



# TWO PIECES PISTON INSTALLATION MANUAL

### **Purpose and important notes**

This manual is used for the installation of the two pieces piston with threaded joint of Moris. It describes the proper steps for the product's installation and the recommendations to be used to make a correct assembly of the jack. This manual refers to the operators, installers and repair technicians. THE MANUFACTURER RETAINS THE RIGHT TO REFUSE TO ISSUE THE WARRANTY IF THE ASSEMBLY HAS NOT BEEN CARRIED OUT ACCORDING TO THE INFORMATIONS CONTAINED IN THIS MANUAL.

#### Tools required for assembly

- Pulley
- Tie kit to screw ram
  - Cod. 0745/2 Ф70 Ф120
  - Cod. 0747/2 Φ130 Φ200
  - Cod. 0747/1 Φ201 Φ280
- Sandpaper, O-rings and gaskets
- LOXEAL 86-55
- Tools (screwdrivers, hex keys)



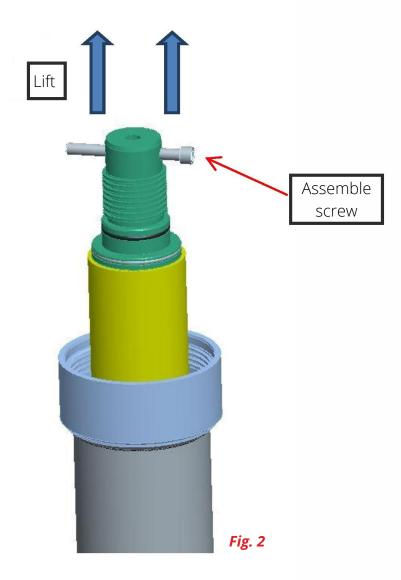
#### A. LOWER JACK PREPARATION

- 1. Place the lower jack vertically.
- 2. Assemble in the pit and fix.
- 3. Remove clamp around rubber protection and remove external and internal rubber protection.



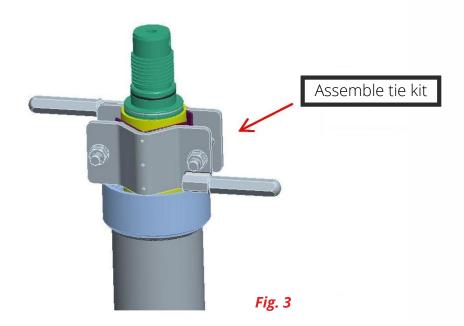


- 4. Insert long screw (assembled in the transport hook of the upper semi-jac) in the hole of the joint (Fig.2).
- 5. Hook the lifting device to the screw (Fig.2) and lift the rod in order to have enough space to assemble the tie kit to screw.

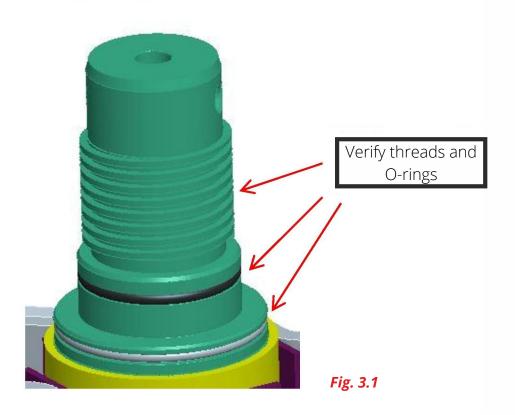


6. Assemble tie kit to screw, then remove the lifting device and the long screw (Fig. 3).





**CAUTION:** Remove any dirt deposited on the threads. If necessary, replace the O-ring (supplied) (Fig. 3.1)





## **B. UPPER JACK PREPARATIONS**

1. Place the semi-jack vertically and remove any clamp around the lower rubber protection. Leave this protection in place.



Fig. 4



2. Remove the upper hook and remove the TPG (gasket holder steel ring), the scraper seal and the seal. Successively, reassemble the hook with only the long screws (Fig. 6).

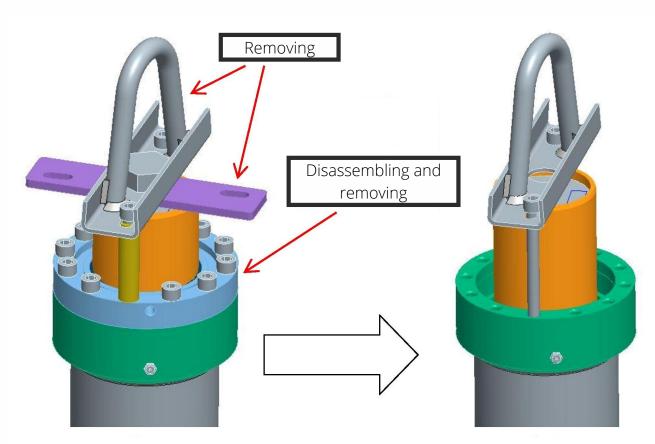
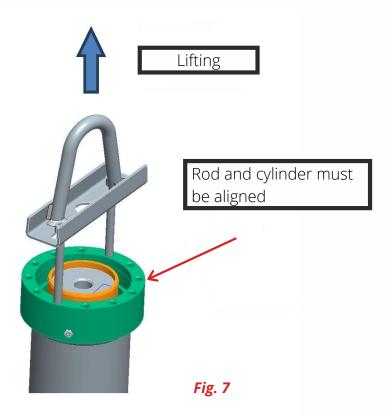


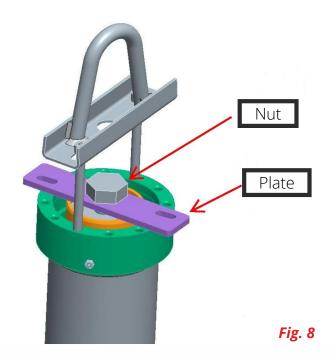
Fig. 5 Fig. 6



3. Hook the lift device to the hook and lift the cylinder until it is aligned to the rod.



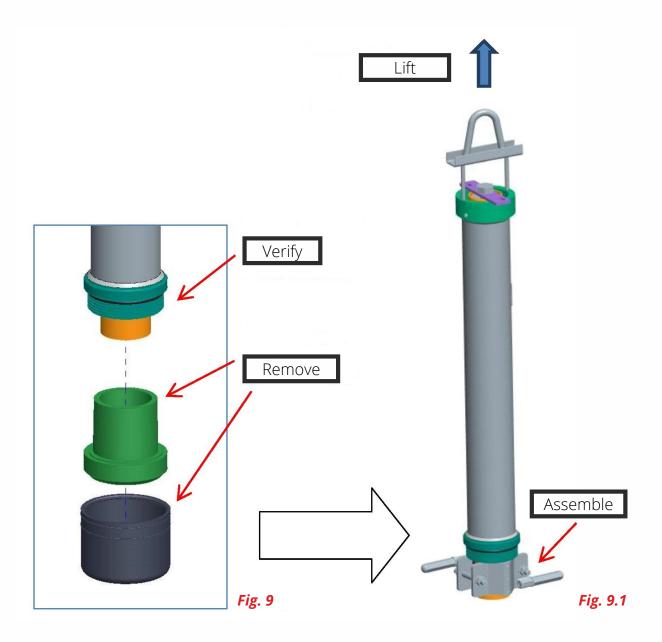
4. Assemble provided plate with nut M30x60.





5. Lift the assembly, remove the lower protection (Fig. 9) and assemble tie kit to screw in the bottom part of the stem (Fig. 9.1) . Verify threads and O-ring of cylinder.

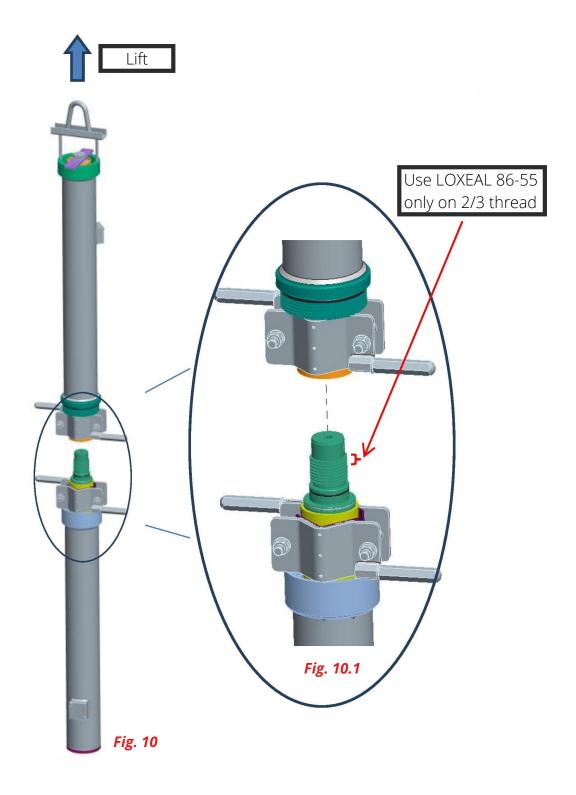
**CAUTION:** By this time the lower thread of the rod is exposed. Any damage to this part can compromise both the mechanical seal of the junction rod and the hydraulic seal of the jack. Use extreme caution in case you need to lay the assembly on the ground.





## C. JACK ASSEMBLY

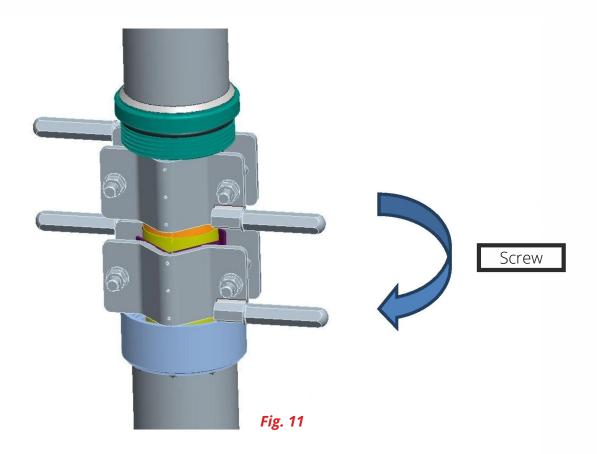
1. Insert with caution the upper jack in the compartment. Lift and align it with lower jack. Apply a small quantity of LOXEAL 86-55 on the first 2/3 threads.

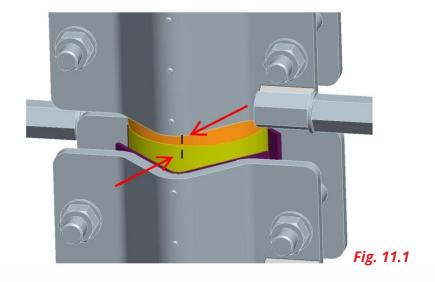




2. Move close the two parts and screw upper rod on lower one, turning slowly and avoiding forcing.

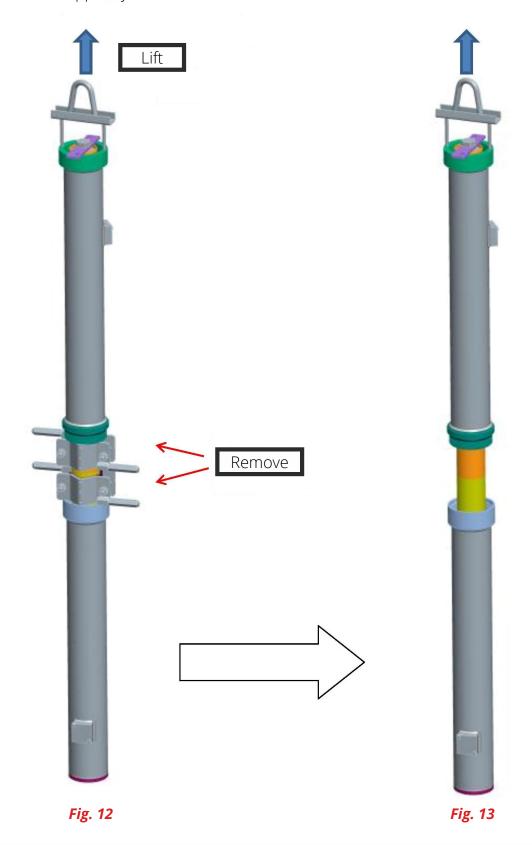
**CAUTION:** After closing the rod, unscrew half a turn and then screw quickly for the final closure. Check the alignment of two parts (Fig. 11.1)







3. Raise the upper cylinder and remove the two tie kits to screw.





- 4. With supplied sandpaper, remove possible defects or rough edges at the joint.
- 5. Lowering slightly the upper part, lay the rod on the end of cylinder (Fig. 14).



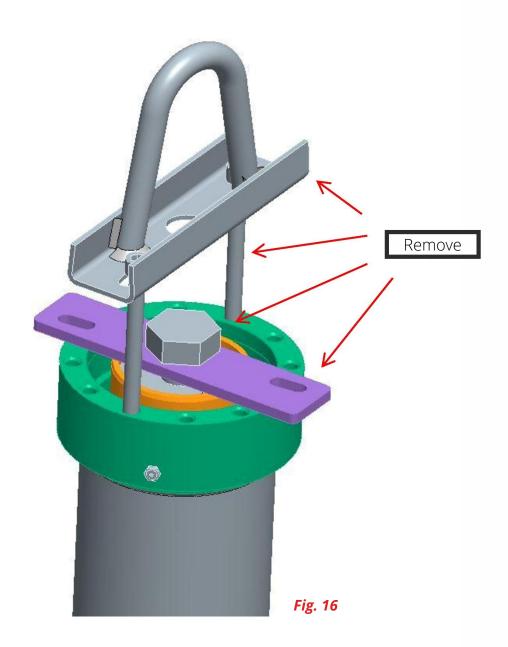


6. Screw the two external cylinders with 3-4 threads, making sure that the system is in safety condition.





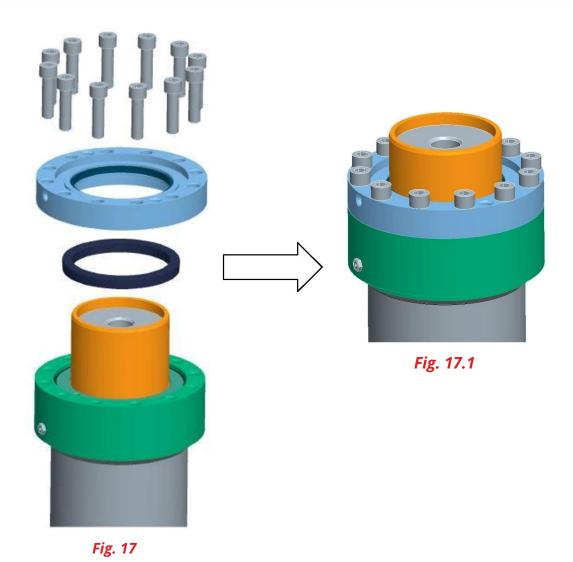
7. Remove screw TE M30x60, plate, long screws and lifting device (Fig. 15).



8. Complete the tightening of cylinders in safety conditions.



9. Assemble the gaskets and the gasket holder ring back on the cylinder, making sure the screws are perfectly clamped (Fig. 17.1)



10. Fix the cylinder perfectly in vertical position.



11. Screw the oil recovery hose and connect PVC pipe.

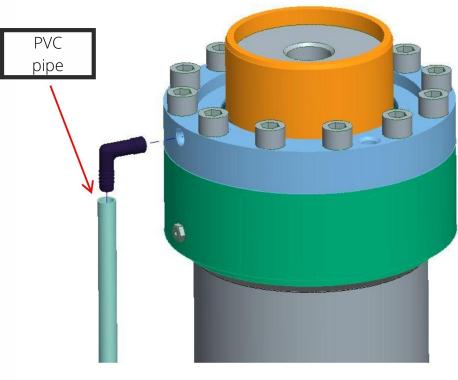


Fig. 18

#### 12. Connect jack to the arch.

**CAUTION:** During the first run, check that there are no damages or imperfections on the surface of the rod. If necessary, remove it with provided sandpaper.

