

# ACCESSORIZING YOUR OUTBOARD

Using the right add-ons can improve your motor's performance and makes fishing easier.

BY BOB BERNSTEIN

First there was the paddle, then the oar, then, in 1860, the propeller. How much longer before someone came up with the idea for the outboard motor? By most accounts, a guy named Waterman developed it around the turn of the century.

These days, manufacturers continue to fine tune the outboard. From new ignition systems to add-ons, the goal is to make a proven concept even more efficient.

Many add-ons are designed for the pleasure-boat market and won't stand up to the rugged, day-in and day-out use an outboard receives in commercial fishing. But some add-ons work well for that purpose.

Take the case of the big-foot option. Getting a big foot means retrofitting your outboard with a larger lower unit — the gear and wheel — which will provide more thrust. The big-foot option is available for four-stroke and two-stroke outboards, although not all outboards are compatible with the big foot.

Without using add-ons an outboard is self-contained and completely pre-engineered. Unlike the drive train on an inboard-powered boat, where speed and torque can be altered with different gears and props, the outboard's drive train is part of a whole system that is happiest coming out of the box and going on your boat without having anything done to it.

But a fisherman's outboard needs can change, especially when switching from hauling pots to towing a small trawl, where more torque is required. Or maybe a fishery that you're in for part of the year requires that you spend a lot of time battling tides and currents. Those are instances when being able to utilize the big foot comes in handy.

Still, due to an outboard motor's power curve, a big-foot option might not work in all situations, says Serge Harrison, owner of Port Kent Marine, in Port Kent, N.Y.

Two-stroke outboards are designed to deliver all their torque at the top end. Four-strokes are better; they deliver more usable power at lower speeds.

"You do generate more thrust with a big foot," says Harrison, "but only when the motor is at peak power. And, in reverse, you don't get much thrust at all."

## An outboard nozzle

Harrison invented the Handler, a nozzle for the outboard's prop, to provide thrust over a wider rpm range. Added to an outboard, he says, the Handler will increase thrust in forward and reverse by as much as 100 percent.

There's no secret about the added torque delivered by a propeller-nozzle combination. Tugs and draggers have used the combo for years. The innovation here is in taking that technology and applying it to outboards.

"We started in 1993 with 6- to 15-hp outboards," says Harrison. "Now we're up to 50-hp outboards."

Harrison says mounting the Handler on an outboard will lead to fuel savings. In addition, he says, with its greater thrust, the Handler appears to increase an outboard-powered boat's maneuverability and protect the propeller.

Pat Smart, with Harbour DeLoutre Products of New Brunswick, Canada, has a Handler nozzle over the props of two Honda 50-hp outboards. The outboards are mounted on a pair of 19' x 8' skiffs at an aquaculture site. One of the Handler-equipped Hondas has been in service for 18 months. The second nozzle has been in use for only a few weeks.

"They get some pretty rough service," says Smart. "The Handler has given us much better handling — no



HOUSED ATOP THIS MERCURY is an outboard-powered hydraulic pump, which runs a hauling sheave. The pump can be put to use on outboards above 40 hp.

skidding or slipping in the water. We load the boats with more than a ton of food, and we've noticed much better response.

"One of these boats has a pretty big bow, and when we used to put it in reverse, it would skid around a lot. Now that we have the Handler on, that doesn't happen anymore."

Smart says there's more strain on the tiller handle with the outboard nozzle, but it's not a concern. "Also, in the past," he says, "we've gone through a lot of Honda props, but I have to say, the Handlers have prevented some of that [loss]."

## The hydraulic power pack

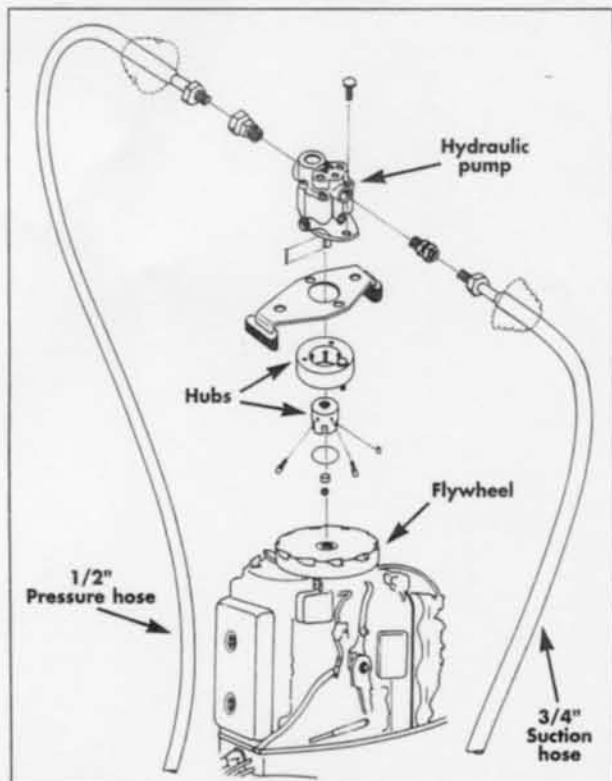
Inshore lobstermen and crab fishermen from the East Coast to Hawaii have been using a hydraulic power pack to power

their haulers. The Outboard Hydraulics package made by Stetson and Pinkham of Waldoboro, Maine, is one such power pack that fits on an outboard.

"The guy who invented it was a long-line fisherman in Alaska," says Lincoln Davis, owner and general manager of Stetson and Pinkham. "He worked for Oregon State University, and he designed hydraulics for salmon gurdies."

"In 1974 or so, *National Fisherman* printed an article [on the hydraulic design], and I sent away for it. I didn't like the installation. It required a machinist to set it up. So I got together with some hydraulics guys and hired them to design a simpler system."

At various times, three different companies made the hydraulic power packs. But



THE KEY to the Outboard Hydraulics unit is the pump, which fits over a hub and is bolted to the flywheel.

## LOW-TECH ACCESSORIES

Add-ons available for outboard motors include tiller extensions, stabilizers, deflectors (also called torque tabs), skeg supports and tilters.

Tiller-extension handles have evolved considerably over the years. It used to be that you just jammed a piece of rubber hose over the end of your outboard's tiller. Now, several companies are making aluminum and plastic extenders.

"They're OK for small motors," says Sandy Crane of Kachemak Gear Shed in Homer, Alaska. "But up over 20 hp, they don't seem to hold up."

Stabilizers, which are the wing-like add-ons you bolt onto an outboard's skeg, are not for everybody, says Lincoln Davis of Waldoboro, Maine-based Stetson and Pinkham.

"If you are underpowered and you're trying to plane the boat more quickly," he says, "they will work. But once you're up there, they'll create more drag. Like anything, there's a give and take to it. But they will enhance a marginal engine's performance."

Deflectors also attach to the skeg. The deflectors are designed to compensate for the motor's steering torque.

"You go out in the boat," says Davis, "figure out your trim angle and speed, then adjust the tab, so when you take your hand off the tiller, the motor stays where it is."

The motor support and tilter protect the outboard and your back when your boat is being transported. The support connects the lower unit of the outboard to the last bow roller on the trailer, keeping the motor from bouncing, while the tilter fits over the shrouds of outboards with handholds, giving extra leverage for lifting the motor.

— B.B.

PORT KENT MARINE



THE HANDLER nozzle fits over an outboard's prop. The prop-nozzle combination provides additional thrust.

Davis did the research and development for all of them and eventually took over the manufacturing.

According to Davis, the Outboard

Hydraulics power package can be placed on any electric-start outboard above about 40 hp. "The biggest engines I've put them on are 225s," he says.

Amby Alley, a lobsterman who fishes out of Maine's Vinalhaven Island, has an Outboard Hydraulics unit from Stetson and Pinkham mounted on his 225-hp Mercury outboard.

He's used a hydraulics power pack the past 10 years, "hauling about 150 traps a day. I've had good luck with them," says Alley.

Most fishermen opt to have the units mounted by technicians, but the procedure is fairly straightforward.

"There's a flexible hub, which is screwed to the flywheel through the puller holes," explains Davis. "Then there's a hydraulic pump that's mounted in the upper [section] of the flex-

ible part of the hub. It has some give, about a 2-degree deflection, so it'll make up for misalignment."

In case anyone is worried that the power demands of the hydraulics package will put excessive strain on the outboard, Davis says it's not a problem.

"I don't even reset the idle on a 50-hp engine," says Davis. "It'll run at a dead idle without killing the engine, once you know how to run it, and with the bigger engines, you don't even have to worry about it."

### Electric power

Another way to bring in fishing gear is with an electric hauler whose power comes from a battery charged by the outboard's alternator.

Peter Maccaferri with Electra-Dyne in Plymouth, Mass., which makes electric haulers, says their primary customer is a guy who doesn't want to pull by hand anymore but doesn't want to go the hydraulic route.

A potential problem with electric haulers is drawing the battery's power down. To avoid this, says Sandy Crane of the Kachemak Gear Shed in Homer, Alaska, "Most people put on an 8D deep-cycle battery. We've sold a few [electric

haulers], and they're pretty good, but in salt water they require maintenance."

Davis says spare power should be considered. "This is an application for a deep-cycle battery, and you want to have a high-output alternator, maybe a spare battery or a battery charging in the shop."

Maccaferri says it's not necessary to have a separate battery, "but we recommend it for safety's sake."

He says Electra-Dyne has shipped a number of haulers to customers in Maryland's crab fishery.

"They're fishing in 10 feet of water. They're clicking the hauler on and then right off, because they're hauling at 300 feet per minute in 10 feet of water." In cases like that, it would be a good idea to have a lot of battery power.

Whether you seek power to haul a lobster trap or crab pot, or to give a skiff more maneuverability or pushing power, there are outboard accessories out there worth checking out.

Your outboard could soon be sporting add-ons that make fishing more profitable and easier. A big change from the days of paddles and oars.

NF

For contact information on companies mentioned in this article, see page 61.

## Propulsion Solutions from PYI

### PACKLESS SEALING SYSTEM SHAFT SEAL

#### Maintenance Free:

No more packing or adjustments.

#### Dripless Operation:

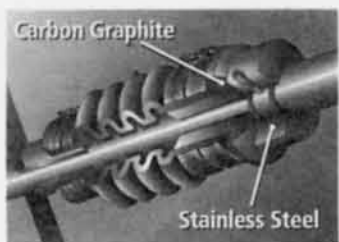
Eliminates needless bilge pumping.

#### Reduce Costs:

Eliminates shaft wear and minimizes corrosion.

#### Easy Retrofit:

Replaces the old stuffing box.

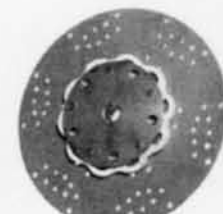


### R&D Flexible Coupling

The R&D Flexible Coupling is designed to protect your drivetrain. The polyurethane flange creates a flexible barrier that reduces noise and vibration to quiet the drivetrain. The R&D coupling will also absorb shock load and the compression plates make the unit fail safe.

### R&D Engine Mount

The R&D Engine mounts are designed specifically for marine applications. These sheer loaded mounts are stiff enough to absorb forward and reverse propeller thrust, yet soft enough to isolate vibrations. Adjustable height for easy alignment. The rubber is factory preloaded to reduce engine movement.



### R&D Damper Drive Plates

The R&D Damper Drive Plates prevent gearbox rattle at low engine speeds. Today's marine diesels are designed with lightweight flywheels which do not create the inertia of an older heavy flywheel. The lighter flywheels result in gear chatter or rattle at low RPM's. This rattle translates into gear wear and damage to the drivetrain. Our damper plates eliminate this problems.



Our goal at PYI is to provide quality, innovative marine equipment at an unsurpassed level of customer service and satisfaction.

Max-Prop / PSS / Whitlock / Scanstrut / R&D  
Feathering Propellers / Shaft Seal / Marine Steering / Radar Mounts / Flexible Couplings

P.O. Box 536, Edmonds, WA 98020 / Tel: 800-523-7558, (425) 670-8915  
Fax (425) 670-8918 / Email: pyi@pyiinc.com / website: www.pyiinc.com

## TUNA DRAGGERS

Put Vista Scan Sonars to work for you!

SEE down the chum line, to **KNOW** what to do next, with the Omni Scan 360°

Avoid costly Hangs with up to 2000' of Early Warning of what lies ahead, with the VSRT

Stern Mounted Model OS360°, only \$498!

Vista Scan, Inc.

5440 NW 78 Ave.,  
Miami, FL 33166  
Tel. 1-800-294-1188  
Fax 1-305-592-6571  
Please contact us for  
More information  
Dealer inquiries welcomed

Retractable Thru-Hull Model VSRT, only \$1,895

Vista Scan converts your existing Fish Finder into true Sonar!

**NEW!** Smarter than an EPIRB, it's a GPIRB™

Take a 406 MHz EPIRB, add a GPS and you have the new GPIRB. It's a smart self-locating beacon that can take the search out of search and rescue.

Advantages of the world's first GPIRB:

- Instantaneous alerting through GEOSAR; no waiting for satellite-pass in the places you're most likely to be.
- Adds latitude and longitude to your EPIRB signal for valuable drift calculation.
- Uses COSPAS-SARSAT & GEOSAR systems.

This unique GPIRB comes from the same safety people who also bring you Satfind™ Survival 406 EPIRBs and PLBs, the Alert™ Man-Overboard System and the world's finest handheld GMDSS and commercial VHF radios.

**nat**  
NORTHERN AIRBORNE TECHNOLOGY

Northern Airborne Technology, Inc., 28 Lord Road, Suite 130, Marlborough, MA 01752, USA  
Toll-free. 800 225 4767 Tel. 508 303 6762 Fax. 508 303 6763  
E-Mail. natinc@ma.ultranet.com www.nat-inc.com

Circle Reader Inquiry # 31

Circle Reader Inquiry # 44