



HyDrive

HYDRAULIC BOAT STEERING

Commander Series



PERFORMANCE

RELIABILITY

QUALITY

Commander Series

FOR OUTBOARDS

The new Commander Series 501 helm unit combines the elements of great performance and economic design, consolidating HyDrive Engineering's position as a world-leader in hydraulic boat steering. Two years of design, development and testing have resulted in these helms being selected as the standard helm supplied in the all-new Commander Series kits for outboards and inboards which also feature the new 510, 511 and 512 series cylinders.

The new 511BH cylinder features a radical new design, which not only provides a competitive price, it also includes the most comprehensive range of protection measures against the effects of corrosion and electrolysis in an aluminium cylinder.

The new 516FM cylinder utilises the same materials and technology to provide a powerful front-mount cylinder which offers a highly competitive price, but with superior quality and performance to other alternatives.

The Commander Series is designed to offer a budget range of hydraulic steering to leisure boat users without sacrificing quality and performance. The new range is designed for use on smaller horsepower outboards and also inboards and jets.

For larger outboard applications, you should either select the PRO version of the kit which upgrades the helm units to the model 401 or 101, or choose the Admiral Series model which best suits the motor. *See separate brochure on the Admiral Series which features chrome plated marine brass, bronze and stainless steel cylinders for outboards - giving the maximum corrosion resistance and strength of any outboard steering system on the market.*

The new Commander Series comes with the standard 2 year warranty for leisure use.

Separate Data Sheets are available on request for each kit.

TYPICAL KIT

Each kit includes the following:-

- Model 501 Helm unit
- 2 litres Ultra-15 hydraulic fluid
- 15 metres high-pressure nylon hydraulic tubing
- The cylinder type of your choice
- All fittings to suit
- Bleeding kit
- All instructions



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For High Horsepower and the optimum in power, strength and performance - see the Admiral Series of outboard steering kits such as the **OBKIT-1** and **OBKIT-1-XT** for extreme applications

NON-FEEDBACK

Commander Series Helms

Take control of your boat with a new HyDrive Commander Series hydraulic steering system.

Hydrive, Australia's largest selling hydraulic steering for small boats, offers the finest in smooth, powerful steering manufactured in Australia using the highest quality materials.

It doesn't matter whether you have a small boat with a small outboard, or a larger craft with multiple large HP outboards, there is a HyDrive system to suit. Everything you need to handle virtually any boat using outboards, inboards, sterndrives or jet units from 4-15 metres - delivered in a single carton.

COMMANDER SERIES

The *Commander Series* features the use of the model 501 (28cc/rev) Helm unit combined with a series of cylinders to suit a boat's requirements. This unique 7-piston pump has a highly efficient combination of features designed to provide maximum performance and longevity for leisure boat users. It is not designed for commercial users or for very large HP outboards.

COMMANDER-PRO SERIES

The *Pro Series* features the model 401 (28cc/rev) and 402 (35cc/rev) helm units. These helms feature high performance bearings and components designed for use in commercial and high HP applications where optimum performance is required.

Why fit HyDrive?

The unique, saltwater resistant design and precision manufacturing offer the most corrosion resistant steering cylinders on the market, resulting in greater product longevity in the harsh marine environments of the world.

Designed as a complete Do-It-Yourself installation, everything you need is supplied including detailed step-by-step instructions.



Model 501 Helm unit



Model 401 & 402
Pro Series Helm unit

COMMANDER HELM OPTIONS

Commander Series Helms

FEATURES:

Compact front-mount design

Unique high-tech composite alloy body for total corrosion resistance

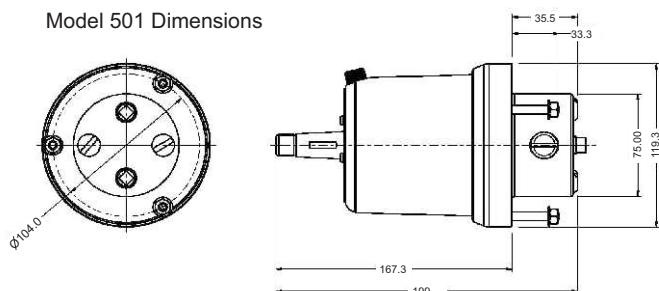
In-built lock valve prevents torque feedback - the wheel stays where you put it.

Field replaceable shaft seal

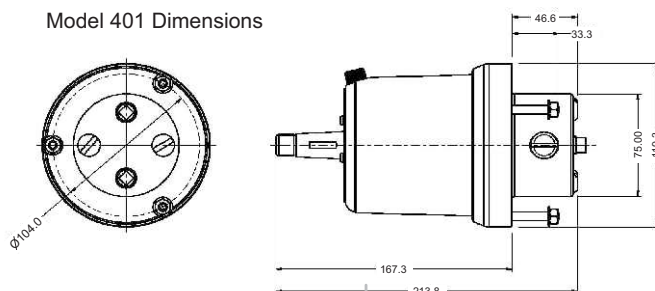
Rear-mount kit available

Wedge kit available

Model 501 Dimensions



Model 401 Dimensions



Inboard & Jet Cylinders



212- Inboard cylinders RUDDER TORQUE TO 30KgM

For small in-board powered boats with rudders, the model 212 inboard cylinder is an ideal choice for rudder torques up to 30KgM. Installation is simple, performance is great and handling is direct with only 3 turns HO/HO. The 212 cylinder comes in kit form with all necessary fittings including high pressure nylon hydraulic hose, 2 litres of Ultra-15 fluid, model 501 helm unit and detailed instructions.

COMKIT-IB1 - for leisure use - supplied with 501 Helm unit - or **COMKIT-IB1-PRO** supplied with 401 Helm unit for commercial use.



212-JET- Jet-Drive cylinders

For small Jet-powered boats, the model 212-JET cylinder is an ideal choice. Small 4" (100mm) stroke and small footprint makes installation simple. Performance is great and handling is direct with only 1.7 turns HO/HO. The 212-JET cylinder comes in kit form with all necessary fittings including high pressure nylon hydraulic tubing, 2 litres of Ultra-15 fluid, model 501 helm unit and detailed instructions.

COMKIT-JET - for leisure use - supplied with 501 Helm unit - or **COMKIT-JET-PRO** supplied with 401 Helm unit for commercial use.



510- Inboard cylinders RUDDER TORQUE TO 70KgM

For small to medium in-board powered boats with rudders, the model 510 inboard cylinder is an ideal choice for rudder torques up to 70KgM. Installation is simple, performance is great and handling is direct with only 5.4 turns HO/HO. The 510 cylinder comes in kit form with all necessary fittings including high pressure nylon hydraulic tubing, 2 litres of Ultra-15 fluid, model 501 helm unit and detailed instructions.

COMKIT-IB1 - supplied with 501 Helm unit - or **COMKIT-IB1-PRO** supplied with 401 Helm unit for commercial use and increased rudder torque of 85KgM.

DUAL STATIONS and AUTOPILOTS

You can fit dual stations to any of the steering kit combinations with the addition of one extra helm unit and a dual-station fitting-kit. Each helm unit is fitted with internal lock valves and is ready to accept either a second station or an autopilot pump unit.

FOR INBOARDS

NON-FEEDBACK

HyDrive

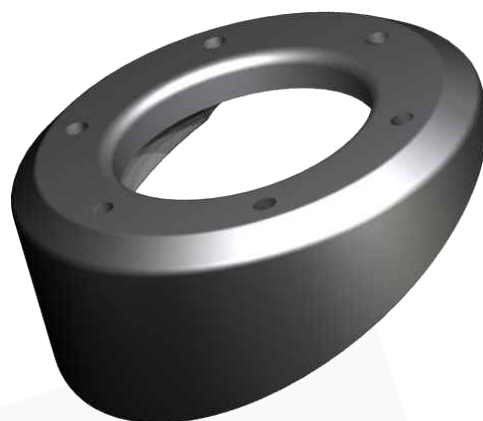
Accessories



REAR-MOUNT KIT

The **REAR-MOUNT KIT** fits any model 401, 402 or 501 helm unit and is adjustable from low-profile to full protrusion for maximum flexibility in helm placement. Simply trim the spacers and studs to adjust the amount of protrusion into the helm position. The front dash or console ring is fully O-ring sealed against pump body to prevent water ingress to the rear of the console. Easy to fit, easy to adjust and looks great.

20 DEGREE WEDGE



The **WEDGE-401** 20-degree wedge kit is designed for mounting from fully horizontal to fully vertical installations and fits any standard model 401, 402 and 501 helm unit.

DO-IT-YOURSELF TIE-BAR KITS



The HyDrive UNITIEBAR is available for tie-bars up to maximum of 700mm between centres and up to twin 175HP outboards. For larger HP outboards - ask for a data sheet on our HD tie-bar kits.

FOR HELM UNITS

HyDrive

Some System Options

Typical steering circuits for outboard motors

Bullhorn type cylinders pictured but same circuits can be used on all cylinder types

FOR OUTBOARDS

