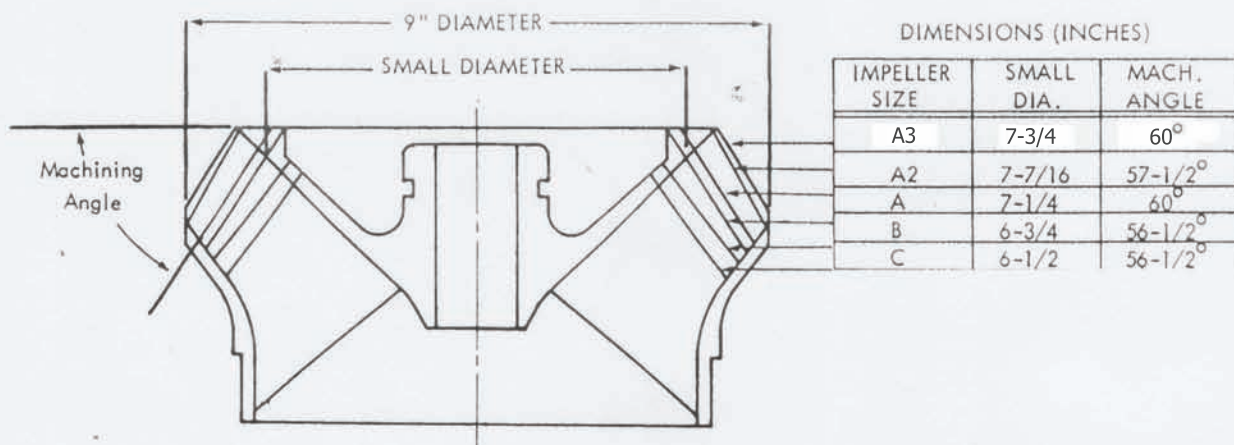


# CP PERFORMANCE MARINE

America's Leading Distributor of Stock and High Performance Marine Parts

## IMPELLER INFORMATION



This is information on how to help in selecting the proper impeller size.

The maximum rating of the 12J aluminum impeller is 500 hp and 4700 rpm. The stainless steel impeller has a maximum rating of 500 hp and up.

The impeller sizes are A2, A, B and C which are described in the figure above. The impellers are identical and it is possible to cut or turn down an A2 and make it the A, B and C sizes.

The HP-RPM curves make it possible to plot on them the engine HP-RPM curve and by intersection of it with the jet-drive curves, the impeller size for that engine may be chosen. If the best engine rated point comes between the curves, use the larger size. For pleasure craft it is better to use the largest impeller possible as this will keep the rpm lower, with the less engine noise and longer engine life.

The curves show actual shaft horsepower required by the jet-drive. Most engine horsepower ratings are based on laboratory tests without accessories and with very careful engine tuning, to obtain the maximum possible output. For a realistic brake horsepower output, engine ratings should be drafted. We suggest 15% as an average figure. Extremely accurate estimates of engine power output are not required as any reasonable error will be compensated for by 100 rpm change.

To illustrate an impeller choice, a ski boat was run with a C and A impeller. It had 185 hp, V-8 engine which turned the C impeller at 4300 rpm, required 182 hp, with a top speed of 42 mph. It turned the A impeller at 3700 rpm, requiring 162 hp, with a top speed of 40 mph. The loss of 20 hp, due to the lower maximum rpm, only dropped the top boat speed 2 mph. The rpm required for all other boat speeds was 500 less for the A impeller, which lowered the noise level considerably.

A jet is different than a propeller as the engine will turn the jet a full rpm whether the boat is tied to the dock or running at top boat speed. Because of this, the larger impeller may be used without danger of lugging the engine when the boat is slowed down by heavy loads, dirty bottom, etc.

Please describe your engine when ordering the jet-drive so we can check the impeller size you have chosen.

# MODEL 12J JET-DRIVE HP-RPM CURVE



CURVE	203
SECTION 3	PAGE 2.02
DATE	10-10-83
SUPERSEDES	
Curve 203, Sec.3, Pg.2.02	
Dated 1-21-71	

POWER DEMAND OF JET-DRIVE MODEL 12J

