



**400 Marine Engine Dyno Kit – makes dry-land testing conclusive. Bidirectional absorber tests either CW or CCW-rotation engines. (Shown without carrying case.)**

**Standard dyno kit includes 13" toroidal-flow water-brake absorber, heavy-duty electronic torque arm transducer (can be used with either CW or CCW rotation), engine load control, DYNomite LCD equipped handheld data-acquisition computer, AC power supply/recharger, a set of prop-shaft mounting hardware, data wiring harness, manual, stainless-braided hoses (with an anti-scratch covering), and protective carrying case.**

**How does it operate?** The lightweight DYNomite absorber installs, like a prop, on most 50 Hp outboards through 502ci stern drives. During testing, you sweep the desired RPM range by adjusting its load valve. This controls the water level inside the absorber - which changes its rotor's load (like having an adjustable RPM test tank wheel). The DYNomite's computer records the resultant torque at the absorber's housing (along with the RPM) to calculate: 
$$\text{Hp} = \text{Torque (in foot pounds)} \times \text{RPM} / 5,252.$$



**Load control clamps on the steering wheel and is connected to an adequate water supply by your 1" garden hose. The data-acquisition computer sits at the dash for easy viewing of RPM, torque and Hp readings by a single operator. Everything is run right from the boat's helm!**



**DYNO-MAX™ Software** option creates a full engine-dynamometer lab console on your PC. Features include: real-time trace graph display, EGT bar graph, full inertia compensation, adjustable visual and voice limit warnings, quick pushbutton controls, and user-configurable analog and digital gauge ranges. You can even print color reports and graphs to hand out to service customers.

**Automate your testing** by installing DYNOMAX™ with an appropriate Auto-Load Servo or Electronic Throttle Control. This allows keyboard setting of test RPM and load. Without special programming, you can easily create self-running engine tests or extended-duration break-in cycles. Troubleshoot problems that take time to show up.

**DYNomite data-acquisition electronics** eliminate manual recording or estimating power from crude hydraulic-pressure conversion charts. The DYNomite records true Hp, torque, RPM, elapsed time, etc. (at up to 1,000 readings per second) while automatically applying SAE correction factors for air temperature, barometric pressure, and relative humidity. Results display on the DYNomite's LCD and can be printed to an optional portable ASCII parallel printer.

## DYNO mite™ Marine “Prop-Shaft” Dynamometer



**400 Marine Engine Dyno Kit – makes dry-land testing conclusive. Bidirectional absorber tests either CW or CCW-rotation engines. (Shown without carrying case.)**

**400+ Hp\* capacity** with our standard 13" toroidal water-brake absorber. Loads most marine engines from your existing water supply.\* (A dual stator absorber with Siamese-rotor is available to test engines to 800+ Hp.)

**Direct prop-shaft mounting** (by a single technician) onto most BIA splines with the included (or optional) adapters. System can be battery powered for outdoor yard or service call operation, so an expensive shop-ventilation system is not needed.



**Engine cooling can be provided with a small test tank, your yard’s flushing supply, or even direct submersion at the boat**



**800 Hp dual-stator absorber (with Siamese rotor) tests high-power blower engines... without costly engine removal.**

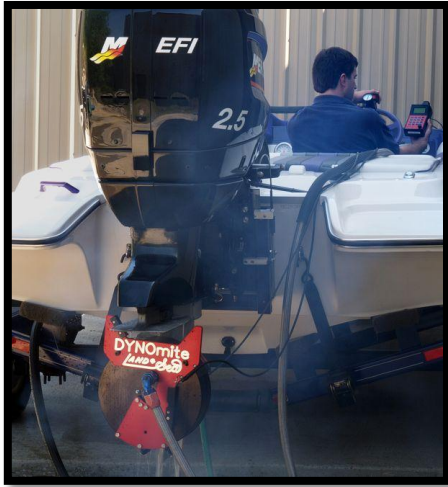
**Precision designed and manufactured** for strength, accuracy, and reliability. Each water absorption brake, heavy-duty torque arm, load-valve, etc. is beautifully CNC machined from anodized aircraft billet aluminum and heat-treated stainless steel. Even the fasteners are stainless, for the maximum submerged corrosion resistance.

**Advanced standard features including:** Smart Record™, torque auto-zeroing, data dampening, spike filtering, playback data averaging, atmospheric correction, instant playback, and integral rev-limiter. It isolates problems that the old-fashioned hydraulic pressure-chart “dynos” cannot even begin to pick up.

Used by many OEM training centers and technical schools, so many outboard and stern-drive technicians already know how to run (and prefer using) a DYNOMite. Just owning the DYNOMite enhances your service department’s technical image among potential employees and customers.



**800 Hp dual-stator absorber (with Siamese rotor) tests high-power blower engines... without costly engine removal.**



Unlike heavy and inherently low-RPM hydraulic “dynos,” a single technician can easily mount the lightweight DYNOMite to test high-Hp race engines.

**Used by many OEM training centers and technical schools,** so many outboard and stern-drive technicians already know how to run (and prefer using) a DYNOMite. Just owning the DYNOMite enhances your service department’s technical image among potential employees and customers.

**Cut non-billable hours** trying to isolate intermittent problems. It is not just that troubleshooting time is often slashed in half, your mechanics stay in the shop instead of out hauling boats around to the lake. Customers that balk at paying for your on-water diagnostic time willingly pay for dyno testing. With DYNO-MAX software, you can even provide them with “before and after” power graphs and reports, documenting the results of your service work.

**One marine dealer’s experience:** “After 15 years of use and well over 3,000 pulls (some in excess of 9,000 RPM) we have not experienced a single failure with our DYNOMite absorber. And, its light weight allows one technician to set it up and do a pull – in less than three minutes. In contrast, our old hydraulic dyno needed two men to wrestle with the pump, was limited to 5,000 RPM, had regular coupler failures, and its hydraulic hose bursts were environmental catastrophes!” – Toni Marine



**Our conversion kit computerizes old hydraulic “dynos” to actually read and log Hp. Eliminates viscosity errors and ambiguous pressure reading “conversion” charts!**

**Dynoing pays its own way** and the most professional marine dealers typically charge an extra premium for all of their dynamometer diagnostic work. Besides being a great service tool, successful service managers find that just the displaying of the brake in their service department allows them to command the higher labor rates, shop wide, needed to operate profitably!