



# Hydraulic Steering

## 700 SERIES SYSTEMS

Wagner 700 Series Hydraulic steering systems offer smooth reliable control of power or sail boats from 18 to 40 ft. in length. Ideal for replacement of obsolete or complicated mechanical systems.

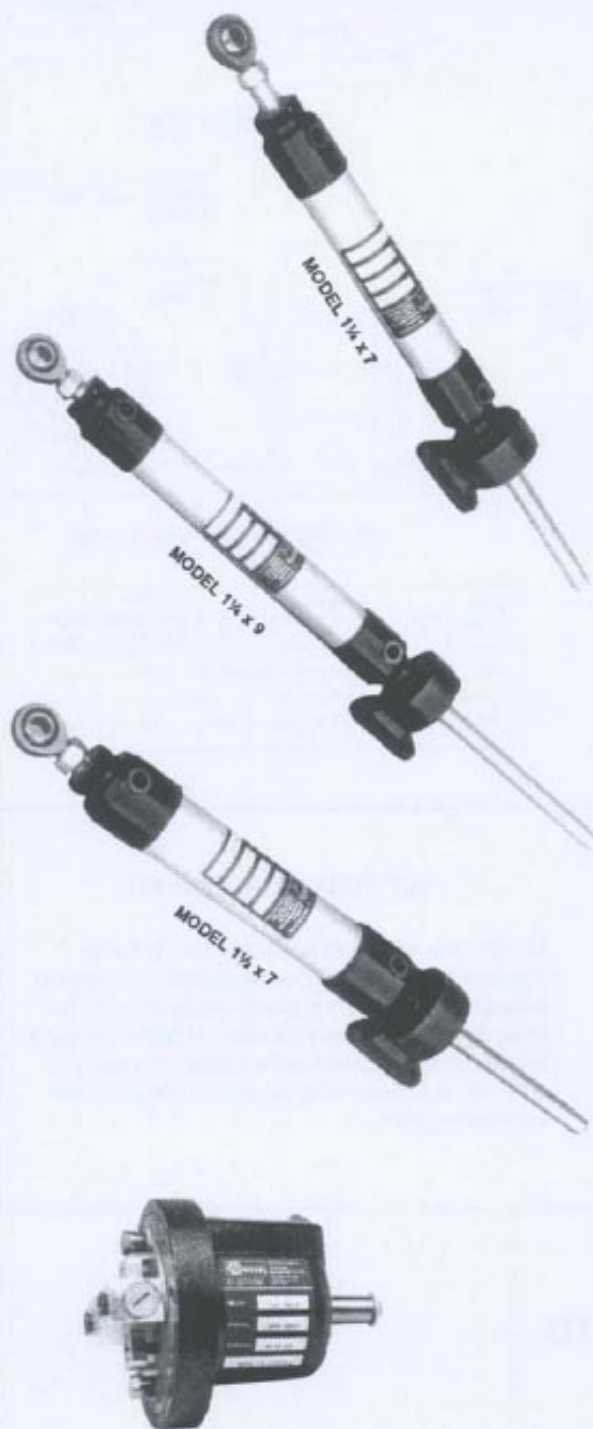
### WHY A WAGNER CYLINDER?

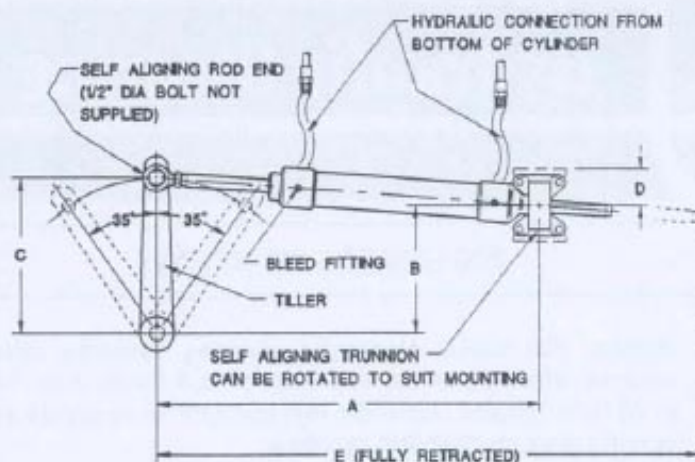
- **Strong and compact design.**  
700 series systems offer pleasure boaters and yachtsmen the same high quality design and construction found in larger commercial Wagner systems. Cylinders are a double acting, balanced displacement design.
- **Flexibility.**  
Standard systems use a 1 1/4 or 1 1/2 cylinder with a 7" stroke. For outboard and inboard/outboard applications there is a 1 1/4 cylinder with a 9" stroke.
- **Corrosion free construction.**  
Cylinder barrels are manufactured using anodized marine grade aluminum and honed to provide a smooth surface for longer seal life. The piston rods are constructed using stainless steel.
- **Simple installation.**  
Self-aligning rod end and trunnion mounting pad allow for easy installation and less critical alignment. Bleed fittings installed in the cylinders ensure easy filling of the system.

### WHY A WAGNER HELM PUMP?

- **Performance.**  
The 701 is a positive displacement axial piston pump based on the same design found in larger Wagner helm pumps. The pistons are ground and honed, then hand assembled for a precise fit resulting in the most efficient manual hydraulic helm pump available.
- **Dependable.**  
The pump is a rugged all metal construction with a hard baked-on enamel finish. The brass shaft is supported at both ends for extra strength. A replaceable external shaft seal is used.
- **Multiple steering stations.**  
Multiple helm pumps are easily connected. Each pump operates independently and has full rudder control. A lockvalve on each pump prevents the wheels not in use from "motoring" as well as eliminating the wheel effort required to maintain rudder position.
- **Simple installation.**  
Pumps have a simple two bolt mounting and may be located in front or behind the dash panel. An optional trim ring provides the perfect finish for a through dash panel mounting.

**Wagner 700 Series Systems offer the ideal all-purpose small boat steering.**



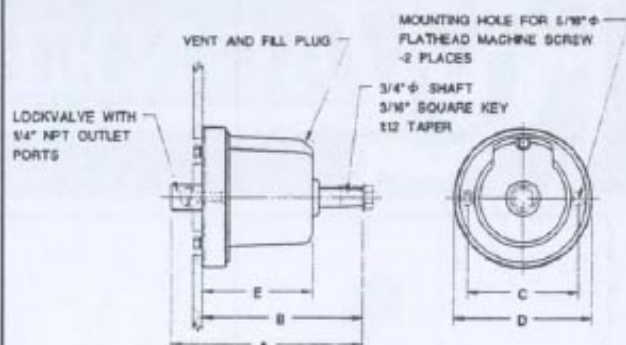
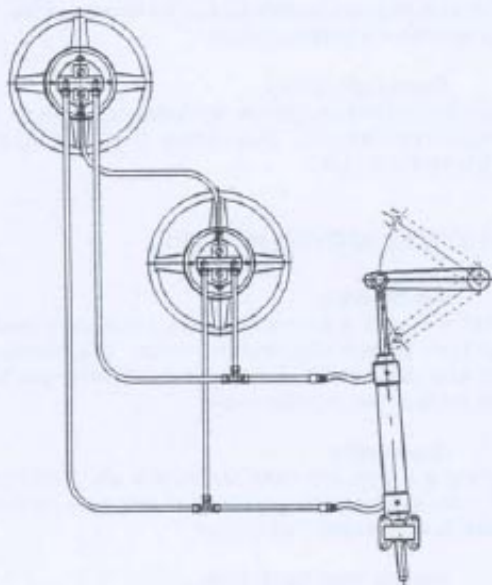


CYLINDER MODEL	BORE	TORQUE (ft-lbs) 2 X 35°	STROKE (inches)	CYLINDER DISPLACEMENT (in³)	WHEEL TURNS (1)	DIMENSIONS				
						A	B	C	D	E
1-1/4 X 7	1-1/4"	384	7"	8.44	3-1/4	16-3/8"	5"	6-1/8"	1-5/16"	22-3/4"
1-1/4 X 9	1-1/4"	492	9"	8.29	4-1/4	19-3/8"	6-7/16"	7-7/8"	1-5/16"	27-3/4"
1-1/2 X 7	1-1/2"	610	7"	10.22	5-1/4	16-3/8"	5"	6-1/8"	1-5/16"	22-3/4"

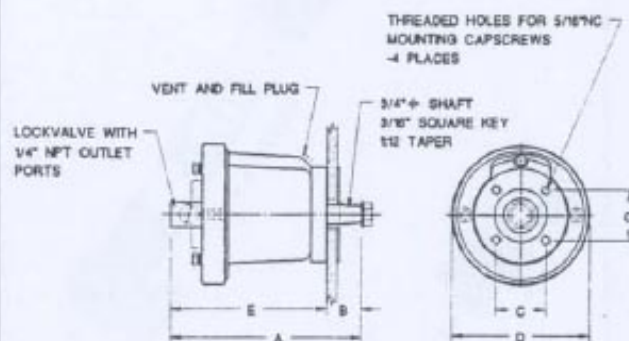
① WHEEL TURNS BASED ON USING WAGNER MODEL 701 OR 702 HELM PUMPS.

② TORQUE RATINGS DEVELOPED IN THE HARDOVER POSITION AT 1000 PSI PRESSURE.

## TWO STATION STEERING



701 HELM PUMP



702 FACEMOUNT HELM PUMP

PUMP MODEL	DIMENSIONS					PUMP DISPLACEMENT (in³/REV)	WEIGHT (lbs)
	A	B	C	D	E		
701	7"	5-3/4"	4-3/8"	5-5/8"	4-3/8"	1.95	9.5
702	9"	2-3/4"	2-3/8"	5-5/8"	6-1/4"	1.95	9.5

## TILT TUBE ADAPTOR KIT

The Tilt Tube Adaptor Kit allows Wagner 700 Series Cylinders to be mounted on certain brands and models of outboard motors and I/O (inboard/outboard) drives. The kit consists of a stainless steel rod and adaptor nut, and is designed to mount directly to the tilt tube of the motor or drive unit. A minimum of 24" clearance is required from the mounting point.



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