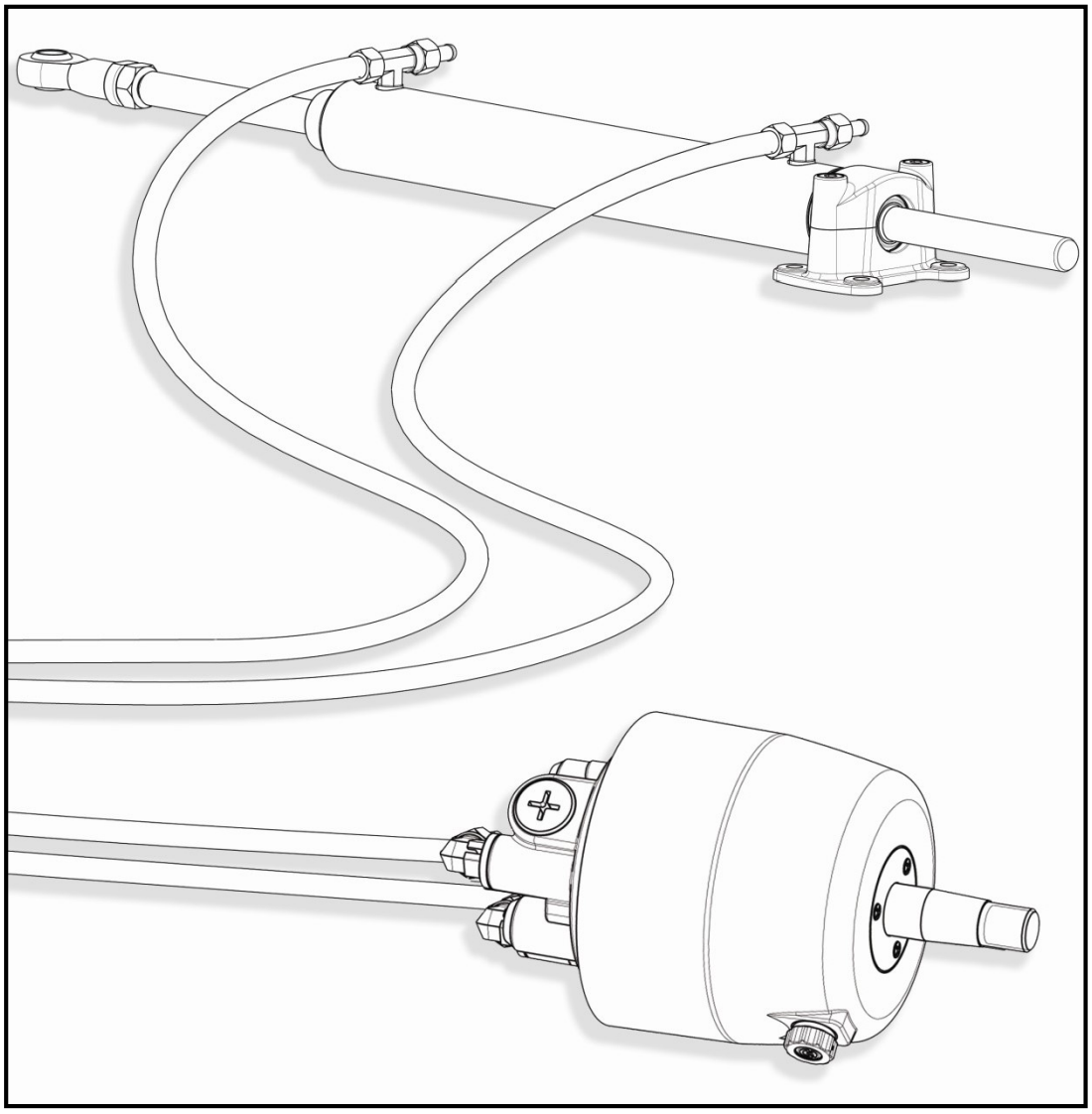
GENOVA Riviera
NAUTICAL ACCESSORIES

HYDRAULIC STEERING SYSTEMS

INSTRUCTION MANUAL FOR INSTALLER AND OWNER



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GENERAL SAFETY RULES

Read carefully and obey the warnings below.

Riviera s.r.l. Genoa is not liable for damage caused to things or people due to modification, improper use or incorrect installation of its products.

It also reserves the right, if it deems it necessary, to make changes at any time to its products to improve their operation.

STOCKING:

- Store the products in environments with temperatures between -40 ° C (-14 ° F) and + 85 ° C (+ 211 ° F).
- Handle only with suitable means or machinery not to compromise its operation.
- Periodically check the state of conservation of the products in the warehouse to avoid deterioration.

INSTALLATION:

- Check the integrity of the packaging; any damage resulting from transport could compromise the correctfunctioning of the hydraulic steering equipment.
- The installation of this equipment must be carried out **EXCLUSIVELY** by qualified personnel after carefulreading of this manual.
- Any system malfunctions must be reported immediately to the qualified personnel who installed it.
- In case of breakdown or failure, shut down the system immediately.
  Restart the system only **after** eliminating the cause of the fault, with the authorization of qualified personnel.
- Tampering or eliminating security systems constitutes a crime.
- Riviera s.r.l. Genova assumes no responsibility deriving from the modification of its products by third parties; this intervention causes immediate forfeiture of the guarantee
- The components can only be replaced with original Riviera spare parts.
  failure to comply with this rule leads to immediate forfeiture of the guarantee.
- The adaptation of the system to any subsequent revisions after installation is the responsibility of the owner.
- In case of purchase of a used steering equipment, the burden of verifying compliance with current regulations is borne by the buyer.
- Keep this manual even after installation; in case of wear or loss, request a replacement copy.

It is recommended to dispose of installation waste products (oils, solvents, greases, etc.) in compliance withthe laws in force.

GENERAL WARRANTY CONDITIONS

Riviera Srl declares that its products are manufactured in a workmanlike manner and comply with current regulations.
The warranty is valid 24 months from the purchase date.
If the Riviera products are installed and used for commercial purposes, the guarantee is limited to one year from the purchase date, without further warranty extensions.
The warranty does not cover any costs deriving from assembly or disassembly of products, transport of the same and expenses for technical personnel, even if attributable to manufacturing defects.
Upon receipt a defective product, it will be examined to determine the cause of defect. If the product is determined to have a defect in workmanship or material, it will be repaired or replaced at the Riviera discretion.
This guarantee does not cover products that have been misinstalled or misapplied, it does not cover claims for direct or indirect damage.
Riviera Srl Genova decline liability and guarantee if products are improperly installed, misapplied or misused.

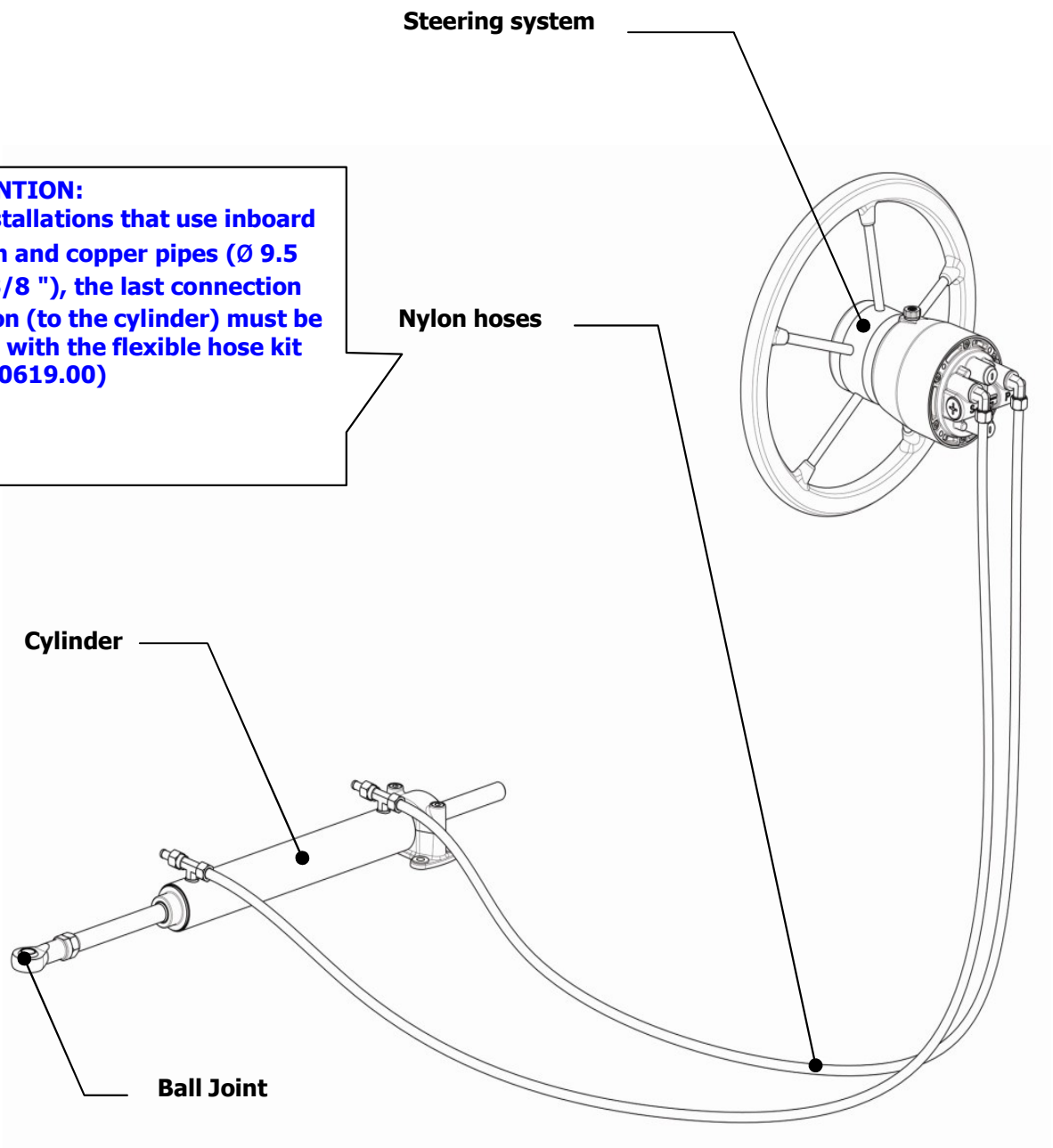
The components of the system are marked according to EU directive 94/25 and ISO 10592.

On certified boats it is mandatory to install steering systems whose components are equally marked.
In this regard, RIVIERA S.R.L. GENOVA is not liable for its products if coupled, for the realization of a guide system, to products not equally certified.

DISPUTES

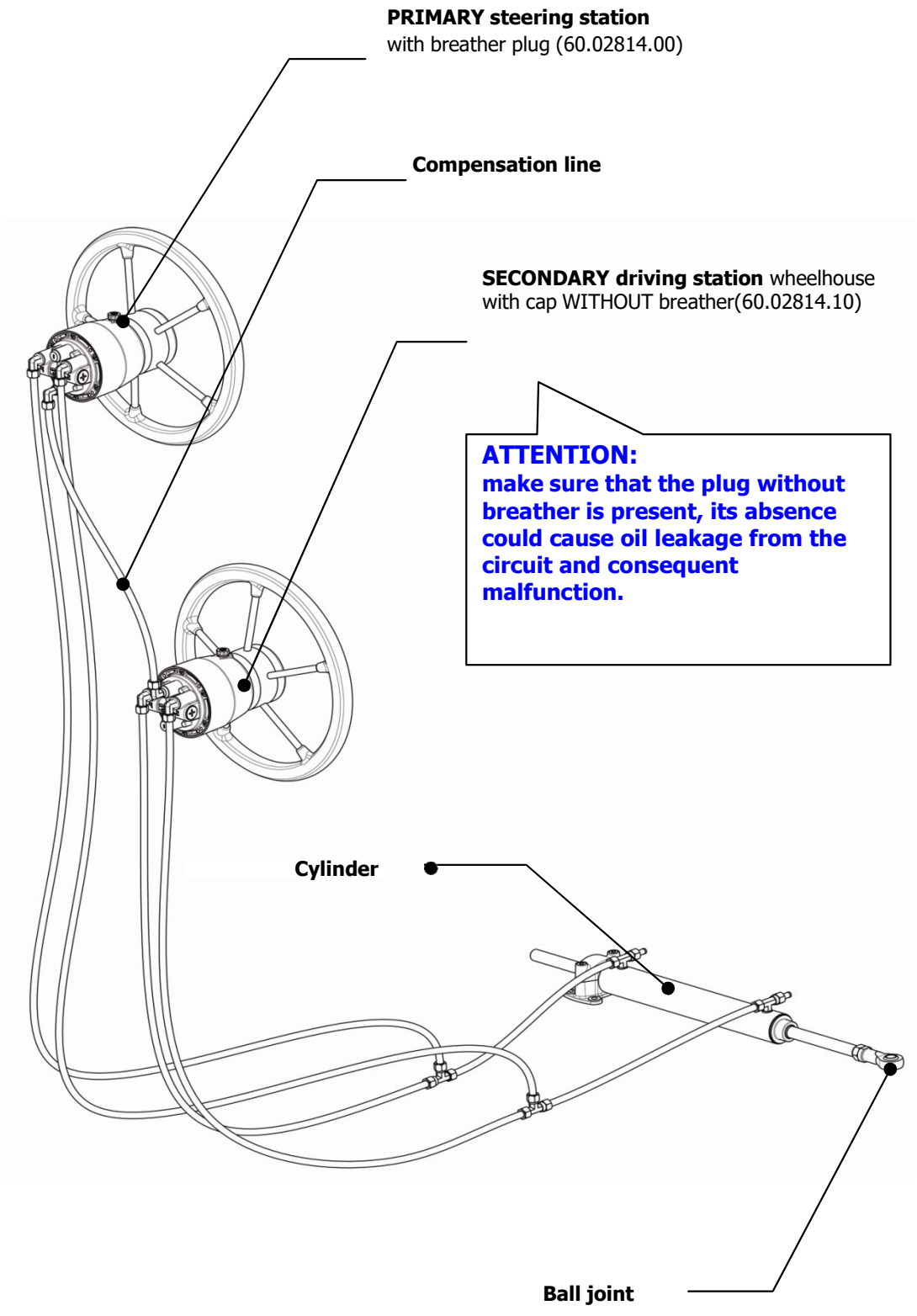
In the event of any disputes, the competent court is the court of Genoa.

SINGLE STEERING STATION SYSTEM



MULTIPLE STEERING STATION SYSTEM

(with the exception of art. 62.00866.00)



INSTALLING THE STEERING SYSTEM

Installations other than those specified by the kit used are NOT allowed:

• Semi-recessed installation 62.00600.00; 62.00601.00; 62.00602.00; 62.00866.00

The steering helm unit can be mounted on horizontal or vertical surfaces as well as in any intermediate inclined position.

For correct installation of the steering helm unit on the dashboard, always respect the following:

• Make sure that the oil tank cap is oriented **UPWARDS** of the wheelhouse itself in order to prevent any oilleaks.

• Refer to the specific assembly instructions for the model purchased (and specific drilling template).

• Read the instructions in the instruction manual carefully.

• Use only original components included in the package.

 **IMPORTANT:**

In order for the steering helm unit to function correctly, use only self-locking nuts for its installation on the dashboard (included in the package).

For correct tightening of the conical fittings, use only sealant such as Loctite 542 or Loctite 545.

The use of different materials such as Teflon or generic adhesive tape could affect the correctfunctioning of the steering helm unit itself.

In this regard, it is also important to check that the liquid sealant used is not introduced into the circuit.

- **Insert the fittings by hand and turn them until they are completely inserted.**
- **Tighten again with a suitable wrench (torque wrench) from 1 ½ to 2 ½ turns, orienting the fitting according tothe installation requirements of the pipes.**

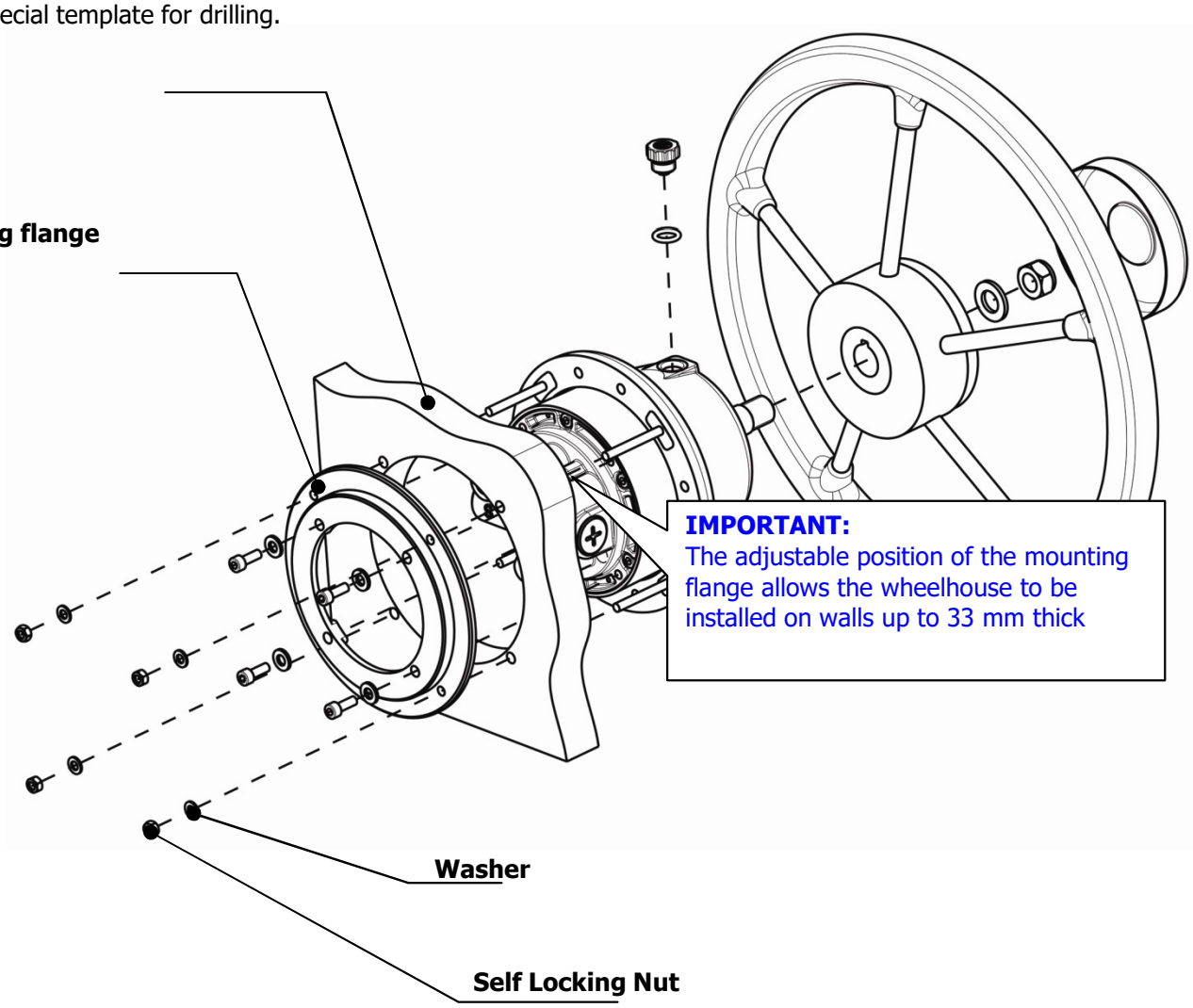
NEVER exceed a tightening torque of 17.6 N / m

DIMENSIONS & CHARACTERISTICS

SEMI FLUSH MOUNTING

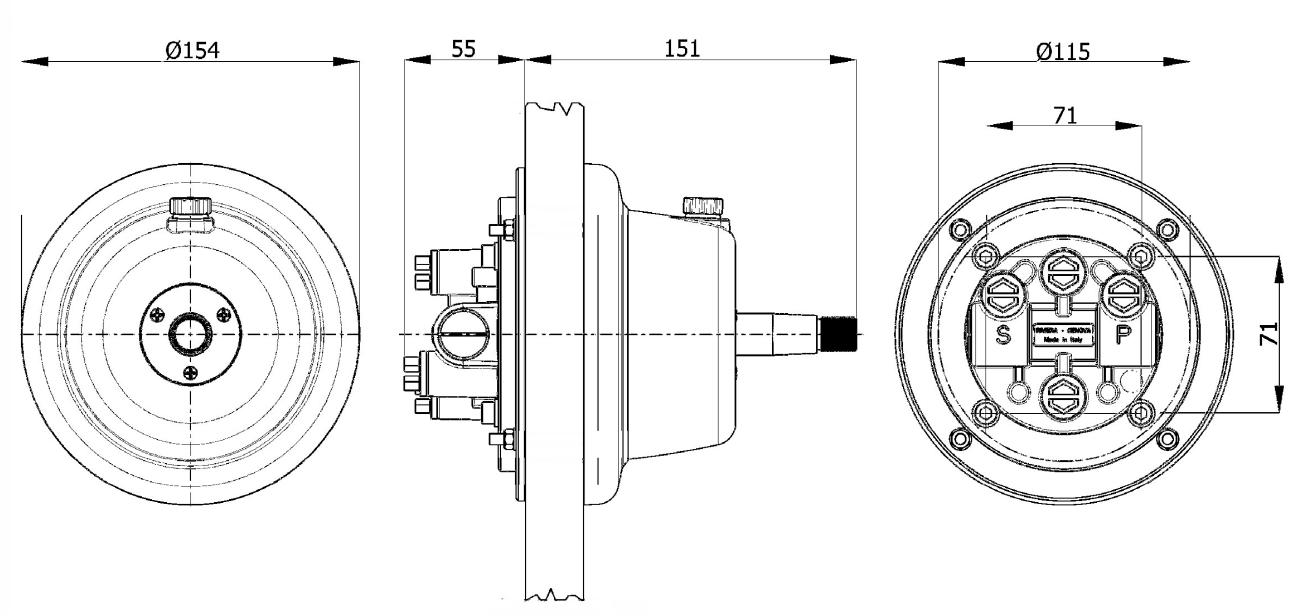
(item codes 62.00600.00 ; 62.00601.00 ; 62.00602.00 ; 62.00866.00)

Dashboard
Use a special template for drilling.

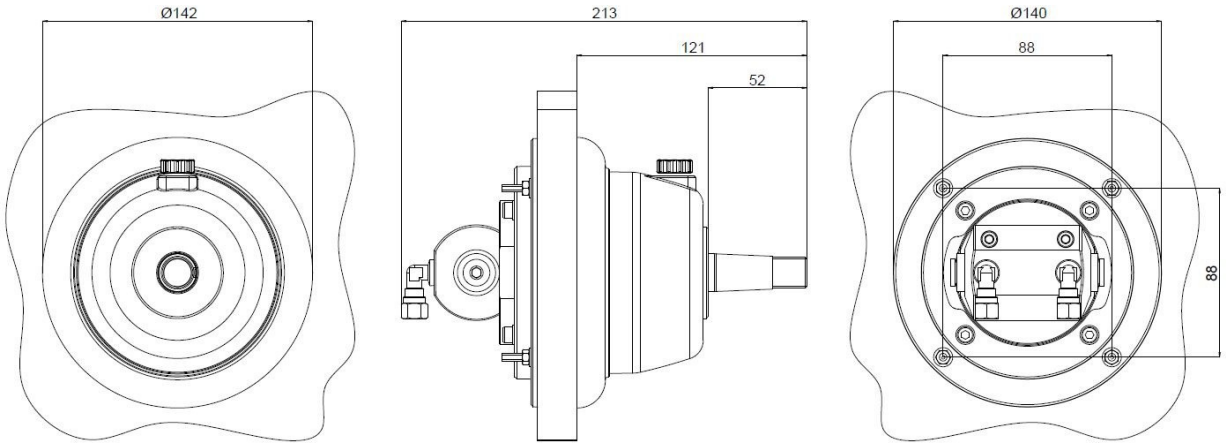


DIMENSIONS

62.00600.00 - 62.00601.00 - 62.00602.00



62.00866.00



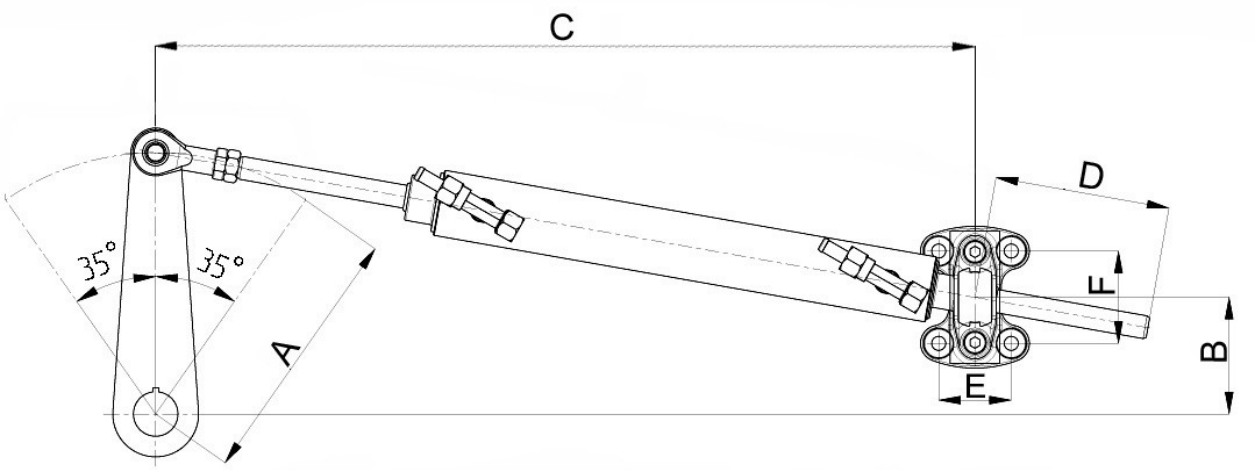
STEERING CYLINDER INSTALLATION

To ensure the correct functioning of the cylinder, as well as the duration over time of gaskets and other wear parts, it is necessary to pay close attention during assembly.

Below is a diagram showing the correct installation method:

The letters A and B represent the end points of the tiller.
Align the hypothetical straight line passing through points A and B with the axis of the cylinder.

INBOARD BALANCED CYLINDERS



Model	Stoke		A		B		C		D		E		F	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
62-00584-00	178	7	155	6.1	127	5	499	19.6	109.5	4.3	44	1.7	56	2.2
62-00591-00	150	5.9	131	5.1	107	4.2	458	18	96.5	3.8	44	1.7	56	2.2

IMPORTANT

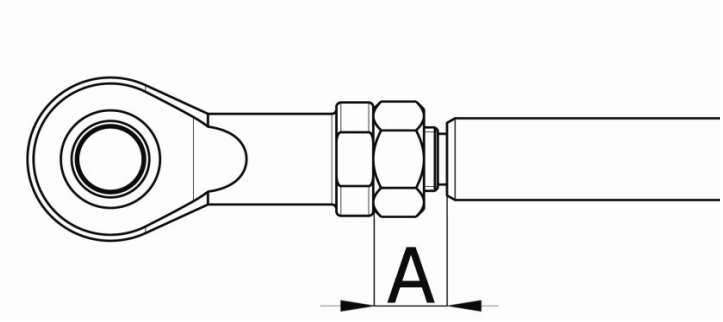
- **The assembly of the piston on the boat must be carried out, if possible, by using through boltsto be preferred to self-tapping screws.**
- **The fittings for the pipes must be placed in a high position: if the nature of the installation makes it impossible, the cylinder must be fixed in position only AFTER having performed allthe filling and bleeding procedures of the system listed below.**
- **Adequately protect the cylinder rod from accidental impacts that could affect correct operation.**
- **In the event of corrosion of one or more parts (possible if the cylinder is used in particularlycorrosive environments), intervene in time by replacing the damaged parts.**

INSTALLATION

- Align the rudder to the fore-aft axis.
- Loosen the pipe fittings
- Place the cylinder on the boat referring to dimensions "B", "C" and "D" of the diagram above.
- Secure the mounting of the bracket on the cylinder with 4 through bolts and the same number of self-locking nuts. (not included); use only stainless steel screws.
- Check the freedom of movement of the piston by turning the tiller fully. In the end-of-stroke positions, thepiston axis must be horizontal.

IMPORTANT

The dimensions indicated with the letters C and D are calculated assuming the ball joint in a central position with respect to its own adjustment area: it is therefore possible to record its position (up to 3 mm per side) to correct any misalignment errors.

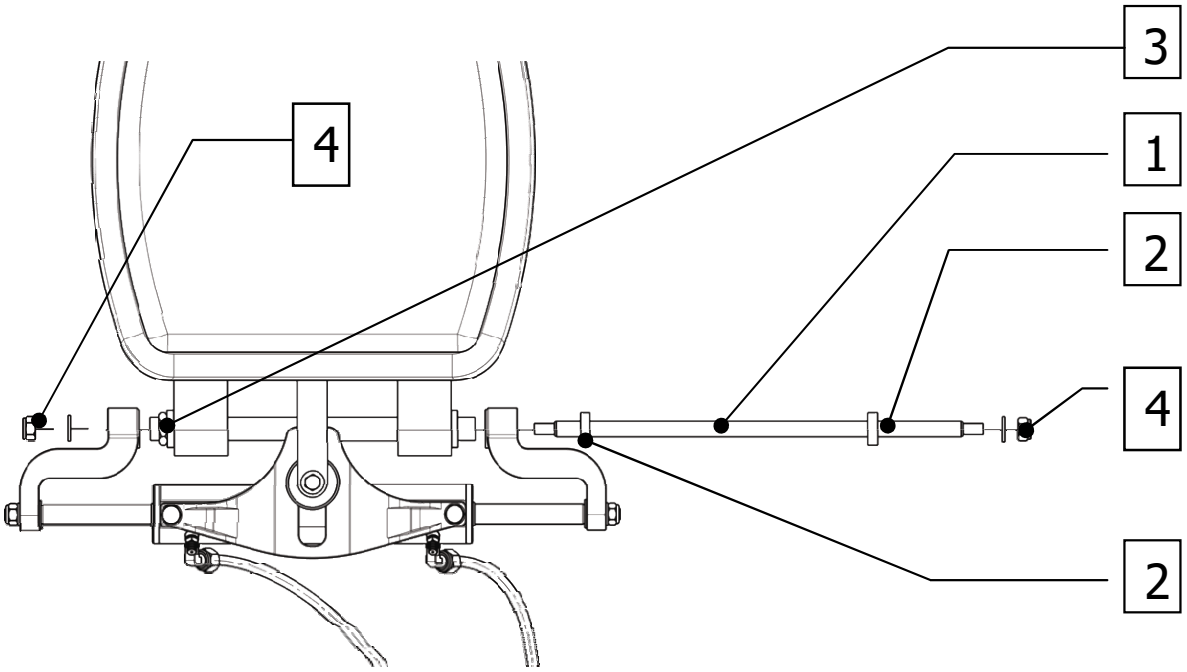


Dimension "A" must **NEVER** be greater than 18 mm

OUTBOARD BALANCED CYLINDERS

The balanced outboard cylinders DO NOT require supports or supports to be fixed to the hull.

Pre-lubricate the inside of the tube on the engine, then insert the bar (1) and sufficient plastic spacers (2)until the cylinder is centered with the motor axis. Then lock the cylinder itself in this position by acting onthe nut (3) to recover any remaining play.
Secure the bar (1) to the rest of the cylinder using suitable washers and self-locking nuts (4).

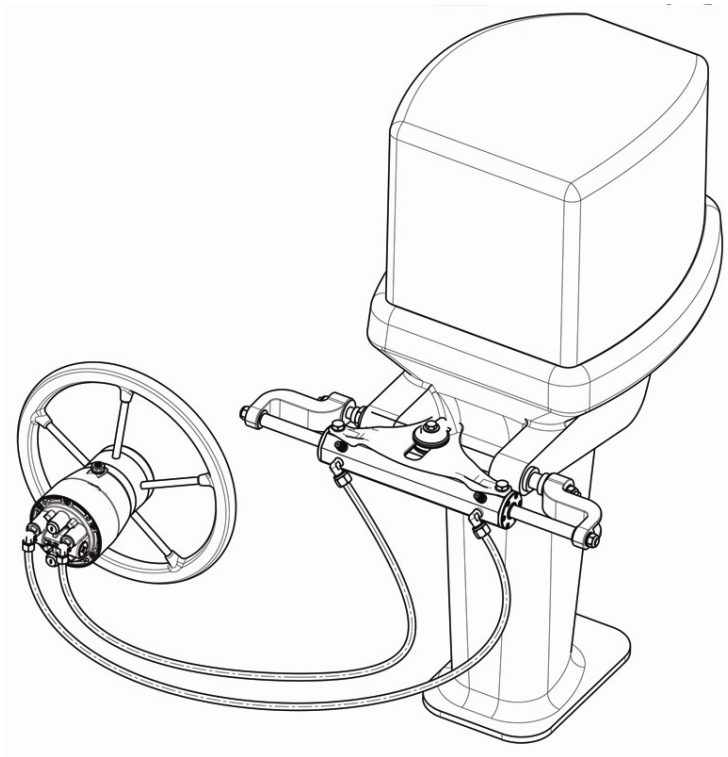


Then connect the pipes as shown in the figure.

Connect the tiller to the bracket using the appropriate screws included.

IMPORTANT

TIGHTEN the self-braking bolts (4), BUT WITHOUT PREVENTING the cylinder from tilting from bottom to top.



HOSE INSTALLATION

The connections between the helm and the cylinder and any additional control stations must be made usingRiviera flexible pipes or copper pipes

N.B: The final section of connection to the outboard cylinder must be made exclusively with Riviera flexiblepipes to allow movement.

N.B: In order to avoid excessive pressure drops, the connections must be as short as possible, **AVOIDING** anyway making bends with a **radius of less than 50 mm**.

FOR A CORRECT INSTALLATION OF THE PIPES, FOLLOW THE FOLLOWING:

- Arrange the pipes at a safe distance from heat sources or chemicals.
- Ensure the pipes have a minimum slope capable of facilitating the escape of air during filling.
- Check the integrity of the pipe along the entire path (protect the pipe with special bulkheads if necessary), avoid dents or section reductions due to bending.
- Work in an environment that is as clean as possible to avoid any type of inclusion in the circuit;

 **IMPORTANT**

The protective caps applied to the fittings must be removed contextually with the installation.

Check that the ends of the pipes (if using pipes without a terminal) are clean and free from burrs;

Reduce the size of the pipe, if necessary, by using cutters, cutters or special pipe cutters (copper pipe) do not use serrated blade tools.

Fix the pipes at regular intervals using non metallic type brackets.

CONNECTION TO CYLINDERS

The RIVIERA hydraulic cylinders are prearranged with ¼ "NPT pitch fittings.

Use a flexible or copper pipe with an external diameter of 10 mm or a pipe terminated with specific fittings.

HOSE CONNECTION WITHOUT TERMINAL

1. unscrew the union nut on the cylinder and remove the protection cap.
2. Insert the nut on the pipe and the pipe inside the fitting bringing it to the stop.
3. Secure the assembly by screwing the nut with a special wrench (torque wrench, not supplied).

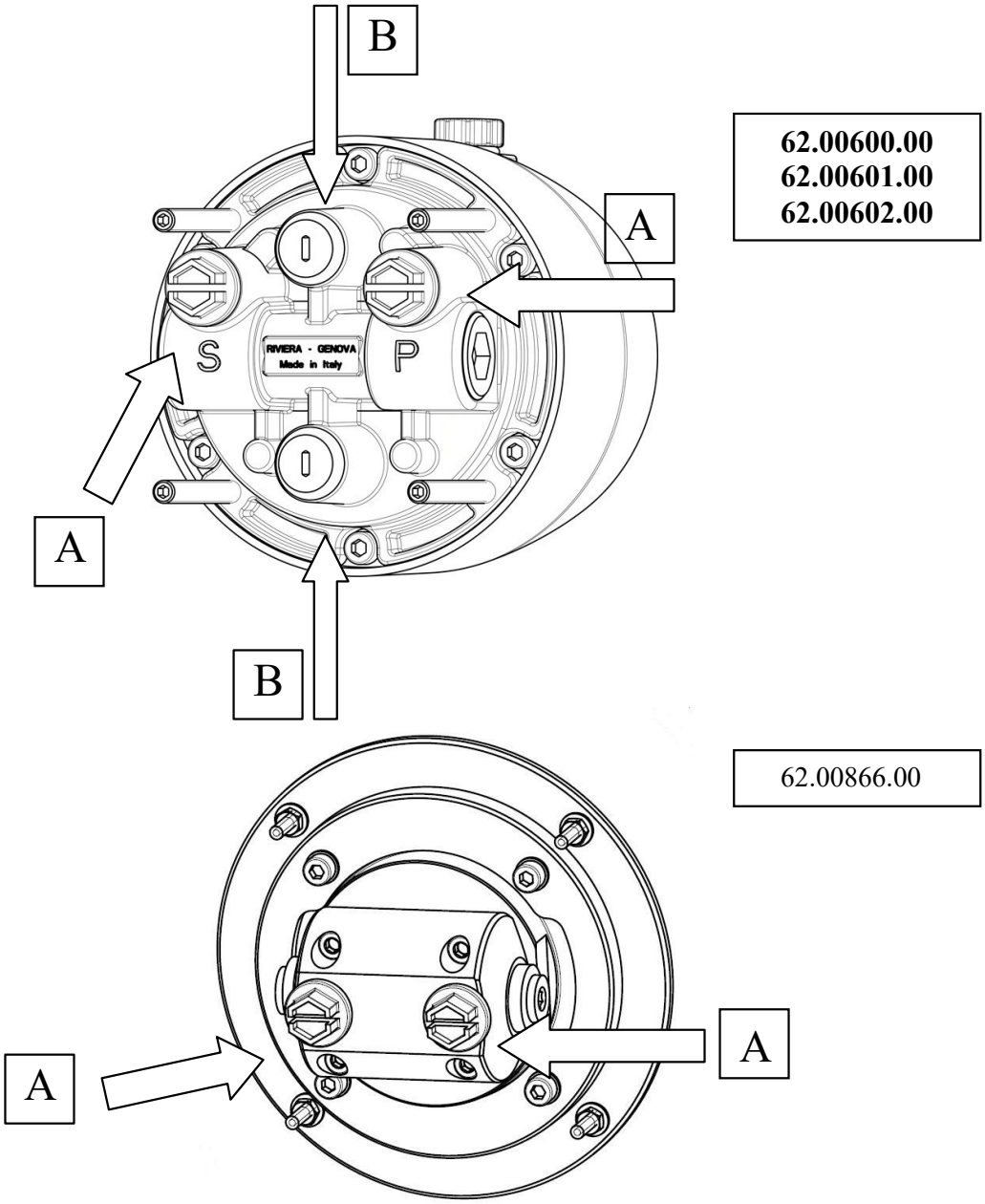
HOSE CONECTION WITH TERMINAL

1. Unscrew the union nut on the cylinder and remove the protection cap.
2. Remove the terminal protection cap on the tube
3. Insert the nut into the terminal and the terminal inside the fitting up to the stop.
4. Secure assembly by screwing the nut with the appropriate wrench (torque wrench not supplied).

STEERING HELM CONNECTION

Remove the caps (yellow colored marked with the letter **A** in the figure) to connect the steering helm unit tothe hydraulic piston.

Remove the caps (black color) indicated with the letter **B** in figure 1 **ONLY** to connect the helm to any additional stations. Use mastic type Loctite 542 or equivalent to ensure the tightness of the fittings



ATTENTION:

The tightness of the fittings must be ensured only by using liquid materials such as Loctite or similar. The use of insulating tape or Teflon could affect the proper functioning of the wheelhouse or damage it permanently. Also avoid the introduction of the liquid sealing material used into the circuit.

FILLING THE CIRCUIT AND BLEEDING

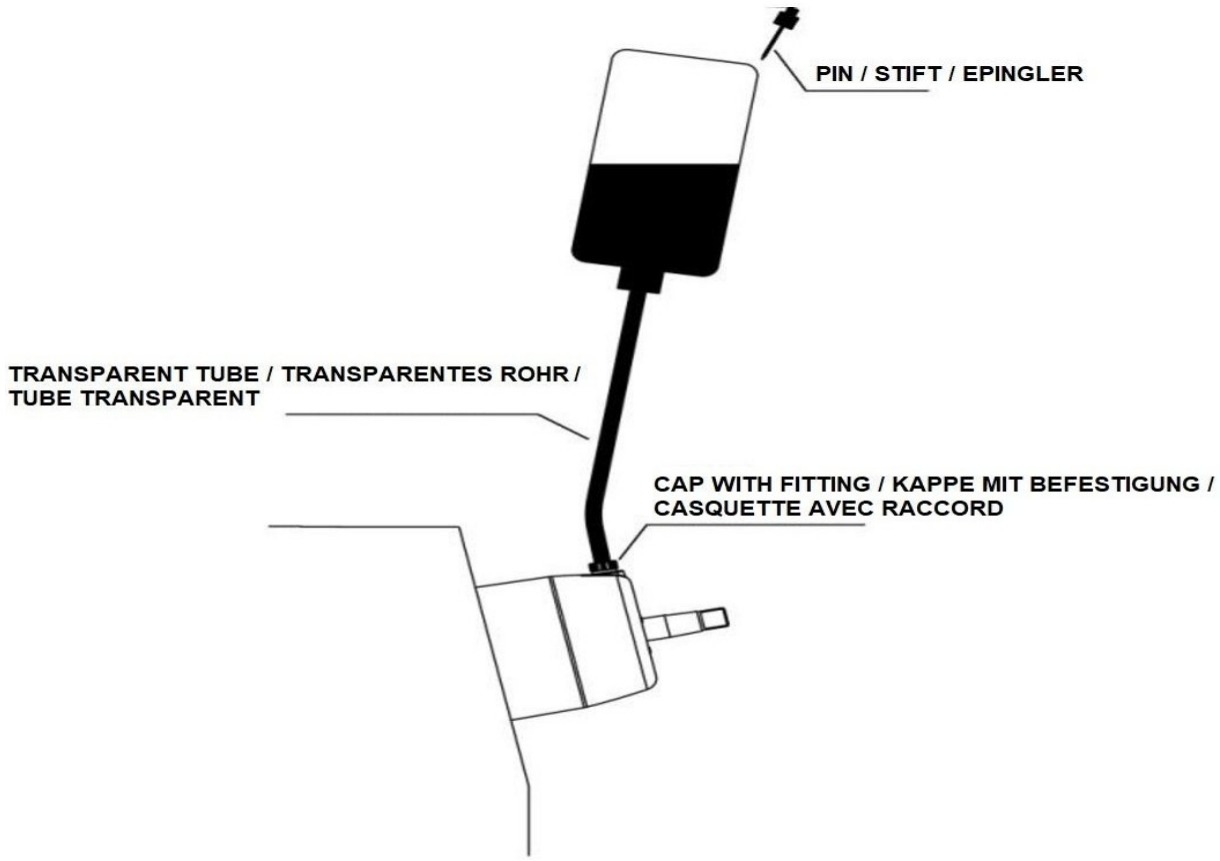
Use "HYDRAX 15" to fill the Riviera oil circuit

N.B. the filling process must start from the wheelhouse.

In the case of installations with several command stations (NOT POSSIBLE WITH art. 62.00844.00), start from the one located at the bottom, then proceeding upwards towards the following stations.
Once the lowest station (s) have been filled, use the oil tank capWITHOUT VENT (art. 60.02814.10).

This operation must be repeated in all control stations, taking care to use the oil tank cap FITTED with BREATHER (art. 60.02814.00) EXCLUSIVELY in the top one.

- Replace the oil tank cap with the appropriate threaded hose holder supplied with the filling kit (62-00597-00).
- Connect the transparent tube supplied to the end of the threaded tube holder.
- Replace the oil container cap with the specific one (white) for connection to the transparent tube.
- Connect the transparent tube to the end of the cap.
- Lift the oil bottle above the level of the cap and drill a hole in the bottom of the same with the special pinsupplied.



SINGLE STEERING STATION SYSTEM

CONNECTION TO CYLINDER WITH FIXED ROD.
(item codes 62.00583.00 / 62.00593.00)

Connect the oil bottle to the wheelhouse as described above.
Fill the wheelhouse tank completely (oil visible in the transparent tube), checking for the absence of air bubbles.
The transparent tube must remain full for the entire duration of the operation, in the event that the contents of the bottle are not enough to replace it with a new one.

ATTENTION:
The rotation of the steering wheel during the filling operations must be done SLOWLY; the excessive speed in the maneuver of the same could form foam inside the circuit.
In this case it is recommended to wait at least 24 hours before proceeding with the following operations.

Refer to diagram 1

1. Open the bleed valve on the piston (picture 2) and rotate the steering wheel as shown until the air is completely eliminated: ONLY oil should come out of the valve.
2. Close the valve and continue to turn the steering wheel in the SAME direction until it reaches the end stop (picture 3).
3. Open the second bleed valve and rotate the steering wheel in the opposite direction to the previous one until the air completely escapes from the valve (picture 4).
4. Close the valve and continue to turn the steering wheel in the same direction until it reaches the limit stop (picture 5).
5. repeat the previous operations until the total elimination of residual air from the circuit (picture 6)

CONNECTION TO CYLINDER WITH MOBILE ROD
(item codes 62.00584.00 / 62.00591.00 / 62.00867.00 / 62.00868.00)

Refer to diagram 2

1. Open the bleed valve on the piston (picture 8) and rotate the steering wheel as illustrated until the air is completely eliminated: ONLY oil should come out of the valve.
2. Close the valve and continue to turn the steering wheel in the SAME direction until it reaches the end of travel (picture 9).
3. Open the second bleed valve and rotate the steering wheel in the opposite direction to the previous one until all the air escapes from the valve (picture 10).
4. Close the valve and continue turning the steering wheel in the same direction until it reaches the end of travel (picture 11).
5. repeat the previous operations until the total elimination of residual air from the circuit (picture 12)

ATTENTION: after each installation, check the system by turning the steering wheel several times until reaching the end stop, first in one direction and then in the other.

SCHEMA 1

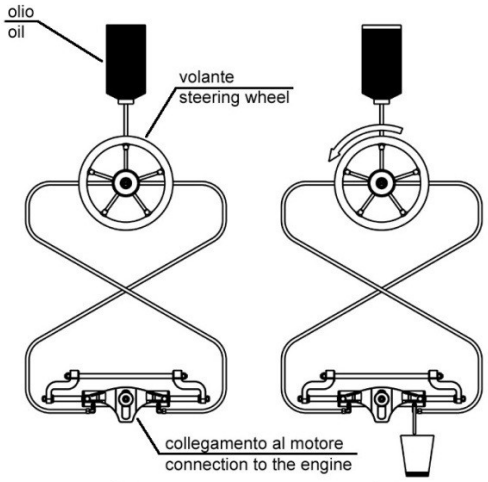


fig.1 fig.2

SCHEMA 2

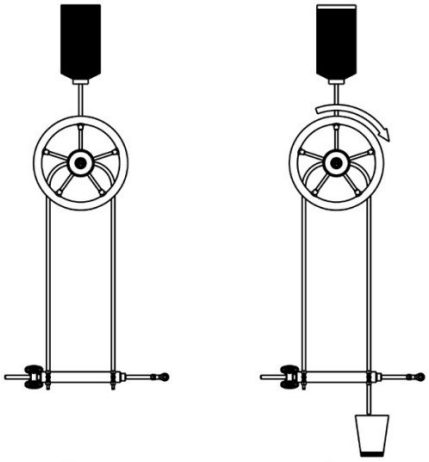


fig.7 fig.8

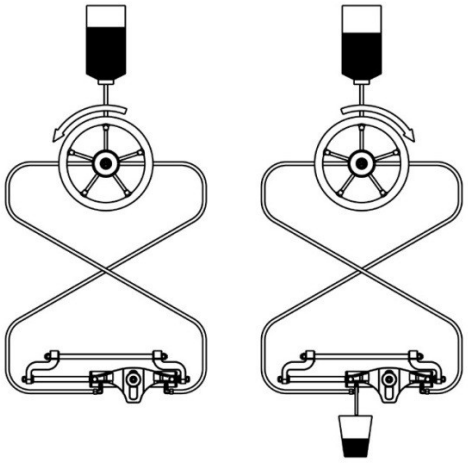


fig.3 fig.4

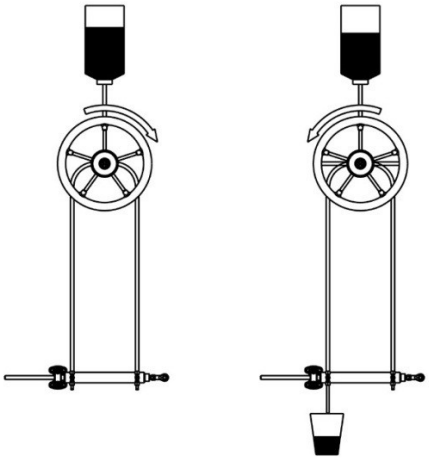


fig.9 fig.10

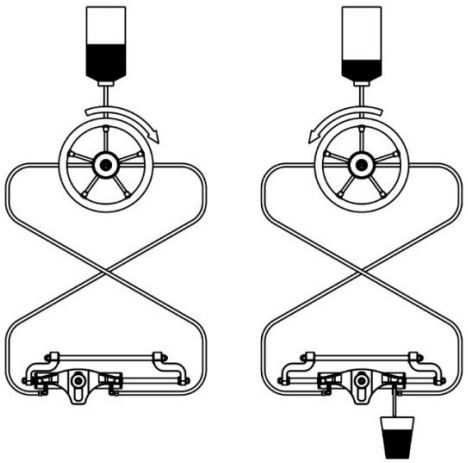


fig.5 fig.6

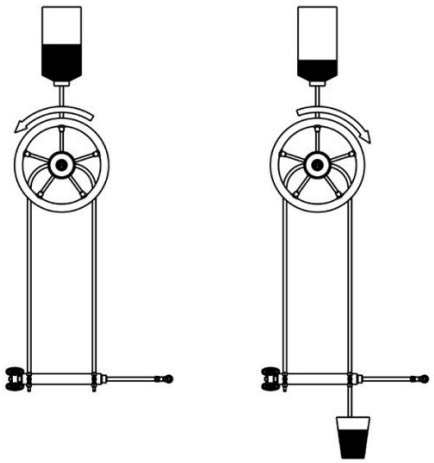


fig.11 fig.12

MULTIPLE STEERING STATION SYSTEM

IMPORTANT:
In all multi-station installations USE, in the lowest station, the plug without breather (art. 60.02814.10).

CONNECTION TO CYLINDER WITH FIXED ROD

Please refer to diagram 3

SINGLE STATION AND MORE CYLINDERS:
Make the connection as shown in fig. 13
Proceed as described above (diagram 1) acting step by step, first on one cylinder and then on the other untilthe circuit is completely filled.

MULTIPLE STATIONS AND MORE CYLINDERS:
Make the connection as shown in fig. 15
Proceed as described above (diagram 1) acting step by step, first on one cylinder and then on the other, first rotate the lower rudder and then the higher one until the circuit is completely filled.

MULTIPLE STATIONS AND ONE CYLINDER:
Make the connection as shown in fig. 17
Proceed as described above (diagram 1) by first rotating the lower rudder and then the higher one until thecircuit is completely filled.

CONNECTION TO CYLINDER WITH MOBILE ROD

Please refer to diagram 4

SINGLE STATION AND MORE CYLINDERS:
Make the connection as shown in fig. 14
Proceed as described above (diagram 2) acting step by step, first on one cylinder and then on the other untilthe circuit is completely filled.

MULTIPLE STATIONS AND MORE CYLINDERS:
Make the connection as shown in fig. 16
Proceed as described above (diagram 2) acting step by step, first on one cylinder and then on the other, first rotate the lower rudder and then the higher one until the circuit is completely filled.

MULTIPLE STATIONS AND ONE CYLINDER:
Make the connection as shown in fig. 18
Proceed as described previously (diagram 2) by first rotating the lower rudder and then the higher one untilthe circuit is completely filled.

SCHEMA 3

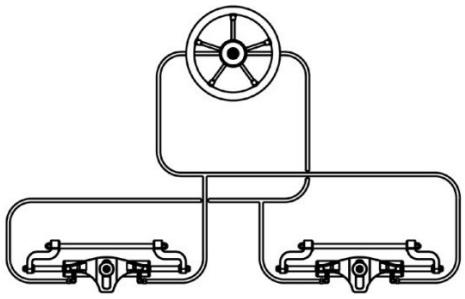


Fig.13

SCHEMA 4

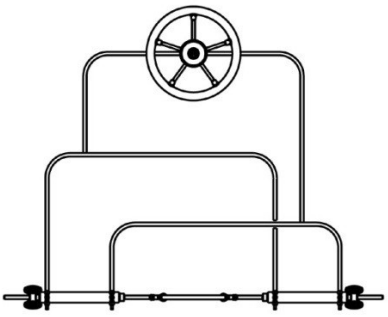


Fig.14

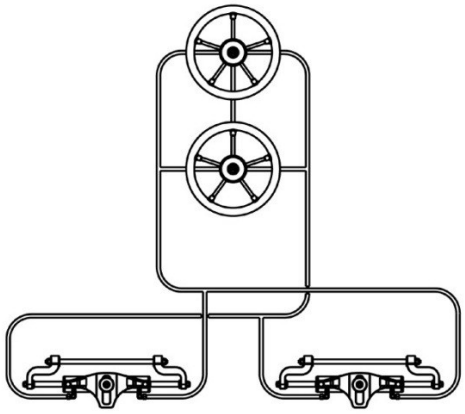


Fig.15

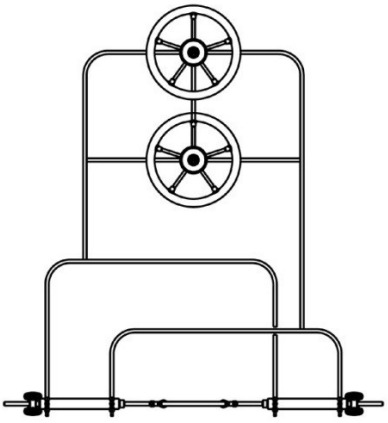


Fig.16

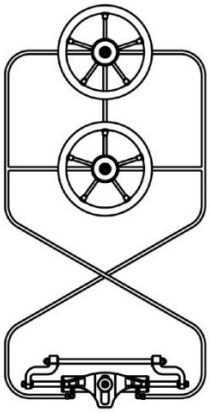


Fig.17

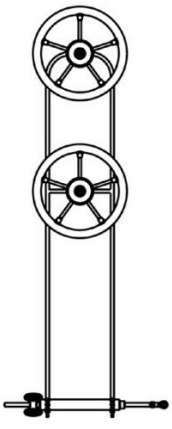


Fig.18

SUMMARY OF WARNINGS AND MAINTENANCE

AFTER FILLING AND BLEEDING OPERATIONS COMPLETION , CARRY OUT A SYSTEM CHECK:
TURN THE STEERING WHEEL UNTIL FULL STROKE, FIRST IN ONE SENSE AND THEN IN THE OTHER. REPEAT THE OPERATION FOR ALL THE STEERING SYSTEMS INSTALLED. MAKE SURE THAT THE SYSTEM HAS BEEN CORRECTLY INSTALLED AND THAT THERE ARE NO OPERATING DEFECTS BEFORE PROCEEDING TO NAVIGATE

 **WARNING** 
Before starting the installation, it is recommended to get rid of rings, necklaces, watches and in general allpersonal items that could get entangled in the mobile parts of the system.

SEALING MATERIAL FOR FITTINGS:
Use only liquid material (such as Loctite). Make sure that there are no infiltrations of the sealing material inthe oil circuit, which could cause damage or breakage of the system itself.

INTRODUCTION OF FOREIGN BODIES INTO THE CIRCUIT:
Avoid the introduction of foreign bodies into the oil circuit, which could cause damage or breakage of the system. Install in an environment that is as clean as possible.

FILLING THE CIRCUIT:
During the filling and bleeding phase, turn the steering wheel SLOWLY to avoid the formation of foam in theoil. If this happens it would be necessary to wait 24 hours before being able to resume the procedure.

MAINTENANCE:

Use Hydrax 15 or compatible oil. **Never use brake oil**

Maintenance must be adequate for the type of use and the climatic conditions in which the system operates.It is necessary to have a global check of the system carried out **twice a year** by a professional nautical mechanic.

Periodically check the condition of the piston and steering system seals to prevent oil leaks.

Check, **every 6 months**, the tightness of the nuts, the integrity of the pipes and, in general, the wear of thesystem.

MAINTENANCE OF THE CORRECT OIL LEVEL:

- Perform the filling and bleeding procedures as indicated above
- Fill the steering gear tank up to the threaded hole for the cap, taking care not to let it come out.
- Open the bleed valve only after placing a container under it to collect the used oil.
- Turn the steering wheel by ½ turn making the oil come out of the valve.
- Close the valve and check the system as described at the beginning of the page.

OIL TECHNICAL FEATURES :

Riviera Steerings use ERG HYDRO ISO 15 according to ISO 15:

- relative density : 0.865 gr/cc at 15°C
- Viscosity : 15 CST a 40°C

compatible OILS conform to ISO VG 15 alternatively:

MOBIL DTE 11 ; SHELL TELLUS T15 ; ESSO NUTO H15 ; Q8 HAYDN 15.

PUMPS:

Item code	Range	nr.pistons	Weight (kg)	Pressure max	Application
62.00866.00	19 cc	5	2,7	50 BAR	Semi-flush
62.00600.00	28 cc	7	4,8	70 BAR	Semi-flush
62.00601.00	34 cc	7	4,8	70 BAR	Semi-flush
62.00602.00	39 cc	7	4,8	70 BAR	Semi-flush

Fittings used ¼ ”NPT; use Loctite 542 or Loctite 545 as sealant

CYLINDERS:

Item code	Ø Piston [mm]	Stroke [mm]	Ø Rod [mm]	Arm [mm]	Area [cm^2]	Thrust [kg]	Max. Pressure [bar]	Torque [kgm]	Application
62.00584.00	32	178	14	154,2	6,50	455,22	70	70,19	Balanced inboard
62.00591.00	25	150	12	128,6	3,77	264,44	70	34,01	Balanced inboard
62.00583.00	35	200	18	/	7,00	495,35	70	/	Balanced outboard
62.00593.00	30	200	16	/	5,00	354,06	70	/	Balanced outboard
62.00867.00	32	200	16	/	6,00	301,59	50	/	Balanced outboard
62.00868.00	32	200	16	/	6,00	301,59	50	/	Balanced outboard

USE COPPER OR RIVIERA FLEXIBLE PIPES FOR CONNECTION.

FAULTS

ATTENTION

RIVIERA S.R.L. GENOVA provides the following list of solutions to the most frequent possible defects found in a hydraulic system to be used only as a guide track.
Operations that require the assembly or disassembly of particular system components must be carried out only by staff, otherwise Riviera assumes no responsibility for any damage caused to things or people

FAULT	CAUSE	SOLUTION
1. Wheelhouse block in the filling phase	Obstructed piping	Locate the obstructed section of pipe and replace it
	Clogged fittings	Locate the obstructed fitting and replace it
2. Difficulty filling the system	Presence of air in the circuit	Repeat the procedure filling and bleeding
		Install the pipes horizontally or with a maximum inclination of 3 cm per meter
3. Gurgling air from the wheelhouse tank once the system is filled	Leakage of the bleed nipple	Fully tighten the fitting or replace if defective
	Kinking of pipes	Straighten piping
	The helm has been mounted with a too low fill hole	Correctly reposition the helmsmen
	Clogged piping or section narrowing.	Identify the section of pipe affected by the fault and replace it
	logged fittings	Locate the plugged fitting and replace it
4. Steering rigidity and difficulty in maneuvering even when the boat is stationary.	Presence of air in the circuit	Repeat the filling and bleeding procedure
	Use of wrong oil	Drain the system and refill with correct oil **The use of fluids other than those specified will result in immediate loss of warranty**

5. Steering rigidity and difficulty in maneuvering even when the boat is stationary with the use of an unbalanced outboard cylinder	Absence of the fuel cap with vent on the wheelhouse	Replace the cap with the correct one
	Purge valve obstruction	Ask the intervention of a specialized technician; do not use the boat
6. Difficult to maneuver the boat in motion	Insufficient steering wheel diameter	Replace the steering wheel with one with a larger diameter
	Incorrect adjustment of the trim tab	Recalibrate the trim tab
	Air is in the circuit	Check the oil level and repeat the filling and bleeding procedure.
7. No movement of the piston (bar or rod)	Air is in the circuit	Repeat the filling and bleeding procedure
	Oil Leak	Contact appropriate personnel once the leak has been identified
	The helm has been mounted with a too low fill hole	Correctly reposition the helm
8.Oil leaks from helms fittings.	Insufficient tightening torque or incorrectly screwed fitting	Tighten the fittings with a suitable wrench DO NOT exceed a tightening torque of 17.6 [Nm]
	Insufficient or missing sealant fluid	Empty and remove the helm. Disassemble the fittings and clean them of any remaining oil
9. Oil leakage from the tank cap	Cap screwed on incorrectly	Treat the threaded part of the fitting with liquid sealant and reassemble them
	Cap with vent on additional wheelhouse in place of the one without vent	Repeat the bleeding operations
	OR seal worn or damaged	Screw the cap correctly
	Excessive oil level	Replace the vented plug with the correct one without vent Replace OR See procedure for correct oil level maintenance

EDITED BY:

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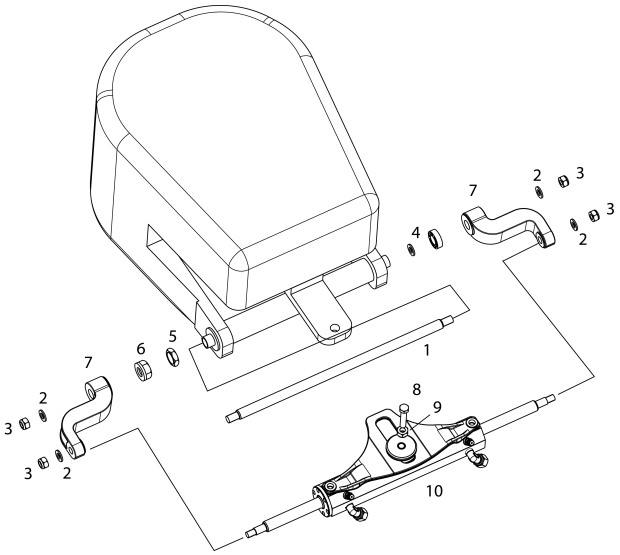
HYDRAULIC ACTUATOR

INSTRUCTIONS MANUAL

Care and maintenance of the hydraulic actuators

In order to maintain the reliability and durability of your hydraulic actuator is advisable to perform simple cleaning and lubrication on sliding rails, taking the following countermeasures:

- Degrease the rod with non-abrasive products and possibly never proceed along the length but in tangent mode.
- All small micro incrustations must be absolutely raised with a suitable tool that can not affect the rod
- Recheck the rod and check that the surface is definitely clean and free of deposits.
- Cover the surface of the rod with hydraulic oil
- If the boat is not used in a short time, please cover the rod with transparent film to protect against weathering, salt, animal dung, etc..



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Before proceeding with the assembly of the hydraulic actuator, it is necessary to check that the motor sleeve is clean and dry.
Proceed with greasing the connecting rod **1** with quality marine grease and insert it into the sleeve.
Insert nut **5** with its lock nut **6** as far as it will go.
Grease the arms **7** and proceed with total tightening using the washers and screws **2** and **3** supplied.
At this point, place the cylinder **10** of the actuator halfway and correct the position of the disc until it meets the motor attachment. Proceed to tighten the two parts using the bolt and nut **8** and **9**.
Now check the distance between the sleeve and the left and right arms of the actuator: any play and asymmetries must be corrected using the combination of shims supplied in the kit.

! ATTENTION !

The tightening of the nuts 3 on the arms, to be carried out with a torque wrench, must be such as to allow them to move completely when the engine overturns.
Please pay attention to this detail as blockage of the arms due to excessive tightening would cause the cylinder to break.

RECOMMENDATIONS

- Make sure that the engine does not encounter obstacles during the complete excursion that could cause malfunctions or breakages.
- Make sure that the hydraulic actuator in its operation does not force the mechanical parts that compose it in order to avoid malfunctions or breakages.
- Run the engine through a series of complete excursions and check that there is no play between the arms and the sleeve. If necessary, correct using nut **5** and lock nut **6**
- Check that nuts **3** and **9** are tightened and if necessary repeat the previous point.

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! ATTENTION !

For some types of engine, including for example Honda 90/115/130/150 HP and Mercury Optimax 115/130 HP, it is necessary to use the accessory shown in the figure supplied with the KIT FB250, FB300, FB350.

To find out all the engine's types on which the accessory will be used, refer to the installer.

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