cupped Propellers are made of a NiBrAl alloy which provides extra strength, less flex, and greater durability. All are cupped to minimize the performance draining effects of cavitation.

Part Number	Dia. x Pitch	Rotation	Bore
310649	13 x 12	LH	1"
310625	13 x 12-1/2	LH	1-1/8"
310660	13 x 13	RH	1"
310661	13 x 13	LH	1"
310659	13 x 13	LH	1-1/8"
310705	13 x 13-1/2	LH	1-1/8"
310724	13 x 14	RH	1"
310725	13 x 14	LH	1"
310727	13 x 14	LH	1-1/8"
310763	13 x 15	LH	1"
310765	13 x 15	LH	1-1/8"
310801	13 x 15-1/2	LH	1-1/8"
310836	13 x 17	RH	1"
311244	14 x 15	RH	1"
311284	14 x 16	RH	1"
311360	14 x 18	RH	1-1/8"
311361	14 x 18	LH	1-1/8"

HOW TO USE THE APPLICATION GUIDE

- If original equipment part number (OEM) is known and a size or style change is not desired, then refer to Part Number Cross Reference on Pages B2 - B33 to locate the equivalent Michigan propeller.
- If an original part number is not known, the part number can not be found in the Part Number reference, or a propeller size or style change is desired, use the following procedure for selecting a propeller.

1. Locate the brand of outboard or sterndrive using the table of contents.
2. Locate the **Horsepower/Model** and **Year** that corresponds with the engine brand.
3. Find the range of your **Boat Length**, and the boat use that best describes your vessel and usage.
4. Select the propeller **Diameter/Pitch** that best meets your vessel and usage. Refer to pages A2 - A6 for information on choosing the right propeller.
5. Order the propeller using the **Michigan Part Number**. (If aluminum is desired, read across to the correct column for the part number. If stainless is desired, read across to the correct column for the part number.)
6. If **Vortex^{XHS}**, or **Apollo^{XHS} propellers** are selected, the **XHS® Hub Kit** indicated must be ordered.

Unless otherwise noted: The XHS™ hub kit is sold separately from the propeller. See page 104 for XHS™ hub kit and miscellaneous hardware information. Vortex^{XHS} and Apollo^{XHS} propellers fit existing Mercury Flo-Torq II™ hubs. Check existing hub for wear or damaged and replace if necessary with Michigan Wheel XHS® hub.

Note: This is a "general" application guideline for determining the appropriate propeller size for you vessel. Performance characteristics may vary due to the many kinds of boats, hull styles, loads and style of boating.

1 MERCURY™, MARINER™, SEA RAY OUTBOARDS

40-140 HORSEPOWER • 4-1/4" GEARCASE
Thru Hub Exhaust & 15 Tooth Spline

2
- 40, 50 HP (Bigfoot, 4-Stroke) . . . . . All Years
- 60 HP (Bigfoot / 4-Stroke) . . . . . 1995 & Newer
- 60 HP (Sea Pro/Marathon) . . . . . 1995 & Newer
- 70 HP 1987-89
- 75 HP (2 & 4-Stroke) . . . . . 1984 & Newer
- 75 HP (Sea Pro/Marathon) . . . . . All Years
- 80 HP 1978-89
- 90 HP (2 & 4-Stroke) . . . . . 1978 & Newer
- 100 HP . . . . . 1988 & Newer
- 115 HP . . . . . 1978 & Newer
- 115 HP 4-Stroke . . . . . 2001 & Newer
- 125 HP . . . . . 1994 & Newer
- 140 HP (Includes Sea Pro & Offshore) 1978 - 81
- 650 4 Cyl. (2:1) 1961-70
- 650 2 Cyl. . . . . Thru 1971
- 800-850 6 Cyl. . . . . Thru 1972
- 800-850 4 Cyl. 1972-77
- 900-1500 Models . . . . . Thru 1977
- 80 HP (Yamaha) 1977
- 80 HP (Mariner) 1978-83

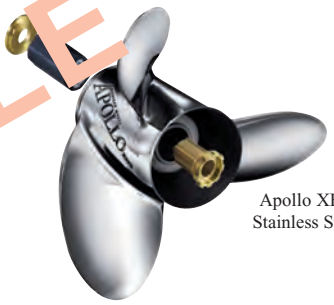
VORTEX^{XHS} — HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.
25' & Up - AL NEW	14	R	10	992109
25' & Up - AL	14	R	13	992112
19-24' - AL, SK	13-3/4	R	15	992113
19-24' - AL, SK				
17-20' - AL, SK	13-1/4	R	17	992114
17-20' - AL, SK				
16-19' - AL, SK	13	R	19	992115
16-19' - AL, SK				
15-18' - AL, SK	12-3/4	R	21	992116
15-18' - AL, SK				

Vortex XHS Aluminum Propeller

APOLLO^{XHS} — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE Dia.	Rot.	Pitch	Part No.
13-3/8	R	15	993143
13-3/8	L	15	✤993153
13-1/4	R	17	✤993144
13-1/4	L	17	✤993154
13-1/8	R	19	✤993145
13-1/8	L	19	✤993155
13	R	21	✤993146
13	L	21	✤993156



Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 16

Use Gearcase Adapter Ring supplied with propeller.

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BALLISTIC STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.	BALLISTIC XL Dia.	Rot.	Pitch	Bld#	Part No.
25' & Up - AL NEW	14	R	10	3	AL		031061										
25' & Up - AL	14	R	11	3	AL	48-77338A45	031054										
25' & Up - AL	14	R	13	3	AL	48-77340A45	031055										
19-24' - AL, SK	13-3/4	R	15	3	AL	48-77342A45	031041	13-5/8	R	15	3	✓335130					
17-20' - AL, SK	13-1/4	R	17	3	AL	48-77344A45	031042	13-1/2	R	17	3	✓335131					
16-19' - AL, SK	13	R	19	3	AL	48-77346A45	031043	13-3/8	R	19	3	✓335132					
15-18' - AL, SK	12-3/4	R	21	3	AL	48-77348A45	031044	13-1/8	R	21	3	✓335133					
High Performance	12-1/2	R	23	3	AL	48-77350A45	✂ 031045						13-1/2	R	22	3	✓335134
High Performance													13-1/2	R	24	3	✓335135

Rubber Hub Bushing

Use OEM fwd washer 13191A1 tab washer 14-816629 or MWC Kit 990332 or 9660-1

See Page 22 for details.

✓ To avoid damage or injury, replace standard trim tab with trim tab 822777A1.

✂ LIMITED INVENTORY ITEMS.

EXAMPLE

4-8 HORSEPOWER
Non-Thru Exhaust & Pin Drive

4 HP 1980-83
4.5 HP Deluxe 1986-95
6, 7.5, 8 HP . . . . . .1980 & Newer
5, 6 HP (4-Stroke) 1997-2003

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
Standard Replacement	8-1/2	R	9	3	AL	778797	**012032**

012032

Rubber Hub Bushing

6-15 HORSEPOWER
Non-Thru Hub Exhaust & Pin Drive

6 HP 1966-79
9.5 HP 1964-73
10 HP 1958-63
10, 12, 14 HP *** 1982-94
8-15 HP . . . . . .2000 & Newer

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
14-16' - AL	8-1/4	R	8	3	AL	763588	**012008**
12-14' - LL	8	R	7-1/4	2	AL	763745	**012005**
12-14' - LL	8-1/4	R	8-1/2	3	AL	763588	**012007**

012008

Rubber Hub Bushing

8, 9.9-15 HORSEPOWER
Thru Hub Exhaust & 13 Tooth Spline

9.9-15 HP (Non 4-Stroke) . . . . . .1974 - 2005
8, 9.9, 15 HP (4-Stroke) . . . . . .1995 - 2001

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
14-16' - AL	10	R	7	3	AL	763456	**012112**
Standard Replacement	9-1/2	R	10	3	AL	778772	**012111**

012111

Rubber Hub Bushing

9.9-15 HORSEPOWER (4-Stroke)
Thru Hub Exhaust & 10 Tooth Spline

9.9-15 HP (4-Stroke) . . . . . .2002 & Newer

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
14-18' - AL	9-1/4	R	9	3	AL	5005384	**062016**

062016

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

*** Engines offered in European Market only.

10-25 HORSEPOWER
Non-Thru Hub Exhaust & Pin Drive

10 HP 1951-57
15 HP 1953-56
18 HP 1957-73
20 HP 1969-73
25 HP 1969-77

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
CR, HB, SB	9-1/4	R	7	3	AL	388294	**012102**
14-16' - HL	9	R	9	3	AL	763587	**012109**
12-14' - LL	9	R	10	3	AL	763583	**012011**
12-14' - LL	9-1/4	R	11	3	AL		**012013**

012011

Rubber Hub Bushing

14-28 HORSEPOWER
Non-Thru Hub Exhaust & 13 Tooth Spline

14 HP 1989
25 HP 1978-84
25 HP ** 1978-91
28 HP 1986-96

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
16-18' - HL	9	R	9	3	AL	763585	**012021**
15-17' - AL	9	R	10	3	AL	763589	**012015**
14-17' - AL	9-1/4	R	11	3	AL	763584	**012016**
14-17' - LL	9-1/4	R	12	3	AL	763590	**012030**

012015

Rubber Hub Bushing

25-30 HORSEPOWER (4-STROKE) • 3-1/2" GEARCASE
Thru Hub Exhaust & 10 Tooth Spline

25 HP (4-Stoke) .....2004 & Newer
30 HP (4-Stroke) .....2004 & Newer

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS — 3-BLADE

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Part No.
	10-1/2	R	9	**992501**
	10-1/2	R	10	**992502**
16-18' - AL	10-1/2	R	11	**992503**
14-16' - AL	10-1/8	R	12	**992504**
14-16' - AL	10-1/8	R	13	**992505**
	10-1/8	R	14	**992506**

992504

Vortex XHS™
Aluminum Propeller

Drop-In Hub

Use XHS™ Hub Kit 121

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
14-16' - AL							

BALLISTIC™ STAINLESS STEEL PROPS — BALLISTIC

Dia.	Rot.	Pitch	Bld#	Part No.
10-1/8	R	13	3	**305529**
10-1/8	R	15	3	**305530**

Ballistic
High Performance
Stainless Steel Propeller

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

** Commercial & Workhorse Applications.

20-35 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 14 Tooth Spline

20 HP 2 Cyl. 1984-97
25 HP (Commercial) . . . . . .1993 & Newer
25 HP 2 & 3 Cyl. . . . . .1984 & Newer
25 HP (E-TEC) . . . . . .2009 & Newer
30 HP 2 Cyl. . . . . .1984 & Newer
30 HP (E-TEC) . . . . . .2009 & Newer
35 HP 2 & 3 Cyl. . . . . .1976 & Newer

* Vortex prop may interfere with skeg on any models.

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.
17-20' - AL, SK	10-1/2	R	9	**992501**
17-20' - AL, SK	10-1/2	R	10	**992502**
16-18' - AL, SK	10-1/2	R	11	**992503**
16-18' - AL, SK	10-1/8	R	12	**992504**
15-17' - AL, SK	10-1/8	R	13	**992505**
13-15' - AL, SK	10-1/8	R	14	**992506**

992504

Vortex XHS™
Aluminum Propeller

Drop-In Hub

Use XHS™ Hub Kit 118

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC™ STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
CR, HB	11-1/4	R	7	3	AL		✂ **011032**					
17-20' - AL, SK	11	R	9	3	AL	765048	**012054**					
17-20' - AL, SK	11	R	9	3	AL		✂ **011033**					
16-18' - AL, SK	10-1/2	R	11	3	AL	765049	**012055**					
15-17' - AL, SK	10	R	13	3	AL	778863	**012056**	10-1/8	R	13	3	**305029**
13-15' - AL, SK	10	R	15	3	AL	763486	**012057**	10-1/8	R	15	3	**305030**

Ballistic
High Performance
Stainless Steel Propeller

Rubber Hub Bushing

25-40 HORSEPOWER
Non-Thru Hub Exhaust & Pin Drive

25 HP 1951-55
28 HP 1962-64
30 HP 1956
33 HP 1965-70
35 HP 1957-59
40 HP 1960-76
40 HP ** 1978-85

MICHIGAN MATCH REPLACEMENT PROPELLERS

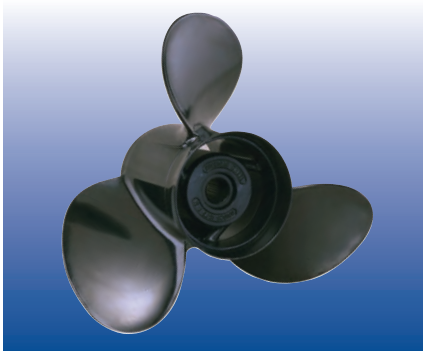
BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
17-19' - AL, SK	10-3/8	R	11-1/2	3	AL		**012023**
14-16' - AL, SK	10-1/2	R	12	3	AL		**012024**
14-16' - LL	10-3/8	R	13-1/4	3	AL		✂ **012025**

012023

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS. ** Commercial & Workhorse Applications.



MICHIGAN MATCH REPLACEMENT PROPELLERS

VORTEX XHS™ PERFORMANCE PROPELLERS

BALLISTIC™ STAINLESS STEEL PROPS

40-50 HORSEPOWER (4-STROKE) • 3-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

40 HP (4-Stroke) . . . . . .1999 & Newer 50 HP (4-Stroke) . . . . . .1999 & Newer

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH		3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
						11-1/2	R	8	**992401**				
18-21' - AL	NEW	12-1/4	R	9	**992601**	11-1/2	R	9	**992402**				
18-21' - AL	NEW	11-3/4	R	10	**992602**	11-1/2	R	10	**992403**				
17-19' - AL	NEW	11-5/8	R	11	**992603**								
15-17' - AL	NEW	11-3/8	R	12	**992604**					10-3/4	R	12	**993405**
14-16' - LL	NEW	11-1/8	R	13	**992605**					10-1/2	R	13	**993406**
12-14' - LL	NEW	11-1/4	R	14	**992606**					10-3/8	R	14	**993407**
12-14' - LL		10	R	15	**992408**					10-1/8	R	15	**993408**
12-14' - LL		10	R	16	**992409**								

APOLLO XHS™ ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 115

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH		ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
18-21' - AL	NEW	12-1/4	R	9	3	AL	776807	**032046**					
18-21' - AL		11-3/4	R	10	3	AL	778606	**032045**					
18-21' - AL		12-1/4	R	10	3	AL		✂ **031072**					
17-19' - AL		12	R	11	3	AL	778607	**032044**					
15-17' - LL		11-3/8	R	12	3	AL	778608	**032043**					
14-16' - LL		11-1/8	R	13	3	AL	778609	**032042**	10-1/8	R	13	3	**395929**
12-14' - LL		11-1/4	R	14	3	AL	778610	**032041**					
12-14' - LL		11	R	15	3	AL		**032040**	10-1/8	R	15	3	**395930**

032042

Rubber Hub Bushing

40-75 HORSEPOWER • SMALL (3-3/8") GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

40 HP 2 Cyl. . . . . .1984 & Newer 50 HP 2 Cyl. . . . . .1975 & Newer 75 HP 3 Cyl. 1975-85
48 HP . . . . . .1987-96 60 HP 2 Cyl. . . . . .1980-85 Sprint / Formula E 1986-92

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH		3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.
						11-1/2	R	8	**992401**
						11-1/2	R	9	**992402**
						11-1/2	R	10	**992403**
15-18' -AL, SK	NEW	12-1/2	R	13	**992311**				
14-17' - AL, SK	NEW	12-1/4	R	15	**992312**				
13-15' - LL		11-3/4	R	17	**992303**				

992303
Vortex XHS™ Aluminum Propeller

992402
Vortex XHS™ Aluminum Propeller

Drop-In Hub

Use XHS™ Hub Kit 111

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
CR, HB	13	R	11	3	AL	763488	**012036**					
CR, HB	13	R	11	3	AL		**011034**					
15-18' - AL, SK	12-1/2	R	13	3	AL	763461	**012037**					
15-18' - AL, SK	12-1/2	R	13	3	AL		**011035**					
14-17' - AL, SK	12-1/4	R	15	3	AL	778774	**011027**	12-3/8	R	15	3	**325030**
13-15' - LL	11-3/4	R	17	3	AL		✂ **012039**	12	R	17	3	**325031**
13-15' - LL	11-3/4	R	17	3	AL	763462	**011028**					

Ballistic High Performance Stainless Steel Propeller

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS.

40-75 HORSEPOWER • LARGE (4-1/4") GEARCASE

Thru Hub Exhaust & 13 Tooth Spline

40 HP (E-TEC) . . . . . .2004 & Newer
45 HP 2 Cyl. Commercial . . . . . .1986 & Newer
50 HP (E-TEC) . . . . . .2004 & Newer
50 HP 2 Cyl. Commercial 1977-79
50 HP 2 Cyl. Pleasure 1971-74
50 HP 3 Cyl. Pleasure . . . . . .1994 & Newer
55 HP 3 Cyl. Pleasure 1968-69
55 HP 2 Cyl. Commercial . . . . . .1980 & Newer
55 HP (E-TEC) . . . . . .2009 & Newer
60 HP 3 Cyl. Pleasure . . . . . .1970-71,1986 & Newer
60 HP (E-TEC) . . . . . .2004 & Newer
60 HP (4-Stroke) . . . . . .1998 & Newer
65 HP 3 Cyl. Pleasure 1972-73
65 HP 3 Cyl. Commercial . . . . . .1984 & Newer
70 HP 3 Cyl. Pleasure . . . . . .1974 & Newer
70 HP (4-Stroke) . . . . . .1998 & Newer
75 HP 3 Cyl. Pleasure 1975-84
75 HP (E-TEC) . . . . . .2004 & Newer

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
CR, HB NEW	14	R	10	**992109**				
19-22' - AL, SK	14	R	13	**992112**				
17-19' - AL, SK	13-3/4	R	15	**992113**	13-3/8	R	15	**993143**
17-19' - AL, SK					13-3/8	L	15	**993153**
15-17' - AL, SK	13-1/4	R	17	**992114**	13-1/4	R	17	**993144**
15-17' - AL, SK					13-1/4	L	17	**993154**
14-16' - AL, SK	13	R	19	**992115**	13-1/8	R	19	**993145**
14-16' - AL, SK					13-1/8	L	19	**993155**
13-15' - AL, SK	12-3/4	R	21	**992116**	13	R	21	**993146**
13-15' - AL, SK					13	L	21	**993156**

Vortex XHS Aluminum Propeller

Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit

106 & 110

Note: For 60 HP & 70 HP 4-Stroke engine applications, 1998 & Newer, use XHS (Drop-In Hub) Kit # 110. For all other engine applications, use XHS™ (Drop-In Hub) Kit # 106 (do not use Gearcase Adapter Ring supplied with propeller).

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC STAINLESS STEEL PROPS

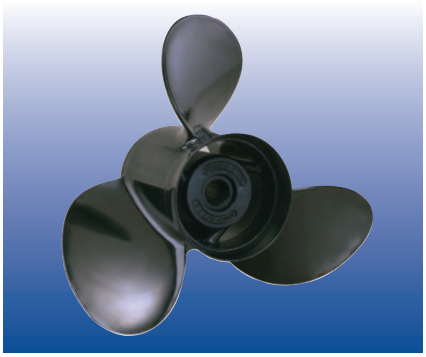
BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
CR, HB	14	R	11	3	AL	763301	**012047**					
CR, HB	14	R	11	3	AL		✂ **011038**					
CR, HB	14	R	13	3	AL	763302	✶ **011001**					
17-19' - AL, SK	13-3/4	R	15	3	AL	763466	✶ **011002**	13-5/8	R	15	3	**335030**
15-17' - AL, SK	13-1/4	R	17	3	AL	763463	✶ **011003**	13-1/2	R	17	3	**335031**
15-17' - AL, SK	14	R	17	3	AL	763463	✶ **011024**					
14-16' - AL, SK	13	R	19	3	AL	763464	✶ **011004**	13-3/8	R	19	3	**335032**
14-16' - AL, SK	14	R	19	3	AL	763464	✶ **011025**					
13-15' - AL, SK	12-3/4	R	21	3	AL	763465	✶ **011005**	13-1/8	R	21	3	**335033**

Ballistic High Performance Stainless Steel Propeller

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS.
✶ If currently using uncupped propeller, use cupped propeller having 2" less pitch. Boats with power trim use same pitch.



MICHIGAN MATCH REPLACEMENT PROPELLERS

VORTEX XHS™ PERFORMANCE PROPELLERS

BALLISTIC STAINLESS STEEL PROPS

85-140 HORSEPOWER • V-4 (4-1/4") GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

85 HP 1969-80, 1991-95
88 HP 1981-1996
90 HP .....1981 & Newer
90 HP (E-TEC) Std. Length .....2004 & Newer
100 HP 1979-80, 1988-93
110 HP 1986-89
112 HP 1994-96
115 HP .....1973 & Newer
115 HP (E-TEC - Includes H.O.) ...2004 & Newer
120 HP 1986-94
125 HP 1971-72
130 HP (E-TEC) .....2004 & Newer
135 HP 1973-76
140 HP 1977-94

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.
CR, HB NEW	14	R	10	**992109**
CR, HB	14	R	13	**992112**
20-24' - AL, SK	13-3/4	R	15	**992113**
20-24' - AL, SK				
19-22' - AL, SK	13-1/4	R	17	**992114**
19-22' - AL, SK				
17-19' - AL, SK	13	R	19	**992115**
17-19' - AL, SK				
15-18' - AL, SK	12-3/4	R	21	**992116**
15-18' - AL, SK				

Vortex XHS Aluminum Propeller

APOLLO XHS — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE Dia.	Rot.	Pitch	Part No.
13-3/8	R	15	**993143**
13-3/8	L	15	**993153**
13-1/4	R	17	**993144**
13-1/4	L	17	**993154**
13-1/8	R	19	**993145**
13-1/8	L	19	**993155**
13	R	21	**993146**
13	L	21	**993156**

Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 106

Do NOT use Gearcase Adapter Ring supplied with propeller.

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
CR, HB	14	R	11	3	AL	763301	**012047**
CR, HB	14	R	11	3	AL		✂ **011038**
CR, HB	14	R	13	3	AL	763302	**011001**
20-24' - AL, SK	13-3/4	R	15	3	AL	763466	**011002**
19-22' - AL, SK	13-1/4	R	17	3	AL	763463	**011003**
19-22' - AL, SK	14	R	17	3	AL	763463	**011024**
17-19' - AL, SK	13	R	19	3	AL	763464	**011004**
17-19' - AL, SK	14	R	19	3	AL	763464	**011025**
15-18' - AL, SK	12-3/4	R	21	3	AL	763465	**011005**
High Performance							
High Performance							

BALLISTIC STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
13-5/8	R	15	3	**335030**
13-1/2	R	17	3	**335031**
13-3/8	R	19	3	**335032**
13-1/8	R	21	3	**335033**

BALLISTIC XL Dia.	Rot.	Pitch	Bld#	Part No.
13-1/2	R	22	3	**335034**
13-1/2	R	24	3	**335035**

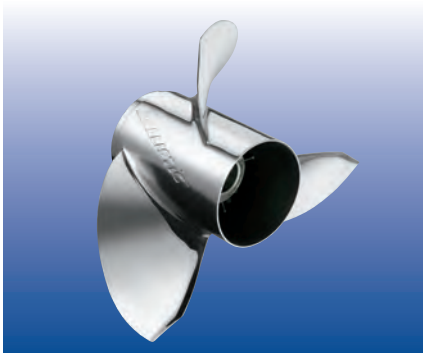
Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS.

MICHIGAN MATCH REPLACEMENT PROPELLERS

VORTEX XHS™ PERFORMANCE PROPELLERS


BALLISTIC™ STAINLESS STEEL PROPS

90, 115 & 140 HORSEPOWER (4-STROKE) • 4-1/4" GEARCASE
Thru Hub Exhaust & 15 Tooth Spline

90 HP (4-Stroke) . . . . . .2003 & Newer 115 HP (4-Stroke) . . . . . .2003 & Newer 140 HP (4-Stroke) . . . . . .2003 & Newer

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.
NEW	14	R	10	992109
	14	R	13	992112
20-24' - AL, SK	13-3/4	R	15	992113
20-24' - AL, SK				
17-19' - AL, SK	13-1/4	R	17	992114
17-19' - AL, SK				
16-18' - AL, SK	13	R	19	992115
16-18' - AL, SK				
15-18' - AL, SK	12-3/4	R	21	992116
15-18' - AL, SK				

Vortex XHS Aluminum Propeller

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE Dia.	Rot.	Pitch	Part No.
13-3/8	R	15	993143
13-3/8	L	15	993153
13-1/4	R	17	993144
13-1/4	L	17	993154
13-1/8	R	19	993145
13-1/8	L	19	993155
13	R	21	993146
13	L	21	993156

Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 125 & 126

Use Gearcase Adapter Ring supplied with propeller.

Refer to pages 40-41 for more details.

Note: For 90 & 115 HP 4-Stroke applications use XHS™ (Drop-in Hub) Kit # 125. For 140 HP 4-Stroke applications use XHS™ (Drop-in Hub) Kit # 126. Use Gearcase Adapter Ring supplied with propeller.

MICHIGAN MATCH REPLACEMENT PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
20-24' - AL, SK NEW	14	R	15	3	AL		061020
17-19' - AL, SK NEW	14	R	17	3	AL		061024
16-18' - AL, SK NEW	14	R	19	3	AL		061028
15-18' - AL, SK NEW	14	R	21	3	AL		061032

Michigan Match Aluminum Propeller

Rubber Hub Bushing

200 & 225 HORSEPOWER (4-STROKE) • 4-3/4" GEARCASE
Thru Hub Exhaust & 15 Tooth Spline

200 HP (4-Stroke) * . . . . . .2004 & Newer 225 HP (4-Stroke) * . . . . . .2004 & Newer

* Vortex and Apollo propeller diameters are slightly less than original equipment propellers.

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.
15-1/4	R	15	992002				
15	R	17	992003	15	R	16	992202
14-1/2	R	19	992004	14-1/2	R	18	992203
14-1/4	R	21	992005	14	R	20	992204
14	R	23	992006				

Vortex XHS™ Aluminum Propeller

Apollo XHS™ Stainless Steel

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE Dia.	Rot.	Pitch	Part No.	LG. DIAMETER 3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	993042								
14-3/8	L	15	993052								
14-1/4	R	17	993043	15-1/2	R	17	993023	14-5/8	R	16	993203
14-1/4	L	17	993053	15-1/2	L	17	993033	14-5/8	L	16	993213
14-1/8	R	19	993044	15-1/4	R	19	993024	14-3/8	R	18	993204
14-1/8	L	19	993054	15-1/4	L	19	993034	14-3/8	L	18	993214
14	R	21	993045	14-3/4	R	21	993025	14-1/8	R	20	993205
14	L	21	993055	14-3/4	L	21	993035	14-1/8	L	20	993215
13-7/8	R	23	993046	14-5/8	R	23	993026	14	R	22	993206
13-7/8	L	23	993056	14-5/8	L	23	993036	14	L	22	993216

Drop-In Hub

Use XHS™ Hub Kit 104

Refer to pages 40-41 for more details.

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

90-300 HORSEPOWER • V-6 (4-3/4") GEARCASE (Includes E-Tec Engines)

Thru Hub Exhaust & 15 Tooth Spline

90 HP .....1995 & Newer
90 HP V6 Gearcase .....2004 & Newer
100 HP Commercial .....1984 & Newer
115 HP .....1995 & Newer
120-140 HP 1985
130 HP .....1995 & Newer
140 (25") HP 1989-94
150 HP Commercial .....1993 & Newer
150 HP .....1978 & Newer
155 HP Commercial .....1978 & Newer
175 HP .....1977 & Newer
185 HP 1984-85
200 HP .....1976 & Newer
225 HP .....1986 & Newer
235 HP 1978-85
250 HP .....1991 & Newer
275 HP 1986-88
300 HP 1986-95
300 HP (E-TEC) .....2009 & Newer
2.6 Liter 1984-85
3.6 Liter 1986-87

* For engines 300 HP or higher, use "high horsepower sleeve". See Page 40 for more details.

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
15-1/4	R	15	**992002**				
15	R	17	**992003**	15	R	16	**992202**
14-1/2	R	19	**992004**	14-1/2	R	18	**992203**
14-1/4	R	21	**992005**	14	R	20	**992204**
14	R	23	**992006**				

Vortex XHS Aluminum Propeller

Apollo XHS Stainless Steel

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE				LG. DIAMETER 3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	**993042**								
14-3/8	L	15	**993052**								
14-1/4	R	17	**993043**	15-1/2	R	17	**993023**	14-5/8	R	16	**993203**
14-1/4	L	17	**993053**	15-1/2	L	17	**993033**	14-5/8	L	16	**993213**
14-1/8	R	19	**993044**	15-1/4	R	19	**993024**	14-3/8	R	18	**993204**
14-1/8	L	19	**993054**	15-1/4	L	19	**993034**	14-3/8	L	18	**993214**
14	R	21	**993045**	14-3/4	R	21	**993025**	14-1/8	R	20	**993205**
14	L	21	**993055**	14-3/4	L	21	**993035**	14-1/8	L	20	**993215**
13-7/8	R	23	**993046**	14-5/8	R	23	**993026**	14	R	22	**993206**
13-7/8	L	23	**993056**	14-5/8	L	23	**993036**	14	L	22	**993216**

Drop-In Hub

Use XHS™ Hub Kit 100 & 101

Refer to pages 40-41 for more details.

Note: For engine applications 1976-1990 use XHS™ (Drop-In Hub) Kit # 101. For engine applications 1991 & Newer, use XHS™ (Drop-In Hub) Kit # 100. Refer to pages 39-40 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BALLISTIC™ STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS							BALLISTIC					BALLISTIC XL				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
CR, HB	15-1/2	R	13	3	AL	763453	**011016**										
CR, HB	15-1/2	R	15	3	AL	763471	**011006**	14-7/8	R	15	3	**345031**					
20-26' - AL, SK	15	R	17	3	AL	763467	**011007**	14-3/4	R	17	3	**345032**					
20-26' - AL, SK								14-3/4	L	17	3	**345062**					
18-22' - AL, SK	14-1/2	R	19	3	AL	763468	**011008**	14-1/2	R	19	3	**345033**					
18-22' - AL, SK								14-1/2	L	19	3	**345063**					
17-19' - AL, SK	14-1/4	R	21	3	AL	763469	**011009**	14-3/8	R	21	3	**345034**					
17-19' - AL, SK								14-3/8	L	21	3	**345064**					
15-18' - AL, SK	14-1/4	R	23	3	AL	763470	**011010**	14-1/4	R	23	3	**345035**					
15-18' - AL, SK								14-1/4	L	23	3	**345065**					
High Performance													14-1/2	R	22	3	**345041**
High Performance								14-1/4	R	25	3	**345036**	14-1/2	R	24	3	**345037**
High Performance													14-1/2	R	26	3	**345038**
High Performance 4-Blade Propellers																	
50-62 MPH													13-3/4	R	23	4	☞ **435035**
55-67 MPH													13-3/4	R	25	4	☞ **435036**
60-72 MPH													13-3/4	R	27	4	☞ **435037**

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

☞ Use OEM thrust washer 127084 for 1990 and earlier motors, or 126869 for 1991 and newer motors.

3.5-3.6 HORSEPOWER
Pin Drive

3.5-3.6 HP 1969-76

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
Standard Replacement	7-1/2	L	4-1/2	2	AL	48-FP19	✂ 072017

072017

Rubber Hub Bushing

3.5-8 HORSEPOWER
Non-Thru Hub Exhaust & 9 Tooth / Pin Drive

3.5 HP .....1980-84 5 HP .....1987-98 4, 4.4, 6, 6.6, 7, 7.5 & 8 HP 1968-88

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
Standard Replacement	7-1/4	R	5-1/2	3	AL	48-FP488	**072123**

072123

Rubber Hub Bushing

6-10 HORSEPOWER
Non-Thru Hub Exhaust & 14 Tooth / Pin Drive

6-10 HP Sailor .....1976-78 Sailor 180-250 1979-84

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
SB	10-3/8	R	10	3	AL	FP-278	**072014**

072014

Rubber Hub Bushing

25 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 10 Tooth Spline

25 HP 3 Cyl. 1995-98

BOAT DESCRIPTION/LENGTH	VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS 3-BLADE Dia.	Rot.	Pitch	Part No.
	10-1/2	R	9	**992501**
	10-1/2	R	10	**992502**
15-19'	10-1/2	R	11	**992503**
15-17'	10-1/8	R	12	**992504**
13-17'	10-1/8	R	13	**992505**
Up to 14'	10-1/8	R	14	**992506**

992504

Vortex XHS™
Aluminum Propeller

Drop-In Hub

Use XHS™ Hub Kit 120

Refer to pages 40-41 for more details.

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
15-19'	10-3/8	R	11	3	AL	48-19638A40	**031049**					
13-17'	10-3/8	R	13	3	AL	48-19640A40	**031048**	10-1/8	R	13	3	**305129**
Up to 14'								10-1/8	R	15	3	**305130**

Ballistic
High Performance
Stainless Steel Propeller

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS

20-60 HORSEPOWER
Non-Thru Hub Exhaust & 14 Tooth / Pin Drive

20-25 HP 1979-81
30 HP 1966-82
35 HP 1966-91
40 HP 1992-94
45 HP 1966-84
50 HP 1982-94
55-60 HP❖❖ 1966-84

MICHIGAN MATCH REPLACEMENT PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
CR, HB, SB	10-3/8	R	10	3	AL	48-819337A40	**072014**
17-19' - AL, SK	10-3/8	R	11-1/2	3	AL	48-819336A40	**072131**
16-17' - AL, SK	10-3/8	R	12-1/2	3	AL	48-819335A40	**072132**
14-16' - AL, SK	10-3/8	R	13-1/2	3	AL	48-819334A4	**072133**

072014

Rubber Hub Bushing

40-75 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

40, 50 HP 1995-98
70 HP 1991-95
75 HP 1996-98

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS
APOLLO XHS — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
19' & Up					11-1/2	R	8	**992401**				
19' & Up					11-1/2	R	9	**992402**				
17-19' - AL, SK					11-1/2	R	10	**992403**				
16-18' - AL, SK	10-3/8	R	11	**992404**								
15-17' - AL, SK	10-3/8	R	12	**992405**					10-3/4	R	12	**993405**
14-17' - AL, SK	10-3/8	R	13	**992406**					10-1/2	R	13	**993406**
14-16' - LL	10-3/8	R	14	**992407**					10-3/8	R	14	**993407**
13-15' - LL	10	R	15	**992408**					10-1/8	R	15	**993408**
13-15' - LL	10	R	16	**992409**								

Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 114

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
19' & Up	12-1/2	R	8	3	AL	48-42738A10	**032141**					
19' & Up **NEW**	12-1/4	R	9	3	AL		**032143**					
17-19' - AL, SK	11-1/4	R	10	3	AL	48-73132A40	**031015**					
16-18' - AL, SK	12	R	10-1/2	3	AL	48-42740A10	**032142**					
16-18' - AL, SK	10-7/8	R	11	3	AL	48-85632A40	**031053**					
15-17' - AL, SK	10-3/4	R	12	3	AL	48-816702A40	**031056**					
15-17' - AL, SK	10-5/8	R	12	3	AL	48-73134A40	**031016**					
14-17' - AL, SK	10-1/2	R	13	3	AL	48-816704A40	**031057**	10-1/8	R	13	3	**395129**
14-17' - AL, SK	10-3/8	R	13	3	AL	48-73136A40	**031017**					
14-16' - LL	10-3/8	R	14	3	AL	48-816706A40	**031058**					
14-16' - LL	10-1/4	R	14	3	AL	48-73138A40	**031018**					
13-15' - LL	10-1/8	R	15	3	AL	48-73140A40	**031019**	10-1/8	R	15	3	**395130**
Up to 15'	10	R	17	3	AL	48-73144A40	**031020**					

031018

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

❖❖ Two-piece lower unit.

70-140 HORSEPOWER • SINGLE EXHAUST UNITS (See Below)

Non-Thru Hub Exhaust & 15 Tooth Spline

70-140HP❖ 1977-89

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS						
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
16-17' - AL, SK	13-1/8	R	15	3	AL	FPS519	**072055**
14-16' - AL, SK	13-1/4	R	17	3	AL	FPS623	**072107**
14-16' - LL	13	R	19	3	AL	FPS625	**072108**

072108

Rubber Hub Bushing

85-150 HORSEPOWER • DUAL EXHAUST UNITS • 4-1/4" GEARCASE (See Below)

Thru Hub Exhaust & 15 Tooth Spline

85, 125 HP 1988-89
90, 120 HP 1990-94
90 HP L-DRIVE 1989-91
120 HP L-DRIVE 1989-91
150 HP 1989-94
150 HP L-DRIVE 1991

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS						
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
17-22' - AL, SK	13-1/2	R	15	3	AL	48-FP669-1	✶ **071035**
17-22' - AL, SK	13-1/2	R	15	3	AL	48-FP692-1	**072127**
16-20' - AL, SK	13-1/2	R	17	3	AL	48-FP685-1	✶ **071036**
16-20' - AL, SK	13-1/2	R	17	3	AL	48-FP685-1	**072128**
16-18' - AL, SK	13	R	19	3	AL	48-FP686-1	✂ **072129**

071036

Rubber Hub Bushing

BOAT DESCRIPTION/LENGTH	VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS — 3-BLADE WIDE				APOLLO XHS ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS — STD 3-BLADE			
	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
22' & Up - AL **NEW**	14	R	10	**992109**				
22' & Up - AL	14	R	13	**992112**				
19-24' - AL, SK	13-3/4	R	15	**992113**	13-3/8	R	15	**993143**
19-24' - AL, SK					13-3/8	L	15	**993153**
17-21' - AL, SK	13-1/4	R	17	**992114**	13-1/4	R	17	**993144**
17-21' - AL, SK					13-1/4	L	17	**993154**
16-19' - AL, SK	13	R	19	**992115**	13-1/8	R	19	**993145**
16-19' - AL, SK					13-1/8	L	19	**993155**
15-18' - AL, SK	12-3/4	R	21	**992116**	13	R	21	**993146**
15-18' - AL, SK					13	L	21	**993156**

Vortex XHS
Aluminum Propeller

Apollo XHS
Stainless Steel

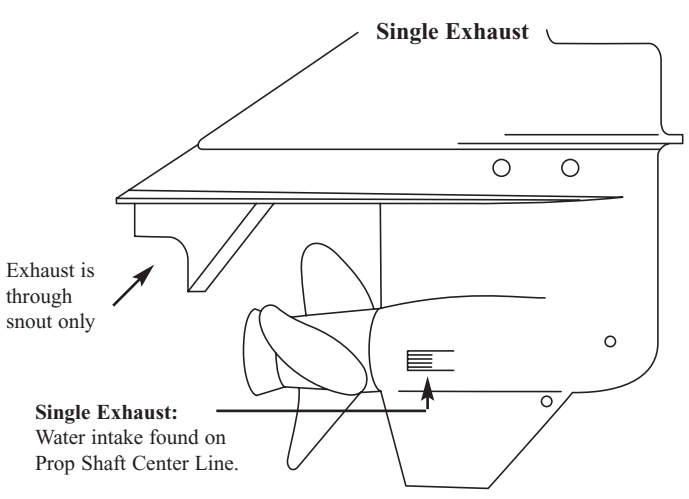
Drop-In Hub

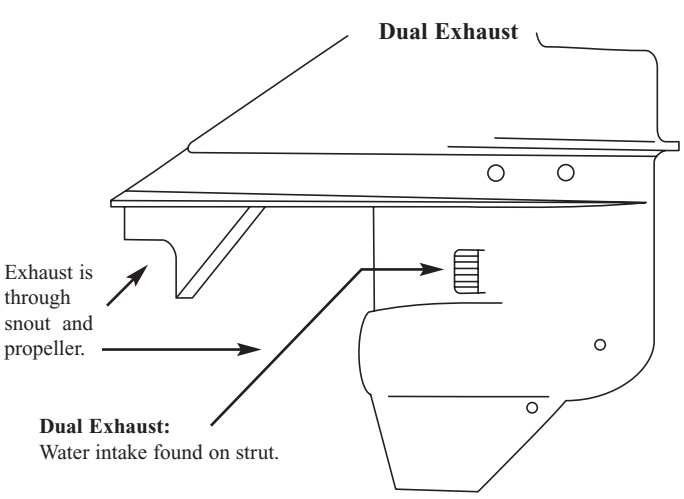
Use XHS™ Hub Kit 102

Do NOT use Gearcase Adapter Ring supplied with propeller.

Refer to pages 40-41 for more details.

Single vs. Dual Exhaust





❖ One piece lower unit. ✂ LIMITED INVENTORY ITEMS.
✶ If currently using uncupped propeller, use cupped propeller having 2" less pitch. Boats with power trim use same pitch.

75-150 HORSEPOWER • USING MERCURY 4-1/4" GEARCASE (See Below)

Thru Hub Exhaust & 15 Tooth Spline

75 HP†† .....1999 & Newer
90 HP L-Drive† 1990-91
90, 120 HP†† 1995-98
120 HP L-Drive† 1990-91
150 HP† 1989-94
150 HP L-Drive 1991

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE WIDE Dia.	Rot.	Pitch	Part No.
22' & Up - AL NEW	14	R	10	**992109**
22' & Up - AL	14	R	13	**992112**
19-24' - AL, SK	13-3/4	R	15	**992113**
19-24' - AL, SK				
17-21' - AL, SK	13-1/4	R	17	**992114**
17-21' - AL, SK				
16-19' - AL, SK	13	R	19	**992115**
16-19' - AL, SK				
15-18' - AL, SK	12-3/4	R	21	**992116**
15-18' - AL, SK				

Vortex XHS Aluminum Propeller

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE Dia.	Rot.	Pitch	Part No.
13-3/8	R	15	**993143**
13-3/8	L	15	**993153**
13-1/4	R	17	**993144**
13-1/4	L	17	**993154**
13-1/8	R	19	**993145**
13-1/8	L	19	**993155**
13	R	21	**993146**
13	L	21	**993156**

Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 102

Use Gearcase Adapter Ring supplied with propeller.

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC™ STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.	BALLISTIC XL Dia.	Rot.	Pitch	Bld#	Part No.
25' & Up - AL NEW	14	R	10	3	AL		**031061**										
25' & Up - AL	14	R	11	3	AL	48-77338A45	**031054**										
Pontoon	14	R	11	3	AL	48-77338CP1	◆ **031200**										
25' & Up - AL	14	R	12	3	AL		**031060**										
Pontoon	14	R	12	3	AL		◆ **031201**										
22' & Up - AL	14	R	13	3	AL	48-77340A45	**031055**										
Pontoon	14	R	13	3	AL	48-77340CP1	◆ **031202**										
19-24' - AL, SK	13-3/4	R	15	3	AL	48-77342A45	**031041**	13-5/8	R	15	3	**335130**					
17-20' - AL, SK	13-1/4	R	17	3	AL	48-77344A45	**031042**	13-1/2	R	17	3	**335131**					
16-19' - AL, SK	13	R	19	3	AL	48-77346A45	**031043**	13-3/8	R	19	3	**335132**					
15-18' - AL, SK	12-3/4	R	21	3	AL	48-77348A45	**031044**	13-1/8	R	21	3	**335133**	13-1/2	R	22	3	☞ **335134**
Up to 17' - LL	12-1/2	R	23	3	AL	48-77350A45	✂ **031045**						13-1/2	R	24	3	☞ **335135**

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

† For dual exhaust units only & requires thrust washer 23-819057.
†† For all units 1995 thru current. Requires thrust washer 13191A1.
☞ Requires special exhaust snout Part No. F744116 for proper fit.
◆ Pontoon Boat Propellers - Extended Cup!
✂ LIMITED INVENTORY ITEMS.

Force Using Mercury Gearcase

Exhaust is through propeller only.
No exhaust snout, trim tab only.

7.5-10 HORSEPOWER
Non-Thru Hub Exhaust & Pin Drive

BF 7.5 . . . . . .1978-87 BF 8 . . . . . .1987-99 BF 100 (10 HP) . . . . . .All Years

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
	9-1/4	R	7	3	AL		**012102**
14-16' - LL	9	R	9	3	AL	58130-881-840ZA	**012109**
12-14'	9	R	10	3	AL		**012011**
12-14' - LL	9-1/4	R	11	3	AL		**012013**

012011

Rubber Hub Bushing

8-20 HORSEPOWER
Thru Hub Exhaust & 8 Tooth Spline

BF 8 TH . . . . . .2000 & Newer BF 15 . . . . . .All Years BF 20 . . . . . .2003 & Newer
BF 9.9 . . . . . .1988 & Newer

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
13-17' - AL	9-1/4	R	8	3	AL	58130-ZV4-008AH	**102003**
12-15' - AL	9-1/4	R	9	3	AL	58130-ZV4-009AH	**102004**
12-15' - LL	9-1/4	R	10-1/2	3	AL	58130-ZV4-010AH	**102005**

102003

Rubber Hub Bushing

25-30 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 10 Tooth Spline

BF 25 . . . . . .1994 & Newer BF 30 . . . . . .1995 & Newer

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS — 3-BLADE

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Part No.
	10-1/2	R	9	**992501**
	10-1/2	R	10	**992502**
	10-1/2	R	11	**992503**
	10-1/8	R	12	**992504**
	10-1/8	R	13	**992505**
	10-1/8	R	14	**992506**

992504

Vortex XHS™
Aluminum Propeller

Drop-In Hub

Use XHS™ Hub Kit 119

Refer to pages 40-41 for more details.

Ballistic
High Performance
Stainless Steel
Propeller

BALLISTIC™ STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BALLISTIC					BALLISTIC XL				
Dia.	Rot.	Pitch	Bld#	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
10-1/8	R	13	3	**305229**					
10-1/8	R	15	3	**305230**					

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS. (See Page 15) ◆ Pontoon Boat Propellers - Extended Cup! (See Page 15)

35-50 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

BF 35 .....1991-94 BF 45 .....1991-94 BF 50/50A .....1995 & Newer
BF 40 .....1995 & Newer

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS — APOLLO XHS ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH		3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
						11-1/2	R	8	**992401**				
19-21' - AL, SK	NEW	12-1/4	R	9	**992601**	11-1/2	R	9	**992402**				
19-21' - AL, SK	NEW	11-3/4	R	10	**992602**	11-1/2	R	10	**992403**				
17-19' - AL, SK	NEW	11-5/8	R	11	**992603**								
15-17' - AL, SK	NEW	11-3/8	R	12	**992604**					10-3/4	R	12	**993405**
15-17' - AL, SK	NEW	11-1/8	R	12	**992605**					10-1/2	R	13	**993406**
14-16' - AL, SK	NEW	11-1/4	R	13	**992606**					10-3/8	R	14	**993407**
13-15' - AL, SK		10	R	15	**992408**					10-1/8	R	15	**993408**
12-14' - AL, SK		10	R	16	**992409**								

Apollo XHS
Stainless Steel

Drop-In Hub
Use XHS™ Hub Kit 113
Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
19-21' - AL, SK	11-3/4	R	10	3	AL	58130-ZV5-860ZA	**032045**					
17-19' - AL, SK	12	R	11	3	AL	58130-ZV5-011AH	**032044**					
15-17' - AL, SK	11-3/8	R	12	3	AL	58130-ZV5-012AH	**032043**					
15-17' - AL, SK	11-1/8	R	13	3	AL	58130-ZV5-013AH	**032042**	10-1/8	R	13	3	**395929**
14-16' - AL, SK	11-1/4	R	14	3	AL	58130-ZV5-014AH	**032041**					
13-15' - AL, SK	11	R	15	3	AL	58130-ZV5-015AH	**032040**	10-1/8	R	15	3	**395930**

032042

Rubber Hub Bushing

75-130 HORSEPOWER • 4-1/4" GEARCASE
Thru Hub Exhaust & 15 Tooth Spline

BF 75 .....1995 & Newer BF 115 .....1998 & Newer BF 130 .....1998 & Newer
BF 90 .....1995 & Newer

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS — APOLLO XHS ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH		3-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
25' & Up - AL	NEW	14	R	10	**992109**				
22' & Up - AL		14	R	13	**992112**				
19-24' - AL, SK		13-3/4	R	15	**992113**	13-3/8	R	15	**993143**
19-24' - AL, SK						13-3/8	L	15	**993153**
17-20' - AL, SK		13-1/4	R	17	**992114**	13-1/4	R	17	**993144**
17-20' - AL, SK						13-1/4	L	17	**993154**
16-19' - AL, SK		13	R	19	**992115**	13-1/8	R	19	**993145**
16-19' - AL, SK						13-1/8	L	19	**993155**
15-18' - AL, SK		12-3/4	R	21	**992116**	13	R	21	**993146**
15-18' - AL, SK						13	L	21	**993156**

Vortex XHS
Aluminum Propeller

Apollo XHS
Stainless Steel

Drop-In Hub
Use XHS™ Hub Kit 102 & 107
Refer to pages 40-41 for more details.

Note: For 75-90 HP 1995-1998 engine applications use XHS (Drop-In- Hub) Kit # 102. For 75-90 HP 1999 & Newer, 115 HP and 130 HP 1998 & Newer engine applications, use XHS (Drop-In- Hub) Kit Kit #107. Use Gearcase Adapter Ring supplied w th propeller.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC STAINLESS STEEL PROPS HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH		ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.	BALLISTIC XL Dia.	Rot.	Pitch	Bld#	Part No.
25' & Up - AL	NEW	14	R	10	3	AL		031061										
25' & Up - AL		14	R	11	3	AL	58130-ZW1-W01ZA	**031054**										
Pontoon		14	R	11	3	AL		◆ **031200**										
25' & Up - AL		14	R	12	3	AL		**031060**										
Pontoon		14	R	12	3	AL		◆ **031201**										
22' & Up - AL		14	R	13	3	AL	58130-ZW1-011AH	**031055**										
Pontoon		14	R	13	3	AL	58130-ZW1-013AH	◆ **031202**										
19-24' - AL, SK		13-3/4	R	15	3	AL	58130-ZW1-015AH	**031041**	13-5/8	R	15	3	**335130**					
17-20' - AL, SK		13-1/4	R	17	3	AL	58130-ZW1-017AH	**031042**	13-1/2	R	17	3	**335131**					
16-19' - AL, SK		13	R	19	3	AL	58130-ZW1-019AH	**031043**	13-3/8	R	19	3	**335132**					
15-18' - AL, SK		12-3/4	R	21	3	AL	58130-ZW1-021AH	**031044**	13-1/8	R	21	3	**335133**	13-1/2	R	22	3	**335134**
Up to 17' - LL		12-1/2	R	23	3	AL	58130-ZW1-W51ZA	✂**031045**						13-1/2	R	24	3	**335135**

Rubber Hub Bushing

135-225 HORSEPOWER • 4-3/4" GEARCASE

Thru Hub Exhaust & 15 Tooth Spline

BF 135 . . . . . .2004 & Newer
BF 150 . . . . . .2004 & Newer
BF 200 . . . . . .2002 & Newer
BF 225 . . . . . .2002 & Newer

Vortex XHS™ — High Performance Aluminum Propellers

3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
15-1/4	R	15	**992002**				
15	R	17	**992003**	15	R	16	**992202**
14-1/2	R	19	**992004**	14-1/2	R	18	**992203**
14-1/4	R	21	**992005**	14	R	20	**992204**
14	R	23	**992006**				

Vortex XHS™ Aluminum Propeller

Apollo XHS™ Stainless Steel

Apollo XHS™ — Ultimate Performance Stainless Steel Propellers

STD 3-BLADE				LG. DIAMETER 3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	**993042**								
14-3/8	L	15	**993052**								
14-1/4	R	17	**993043**	15-1/2	R	17	**993023**	14-5/8	R	16	**993203**
14-1/4	L	17	**993053**	15-1/2	L	17	**993033**	14-5/8	L	16	**993213**
14-1/8	R	19	**993044**	15-1/4	R	19	**993024**	14-3/8	R	18	**993204**
14-1/8	L	19	**993054**	15-1/4	L	19	**993034**	14-3/8	L	18	**993214**
14	R	21	**993045**	14-3/4	R	21	**993025**	14-1/8	R	20	**993205**
14	L	21	**993055**	14-3/4	L	21	**993035**	14-1/8	L	20	**993215**
13-7/8	R	23	**993046**	14-5/8	R	23	**993026**	14	R	22	**993206**
13-7/8	L	23	**993056**	14-5/8	L	23	**993036**	14	L	22	**993216**

Drop-In Hub

Use XHS™ Hub Kit 107

Refer to pages 40-41 for more details.

Michigan Match Replacement Propellers — Aluminum Props

Ballistic Stainless Steel Props — High Performance Stainless Steel Propellers

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS							BALLISTIC					BALLISTIC XL				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
CR, HB	16	R	12	3	AL		✂ **031063**										
CR, HB	16	R	13	3	AL	58130-ZY3-013A	**031022**										
22-25' - AL	16	R	14	3	AL		**031050**										
21-24' - AL	15-1/4	R	15	3	AL	58130-ZY3-015A	**031023**	14-7/8	R	15	3	**345131**					
20-23' - AL, SK	16	R	16	3	AL		**031051**										
19-23' - AL, SK	14-1/2	R	17	3	AL	58130-ZY3-017A	**031024**	14-3/4	R	17	3	**345132**					
19-23' - AL, SK	15	R	17	3	AL		**031064**	14-3/4	L	17	3	**345162**					
19-22' - AL, SK	15-1/2	R	18	3	AL		**031052**										
18-22' - AL, SK	14	R	19	3	AL	58130-ZY3-019A	**031025**	14-1/2	R	19	3	**345133**					
18-22' - AL, SK	14-1/2	R	19	3	AL		**031065**	14-1/2	L	19	3	**345163**					
18-20' - AL, SK	13-3/4	R	21	3	AL	58130-ZY3-021A	**031026**	14-3/8	R	21	3	**345134**					
18-20' - AL, SK	14-1/4	R	21	3	AL		**031066**	14-3/8	L	21	3	**345164**					
17-20' - AL, SK								14-1/4	R	23	3	**345135**					
17-20' - AL, SK								14-1/4	L	23	3	**345165**					
Up to 18'	13-3/8	R	25	3	AL		✂ **031067**	14-1/4	R	25	3	**345136**					
High Performance													14-1/2	R	22	3	**345141**
High Performance													14-1/2	R	24	3	**345137**
High Perf. (EFI Engine)													14	R	24	3	**345139**
High Performance													14-1/2	R	26	3	**345138**
High Perf. (EFI Engine)													14	R	26	3	**345140**
High Performance 4 Blade Propellers																	
50-62 MPH													13-3/4	R	23	4	**435135**
55-67 MPH													13-3/4	R	25	4	**435136**
60-72 MPH													13-3/4	R	27	4	**435137**

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS.

4-10 HORSEPOWER
Thru Hub Exhaust & 8 Tooth Spline

MODEL 40 . . . . . .1973-75 MODEL 45 . . . . . .1973-81 7.5 HP 1976

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
Standard Replacement	9	R	9	2	AL	48-47922A10	**032021**
14-16' - AL	9	R	7	3	AL	48-47670A10	**032020**

032020

Rubber Hub Bushing

6-15 HORSEPOWER
Thru Hub Exhaust & 8 Tooth Spline

6, 8, 9.9 HP (2-Stroke) . . . . . .1986 & Newer 9.9 HP (4-Stroke - Not Bigfoot) . . . .1995 - 2004 10, 15 HP (Sea Pro/Marathon) . . . . .1995 & Newer
8 HP (4-Stroke - Not Bigfoot) . . . . . .1995 - 2004 10 HP . . . . . .1995 & Newer 15 HP (2 & 4-Stroke) . . . . . .1989 - 2006

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
16-20' - AL	9-1/4	R	7	3	AL	48-828152A12	**032056**
14-18' - AL	9	R	9	3	AL	48-828156A12	**032052**
14-16' - AL	9	R	10-1/2	3	AL	48-828158A12	**032050**

032056

Rubber Hub Bushing

8-9.9 HORSEPOWER
Thru Hub Exhaust & 14 Tooth Spline

8 HP (4-Stroke - Not Bigfoot) . . . . . .2005 & Newer 9.9 HP (4-Stroke - Not Bigfoot) . . . .2005 & Newer

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
12-16' - AL	9.2	R	8.4	3	AL	48-897618A10	**142017**

142017

Rubber Hub Bushing

MERC 20
Thru Hub Exhaust & 8 Tooth Spline

Merc. 20 1963-81

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
Standard Replacement	9-7/8	R	11	2	AL	48-33480A1	**032135**
14-16' - AL	10	R	9	3	AL	48-86962A4	**032136**

032136

Rubber Hub Bushing

9.9-25 HORSEPOWER
Thru Hub Exhaust & 10 Tooth Spline

9.9, 15 HP (4-Stroke, Bigfoot / Sail) .1999 - 2005 20 HP (2-Stroke Mercury) . . . . . .1986 & Newer 25 HP (2-Stroke Mariner) . . . . . .1985 & Newer
18 HP (Mercury) . . . . . .1980-85 25 HP (2-Stroke Mercury) . . . . . .1980 & Newer 25 HP (Sea Pro/Marathon) . . . . . .All Years

BOAT DESCRIPTION/LENGTH	VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS 3-BLADE Dia.	Rot.	Pitch	Part No.
	10-1/2	R	9	**992501**
	10-1/2	R	10	**992502**
15-19'	10-1/2	R	11	**992503**
13-17'	10-1/8	R	12	**992504**
13-17'	10-1/8	R	13	**992505**
Up to 14'	10-1/8	R	14	**992506**

992504
Vortex XHS™
Aluminum Propeller

Drop-In Hub
Use XHS™ Hub Kit 120

Refer to pages 40-41 for more details.

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
15-19'	10-3/8	R	11	3	AL	48-19638A40	**031049**					
13-17'	10-3/8	R	13	3	AL	48-19640A40	**031048**	10-1/8	R	13	3	**305129**
Up to 14'								10-1/8	R	15	3	**305130**

Ballistic
High Performance
Stainless Steel Propeller

Rubber Hub Bushing

15-25 HORSEPOWER • MARINER
Non-Thru Hub Exhaust & Pin Drive

15 HP .....1976-81 | 15A .....1979-82 | W15 .....1977-85 | 20 HP .....1976-79 | 25 HP 1977-1979

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
HB, SB	9-1/4	R	7	3	AL	48-96628	**012102**
12-14' - HL	9	R	9	3	AL		**012109**
12-14' - HL	9	R	10	3	AL		**012011**
12-14' - LL	9-1/4	R	11	3	AL		**012013**

012011

Rubber Hub Bushing

25-30 HORSEPOWER • MARINER • 3-1/4" GEARCASE
Thru Hub Exhaust & 10 Tooth Spline

25 HP .....1980-84 | 28 HP .....1976-79 | 30 HP 1979-90

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
16-18' - AL, SK	9-7/8	R	9	3	AL	48-81647	**022001**
14-17' - AL, SK	9-7/8	R	10-1/2	3	AL	48-81649	**022002**
13-16' - LL	9-3/8	R	12	3	AL	48-82826	**022003**

022001

Rubber Hub Bushing

25-30 HORSEPOWER • MERCURY • 3-1/4" GEARCASE
Thru Hub Exhaust & 10 Tooth Spline

25 HP (4-Stroke - Not Bigfoot) .....2006 & Newer | 30 HP (4-Stroke - Not Bigfoot) .....2006 & Newer

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS — 3-BLADE

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Part No.
16-20' - AL	10-1/2	R	9	**992501**
14-18' - AL	10-1/2	R	10	**992502**
14-18' - AL	10-1/2	R	11	**992503**
14-18' - AL	10-1/8	R	12	**992504**
12-16' - AL	10-1/8	R	13	**992505**
12-16' - AL	10-1/8	R	14	**992506**

992504

Vortex XHS™
Aluminum Propeller

Drop-In Hub

Use XHS™ Hub Kit 122

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BALLISTIC STAINLESS STEEL PROPS — BALLISTIC

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
16-20' - AL	10.2	R	8.3	3	AL	48-896890A10	**142020**					
12-16' - AL								10-1/8	R	13	3	**305429**
12-16' - AL								10-1/8	R	15	3	**305430**

Ballistic
High Performance
Stainless Steel Propeller

Rubber Hub Bushing

MODELS 402-500 (1974-76), 650, 60 HP
Thru Hub Exhaust & 13 Tooth Spline

MODEL 402-500 .....1974-76 | MODEL 650 .....1972-76 | 60 HP (Mariner) 1976

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS — APOLLO XHS™ ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
					11-1/2	R	8	**992401**				
NEW	12-1/4	R	9	**992601**	11-1/2	R	9	**992402**				
19-22' - AL, SK NEW	11-3/4	R	10	**992602**	11-1/2	R	10	**992403**				
17-19' - AL, SK NEW	11-5/8	R	11	**992603**								
16-17' - AL, SK NEW	11-3/8	R	12	**992604**					10-3/4	R	12	**993405**
14-16' - LL NEW	11-1/8	R	13	**992605**					10-1/2	R	13	**993406**
12-14' - LL NEW	11-1/4	R	14	**992606**					10-3/8	R	14	**993407**
12-14' - LL	10	R	15	**992408**					10-1/8	R	15	**993408**
12-14' - LL	10	R	16	**992409**								

Apollo XHS
Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 114

Refer to pages 40-41 for more details.

MODELS 402-500 (1974-76), 650, 60 HP (Continued)
Thru Hub Exhaust & 13 Tooth Spline

MODEL 402-500 . . . . . .1974-76 MODEL 650 . . . . . .1972-76 60 HP (Mariner) 1976

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS							BALLISTIC BALLISTIC				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
19-22' - AL **NEW**	12-1/4	R	9	3	AL	48-73132A40	**032046**					
19-22' - AL	11-3/4	R	10	3	AL	48-73132A40	**032045**					
17-19' - AL, SK	12	R	11	3	AL	48-73134A40	**032044**					
16-17' - AL, SK	11-3/8	R	12	3	AL	48-73136A40	**032043**					
14-16' - LL	11-1/8	R	13	3	AL	48-73136A40	**032042**	10-1/8	R	13	3	**395929**
12-14' - LL	11-1/4	R	14	3	AL	48-73138A40	**032041**					
12-14' - LL	11	R	15	3	AL	48-73140A40	**032040**	10-1/8	R	15	3	**395930**

032042

Rubber Hub Bushing

Use OEM fwd washer 65758 aft washer 62124

25-70 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

MODEL 402-500-700 1977-84
25 HP Bigfoot (4-Stroke) 1999-2005
30 HP (2 & 4-Stroke) 1994-2005
30 HP (Sea Pro/Marathon) . . . . . .1994 & Newer
35 HP 1984-89
40 HP (2 & 4-Stroke) (Not Bigfoot) . .1977 & Newer
40 HP (Sea Pro/Marathon) . . . . . .1977 & Newer
45 HP 1986-89
48 HP (Mariner) . . . . . .All Years
50 HP (2 & 4-Stroke) (Not Bigfoot) . .1977 & Newer
55 HP (Mercury/Sea Pro/Marathon) . . .1995 & Newer
60 HP (Not Bigfoot or Sea Pro) . . . .1978 & Newer
60 HP (2 & 4-Stroke) (Not Bigfoot) .1978 & Newer
70 HP . . . . . .Thru 1983

BOAT DESCRIPTION/LENGTH	VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS								APOLLO XHS™ ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS			
	3-BLADE				4-BLADE				STD 3-BLADE			
	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
					11-1/2	R	8	**992401**				
					11-1/2	R	9	**992402**				
					11-1/2	R	10	**992403**				
16-18' - AL, SK	10-3/8	R	11	**992404**								
15-17' - AL, SK	10-3/8	R	12	**992405**					10-3/4	R	12	**993405**
14-17' - AL, SK	10-3/8	R	13	**992406**					10-1/2	R	13	**993406**
14-16' - LL	10-3/8	R	14	**992407**					10-3/8	R	14	**993407**
Up to 15' - LL	10	R	15	**992408**					10-1/8	R	15	**993408**
Up to 15' - LL	10	R	16	**992409**								

Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 114

Refer to pages 40-41 for more details.

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS							BALLISTIC BALLISTIC				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
19' & Up	12-1/2	R	8	3	AL	48-42738A10	**032141**					
19' & Up **NEW**	12-1/4	R	9	3	AL		**032143**					
17-19' - AL, SK	11-1/4	R	10	3	AL	48-73132A40	**031015**					
16-18' - AL, SK	12	R	10-1/2	3	AL	48-42740A10	**032142**					
16-18' - AL, SK	10-7/8	R	11	3	AL	48-85632A40	**031053**					
15-17' - AL, SK	10-3/4	R	12	3	AL	48-816702A40	**031056**					
15-17' - AL, SK	10-5/8	R	12	3	AL	48-73134A40	**031016**					
14-17' - AL, SK	10-1/2	R	13	3	AL	48-816704A40	**031057**	10-1/8	R	13	3	**395129**
14-17' - AL, SK	10-3/8	R	13	3	AL	48-73136A40	**031017**					
14-16' - LL	10-3/8	R	14	3	AL	48-816706A40	**031058**					
14-16' - LL	10-1/4	R	14	3	AL	48-73138A40	**031018**					
13-15' - LL	10-1/8	R	15	3	AL	48-73140A40	**031019**	10-1/8	R	15	3	**395130**
Up to 15'	10	R	17	3	AL	48-73144A40	**031020**					

031017

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

40-140 HORSEPOWER • 4-1/4" GEARCASE

Thru Hub Exhaust & 15 Tooth Spline

40, 50 HP (Bigfoot, 4-Stroke) . . . . . .All Years	90 HP (2 & 4-Stroke) . . . . . .1978 & Newer	650 2 Cyl. . . . . .Thru 1971
60 HP (Bigfoot / 4-Stroke) . . . . . .1995 & Newer	100 HP . . . . . .1988 & Newer	800-850 6 Cyl. . . . . .Thru 1972
60 HP (Sea Pro/Marathon) . . . . . .1995 & Newer	115 HP . . . . . .1978 & Newer	800-850 4 Cyl. 1972-77
70 HP 1987-89	115 HP 4-Stroke . . . . . .2001 & Newer	900-1500 Models . . . . . .Thru 1977
75 HP (2 & 4-Stroke) . . . . . .1984 & Newer	125 HP . . . . . .1994 & Newer	80 HP (Yamaha) 1977
75 HP (Sea Pro/Marathon) . . . . . .All Years	140 HP (Includes Sea Pro & Offshore) 1978 - 81	80 HP (Mariner) 1978-83
80 HP 1978-89	650 4 Cyl. (2:1) 1961-70	

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.
25' & Up - AL NEW	14	R	10	992109
25' & Up - AL	14	R	13	992112
19-24' - AL, SK	13-3/4	R	15	992113
19-24' - AL, SK				
17-20' - AL, SK	13-1/4	R	17	992114
17-20' - AL, SK				
16-19' - AL, SK	13	R	19	992115
16-19' - AL, SK				
15-18' - AL, SK	12-3/4	R	21	992116
15-18' - AL, SK				

Vortex XHS Aluminum Propeller

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE Dia.	Rot.	Pitch	Part No.
13-3/8	R	15	✓993143
13-3/8	L	15	✓993153
13-1/4	R	17	✓993144
13-1/4	L	17	✓993154
13-1/8	R	19	✓993145
13-1/8	L	19	✓993155
13	R	21	✓993146
13	L	21	✓993156

Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 102

Use Gearcase Adapter Ring supplied with propeller.

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BALLISTIC™ STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
25' & Up - AL NEW	14	R	10	3	AL		031061
25' & Up - AL	14	R	11	3	AL	48-77338A45	031054
Pontoon	14	R	11	3	AL	48-77338CP1	◆ 031200
25' & Up - AL	14	R	12	3	AL		031060
Pontoon	14	R	12	3	AL		◆ 031201
25' & Up - AL	14	R	13	3	AL	48-77340A45	031055
Pontoon	14	R	13	3	AL	48-77340CP1	◆ 031202
19-24' - AL, SK	13-3/4	R	15	3	AL	48-77342A45	031041
17-20' - AL, SK	13-1/4	R	17	3	AL	48-77344A45	031042
16-19' - AL, SK	13	R	19	3	AL	48-77346A45	031043
15-18' - AL, SK	12-3/4	R	21	3	AL	48-77348A45	031044
High Performance	12-1/2	R	23	3	AL	48-77350A45	✂ 031045
High Performance							

BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
13-5/8	R	15	3	✓335130
13-1/2	R	17	3	✓335131
13-3/8	R	19	3	✓335132
13-1/8	R	21	3	✓335133

BALLISTIC XL Dia.	Rot.	Pitch	Bld#	Part No.
13-1/2	R	22	3	✓335134
13-1/2	R	24	3	✓335135

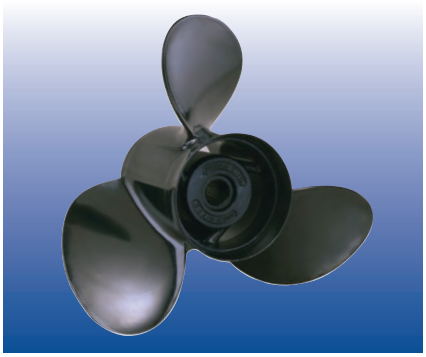
Rubber Hub Bushing

Use OEM fwd washer 13191A1 tab washer 14-816629 or MWC Kit 990332 or 9660-1

See Page 22 for details.

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✓ To avoid damage or injury, replace standard trim tab with trim tab 822777A1.
◆ Pontoon Boat Propellers - Extended Cup!
✂ LIMITED INVENTORY ITEMS.



135-300 HORSEPOWER • V-6 (4-3/4") GEARCASE
Thru Hub Exhaust & 15 Tooth Spline

135 HP .....1987 & Newer
150 HP .....1978 & Newer
175 HP .....1978 & Newer
200 HP .....1978 & Newer
220 HP 1987-88
225 HP .....1980 & Newer
225 HP (Sea Pro/Marathon) .....All Years
250 HP .....1994 & Newer
275 HP 1990-94
300 HP .....1983, 1999 & Newer
350 HP .....2008 & Newer
3.4 Litre 1984-86

Includes DFI, EFI, Magnum, Offshore, Optimax, Sea Pro XRI, & Verado
Use thrust washer 13171 - (See Note **).
Add 4" pitch for twin motors

* For engines 300 HP or higher, use "high horsepower sleeve". See Page 40 for more details.

Drop-In Hub
Use XHS™ Hub Kit 102
Refer to pages 40-41 for more details.

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
15-1/4	R	15	**992002**				
15	R	17	**992003**	15	R	16	**992202**
14-1/2	R	19	**992004**	14-1/2	R	18	**992203**
14-1/4	R	21	**992005**	14	R	20	**992204**
14	R	23	**992006**				

Vortex XHS™ Aluminum Propeller

Apollo XHS™ Stainless Steel

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE				LG. DIAMETER 3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	✓**993042**								
14-3/8	L	15	✓**993052**								
14-1/4	R	17	✓**993043**	15-1/2	R	17	✓**993023**	14-5/8	R	16	✓**993203**
14-1/4	L	17	✓**993053**	15-1/2	L	17	✓**993033**	14-5/8	L	16	✓**993213**
14-1/8	R	19	✓**993044**	15-1/4	R	19	✓**993024**	14-3/8	R	18	✓**993204**
14-1/8	L	19	✓**993054**	15-1/4	L	19	✓**993034**	14-3/8	L	18	✓**993214**
14	R	21	✓**993045**	14-3/4	R	21	✓**993025**	14-1/8	R	20	✓**993205**
14	L	21	✓**993055**	14-3/4	L	21	✓**993035**	14-1/8	L	20	✓**993215**
13-7/8	R	23	✓**993046**	14-5/8	R	23	✓**993026**	14	R	22	✓**993206**
13-7/8	L	23	✓**993056**	14-5/8	L	23	✓**993036**	14	L	22	✓**993216**

Rubber Hub Bushing
Use OEM fwd washer 12-835467 aft wash 12-31211A3 tab washer 14-816629 or MWC Kit 990312 or 9661-1
See Page 22 for details.

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS							BALLISTIC STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS									
								BALLISTIC					BALLISTIC XL				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
CR, HB	16	R	12	3	AL	48-16436A45	✂ **031063**										
CR, HB	16	R	13	3	AL	48-78114A45	**031022**										
22-25' - AL	16	R	14	3	AL	48-16438A45	**031050**										
21-24' - AL	15-1/4	R	15	3	AL	48-78116A45	**031023**	14-7/8	R	15	3	✓ **345131**					
20-23' - AL, SK	16	R	16	3	AL	48-16440A45	**031051**										
19-23' - AL, SK	14-1/2	R	17	3	AL	48-832828A45	**031024**	14-3/4	R	17	3	✓ **345132**					
19-23' - AL, SK	15	R	17	3	AL	48-832828A45	**031064**	14-3/4	L	17	3	✓ **345162**					
19-22' - AL, SK	15-1/2	R	18	3	AL	48-11324A45	**031052**										
18-22' - AL, SK	14	R	19	3	AL	48-832830A45	**031025**	14-1/2	R	19	3	✓ **345133**					
18-22' - AL, SK	14-1/2	R	19	3	AL	48-832830A45	**031065**	14-1/2	L	19	3	✓ **345163**					
18-20' - AL, SK	13-3/4	R	21	3	AL	48-832832A45	**031026**	14-3/8	R	21	3	✓ **345134**					
18-20' - AL, SK	14-1/4	R	21	3	AL	48-832832A45	**031066**	14-3/8	L	21	3	✓ **345164**					
17-20' - AL, SK								14-1/4	R	23	3	✓ **345135**					
17-20' - AL, SK								14-1/4	L	23	3	✓ **345165**					
Up to 18'	13-3/8	R	25	3	AL	48-78126A45	✂ **031067**	14-1/4	R	25	3	✓ **345136**					
High Performance													14-1/2	R	22	3	✓ **345141**
High Performance													14-1/2	R	24	3	✓ **345137**
High Perf. (EFI Engine)													14	R	24	3	✓ **345139**
High Performance													14-1/2	R	26	3	✓ **345138**
High Perf. (EFI Engine)													14	R	26	3	✓ **345140**
High Performance 4 Blade Propellers																	
50-62 MPH													13-3/4	R	23	4	✓ **435135**
55-67 MPH													13-3/4	R	25	4	✓ **435136**
60-72 MPH													13-3/4	R	27	4	✓ **435137**

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS. ✓ To avoid damage or injury, replace standard trim tab with trim tab 822777A1.
** 13171 Forward Thrust Washers are for 1983 & Newer applications (Michigan Match props only). This is equivalent to the 12-835467 indicated on page 22.

Replacing a Flo-Torq™ Hub with Michigan Propellers

Replacing a Flo-Torq II™ Drop In Hub Design with Michigan Propellers

Propellers supplied from Mercury™, Mariner™ and Force® since 1996 come with Flo-Torq II™ drop in hubs equipped with attaching hardware A,B,C,F & G per the following illustrations. When switching to Michigan Match®, Ballistic® or Rapture™ propellers, change the attaching hardware set up as follows.

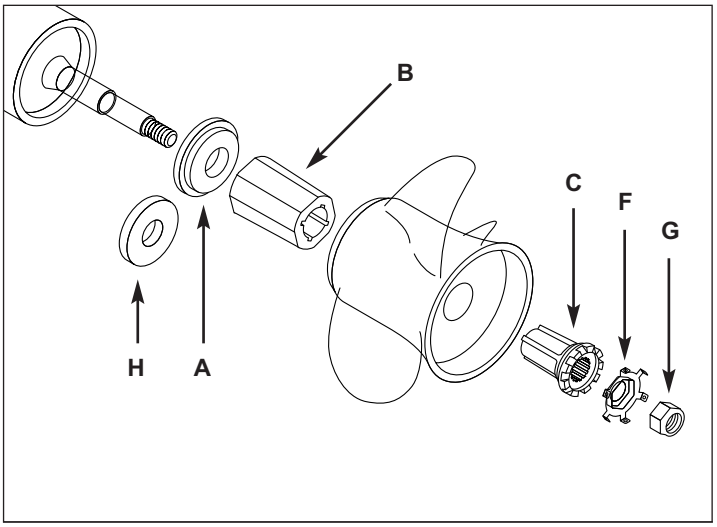
When converting to a Michigan Propeller on a **V-4 gearcase**, eliminate B & C, replace A with H and use existing hardware F & G.

When converting to a Michigan Propeller on a **V-6 gearcase**, eliminate B & C and use A, D, E, F & G as attaching hardware (D & E replaces C). Be sure to use high-performance trim tab 822777A1 for stainless steel installations.

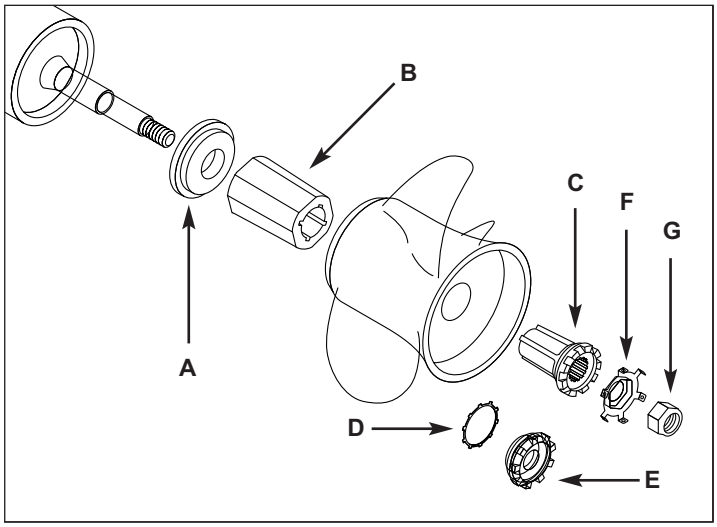
Michigan Wheel offers the following attaching hardware kits for these installations:

990312	Includes D & E for the V-6 gearcase.
990332	Includes Forward Thrust Washer H for V-4 gearcase.
9661-1	Includes A, D, E, F & G for the V-6 gearcase.
9660-1	Includes H, F & G for the V-4 gearcase.

V-4 Gearcase
Example part No. 031042



V-6 & Sterndrive Gearcase
Example Part No. 031025



A) 12-835467 Forward Thrust Washer
B) 827703 Plastic Drive Sleeve
C) 826074-1 Metal Sleeve adapter
D) 13-42351-1 Conductivity (star) washer
E) 12-31211A2 Aft Castle Thrust Washer
F) 14-816629 Locking Tab Washer
G) 11-827614 Shaft Prop Nut
H) 13191A1 Forward Thrust Washer

9.9-20 HORSEPOWER
Thru Hub Exhaust & 14 Tooth Spline

9.9 HP . . . . . .1984 & Newer
9.9 HP (4-Stroke) . . . . . .2000 & Newer
12 HP 1985-88
15 HP (4-Stroke) . . . . . .2000 & Newer
15, 18 HP . . . . . .1985 & Newer
18 HP (4-Stroke) 2001-08
20 HP (4-Stroke) . . . . . .2007 & Newer

MICHIGAN MATCH REPLACEMENT PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
12-16' - AL	9.2	R	8.4	3	AL	362-64102-0	**142017**

142017

Rubber Hub Bushing

25-30 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 10 Tooth Spline

25 HP . . . . . .1986 & Newer
25 HP (4-Stroke) . . . . . .2002 & Newer
30 HP . . . . . .1985 & Newer
30 HP (4-Stroke) . . . . . .2002 & Newer

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.
16-20' - AL	10-1/2	R	9	**992501**
14-18' - AL	10-1/2	R	10	**992502**
14-18' - AL	10-1/2	R	11	**992503**
14-18' - AL	10-1/8	R	12	**992504**
12-16' - AL	10-1/8	R	13	**992505**
12-16' - AL	10-1/8	R	14	**992506**

992504

Vortex XHS™
Aluminum Propeller

Drop-In Hub

Use XHS™ Hub Kit 122

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS

BALLISTIC STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
16-20' - AL	10.2	R	8.3	3	AL	346-64106-5	**142020**					
12-16' - AL								10-1/8	R	13	3	**305429**
12-16' - AL								10-1/8	R	15	3	**305430**

Ballistic High Performance Stainless Steel Propeller

Rubber Hub Bushing

35-50 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

35 HP (35B only) . . . . . .Thru 1984
40 HP . . . . . .1984 & Newer
50 HP (All series except 50C) . . . . . .1992 & Newer

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS

APOLLO XHS™ ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH		3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
						11-1/2	R	8	**992401**				
	NEW	12-1/4	R	9	**992601**	11-1/2	R	9	**992402**				
20' & Up	NEW	11-3/4	R	10	**992602**	11-1/2	R	10	**992403**				
17-21' - AL	NEW	11-5/8	R	11	**992603**								
16-17' - AL	NEW	11-3/8	R	12	**992604**					10-3/4	R	12	**993405**
14-16' - AL	NEW	11-1/8	R	13	**992605**					10-1/2	R	13	**993406**
12-14' - AL	NEW	11-1/4	R	14	**992606**					10-3/8	R	14	**993407**
Up to 13' - AL		10	R	15	**992408**					10-1/8	R	15	**993408**
		10	R	16	**992409**								

Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 116

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
20' & Up - AL							
17-21' - AL	10.6	R	11.3	3	AL	361-64113-0	**142001**
16-17' - AL	10.6	R	11.7	3	AL	361-64114-0	✂ **142002**
14-16' - AL							
12-14' - AL	10.2	R	13.9	3	AL	348-64103-0	✂ **142004**
Up to 13' - AL							

142001

Rubber Hub Bushing

✂ LIMITED INVENTORY ITEMS.

50-70 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

50 HP (50C only) 1987-91
55 HP 1981-88
60A . . . . . .1986 & Newer
70A & 70B . . . . . .1981 & Newer

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.
					11-1/2	R	8	**992401**
					11-1/2	R	9	**992402**
					11-1/2	R	10	**992403**
15-18' -AL, SK	11-3/4	R	13	**992301**				
14-17' - AL, SK	11-3/4	R	15	**992302**				
13-15' - AL, SK	11-3/4	R	17	**992303**				

992302
Vortex XHS™
Aluminum Propeller

992402
Vortex XHS™
Aluminum Propeller

Drop-In Hub
Use XHS™ Hub Kit
112

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
CR, HB	11.6	R	11	3	AL	353-64103-0	✂ **142005**					
14-17' - AL, SK	11	R	15	3	AL	353-64107-0	✂ **142007**	12-3/8	R	15	3	**325030**
13-15' - AL, SK	10.7	R	16.4	3	AL	353-64108-0	✂ **142008**					
12-14' - AL, SK	10.9	R	17.6	3	AL	353-64109-0	✂ **142009**	12	R	17	3	**325031**

Ballistic
Stainless Steel
Propeller

Rubber Hub Bushing

60-140 HORSEPOWER • 4-1/4" GEARCASE
Thru Hub Exhaust & 15 Tooth Spline

60C (Large Gearcase) . . . . . .Thru 1999
70C (Large Gearcase) . . . . . .Thru 2002
90 HP . . . . . .1987 & Newer
115 HP . . . . . .1992 & Newer
120 HP . . . . . .1988 & Newer
140 HP . . . . . .1988 & Newer

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS — APOLLO XHS ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
NEW	14	R	10	**992109**				
	14	R	13	**992112**				
19-22' - AL, SK	13-3/4	R	15	**992113**	13-3/8	R	15	**993143**
19-22' - AL, SK					13-3/8	L	15	**993153**
18-21' - AL, SK	13-1/4	R	17	**992114**	13-1/4	R	17	**993144**
18-21' - AL, SK					13-1/4	L	17	**993154**
17-20' - AL, SK	13	R	19	**992115**	13-1/8	R	19	**993145**
17-20' - AL, SK					13-1/8	L	19	**993155**
15-18' - AL, SK	12-3/4	R	21	**992116**	13	R	21	**993146**
15-18' - AL, SK					13	L	21	**993156**

Vortex XHS
Aluminum Propeller

Apollo XHS
Stainless Steel

Drop-In Hub
Use XHS™ Hub Kit
109

Use Gearcase Adapter Ring supplied with propeller.

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
20-24' - AL, SK								13-5/8	R	15	3	**335930**
17-19' - AL, SK								13-1/2	R	17	3	**335931**
16-18' - AL, SK								13-3/8	R	19	3	**335932**
15-18' - AL, SK	12.5	R	19.9	3	AL	3B7-64545-0	✂ **142013**					
15-18' - AL, SK								13-1/8	R	21	3	**335933**

Rubber Hub Standard OEM
Replacement Aluminum

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS.

9.9-15 HORSEPOWER
Thru Hub Exhaust & 10 Tooth Spline

DT 9.9 1983-87
DF 9.9 (4-Stroke) . . . . . .1997 & Newer
DT 15 1983-88
DT 15C 1989-97
DF 15 (4-Stroke) . . . . . .1997 & Newer

MICHIGAN MATCH REPLACEMENT PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
14-18' - AL	9-1/4	R	9	3	AL	58100-93763-019	**062016**
14-16' - AL	9-1/4	R	11	3	AL		✂ **062017**

Rubber Hub Bushing

25-30 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 10 Tooth Spline

DT 25C . . . . . .1989 & Newer
DT 20, 25 1987-88
DT 20, 25 ∅ 1983-86
DT 30, 30C 1987-97
DT 30 ∅. 1983-86
DF 25 (4-Stroke) . . . . . .2000 & Newer
DF 30 (4-Stroke) 2000-07

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.
	10-1/2	R	9	**992501**
	10-1/2	R	10	**992502**
16-18' - AL	10-1/2	R	11	**992503**
14-16' - AL	10-1/8	R	12	**992504**
14-16' - AL	10-1/8	R	13	**992505**
	10-1/8	R	14	**992506**

992504

Vortex XHS™
Aluminum Propeller

Drop-In Hub

Use XHS™ Hub Kit 121

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC™ STAINLESS STEEL PROPS

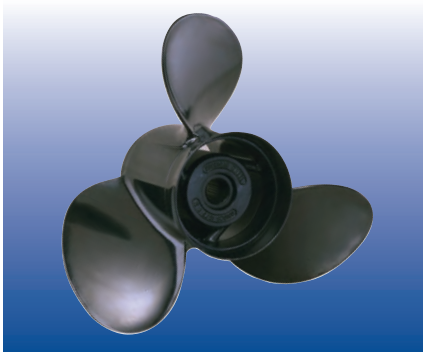
BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
14-16' - AL								10-1/8	R	13	3	**305529**
14-16' - AL								10-1/8	R	15	3	**305530**

Ballistic
Stainless Steel
Propeller

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

∅ Use stopper 57632-96400 (for rubber hub prop only). ✂ LIMITED INVENTORY ITEMS.



MICHIGAN MATCH REPLACEMENT PROPELLERS

VORTEX XHS™ PERFORMANCE PROPELLERS

BALLISTIC™ STAINLESS STEEL PROPS

35-65 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

DT 35C 1987-90
DT 40 .....1983 & Newer
DT 50 & 50M 1983-84
DT 55 1985-97
DT 60 1983-84
DT 65 1985-97
DF 40 (4-Stroke) .....1999 & Newer
DF 50 (4-Stroke) .....1999 & Newer

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

APOLLO XHS — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH		3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
						11-1/2	R	8	**992401**				
18-21' - AL	NEW	12-1/4	R	9	**992601**	11-1/2	R	9	**992402**				
18-21' - AL	NEW	11-3/4	R	10	**992602**	11-1/2	R	10	**992403**				
17-19' - AL	NEW	11-5/8	R	11	**992603**								
16-18' - LL	NEW	11-3/8	R	12	**992604**					10-3/4	R	12	**993405**
14-16' - LL	NEW	11-1/8	R	13	**992605**					10-1/2	R	13	**993406**
12-14' - LL	NEW	11-1/4	R	14	**992606**					10-3/8	R	14	**993407**
12-14' - LL		10	R	15	**992408**					10-1/8	R	15	**993408**
12-14' - LL		10	R	16	**992409**								

Apollo XHS Stainless Steel

Drop-In Hub
Use XHS™ Hub Kit 115

Refer to pages 40-41 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH		ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
18-21' - AL	NEW	12-1/4	R	9	3	AL		**032046**					
18-21' - AL		11-3/4	R	10	3	AL	58100-95212-019	**032045**					
17-19' - AL		12	R	11	3	AL	58100-95222-019	**032044**					
16-18' - LL		11-3/8	R	12	3	AL	58100-95393-019	**032043**					
14-16' - LL		11-1/8	R	13	3	AL	58100-94313-019	**032042**	10-1/8	R	13	3	**395929**
12-14' - LL		11-1/4	R	14	3	AL	58100-95353-019	**032041**					
12-14' - LL		11	R	15	3	AL	58100-95363-019	**032040**	10-1/8	R	15	3	**395930**

Ballistic High Performance Stainless Steel Propeller

Rubber Hub Bushing

60-140 HORSEPOWER • 4-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

DF 60, 70 (4-Stroke) .....1998 & Newer
DT 75 1992-97
DT 75 1983-91
DT 85 .....1992 & Newer
DT 85 1979-91
DT 90 1989-2000
DT 100 .....1989 & Newer
DT 115, 140 .....1992 & Newer
DT 115, 140 1981-91

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

APOLLO XHS — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
NEW	14	R	10	**992109**				
	14	R	13	**992112**				
19-22' - Runabouts, SK	13-3/4	R	15	**992113**	13-3/8	R	15	**993143**
19-22' - Runabouts, SK					13-3/8	L	15	**993153**
18-21' - Runabouts, SK	13-1/4	R	17	**992114**	13-1/4	R	17	**993144**
18-21' - Runabouts, SK					13-1/4	L	17	**993154**
17-20' - Runabouts, SK	13	R	19	**992115**	13-1/8	R	19	**993145**
17-20' - Runabouts, SK					13-1/8	L	19	**993155**
15-18' - Runabouts, SK	12-3/4	R	21	**992116**	13	R	21	**993146**
15-18' - Runabouts, SK					13	L	21	**993156**

Vortex XHS Aluminum Propeller

Apollo XHS Stainless Steel

Drop-In Hub
Use XHS™ Hub Kit 110

Do NOT use Gearcase Adapter Ring supplied with propeller.

Refer to pages 40-41 for more details.

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

70-140 HORSEPOWER (4-STROKE) • 4-1/4" GEARCASE
Thru Hub Exhaust & 15 Tooth Spline

DF 70 (4-Stroke) . . . . . .2009 & Newer
DF 80 (4-Stroke) . . . . . .2009 & Newer
DF 90 (4-Stroke) . . . . . .2001 & Newer
DF 100 (4-Stroke) . . . . . .2009 & Newer
DF 115 (4-Stroke) . . . . . .2001 & Newer
DF 140 (4-Stroke) . . . . . .2002 & Newer

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.
NEW	14	R	10	**992109**
22' - AL	14	R	13	**992112**
19-22' - AL, SK	13-3/4	R	15	**992113**
19-22' - AL, SK				
18-21' - AL, SK	13-1/4	R	17	**992114**
18-21' - AL, SK				
17-20' - AL, SK	13	R	19	**992115**
17-20' - AL, SK				
15-18' - AL, SK	12-3/4	R	21	**992116**
15-18' - AL, SK				

Vortex XHS Aluminum Propeller

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE Dia.	Rot.	Pitch	Part No.
13-3/8	R	15	**993143**
13-3/8	L	15	**993153**
13-1/4	R	17	**993144**
13-1/4	L	17	**993154**
13-1/8	R	19	**993145**
13-1/8	L	19	**993155**
13	R	21	**993146**
13	L	21	**993156**

Apollo XHS Stainless Steel

Drop-In Hub
Use XHS™ Hub Kit
125 & 126
Refer to pages 40-41 for more details.

Note: For 140 HP 4-Stroke applications use XHS™ (Drop-in Hub) Kit # 126. Use Gearcase Adapter Ring supplied with propeller.
For all other applications use XHS™ (Drop-in Hub) Kit # 125.

MICHIGAN MATCH REPLACEMENT PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
20-24' - AL, SK NEW	14	R	15	3	AL	58100-90J41-019	**061020**
17-19' - AL, SK NEW	14	R	17	3	AL	58100-90J01-019	**061024**
16-18' - AL, SK NEW	14	R	19	3	AL	58100-90J11-019	**061028**
15-18' - AL, SK NEW	14	R	21	3	AL	58100-90J21-019	**061032**

Michigan Match Aluminum Propeller

Rubber Hub Bushing

150-300 HORSEPOWER • 4-3/4" GEARCASE
Thru Hub Exhaust & 15 Tooth Spline

DT 150 . . . . . .1986 & Newer
DF 150 . . . . . .2006 & Newer
DT 175 1986-92
DF 175 . . . . . .2006 & Newer
DT 200 . . . . . .1986 & Newer
DF 200 * . . . . . .2004 & Newer
DT 225 . . . . . .1986 & Newer
DF 225 * . . . . . .2004 & Newer
DF 250 * . . . . . .2004 & Newer
DF 300 * . . . . . .2007 & Newer

* Listed propeller diameters are slightly less than original equipment propellers.

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.
15-1/4	R	15	**992002**				
15	R	17	**992003**	15	R	16	**992202**
14-1/2	R	19	**992004**	14-1/2	R	18	**992203**
14-1/4	R	21	**992005**	14	R	20	**992204**
14	R	23	**992006**				

Vortex XHS™ Aluminum Propeller

Apollo XHS™ Stainless Steel

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE Dia.	Rot.	Pitch	Part No.	LG. DIAMETER 3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	**993042**								
14-3/8	L	15	**993052**								
14-1/4	R	17	**993043**	15-1/2	R	17	**993023**	14-5/8	R	16	**993203**
14-1/4	L	17	**993053**	15-1/2	L	17	**993033**	14-5/8	L	16	**993213**
14-1/8	R	19	**993044**	15-1/4	R	19	**993024**	14-3/8	R	18	**993204**
14-1/8	L	19	**993054**	15-1/4	L	19	**993034**	14-3/8	L	18	**993214**
14	R	21	**993045**	14-3/4	R	21	**993025**	14-1/8	R	20	**993205**
14	L	21	**993055**	14-3/4	L	21	**993035**	14-1/8	L	20	**993215**
13-7/8	R	23	**993046**	14-5/8	R	23	**993026**	14	R	22	**993206**
13-7/8	L	23	**993056**	14-5/8	L	23	**993036**	14	L	22	**993216**

Drop-In Hub
Use XHS™ Hub Kit
104
Refer to pages 40-41 for more details.

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

6-8 HORSEPOWER
Thru Hub Exhaust & 7 Tooth Spline

6 HP (2 & 4-Stroke) . . . . . .1986 & Newer 8 HP (2 & 4-Stroke) . . . . . .1986 & Newer

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS						
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
General Usage	8-1/2	R	7-1/2	3	AL	6G1-45943-00-EL	**102002**

102002

Rubber Hub Bushing

8 HORSEPOWER
Non-Thru Hub Exhaust & Pin Drive

8 HP 1976-83

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS						
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
14-16' - AL	8-1/4	R	8	3	AL		**012008**

012008

Rubber Hub Bushing

9.9-20 HORSEPOWER
Thru Hub Exhaust & 8 Tooth Spline

9.9 HP (2 & 4-Stroke) . . . . . .1984 & Newer F15 C . . . . . .2007 & Newer 20 HP (4-Stroke) . . . . . .2007 & Newer
15 HP (2 & 4-Stroke) . . . . . .1984 & Newer

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS						
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
13-17' - HL	9-1/4	R	8	3	AL	683-45947-00-EL	**102003**
12-15' - AL	9-1/4	R	9	3	AL	683-45945-00-EL	**102004**
12-15' - AL	9-1/4	R	10-1/2	3	AL	683-45943-00-EL	**102005**

102003

Rubber Hub Bushing

15-28 HORSEPOWER
Non-Thru Hub Exhaust & Pin Drive

15A & W15 HP . . . . . .1976-83 25 HP 2 Cyl. . . . . .1977-79 28 HP 1976-78
20 HP 1976-78

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS						
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
HB, SB	9-1/4	R	7	3	AL	650-45943-01-36	**012102**
12-14' - HL	9	R	9	3	AL		**012109**
12-14' - HL	9	R	10	3	AL	651-45947-00-36	**012011**
12-14' - AL	9-1/4	R	11	3	AL	653-45941-01-36	**012013**

012011

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

20-30 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 10 Tooth Spline

20 HP 1996-97
25 HP .....1980 & Newer
F25 (4-Stroke) .....1998 - 2006
30 HP .....1979 - 2002

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.
16-18' - AL	10-1/2	R	9	**992501**
14-17' - AL	10-1/2	R	10	**992502**
14-17' - AL	10-1/2	R	11	**992503**
13-16' - LL	10-1/8	R	12	**992504**
14-17'	10-1/8	R	13	**992505**
14-17'	10-1/8	R	14	**992506**

992504

Vortex XHS™
Aluminum Propeller

Drop-In Hub

Use XHS™ Hub Kit 123

Refer to pages 40-41 for more details

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC™ STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
16-18' - AL	9-7/8	R	9	3	AL	664-45941-01-EL	**022001**					
14-17' - AL	9-7/8	R	10-1/2	3	AL	664-45945-00-EL	**022002**					
13-16' - LL	9-3/8	R	12	3	AL	664-45954-01-EL	**022003**					
14-17'								10-1/8	R	13	3	**305929**
14-17'								10-1/8	R	15	3	**305930**

Ballistic High Performance Stainless Steel Propeller

Rubber Hub Bushing

30-60 HORSEPOWER • 3-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

F30 (4-Stroke) 2001-05
40 HP .....1984 & Newer
F40 (4-Stroke) .....1999 & Newer
48 HP .....1995 & Newer
50 HP (Not T50) .....1984 & Newer
F50 (4-Stroke) .....1995 & Newer
55 HP 1976-95
60 HP 1976-91
F60 (4-Stroke) .....1999 & Newer

VORTEX XHS™ HIGH PERFORMANCE ALUMINUM PROPELLERS — APOLLO XHS™ ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.	4-BLADE Dia.	Rot.	Pitch	Part No.	STD 3-BLADE Dia.	Rot.	Pitch	Part No.
					11-1/2	R	8	**992401**				
19-22' - LL **NEW**	12-1/4	R	9	**992601**	11-1/2	R	9	**992402**				
19-22' - LL **NEW**	11-3/4	R	10	**992602**	11-1/2	R	10	**992403**				
17-19' - AL, SK **NEW**	11-5/8	R	11	**992603**								
16-17' - AL, SK **NEW**	11-3/8	R	12	**992604**					10-3/4	R	12	**993405**
14-16' - AL, SK **NEW**	11-1/8	R	13	**992605**					10-1/2	R	13	**993406**
12-14' - LL **NEW**	11-1/4	R	14	**992606**					10-3/8	R	14	**993407**
12-14'- LL	10	R	15	**992408**					10-1/8	R	15	**993408**
12-14'- LL	10	R	16	**992409**								

Apollo XHS Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 117

Refer to pages 40-41 for more details

MICHIGAN MATCH REPLACEMENT PROPELLERS — BALLISTIC™ STAINLESS STEEL PROPS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.
19-22' - LL **NEW**	12-1/4	R	9	3	AL		**032046**					
19-22' - LL	11-3/4	R	10	3	AL		**032045**					
19-22' - LL	12-1/4	R	10	3	AL		✂ **031072**					
17-19' - AL, SK	12	R	11	3	AL	663-45947-00-EL	**032044**					
16-17' - AL, SK	11-3/8	R	12	3	AL	6H5-45952-00-EL	**032043**					
14-16' - AL, SK	11-1/8	R	13	3	AL	6H5-45945-00-EL	**032042**	10-1/8	R	13	3	**395929**
12-14' - LL	11-1/4	R	14	3	AL	663-45958-01-EL	**032041**					
12-14' - LL	11	R	15	3	AL	69W-45943-00-EL	**032040**	10-1/8	R	15	3	**395930**

032042

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS.

50-130 HORSEPOWER • 4-1/4" GEARCASE
Thru Hub Exhaust & 15 Tooth Spline

T50 HP .....1996 & Newer
60 HP .....1992 & Newer
70 HP .....1984 & Newer
75 HP .....1994 & Newer
80 HP 1997
F80 (4-Stroke) 1999-2002
85 HP 1991-97
F90 (4-Stroke) .....1999 & Newer
90 HP .....1984 & Newer
F100 (4-Stroke) .....1999 & Newer
115 HP .....1984 & Newer
F115 (4-Stroke) .....2000 & Newer
130 HP .....1984 & Newer

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE Dia.	Rot.	Pitch	Part No.
25' - AL NEW	14	R	10	992109
22' - AL	14	R	13	992112
20-24' - AL, SK	13-3/4	R	15	992113
20-24' - AL, SK				
17-19' - AL, SK	13-1/4	R	17	992114
17-19' - AL, SK				
16-18' - AL, SK	13	R	19	992115
16-18' - AL, SK				
15-18' - AL, SK	12-3/4	R	21	992116
15-18' - AL, SK				

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE Dia.	Rot.	Pitch	Part No.
13-3/8	R	15	☞993143
13-3/8	L	15	☞993153
13-1/4	R	17	☞993144
13-1/4	L	17	☞993154
13-1/8	R	19	☞993145
13-1/8	L	19	☞993155
13	R	21	☞993146
13	L	21	☞993156

Apollo XHS
Stainless Steel

Drop-In Hub

Use XHS™ Hub Kit 108 & 103

Use Gearcase Adapter Ring supplied with propeller.

Refer to pages 40-41 for more details

Note: For 115 HP, FS 115 (4-Stroke), and 130 HP engine applications, use XHS™ (Drop-In Hub) Kit # 103. For all other engine applications, use XHS™ (Drop-in Hub) Kit # 108. Refer to pages 39-40 for more details. Trim Tab 6E5-45371-10-00 is required when using the Apollo.

MICHIGAN MATCH REPLACEMENT PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
25' - AL	14	R	11	3	AL	6E5-45954-00-EL	101036
22' - AL	13-5/8	R	13	3	AL	6E5-45949-00-EL	101031
20-24' - AL, SK	13-1/2	R	15	3	AL	6E5-45947-00-EL	101032
17-19' - AL, SK	13-1/4	R	17	3	AL	6E5-45945-01-EL	101033
16-18' - AL, SK	13	R	19	3	AL	6E5-45941-00-EL	101034
15-18' - AL, SK	12-5/8	R	21	3	AL	6E5-45943-00-EL	101035
High Performance							
High Performance							

BALLISTIC™ STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BALLISTIC Dia.	Rot.	Pitch	Bld#	Part No.	BALLISTIC XL Dia.	Rot.	Pitch	Bld#	Part No.
13-5/8	R	15	3	335930					
13-1/2	R	17	3	335931					
13-3/8	R	19	3	335932					
13-1/8	R	21	3	335933					
					13-1/2	R	22	3	335934
					13-1/2	R	24	3	335935

Rubber Hub Bushing

80-140 HORSEPOWER
Thru Hub Exhaust & 15 Tooth Spline

80, 90, 115 HP 1978-83
80 HP 1977
140 HP 1978-79

See Mercury 40-140 HP Product Offering on page 20.

150-175 HORSEPOWER
Thru Hub Exhaust & 15 Tooth Spline

150 HP 1979-83
175 HP 1978-79

See Mercury V-6 Product Offering on page 21.

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

☞ Trim Tab 6E5-45371-10-00 is required when using the Apollo propeller on Yamaha V4 engines, 50-130 HP.

150-300 HORSEPOWER • 4-3/4" GEARCASE

Thru Hub Exhaust & 15 Tooth Spline

150 HP .....1986 & Newer
F150 HP (4-Stroke) .....2004 & Newer
175 HP .....1984 & Newer
200 HP .....1984 & Newer
200 HP (VMAX) 2001
F200 (4-Stroke) 2002 & Newer
220 HP (Special) 1984-85
225 HP (Excel) 1987-88
225 HP .....1986 & Newer
F225 (4-Stroke) .....2002 & Newer
250 HP .....1990 & Newer
250 HP (VMAX) 2001
F250 (4-Stroke) .....2002 & Newer
300 HP (HPDI & VMAX) 2004-07

* For engines 300 HP or higher, use "high horseopwer sleeve". See Page 40 for more details.

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
15-1/4	R	15	**992002**				
15	R	17	**992003**	15	R	16	**992202**
14-1/2	R	19	**992004**	14-1/2	R	18	**992203**
14-1/4	R	21	**992005**	14	R	20	**992204**
14	R	23	**992006**				

Vortex XHS™ Aluminum Propeller

Apollo XHS™ Stainless Steel

APOLLO XHS — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE				LG. DIAMETER 3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	**993042**								
14-3/8	L	15	**993052**								
14-1/4	R	17	**993043**	15-1/2	R	17	**993023**	14-5/8	R	16	**993203**
14-1/4	L	17	**993053**	15-1/2	L	17	**993033**	14-5/8	L	16	**993213**
14-1/8	R	19	**993044**	15-1/4	R	19	**993024**	14-3/8	R	18	**993204**
14-1/8	L	19	**993054**	15-1/4	L	19	**993034**	14-3/8	L	18	**993214**
14	R	21	**993045**	14-3/4	R	21	**993025**	14-1/8	R	20	**993205**
14	L	21	**993055**	14-3/4	L	21	**993035**	14-1/8	L	20	**993215**
13-7/8	R	23	**993046**	14-5/8	R	23	**993026**	14	R	22	**993206**
13-7/8	L	23	**993056**	14-5/8	L	23	**993036**	14	L	22	**993216**

Drop-In Hub

Use XHS™ Hub Kit 103

Refer to pages 40-41 for more details

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BALLISTIC STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS							BALLISTIC					BALLISTIC XL				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
20-22' - AL, SK								14-7/8	R	15	3	**345931**					
19-21'- AL, SK	14-1/2	R	17	3	AL	6G5-45947-01-98	**101027**	14-3/4	R	17	3	**345932**					
19-21' - AL, SK								14-3/4	L	17	3	**345962**					
18-20'- AL, SK	14	R	19	3	AL	6G5-45945-01-98	**101028**	14-1/2	R	19	3	**345933**					
18-20' - AL, SK								14-1/2	L	19	3	**345963**					
18-20'- AL, SK								14-3/8	R	21	3	**345934**					
18-20'- AL, SK								14-3/8	L	21	3	**345964**					
18-19' - AL, SK	13-1/2	R	23	3	AL	6G5-45949-00-98	✂ **101030**	14-1/4	R	23	3	**345935**					
Up to 18' - AL, SK								14-1/4	R	25	3	**345936**					
High Performance													14-1/2	R	22	3	**345941**
High Performance													14-1/2	R	24	3	**345937**
High Performance													14-1/2	R	26	3	**345938**
High Performance 4-Blade Propellers																	
High Performance													13-3/4	R	23	4	**435935**
High Performance													13-3/4	R	25	4	**435936**
High Performance													13-3/4	R	27	4	**435937**

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS.

MERCRUISER™, ALPHA ONE™ • BRAVO ONE™ • 4-3/4" GEARCASE

Thru Hub Exhaust & 15 Tooth Spline

MODELS 1A, 1B, 1C . . . . . .
MODELS 120, 140, 145 DTS . . . . . .
MODELS 165, 228, 470, 485, 888, 898
MODELS 225S, 233, 255TRS . . . . .
MODELS 260, 280TRS, 330TRS . . .
120-190 HP Mercruiser™ 1983-85
200-260 HP Mercruiser™ 1983-85

Alpha One™ . . . . . .
2.5L - 5.7L Alpha One™ . . . . . .All Years
6.2L MPI Alpha One™ . . . . . .All Years
262, 350, 354 Magnum . . . . . .All Years
320 EFI Alpha One™ . . . . . .All Years
D2.8L - D7.3L (Diesel) . . . . . .All Years

Bravo One™ (Rubber Hub) (*See Note Below)
320 EFI, 350, 377, 454 Magnum . . . .All Years
5.0L - 7.4L Bravo One™ . . . . . .All Years

* Bravo One & Bravo One X Drives only.

VORTEX™ XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
15-1/4	R	15	**992002**				
15	R	17	**992003**	15	R	16	**992202**
14-1/2	R	19	**992004**	14-1/2	R	18	**992203**
14-1/4	R	21	**992005**	14	R	20	**992204**
14	R	23	**992006**				

Vortex XHS™ Aluminum Propeller

Apollo XHS™ Stainless Steel

APOLLO™ XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE				LG. DIAMETER 3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	✓**993042**								
14-3/8	L	15	✓**993052**								
14-1/4	R	17	✓**993043**	15-1/2	R	17	☞**993023**	14-5/8	R	16	✓**993203**
14-1/4	L	17	✓**993053**	15-1/2	L	17	☞**993033**	14-5/8	L	16	✓**993213**
14-1/8	R	19	✓**993044**	15-1/4	R	19	☞**993024**	14-3/8	R	18	✓**993204**
14-1/8	L	19	✓**993054**	15-1/4	L	19	☞**993034**	14-3/8	L	18	✓**993214**
14	R	21	☞**993045**	14-3/4	R	21	☞**993025**	14-1/8	R	20	✓**993205**
14	L	21	☞**993055**	14-3/4	L	21	☞**993035**	14-1/8	L	20	✓**993215**
13-7/8	R	23	☞**993046**	14-5/8	R	23	☞**993026**	14	R	22	✓**993206**
13-7/8	L	23	☞**993056**	14-5/8	L	23	☞**993036**	14	L	22	✓**993216**

Drop-In Hub

Use XHS™ Hub Kit 102

Refer to pages 40-41 for more details

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BALLISTIC™ STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS							BALLISTIC					BALLISTIC XL				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
Non-Plane Heavy CR	16	R	12	3	AL	48-16436A40	✂ **031063**										
Non-Plane Heavy CR	16	R	13	3	AL	48-78114A40	**031022**										
21-27' - (17-31 MPH)	16	R	14	3	AL	48-16438A40	**031050**										
21-28' - (18-38 MPH)	15-1/4	R	15	3	AL	48-78116A40	**031023**	14-7/8	R	15	3	✓**345131**					
19-26' - (26-35 MPH)	16	R	16	3	AL	48-16440A40	**031051**										
19-26' - (27-45 MPH)	14-1/2	R	17	3	AL	48-78118A40	**031024**	14-3/4	R	17	3	✓**345132**					
19-26' - (27-45 MPH)	15	R	17	3	AL	48-832828A45	**031064**	14-3/4	L	17	3	✓**345162**					
17-25' - (32-42 MPH)	15-1/2	R	18	3	AL	48-11324A45	**031052**										
17-25' - (33-49 MPH)	14	R	19	3	AL	48-78120A40	**031025**	14-1/2	R	19	3	✓**345133**					
17-25' - (33-49 MPH)	14-1/2	R	19	3	AL	48-832830A45	**031065**										
17-25' - (33-49 MPH)								14-1/2	L	19	3	✓**345163**					
Up to 23' - (37-56 MPH)	13-3/4	R	21	3	AL	48-78122A40	**031026**	14-3/8	R	21	3	✓**345134**					
Up to 23' - (37-56 MPH)	14-1/4	R	21	3	AL	48-832832A45	**031066**	14-3/8	L	21	3	✓**345164**					
Up to 20' - (40-62 MPH)	14	R	23	3	AL	48-832834A45	✂ **031068**	14-1/4	R	23	3	✓**345135**					
Up to 20' - (40-62 MPH)								14-1/4	L	23	3	✓**345165**					
Up to 18' - (43-65 MPH)	13-3/8	R	25	3	AL	48-78126A40	✂ **031067**	14-1/4	R	25	3	✓**345136**					

Rubber Hub Bushing

Use OEM
fwd washer 12-835467
aft washer 12-31211A3
tab washer 14-816629
or
MWC Kit 990312
or 9661-1

See Page 22 for details.

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS.
✓ When using Ballistic and Apollo propellers, to avoid damage or injury, replace standard trim tab with trim tab 822777A1.
☞ These applications will require an anode plate 76214Q5 (Quicksilver part number) in place of the 822777A1 trim tab.

BRAVO ONE™ • OVER 365 HP • (SOLID HUB) • 4-3/4" GEARCASE
Thru Hub Exhaust & 15 Tooth Spline

454 Magnum (385 HP) . . . . . .1995 & Newer
496 Magnum (375 HP) . . . . . .All Years
496 Magnum H.O. (425 HP) . . . . . .All Years
502 Magnum (390-415 HP) . . . . . .1990 & Newer
450 HP 1995
465 HP . . . . . .1991 & 94
500 HP . . . . . .1996 & Newer
525 HP (SC) (490-500) . . . . . .1992 & Newer

Apollo — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE				LG. DIAMETER 3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	✓**993042**								
14-3/8	L	15	✓**993052**								
14-1/4	R	17	✓**993043**	15-1/2	R	17	☞**993023**	14-5/8	R	16	✓**993203**
14-1/4	L	17	✓**993053**	15-1/2	L	17	☞**993033**	14-5/8	L	16	✓**993213**
14-1/8	R	19	✓**993044**	15-1/4	R	19	☞**993024**	14-3/8	R	18	✓**993204**
14-1/8	L	19	✓**993054**	15-1/4	L	19	☞**993034**	14-3/8	L	18	✓**993214**
14	R	21	☞**993045**	14-3/4	R	21	☞**993025**	14-1/8	R	20	✓**993205**
14	L	21	☞**993055**	14-3/4	L	21	☞**993035**	14-1/8	L	20	✓**993215**
13-7/8	R	23	☞**993046**	14-5/8	R	23	☞**993026**	14	R	22	✓**993206**
13-7/8	L	23	☞**993056**	14-5/8	L	23	☞**993036**	14	L	22	✓**993216**

Apollo XHS
Stainless Steel

Drop-In Hub
Use XHS™ Hub Kit
102SH
Refer to pages 40-41 for more details

MODEL 400, COBRA® • 4-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

Model 400
2.3 L (120 HP) . . . . . .Thru 1991
2.5 L (120 HP) 1978-84
3.0 L (140 HP) . . . . . .Thru 1989
Cobra®
2.3 L (128 HP) 1988-91
2.5 L (120 HP) 1985-87
3.0 L (140 HP) 1985-87

Vortex XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS
Apollo — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	3-BLADE				STD 3-BLADE			
	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
	14	R	13	**992112**				
19-22' - (24-37 MPH)	13-3/4	R	15	**992113**	13-3/8	R	15	**993143**
19-22' - (24-37 MPH)					13-3/8	L	15	**993153**
17-20' - (30-45 MPH)	13-1/4	R	17	**992114**	13-1/4	R	17	**993144**
17-20' - (30-45 MPH)					13-1/4	L	17	**993154**
16-19' - (36-50 MPH)	13	R	19	**992115**	13-1/8	R	19	**993145**
16-19' - (36-50 MPH)					13-1/8	L	19	**993155**
15-18' - (41-53 MPH)	12-3/4	R	21	**992116**	13	R	21	**993146**
15-18' - (41-53 MPH)					13	L	21	**993156**

Vortex XHS
Aluminum Propeller

Apollo XHS
Stainless Steel

Drop-In Hub
Use XHS™ Hub Kit
106
Do NOT use Gearcase Adapter Ring supplied with propeller.
Refer to pages 40-41 for more details

Michigan Match Replacement Propellers — Ballistic Stainless Steel Props

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS							BALLISTIC				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
WB - (6-16 MPH)	14	R	11	3	AL	382761	**012047**					
CR, HB - (14-26 MPH)	14	R	13	3	AL	391668	**011001**					
19-22' - (24-37 MPH)	13-3/4	R	15	3	AL	391198	**011002**	13-5/8	R	15	3	**335030**
17-20' - (30-45 MPH)	13-1/4	R	17	3	AL	391199	**011003**	13-1/2	R	17	3	**335031**
17-20' - (30-45 MPH)	14	R	17	3	AL	176214	**011024**					
16-19' - (36-50 MPH)	13	R	19	3	AL	390896	**011004**	13-3/8	R	19	3	**335032**
16-19' - (36-50 MPH)	14	R	19	3	AL	176215	**011025**					
15-18' - (41-53 MPH)	12-3/4	R	21	3	AL	389788	**011005**	13-1/8	R	21	3	**335033**

Ballistic
High Performance
Stainless Steel
Propeller

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✓ When using Ballistic and Apollo propellers, to avoid damage or injury, replace standard trim tab with trim tab 822777A1.
☞ These applications will require an anode plate 76214Q5 (Quicksilver part number) in place of the 822777A1 trim tab.

MODEL 800, KING COBRA®, COBRA® , SEA DRIVE® • 4-3/4" Large Gearcase

Thru Hub Exhaust & 15 Tooth Spline

3.0 L - 8.2 L (Non SX Drive) . . . . . .1990-93 5.8 L (Cobra®) . . . . . .1989-93 Sea Drive® 2.0 L - 4.0 L . . . . . .All Years

Includes H.O. & EFI Models

Note: For SX Drive, see Volvo Penta Section on page 37.

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
15-1/4	R	15	**992002**				
15	R	17	**992003**	15	R	16	**992202**
14-1/2	R	19	**992004**	14-1/2	R	18	**992203**
14-1/4	R	21	**992005**	14	R	20	**992204**
14	R	23	**992006**				

Vortex XHS™ Aluminum Propeller

Apollo XHS™ Stainless Steel

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE				LG. DIAMETER 3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	**993042**								
14-3/8	L	15	**993052**								
14-1/4	R	17	**993043**	15-1/2	R	17	**993023**	14-5/8	R	16	**993203**
14-1/4	L	17	**993053**	15-1/2	L	17	**993033**	14-5/8	L	16	**993213**
14-1/8	R	19	**993044**	15-1/4	R	19	**993024**	14-3/8	R	18	**993204**
14-1/8	L	19	**993054**	15-1/4	L	19	**993034**	14-3/8	L	18	**993214**
14	R	21	**993045**	14-3/4	R	21	**993025**	14-1/8	R	20	**993205**
14	L	21	**993055**	14-3/4	L	21	**993035**	14-1/8	L	20	**993215**
13-7/8	R	23	**993046**	14-5/8	R	23	**993026**	14	R	22	**993206**
13-7/8	L	23	**993056**	14-5/8	L	23	**993036**	14	L	22	**993216**

Drop-In Hub

Use XHS™ Hub Kit

100 & 101

Refer to pages 40-41 for more details

Note: For engine applications 1978-1990 use XHS™ (Drop-In Hub) Kit # 101. For engine applications 1991 & Newer, use XHS™ (Drop-In Hub) Kit # 100. Refer to pages 39-40 for more details.

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

BALLISTIC STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS							BALLISTIC					BALLISTIC XL				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
Non-Plane Heavy CR	15-1/2	R	13	3	AL	391536	**011016**										
22-28' - (22-32 MPH)	15-1/2	R	15	3	AL	391535	**011006**										
19-26' - (28-39 MPH)								14-7/8	R	15	3	**345031**					
18-26' - (30-46 MPH)	15	R	17	3	AL	391200	**011007**	14-3/4	R	17	3	**345032**					
18-26' - (30-46 MPH)								14-3/4	L	17	3	**345062**					
17-24' - (36-52 MPH)	14-1/2	R	19	3	AL	391201	**011008**	14-1/2	R	19	3	**345033**					
17-24' - (36-52 MPH)								14-1/2	L	19	3	**345063**					
16-22' - (40-60 MPH)	14-1/4	R	21	3	AL	391202	**011009**	14-3/8	R	21	3	**345034**					
16-22' - (40-60 MPH)								14-3/8	L	21	3	**345064**					
15-20' - (45-66 MPH)	14-1/4	R	23	3	AL	391203	**011010**	14-1/4	R	23	3	**345035**					
15-20' - (45-66 MPH)								14-1/4	L	23	3	**345065**					
High Perf. (50-66 MPH)								14-1/4	R	25	3	**345036**					

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

MODEL 14 LARGE GEARCASE 1967-77
Non-Thru Hub Exhaust & Pin Drive

Suggestion: For twin installation increase pitch 2".
HP RANGE: 120-245

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS						
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.
HP Range: 120-245	14	R	14	3	AL	381185	**012091**
	14	R	16	3	AL	381186	**012092**

012091

Rubber Hub Bushing

SEA DRIVE® 1982 & NEWER • 4-1/4" GEARCASE
Thru Hub Exhaust & 13 Tooth Spline

1.6 L V-4 . . . . . .1982 & Newer 1.8 L V-4 . . . . . .1987 & Newer
For twin installation increase p tch 2".

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS							BALLISTIC				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
Barges, HB - (1-18 MPH)	14	R	11	3	AL	382761	**012047**					
26' & Up - (14-28 MPH)	14	R	13	3	AL	391668	**011001**					
22-26' - (24-36 MPH)	13-3/4	R	15	3	AL	391198	**011002**	13-5/8	R	15	3	**335030**
19-22' - (30-40 MPH)	13-1/4	R	17	3	AL	391199	**011003**	13-1/2	R	17	3	**335031**
19-22' - (30-40 MPH)	14	R	17	3	AL	176214	**011024**					
17-20' - (38-50 MPH)	13	R	19	3	AL	390896	**011004**	13-3/8	R	19	3	**335032**
17-20' - (38-50 MPH)	14	R	19	3	AL	176215	**011025**					
15-18' - (44-56 MPH)	12-3/4	R	21	3	AL	389788	**011005**	13-1/8	R	21	3	**335033**

Ballistic High Performance Stainless Steel Propeller

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

VORTEX XHS™ PERFORMANCE PROPELLERS

APOLLO XHS™

BALLISTIC™ STAINLESS STEEL PROPS

AQUAMATIC 200, 250, 270, 275, 280, 290 SP

Motor Horsepower	Gear Ratio	Approximate Boat Length			Houseboats Barges
		Thru 17'	18 - 21'	22 - 25'	
110 - 140 HP	1.35 : 1 1.62 : 1 2.15 : 1	14 x 15 14 x 17 14 x 19	 14 x 15 14 x 17	14 x 15 14 x 17	 15 x 13
150 - 185 HP	1.35 : 1 1.61 : 1 1.89 : 1	14 x 17 14 x 21 14 x 19	14 x 17 14 x 21 14 x 19	15 x 13 15 x 17 15 x 15	 15 x 15 15 x 13
190 - 255 HP	1.35 : 1 1.61 : 1	14 x 21 14 x 23	15 x 19 16 x 17	15 x 17 16 x 17	 16 x 13
230 - 260 HP	1.61 : 1	14 x 23	14 x 23	14 x 23	
290 HP	1.61 : 1	14 x 23	14 x 23	14 x 23	

Volvo Long Hub Aluminum

Volvo Standard Hub Aluminum

Long Hub Propellers

Non-Thru Hub Exhaust & 17 Tooth Spline

Nearest Michigan Match™ OEM Equivalent

Dia. x Pitch	Rot.	Blade #	Aluminum Part No.	
			OEM	Michigan
14 x 17	LH	3	854977-6	✂❖ **082001-1**
14 x 19	RH	3	854993-3	✂❖ **082004-1**
14 x 21	LH	3	854979-2	✂❖ **082009-1**
15 x 21	LH	3	854984-2	✂❖ **082015-1**
16 x 15	RH	3	872001-3	✂❖ **082090-1**
16 x 17	RH	3	872002-1	✂❖ **082092-1**

Standard Hub Propellers

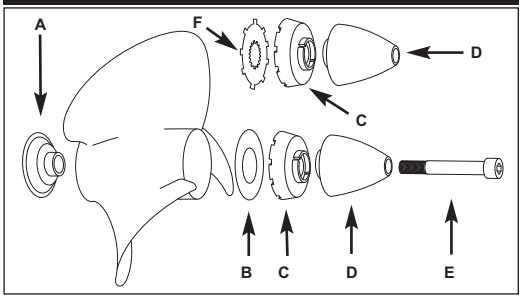
Non-Thru Hub Exhaust & 17 Tooth Spline

Nearest Michigan Match™ OEM Equivalent

Dia. x Pitch	Rot.	Blade #	Aluminum Part No.	
			OEM	Michigan
15 x 13	LH	3	813319-7	✂ **082087-1**
15 x 19	LH	3	-	✂ **082021**

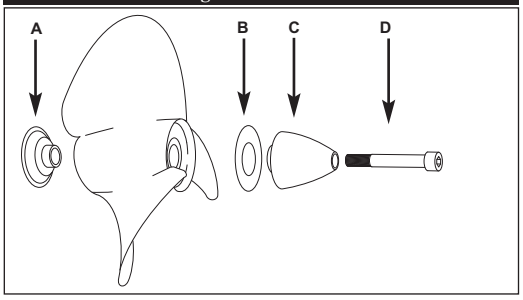
Long Hub Propellers are for use with model 275, 280 & 290 outdrives and late production 270 outdrives which have drilled propeller shaft.
Standard Hub Propeller installations are from outdrive serial #PZ2877179, and are NOT for use with V-6 diesel engines.
Propeller Hardware is available thru Volvo Distributors.
❖ **Note:** Bushings for above propellers suggested for max. 240 HP UNLESS marked with a ❖.
✂ LIMITED INVENTORY ITEMS.

Standard Hub Installation



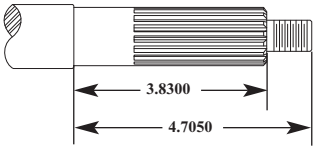
Standard Hub Propeller installations require:
A) Thrust Washer #839534-5 (Depth: 625")
B) Washer #850888-9 or F) Washer #897367-9
C) Spacer Ring #854047-8
D) Propeller Cone #8504045-2
E) Allen bolt #850889-7

Long Hub Installation

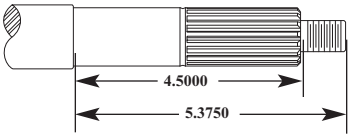


Long Hub Propeller Hardware:
A) Thrust Washer #839423-1 (Depth: 1.3")
B) Washer #850888-9
C) Propeller Cone #8504045-2
D) Allen bolt #850889-7

Volvo Standard Shaft



Volvo Long Shaft



SX COBRA™, VOLVO PENTA SX • 4-3/4" GEARCASE

Thru Hub Exhaust & 19 Tooth Spline

3.0 L . . . . . 1994 & Newer
4.3 L . . . . . 1994 & Newer
5.0 L . . . . . 1994 & Newer
5.7 L . . . . . 1994 & Newer
5.8 L 1994-97
7.4 L . . . . . 1997 & Newer
8.2 L 1997

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
15-1/4	R	15	**992002**				
15	R	17	**992003**	15	R	16	**992202**
14-1/2	R	19	**992004**	14-1/2	R	18	**992203**
14-1/4	R	21	**992005**	14	R	20	**992204**
14	R	23	**992006**				

Vortex XHS™ Aluminum Propeller

Apollo XHS™ Stainless Steel

APOLLO XHS™ — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE				LG. DIAMETER 3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	**993042**								
14-3/8	L	15	**993052**								
14-1/4	R	17	**993043**	15-1/2	R	17	**993023**	14-5/8	R	16	**993203**
14-1/4	L	17	**993053**	15-1/2	L	17	**993033**	14-5/8	L	16	**993213**
14-1/8	R	19	**993044**	15-1/4	R	19	**993024**	14-3/8	R	18	**993204**
14-1/8	L	19	**993054**	15-1/4	L	19	**993034**	14-3/8	L	18	**993214**
14	R	21	**993045**	14-3/4	R	21	**993025**	14-1/8	R	20	**993205**
14	L	21	**993055**	14-3/4	L	21	**993035**	14-1/8	L	20	**993215**
13-7/8	R	23	**993046**	14-5/8	R	23	**993026**	14	R	22	**993206**
13-7/8	L	23	**993056**	14-5/8	L	23	**993036**	14	L	22	**993216**

Drop-In Hub

Use XHS™ Hub Kit 105

Refer to pages 40-41 for more details

BOAT DESCRIPTION/LENGTH	MICHIGAN MATCH ALUMINUM PROPS							BALLISTIC STAINLESS STEEL PROPS BALLISTIC				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
24-28' - (26-36 MPH)	15-1/2	R	15	3	AL	3850299	**161001**	14-7/8	R	15	3	**346031**
22-27' - (34-44 MPH)	15	R	17	3	AL	3850300	**161002**	14-3/4	R	17	3	**346032**
22-27' - (34-44 MPH)								14-3/4	L	17	3	**346062**
19-25' - (39-50 MPH)	14-1/2	R	19	3	AL	3850301	**161003**	14-1/2	R	19	3	**346033**
19-25' - (39-50 MPH)								14-1/2	L	19	3	**346063**
17-22' - (39-50 MPH)	14-1/4	R	21	3	AL	3850302	**161004**	14-3/8	R	21	3	**346034**
17-22' - (39-50 MPH)								14-3/8	L	21	3	**346064**
17-20' - (44-57 MPH)	14-1/4	R	23	3	AL	3850303	**161005**	14-1/4	R	23	3	**346035**
17-20' - (44-57 MPH)								14-1/4	L	23	3	**346065**

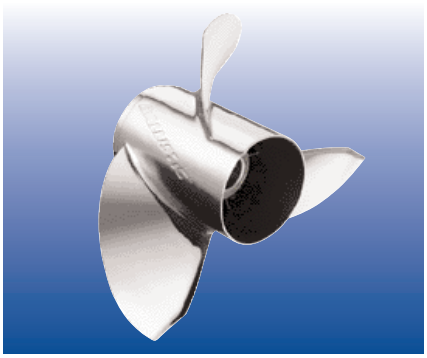
Rubber Hub Standard Replacement Aluminum

Rubber Hub Bushing

Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

VORTEX XHS™ PERFORMANCE PROPELLERS

APOLLO XHS™



BALLISTIC™ STAINLESS STEEL PROPS

YAMAHA STERNDRIVES • 4-3/4" GEARCASE

Thru Hub Exhaust & 15 Tooth Spline

3.0 L (130 HP) EST/PSR 1989-93
4.3 L (205 HP) EST/YEMS/PRS 1989-93
5.0 L (205 HP) EST/PSR/YEMS . . .1989-93
5.7 L (260 HP) EST/PSR/YEMS . . .1989-93
7.4 L (300 HP) HYDRA DRIVE (EST) 1992-93

* For engines 300 HP or higher, use "high horsepower sleeve". See Page 40 for more details.

VORTEX XHS™ — HIGH PERFORMANCE ALUMINUM PROPELLERS

3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
15-1/4	R	15	**992002**				
15	R	17	**992003**	15	R	16	**992202**
14-1/2	R	19	**992004**	14-1/2	R	18	**992203**
14-1/4	R	21	**992005**	14	R	20	**992204**
14	R	23	**992006**				

Vortex XHS™ Aluminum Propeller

Apollo XHS™ Stainless Steel

APOLLO XHS — ULTIMATE PERFORMANCE STAINLESS STEEL PROPELLERS

STD 3-BLADE				LG. DIAMETER 3-BLADE				4-BLADE			
Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.	Dia.	Rot.	Pitch	Part No.
14-3/8	R	15	**993042**								
14-3/8	L	15	**993052**								
14-1/4	R	17	**993043**	15-1/2	R	17	**993023**	14-5/8	R	16	**993203**
14-1/4	L	17	**993053**	15-1/2	L	17	**993033**	14-5/8	L	16	**993213**
14-1/8	R	19	**993044**	15-1/4	R	19	**993024**	14-3/8	R	18	**993204**
14-1/8	L	19	**993054**	15-1/4	L	19	**993034**	14-3/8	L	18	**993214**
14	R	21	**993045**	14-3/4	R	21	**993025**	14-1/8	R	20	**993205**
14	L	21	**993055**	14-3/4	L	21	**993035**	14-1/8	L	20	**993215**
13-7/8	R	23	**993046**	14-5/8	R	23	**993026**	14	R	22	**993206**
13-7/8	L	23	**993056**	14-5/8	L	23	**993036**	14	L	22	**993216**

Drop-In Hub

Use XHS™ Hub Kit 103

Refer to pages 40-41 for more details

MICHIGAN MATCH REPLACEMENT PROPELLERS — ALUMINUM PROPS

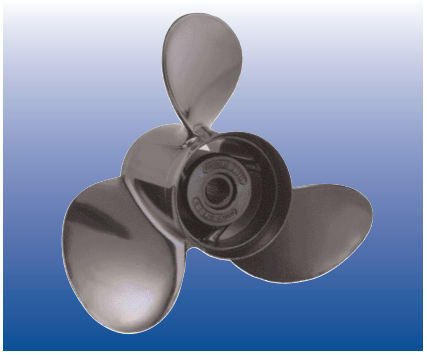
BALLISTIC STAINLESS STEEL PROPS — HIGH PERFORMANCE STAINLESS STEEL PROPELLERS

BOAT DESCRIPTION/LENGTH	ALUMINUM PROPS							BALLISTIC					BALLISTIC XL				
	Dia.	Rot.	Pitch	Bld#	Mat'l	OEM Part No.	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.	Dia.	Rot.	Pitch	Bld#	Part No.
21-26' - (18-31 MPH)								14-7/8	R	15	3	**345931**					
19-23' - (27-37 MPH)	14-1/2	R	17	3	AL	6G5-45947-01-98	**101027**	14-3/4	R	17	3	**345932**					
19-23' - (27-37 MPH)								14-3/4	L	17	3	**345962**					
17-21' - (33-42 MPH)	14	R	19	3	AL	6G5-45945-01-98	**101028**	14-1/2	R	19	3	**345933**					
17-21' - (33-42 MPH)								14-1/2	L	19	3	**345963**					
18-19' - (37-46 MPH)								14-3/8	R	21	3	**345934**					
18-19' - (37-46 MPH)								14-3/8	L	21	3	**345964**					
17-19' - (39-48 MPH)	13-1/2	R	23	3	AL	6G5-45949-00-98	✂ **101030**	14-1/4	R	23	3	**345935**					
17-19' - (39-48 MPH)								14-1/4	L	23	3	**345965**					

Rubber Hub Bushing

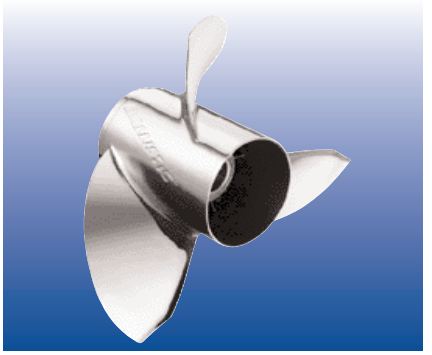
Key to abbreviations: LL = Light Loads; SB = Sailboat; AL = All Loads; SK = Skiboat; WB = Workboat; HB = Houseboat; CR = Cruisers; HL = Heavy Loads; WD = Weedless

✂ LIMITED INVENTORY ITEMS.



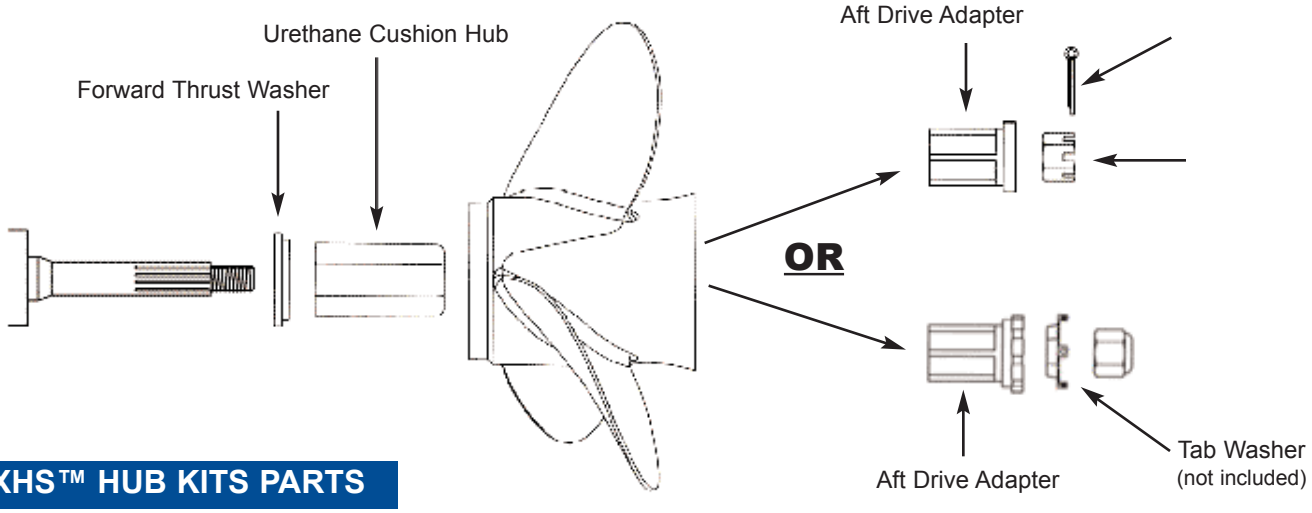
MICHIGAN MATCH REPLACEMENT PROPELLERS

VORTEX XHS™ PERFORMANCE PROPELLERS



BALLISTIC™ STAINLESS STEEL PROPS

XHS™ PROPELLER ACCESSORIES



XHS™ HUB KITS PARTS

Hub Kit	Description	Parts	
V4/V6 & Sterndrive XHS™ Hub Kits			
100	Evinrude/Johnson Outboards - OMC Sterndrives (V6/V8 Gearcase 1991 to present)	**991202** **991201** **991203**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter
100SH	Solid Hub Kit available by special order.		
101	Evinrude/Johnson Outboards - OMC Sterndrives (V6/V8 Gearcase 1984 - 1990)	**991204** **991201** **991203**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter
101SH	Solid Hub Kit available by special order.		
102	Mercruiser Alpha One & Bravo One (less than 400 HP) Mercury/Mariner 60HP Bigfoot, 70-125 HP Mercury/Mariner/Force 135-250 HP Force 90-120 HP Honda Outboards 75-90 HP thru 1998 Yamaha Outboards thru 1983	**991204** **991201** **991205** **990346** **990344**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter Propeller Nut Tab Washer
102SH	Solid Hub Kit available by special order.		
103	Yamaha Outboards & Sterndrives (115-130 HP, 150-250 HP, V6 Gearcase 1984 to present)	**991213** **991201** **991206**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter
103SH	Solid Hub Kit available by special order.		
104	Suzuki Outboards (150-225 HP, V6 Gearcase)	**991207** **991201** **991208**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter
104SH	Solid Hub Kit available by special order.		
105	Volvo SX Sterndrives (19 tooth spline 1994 to present)	**991202** **991201** **991209**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter
105SH	Solid Hub Kit available by special order.		
106	Evinrude/Johnson Outboards - OMC Sterndrives (V4 Gearcase 1968 to present)	**991210** **991201** **991211**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter
106SH	Solid Hub Kit available by special order.		
107	Honda Outboards (115-130 HP 1998 to present, 75-90 HP 1999 to present) 135 & 150 HP 2004 & Newer, 200 & 225 HP 2003 & Newer)	**991207** **991201** **991205**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter
107SH	Solid Hub Kit available by special order.		
108	Yamaha Outboards (50-100 HP, splined front thrust washer)	**991212** **991201** **991206**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter
108SH	Solid Hub Kit available by special order.		
109	Nissan/Tohatsu Outboards (90-140 HP)	**991213** **991201** **991214**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter
109SH	Solid Hub Kit available by special order.		
110	Suzuki V4 Outboards (60-140 HP)	**991215** **991201** **991211**	Forward Thrust Washer Urethane Cushion Hub Aft Drive Adapter
110SH	Solid Hub Kit available by special order.		
125	90-115 4-Stroke Suzuki/Johnson	**991201** **991205** **991253** **990337**	Urethane Cushion Hub Aft Drive Adapter Forward Thrust Washer (1) - Washer SS 32 x 19.2 x 2.5MM
125SH	Solid Hub Kit available by special order.		

NOTE: V4/V6 Solid Hub Kits are available by special order. Add “SH” to end of any V4/V6 Hub kit number to order. Contact Customer Service for details.

XHS™ HUB KITS PARTS

Hub Kit	Description	Parts	
V4/V6 & Sterndrive XHS™ Hub Kits (continued)			
126	140 4-Stroke Suzuki/Johnson	**991201**	Urethane Cushion Hub
		991205	Aft Drive Adapter
		991204	Forward Thrust Washer
		990337	(1) - Washer SS 32 x 19.2 x 2.5MM
126SH	Solid Hub Kit available by special order.		
High Horsepower Inner Hub (Mercury part # 850821A2)		**991272**	Solid Hub
V4 Gearcaser Adapter Ring		**991216**	Adapter Ring
20-70 HP XHS™ Hub Kits			
111	Evinrude/Johnson Outboards (40-70 HP)	**991225**	Urethane Cushion Hub
		991247	Thrust Washer
		991232	Drive Adapter
112	Tohatsu/Nissan Outboards (50-70 HP)	**991225**	Urethane Cushion Hub
		991273	Thrust Washer
		991232	Drive Adapter
113	Honda Outboards (35-50 HP)	**991225**	Urethane Cushion Hub
		991234	Thrust Washer
		991227	Drive Adapter
114	Mercury/Mariner/Force Outboards (30-70 HP)	**991225**	Urethane Cushion Hub
		991236	Thrust Washer
		991227	Drive Adapter
115	Suzuki Outboards (30-70 HP)	**991225**	Urethane Cushion Hub
		991239	ForwardThrust Washer
		991232	Aft Drive Adapter
		990337	(2) - Washer SS 32 x 19.2 x 2.5MM
116	Tohatsu/Nissan Outboards (35-50 HP)	**991225**	Urethane Cushion Hub
		991241	Forward Thrust Washer
		991227	Aft Drive Adapter
		990338	(2) - Washer SS 17 x 30 x 2.5MM
117	Yamaha Outboards (40-60 HP)	**991225**	Urethane Cushion Hub
		991243	ForwardThrust Washer
		991227	Aft Drive Adapter
		990338	(1) - Washer SS 17 x 30 x 2.5MM
118	Evinrude/Johnson Outboards (20-35 HP)	**991225**	Urethane Cushion Hub
		991237	Thrust Washer
		991229	Drive Adapter
119	Honda Outboards (20-30 HP)	**991225**	Urethane Cushion Hub
		991233	Thrust Washer
		991226	Drive Adapter
120	Mercury/Mariner/Force Outboards (18-25 HP)	**991225**	Urethane Cushion Hub
		991235	Thrust Washer
		991228	Drive Adapter
121	Suzuki Outboards (25-30 HP)	**991225**	Urethane Cushion Hub
		991238	Forward Thrust Washer
		991230	Aft Drive Adapter
		990338	(1) - Washer SS 17 x 30 x 2.5MM
122	Nissan/Tohatsu Outboards (25-30 HP)	**991225**	Urethane Cushion Hub
		991240	Thrust Washer
		991226	Drive Adapter
123	Yamaha Outboards (20-30 HP)	**991225**	Urethane Cushion Hub
		991242	Forward Thrust Washer
		991230	Aft Drive Adapter
		990338	(1) - Washer SS 17 x 30 x 2.5MM
20-30 HP Gearcase Adapter Ring		**991244**	Package including all three sizes

NOTE: V4/V6 Solid Hub Kits are available by special order. Add “SH” to end of any V4/V6 Hub kit number to order. Contact Customer Service for details.

PROPELLER CROSS REFERENCE

MWC ALPHA-NUMERIC CROSS REFERENCE
(PAGE B1)

OEM CROSS REFERENCE
(PAGES B2 - B33)

XHS™ HUB SYSTEM TO MERCURY FLO-TORQ™ II HUB SYSTEM CROSS REFERENCE
(PAGE B34)

MICHIGAN WHEEL ALPHA-NUMERIC CROSS REFERENCE

Alpha Numeric	Numeric	
AM431	012067	Obsolete
AMC308	072014	
AMC310	072131	
AMC314	072133	
AMC316	072134	Obsolete
AMC394	072132	
AMC422	012068	Obsolete
AMC490	152002	Obsolete
AMC580-S	032077	Obsolete
DQ320	012074	Obsolete
DQ328	012075	Obsolete
EWC19	012076	Obsolete
G 20	072017	Limited Inv
G 30	152014	Obsolete
NP 74	302001	Obsolete
PC 12	072024	Obsolete
PC 20	072026	Obsolete
PC 28	072122	Obsolete
PC 32	072121	Obsolete
PC112	072123	
PJ 3	012001	Obsolete
PJ 7	012004	Obsolete
PJ 8	012005	
PJ 9	012006	Obsolete
PJ 10	012007	
PJ 11	012008	
PJ 15	012010	Obsolete
PJ 16	012011	
PJ 18	012013	
PJ 19	012109	
PJ 21	012014	Limited Inv
PJ 22	012015	
PJ 24	012016	
PJ 29	012021	
PJ 30	012022	Obsolete
PJ 31	012023	
PJ 32	012024	
PJ 35	012025	Obsolete
PJ 40	012026	Obsolete
PJ 41	012027	Obsolete
PJ 42	012028	Obsolete
PJ 45	012030	
PJ 47	012031	Obsolete
PJ 49	012032	
PJ 50	012033	Obsolete
PJ 58	012036	
PJ 59	012037	
PJ 60	012038	Obsolete
PJ 61	012039	Obsolete
PJ 62	012040	Obsolete
PJ 74	012042	Obsolete
PJ 75	012043	Obsolete
PJ 76	012044	Obsolete
PJ 77	012045	Obsolete
PJ 83-C	011005	
PJ 87	012047	
PJ 88-C	011001	
PJ 89-C	011002	
PJ 90-C	011003	
PJ 91-C	011004	
PJ 94	012053	Obsolete
PJ 95	012054	
PJ 96	012055	
PJ 97	012056	
PJ 98	012057	
PJ199-C	011015	Obsolete
PJ200-C	011016	
PJ201-C	011006	
PJ202-C	011007	
PJ203-C	011008	
PJ204-C	011009	
PJ205-C	011010	Obsolete
PJ300	012060	Obsolete
PM 8	032014	Obsolete
PM 19	032019	Obsolete
PM 20	032020	
PM 21	032021	
PM 22-C	031047	Obsolete
PM 23-C	031048	
PM 24-C	031049	
PM 39	022001	
PM 40	022002	
PM 42	022003	
PM211-C	031021	Obsolete
PM213-C	031022	
PM215-C	031023	
PM217-C	031024	
PM219-C	031025	
PM221-C	031026	
PM223-C	031027	Obsolete
PM311-C	031054	
PM313-C	031055	
PM315-C	031041	
PM317-C	031042	
PM319-C	031043	
PM321-C	031044	Limited Inv
PM323-C	031045	Obsolete
PM513	032039	Obsolete
PM515	032040	
PM518	032041	
PM521	032042	
PM524	032043	
PM527	032044	
PM530	032045	
PM600-C	031015	
PM612-C	031016	
PM613-C	031017	
PM614-C	031018	
PM615-C	031019	
PM617-C	031020	
PR 33	032084	Obsolete
PR 35	032085	Obsolete
PR 37	032086	Obsolete
PR 39	032087	Obsolete
PR 78	072032	Obsolete
PR 80	072033	Obsolete
PR 82	072034	Obsolete
PR115	012089	Obsolete
PR118	012090	Obsolete
PR120	012091	
PR122	012092	
PR124	012093	Obsolete
PR126	012094	Obsolete
PR151	032089	Obsolete
PR153	032090	Obsolete
PR155	032091	Obsolete
PR155-C	031001	Obsolete
PR157	032092	Obsolete
PR157-C	031002	Obsolete
PR159	032093	Obsolete
PR159-C	031003	Obsolete
PR161	032094	Obsolete
PR161-C	031004	Obsolete
PR276	072054	Obsolete
PR278	072055	
PR339	032099	Obsolete
SMC 18	012101	Obsolete
SMC 39	012102	
SMC292	082022	Obsolete
SMC293	082021	
SMC295	082023	Obsolete
SMC348	082033	Obsolete
SMC349	082034	Obsolete
SMC374-C	031035	Obsolete
SMC376-C	031036	Obsolete
SMC378-C	031037	Obsolete
SMC380-C	031038	Obsolete
SMC382-C	031039	Obsolete
SMC504-C	031034	Obsolete
SMC921	082045	Obsolete
SMC980	082057	Obsolete
SPC180	072107	
SPC182	072108	
SPC184	072109	Obsolete
SSC315-C	073002	Obsolete
SSC317-C	073003	Obsolete
SSC319-C	073004	Obsolete
SSM212-C	033001	Obsolete
SSM245-C	033002	Obsolete
SSM247-C	033003	Obsolete
SSM249-C	033004	Obsolete
SSM251-C	033005	Obsolete
SSM253-C	033006	Obsolete
SSM350-C	033007	Obsolete
SSM354-C	033008	Obsolete
SSM358-C	033009	Obsolete
SSM615-C	033016	Obsolete
SSM617-C	033017	Obsolete
SSM619-C	033018	Obsolete
SSM621-C	033019	Obsolete
SSO315-C	013010	Obsolete
SSV171-C	083001	Obsolete
SSV172-C	083002	Obsolete
SSV191-C	083003	Obsolete
SSV192-C	083004	Obsolete
SSV211-C	083005	Obsolete
SSV212-C	083006	Obsolete
SSY615-C	103025	Obsolete
SSY617-C	103026	Obsolete
SSY619-C	103027	Obsolete
SSY717-C	103018	Obsolete
SSY719-C	103020	Obsolete
SSY721-C	103022	Obsolete

MICHIGAN WHEEL OEM CROSS REFERENCE

Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
BRP, EVINRUDE, JOHNSON, OMC									
174811 VIPER™(LH)	345063			993054	993034	993214		See Note 2	9, 34
174812 VIPER™(LH)	345064			993055	993035	993215		See Note 2	9, 34
174813 VIPER™(LH)	345065			993056	993036	993216		See Note 2	9, 34
174814 VIPER™	011008	345033		992004	993044	993024	993204	See Note 2	9, 34
174815 VIPER™	011009	345034		992005	993045	993025	993205	See Note 2	9, 34
174816 VIPER™	011010	345035		992006	993046	993026	993206	See Note 2	9, 34
174889 VIPER™	011007	345032		992003	993043	993023	993203	See Note 2	9, 34
174890 VIPER™(LH)	345062			993053	993033	993213		See Note 2	9, 34
174926 SST II®	011006	345031		992002	993042			See Note 2	9, 34
174927 SST II® (LH)					993052			See Note 2	9, 34
174950	012111								2
175190	012055			992503				118	4
175191	012056	305029		992505				118	4
175738 Renegade™ Bass			435036						9
175739 Renegade™ Bass			435037						9
176058 Renegade™ Bass			435035						9
176196 Renegade™ Bass	011005	335033	335034	992116	993146			106	6, 7, 33
176214	011024	335031		992114	993144			106	6, 7, 33
176215	011025	335032		992115	993145			106	6, 7, 33
176216	011005	335033		992116	993146			106	6, 7, 33
176421	011027	325030		992312				111	5
176422	011028	325031		992303				111	5
176424				992504				118	4
176425				992506				118	4
176571	011002	335030		992113	993143			106	6, 7, 33
176572 SST II®	011003	335031		992114	993144			106	6, 7, 33
176573 SST II®	011004	335032		992115	993145			106	6, 7, 33
176574 SST II®	011005	335033	335034	992116	993146			106	6, 7, 33
176575 Renegade™ O.S.	011007	345032		992003	993043	993023	993203	See Note 2	9, 34
176576 Renegade™ O.S.	011008	345033		992004	993044	993024	993204	See Note 2	9, 34
176577 Renegade™ O.S.	011009	345034		992005	993045	993025	993205	See Note 2	9, 34
176578 Renegade™ O.S.(LH)	345062			993053	993033	993213		See Note 2	9, 34
176579 Renegade™ O.S.(LH)	345063			993054	993034	993214		See Note 2	9, 34
176580 Renegade™ O.S.(LH)	345064			993055	993035	993215		See Note 2	9, 34
176615 Swept-Blade™	011007	345032		992003	993043	993023	993203	See Note 2	9, 34
176616 Swept-Blade™(LH)	345062			993053	993033	993213		See Note 2	9, 34
176617 Swept-Blade™	011008	345033		992004	993044	993024	993204	See Note 2	9, 34
176618 Swept-Blade™(LH)	345063			993054	993034	993214		See Note 2	9, 34
176619 Swept-Blade™	011009	345034		992005	993045	993025	993205	See Note 2	9, 34
176620 Swept-Blade™(LH)	345064			993055	993035	993215		See Note 2	9, 34
176623 VIPER™	011003	335031		992114	993144			106	6, 7, 33
176624 VIPER™	011004	335032		992115	993145			106	6, 7, 33
176625 VIPER™	011005	335033		992116	993146			106	6, 7, 33
176626 VIPER™	011007	345032		992003	993043	993023	993203	See Note 2	9, 34
176627 VIPER™	011008	345033		992004	993044	993024	993204	See Note 2	9, 34
176628 VIPER™	011009	345034		992005	993045	993025	993205	See Note 2	9, 34
176629 VIPER™ (LH)	345062			993053	993033	993213		See Note 2	9, 34
176630 VIPER™ (LH)	345063			993054	993034	993214		See Note 2	9, 34
176902 VIPER™ (LH)	345064			993055	993035	993215		See Note 2	9, 34
176969 SST®	011008	345033		992004	993044	993024	993204	See Note 2	9, 34
176970 SST®	011008	345033		992004	993044	993024	993204	See Note 2	9, 34
176971 SST®	011009	345034		992005	993045	993025	993205	See Note 2	9, 34
176973 SST® (LH)					993053	993033	993213	See Note 2	9, 34
176999 Renegade™ O.S.	011010	345035		992006	993046	993026	993206	See Note 2	9, 34
177000 Renegade™ O.S.(LH)					993056	993036	993216	See Note 2	9, 34
177034 SST®	011002	335030		992113	993143			106	6, 7, 33

MICHIGAN WHEEL OEM CROSS REFERENCE

Original Equipment Manufacturer Part & Trade Mark		Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
BRP, EVINRUDE, JOHNSON, OMC (Continued)										
177035	SST®	011003	335031		992114	993144			106	6, 7, 33
177036	SST®	011004	335032		992115	993145			106	6, 7, 33
177042	VIPER™	011002	335030		992113	993143			106	6, 7, 33
177128	Renegade Bass TBX (4)		435035							9
177129	Renegade Bass TBX (4)		435036							9
177130	Renegade Bass TBX (4)		435037							9
177131		011024	335031		992114	993144			106	6, 7, 33
177134		011007	345032		992003	993043	993023	993203	See Note 2	9, 34
177135		011008	345033		992004	993044	993024	993204	See Note 2	9, 34
177136		011009	345034		992005	993045	993025	993205	See Note 2	9, 34
177137		011010	345035		992006	993046	993026	993206	See Note 2	9, 34
177139		011025	335032		992115	993145			106	6, 7, 33
177140			335033		992116	993146			106	6, 7, 33
177151		011002	335030		992113	993143			106	6, 7, 33
177153		012037			992311				111	5
177159		012111								3
177187		012057								4
177234	Cyclone TBX (4)	011010	345035		992006	993046	993026	993206	See Note 2	9, 34
177235	Cyclone TBX (4) (LH)					993056	993036	993216	See Note 2	9, 34
177258	VIPER™	011002	335030		992113	993143			106	6
177259	VIPER™	011003	335031		992114	993144			106	6
177264	Raker II		345041							9, 34
177265	Raker II		345037							9, 34
177266	Raker II		345038							9, 34
178811	VIPER™ (LH)					993054	993034	993214	See Note 2	9, 34
178814	VIPER™	011008	345033		992004	993044	993024	993204	See Note 2	9, 34
277212		012011								3
277443		012011								3
277580		012024								4
277581		012024								4
277583		012011								3
277599		012011								3
277759		012008								2
375605		012109								3
376506		012011								3
376732		012024								4
376735		012109								3
376737		012011								3
376805		012011								3
376841		012109								3
377410		012023								4
377635		012007								2
377636		012011								3
378581		012023								4
379717		012109								3
380637		012024								4
380958		012005								2
381185		012091								35
381186		012092								35
381801		012011								3
382761		012047								6, 7, 33, 35
382762		011001			992112				106	6, 7, 33
382763		011002	335030		992113	993143			106	6, 7, 33
382764		011003	335031		992114	993144			106	6, 7, 33
382765		011004	335032		992115	993145			106	6, 7, 33
382766		011005	335033		992116	993146			106	6, 7, 33
382768		011005	335033		992116	993146			106	6, 7, 33

MICHIGAN WHEEL OEM CROSS REFERENCE

Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
BRP, EVINRUDE, JOHNSON, OMC (Continued)									
383315	012008								2
383629	012011								3
384139	SST®	011003	335031	992114	993144			106	6, 7, 33
384140	SST®	011005	335033	992116	993146			106	6, 7, 33
384141	SST®	011005	335033	992116	993146			106	6, 7, 33
384142	SST®	011004	335032	992115	993145			106	6, 7, 33
384144	SST®	011002	335030	992113	993143			106	6, 7, 33
384702	SST®	011005	335033	992116	993146			106	6, 7, 33
385319		012005							2
385940	SST®	012008							2
385955		012023							4
386118		012111							3
386317		012054		992501				118	4
386637		012055		992503				118	4
386786		011027	325030	992311				111	5
386841		011028		992312				111	5
386907		012036							5
386909		012037		992301				111	5
386933		012056		992505				118	4
386955		012005							2
386980	SST®	011028	325031	992303				111	5
386981	SST®	011027	325030	992312				111	5
386982	SST®	011035		992311				111	5
387158		011016							9, 34
387159		011006	345031	992002	993042			See Note 2	9, 34
387160		011007	345032	992003	993043	993023	993203	See Note 2	9, 34
387161		011008	345033	992004	993044	993024	993204	See Note 2	9, 34
387162		011009	345034	992005	993045	993025	993205	See Note 2	9, 34
387163		011010	345035	992006	993046	993026	993206	See Note 2	9, 34
387334		012008							2
387519	SST®	011008	345033	992004	993044	993024	993204	See Note 2	9, 34
387520	SST®	011009	345034	992005	993045	993025	993205	See Note 2	9, 34
387636		012056							4
388088		012013							3
388294		012102							3
388883		012016							3
389019	SST II®	011010	345035		993046	993026	993206	See Note 2	9, 34
389068		012021							3
389069		012015							3
389510	SST II®	011004	335032	992115	993145			106	6, 7, 33
389512	SST II®	011005	335033	992116	993146			106	6, 7, 33
389619		012015							3
389788		011005	335033	335034	992116	993146		106	6, 7, 33
389855		012023							4
389923	SST II®	011009	345034	992005	993045	993025	993205	See Note 2	9, 34
389924	SST II®	011008	345033	992004	993044	993024	993204	See Note 2	9, 34
389925	SST®	011007	345032	992003	993043	993023	993203	See Note 2	9, 34
389944		012030							3
389948	SST II®	011003	335031	992114	993144			106	6, 7, 33
389949	SST II®	011002	335030	992113	993143			106	6, 7, 33
390113	SST®	011004	335032	992115	993145			106	6, 7, 33
390114	SST®	011003	335031	992114	993144			106	6, 7, 33
390237		012032							2
390380		012057	305030						4
390725	SST®	345036							9, 34
390729	SST®	305029							4
390730	SST®	305030							4

MICHIGAN WHEEL OEM CROSS REFERENCE

Original Equipment Manufacturer Part & Trade Mark		Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
BRP, EVINRUDE, JOHNSON, OMC (Continued)										
390821	SST II® (LH)	345063			993054	993034	993214		See Note 2	9, 34
390822	SST II® (LH)	345064			993055	993035	993215		See Note 2	9, 34
390823	SST II® (LH)	345065			993056	993036	993216		See Note 2	9, 34
390833		012024								4
390849	SST®	011035			992311				111	5
390850	SST®	011027	325030		992312				111	5
390851	SST®	011028	325031		992303				111	5
390896		011004	335032		992115	993145			106	6, 7, 33
391198		011002	335030		992113	993143			106	6, 7, 33
391199		011003	335031		992114	993144			106	6, 7, 33
391200		011007	345032		992003	993043	993023	993203	See Note 2	9, 34
391201		011008	345033		992004	993044	993024	993204	See Note 2	9, 34
391202		011009	345034	345041	992005	993045	993025	993205	See Note 2	9, 34
391203		011010	345035	345037	992006	993046	993026	993206	See Note 2	9, 34
391290	SST II®	011007	345032		992003	993043	993023	993203	See Note 2	9, 34
391535		011006	345031		992002	993042	993022		See Note 2	9, 34
391536		011016								9, 34
391668		011001								6, 7, 33, 35
393160	Aluminum	011025			992115	993145			106	6, 7, 33
394752	Raker®	011007	345032		992003	993043		993203	See Note 2	9, 34
394753	Raker®	011008	345033		992004	993044		993204	See Note 2	9, 34
394754	Raker®	011009	345034	345041	992005	993045		993205	See Note 2	9, 34
394755	Raker®	011010	345035	345037	992006	993046		993206	See Note 2	9, 34
394756	Raker®		345036	345038					See Note 2	9, 34
394758	Raker®	011003	335031		992114	993144			106	6, 7, 33
394759	Raker®	011004	335032		992115	993145			106	6, 7, 33
394760	Raker®	011005	335033	335034	992115	993146			106	6, 7, 33
394761	Raker®			335035						7
398126		012112								2
398502	Raker® (LH)		345063			993054		993214	See Note 2	9, 34
398503	Raker® (LH)		345064			993055		993215	See Note 2	9, 34
398504	Raker® (LH)					993056		993216	See Note 2	9, 34
431717	SHOOTER®			435035						9
431718	SHOOTER®			435036						9
431930	SST ll® (LH)		345062			993053		993213	See Note 2	9, 34
591920		012024								4
591925		012011								3
592038		012011								3
592959		012011								3
763301		012047								6, 7, 33
763302		011001			992112				106	6, 7, 33
763304			346031		992002	993042	993022		105	37
763305						993052	993032		105	37
763306		161002	346032		992003	993043	993023	993203	105	37
763307			346062			993053	993033	993213	105	37
763308		161003	346033		992004	993044	993024	993204	105	37
763309						993054	993034	993214	105	37
763310		161004	346034		992005	993045	993025	993205	105	37
763311			346064			993055	993035	993215	105	37
763315		161001	346031		992002	993042	993022		105	37
763316		161002	346032		992003	993043	993023	993203	105	37
763317		161003	346033		992004	993044	993024	993204	105	37
763318		161004	346034		992005	993045	993025	993205	105	37
763319		161005	346035		992006	993046	993026	993206	105	37
763453		011016								9, 34
763456		012112								2
763459	Aluminum	012055			992503				118	4

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Original Equipment Manufacturer Part & Trade Mark		Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
BRP, EVINRUDE, JOHNSON, OMC (Continued)										
763460	Aluminum				992504				118	4
763461	Aluminum	012037			992301					5
763462	Aluminum	011028	325031		992303				111	5
763463		011003	335031		992114	993144			106	6, 7, 33
763464		011004	335032		992115	993145			106	6, 7, 33
763465		011005	335033		992116	993146			106	6, 7, 33
763466		011002	335030		992113	993143			106	6, 7, 33
763467		011007	345032		992003	993043	993023	993203	See Note 2	9, 34
763468		011008	345032		992004	993044	993024	993204	See Note 2	9, 34
763469		011009	345033		992005	993045	993025	993205	See Note 2	9, 34
763470			345034		992006	993046	993026	993206	See Note 2	9, 34
763471		011006	345031		992002	993042			See Note 2	9, 34
763486		012057	305030							4
763487	Aluminum	012054			992501				118	4
763488	Aluminum	012036								5
763568	Rebel	011007	345032		992003	993043	993023	993203	See Note 2	9, 34
763569	Rebel (LH)		345062			993053	993033	993213	See Note 2	9, 34
763570	Rebel	011008	345033		992004	993044	993024	993204	See Note 2	9, 34
763571	Rebel (LH)		345063			993054	993034	993214	See Note 2	9, 34
763572	Rebel	011009	345034		992005	993045	993025	993205	See Note 2	9, 34
763573	Rebel (LH)		345064			993055	993035	993215	See Note 2	9, 34
763574	Rebel	011010	345035		992006	993046	993026	993206	See Note 2	9, 34
763575	Rebel (LH)					993056	993036	993216	See Note 2	9, 34
763583		012011								3
763584		012016								3
763585		012021								3
763587		012109								3
763588		012005								2
763589		012015								3
763590		012030								3
763912	Viper TBX		345031			993042			See Note 2	9, 34
763913	Viper TBX (LH)					993052			See Note 2	9, 34
763914	Viper TBX	011007	345032		992003	993043	993023	993203	See Note 2	9, 34
763915	Viper TBX (LH)		345062			993053	993033	993213	See Note 2	9, 34
763918	Viper TBX	011008	345033		992004	993044	993024	993204	See Note 2	9, 34
763919	Viper TBX (LH)		345063			993054	993034	993214	See Note 2	9, 34
763922	Viper TBX	011009	345034		992005	993045	993025	993205	See Note 2	9, 34
763923	Viper TBX (LH)		345064			993055	993035	993215	See Note 2	9, 34
763924	Viper TBX		345041							9, 34
763929	Viper 3	011002	335030		992113	993143			106	6
763930	Viper 3	011003	335031		992114	993144			106	6
763931	Viper 3	011004	335032		992115	993145			106	6
763932	Viper 3	011005	335033		992116	993146			106	6
763938	Cyclone TBX (4)				992202			993203	See Note 2	9, 34
763939	Cyclone TBX (4) (LH)							993213	See Note 2	9, 34
763940	Cyclone TBX (4)				992203			993204	See Note 2	9, 34
763941	Cyclone TBX (4) (LH)							993214	See Note 2	9, 34
763944	Cyclone TBX (4)				992204			993205	See Note 2	9, 34
763945	Cyclone TBX (4) (LH)							993215	See Note 2	9, 34
763950	SS Polished	011002	335030		992113	993143			106	6
763951	SS Polished	011003	335031		992114	993144			106	6
763952	SS Polished	011004	335032		992115	993145			106	6
763956	Raker 3		335035							7
763962	SST TBX		345031		992002	993042			See Note 2	9, 34
763963	SST TBX (LH)					993052			See Note 2	9, 34
763986	Rebel TBX	011007	345032		992003	993043	993023	993203	See Note 2	9, 34
763987	Rebel TBX (LH)		345062			993053	993033	993213	See Note 2	9, 34

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Original Equipment Manufacturer Part & Trade Mark		Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
BRP, EVINRUDE, JOHNSON, OMC (Continued)										
763990	Rebel TBX	011008	345033		992004	993044	993024	993204	See Note 2	9, 34
763991	Rebel TBX (LH)		345063			993054	993034	993214	See Note 2	9, 34
763994	Rebel TBX	011009	345034		992005	993045	993025	993205	See Note 2	9, 34
763995	Rebel TBX (LH)		345063			993055	993035	993215	See Note 2	9, 34
763998	Rebel TBX	011010	345035		992006	993046	993026	993206	See Note 2	9, 34
763999	Rebel TBX (LH)					993056	993036	993216	See Note 2	9, 34
775713		012037			992311				111	5
776891		011001			992112				106	6, 7, 33
777021	SST High Luster	032042	395929		992605	993406			115	5
777022	SST High Luster	032041			992606	993407			115	5
777023	SST High Luster	032040	395930		992408	993408			115	5
777024	SS Polished	061024			992114	993144			See Note 4	8
777025	SS Polished	061028			992115	993145			See Note 4	8
777026	SS Polished	061032			992116	993146			See Note 4	8
777029	SS Polished (LH)					993154			See Note 4	8
777030	SS Polished (LH)					993155			See Note 4	8
777031	SS Polished (LH)					993156			See Note 4	8
778606	4-Stroke	032045								5
778607	4-Stroke	032044			992404				115	5
778608	4-Stroke	032043			992405	993405			115	5
778609	4-Stroke	032042	395929		992406	993406			115	5
778610	4-Stroke	032041			992407	993407			115	5
778703	4-Stroke				992503				121	3
778704	4-Stroke				992504				121	3
778705	4-Stroke		305529		992505				121	3
778706	4-Stroke				992506				121	3
778772		012111								3
778774		011027	325030		992302				111	5
778797		012032								2
778863		012056	305029		992505				118	4
5005384	Aluminum	062016								2
5031619	4-Stroke	032042	395929		992406	993406			115	5
5031627	4-Stroke	032040	395930		992408	993408			115	5
5031628	4-Stroke				992409				115	5
5032107	4-Stroke				992502				121	3
5032108	4-Stroke				992503				121	3
5032109	4-Stroke				992504				121	3
5032110	4-Stroke		305529		992505				121	3
5032171	4-Stroke				992501				121	3
5033201	Aluminum	062016								2
5033322	4-Stroke	061020	335930		992113	993143			See Note 4	8
5033323	4-Stroke	061024	335931		992114	993144			See Note 4	8
5033324	4-Stroke	061028	335932		992115	993145			See Note 4	8
5033325	4-Stroke	061032	335933		992116	993146			See Note 4	8
5033327	4-Stroke	061024	335931		992114	993144			See Note 4	8
5033328	4-Stroke	061028	335932		992115	993145			See Note 4	8
5033329	4-Stroke	061032	335933		992116	993146			See Note 4	8
FORCE, CHRYSLER, U.S. MARINE										
48-16986A45	Vengeance	031041	335130		992113	993143			See Note 3	12, 13
48-16986A5	QSS™	031041	335130		992113	993143			See Note 3	12, 13
48-16988A40	QSS™	031042	335131		992114	993144			See Note 3	12, 13
48-16988A45	Vengeance	031042	335131		992114	993144			See Note 3	12, 13
48-16990A40	Laser II™	031043	335132		992115	993145			See Note 3	12, 13
48-16990A45	Laser II™	031043	335132		992115	993145			See Note 3	12, 13
48-16992A40	Laser II™	031044	335133	335134	992116	993146			See Note 3	12, 13

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
FORCE, CHRYSLER, U.S. MARINE (Continued)									
48-16992A45 Laser II™	031044	335133	335134	992116	993146			See Note 3	12, 13
48-19636A10				992501				120	10
48-19638A40 Black Max™	031049			992503				120	10
48-19639A40 Black Max™				992504				120	10
48-19640A40 Black Max™	031048	305129		992505				120	10
48-19642A40 Black Max™				992506				120	10
48-42738A10 Black Max™	032141								11
48-42740A10 Black Max™	032142								11
48-64724A1	031020								11
48-64724A4	031020								11
48-73132A4	031015								11
48-73132A40 Black Max™	031015								11
48-73134A4 Black Max™	031016			992405	993405			114	11
48-73134A40 Black Max™	031016			992405	993405			114	11
48-73136A4 Black Max™	031017	395129		992406	993406			114	11
48-73136A40 Black Max™	031017	395129		992406	993406			114	11
48-73138A4 Black Max™	031018			992407	993407			114	11
48-73138A40 Black Max™	031018			992407	993407			114	11
48-73140A4 Black Max™	031019	395130		992408	993408			114	11
48-73140A40 Black Max™	031019	395130		992408	993408			114	11
48-73142A40 Black Max™				992409				114	11
48-73144A4 Black Max™	031020								11
48-73144A40 Black Max™	031020								11
48-76228A4 QSS™	031017	395129		992406	993406			114	11
48-76228A5 Vengeance	031017	395129		992406	993406			114	11
48-76230A4 QSS™	031018			992407	993407			114	11
48-76230A5 Vengeance	031018			992407	993407			114	11
48-76232A4 QSS™	031019	395130		992408	993408			114	11
48-76232A5 Vengeance	031019	395130		992408	993408			114	11
48-77338A40 Black Max™	031054								13
48-77338A45 Black Max™	031054								13
48-77338CP1 Pontoon	031200								13
48-77340A40 Black Max™	031055			992112				See Note 3	12, 13
48-77340A45 Black Max™	031055			992112				See Note 3	12, 13
48-77340CP1 Pontoon	031202								13
48-77342A40 Black Max™	031041	335130		992113	993143			See Note 3	12, 13
48-77342A45 Black Max™	031041	335130		992113	993143			See Note 3	12, 13
48-77344A40 Black Max™	031042	335131		992114	993144			See Note 3	12, 13
48-77344A45 Black Max™	031042	335131		992114	993144			See Note 3	12, 13
48-77346A40 Black Max™	031043	335132		992115	993145			See Note 3	12, 13
48-77346A45 Black Max™	031043	335132		992115	993145			See Note 3	12, 13
48-77348A40 Black Max™	031044	335133	335134	992116	993146			See Note 3	12, 13
48-77348A45 Black Max™	031044	335133	335134	992116	993146			See Note 3	12, 13
48-77350A40 Black Max™	031045								13
48-77350A45 Black Max™	031045								13
48-77350A45 Black Max™	031045								13
48-79792A4 QSS™	031016			992405	993405			114	11
48-79792A5 Vengeance	031016			992405	993405			114	11
48-816702A40	031056			992405	993405			114	11
48-816704A40	031057	395129		992406	993406			114	11
48-816706A40	031058			992407	993407			114	11
48-819334A40	072133								11
48-819335A40	072132								11
48-819336A40	072131								11
48-819337A40	072014								10, 11
48-819337A45	072014								10, 11
48-855858A5 Vengeance	031057			992406	993406			114	11

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
FORCE, CHRYSLER, U.S. MARINE (Continued)									
48-85632A40 Black Max™	031053			992404				114	11
48-FP19	072017								10
48-FP488 Black Max™	072123								10
48-FP669-1	071035			992113	993143			102	12
48-FP669-2	071035			992113	993143			102	12
48-FP669-3	071035			992113	993143			102	12
48-FP685-1	071036			992114	993144			102	12
48-FP685-2	071036			992114	993144			102	12
48-FP685-3	071036			992114	993144			102	12
48-FP686-1				992115	993145			102	12
48-FP686-3				992115	993145			102	12
48-FP686-4				992115	993145			102	12
48-FP692-1	072127			992113	993143			102	12
48-FP692-2	072127			992113	993143			102	12
48-FP692-3	072127			992113	993143			102	12
48-FP694				992116	993146			102	12
FA282265	072132								11
FA287265	072131								11
FA378265	072132								11
FP273	072133								11
FP274	072014								10, 11
FP276	072014								10, 11
FP277	072131								11
FP278	072014								10, 11
FP282	072132								11
FP287	072131								11
FP293	072132								11
FP328	072014								10, 11
FP366	072014								10, 11
FP378	072132								11
FP519	072055								12
FP523	072107								12
FP524	072108								12
FP623	072107								12
FP654	072108								12
FP665	071035								12
FP669	071035								12
FP669-1	071035								12
FP682	072127								12
FP685	072128								12
FP685-1	072128								12
FP692	072127								12
FP692-1	072127								12
FPM736	031020								11
FPM738	031019			992408	993408			114	11
FPM752 QSS™	031058	395129		992407	993407			114	11
FPM754 QSS™	031056			992405	993405			114	11
FPM756	031015								11
FPS510	072108								Obsolete
FPS523	072107								12
FPS524	072108								12
FPS623	072107								12
FPS625	072108								12
FPS626	072109								12
FPS654	072108								12

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
HONDA									
08M60-ZW7-A00 Honda "Turbo" 3-Blade	031041	335130		992113	993143			See Note 3	15
08M60-ZW7-A10 Honda "Turbo" 3-Blade	031042	335131		992114	993144			See Note 3	15
08M60-ZW7-A20 Honda "Turbo" 3-Blade	031043	335132		992115	993145			See Note 3	15
08M60-ZW7-A30 Honda "Turbo" 3-Blade	031044	335133		992116	993146			See Note 3	15
08M60-ZW7-B00 Honda "Turbo" 3-Blade (LH)					993153			See Note 3	15
08M60-ZW7-B10 Honda "Turbo" 3-Blade (LH)					993154			See Note 3	15
08M60-ZW7-B20 Honda "Turbo" 3-Blade (LH)					993155			See Note 3	15
08M60-ZW7-B30 Honda "Turbo" 3-Blade (LH)					993156			See Note 3	15
58110-ZV4-300	102005								14
58110-ZV5-E00 Honda "Turbo" 3-Blade	032040	395930		992408	993408			113	15
58110-ZV5-E10 Honda "Turbo" 3-Blade	032041			992407	993407			113	15
58110-ZV5-E20 Honda "Turbo" 3-Blade	032042	395929		992406	993406			113	15
58110-ZV5-E30 Honda "Turbo" 3-Blade	032043			992405	993405			113	15
58130-881-840ZA	012109								14
58130-881-840ZB	012109								14
58130-935-000N	012109								14
58130-935-600N	012109								14
58130-ZV4-000ZA	102005								14
58130-ZV4-008AH Solas Honda	102003								14
58130-ZV4-009AH Solas Honda	102004								14
58130-ZV4-010ZA Solas Honda	102005								14
58130-ZV4-020ZA	102005								14
58130-ZV4-030ZA	102005								14
58130-ZV4-030ZB	102005								14
58130-ZV4-700ZA	102004								14
58130-ZV4-701ZA	102004								14
58130-ZV4-702ZA	102004								14
58130-ZV4-703ZA	102004								14
58130-ZV4-703ZB	102004								14
58130-ZV5-000ZA	032042	395929		992605	993406			113	15
58130-ZV5-011AH Solas Honda	032044			992603	993404			113	15
58130-ZV5-012AH Solas Honda	032043			992604	993405			113	15
58130-ZV5-013AH Solas Honda	032042			992605	993406			113	15
58130-ZV5-014AH Solas Honda	032041			992606	993407			113	15
58130-ZV5-015AH Solas Honda	032040			992408	993408			113	15
58130-ZV5-850ZA	032043			992604	993405			113	15
58130-ZV5-860ZA	032045			992603				113	15
58130-ZV5-870ZA	032040	395930		992408	993408			113	15
58130-ZV7-009AH Solas Honda				992501				119	14
58130-ZV7-010AH Solas Honda				992502				119	14
58130-ZV7-011AH Solas Honda				992503				119	14
58130-ZV7-012AH Solas Honda				992504				119	14
58130-ZV7-013AH Solas Honda		305229		992505				119	14
58130-ZW1-011AH Solas Honda	031054								15
58130-ZW1-013AH Solas Honda	031055			992112				See Note 3	15
58130-ZW1-015AH Solas Honda	031041	335130		992113	993143			See Note 3	15
58130-ZW1-015B Solas Honda (LH)					993153			See Note 3	15
58130-ZW1-017AH Solas Honda	031042	335131		992114	993144			See Note 3	15
58130-ZW1-017B Solas Honda (LH)					993154			See Note 3	15
58130-ZW1-019AH Solas Honda	031043	335132		992115	993145			See Note 3	15
58130-ZW1-021AH Solas Honda	031044	335133	335134	992116	993146			See Note 3	15
58130-ZW1-V01	031042	335131		992114	993144			See Note 3	15
58130-ZW1-V11	031043	335132		992115	993145			See Note 3	15
58130-ZW1-V31	031044	335133	335134	992116	993146			See Note 3	15
58130-ZW1-W01ZA	031054								15
58130-ZW1-W11ZA	031055			992112				See Note 3	15
58130-ZW1-W21ZA	031041	335130		992113	993143			See Note 3	15

MICHIGAN WHEEL OEM CROSS REFERENCE

Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
HONDA (Continued)									
58130-ZW1-W31ZA	031042	335131		992114	993144			See Note 3	15
58130-ZW1-W41ZA	031044	335133	335134	992116	993146			See Note 3	15
58130-ZW1-W51ZA	031045								15
58130-ZW1-W61ZA	031043	335132		992115	993145			See Note 3	15
58130-ZW1-W91	031041	335130		992113	993143			See Note 3	15
58130-ZY3-013A	Solas Honda	031022							16
58130-ZY3-015A	Solas Honda	031023	345131	992002	993042	993022		107	16
58130-ZY3-017A	Solas Honda	031024	345132	992003	993043	993023	993203	107	16
58130-ZY3-017AP	Solas Honda	031064	345132	992003	993043	993023	993203	107	16
58130-ZY3-017B	Solas Honda (LH)	345162			993053	993033	993213	107	16
58130-ZY3-017BP	Solas Honda (LH)	345162			993053	993033	993213	107	16
58130-ZY3-017P	Solas Honda	031064	345132	992003	993043	993023	993203	107	16
58130-ZY3-019A		031025	345133	992004	993044	993024	993204	107	16
58130-ZY3-019AP	Solas Honda	031065	345133	992004	993043	993024	993204	107	16
58130-ZY3-019B	Solas Honda (LH)	345163			993054	993034	993214	107	16
58130-ZY3-021A	Solas Honda	031026	345134	992005	993045	993025	993205	107	16
58130-ZY3-021B	Solas Honda (LH)	345164			993055	993035	993215	107	16
58130-ZY3-023A		345135		992006	993046	993026	993206	107	16
58130-ZY3-15B	Solas Honda (LH)				993052			107	16
58133-ZV4-008AH	Solas "Saturn" 3-Blade	102003							14
58133-ZV4-009AH	Solas "Saturn" 3-Blade	102004							14
58133-ZV4-010AH	Solas "Saturn" 3-Blade	102005							14
58133-ZV5-012AH	Solas "Saturn" 3-Blade	032043		992604	993405			113	15
58133-ZV5-013AH	Solas "Saturn" 3-Blade	032042	395929	992605	993406			113	15
58133-ZV5-014AH	Solas "Saturn" 3-Blade	032041		992606	993407			113	15
58133-ZV5-015AH	Solas "Saturn" 3-Blade	032040	395930	992408	993408			113	15
58133-ZV7-013AH	Solas "Saturn" 3-Blade	305229		992505					14
58133-ZW1-A11P	Solas "New Saturn" Pontoon	031200							15
58133-ZW1-A13P	Solas "New Saturn" Pontoon	031202							15
58133-ZW1-A15AH	Solas "Titan" Perf.	031041	335130	992113	993143			See Note 3	15
58133-ZW1-A15HR	Solas Titan HR3	031041	335130	992113	993143			See Note 3	15
58133-ZW1-A17AH	Solas "Titan" Perf.	031042	335131	992114	993144			See Note 3	15
58133-ZW1-A17HR	Solas Titan HR3	031042	335131	992114	993144			See Note 3	15
58133-ZW1-A19AH	Solas "Titan" Perf.	031043	335132	992115	993145			See Note 3	15
58133-ZW1-A19HR	Solas Titan HR3	031043	335132	992115	993145			See Note 3	15
58133-ZW1-A21HR	Solas Titan HR3	031044	335133	992116	993146			See Note 3	15
58133-ZW1-B15AH	Solas "Titan" Perf. (LH)				993153			See Note 3	15
58133-ZW1-B17AH	Solas "Titan" Perf. (LH)				993154			See Note 3	15
58133-ZW1-B17HR	Solas Titan HR3 (LH)				993154			See Note 3	15
58133-ZW1-B19AH	Solas "Titan" Perf. (LH)				993155			See Note 3	15
58133-ZW1-B19HR	Solas Titan HR3 (LH)				993155			See Note 3	15
58133-ZW1-B21HR	Solas Titan HR3 (LH)				993156			See Note 3	15
58133-ZY3-A15AH	Solas "New Saturn"	031023	345131	992002	993042			107	16
58133-ZY3-A15LX	Solas "Lexor" HP	031024	345132	992003	993043	993023		107	16
58133-ZY3-A15S	Solas "Titan"	031023	345131	992002	993042				16
58133-ZY3-A17AH		031024	345132	992003	993043	993023	993203	107	16
58133-ZY3-A17HR	Solas "HR Titan"	031024	345132	992003	993043	993023	993203	107	16
58133-ZY3-A17LX	Solas "Lexor" HP	031065	345133	992004	993044	993024	993204	107	16
58133-ZY3-A17S	Solas "Titan"	031024	345132	992003	993043	993023	993203	107	16
58133-ZY3-A19AH		031065	345133	992004	993044	993024	993204	107	16
58133-ZY3-A19HR	Solas "HR Titan"	031065	345133	992004	993044	993024	993204	107	16
58133-ZY3-A19LX	Solas "Lexor" HP	031026	345134	992005	993045	993025	993205	107	16
58133-ZY3-A19S	Solas "Titan"	031065	345133	992004	993044	993024	993204	107	16
58133-ZY3-A21AH		031026	345134	992005	993045	993025	993205	107	16
58133-ZY3-A21HR	Solas "HR Titan"	031026	345134	992005	993045	993025	993205	107	16
58133-ZY3-A21LX	Solas "Lexor" HP	345135		992006	993046	993026	993206	107	16
58133-ZY3-A21S	Solas "Titan"	031026	345134	992005	993045	993025	993205	107	16

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
HONDA (Continued)									
58133-ZY3-A23S ....Solas "Titan"		345135		992006	993046	993026	993206	107	16
58133-ZY3-A25AH	031067	345136							16
58133-ZY3-B15AH ...Solas "New Saturn" (LH)					993052			107	16
58133-ZY3-B15LX ...Solas "Lexor" HP (LH)		345162			993053	993033		107	16
58133-ZY3-B17AH ...Solas "New Saturn" (LH)		345162			993053	993033	993213	107	16
58133-ZY3-B17HR ...Solas "HR Titan" (LH)		345162			993053	993033	993213	107	16
58133-ZY3-B17LX ...Solas "Lexor" HP (LH)		345163			993054	993034		107	16
58133-ZY3-B17S ....Solas "Titan" (LH)		345162			993053	993033	993213	107	16
58133-ZY3-B19AH ...Solas "New Saturn" (LH)		345163			993054	993034	993214	107	16
58133-ZY3-B19HR ...Solas "HR Titan" (LH)		345163			993054	993034	993214	107	16
58133-ZY3-B19LX ...Solas "Lexor" HP (LH)		345164			993055	993035		107	16
58133-ZY3-B19S ....Solas "Titan" (LH)		345163			993054	993034	993214	107	16
58133-ZY3-B21AH ...Solas "New Saturn" (LH)		345164			993055	993035	993215	107	16
58133-ZY3-B21HR ...Solas "HR Titan" (LH)		345164			993055	993035	993215	107	16
58133-ZY3-B21LX ...Solas "Lexor" HP (LH)		345165			993056	993036		107	16
58133-ZY3-B21S ....Solas "Titan" (LH)		345164			993055	993035	993215	107	16
58133-ZY3-B23S ....Solas "Titan" (LH)		345165			993056	993036	993216	107	16
58134-ZV5-009AH				992402				113	15
58134-ZV5-010AH				992403				113	15
58134-ZY3-017A ....Solas Honda 4				992202			993203	107	16
58134-ZY3-017B ....Solas Honda 4 (LH)							993213	107	16
58134-ZY3-019A ....Solas Honda 4				992203			993204	107	16
58134-ZY3-019B ....Solas Honda 4 (LH)							993214	107	16
58134-ZY3-021A ....Solas Honda 4				992204			993205	107	16
58134-ZY3-021B ....Solas Honda 4 (LH)							993215	107	16
58134-ZY3-A18HR ...Solas "HR Titan" 4-Bl							993204	107	16
58134-ZY3-A20HR ...Solas "HR Titan" 4-Bl							993205	107	16
58134-ZY3-A21HR ...Solas "HR Titan" 4-Bl							993205	107	16
58134-ZY3-B18HR ...Solas "HR Titan" 4-Bl (LH)							993214	107	16
58134-ZY3-B20HR ...Solas "HR Titan" 4-Bl (LH)							993215	107	16
58134-ZY3-B21HR ...Solas "HR Titan" 4-Bl (LH)							993215	107	16
58233-ZY3-A15H ....Honda "Turbo"	031023	345131		992002	993042			107	16
58233-ZY3-A17H ....Honda "Turbo"	031024	345132		992003	993043	993023	993203	107	16
58233-ZY3-A19H ....Honda "Turbo"	031025	345133		992004	993044	993024	993204	107	16
58233-ZY3-A21H ....Honda "Turbo"	031026	345134		992005	993045	993025	993205	107	16
58233-ZY3-A23H ....Honda "Turbo"	031027	345135		992006	993046	993026	993206	107	16
58233-ZY3-A23HP ...Honda "Turbo" Perf.	031027	345135		992006	993046	993026	993206	107	16
58233-ZY3-A25H ....Honda "Turbo"	031067	345136							16
58233-ZY3-B15H ....Honda "Turbo" (LH)					993052			107	16
58233-ZY3-B17H ....Honda "Turbo" (LH)		345162			993053	993033	993213	107	16
58233-ZY3-B19H ....Honda "Turbo" (LH)		345163			993054	993034	993214	107	16
58233-ZY3-B21H ....Honda "Turbo" (LH)		345164			993055	993035	993215	107	16
58233-ZY3-B23H ....Honda "Turbo" (LH)		345165			993056	993036	993216	107	16
58234-ZY3-A20H ....Honda "Turbo" 4-Bl	031026	345134		992005	993045	993025	993205	107	16
58234-ZY3-A22H ....Honda "Turbo" 4-Bl	031027	345135		992006	993046	993026	993206	107	16
58234-ZY3-A23HP ...Honda "Turbo" 4-Bl Perf.	031027	345135		992006	993046	993026	993206	107	16
58333-ZY3-A15CL ...PowerTech OFS 3-Bl Perf		345131						16	
58333-ZY3-A17CL ...PowerTech OFS 3-Bl Perf	031024	345132		992003	993043	993023	993203	107	16
58333-ZY3-A19CL ...PowerTech OFS 3-Bl Perf	031025	345133		992004	993044	993024	993204	107	16
58333-ZY3-A21CL ...PowerTech OFS 3-Bl Perf	031026	345134		992005	993045	993025	993205	107	16
58333-ZY3-A23CL ...PowerTech OFS 3-Bl Perf	031027	345135		992006	993046	993026	993206	107	16
58333-ZY3-B17CL ...PowerTech OFS 3-Bl Perf (LH)		345162			993053	993033	993213	107	16
58333-ZY3-B19CL ...PowerTech OFS 3-Bl Perf (LH)		345163			993054	993034	993214	107	16
58333-ZY3-B21CL ...PowerTech OFS 3-Bl Perf (LH)		345164			993055	993035	993215	107	16
58333-ZY3-B23CL ...PowerTech OFS 3-Bl Perf (LH)		345165			993056	993036	993216	107	16

MICHIGAN WHEEL OEM CROSS REFERENCE

Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER									
48-11070A40 Laser™		345134	345141		993045	993025	993205	102	21, 32
48-11074A40 Laser™		345135	345137		993046	993026	993206	102	21, 32
48-11320A40 Black Max™	031050			992002	993042			102	21, 32
48-11322A40 Black Max™	031051			992003	993043	993023	993203	102	21, 32
48-11324A40 Black Max™	031052	345133		992004	993044	993024	993204	102	21, 32
48-11324A45 Black Max™	031052	345133		992004	993044	993024	993204	102	21, 32
48-13242A5 Mirage®	031065	345133		992004	993044	993024	993204	102	21, 32
48-13242A50 Mirage®	031065	345133		992004	993044	993024	993204	102	21, 32
48-13243A5 Mirage®(LH)		345164			993055	993035	993215	102	21, 32
48-13243A50 Mirage®(LH)		345164			993055	993035	993215	102	21, 32
48-13244A5 Mirage®	031066	345134		992005	993045	993025	993205	102	21, 32
48-13244A50 Mirage®	031066	345134		992005	993045	993025	993205	102	21, 32
48-13245A5 Mirage®(LH)		345165			993056	993036	993216	102	21, 32
48-13245A50 Mirage®(LH)		345165			993056	993036	993216	102	21, 32
48-13700A46 Mirage Plus						993024		102	21, 32
48-13701A40 Mirage® (LH)		345163							21, 32
48-13701A41 Mirage® (LH)		345163							21, 32
48-13701A45 Mirage®Plus (LH)		345163							21, 32
48-13701A46 Mirage®Plus (LH)		345163			993054	993034	993214	102	21, 32
48-13702A40 Mirage®	031066	345134		992005	993045	993025	993205	102	21, 32
48-13702A41 Mirage®	031066	345134		992005	993045	993025	993205	102	21, 32
48-13702A45 Mirage®Plus	031066	345134		992005	993045	993025	993205	102	21, 32
48-13702A46 Mirage®Plus	031066	345134		992005	993045	993025	993205	102	21, 32
48-13702A55 Mirage®Plus	031066	345134		992005	993045	993025	993205	102	21, 32
48-13703A40 Mirage® (LH)		345164			993055	993035	993215	102	21, 32
48-13703A41 Mirage® (LH)		345164			993055	993035	993215	102	21, 32
48-13703A45 Mirage®Plus (LH)		345164			993055	993035	993215	102	21, 32
48-13703A46 Mirage® Plus (LH)		345164			993055	993035	993215	102	21, 32
48-13703A55 Mirage®Plus (LH)		345164			993055	993035	993215	102	21, 32
48-13704A40 Mirage®		345135		992006	993046	993026	993206	102	21, 32
48-13704A41 Mirage®		345135		992006	993046	993026	993206	102	21, 32
48-13704A45 Mirage®Plus		345135		992006	993046	993026	993206	102	21, 32
48-13704A46 Mirage®Plus		345135		992006	993046	993026	993206	102	21, 32
48-13705A40 Mirage® (LH)		345165			993056	993036	993216	102	21, 32
48-13705A41 Mirage® (LH)		345165			993056	993036	993216	102	21, 32
48-13705A45 Mirage®Plus (LH)		345165			993056	993036	993216	102	21, 32
48-13705A46 Mirage®Plus (LH)		345165			993056	993036	993216	102	21, 32
48-13705A55 Mirage®Plus (LH)		345165							21, 32
48-13706A40 Mirage®		345136							21, 32
48-13706A41 Mirage®		345136							21, 32
48-13706A45 Mirage®Plus		345136							21, 32
48-13706A46 Mirage®Plus		345136							21, 32
48-16312A4 QSS™	031023	345131		992002	993042			102	21, 32
48-16312A45 Vengeance	031023	345131		992002	993042			102	21, 32
48-16312A46 Vengeance	031023	345131		992002	993042			102	21, 32
48-16312A5 QSS™	031023	345131		992002	993042			102	21, 32
48-16314A4 QSS™	031064	345132		992003	993043	993023	993203	102	21, 32
48-16314A45 Vengeance	031064	345132		992003	993043	993023	993203	102	21, 32
48-16314A46 Vengeance	031064	345132		992003	993043	993023	993203	102	21, 32
48-16314A5 QSS™	031064	345132		992003	993043	993023	993203	102	21, 32
48-16315A4 QSS™ (LH)		345162			993053	993033	993213	102	21, 32
48-16315A45 Vengeance (LH)		345162			993053	993033	993213	102	21, 32
48-16315A46 Vengeance (LH)		345162			993053	993033	993213	102	21, 32
48-16315A5 QSS™ (LH)		345162			993053	993033	993213	102	21, 32
48-16316A4 QSS™	031065	345133		992004	993044	993024	993204	102	21, 32
48-16316A45 Vengeance	031065	345133		992004	993044	993024	993204	102	21, 32
48-16316A46 Vengeance	031065	345133		992004	993044	993024	993204	102	21, 32

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)									
48-16316A5 QSS™	031065	345133		992004	993044	993024	993204	102	21, 32
48-16317A4 QSS™ (LH)		345163			993054	993034	993214	102	21, 32
48-16317A45 Vengeance (LH)		345163			993054	993034	993214	102	21, 32
48-16317A46 Vengeance (LH)		345163			993054	993034	993214	102	21, 32
48-16317A5 QSS™ (LH)		345163			993054	993034	993214	102	21, 32
48-16318A4 QSS™	031066	345134		992005	993045	993025	993205	102	21, 32
48-16318A45 Vengeance	031066	345134		992005	993045	993025	993205	102	21, 32
48-16318A46 Vengeance	031066	345134		992005	993045	993025	993205	102	21, 32
48-16318A5 QSS™	031066	345134		992005	993045	993025	993205	102	21, 32
48-16319A4 QSS™ (LH)		345164			993055	993035	993215	102	21, 32
48-16319A45 Vengeance (LH)		345164			993055	993035	993215	102	21, 32
48-16319A46 Vengeance (LH)		345164			993055	993035	993215	102	21, 32
48-16319A5 QSS™ (LH)		345164			993055	993035	993215	102	21, 32
48-16320A4 QSS™		345135		992006	993046	993026	993206	102	21, 32
48-16320A4 QSS™		345135		992006	993046	993026	993206	102	21, 32
48-16320A45 Vengeance		345135		992006	993046	993026	993206	102	21, 32
48-16320A46 Vengeance		345135		992006	993046	993026	993206	102	21, 32
48-16320A5 QSS™		345135		992006	993046	993026	993206	102	21, 32
48-16320A5 QSS™		345135		992006	993046	993026	993206	102	21, 32
48-16321A4 QSS™ (LH)		345165			993056	993036	993216	102	21, 32
48-16321A45 Vengeance (LH)		345165			993056	993036	993216	102	21, 32
48-16321A46 Vengeance (LH)		345165			993056		993216	102	21, 32
48-16321A5 QSS™ (LH)		345165			993056	993036	993216	102	21, 32
48-16322A4 QSS™	031067	345136							21, 32
48-16322A45	031067	345136							21, 32
48-16322A46 Vengeance	031067	345136							21, 32
48-16436A40	031063								21, 32
48-16436A45 Black Max™	031063								21, 32
48-16438A40 Black Max™	031050			992002	993042			102	21, 32
48-16438A45 Black Max™	031050			992002	993042			102	21, 32
48-16440A40 Black Max™	031051			992003	993043	993023	993203	102	21, 32
48-16440A45 Black Max™	031051			992003	993043	993023	993203	102	21, 32
48-16543A40 Laser II™ (LH)		345163			993054	993034	993214	102	21, 32
48-16543A41 Laser II™ (LH)		345163			993054	993034	993214	102	21, 32
48-16543A45 Laser II™ (LH)		345163			993054	993034	993214	102	21, 32
48-16543A46 Laser II™ (LH)		345163			993054	993034	993214	102	21, 32
48-16544A40 Laser II™	031065	345133		992004	993044	993024	993204	102	21, 32
48-16544A41 Laser II™	031065	345133		992004	993044	993024	993204	102	21, 32
48-16544A45 Laser II™	031065	345133		992004	993044	993024	993204	102	21, 32
48-16544A46 Laser II™	031065	345133		992004	993044	993024	993204	102	21, 32
48-16545A40 Laser II™ (LH)		345164			993055	993035	993215	102	21, 32
48-16545A41 Laser II™ (LH)		345164			993055	993035	993215	102	21, 32
48-16545A45 Laser II™ (LH)		345164			993055	993035	993215	102	21, 32
48-16545A46 Laser II™ (LH)		345164			993055	993035	993215	102	21, 32
48-16546A40 Laser II™	031066	345134		992005	993045	993025	993205	102	21, 32
48-16546A41 Laser II™	031066	345134		992005	993045	993025	993205	102	21, 32
48-16546A45 Laser II™	031066	345134		992005	993045	993025	993205	102	21, 32
48-16546A46 Laser II™		345164			993055	993035	993215	102	21, 32
48-16547A40 Laser II™ (LH)		345165			993056	993036	993216	102	21, 32
48-16547A41 Laser II™ (LH)		345165			993056	993036	993216	102	21, 32
48-16547A45 Laser II™ (LH)		345165			993056	993036	993216	102	21, 32
48-16547A46 Laser II™ (LH)		345165			993056	993036	993216	102	21, 32
48-16548A40 Laser II™		345135		992006	993046	993026	993206	102	21, 32
48-16548A41 Laser II™		345135		992006	993046	993026	993206	102	21, 32
48-16548A45 Laser II™		345135		992006	993046	993026	993206	102	21, 32
48-16548A46 Laser II™		345165			993056	993036	993216	102	21, 32
48-16550A40 Laser II™	031067	345136							21, 32

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Original Equipment Manufacturer Part & Trade Mark		Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)										
48-16550A41	Laser II™	031067	345136							21, 32
48-16550A45	Laser II™	031067	345136							21, 32
48-16550A46	Laser II™	031067	345136							21, 32
48-16986A45	Vengeance	031041	335131		992113	993143			See Note 3	20
48-16986A46	Vengeance	031041	335131		992113	993143			See Note 3	20
48-16986A5	QSS™	031041	335130		992113	993143			See Note 3	20
48-16988A45	Vengeance	031042	335131		992114	993144			See Note 3	20
48-16988A46	Vengeance	031042	335131		992114	993144			See Note 3	20
48-16988A5	QSS™	031042	335131		992114	993144			See Note 3	20
48-16990A40	Laser II™	031043	335132		992115	993145			See Note 3	20
48-16990A45	Laser II™	031043	335132		992115	993145			See Note 3	20
48-16992A40	Laser II™	031044	335133		992116	993146			See Note 3	20
48-16992A45	Laser II™	031044	335133		992116	993146			See Note 3	20
48-16992A46	Laser II™		335134							20
48-16994A46	Laser II™		335135							20
48-17874A12		032050								17
48-18278A46	Mirage Plus®		345132			993043	993023		102	21, 32
48-19636A10	Black Max™				992501					18
48-19638A40	Black Max™	031049			992503				120	17
48-19639A40	Black Max™				992504				120	17
48-19640A40	Black Max™	031048	305129		992505				120	17
48-19642A40	Black Max™		305130		992506				120	17
48-19644A 5	Vengeance		305129						120	17
48-19841A46	Mirage Plus (LH)					993052	993032		102	21, 32
48-30388A1		031042	335131		992114	993144				20
48-30390A1		031041	335130		992113	993143				20
48-30396A1		031054								20
48-30396A3		031054								20
48-30396A4		031054								20
48-31072A4		031041	335130		992113	993143				20
48-31080A1		031042	335131		992114	993144				20
48-31082A1		031041	335130		992113	993143				20
48-31454A3		031043	335132		992115	993145				20
48-31456A3		031042	335131		992114	993144				20
48-31458A3		031041	335130		992113	993143				20
48-32264A3		031041	335130		992113	993143				20
48-32386A3		031043	335132		992115	993145				20
48-32386A4		031045								20
48-32388A3		031042	335131		992114	993144				20
48-32390A3		031055			992112					20
48-32392A3		031054								20
48-32392A4		031055			992112					20
48-32746A3		031043	335132		992115	993145				20
48-32748A3		031042	335131		992114	993144				20
48-32750A3		031042	335131		992114	993144				20
48-33480A1		032135								17
48-33482A1		032136								17
48-35936A3		031054								20
48-35936A4		031055								19
48-36008A1			345135		992006	993046	993026	993206	102	21, 32
48-36010A1		031026	345134		992005	993045	993025	993205	102	21, 32
48-36010A4			345135		992006	993046	993026	993206	102	21, 32
48-36012A1		031052	345133		992004	993044	993024	993204	102	21, 32
48-36012A4		031026	345134		992005	993045	993025	993205	102	21, 32
48-36012A5		031051	345131		992002	993043	993023	993203	102	21, 32
48-36014A1		031051	345131		992002	993043	993023	993203	102	21, 32
48-36014A4		031052	345133		992004	993044	993024	993204	102	21, 32

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)									
48-36016A4	031051	345131		992002	993043	993023	993203	102	21, 32
48-36018A1	031022								21, 32
48-36020A1	031022								21, 32
48-36020A4	031022								21, 32
48-37902A4	031042	335131		992114	993144				20
48-42522A10	032052								17
48-42522A11	032052								17
48-42522A12	032052								17
48-42738A10	Black Max™ 032141								19
48-42738A11	Black Max (RB) 032141								19
48-42738A13	Black Max (RB) Ex. Cup 032141								19
48-42740A10	Black Max™ 032142								19
48-42740A11	Black Max (RB) 032142								19
48-43584A40	031049			992503				120	17
48-43586A40	031048	305130		992505				120	17
48-43590A40				992506				120	17
48-47670A1	032020								17
48-47670A10	032020								17
48-47670A3	032020								17
48-47922A1	032021								17
48-47922A10	032021								17
48-47926A1	032021								17
48-47926A10	032021								17
48-49632A3	031042	335131		992114	993144				20
48-49632A4	031043	335132		992115	993145				20
48-49634A1	031052			992004	993044	993024	993204	102	21, 32
48-49634A4	031052			992004	993044	993024	993204	102	21, 32
48-52008A3	031045								20
48-52008A4	031045								20
48-52012A3	031045								20
48-53892A3	031043	335132		992115	993145			See Note 3	20
48-53896A3	031042	335131		992114	993144			See Note 3	20
48-53896A4	031043	335132		992115	993145			See Note 3	20
48-53900A3	031041	335130		992113	993143			See Note 3	20
48-58422A1	031051			992003	993043	993023	993203	102	21, 32
48-58422A4	031052			992004	993044	993024	993204	102	21, 32
48-58424A4	031026	345134		992005	993045	993025	993205	102	21, 32
48-58426A1	031026	345134		992005	993045	993025	993205	102	21, 32
48-58426A4				992006	993046	993026	993206	102	21, 32
48-58826A3	031054								20
48-58826A4	031055			992112				102	20
48-61812A1	032045								19
48-61812A4	032045								19
48-61814A1	032044			992603				114	18, 19
48-61814A4	032044			992603				114	18, 19
48-61816A1	032043	395929		992604	993405			114	18, 19
48-61816A4	032043	395929		992604	993405			114	18, 19
48-61818A1	032042	395929		992605	993406			114	18, 19
48-61818A4	032042	395929		992605	993406			114	18, 19
48-61820A1	032041			992606	993407			114	18, 19
48-61820A4	032041			992606	993407			114	18, 19
48-61822A1	032040	395930		992408	993408			114	18, 19
48-61822A4	032040	395930		992408	993408			114	18, 19
48-61824A1				992409				114	18, 19
48-62274A1	032045								19, 20
48-62274A4	032045								19, 20
48-63540A1	032040	395930		992408	993408			114	19

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	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)									
48-63542A1	032041			992407	993407			114	19
48-63542A4	032041			992407	993407			114	19
48-63544A1	032042	395929		992406	993406			114	19
48-63544A4	032042	395929		992406	993406			114	19
48-63546A4	032043	395929		992406	993406			114	19
48-64724A1	031020								19
48-64724A4	031020								19
48-65022A1	031041			992113	993143			102	20
48-65024A1	031042			992114	993144			102	20
48-65480A1	031027			992006	993046	993026	993206	102	21, 32
48-65588A1	031042	335131		992114	993144			102	20
48-65588A4	031042	335131		992114	993144			102	20
48-65736A1	031045								20
48-65736A4	031045								20
48-65748A1	031041			992407	993407				20
48-65992A1	031026	345134		992005	993045	993025	993205	102	21, 32
48-65992A4	031026	345134		992005	993045	993025	993205	102	21, 32
48-66432A1	031051			992003	993043	993023	993203	102	21, 32
48-66432A4	031052			992004	993044	993024	993204	102	21, 32
48-66450A4	031051			992003	993043	993023	993203	102	21, 32
48-67280A1	031043	335132		992115	993145				20
48-67874A4	031027			992006	993046		993206	102	21, 32
48-68556A4	Cleaver™			992004	993044	993024	993204		21, 32
48-68557A4	Cleaver™ (LH)				993055	993035	993215		21, 32
48-68558A4	Cleaver™			992005	993045	993025	993205		21, 32
48-72764A4	QSS™	031042	335131	992114	993144			See Note 3	20
48-72764A5	QSS™	031042	335131	992114	993144			See Note 3	20
48-73132A4		031015							19
48-73132A40	Black Max™	031015							19
48-73134A4	Black Max™	031016		992405	993405			114	19
48-73134A40	Black Max™	031016		992405	993405			114	19
48-73136A4	Black Max™	031017	395129	992406	993406			114	19
48-73136A40	Black Max™	031017	395129	992406	993406			114	19
48-73138A4	Black Max™	031018		992407	993407			114	19
48-73138A40	Black Max™	031018		992407	993407			114	19
48-73140A4	Black Max™	031019	395130	992408	993408			114	19
48-73140A40	Black Max™	031019	395130	992408	993408			114	19
48-73142A40	Black Max™			992409				114	19
48-73144A4	Black Max™	031020							19
48-73144A40	Black Max™	031020							19
48-73502A4		031022							21, 32
48-73504A4		031023	345131	992002	993042			102	21, 32
48-73506A4		031024	345132	992003	993043	993023	993203	102	21, 32
48-73508A4		031025	345133	992004	993044	993024	993204	102	21, 32
48-73510A4		031026	345134	992005	993045	993025	993205	102	21, 32
48-73512A4			345135	992006	993046	993026	993206	102	21, 32
48-73980A4	QSS™	031025	345133	992004	993044	993024	993204	102	21, 32
48-73980A5	QSS™	031025	345133	992004	993044	993024	993204	102	21, 32
48-73982A4	QSS™	031026	345134	992005	993045	993025	993205	102	21, 32
48-73982A5	QSS™	031026	345134	992005	993045	993025	993205	102	21, 32
48-74266A4	QSS™	031025	345133	992004	993044	993024	993204	102	21, 32
48-74268A4	QSS™	031026	345134	992005	993045	993025	993205	102	21, 32
48-74598A4	Cleaver™	031025	345133	992004	993044	993024	993204	102	21, 23
48-74599A4	Cleaver™		345164		993055	993035	993215	102	21, 32
48-74600A4	Cleaver™	031026	345134	992005	993045	993025	993205	102	21, 32
48-74601A4	Cleaver™		345165		993056	993036	993216	102	21, 32
48-74872A4		031051		992003	993043	993023	993203	102	21, 32

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		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)										
48-74874A4		031052			992004	993044	993024	993204	102	21, 32
48-74876A4		031026	345134		992005	993045	993025	993205	102	21, 32
48-74886A4		031052			992004	993044	993024	993204	102	21, 32
48-74888A4		031026	345134		992005	993045	993025	993205	102	21, 32
48-75058A4	QSS™		345135		992006	993046	993026	993206	102	21, 32
48-75160A4			345135		992006	993046	993026	993206	102	21, 32
48-75724A4	QSS™		345135		992006	993046	993026	993206	102	21, 32
48-75724A5	QSS™		345135		992006	993046	993026	993206	102	21, 32
48-75760A4		031023	345131		992002	993042			102	21, 32
48-76230A4	QSS™	031058			992407	993407			114	19
48-76230A5	Vengeance	031058			992407	993407			114	19
48-76232A4	QSS™	031019	395130		992408	993408			114	19
48-76232A5	Vengeance	031019	395130		992408	993408			114	19
48-77338A33	Black Max™	031054								20
48-77338A4	Black Max™	031054								20
48-77338A40	Black Max™	031054								20
48-77338A45	Black Max™	031054								20
48-77338CP1	Black Max Pontoon	031200								20
48-77340A33	Black Max (RB)	031055			992112				See Note 3	20
48-77340A4	Black Max™	031055			992112				See Note 3	20
48-77340A40	Black Max™	031055			992112				See Note 3	20
48-77340A45	Black Max™	031055			992112				See Note 3	20
48-77340CP1	Black Max Pontoon	031202								20
48-77342A33	Black Max (RB)	031041	335130		992113	993143			See Note 3	20
48-77342A4	Black Max™	031041	335130		992113	993143			See Note 3	20
48-77342A40	Black Max™	031041	335130		992113	993143			See Note 3	20
48-77342A45	Black Max™	031041	335130		992113	993143			See Note 3	20
48-77344A4	Black Max™	031042	335131		992114	993144			See Note 3	20
48-77344A40	Black Max™	031042	335131		992114	993144			See Note 3	20
48-77344A45	Black Max™	031042	335131		992114	993144			See Note 3	20
48-77346A4	Black Max™	031043	335132		992115	993145			See Note 3	20
48-77346A40	Black Max™	031043	335132		992115	993145			See Note 3	20
48-77346A45	Black Max™	031043	335132		992115	993145			See Note 3	20
48-77348A4	Black Max™	031044	335133	335134	992116	993146			See Note 3	20
48-77348A40	Black Max™	031044	335133	335134	992116	993146			See Note 3	20
48-77348A45	Black Max™	031044	335133	335134	992116	993146			See Note 3	20
48-77350A4	Black Max™	031045								20
48-77350A40	Black Max™	031045								20
48-77350A45	Black Max™	031045								20
48-78114A4		031022								21, 32
48-78114A40		031022								21, 32
48-78114A45	Black Max™	031022								21, 32
48-78116A4	Black Max™	031023	345131		992002	993042			102	21, 32
48-78116A40	Black Max™	031023	345131		992002	993042			102	21, 32
48-78116A45	Black Max™	031023	345131		992002	993042			102	21, 32
48-78118A4	Black Max™	031024	345132		992003	993043	993023	993203	102	21, 32
48-78118A40	Black Max™	031024	345132		992003	993043	993023	993203	102	21, 32
48-78118A45	Black Max™	031024	345132		992003	993043	993023	993203	102	21, 32
48-78120A4	Black Max™	031025	345133		992004	993044	993024	993204	102	21, 32
48-78120A40	Black Max™	031025	345133		992004	993044	993024	993204	102	21, 32
48-78120A45	Black Max™	031025	345133		992004	993044	993024	993204	102	21, 32
48-78122A4	Black Max™	031026	345134	345141	992005	993045	993025	993205	102	21, 32
48-78122A40	Black Max™	031026	345134	345141	992005	993045	993025	993205	102	21, 32
48-78122A45	Black Max™	031026	345134	345141	992005	993045	993025	993205	102	21, 32
48-78124A4	Black Max™		345135	345137	992006	993046	993026	993206	102	21, 32
48-78124A40	Black Max™		345135	345137	992006	993046	993026	993206	102	21, 32
48-78124A45	Black Max™		345135	345137	992006	993046	993026	993206	102	21, 32

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Original Equipment Manufacturer Part & Trade Mark		Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)										
48-78126A4	Black Max™	031067	345136	345138					102	21, 32
48-78126A40	Black Max™	031067	345136	345138					102	21, 32
48-78126A45	Black Max™	031067	345136	345138					102	21, 32
48-79572A4	Black Max™	031051	345132		992003	993043	993023	993203	102	21, 32
48-79574A4	Black Max™	031025	345133		992004	993044	993024	993204	102	21, 32
48-79576A4	Black Max™	031026	345134		992005	993045	993025	993205	102	21, 32
48-79578A4	Black Max™		345135		992006	993046	993026	993206	102	21, 32
48-79792A4	QSS™	031016			992405	993405			114	19
48-79792A5	Vengeance	031016			992405	993405			114	19
48-79794A4	QSS™	031024			992003	993043	993023	993203	102	21, 32
48-79794A5	QSS™	031024			992003	993043	993023	993203	102	21, 32
48-79830A4	QSS™	031024			992003	993043	993023	993203	102	21, 32
48-81645M		022002								18
48-81647M		022001								18
48-81649M		022002								18
48-816702A40	Black Max™	031056			992405	993405			114	19
48-816704A40	Black Max™	031057	395129		992406	993406			114	19
48-816706A40	Black Max™	031058			992407	993407			114	19
48-825860A47		031025	345133		992004	993044	993024	993204	102	21, 32
48-825861A47	Tempest Plus (LH)		345163			993054	993034	993214		21, 32
48-825862A47	Tempest Plus	031026	345134		992005	993045	993025	993205	102	21, 32
48-825863A47	Tempest Plus (LH)		345164			993055	993035	993215		21, 32
48-825864A47	Tempest Plus		345135		992006	993046	993026	993206		21, 32
48-825865A47	Tempest Plus (LH)		345165			993056	993036	993216		21, 32
48-825866A47	Tempest Plus	031067	345136							21, 32
48-825872A47	Tempest Plus			345137						21, 32
48-825874A47	Tempest Plus			345138						21, 32
48-825898A48	VenSura 4				992202			993203	102	21, 32
48-825899A48	VenSura 4 (LH)							993213	102	21, 32
48-825900A48	VenSura 4				992203			993204	102	21, 32
48-825901A48	VenSura 4 (LH)							993214	102	21, 32
48-825902A48	VenSura 4				992204			993205	102	21, 32
48-825903A48	VenSura 4 (LH)							993215	102	21, 32
48-825906A48	VenSura 4							993206	102	21, 32
48-825907A48	VenSura 4 (LH)							993216	102	21, 32
48-825938A47	Trophy Plus 4			435135						21
48-825942A47	Trophy Plus 4			435136						21
48-825946A47	Trophy Plus 4			435137						21
48-827312A11	Black Max (RB)	032142								19
48-82767		012102								18
48-82768		012011								18
48-828152A12	Black Max™	032056								17
48-828156A12	Black Max™	032052								17
48-828158A12	Black Max™	032050								17
48-82826		022003								18
48-832828A45	Black Max™	031064	345132		992003	993043	993023	993203	102	21, 32
48-832830A45	Black Max™	031065	345133		992004	993044	993024	993204	102	21, 32
48-832832A45	Black Max™	031066	345134		992005	993045	993025	993205	102	21, 32
48-832834A45	Black Max™		345135		992006	993046	993026	993206	102	21, 32
48-834850A45	Alpha 4				992202			993203	102	21, 32
48-834850A45	Alpha 4				992202			993203	102	21, 32
48-834851A45	Alpha 4 (LH)							993213	102	21, 32
48-834851A45	Alpha 4 (LH)							993213	102	21, 32
48-834852A45	Alpha 4				992203			993204	102	21, 32
48-834852A45	Alpha 4				992203			993204	102	21, 32
48-834853A45	Alpha 4 (LH)							993214	102	21, 32
48-834853A45	Alpha 4 (LH)							993214	102	21, 32

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Original Equipment Manufacturer Part & Trade Mark		Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)										
48-834854A45	Alpha 4				992204			993205	102	21, 32
48-834854A45	Alpha 4				992204			993205	102	21, 32
48-834855A45	Alpha 4 (LH)							993215	102	21, 32
48-834855A45	Alpha 4 (LH)							993215	102	21, 32
48-854342A45		031061			992109				See Note 3	20
48-854354A46	Vengeance	031041	335130		992113	993143			See Note 3	20
48-855856A 5	Vengeance				992405	993405			114	19
48-855858A 5	Vengeance		395129		992406	993406			114	19
48-855860A 5	Vengeance					993407			114	19
48-855862A 5	Vengeance		395130			993408			114	19
48-85632A4		031053			992404				114	19
48-85632A40	Black Max™	031053			992404				114	19
48-86848A4		031048								17
48-86962A4		032136								17
48-88438A4	QSS™					993043		993203	102	21, 32
48-88440A4	QSS™					993044		993204	102	21, 32
48-88442A4	QSS™					993045		993205	102	21, 32
48-88444A4	QSS™					993046		993206	102	21, 32
48-896890A10	Black Max (RB)	142020								18
48-896892A40	Black Max (RB)				992501				122	18
48-896896A40	Black Max (RB)				992503				122	18
48-897618A10	Black Max	142017								17
48-89852A4		031049			992503				120	17
48-89854A4					992506				120	17
48-898990A46	Enertia	031023	345131		992002	993042			102	21, 32
48-898991A46	Enertia (LH)					993052			102	21, 32
48-898994A46	Enertia	031024	345132		992003	993043	993023	993203	102	21, 32
48-898995A46	Enertia (LH)		345162			993053	993033	993213	102	21, 32
48-898998A46	Enertia	031025	345133		992004	993044	993024	993204	102	21, 32
48-898999A46	Enertia (LH)		345163			993054	993034	993214	102	21, 32
48-899002A46	Enertia	031026	345134		992005	993045	993025	993205	102	21, 32
48-899003A46	Enertia (LH)		345164			993055	993035	993215	102	21, 32
48-899004A46	Laser II	031043	335132		992115	993145			102	21, 32
48-899006A46	Laser II	031044	335133		992116	993146			102	21, 32
48-90159A46			345162			993053	993033	993213	102	21, 32
48-93272A4	QSS™	031023	345131		992002	993042			102	21, 32
48-93272A5	QSS™	031023	345131		992002	993042			102	21, 32
48-96623M		012013								18
48-96625M		012011								18
48-96628M		012102								18
QA1912X	Black Diamond	031064	345132		992003	993043	993023	993203	102	21, 32
QA1916X	Black Diamond	031065	345133		992004	993044	993024	993204	102	21, 32
QA1918X	Black Diamond	031066	345134		992005	993045	993025	993205	102	21, 32
QA1920X	Black Diamond		345135		992006	993046	993026	993206	102	21, 32
QA2002X	Black Diamond	031063								21, 32
QA2004X	Black Diamond	031022								21, 32
QA2006X	Black Diamond	031050	345131		992002	993042			102	21, 32
QA2008X	Black Diamond	031023	345131		992002	993042			102	21, 32
QA2010X	Black Diamond	031051	345132		992003	993043	993023	993203	102	21, 32
QA2012X	Black Diamond	031024	345132		992003	993043	993023	993203	102	21, 32
QA2014X	Black Diamond	031052	345133		992004	993044	993024	993204	102	21, 32
QA2016X	Black Diamond	031025	345133		992004	993044	993024	993204	102	21, 32
QA2018X	Black Diamond	031026	345134		992005	993045	993025	993205	102	21, 32
QA2022X	Black Diamond	031067	345136							21, 32
QA2028X	Black Diamond	031043	335132		992115	993145			See Note 3	20
QA2030X	Black Diamond	031054								20
QA2032X	Black Diamond	031055			992112				See Note 3	20

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		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)										
QA2034X	Black Diamond	031041	335130		992113	993143			See Note 3	20
QA2036X	Black Diamond	031042	335131		992114	993144			See Note 3	20
QA2038X	Black Diamond	031043	335132		992115	993145			See Note 3	20
QA2040X	Black Diamond	031044	335133		992116	993146			See Note 3	20
QA2042X	Black Diamond	031045								20
QA2060R	Black Diamond	032141								19
QA2064R	Black Diamond	032044			992404				114	18, 19
QA2064R	Black Diamond	031015								19
QA2064R	Black Diamond	032045								19
QA2066R	Black Diamond	032142								19
QA2070R	Black Diamond	031053			992404				114	19
QA2072R	Black Diamond	031056			992405	993405			114	19
QA2074R	Black Diamond	031016			992405	993405			114	19
QA2076R	Black Diamond	031057	395129		992406	993406			114	19
QA2078R	Black Diamond	032043			992405	993405			114	19
QA2078R	Black Diamond	031017	395129		992406	993406			114	19
QA2078R	Black Diamond	032042	395929		992406	993406			114	19
QA2080R	Black Diamond	031058			992407	993407			114	19
QA2082R	Black Diamond	031018	395130		992407	993407			114	19
QA2082R	Black Diamond	032041			992407	993407			114	19
QA2084R	Black Diamond	031019	395130		992408	993408			114	19
QA2084R	Black Diamond	032040	395930		992408	993408			114	19
QA2084R	Black Diamond				992409	993409			114	19
QA2088R	Black Diamond	031020								19
QA2102R	Black Diamond	031049			992503				120	17
QA2106R	Black Diamond	031048	305129		992505				120	17
QA2108R	Black Diamond		305130		992506				120	17
QA2124R	Black Diamond	032056								17
QA2128R	Black Diamond	032052								17
QA2130R	Black Diamond	032050								17
QA2158R	Black Diamond	142017								17
QA2182X	Diamond 4				992202	993043	993023	993203	102	21, 32
QA2183X	Diamond 4 (LH)					993053	993033	993213	102	21, 32
QA2184X	Diamond 4				992203	993044	993024	993204	102	21, 32
QA2185X	Diamond 4 (LH)					993054	993034	993214	102	21, 32
QA2186X	Diamond 4				992204	993045	993025	993205	102	21, 32
QA2187X	Diamond 4 (LH)					993055	993035	993215	102	21, 32
QA2190R	Black Diamond	142020								18
QA2226R	Black Diamond	032044			992603	993405			114	18, 19
QA2230R	Black Diamond	032042	395929		992605	993406			114	18, 19
QA2232R	Black Diamond	032041			992606	993407			114	18, 19
QA2234R	Black Diamond	032040	395930		992408	993408			114	18, 19
QA2830X	Black Diamond	031200								20
QA2832X	Black Diamond	031202								20
QA3150R	Black Diamond	012011								18
QA3808R	Black Diamond	022002								18
QA3812R	Black Diamond	022003								18
QA6004	QA3	031022								21, 32
QA6010	QA3	031051								21, 32
QA6012	QA3	031024	345132		992003	993043	993023	993203	102	21, 32
QA6016	QA3	031025	345133		992004	993044	993024	993204	102	21, 32
QA6018	QA3	031026	345134		992005	993045	993025	993205	102	21, 32
QA6020	QA3		345135		992006	993046	993026	993206	102	21, 32
QA6030	QA3	031054								20
QA6032	QA3	031055			992112				See Note 3	20
QA6034	QA3	031041			992113	993143			See Note 3	20
QA6036	QA3	031042			992114	993144			See Note 3	20

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		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)										
QA6038	QA3	031043			992115	993145			See Note 3	20
QA6040	QA3	031044			992116	993146			See Note 3	20
QA6042	QA3	031045								20
QA6060T	QA3	032141								19
QA6064T	QA3	031015								19
QA6070T	QA3	031053			992404				114	19
QA6074T	QA3	031016			992405	993405			114	19
QA6078T	QA3	031017			992406	993406			114	19
QA6082T	QA3	031018			992407	993407			114	19
QA6084T	QA3	031019			992408	993408			114	19
QA6102T	QA3	031049			992503				120	17
QA6106T	QA3	031048	305129		992505				120	17
QA6128T	QA3	032021								17
QS5004X	Thunderbolt	031064	345132		992003	993043	993023	993203	102	21, 32
QS5005X	Thunderbolt (LH)		345162			993053	993033	993213	102	21, 32
QS5006X	Thunderbolt	031065	345133		992004	993044	993024	993204	102	21, 32
QS5007X	Thunderbolt (LH)		345163			993054	993034	993214	102	21, 32
QS5008X	Thunderbolt	031066	345134		992005	993045	993025	993205	102	21, 32
QS5009X	Thunderbolt (LH)		345164			993055	993035	993215	102	21, 32
QS5010X	Thunderbolt		345135		992006	993046	993026	993206	102	21, 32
QS5011X	Thunderbolt (LH)		345165			993056	993036	993216	102	21, 32
QS5050X	Silverado	031023	345131		992002	993042			102	21, 32
QS5052X	Silverado	031024	345132		992003	993043	993023	993203	102	21, 32
QS5053X	Silverado (LH)		345162			993053	993033	993213	102	21, 32
QS5054X	Silverado	031025	345133		992004	993044	993024	993204	102	21, 32
QS5055X	Silverado (LH)		345163			993054	993034	993214	102	21, 32
QS5056X	Silverado	031026	345134		992005	993045	993025	993205	102	21, 32
QS5057X	Silverado (LH)		345164			993055	993035	993215	102	21, 32
QS5058X	Silverado		345135		992006	993046	993026	993206	102	21, 32
QS5059X	Silverado (LH)		345165			993056	993036	993216	102	21, 32
QS5070X	Lightspeed	031025	345133		992004	993044	993024	993204	102	21, 32
QS5071X	Lightspeed (LH)		345163			993054	993034	993214	102	21, 32
QS5072X	Lightspeed	031026	345134		992005	993045	993025	993205	102	21, 32
QS5073X	Lightspeed (LH)		345164			993055	993035	993215	102	21, 32
QS5074X	Lightspeed		345135	345141	992006	993046	993026	993206	102	21, 32
QS5075X	Lightspeed (LH)		345165			993056	993036	993216	102	21, 32
QS5076X	Lightspeed		345136	345137					102	21, 32
QS5076X	Lightspeed			345139						21
QS5116X	Silverado	031041	335130		992113	993143			102	20
QS5118X	Silverado	031042	335131		992114	993144			102	20
QS5120X	Silverado	031043	335132		992115	993145			102	20
QS5122X	Silverado	031044	335133	335134	992116	993146			102	20
QS5124X	Silverado			335135						20
QS5164R	Silverado	031056			992405	993405			114	19
QS5166R	Silverado	031057	395129		992406	993406			114	19
QS5168R	Silverado	031058	395130		992407	993407			114	19
QS5170R	Silverado	031058	395130		992408	993408			114	19
QS5180R	Silverado	031048	305129		992505					17
QS5862X	Torrent	031066	345143		992005	993045	993025	993205	102	21, 32
QS5864X	Torrent		345135		992006	993046	993026	993206	102	21, 32
QS6003X	Typhoon 4 (LH)		345163			993054	993034	993214	102	21, 32
QS6004X	Typhoon 4		345133		992203	993044	993024	993204	102	21, 32
QS6005X	Typhoon 4 (LH)		345164			993055	993035	993215	102	21, 32
QS6006X	Typhoon 4		345134		992204	993045	993025	993205	102	21, 32
TA1916X	Black Diamond XT	031065	345133		992004	993044	993024	993204	102	21, 32
TA1918X	Black Diamond XT	031066	345134		992005	993045	993025	993205	102	21, 32
TA1920X	Black Diamond XT		345135		992006	993046	993026	993206	102	21, 32

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	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)									
TA2004X Black Diamond	031022								21, 32
TA2008 Black Diamond	031023			992002	993042			102	21, 32
TA2010 Black Diamond	031051			992003	993043	993023	993203	102	21, 32
TA2012 Black Diamond	031024			992003	993043	993023	993203	102	21, 32
TA2014 Black Diamond	031052			992004	993044	993024	993204	102	21, 32
TA2016 Black Diamond	031025			992004	993044	993024	993204	102	21, 32
TA2018 Black Diamond	031026			992005	993045	993025	993205	102	21, 32
TA2020 Black Diamond				992006	993046	993026	993206	102	21, 32
TA2022X Black Diamond				992007				102	21, 32
TA2030X Black Diamond	031054								20
TA2032X Black Diamond	031055								20
TA2034 Black Diamond	031041	335130		992113	993143			See Note 3	20
TA2036 Black Diamond	031042	335131		992114	993144			See Note 3	20
TA2038 Black Diamond	031043	335132		992115	993145			See Note 3	20
TA2040 Black Diamond	031044	335133		992116	993146			See Note 3	20
TA2048 Black Diamond	031041	335130		992113	993143			See Note 3	20
TA2050 Black Diamond	031042	335131		992114	993144			See Note 3	20
TA2052 Black Diamond	031043	335132		992115	993145			See Note 3	20
TA2054 Black Diamond	031044	335133		992116	993146			See Note 3	20
TA2060T Black Diamond	032141								19
TA2064T Black Diamond	031015								19
TA2066T Black Diamond	032142								19
TA2070T Black Diamond	031053			992404				114	19
TA2072T Black Diamond	031056			992405	993405			114	19
TA2074T Black Diamond	031016			992405	993405			114	19
TA2076T Black Diamond	031057	395129		992406	993406			114	19
TA2078T Black Diamond	031017	395129		992406	993406			114	19
TA2080T Black Diamond	031058			992407	993407			114	19
TA2082T Black Diamond	031018			992407	993407			114	19
TA2084T Black Diamond	031019	395130		992408	993408			114	19
TA2088T Black Diamond	031022								21, 32
TA2106T Black Diamond	031048			992505				120	17
TA2128T Black Diamond	032052								17
TA2202 Black Diamond	031044	335133		992116	993146			See Note 3	20
TA2204 Black Diamond	031043	335132		992115	993145			See Note 3	20
TA2206 Black Diamond	031042	335131		992114	993144			See Note 3	20
TA2208 Black Diamond	031041	335130		992113	993143			See Note 3	20
TA3150T Black Diamond	012011								18
TA3152T Black Diamond	012013								18
TA3808T Black Diamond	022002								18
TS1006 Thunderbolt				992004	993044	993024	993204	102	21, 32
TS1007 Thunderbolt					993054	993034	993214	102	21, 32
TS1008 Thunderbolt				992005	993045	993025	993205	102	21, 32
TS1009 Thunderbolt					993055	993035	993215	102	21, 32
TS1010 Thunderbolt				992006	993046	993026	993206	102	21, 32
TS1011 Thunderbolt					993056	993036	993216	102	21, 32
TS1052 Silverado	031064	345132		992003	993043	993023	993203	102	21, 32
TS1053 Silverado		345162			993053	993033	993213	102	21, 32
TS1054 Silverado	031065	345133		992004	993044	993024	993204	102	21, 32
TS1055 Silverado		345163			993054	993034	993214	102	21, 32
TS1056 Silverado	031066	345134		992005	993045	993025	993205	102	21, 32
TS1057 Silverado		345164			993055	993035	993215	102	21, 32
TS1070 Lightspeed	031065	345133		992004	993044	993024	993204	102	21, 32
TS1071 Lightspeed		345163			993054	993034	993214	102	21, 32
TS1072 Lightspeed	031066	345134		992005	993045	993025	993205	102	21, 32
TS1073 Lightspeed		345164			993055	993035	993215	102	21, 32
TS1074 Lightspeed		345135		992006	993046	993026	993206	102	21, 32

MICHIGAN WHEEL OEM CROSS REFERENCE

Original Equipment Manufacturer Part & Trade Mark		Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
MERCURY, MARINER, MERCRUISER (Continued)										
TS1075	Lightspeed		345165			993056	993036	993216	102	21, 32
TS1116	Silverado	031041	335130		992113	993143			See Note 3	20
TS1118	Silverado	031042	335131		992114	993144			See Note 3	20
TS1120	Lightspeed	031043	335132		992115	993145			See Note 3	20
TS1122	Lightspeed	031044	335133		992116	993146			See Note 3	20
TS1164T	Silverado	031016			992305	993405			114	19
TS1166T	Silverado	031017	395129		992406	993406			114	19
TS1168T	Silverado	031058			992407	993407			114	19
NISSAN, TOHATSU										
348641020					992605	993406			116	23
348641030					992606	993407			116	23
348641080					992401				112	24
353641010					992401				112	24
353641010					992401				112	24
353641020					992402				112	24
353641020					992402				112	24
353641030					992403				112	24
353641030					992403				112	24
353641050					992301				112	24
353641050					992301				112	24
353641070					992302				112	24
353641070					992302				112	24
353641090					992303				112	24
353641090					992303				112	24
361641130					992603				116	23
361641140					992604				116	23
362641020		142017								23
346-64101-5					992501				122	23
34664-1015M					992501				122	23
34664-1025M					992502				122	23
346-64103-5					992503				122	23
346-64105-5					992506				122	23
34664-1055M					992506				122	23
346-64106-5		142020								23
346W641055					992506				122	23
346W641065		142020								23
348-64102-0					992605	993406			116	23
348-64103-0					992606	993407			116	23
348-64104-0					992604	993405			116	23
348W641080					992401				116	23
353-64103-0									112	24
353-64105-0					992301				112	24
35364-1050M					992301				112	24
353-64107-0		142007			992302				112	24
35364-1070M					992302				112	24
353-64108-0		142008								24
353-64109-0		142009			992303				112	24
35364-1090M					992303				112	24
361-64102-0					992605				116	23
361-64103-0					992606				116	23
361-64113-0		142001			992603				116	23
361-64114-0		142002			992604				116	23
362-64102-0		142017								23
362W641020		142017								23
3B7-64527-0					992112				See Note 4	24
3B7-64532-0			335930		992113	993143			See Note 4	24

MICHIGAN WHEEL OEM CROSS REFERENCE

Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
NISSAN, TOHATSU (Continued)									
3B7-64536-0		335930		992113	993143			See Note 4	24
3B7-64541-0		335931		992114	993144			See Note 4	24
3B7-64545-0	142013	335932		992115	993145			See Note 4	24
3B7-64549-0		335933							24
3C7645140		335931		992114	993144			See Note 4	24
3C7645360		335931		992114	993144			See Note 4	24
3C7645360M		335930		992113	993143			See Note 4	24
3C7645410M		335931		992114	993144			See Note 4	24
3C7645490M		335932		992115	993145			See Note 4	24
3C7645540M		335933		992116	993146			See Note 4	24
3E0641810M				992112				See Note 4	24
3E0641850M		335930		992113	993143			See Note 4	24
3E0641890M		335931		992114	993144			See Note 4	24
3E0641940M		335932		992115	993145			See Note 4	24
3E0641960M		335933		992116	993146			See Note 4	24
3E3645260M				992405	993405			See Note 4	24
3E3645280M				992406	993406			See Note 4	24
3E3645310M				992407	993407			See Note 4	24
3E3645360M				992408	993408			See Note 4	24
3N4W645271				992112				See Note 4	24
3N4W645321		335930		992113	993143			See Note 4	24
3N4W645361		335931		992114	993144			See Note 4	24
3N4W645411		335932		992115	993145			See Note 4	24
3N4W645451		335933		992116	99146			See Note 4	24
3R064-5250M				992504				122	23
3R0W645210				992502				122	23
3R0W645230				992503				122	23
3R0W645250				992504				122	23
3R0W645270		305429		992505				122	23
3R0W645480				992501				122	23
3T5645230				992603				116	23
3T5645250				992604	993405			116	23
3T5645270				992605	993406			116	23
3T5645290				992606	993407			116	23
3T5645320				992408	993408			116	23
NM889210130		305429							23
NM889410120				992604	993405			116	23
NM889410130				992605	993406			116	23
NM889410140				992606	993407			116	23
NM889410150				992408	993408			116	23
NM889510150		325030							24
NM889510170		325031							24
NM889610150		335930			993143			109	24
NM889610170		335931		992114	993144			109	24
NM889610180		335932		992115	993145			109	24
NM889610200		335933		992116	993146			109	24
SUZUKI									
58100-90420-019	DF 90 / 115 / 140	061032		992116	993146			See Note 4	27
58100-90J00-019	DF 90 / 115 / 140	061024		992114	993144			See Note 4	27
58100-90J01-019	DF 90 / 115 / 140	061024		992114	993144			See Note 4	27
58100-90J10-019	DF 90 / 115 / 140	061028		992115	993145			See Note 4	27
58100-90J11-019	DF 90 / 115 / 140	061028		992115	993145			See Note 4	27
58100-90J20-019	DF 90 / 115 / 140	061032		992116	993146			See Note 4	27
58100-90J21-019	DF 90 / 115 / 140	061032		992116	993146			See Note 4	27
58100-90J41-019	DF 90 / 115 / 140	061020		992113	993143			See Note 4	27
58100-93723-019	Aluminum (3)	062016							25

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
SUZUKI (Continued)									
58100-93733-019 ....Aluminum (3)	062016								25
58100-93743-019 ....Aluminum (3)	062017								25
58100-93763-019 ....Aluminum (3)	062016								25
58100-94313-019 ....Aluminum (3) - Uncupped	032042	395929		992605	993406			115	26
58100-94410				992606	993407			115	26
58100-94411				992606	993407			115	26
58100-94412				992606	993407			115	26
58100-94500-019 ....Aluminum (3)				992113	993143			110	26
58100-94512-019 ....Aluminum (3)				992114	993144			110	26
58100-94522-019 ....Aluminum (3)				992115	993145			110	26
58100-94532-019 ....Aluminum (3)				992116	993146			110	26
58100-94554				992113	993143			110	26
58100-94561				992115	993145			110	26
58100-94571				992116	993146			110	26
58100-94581				992114	993144			110	26
58100-95212-019 ....Aluminum (3) - Uncupped	032045			992602				115	26
58100-95222-019 ....Aluminum (3) - Uncupped	032044			992603				115	26
58100-95353-019 ....Aluminum (3) - Uncupped	032041			992606	993406			115	26
58100-95363-019 ....Aluminum (3) - Uncupped	032040	395929		992408	993407			115	26
58100-95373-019 ....Aluminum (3) - Uncupped				992409	993408			115	26
58100-95382-019 ....Aluminum (3) - Uncupped		395930							26
58100-95393-019 ....Aluminum (3) - Uncupped	032043			992604	993405			115	26
58100-95500-019 ....Aluminum (3) - Uncupped				992113	993143			110	26
58100-95511-019 ....Aluminum (3) - Uncupped				992114	993144			110	26
58100-95521-019 ....Aluminum (3) - Uncupped				992115	993145			110	26
58100-95530-019 ....Aluminum (3) - Uncupped				992116	993146			110	26
58100-95D00-019 ....Aluminum (3)		305529		992505				121	25
58100-96370-019 ....Aluminum (3)				992501				121	25
58100-96410-019 ....Aluminum (3)				992502				121	25
58100-96420-019 ....Aluminum (3)				992503				121	25
58100-96430-019 ....Aluminum (3)				992504				121	25
58100-96440-019 ....Aluminum (3)		305529		992505				121	25
58100-96460-019 ....Aluminum (3)				992506				121	25
58100-96470-019 ....Aluminum (3)				992502				121	25
58100-96480-019 ....Aluminum (3)				992504				121	25
58100-96490-019 ....Aluminum (3)		305529		992505				121	25
58100-99E00-019 ....Aluminum (3)				992112				110	26
58200-96400		305529							25
990C0-00830-17P ....Stainless (3) DF 150 / 175				992003	993043	993023	993203	104	27
990C0-00830-19P ....Stainless (3) DF 150 / 175				992004	993044	993024	993204	104	27
990C0-00830-21P ....Stainless (3) DF 150 / 175				992005	993045	993025	993205	104	27
990C0-00830-23P ....Stainless (3) DF 150 / 175				992006		993026	993206	104	27
990C0-0083L-17P ....Stainless (3) DF 150 / 175 (LH)						993033	993213	104	27
990C0-0083L-19P ....Stainless (3) DF 150 / 175 (LH)						993034	993214	104	27
990C0-0083L-21P ....Stainless (3) DF 150 / 175 (LH)						993035	993215	104	27
990C0-0083L-23P ....Stainless (3) DF 150 / 175 (LH)						993036	993216	104	27
99105-00100-16P ....Stainless Steel (3)				992113	993143			110	26
99105-00100-18P ....Stainless Steel (3)				992114	993144			110	26
99105-00100-20P ....Stainless Steel (3)				992115	993145			110	26
99105-00100-22P ....Stainless Steel (3)				992116	993146			110	26
99105-00101-20P				992115	993145			110	26
99105-00101-22P				992116	993146			110	26
99105-00103-18P ....SS Thunder DT 75-140				992114	993144			110	26
99105-00103-20P ....SS Thunder DT 75-140				992115	993145			110	26
99105-00103-22P ....SS Thunder DT 75-140				992116	993146			110	26
99105-00200-16P ....Stainless (3) DT 150-225				992002	993042	993022		104	27
99105-00200-18P ....Stainless (3) DT 150-225				992003	993043	993023	993203	104	27

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s	
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade			
SUZUKI (Continued)										
99105-00200-20P	Stainless (3) DT 150-225			992004	993044	993024	993204	104		27
99105-00200-22P	Stainless (3) DT 150-225			992005	993045	993025	993205	104		27
99105-00200-24P	Stainless (3) DT 150-225			992006	993046	993026	993206	104		27
99105-00203-23P	SS Thunder (3) DT 150-225			992006	993046	993026	993206	104		27
99105-0020L-16P	Stainless (3) DT 150-225 (LH)				993052	993032		104		27
99105-0020L-18P	Stainless (3) DT 150-225 (LH)				993053	993033	993213	104		27
99105-0020L-20P	Stainless (3) DT 150-225 (LH)				993054	993034	993214	104		27
99105-0020L-22P	Stainless (3) DT 150-225 (LH)				993055	993035	993215	104		27
99105-0020L-24P	Stainless (3) DT 150-225 (LH)				993056	993036	993216	104		27
99105-00300-24P				992006	993046	993026	993206	104		27
99105-00400-23P	SS Thunder (4) DT 150-225			992006	993046	993026	993206	104		27
99105-00500-12P	Stainless Steel (3)			992604	993405			115		26
99105-00500-13P	Stainless Steel (3)	395929		992605	993406			115		26
99105-00500-14P	Stainless Steel (3)			992606	993407			115		26
99105-00500-15P	Stainless Steel (3)	395930		992408	993408			115		26
99105-00600-13P	Stainless Steel (3)	305529								25
99105-00600-15P	Stainless Steel (3)	305530								25
99105-00700-16P	Stainless (3) DF 90 / 115 / 140			992114	993144			See Note 4		27
99105-00700-18P	Stainless (3) DF 90 / 115 / 140			992115	993145			See Note 4		27
99105-00700-20P	Stainless (3) DF 90 / 115 / 140			992116	993146			See Note 4		27
99105-0070L-18P	Stainless (3) DF 90 / 115 / 140 (LH)				993155			See Note 4		27
99105-0070L-20P	Stainless (3) DF 90 / 115 / 140 (LH)				993156			See Note 4		27
VOLVO										
3587517	SS - 4BL Polished	161001	346031	992002	993042			105		37
3587519	SS - 4BL Polished (LH)				993052			105		37
3587520	SS - 4BL Polished	161002	346032	992003	993043	993023	993203	105		37
3587521	SS - 4BL Polished (LH)		346062		993053	993033	993213	105		37
3587522	SS - 4BL Polished	161003	346033	992004	993044	993024	993204	105		37
3587523	SS - 4BL Polished (LH)		346063		993054	993034	993214	105		37
3587524	SS - 4BL Polished	161004	346034	992005	993045	993025	993205	105		37
3587525	SS - 4BL Polished (LH)		346064		993055	993035	993215	105		37
3587526	SS - 4BL Polished	161005	346035	992006	993046	993026	993206	105		37
3850299	Aluminum	161001		992002	993042			105		37
3850300	Aluminum	161002	346032	992003	993043	993023	993203	105		37
3850301	Aluminum	161003	346033	992004	993044	993024	993204	105		37
3850302		161004	346034	992005	993045	993025	993205	105		37
3850303	Aluminum	161005	346035	992006	993046	993026	993206	105		37
3850305	SST®	161001	346031	992002	993042			105		37
3850306	SST®	161002	346032	992003	993043	993023	993203	105		37
3850307	SST®	161002	346032	992003	993043	993023	993203	105		37
3850308	SST®	161003	346033	992004	993044	993024	993204	105		37
3850309	SST®	161004	346034	992005	993045	993025	993205	105		37
3850310	SST®	161005	346035	992006	993046	993026	993206	105		37
3850311	VIPER™	161002	346032	992003	993043	993023	993203	105		37
3850312	VIPER™	161003	346033	992004	993044	993024	993204	105		37
3850313	VIPER™	161004	346034	992005	993045	993025	993205	105		37
3850314	VIPER™	161005	346035	992006	993046	993026	993206	105		37
3850315	SST® (LH)				993052	993032		105		37
3850316	SST® (LH)		346062		993053	993033	993213	105		37
3850317	SST® (LH)		346063		993054	993034	993214	105		37
3850318	SST® (LH)		346064		993055	993035	993215	105		37
3850319	SST® (LH)		346065		993056	993036	993216	105		37
3850320	VIPER™ (LH)		346062		993053	993033	993213	105		37
3850321	VIPER™ (LH)		346063		993054	993034	993214	105		37
3850322	VIPER™ (LH)		346064		993055	993035	993215	105		37
3850323	VIPER™ (LH)		346065		993056	993036	993216	105		37

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Original Equipment Manufacturer Part & Trade Mark		Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
		Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
VOLVO (Continued)										
3855142	Raker®	161003	346034		992004	993044	993024	993204	105	37
3855144	Raker®	161004	346035		992005	993045	993025	993205	105	37
3855146	Raker®	161005	346036		992006	993046	993026	993206	105	37
3855152	Raker® (LH)		346064			993054	993034	993214	105	37
3855154	Raker® (LH)		346065			993055	993035	993215	105	37
3855156	Raker® (LH)					993056	993036	993216	105	37
3855481	Aluminum (LH)		346063			993054			105	37
3860708	SS - 3 BL Polished	161003	346033		992004	993044	993024	993204	105	37
3860709	SS - 3 BL Polished	161004	346034		992005	993045	993025	993205	105	37
3860714	SS - 3 BL Polished (LH)		346062			993053	993033	993213	105	37
3860715	SS - 3 BL Polished (LH)		346063			993054	993034	993214	105	37
3860716	SS - 3 BL Polished (LH)		346064			993055	993035	993215	105	37
3860717	SS - 3 BL Polished (LH)		346065			993056	993036	993216	105	37
3862462	SS - 3 BL Polished	161002	346032		992003	993043	993023	993203	105	37
3870710	SS - 3 BL Polished	161005	346035		992006	993046	993026	993206	105	37
3850298-5	Aluminum	161002	346032		992003	993043	993023	993203	105	37
3850299-3	Aluminum	161001	346031		992002	993042			105	37
3850300-9	Aluminum	161002	346032		992003	993043	993023	993203	105	37
3850301-7	Aluminum	161003	346033		992004	993044	993024	993204	105	37
3850302-5	Aluminum	161004	346034		992005	993045	993025	993205	105	37
3850303-3	Aluminum	161005	346035		992006	993046	993026	993206	105	37
3850305-8	SS Black	161001	346031			993042			105	37
3850307-4	SS Black	161002	346032			993043	993023	993203	105	37
3850308-2	SS Black	161003	346033			993044	993024	993204	105	37
3850309-0	SS Black	161004	346034			993045	993025	993205	105	37
3850310-8	SS Black	161005	346035			993046	993026	993206	105	37
3850311-6	SS - 3 BL Polished	161002	346032			993043	993023	993203	105	37
3850312-4	SS - 3 BL Polished	161003	346033			993044	993024	993204	105	37
3850313-2	SS - 3 BL Polished	161005	346035			993046	993026	993206	105	37
3850314-0	SS - 3 BL Polished	161004	346034			993045	993025	993205	105	37
3850315-7	SS Black (LH)					993052	993032		105	37
3850316-5	SS Black (LH)		346062			993053	993033	993213	105	37
3850317-3	SS Black (LH)		346063			993054	993034	993214	105	37
3850318-1	SS Black (LH)		346064			993055	993035	993215	105	37
3850319-9	SS Black (LH)		346065			993056	993036	993216	105	37
3850320-7	SS - 3 BL Polished (LH)		346062			993053			105	37
3850321-5	SS - 3 BL Polished (LH)		346063			993054			105	37
3850322-3	SS - 3 BL Polished (LH)		346065			993056			105	37
3850323-1	SS - 3 BL Polished (LH)		346064			993055	993035	993215	105	37
3855480-4	Aluminum (LH)						993033		105	37
3855481-2	Aluminum (LH)						993034		105	37
3858026-2	SS - 3 BL Polished	161002	346032		992003	993043	993023	993203	105	37
3858027-0	SS - 3 BL Polished	161003	346033		992004	993044	993024	993204	105	37
3858028-8	SS - 3 BL Polished	161004	346034		992005	993045	993025	993205	105	37
3858029-6	SS - 3 BL Polished (LH)		346062				993033		105	37
3858030-4	SS - 3 BL Polished (LH)		346063				993034		105	37
3858031-2	SS - 3 BL Polished (LH)		346064				993035		105	37
813226-		082045								Obsolete
813228-		082057								Obsolete
813316-7		082087-1								Obsolete
814611-0		082059-1								Obsolete
814611-1		082059-1								Obsolete
814612-8		082029-1								Obsolete
814615-1		082060-1								Obsolete
814616-9		082030-1								Obsolete
814626-8		082025-1								Obsolete
814627-6		082027-1								Obsolete

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
VOLVO (Continued)									
814628-4	082031-1								Obsolete
814629-2	082033								Obsolete
814631-8	082026-1								Obsolete
814632-6	082028-1								Obsolete
814633-4	082032-1								Obsolete
814634-2	082034								Obsolete
850864-0	082013-1								Obsolete
850865-7	082014-1								Obsolete
850866-5	082015-1								36
850867-3	082016-1								Obsolete
851035-6	082089-1								Obsolete
851037-2	082091-1								Obsolete
851038-0	082090-1								Obsolete
851039-8	082093-1								Obsolete
851040-6	082092-1								Obsolete
851124-8	082011-1								Obsolete
851125-5	082012-1								Obsolete
851138-8	082009-1								36
851139-6	082010-1								Obsolete
852085-0	083003								Obsolete
852086-8	083001								Obsolete
852087-6	083005								Obsolete
852137-9	083006								Obsolete
852138-7	083004								Obsolete
852155-1	083002								Obsolete
854146-8	082032-1								Obsolete
854147-6	082031-1								Obsolete
854148-4	082030-1								Obsolete
854149-2	082029-1								Obsolete
854285-4	082001-1								Obsolete
854286-2	082002-1								Obsolete
854286-4	082002-1								Obsolete
854288-8	082003-1								Obsolete
854289-6	082004-1								36
854977-6	082001-1								Obsolete
854978-4	082003-1								Obsolete
854979-2	082009-1								36
854982-6	082011-1								Obsolete
854983-4	082013-1								Obsolete
854984-2	082015-1								36
854986-7	082089-1								Obsolete
854987-5	082091-1								Obsolete
854988-3	082093-1								Obsolete
854993-3	082004-1								36
854997-4	082012-1								Obsolete
854998-2	082014-1								Obsolete
854999-0	082016-1								Obsolete
872001-3	082090-1								36
872002-1	082092-1								36
YAMAHA									
61A-45972-00-98 Black Steel			345934		993045	993025	993205	103	31, 39
61A-45974-00-98 Black Steel		345933			993044	993024	993204	103	31, 39
61A-45978-00-98 Black Steel		345932			993043	993023	993203	103	31, 39
61B-45972-00-98 Black Steel (LH)		345964			993055	993035	993215	103	31, 39
61B-45974-00-98 Black Steel (LH)		345963			993054	993034	993214	103	31, 39
61B-45978-00-98 Black Steel (LH)		345962			993053	993033	993213	103	31, 39
62A-45970-10-00 Pro Series			335934		993145			See Note 1	30

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
YAMAHA (Continued)									
62A-45970-10-00 PRO HPPro Series					993146			See Note 1	30
62A-45972-10-00 Pro Series			335935		993146			See Note 1	30
62A-45974-10-00 PRO HPPro Series		335932			993145			See Note 1	30
650-45943-01-36	012102								28
651-45947-00-36	012011								28
653-45941-01-36	012013								28
663-45930-00-98 Black Steel					993407			117	29
663-45943-01-36	032040			992408	993408			117	29
663-45943-02-36	032040			992408	993408			117	29
663-45943-02-EL	032040			992408	993408			117	29
663-45945-01-36	032042			992605	993406			117	29
663-45945-02-36	032042			992605	993406			117	29
663-45945-02-EL	032042			992605	993406			117	29
663-45947-01-36	032044			992603				117	29
663-45947-02-36	032044			992603				117	29
663-45947-02-EL Aluminum	032044			992603				117	29
663-45949-01-36 Aluminum				992409				117	29
663-45949-01-EL Aluminum				992409				117	29
663-45952-02-EL Aluminum	032043			992604	993405			117	29
663-45956-01-EL Aluminum	032046			992601				117	29
663-45958-00-36 Aluminum	032041			992606	993407			117	29
663-45958-00-EL Aluminum	032041			992606	993407			117	29
663-45958-01-36 Aluminum	032041			992606	993407			117	29
663-45958-01-EL Aluminum	032041			992606	993407			117	29
663-45970-60-98 Black Steel	032042	395929		992605	993406			117	29
663-45972-60-98 Black Steel	032043			992604	993405			117	29
663-45974-60-98 Black Steel	032042	395929		992605	993406			117	29
663-45976-00-98 Black Steel	032040	395930		992408	993408			117	29
663-45978-00-98	032040	395930		992408	993408			117	29
664-45941-01-36	022001			992501				123	29
664-45941-01-EL Aluminum	022001			992501				123	29
664-45945-00-36 Aluminum	022002			992502				123	29
664-45945-00-EL Aluminum	022002			992502				123	29
664-45947-01-EL Aluminum	022002			992503				123	29
664-45949-02-EL Aluminum		305929		992505				123	29
664-45952-00-EL Aluminum		305930		992506				123	29
664-45954-00-EL Aluminum	022003			992504				123	29
664-45954-01-EL Aluminum	022003			992504				123	29
664-45970-00-98 Black Steel WD		305929		992505					29
66K-45972-B0-00 Pro Series			345938					103	31, 39
66K-45974-B0-00 Pro Series			345937		993046			103	31, 39
683-45943-00-36 Aluminum	102005								28
683-45943-00-EL Aluminum	102005								28
683-45945-00-36	102004								28
683-45945-00-EL	102004								28
683-45947-00-36	102003								28
683-45947-00-EL	102003								28
683-W4591-02-EL Aluminum	102003								28
688-45930-01-98 Black Steel	101033	335931		992114	993144			See Note 1	30
688-45930-02-98 Black Steel	101033	335931		992114	993144			See Note 1	30
688-45930-60-98 Black Steel	101033	335931		992114	993144			See Note 1	30
688-45932-60-98 Black Steel		335930							30
688-45970-01-98 Black Steel	101034	335932		992115	993145			See Note 1	30
688-45970-02-98 Black Steel	101034	335932		992115	993145			See Note 1	30
688-45970-03-98 Black Steel	101034	335932		992115	993145			See Note 1	30
688-45972-01-98 Black Steel	101035	335933		992116	993146			See Note 1	30
688-45972-02-98 Black Steel	101035	335933		992116	993146			See Note 1	30

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
YAMAHA (Continued)									
688-45978-60-98 ....Black Steel	101031	335931		992113	993143			See Note 1	30
68F-45970-00-00 ....Reliance		345931		992002	993042			103	31
68F-45972-00-00 ....Reliance	101027	345932		992003	993043	993023	993203	103	31
68F-45974-00-00 ....Reliance	101028	345933		992004	993044	993024	993204	103	31
68F-45976-00-00 ....Reliance		345934		992005	993045	993025	993205	103	31
68G-45972-00-00 ....Reliance (LH)		345962			993053		993213	103	31
68G-45974-00-00 ....Reliance (LH)		345963			993054		993214	103	31
68G-45976-00-00 ....Reliance (LH)		345964			993055		993215	103	31
68U-45941-00-EL ....Aluminum DT (T25)				992402				117	29
69L-45974-20-00 ....V MAX				992006	993046	993026	993206	103	31
69W-45943-00-EL ....Aluminum	032040	395930		992408	993408			117	29
69W-45945-00-EL ....Aluminum	032042	395929		992605	993406			117	29
69W-45947-00-EL ....Aluminum	032044			992603				117	29
69W-45952-00-EL ....Aluminum	032043			992604	993405			117	29
69W-45958-00-EL ....Aluminum	032041			992606	993407			117	29
6D0-45970-00-00 ....Saltwater Series II	101028	345933		992004	993044	993024	993204	103	31
6D0-45972-00-00 ....Saltwater Series II		345934		992005	993045	993025	993205	103	31
6D0-45978-00-00 ....Saltwater Series II	101027	345932		992003	993043	993023	993203	103	31
6D1-45970-00-00 ....Saltwater Series II (LH)		345963			993054	993034	993214	103	31
6D1-45972-00-00 ....Saltwater Series II (LH)		345964			993055	993035	993215	103	31
6D-45978-00-00 ....Saltwater Series II (LH)		345962			993053	993033	993213	103	31
6E5-45941-00-36	101034	335932		992115	993145			See Note 1	30
6E5-45941-00-EL ....Aluminum	101034	335932		992115	993145			See Note 1	30
6E5-45943-00-36 ....Aluminum	101035	335933		992116	993146			See Note 1	30
6E5-45943-00-EL ....Aluminum	101035	335933		992115	993146			See Note 1	30
6E5-45945-00-36 ....Aluminum	101033	335931		992114	993144			See Note 1	30
6E5-45945-00-EL ....Aluminum	101033	335931		992114	993144			See Note 1	30
6E5-45945-01-EL ....Aluminum	101033	335931		992114	993144			See Note 1	30
6E5-45947-00-36 ....Aluminum	101032	335930		992113	993143			See Note 1	30
6E5-45947-00-EL ....Aluminum	101032	335930		992113	993143			See Note 1	30
6E5-45949-00-36 ....Aluminum	101031			992112					30
6E5-45949-00-EL ....Aluminum	101031			992112				See Note 1	30
6E5-45954-00-EL ....Aluminum	101036								30
6E5-45970-10-00	101028	345933		992004	993044	993024	993204	103	31, 39
6E5-45970-10-98	101028	345933		992004	993044	993024	993204	103	31, 39
6E5-45972-10-00		345935		992006	993046	993026	993206	103	31, 39
6E5-45972-10-98		345935		992006	993046	993026	993206	103	31, 39
6E5-45976-10-00		345934		992005	993045	993025	993205	103	31, 39
6E5-45976-10-98		345934		992005	993045	993025	993205	103	31, 39
6E5-45978-10-00		345936							31, 39
6E5-45978-10-98		345936							31, 39
6G1-45943-00-36	102002								28
6G1-45943-00-EL ....Aluminum	102002								28
6G5-45930-00-98 ....Black Steel		345936							31, 39
6G5-45941-00-36		345931		992002	993042	993022		103	31, 39
6G5-45941-00-98		345931		992002	993042	993022		103	31, 39
6G5-45941-00-EL ....Aluminum		345931		992002	993042	993022		103	31, 39
6G5-45943-00-36 ....Aluminum		345934		992005	993045	993025	993205	103	31, 39
6G5-45943-00-EL ....Aluminum		345934		992005	993045	993025	993205	103	31, 39
6G5-45943-01-98 ....Aluminum		345934		992005	993045	993025	993205	103	31, 39
6G5-45945-00-36 ....Aluminum	101028	345933		992004	993044	993024	993204	103	31, 39
6G5-45945-00-EL ....Aluminum	101028	345933		992004	993044	993024	993204	103	31, 39
6G5-45945-01-98 ....Aluminum	101028	345933		992004	993044	993024	993204	103	31, 39
6G5-45945-01-EL ....Aluminum	101028	345933		992004	993044	993024	993204	103	31, 39
6G5-45947-01-98 ....Aluminum	101027	345932		992003	993043	993023	993203	103	31, 39
6G5-45947-01-EL ....Aluminum	101027	345932		992003	993043	993023	993203	103	31, 39
6G5-45949-00-36 ....Aluminum	101030	345935		992006	993046	993026	993206	103	31, 39

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
YAMAHA (Continued)									
6G5-45949-00-98 ....Aluminum	101030	345935		992006	993046	993026	993206	103	31, 39
6G5-45949-00-EL ....Aluminum	101030	345935		992006	993046	993026	993206	103	31, 39
6G5-45952-00-98 ....Aluminum		345931		992002	993042			103	31, 39
6G5-45952-00-EL		345931		992002	993042			103	31, 39
6G5-45970-00-98		345931		992002	993042			103	31, 39
6G5-45970-01-98		345931		992002	993042			103	31, 39
6G5-45970-02-98 ....Black Steel		345931		992002	993042			103	31, 39
6G5-45972-00-98 ....Black Steel		345934		992005	993045	993025	993205	103	31, 39
6G5-45972-01-98 ....Black Steel		345934		992005	993045	993025	993205	103	31, 39
6G5-45972-02-98 ....Black Steel		345934		992005	993045	993025	993205	103	31, 39
6G5-45972-03-98 ....Black Steel		345934		992005	993045	993025	993205	103	31, 39
6G5-45974-00-98 ....Black Steel	101028	345933		992004	993044	993024	993204	103	31, 39
6G5-45974-01-98 ....Black Steel	101028	345933		992004	993044	993024	993204	103	31, 39
6G5-45974-02-98 ....Black Steel	101028	345933		992004	993044	993024	993204	103	31, 39
6G5-45974-03-98 ....Black Steel	101028	345933		992004	993044	993024	993204	103	31, 39
6G5-45976-00-98 ....Black Steel		345935		992005	993046	993026	993206	103	31, 39
6G5-45976-01-98 ....Black Steel		345935		992005	993046	993026	993206	103	31, 39
6G5-45978-00-98 ....Black Steel	101027	345932		992003	993043	993023	993203	103	31, 39
6G5-45978-01-98 ....Black Steel	101027	345932		992003	993043	993023	993203	103	31, 39
6G5-45978-02-98 ....Black Steel	101027	345932		992003	993043	993023	993203	103	31, 39
6G5-45978-03-98 ....Black Steel	101027	345932		992003	993043	993023	993203	103	31, 39
6H5-45943-00-EL ....Aluminum	032040	395930		992408	993408			117	29
6H5-45945-00-EL ....Aluminum	032042	395929		992605	993406			117	29
6H5-45952-00-EL ....Aluminum	032043			992604	993405			117	29
6H5-45958-00-EL ....Aluminum	032041			992606	993407			117	29
6J9-45972-B0-00 ....Pro Series			345937		993046	993026	993206	103	31, 39
6J9-45976-10-00 ....Pro Series			345941		993045	993025	993205	103	31, 39
6K1-45945-00-98 ....Aluminum (LH)		345963			993054	993032	993214	103	31, 39
6K1-45947-00-98 ....Aluminum (LH)		345962			993053	993033	993213	103	31, 39
6K1-45970-00-98 ....(LH)					993052	993022		103	31, 39
6K1-45970-01-98 ....Black Steel (LH)					993052			103	31, 39
6K1-45970-01-98 ....Black Steel (LH)					993052	993022		103	31, 39
6K1-45972-00-00 ....Black Steel (LH)					993055	993035	993215	103	31, 39
6K1-45972-00-98 ....Black Steel (LH)		345964			993055	993035	993215	103	31, 39
6K1-45972-01-98 ....Black Steel (LH)		345964			993055	993035	993215	103	31, 39
6K1-45974-00-00 ....Black Steel (LH)					993054	993034	993214	103	31, 39
6K1-45974-00-98 ....Black Steel (LH)					993054	993034	993214	103	31, 39
6K1-45974-01-98 ....Black Steel (LH)					993054	993034	993214	103	31, 39
6K1-45974-02-98 ....Black Steel (LH)		345963			993054	993034	993214	103	31, 39
6K1-45976-00-98 ....Black Steel (LH)		345965			993056	993036	993216	103	31, 39
6K1-45976-01-98 ....Black Steel (LH)					993056	993036	993216	103	31, 39
6K1-45978-00-00 ....Black Steel (LH)					993053	993033	993213	103	31, 39
6K1-45978-00-98 ....Black Steel (LH)					993053	993033	993213	103	31, 39
6K1-45978-01-98 ....Black Steel (LH)					993053	993033	993213	103	31, 39
6K1-45978-02-98 ....Black Steel (LH)		345962			993053	993033	993213	103	31, 39
6L6-45930-01-98 ....Black Steel (LH)					993154			See Note 1	30
6L6-45970-00-98 ....Black Steel (LH)					993155			See Note 1	30
6L6-45972-00-98 ....Black Steel (LH)					993156			See Note 1	30
6R1-45970-AO-00 ....Saltwater Series (LH)					993054	993034	993214	103	31, 39
6R1-45972-AO-00 ....Saltwater Series (LH)					993055	993035	993215	103	31, 39
6R1-45974-AO-00 ....Saltwater Series (LH)					993056	993036	993216	103	31, 39
6R1-45976-AO-00 ....Saltwater Series (LH)					993052			103	31, 39
6R1-45978-AO-00 ....Saltwater Series (LH)					993053	993033	993213	103	31, 39
6R4-45970-AO-00 ....Saltwater Series	101028	345933		992004	993044	993024	993214	103	31, 39
6R4-45972-AO-00 ....Saltwater Series		345934		992005	993045	993025	993215	103	31, 39
6R4-45974-AO-00 ....Saltwater Series		345935		992006	993046	993026	993206	103	31, 39
6R4-45976-A0-00 ....Saltwater Series							993206	103	31, 39

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Original Equipment Manufacturer Part & Trade Mark	Standard Hub Propellers			XHS Hub Propellers				XHS Hub Kits	Catalog Page #'s
	Michigan Match	Ballistic	Ballistic XL	Vortex XHS	Apollo Std.	Apollo Lg. Dia	Apollo 4-blade		
YAMAHA (Continued)									
6R4-45976-AO-00	Saltwater Series				993042	993022	993206	103	31, 39
6R4-45978-AO-00	Saltwater Series				993043	993023		103	31, 39
MAR-GYT3B-02-13	Performance 3-Blade		305929						29
MAR-GYT3B-03-12	Performance 3-Blade	032043			992604	993405		117	29
MAR-GYT3B-03-13	Performance 3-Blade	032042	395929		992605	993406		117	29
MAR-GYT3B-03-14	Performance 3-Blade	032041			992606	993407		117	29
MAR-GYT3B-03-15	Performance 3-Blade	032040	395930		992408	993408		117	29
MAR-GYT3B-L4-16	Performance 3-Blade (LH)				993153			See Note 1	30
MAR-GYT3B-L4-18	Performance 3-Blade (LH)				993154			See Note 1	30
MAR-GYT3B-L4-20	Performance 3-Blade (LH)				993155			See Note 1	30
MAR-GYT3B-L4-22	Performance 3-Blade (LH)				993156			See Note 1	30
MAR-GYT3B-L6-16	Performance 3-Blade (LH)		345962		993052			103	31, 39
MAR-GYT3B-L6-18	Performance 3-Blade (LH)		345963		993053			103	31, 39
MAR-GYT3B-L6-20	Performance 3-Blade (LH)		345964		993054			103	31, 39
MAR-GYT3B-L6-22	Performance 3-Blade (LH)		345965		993055	993035	993215	103	31, 39
MAR-GYT3B-V4-14	Performance 3-Blade		335930						30
MAR-GYT3B-V4-16	Performance 3-Blade	101032	335931		992113	993143		See Note 1	30
MAR-GYT3B-V4-18	Performance 3-Blade	101033	335932		992114	993144		See Note 1	30
MAR-GYT3B-V4-20	Performance 3-Blade	101034	335933		992115	993145		See Note 1	30
MAR-GYT3B-V4-22	Performance 3-Blade	101035			992116	993146		See Note 1	30
MAR-GYT3B-V6-16	Performance 3-Blade		345932		992002	993042		103	31, 39
MAR-GYT3B-V6-18	Performance 3-Blade	101027	345933		992003	993043	993023	993203	103	31, 39
MAR-GYT3B-V6-20	Performance 3-Blade	101028	345934		992004	993044	993024	993204	103	31, 39
MAR-GYT3B-V6-22	Performance 3-Blade		345935		992005	993045	993025	993205	103	31, 39
MAR-GYT3B-V6-24	Performance 3-Blade		345936		992006	993046	993026	993206	103	31, 39
MAR-GYT3B-V6-26	Performance 3-Blade		345938							31, 39
MAR-GYT3B-XL-23	Performace XL		345937							31, 39
MAR-GYT3B-XL-25	Performace XL		345938							31, 39
MAR-GYT4B-V6-18	Performance 4-Blade	101028	345933		992004	993044	993024	993204	103	31, 39
MAR-GYT4B-V6-20	Performance 4-Blade		345934		992005	993045	993025	993205	103	31, 39
MAR-GYT4B-V6-22	Performance 4-Blade		345935	435935	992006	993046	993026	993206	103	31, 39
MAR-GYT4B-V6-23	Performance 4-Blade		345935	435935	992006	993046	993026	993206	103	31, 39
MAR-GYT4B-V6-24	Performance 4-Blade		345936	435936						31, 39
MAR-GYT4B-V6-25	Performance 4-Blade		345936	435936						31, 39
MAR-GYT4B-V6-26	Performance 4-Blade		435937							31, 39
MAR-VMAX3-04-18		101034	335932		992114	993144		See Note 1	30
MAR-VMAX3-04-20		101035	335933		992115	993145		See Note 1	30
MAR-VMAX3-04-22					992116	993146		See Note 1	30
MAR-VMAX3-06-16			345932		992002	993042	993022	103	31, 39
MAR-VMAX3-06-18		101027	345933		992003	993043	993023	993203	103	31, 39
MAR-VMAX3-06-20		101028	345934		992004	993044	993024	993204	103	31, 39
MAR-VMAX3-06-22			345935	435935	992005	993045	993025	993205	103	31, 39
MAR-VMAX3-06-24			345936	435936	992006	993046	993026	993206	103	31, 39
MAR-VMAX3-06-26			435937							31, 39
MAR-VMAX3-C6-18	(LH)		345963		993053	993033	993213	103	31, 39
MAR-VMAX3-C6-20	(LH)		345964		993054	993034	993214	103	31, 39
MAR-VMAX3-C6-22	(LH)		345965		993056	993036	993216	103	31, 39

MICHIGAN WHEEL OEM CROSS REFERENCE

Note 1	**Yamaha**	
	T50, 1996 to Present, 15 tooth spline	108
	60-100 HP Including 4-Stroke, 1984 to present, 15 tooth spline	108
	80-140 HP, 1978 thru 1983, 15 tooth spline	102
	115-130 HP, 1984 to present, 15 tooth spline	103

Note 2	**Evinrude/Johnson Outboards**	
	90-140 Large Gearcase, 1976 thru 1990, 15 tooth spline	101
	90-140 Large Gearcase, 1991 to present, 15 tooth spline	100
	150-300 HP, 1976 thru 1990, 15 tooth spline	101
	150-300 HP, 1991 to present, 15 tooth spline	100
	OMC/Cobra Sterndrives	
	Model 800/Cobra/King Cobra, 1978 thru 1990, 15 tooth spline	101
	Model 800/Cobra/King Cobra, 1991 thru 1994, 15 tooth spline	100

Note 3	**Mercury/Mariner**	
	40, 50 & 60 HP Bigfoot, 15 tooth spline	102
	70-140 HP Except 135 HP, 1961 to present, 15 tooth spline	102
	XR-4, XR-6, 15 tooth spline	102
	Honda Outboards	
	75-90 HP, thru 1988, 15 tooth spline	102
	75-90 HP, 1999 & Newer, 15 tooth spline	107
	115-130 HP, 1998 & Newer, 15 tooth spline	107
	Force	
	75-150 HP, 1995 & Newer, 15 tooth spline	102
	Yamaha	
	80-140 HP, 1978 thru 1983, 15 tooth spline	102

Note 4	**Nissan/Tohatsu**	
	90 HP, 1987 & Newer, 15 tooth spline	109
	115 HP, 1992 & Newer, 15 tooth spline	109
	120 HP & 140 HP, 1988 & Newer	109
	Suzuki	
	DF90 & DF115, 2001 & Newer, 15 tooth spline	125
	DF140, 2001 & Newer, 15 tooth spline	126
	Johnson	
	90 & 115 HP (4-Stroke), 2003 & Newer, 15 tooth spline	125
	140 HP (4-Stroke), 2003 & Newer, 15 tooth spline	126
	Yamaha	
	50-100 HP (including 4-Stroke), 1984 & Newer, 15 tooth spline	108
	115-130 HP, 1984 & Newer, 15 tooth spline	103

XHS™ HUB SYSTEM CROSS REFERENCE TO MERCURY FLO-TORQ® HUB SYSTEM

Mercury Flo-Torq®	XHS™ Hub Kit	Mercury Flo-Torq®	XHS™ Hub Kit
835257A1	102	835272A1	108
835265A1	100	835277A1	102
835266A1	106	835279A1	107
835267A1	101	835281A1	104
835270A1	105	835282A1	110
835271A1	103	835284A1	109

PROP-IT-RIGHT ANALYSIS FORM

Michigan propellers

Michigan Wheel Corporation

A free service from:

Find the prop that matches your needs.

1. Please complete all information listed below.
2. If you do not know all the information, refer to the owners manual or to the actual vessel you are re-propping.
3. Ideally, all spaces are to be filled in. However, if certain information is unknown, focus on the spaces marked with an asterisk (*).
4. Our suggestion can only be as good as the information you provide. Inaccurate data will have an effect on the propeller(s) we suggest.
5. Please note any desires, concerns or history of performance in the comment section.
6. When complete, return this form to Michigan Wheel Corporation or a Michigan Wheel distributor. You will be contacted when your Prop-It-Right analysis is ready.

Name: _____

Street: _____

City/State: _____

Zip: _____ Phone: _____

Fax: _____ Date: _____

1501 Buchanan Ave. SW, Grand Rapids, MI 49507
Phone: (616) 452-6941 Fax: (616) 247-0227

PLEASURE BOAT – OUTBOARD & STERN DRIVE

Boat Data

Manufacturer: _____ Model / Year: _____

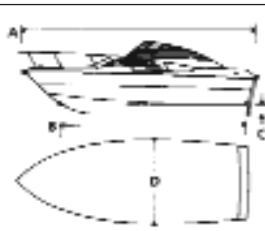
*Overall Length (OAL): _____ Waterline Length (WL): _____

Beam: _____ Draft: _____ Loaded Weight in Pounds: _____

*Boat Hull Material: ⑤ Fiberglass ⑤ Steel ⑤ Aluminum ⑤ Wood ⑤ Other: ____

Present Hull Speed: _____ Desired Hull Speed: ____ ⑤ Knots ⑤ MPH

Boat Use: _____



Check one: ⑤ feet ⑤ m

A _____

B _____

C _____

D _____

Outboard & Stern Drive Engine Data

Motor – Manufacturer: _____ Model: _____

Year: _____ ⑤ Gas ⑤ Diesel

*Engine Mfg. Rating: _____ HP @ Engine Operating Range of _____ to _____ RPM (low to high)

Cubic Inch Displacement (CID): _____

*Full-throttle RPM and speed produced with existing propeller:

RPM: _____ Speed: _____

*Gear Ratio: _____:1 *No. of Engines: ⑤ Single ⑤ Twin

Does your boat have hydraulic power trim? ⑤ Yes ⑤ No

Stern Drive – Manufacturer: _____

Model: _____ Year: _____

Propeller Data

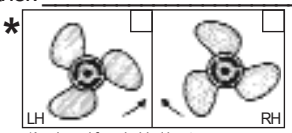
*Present Propeller: _____ diam. x _____ pitch Number of Blades: __

Manufacturer: _____ Model: _____

Material: ⑤ Aluminum ⑤ Stainless Steel ⑤ Other: _____

Part No. _____

*Shaft Size: _____

* 

(As viewed from behind boat looking forward.)

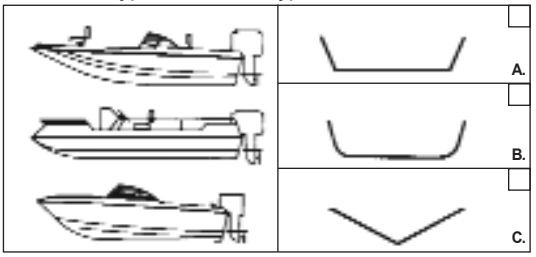
Your Comments:

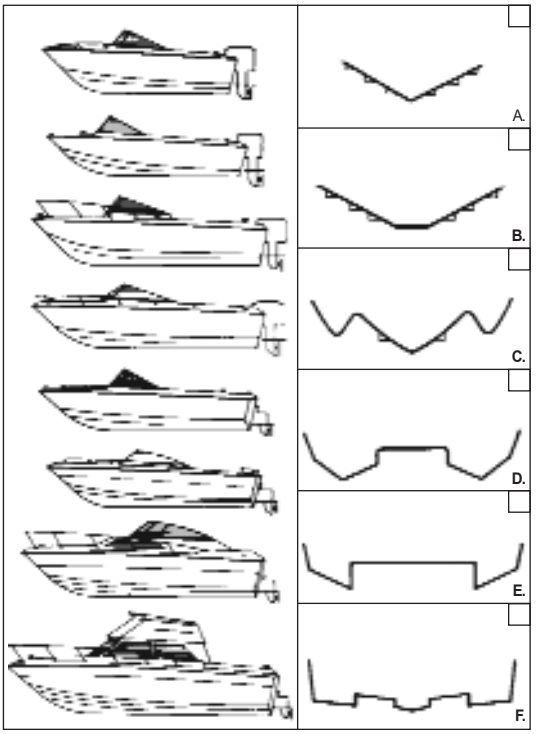
_____

_____

_____

Circle boat type. Check hull type.





For Michigan Wheel Corp. use only

Suggested Propeller Size: _____ diam. x _____ pitch Part No.: _____

Blades: _____ Material: _____

Comments: _____

_____

_____

990010A

ONE YEAR LIMITED WARRANTY AND DISCLAIMER OF IMPLIED WARRANTIES

Michigan Wheel Corporation warrants to the original consumer purchaser that for the life of the motor originally fitted with the Michigan Match™, Vortex™, Apollo™ or Ballistic™ Propeller, under normal pleasure boat usage, the body of the propeller will be free of any defect in material or workmanship that results in blade or hub fracture or failure. Michigan Wheel Corporation also warrants to the original consumer purchaser, under the same parameters of use described above, that the propeller bushing will be free from any defect in material or workmanship for a period of one year from the date of purchase.

Some surface discoloration is unavoidable in a cast stainless steel alloy and will not be covered by this warranty. This warranty does not cover normal wear, accidental damage, modification, improper installation, improper maintenance, or other circumstances that are not a direct result of a defect in the material or workmanship of the propeller.

The sole obligation of Michigan Wheel Corporation under this warranty is to repair or replace the defective component, in the sole discretion of Michigan Wheel Corporation, and at its expense. In order to make a replacement claim, please contact the Michigan Wheel Corporation Customer Service Department, at (616) 452-6941, for a “Return Materials Authorization” number (RMA#), and shipping address instructions. The RMA# must be indicated along with our address on the mailing label, and the shipping carton should include your return shipping address, your phone number, and your original purchase receipt. The warranty will not cover any expense of propeller removal, shipping, or reinstallation of the propeller.

The above warranty is Michigan Wheel Corporation’s sole express warranty for the Michigan Match™, Vortex™, Apollo™ or Ballistic™ Propeller. ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF PURCHASE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Michigan Wheel Corporation also excludes and disclaims all liability for incidental or consequential damages, loss of use of the propeller, costs, and expenses. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State. Any actions arising out of this warranty and the sale of this produce shall be governed by Michigan law and may only be brought, heard, and decided in Kent County Circuit Court, in the State of Michigan, U.S.A., or in the United States District Court for the Western District of Michigan.

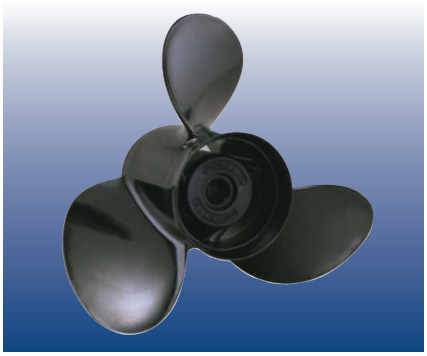
Michigan Wheel Corporation, Outboard & Sterndrive Division
1501 Buchanan Avenue SW
Grand Rapids, MI 49507
Phone: (616) 452-6941

Need your Propeller Repaired?

Congratulations, you have chosen a top quality propeller. Should it become damaged during use, you want a qualified trained technician to repair it. Contact the **National Marine Propeller Association (NMPA)** at phone: 616.235.6672, fax: 616.235.0144 or visit them on the web: www.nmpa.net for a certified propeller repair shop near you.

Warranty claims are to be addressed directly to **Michigan Wheel Corporation** per instructions on this warranty statement and not to the **NMPA.**

Michigan Wheel, introducing new props and improving old ones…since 1903.

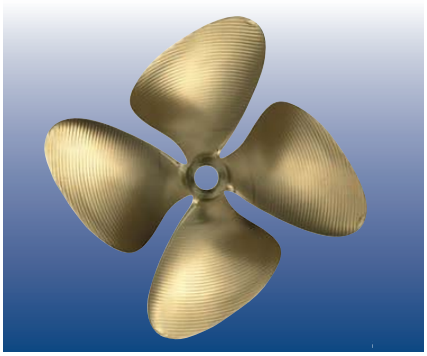


MICHIGAN MATCH REPLACEMENT PROPELLERS

'Old Faithful' with improved powder coating & beefier bushings. Great primary prop, yet priced as a weekend-saver spare!

BALLISTIC™ STAINLESS STEEL PROPS

High-performance stainless props with proven Power Tip. Finest materials, design and the industry's best warranty!



Ambush4

The New and Improved Ambush propellers are 100% CNC machined for the ultimate in accuracy and consistency.

XHS™ Propeller Series

Carry less inventory, cover more applications! High performance propellers with an exchangeable hub system. Michigan Wheel's Xchangeable Hub System absorbs impact and stress caused by shifting gears and is designed to spin under significant impact to help protect your lower unit. XHS® is also designed to be interchangeable with Mercury's Flo-Torq II™ hub system, potentially saving you money when replacing or upgrading your propeller.

APOLLO XHS

Highly polished, ultimate performance, stainless steel propeller featuring CAD designed blade geometry. Available in standard 3-blade, large diameter 3-blade, and 4-blade propellers.

VORTEX XHS™ PERFORMANCE PROPELLERS

High performance aluminum replacement propeller featuring high performance blade geometry, and high gloss black powder coat finish. Available in 3 & 4 blade propellers.

Michigan Wheel Corporation

1501 Buchanan Avenue S.W.
Grand Rapids, MI 49507

Phone: (616) 452-6941
Fax: (616) 247-0227
E-mail: info@miwheel.com
www.miwheel.com

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