

installation, follow same procedure and select the next higher pitch propeller on chart. For water skiing, use next lower pitch on chart. If the correct propeller has been selected, and if the boat is in good condition, the speed will fall in the given speed performance range.

### QUICKSILVER PROPELLER RECOMMENDATION CHART

Motor Model	Propeller Description	Propeller No.	Prop. Pitch	Boat Length	Lbs. Boat Weight	Pounds * Gross Load	Transom Height	Speed MPH
Mark 55	2 Blade Br.	48-23587	13"	12-14'	Up to 325	Up to 750	16-17½"	35-40
Mark 50	2 Blade Al.	48-22914+	12"	14-16'	325-450	700-1200	15½-16½"	32-35
	2 Blade Br.	48-22636	12"	14-16'	325-450	700-1200	15½-16½"	32-35
and	2 Blade Br.	48-23586	11"	15½-16½'	450-725	800-1700	15½-16½"	25-32
	3 Blade Al.	48-22575	10"	16½-18'	725-900	1050-1800	15½-16½"	21-29
Mark 55E	3 Blade Br.	48-22105	10"	16½-18'	725-900	1050-1800	15½-16½"	21-29
Mark 50E	2 Blade Br.	48-25773	9"	18-20'	800-1200	1000-1900	15½"	18-25
	3 Blade Br.	48-22814	8"	19-21'	1000-2000	1900-3000	15½"	12-21
Mark 30	2 Blade Br.	48-25518A1	12.5"	12-14'	Up to 275	Up to 650	16-17"	32-36
	2 Blade Al.	48-25419A2+	11.6"	14-16'	275-550	600-850	15½-16½"	27-32
and	2 Blade Br.	48-25663A1	11.6"	14-16'	275-550	600-850	15½-16½"	27-32
	2 Blade Al.	48-23647A1	11"	15-16½'	550-800	850-1400	15½-16½"	21-27
Mark 30E	2 Blade Br.	48-25662A1	11"	15-16½'	550-800	850-1400	15½-16½"	21-27
	3 Blade Br.	48-25551A1	9"	17-20'	750-1300	1300-1850	15½"	17-22
Mark 25	2 Blade Br.	48-25663A1	11.6"	11-12½'	125-200	400-500	16-17"	31-34
	2 Blade Al.	48-25419A2	11.6"	11-12½'	125-200	400-500	16-17"	31-34
and	2 Blade Br.	48-25662A1	11"	12-15'	150-400	450-800	15½-16½"	25-30
	2 Blade Al.	48-23647A1+	11"	12-15'	150-400	450-800	15½-16½"	25-30
Mark 25E	3 Blade Br.	48-25551A1	9"	14-16'	400-600	750-950	15½-16½"	20-25
	2 Blade Br.	48-20895A1	9"	15½-17'	550-900	850-1300	15½-16½"	15-24
Mark 20	2 Blade Al.	48-23647A1	11"	12-15'	150-400	450-800	15½-16½"	25-30
	3 Blade Br.	48-25551A1	9"	14-16'	400-600	750-950	15½-16½"	20-25
	2 Blade Br.	48-20895A1+	9"	15½-17'	550-900	850-1300	15½-16½"	15-24
Mark 15	2 Blade Al.	48-24611A1+	9.5"	12-15'	150-400	450-800	15½-16½"	18-26
	2 Blade Br.	48-24617A1	8.5"	15-16½'	550-900	850-1500	15-16½"	12-20

NOTE: Suffix for Mark 55-55E 11-spline propeller hub is "A2" and suffix for 14-spline is "A1".  
 All Mark 50-50E are "A1".  
 \* Includes boat weight, engine, fuel, passengers and gear. + Shipped on motor from factory.  
 Br. - Bronze; Al. - Aluminum.

Recommended Kiekhaefer Quicksilver Propellers

### BOAT PERFORMANCE

**Effect of Center of Gravity Location:** For minimum drag and maximum speed -- which allow the best fuel economy at a given time setting per mile and per hour of operation -- move weight of boat to a minimum, only the rear half of the boat being wet. (See Fig

**Effect of Tilt Angle:** The tilt angle of the motor on the transom should be set so cavitation plate is about parallel to bottom of hull. Speed of boats, having center of gravity located forward, may sometimes be improved by tilting engine out one pin hole. This will tend to raise bow and reduce wetted surface. If engine is tilted too far, boat will ride with the bow down, wetting more of the bottom, thus reducing speed. This will generally improve operation in rough

Under ideal conditions, efficiency is best with lower unit operation in level position, because entire thrust is then applied perpendicular to plane of motion. With some boats, however, and under unfavorable conditions of loading, there will be a tendency for the stern to rise or bow to drop (Figure 2). This condition can be corrected considerably by adjusting tilt angle so that boat rides

It must be considered that operation with excessive tilt will result in noticeably poorer performance and may induce cavitation. It is, therefore, preferable to level boat by proper loading rather than by excessive adjustment of tilt angle. Except on very rough water, if tilt angle is correctly adjusted and boat is favorably loaded, a properly designed boat will ride level and will plane without "spank" or "bucking".

**Cavitation:** Cavitation is indicated by intermittent or continuous overspeed of the motor, accompanied by violent water agitation and a sharp reduction in boat speed. Cavitation occurs when slight change in flow (flow of water past propeller) changes from a smooth, laminar flow to a turbulent flow.