

# HYDRAULIC STEERING



## HYDRIVE STORY




Hydrive equipment is manufactured to the finest tolerances possible using the latest computer controlled machines. Every single component is measured and tested at least twice before assembly. It is then tested again in the final assembly in stringent working conditions. All our equipment is designed with huge safety margins to maximise your safety. Along with this all our products are manufactured using only the very best material to ensure corrosion resistance and serviceability even in the worst possible conditions.

## COMPLETE SYSTEMS

A24-4006	<p><b><u>OBKIT5 FRONT MOUNT SYSTEM</u></b>                  (turns Ho/Ho 4.5) - 216 FM Cylinder                  This cylinder is capable of handling single engine installations up to 300HP or multiple engine installations up to 600HP. It requires a small amount of tolerance (615mm)                  Dimension: 737.50 full RAM end stroke length. Each complete kit contains Hydrive hydraulic fluid; 2 x brass fittings, 1 x 12m length of hydraulic tubing, 1 x plastic bleed bottle, 1 x Hydrive Helm and a Hydrive Ram.</p>	
A24-4006TILT	<p><b><u>OBKIT5 UPGRADE TILT FRONT MOUNT</u></b></p>	
A24-4007	<p><b><u>PROKIT COMPACT FRNT/MNT SYSTEM</u></b>                  (turns Ho/Ho 4) (Bull Horn)                  For small inboard vessels, jet units and outboards up to twin 150HP CXL or 235 HP single. The complete PROKIT is the ideal choice using the 212BH cylinder.                  Each complete kit contains Hydrive hydraulic fluid, 2 x brass fitting, 1 x 12m length of hydraulic tubing, 1 x plastic bleed bottle, 1 x Hydrive Helm and a Hydrive Bull Horn Ram (19' - 492mm)</p>	
A24-4008 STD A24-4008-H HONDA A24-4008-M MERCURY	<p><b><u>OBKIT1 FRONT MOUNT SYSTEM</u></b>                  (turns Ho/Ho 5) (Bull Horn) - 210 BH                  It is capable of handling single and multiple engine installations (up to 1200HP). Requires only a small amount of clearance (615mm). Each complete kit contains Hydrive hydraulic fluid; 2 x brass fittings, 1 x 12m length of hydraulic tubing, 1 x plastic bleed bottle, 1 x Hydrive Helm and a Hydrive Bull Horn Ram (26" = 660mm)</p>	
A24-4008TILT	<p><b><u>OBKIT1 UPGRADE TILT FRONT MOUNT</u></b></p>	
A24-4008B	<p><b><u>BOSUN OBKIT1 BULLHORN</u></b></p>	
A24-4009	<p><b><u>SPORTKIT COMPACT SIDE MOUNT SYSTEM</u></b>                  (turns Ho/Ho 3)                  For small inboard vessels, jet units and outboards up to twin 150HP CSL or 235 HP single. The complete Sportkit is the ideal choice using the 212T Sport cylinder. Giving direct control for most boats up to 8 metres, this cylinder is made from the finest anodised aluminum and stainless steel.</p>	

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<b>COMPLETE SYSTEMS continued</b>		
A24-4010	<p><b><u>OBKIT3 SIDE MOUNT SYSTEM</u></b> (turns Ho/Ho 5) The side mount 210TSE (unbalanced) can handle the same horsepower as the power Bull Horn cylinder (up to 225 HP CXL), but it is simpler and cheaper to install. The only restriction to fitting them is the side clearance requirements in the engine well.</p>	 <p style="color: red; text-align: center;"><b>Fits All Makes</b></p>
A24-4011	<p><b><u>OBKIT4 DOUBLE ENDED TRANSOM MOUNT SYSTEM 210DE</u></b> (turns Ho/Ho 6) The perfect steering solution for narrow engine well installations as it offers minimum space wastage and stationary hoses during operation. The tie bars need to be custom made to fit, and provide universal movement on each end to allow independent tilting of the motors.</p>	
A24-213LSC12	<p><b><u>IBKIT4 MODEL 213 BALANCED CYLINDER</u></b> For larger vessels, and those demanding increased protection from exposure to heavy conditions. Materials used include: Chrome-plated brass, bronze and stainless steel, it is also fully insulated to help prevent electrolysis and is designed for in-field use.</p>	
A24-4012	<p><b><u>HYDRAULIC CABLE STEERING</u></b> The new HyDrive Bosun HydraCable cleverly combines the best features of both cables and hydraulics into a perfect steering solution for single outboard engines up to 200HP or twin outboards up to 150HP (counter-rotating).</p>	

**Hydraulic Components (Can be purchased separately)**

**ADMIRAL HELM UNITS**

Compact low-profile helm with minimal protrusion from the console. Solid stainless steel helm shaft for optimum strength and durability. 4 precision bearings for smoothest performance. All helms are built to high performance standards.

A24-4000	<p><b>101N8 HELM</b> 1.7cu ins (28cc)/rev Meets NMMA requirements Optical 20 degree Bezel Kit alters angle of wheel to dash</p>	
A24-101N8-FM	<p><b>401N8 HELM</b> Front Mount Helm now std on all kits. Displaces 28cc 3/8"</p>	

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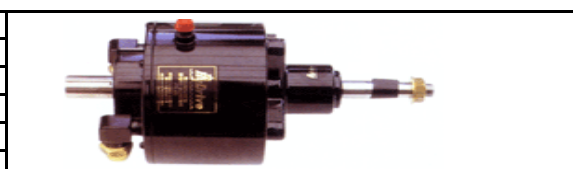
ADMIRAL HELM UNITS (CONT)		
A24-4001	<p><b>102N8 HELM</b>                      2.00cu ins (35cc)/rev                      Meets ABYC requirements                      Optical 20 degree Bezel Kit alters angle of wheel to dash</p>	
CYLINDER UNITS		
A24-4140	212 PRO COMPACT FRONT MOUNT CYL 135cc	
A24-4141	210BHN8 FRONT MOUNT CYL 3/8" 154cc	
A24-4142	216FM NEW FRONT MOUNT CYLINDER 137cc	
A24-4149	212TN8 COMPACT SIDE MOUNT CYL 78cc	
A24-4150	210TSEN8 SIDE MOUNT CYL 3/8" 154cc	
A24-4151	210TN8 BALANCED SIDE MOUNT CYL. 154cc	
A24-4160 Double Bracket A24-4161 Not Balanced A24-4161B 210 Type Balanced.	<p>210N8 BRACKET MOUNT CYLINDER FOR INBOARDS                      (turns Ho/Ho 5.5)                      This bracket-mounted 210TNE (balanced) cylinder combined in this kit with the Admiral 101 Helm provides a useful installation option for inboard engines.</p>	
A24-4506	BYPASS VALVE FOR LIQUID TIEBAR	
A24-4501	100M 3/8" NYLON HOSE (SOLD PER M)	
A24-4500	15M HOSE	
A24-4601	ULTRA 15 HYDRIVE FLUID (PER LITRE)	
<b>N.B.</b>	<b>SEALKITS AVAILABLE ON REQUEST</b>	

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## ADMIRAL HEAVY DUTY BOAT STEERING

A24-3000	304 HELM UNIT (OLD TYPE)
A24-3005	103HD HELM UNIT
A24-3020	330C CAT BALL VALVE KIT
A24-3021	DUAL HELM KIT FOR 304 HELM
A24-3022	331C LOCK VALVE (AUTO PILOT)



## ADMIRAL HEAVY DUTY STEERING CYLINDERS

A24-3010	H150-9 SLAVE CYLINDER
A24-3012	HD175-10 SLAVE CYLINDER



## NOMINAL DIMENSIONS IN MID STROKE POSITION

MODEL	HD-150-9	HD150-12	HD175-10	HD175-12	HD200-12	HD200-15	HD250-12	HD250-15
STROKE	230	305	254	305	305	380	305	380
A	557	635	583	685	685	835	685	835
B	139	215	165	190	215	290	215	290
C	743	898	794	900	900	975	900	975
D	52	52	52	52	52	52	52	52
E	60	60	60	60	60	60	60	60
F	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5
G	106	106	106	106	106	106	106	106
H	218	265	240	265	265	340	265	340
I	375	450	400	450	450	525	450	525
J	53	53	53	53	53	53	53	53
K	106	106	106	106	106	106	106	106

## SOME POSSIBLE STEERING TORQUE COMBINATIONS for single & dual cyl. systems

CYL/MODEL	TORQUE KgM	VOLUME cc's	301 HELM   304 HELM   305 HELM		
			TURNS Ho/Ho		
150-9	107	172	4.9	4	2
150-9 x 2	214	344	9.8	8	4
150-12	143	229	6.5	5.3	2.7
175-10	185	296	8.4	6.9	3.4
175-10 x 2	370	592	n/a	13.8	6.8
175-12	221	355	10.1	8.2	4.1
175-12 x 2	442	705	n/a	n/a	8.2
200-12	289	463	13.2	10.8	5.4
200-12 x 2	578	926	n/a	n/a	10.8
200-15	362	579	n/a	13.5	6.7
250-12	506	811	n/a	n/a	9.4
250-15	633	1014	n/a	n/a	11.8
250-12 x 2	1012	1622	n/a	n/a	18.8
250-15 x 2	1266	2028	n/a	n/a	23.6

NB APART FROM STOCKED CYLINDER ITEMS THE OTHER LISTED ITEMS ARE AVAILABLE ON REQUEST

# HYDRAULIC STEERING



## SEAL KITS

A24-SK216FM	SEAL KIT 216 FRONT MOUNT
A24-SK411BH	SEAL KIT 411 BH CYLINDER
A24-SK101	SEAL KIT 101 HELM
A24-SK201	SEAL KIT 201 AND 202 HELMS
A24-SK210	SEAL KIT 210 CYLINDER
A24-SK210BH	SEAL KIT 210 BH FRONT MT CYL
A24-SK210T	SEAL KIT 210T CYLINDERS
A24-SK211BH	SEAL KIT COMPLETE 211BH
A24-SK212	SEAL KIT 212 CYLINDER

# POWER-BLEED KIT

## BLEEDING MADE EASY

**NEW**

### FEATURES:-

- Portable
- 12 Volt DC
- Easy to operate
- Bleeds steering in minutes with a single person
- Air-free steering every time
- No mess
- No waste
- Quick connect fittings
- Filter is visible and easy to access
- Optional dual cylinder hose kit



Reduce installation time and cost with a HyDrive POWER-BLEED Kit. Fast and efficient bleeding of HyDrive hydraulic steering\* can now be a simple task for one person and in a fraction of the time needed for normal self-bleeding methods. Everything you need is supplied in the kit including the quick-connect fittings designed to attach directly to HyDrive's new style bleeder nipples.

***Ideal for boat builders where time is money. This makes the quick task of bleeding a HyDrive system even quicker!***

Part number **A24-PBK-12** - Complete POWER-BLEED KIT

Part number **A24-PBK-DCH** - Dual cylinder hose kit

\*Note: can be used on some other brand steering - adaptors available.

**Rutherford**

**Marine**