

## TECHNICAL MANUAL

### Maintenance and Operation Instructions

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### LEVER CONTROLS

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#### CM02 - CM03



#### CAUTION

Before to install and start-up, please read the “Technical Manual”.

### *Certificate of Warranty*

*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.*

## ASSEMBLY INSTRUCTIONS ON BOAT

### **FLANGE MOUNTING**

1. Drill the panel as shown in the attached drilling diagrama.
2. Mount the fixing flange **(1)** (see **Fig.1** and **Fig.2**), using N°4 M6x25 screws **(2)**, N°4 washers **(4)** and N°4 M6 self-locking nuts **(3)**. Lend pay attention to the position of the safety key which must be as shown in **Fig.1**.
3. Fully tighten the screws.

### **SETTING THE ACCELERATOR COMMAND DIRECTION**

1. Check in **Fig.3** that the position of the throttle control is correct for the boat's engine.
2. To reverse the throttle control direction (in tension or compression), insert the lever into the hub, exert pressure on it (**Fig.3**) to bring the mechanism into neutral position and turn it 180 ° (until the next click).

## CONTROL CABLES PROCESSING

*The CM02 single lever can be used with RIVIERA F05 - F14 - F02 and F08 cables.*

### **USE OF UNIVERSAL CABLES F02 - F08 (see FIG.4):**

1. Remove the protective cap **(3)** and the gasket **(2)** from the cable, insert the connector **(4)** until it stops and insert the cable clamp **(5)** into the slot.
2. Screw the nut **(6)** and the terminal **(7)** onto the threaded rod of the cable.

**USE OF CABLE F05 (see FIG.5):**

1. Insert the lower barrel **(2)** into the groove shown in the figure, insert the upper barrel **(3)** pairing it with the lower barrel **(2)**.
2. Insert the elastic pin **(4)** taking care that the holes of the two barrels are perfectly aligned.

The F14 cable doesn't need any adaptation.

**ASSEMBLY OF CABLES ON THE BOX**

**INVERTER CONTROL CABLE ASSEMBLY**

1. Insert the reversing pin **(2)** (**Fig.9**) into the eyelet of the control cable terminal and lock it with the saw **(3)** (**Fig.9**). The cable must be placed in seats E or F (**Fig.3**) according to the installation direction of the box.
2. Insert the reversing pin into the slot (**Fig.9**) and position it in position "C" (towards the inside) or "D" (towards the outside) according to the required travel (**see Fig. 3**).
3. Fix the pin with the M4x18 screw **(9)** and the M4 bolt to be inserted in 1 (**see Fig.9**).

**ACCELERATOR CONTROL CABLE ASSEMBLY**

1. Insert the cable into the accelerator pin **(5)** and secure it with the stop ring **(2)** (**see Fig.6**).
2. Position the cable in housing "A" in case of acceleration in pull or in seat "B" in case of acceleration in thrust (**see Fig.3**).

IN CASE OF THE USE OF UNIVERSAL CABLES F02 OR F08 THE WORKING POSITION IS ALWAYS THE "A"

Before proceeding, check that the assembly is correct by moving the lever back and forth, making sure that the cables allow the entire stroke to be carried out.

*If necessary, using universal F02/F08 cables, adjust the stroke by screwing/unscrewing the terminal **(7)** (**see Fig. 4**).*

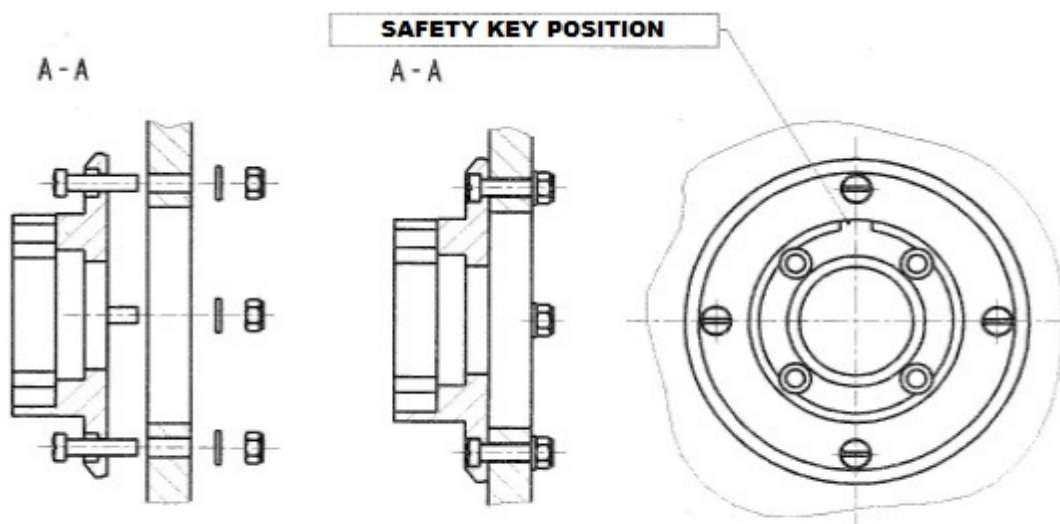
3. Insert the cable lock **(6)** fully (taking care that the cable barrels correctly engage the respective seats and fix it with 4 screws M4 x 40 **(7)** (**see Fig. 6**).
4. Perform some lever movements back and forth making sure that the cables work properly and that they are installed in the correct position.

**ASSEMBLING THE WALL SINGLE LEVER**

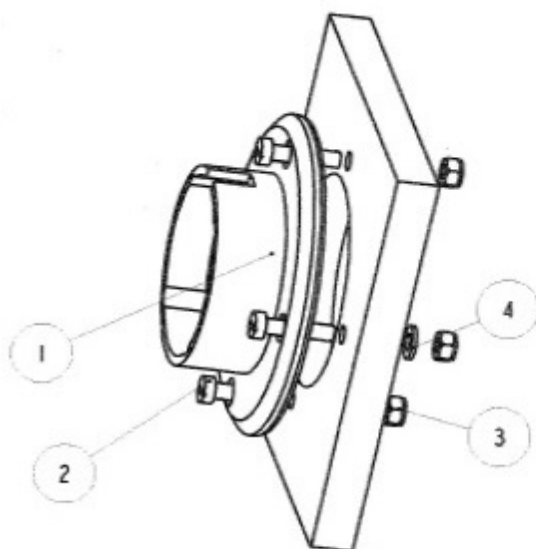
1. Place the single lever mechanism in the desired position (90 ° intervals), engaging the columns in their seats.
2. Fix with N°4 M6x25 screws **(2)** tightening them to the bottom (**see Fig.7**).
3. Insert the flange cover **(1)** and push it fully until it clicks into place (**see Fig.7**).

## LEVER ASSEMBLY

Before proceeding, check that the mechanism is in the neutral position.

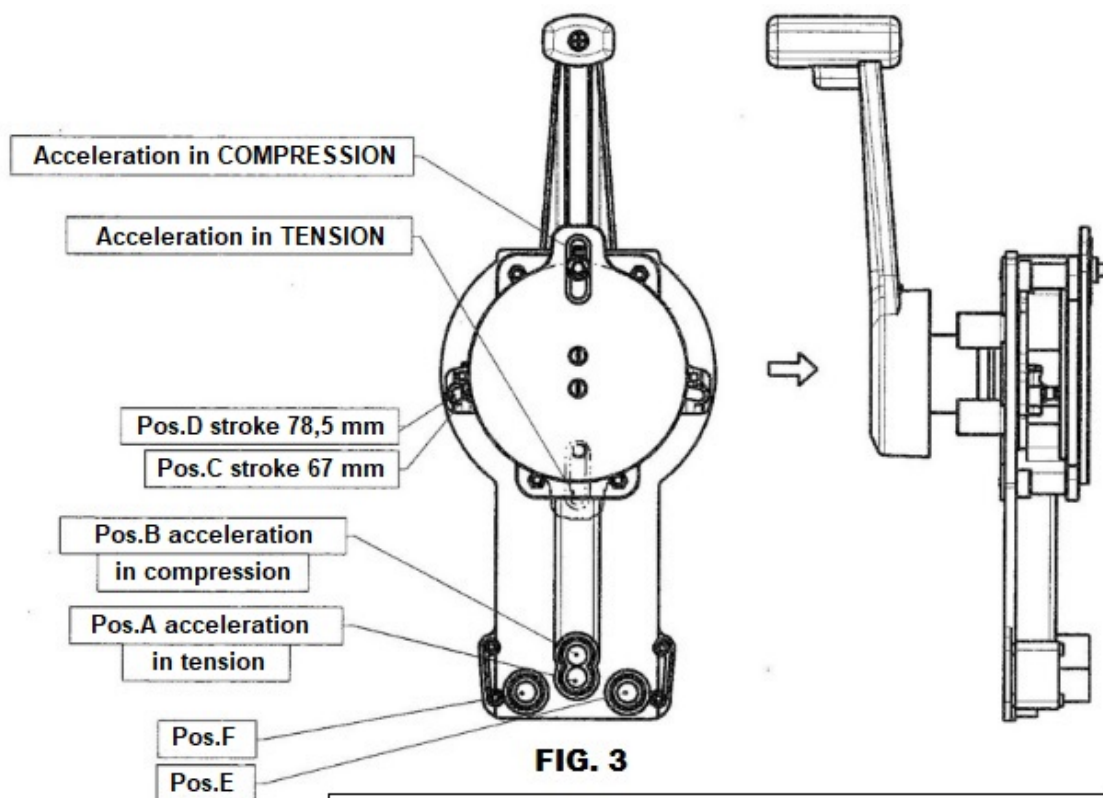


**FIG. 1**

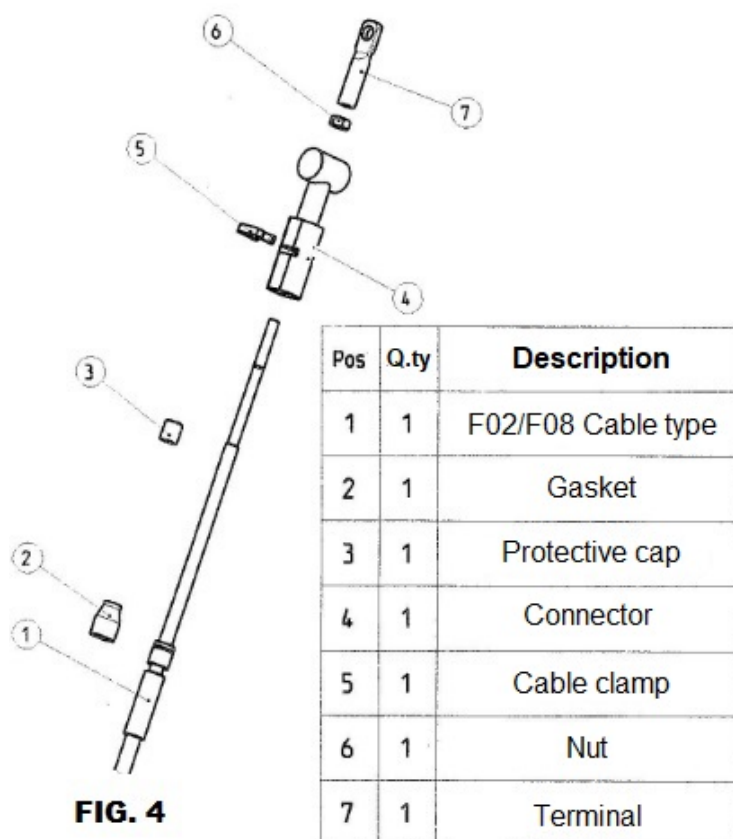


**FIG. 2**

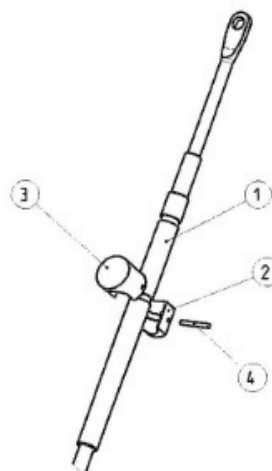
4	4	Washer A2 DIN 125 d.6.4
3	4	Nut A2 DIN 985 M6
2	4	Screw DIN 84 M6x25
1	1	Flange
Pos	Q.ty	Description



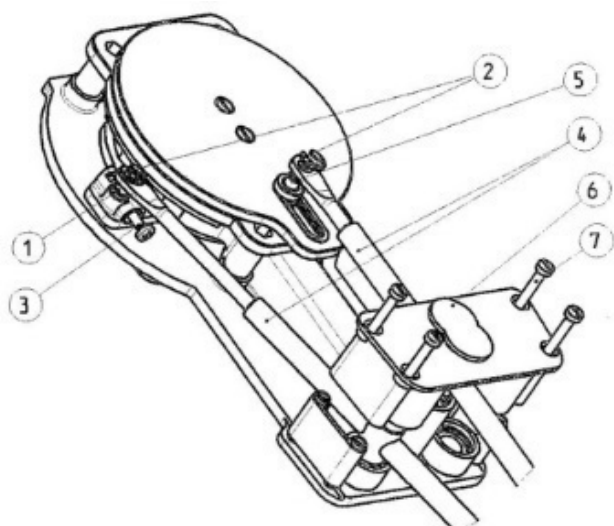
NOTE: Universal cables (F02/F08), working position is always "A" both for acceleration in compression and in tension



Pos	Q.ty	Description
1	1	F05 Cable type
2	1	Lower barrel
3	1	Upper barrel
4	1	Elastic pin

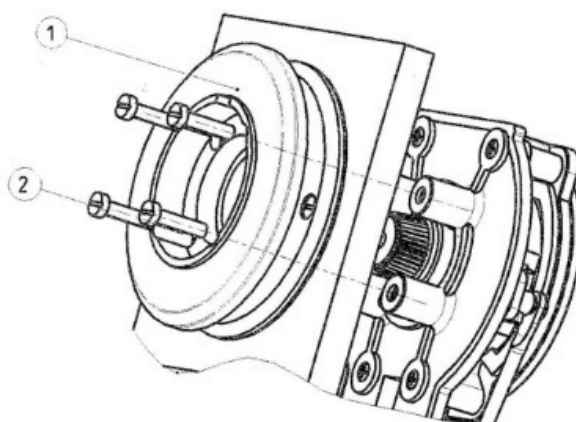


**FIG. 5**



7	4	Screw A2 M6x20
6	1	Cable lock
5	1	Accelerator pin
4	2	Control cable
3	1	Screw A2 M4x18
2	2	Stop ring
1	1	Inverter stud
Pos	Q.ty	Description

**FIG. 6**



**FIG. 7**

2	4	Screw A2 M6x25
1	1	Flange cup
Pos	Q.ty	Description



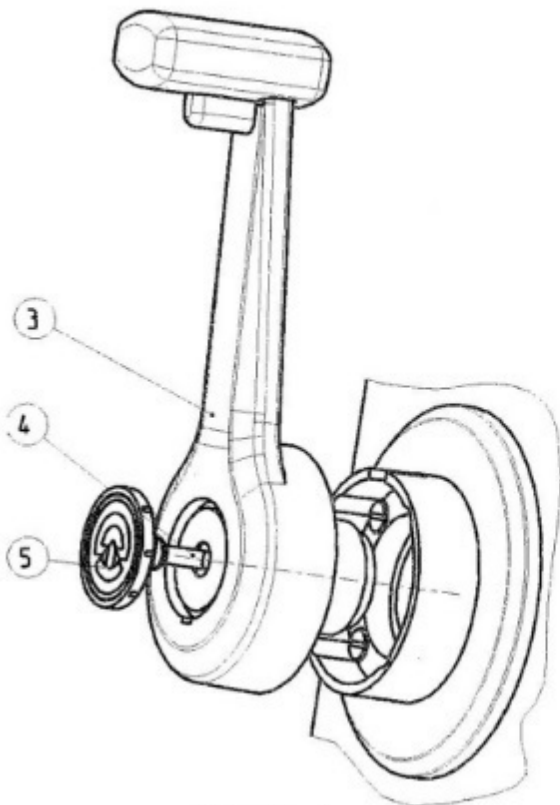
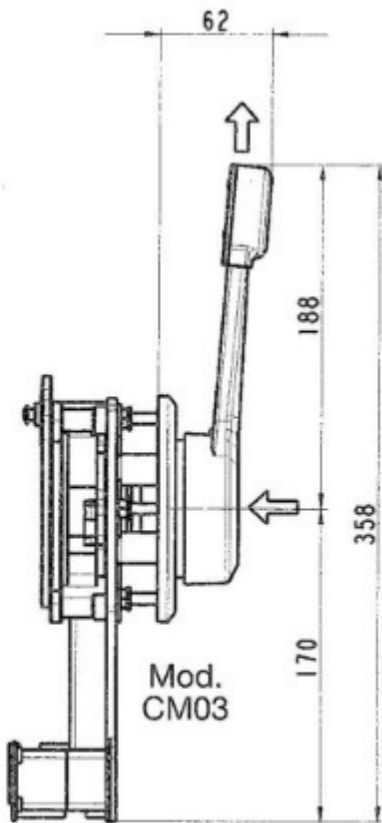
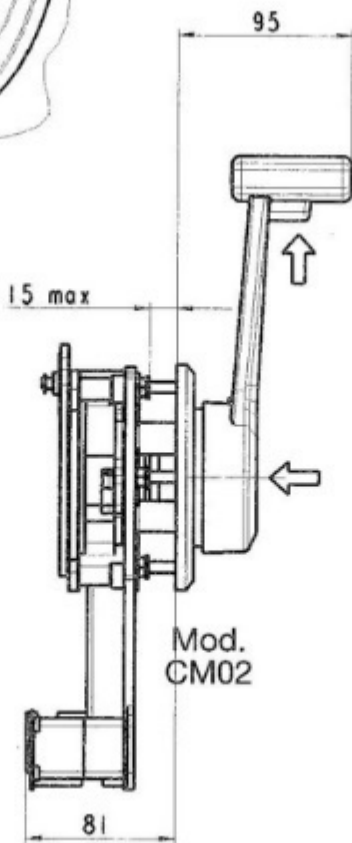
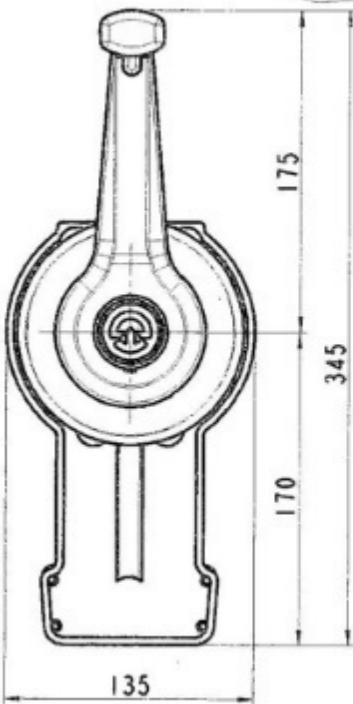
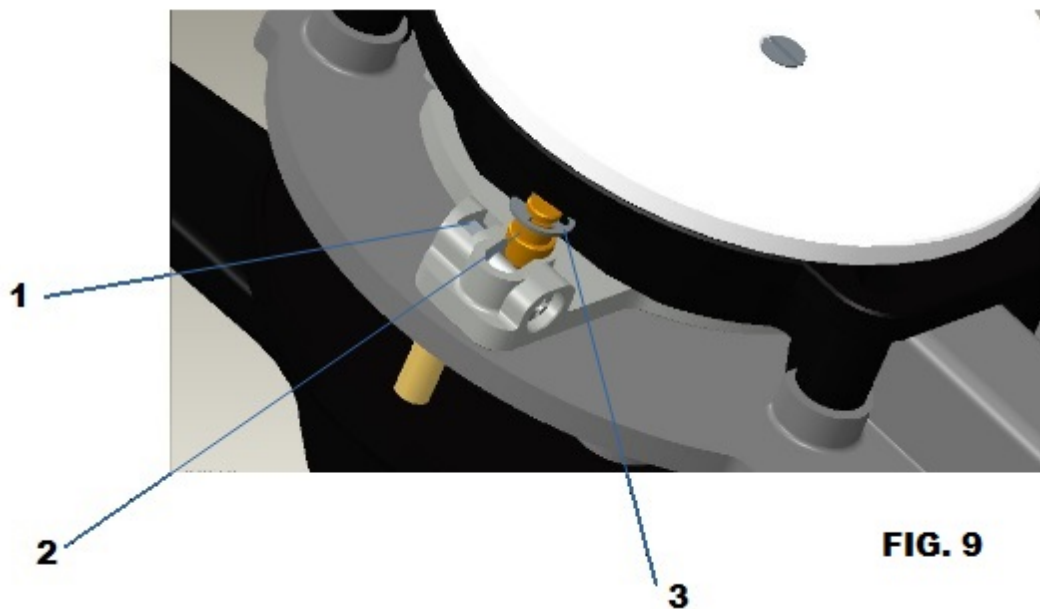


FIG. 8

5	1	Cover
4	1	Screw A2 M6x60
3	1	Level
Pos	Q.ty	Description







1		2		3		4	
A							
B							
C							
D							

ATTENZIONE: VERIFICARE CHE LA VOSTRA STAMPA RISPETTI LE QUOTE INDICATE  
ATTENTION: CHECK THAT YOUR PRINT COMPLIES WITH THE INDICATED DIMENSIONS

Ver	Let	Modifica	Data			Disegnatore		
QUOTE SENZA INDICAZIONE DI TOLLERANZA: RIF. UNI ISO2768						Raggi non quotati: 0.5		
GRUPPO DI DIMENSIONI		0-6	6-30	30-120	120-400	400-1000	TOLL. ANGOLARI	Smussi non quotati: 0.5x45°
SCOSTAMENTI AMMISSIBILI		±0.1	±0.2	±0.3	±0.5	±0.8	2768.3	Sformi non quotati: 0.5°
Scala		Disegnato		Prodotto:				
1:1		Firma		62-0007-00 62-0010-00				
		Visto A.Frione						
Formato		Firma		Denominazione:				
DIN A4		Approvato R.Migone		MASCHERA DI FORATURA				
		Firma						
Trattamento				Materiale:				
Colore				Numero disegno:				
							foglio1 di 1	

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