

OUTBOARD

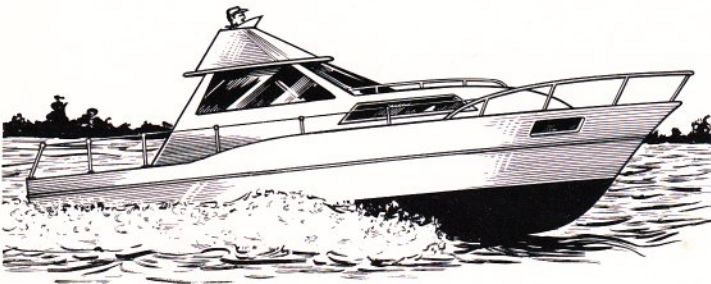


TRIM PLANES

Superior By Design

BENNETT TRIM PLANES

AIRCRAFT TYPE PLANING CONTROL, ENGINEERED IN CORRECT
DESIGNS AND SIZES FOR BOATS 16 TO 80 FEET IN LENGTH



UNTRIMMED

- ☆ INCREASE SPEED
- ☆ REDUCE FUEL CONSUMPTION
- ☆ PROVIDE EXCELLENT VISIBILITY
- ☆ REDUCE POUNDING
- ☆ REDUCE LABORING OF ENGINES
- ☆ ELIMINATE LISTING
- ☆ ELIMINATE SQUATTING
- ☆ REDUCE WAKE
- ☆ ELIMINATE PORPOISING
- ☆ REDUCE HULL STRESS



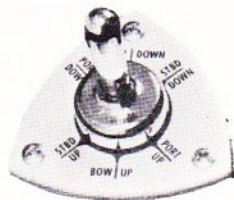
TRIMMED

We commend boat builders and naval architects for designing and building boats to run bow-high as at left. Bow-high running provides positive response to rudder action--giving an excellent-handling, safe boat in a following sea or when running an inlet. Running "uphill," however, labors the engines, reduces speed and increases fuel consumption. The condition is further aggravated by the added weight of full fuel tanks and passengers in the cockpit. BENNETT TRIM PLANES are standard equipment on many boats and are offered as optional equipment by ALL MAJOR BOAT BUILDERS--not as a corrective measure, but rather to provide you with a higher performance, more versatile, safer boat.

Bennett Trim Planes are guaranteed to enable you to trim your boat in seconds for maximum speed and efficiency, regardless of the load of fuel and passengers aboard.

BENNETT TRIM PLANES consist of a pair of stainless steel afterplanes secured to the stern of motor boats--both hard chine and round bilge. A unique single lever control on the instrument panel allows you to control the trim planes together or individually from the pilot's seat. The action is gentle, making it easy to adjust a boat's trim precisely and safely. All components are selected on the basis of durability.

CONTROL

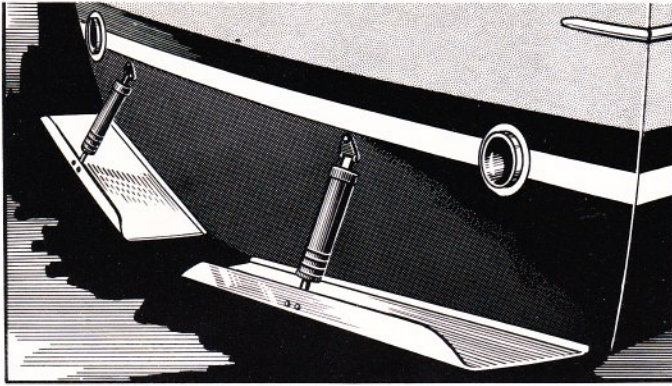


This is the ultimate trim plane control. It is an aircraft joy stick design, the movement of which is descriptive of the boat's reaction to the trim planes. It installs simply through a 1-3/8" bored hole and fits neatly between instruments. This unique design is waterproof and made to last. Standard on all units. PATENT #3,695,204 and Foreign

3 Year
Unconditional Guarantee

BENNETT TRIM PLANE units are engineered for safety, durability and ease of installation. A full 3 YEAR UNCONDITIONAL GUARANTEE assures you it is the superior product.

ELECTRO-HYDRAULIC

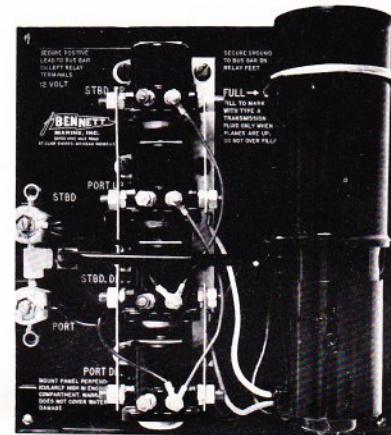


The power of hydraulic is ideal for trim plane application. The planes themselves are the same design for the Electro-hydraulic as for the Electro-mechanical. A restricting orifice in the oil supply to the pump gyrotor provides gentle action--with no loss in pressure--to prevent instant trimming and the possibility of throwing a boat out of control. Two solenoid valves preclude the possibility of the trim planes retracting due to water pressure. All wiring and fusing meet the standards of the National Fire Prevention Association.



Impressive trim plane indicators read system pressure and total lift in pounds. Often will show the planes lifting a ton or more! They come complete with all necessary fastenings and tubing. Optional on Electro-hydraulic only. Patents pending.

Actuators are large and molded of nylon reinforced with fiber-glas. There are no unsightly external hoses to fly off or burst from rot due to the elements. The fluid flows through a concealed feeder passage in the cap. The flexible neck is designed to fit transom angles from perpendicular to 25° rake. Neck can flex over 90° but, due to the geometric design, flexes only 5° in actual operation. PATENT #3,628,487 and Foreign

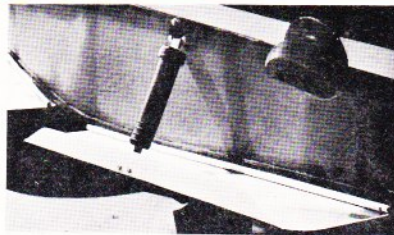


This tough molded panel cradles the hydraulic pump (specially designed high pressure, low volume). Also incorporated on this handsome panel are four relays. The control operates the relays requiring only 3 amps. The relays handle the greater amperage required by the pump, providing full voltage for long life. The two solenoid valves will resist up to 5,000 lbs. p.s.i. The planes stay where you put them! Patents pending.

PRICES

STANDARD 9" CHORD

(Longitudinal Width)



PLANE SPAN

18" (16", 12")
24"
30"
36"
42"
48"
54"

PRICE

\$290.
290.
300.
320.
340.
360.
380.

HULL LENGTH

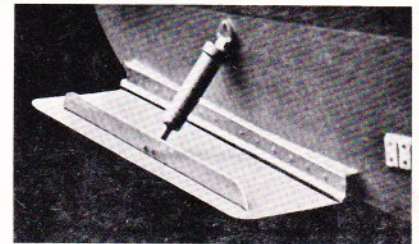
16' - 21' —
16' - 21' A
22' - 25' P
25' - 29' P
30' - 34' R
35' - 42' O
43' - 50' X

12" CHORD

(Longitudinal Width)

PLANE SPAN PRICE

18" \$320.
24" 320.
30" 332.
36" 354.
42" 376.
48" 448.†
54" 470.†
60" 505.†
66" 528.†
72" 577.†



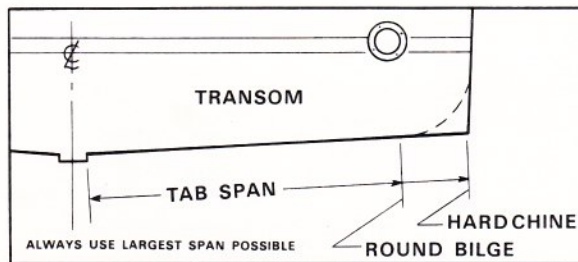
We recommend the 12" Chord for boats where the configuration of the bottom limits the plane span (total of both planes) to less than 2" Per Foot of Boat length. The 12" chord should always be used on heavy boats that have a relatively slow cruise (less than 15 mph.) and on boats over 50 feet in length.

†These units have two actuators per each plane.

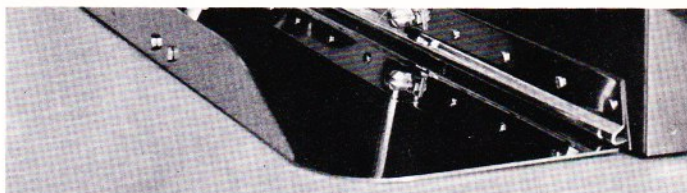
ORDERING TRIM PLANES

PLEASE SPECIFY WHEN ORDERING :

- ☐ Transom mounting planes
- ☐ Bottom mounting planes
- ☐ For wood or fiberglass
- ☐ For steel or aluminum
- ☐ 12 volts
- ☐ 32 volts - \$20. additional
- ☐ Second control for bridge - \$19.50 additional
- ☐ Trim Plane Indicators (Pair) - \$35. additional
- ☐ Epoxy - \$5. additional (required for glass hulls.)

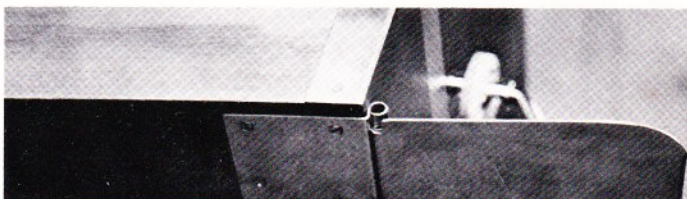


Maximum efficiency is obtained by using the longest span planes possible. The planes are secured to the trailing edge of the bottom. The attaching plate is available for bottom or transom mounting. Measure the hull from centerline to the chine, or turn of the bilge, and select the longest span planes that can be used (allowing 3-4" of leeway). When bottom is convex, concave or lapstrake use transom mount style.

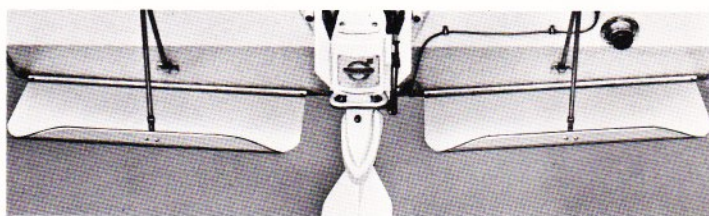


Curved bottom surfaces or flat transoms require transom mounting plates.

IF NOT SPECIFIED, TRANSOM MOUNTING PLATES WILL BE SHIPPED.



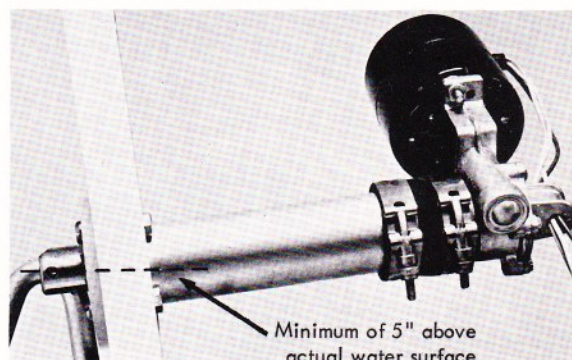
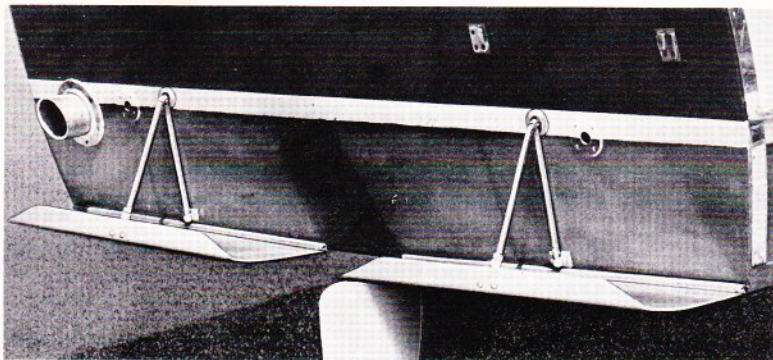
Flat bottom surfaces accept the bottom mounting plates.



Outdrive and outboard boats require a Minimum of 8" clearance from the centerline of the lower unit to the planes.

COMPONENTS OF BENNETT TRIM PLANES ARE MADE UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS
3,062,167 • 3,111,103 • 3,399,643 • 3,628,486 • 3,628,487 • 3,695,204.

ELECTRO-MECHANICAL



A neat looking stainless unit on the outside; easy to install power unit inside. Each trim plane is powered by a reversible electric motor which drives a free-wheeling ball screw jack through 40-to-1 reduction gears.

The trim planes, of 304 stainless steel, have a rigid trailing edge that gives unmatched strength. The hinge is a patented interlock which permits no water to squirt up and aft of the boat (patent #3,111,103)

PRICES OF MOST SIZES ARE \$15. LESS THAN THE ELECTRO-HYDRAULIC.

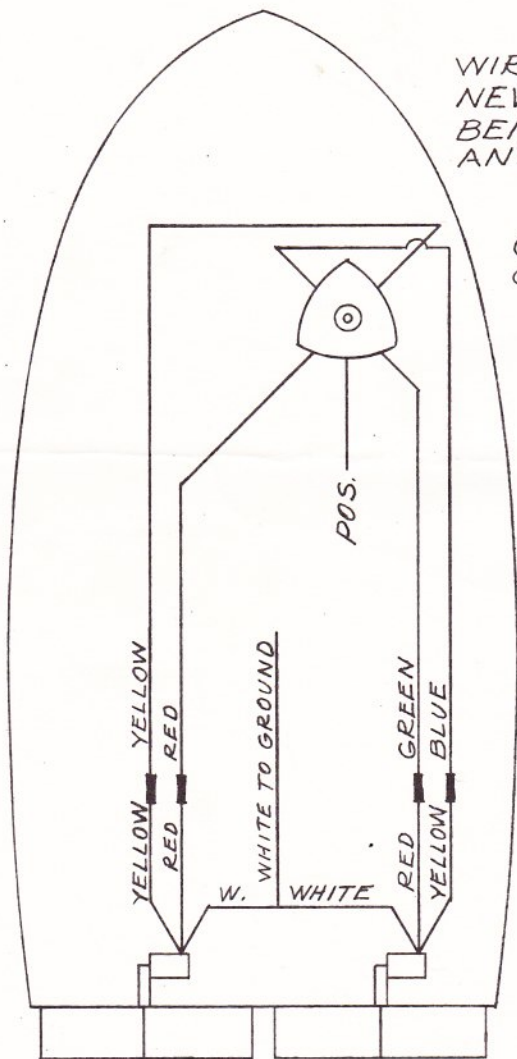


MARINE, INC.

20400 NINE MILE ROAD • ST. CLAIR SHORES, MICHIGAN 48080 - USA • (313) 773-8400

WIRING DIAGRAM FOR
NEW CONTROL FOR
BENNETT ELECTO-MECH-
ANICAL TRIM PLANES

CONTROL IS COLOR
CODED TO HARNESS



PORT SIDE IS COLOR
CODED. STBD. IS MIS-
MATCHED RED TO
GREEN AND YELLOW
TO BLUE

BENNETT MARINE, INC.

PARTS COMMON TO BOTH UNITS

	PART #	LIST
Control with 20' Wire Harness	C1000A	\$ 19.50
Single Lever Control	C1000	14.00
#10 x 1-1/4 s.s. full threaded scr.	EH1071	.06
#14 x 1-1/2 s.s. full threaded scr.	EH1070	.12
Epoxy Kit	EH1090	5.00

PARTS FOR ELECTRO-HYDRAULIC UNIT ONLY

Hydraulic Unit Complete (complete set less planes)		209.50
Actuator Assembly w/Fastenings	A1101A	32.50
Transom mount-cap w/"O" Ring	A1103	6.35
Cylinder	A1105	9.90
Spring	A1107	8.20
Piston w/"O" Ring	A1109	4.35
Lower Hinge	A1113	2.25
Pin	A1115	.20
Power Panel	P1131A	125.00
Molded Panel	P1133	5.60
Solenoid Valve	P1135	16.32
Pump and Motor Assembly	P1145	72.00
Relay	P1153	3.25
Hydraulic Tubing	T1125	.15/ft
1/4-20 x 3/4" s.s. hex hd cap screw	H1173	.10
Tube Bending Clip	H1179	.15

PARTS FOR ELECTRO-MECHANICAL UNIT ONLY

Mechanical Unit Complete (complete set less planes)	SM00165	194.50
Power Unit Complete	P930A	66.50
Basic Power Unit	P930B	29.12
Gear Box w/Jack Screw	P936	20.55
Tube and Clevis	P956	8.57
Electric Motor (12v. or 32v.)	P932	15.51
Rubber Coupling	P934	.57
1-5/8" I.D. Rubber Hose	P958	.31
T-Clamp	2H994	.67
Flanged Tube	P960	5.86
Roll Pin	IH992	.10
Plastic Seal & Pressure Plate	IH976	1.53
Grommet	IH972	1.79
1/4-20 x 2-1/2 pan hd cap screw	IH974	.25
1/4" clipped washer	2H998	.03
Hairpin Arm	A900	14.00
1/2-20 s.s. hex nut	IH980	.25
Ball and Shank	IH978	3.15
Ball Socket	IH982	.67
1/4-20 x 1/2s.s. hex hd cap screw	IH986	.08
1/4-20 s.s. hex nut	IH988	.07
Ball Back-Up Plate	IH984	.36

Boat Leveler Conversion Kit	75.00
(Includes) 2 - Actuators	
Fittings to Hydraulic Line	
Conversion Bracket for Trim Planes	
Pump Cap w/Relief Valve	