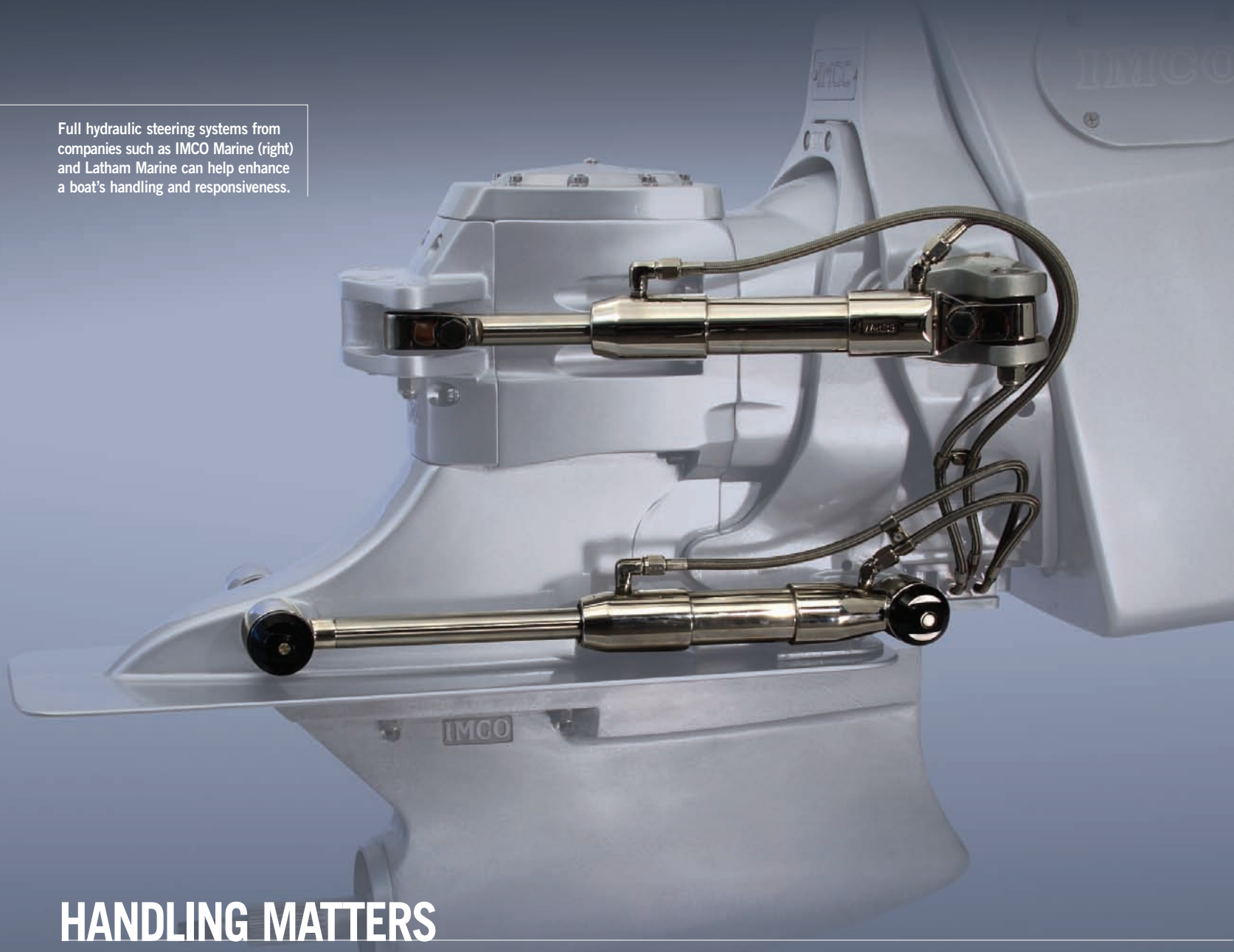


Full hydraulic steering systems from companies such as IMCO Marine (right) and Latham Marine can help enhance a boat's handling and responsiveness.



## HANDLING MATTERS

In performance boats that can top 70 mph, full hydraulic steering isn't a luxury—it's a necessity. By Matt Trulio

It's common knowledge that if you want to upgrade your out-of-warranty MerCruiser 496 Mag HO engine with a supercharger kit you'll need to upgrade your stock Bravo drive to handle the increased horsepower. Most people also understand that a bigger-pitch propeller will probably be necessary.

But not everyone will think about the need to upgrade their steering system at the same time. After all, a blower kit—or a new, more powerful engine—can turn your 60-mph boat into an 85-mph boat. And while stock cable-assist steering is adequate in a 60-mph boat, it is most definitely not in an 85-mph boat.

Make that a 70-mph boat.

"That's where we draw the line," says Tommy Gongola of Latham Marine in Fort Lauderdale, Fla., which is generally considered the pioneer of hydraulic steering in high-performance powerboats. "If you bought a new boat that could do that or more, it would probably already have external hydraulic steering on it.

"But what if you have a boat from 15 years ago with 454s you want to upgrade with TRS drives?" he continues. "Those are actually pretty common—I even have generic price quotes for that setup, not counting hoses and fittings, which we produce to specific lengths for each boat,

for upgrading to full hydraulic steering.”

Hydraulic steering does more than enhance a powerboat’s handling and responsiveness. Hydraulic systems rarely fail and, in the rare instances they do, boats equipped with them are still driveable (though heavy at the helm) and don’t shoot to one side or the other. With cable steering, if the cable breaks, the boat often will dart to the right or left depending on the position of the drive when the failure occurs. At 70 mph, that could be disastrous.

“These boats are going so fast, and the loads they create are extensive,” says Bob Latham, the mastermind behind his 36-year-old company. “It’s all about control. When a boat takes a flier and lands, the loads on the drives and steering system are tremendous. If you were to walk up to a standard cable setup and grab the drive, you could move it with your hand about 2 to 3 inches—with no load. Now, imagine it with load. Hydraulic steering holds everything where it’s supposed to be and keeps the boat going straight.”

Hydraulic steering hardware generally includes one or two external steering rams, a helm pump, a hydraulic fluid filter kit, hoses, fittings and—in twin-engine applications—a tiebar. Keep in mind the word “generally,” because different manufacturers include or exclude different items in their kits. Latham cuts hoses and supplies fittings to order, whereas IMCO Marine’s Nevada facility supplies 60 feet of high-pressure hose and 20 feet of lower-pressure hose with its kits.

“That’s usually enough to do boats up to 40 feet,” says Ron Tsarski of IMCO.

Like Latham, IMCO uses the stock power-steering pump supplied on MerCruiser engines—and the engines of most custom engine builders—in its hydraulic steering systems. Tsarski said plumbing usually consists of four lines running from the helm station and helm pump to the engine compartment and external rams. Once a boat’s stock rack-and-pinion steering assembly is removed, he says, under-dash space for the helm pump and plumbing is rarely an issue.

“Our kits are designed for guys who have some mechanical background,” Tsarski says. “Otherwise, you need a qualified marine mechanic. We supply everything you need. It’s pretty straightforward but there are some measurements that need to be taken and hoses and fittings that need to be assembled.”

So how do you know if you’re up to the task?

“If you’re the guy who just changes his oil, you’re probably not the guy,” Gongola says. “But if you’ve changed your engine, you’re definitely the guy.”

Depending on the manufacturer and your boat—single- or twin-engine—you can expect to spend anywhere from \$4,000 to \$10,000 on a hydraulic steering system. That’s not chump change, but it is reasonable relative to other performance upgrades. You could easily spend that on a supercharger kit, a drive upgrade and a new propeller.

And the truth is—at least in boats that run 70 mph or more—you can’t afford not to do it.

“Unlike with cable steering, if you lose the engine with the power-steering pump you

still have steering control,” Tsarski says. “It’s physically harder to turn the steering wheel, but you still have control.” **P**

— Matt Trulio is a freelance writer for Powerboat.

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