

# ***SERVICE TOWER***

## **MANUAL**



**9 2 1 2 5**



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## 1. General

The service tower is designed to be equipped with one exhaust hose reel with max 10 m  $\varnothing 150$  mm (33ft and  $\varnothing 6$ ") exhaust hose and 16 hose reels for fluid or air + 2 electrical cable reels.

The top is provided with fastening hole which are suitable for hose reel models ORK, ORM, ORS, CR, CRO. The electrical cable reels which are provided with turnable bracket can be mounted under the exhaust reel on each side of the tower.

All connections must be done with suitable hoses from the bottom and up to the bulkhead in upper end of the tower. The hoses have to withstand the fluid and pressure which will be delivered through them.

If the tower is to be equipped with one extra exhaust hose reel, a separate support sheet metal part must be added on the top and at the opposite side of the first exhaust reel. Extra support beams on top of the tower, are also required. In this case, 14 hose reels can be mounted (+ 2 electrical cable reels).

Some kind of lifting device is needed, for example a fork lift or an overhead crane which have enough capacity to lift up the assembled top section on top of the lower section.

### Direction of tower

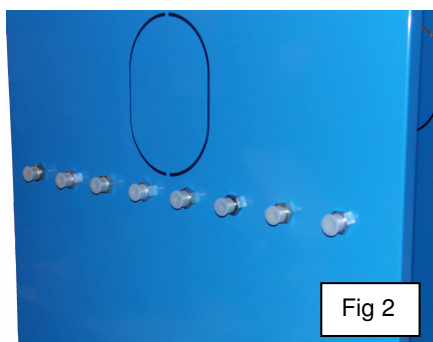
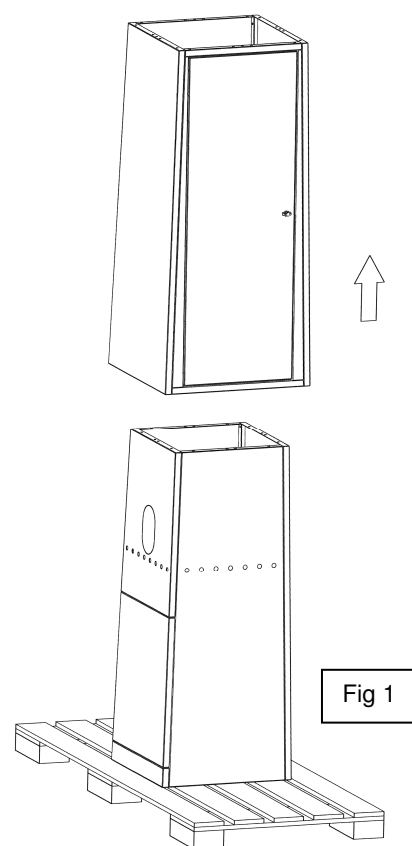
The bottom section of the tower can be mounted in all directions on the floor frame.

The middle section can be mounted in two directions on the bottom section.

The top section can be mounted in two directions on the middle section.

## 2. Assembly of the top section of the tower

- Unpack the complete delivered tower by removing the wrap-around plastic and then the top plates, the floor grid, the loose shutter and the package with bolts and nuts. Control carefully that all needed parts really are included into the delivery. If anything is missing or damaged it **MUST** immediately be reported back to us for suitable remedy.
- Enclosed are 72 M10x25 bolts and 72 M10 nuts for the assembly of the tower. There are also 4 M8x20 bolts to fix the loose shutter. The two eye bolts are included for use when the lower section is lifted off the upper section.
- Fix the eye bolts on the top of the lower section. Use a fork lift or similar to lift the bottom section off the upper section of the tower (Fig 1).
- While the upper section is fixed on the EURO pallet, mount the required number of bulkhead couplings as indicated in (Fig 2).
- Now mount the meter units and their connections (Fig 3). Make sure they will be absolutely leak proof. If necessary, use a floating sealant (for example Loctite 577).



- (Fig 4) Mount a support rail and equip it with, for example, "HYRO" clamps to relieve the meters from possible force coming from the connected heavy hoses. This to avoid leakage in the future when the fluid pressure will create pulsation and movement in the hoses. How these are mounted depends on choice of support rail and clamps.
- Now is it time to create the first connection to the meters and solenoid valves. Use a suitable electrical cable (Orion 23393) and make sure that they are long enough to reach the connection box (MPDM) without any joint.
- Assemble the three top plates as shown in Fig 5 and tight firmly.



Fig 4

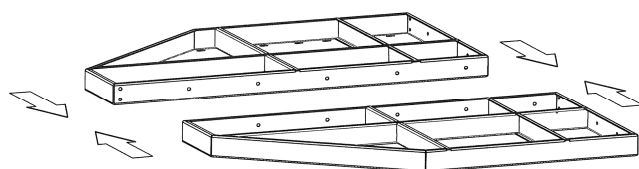
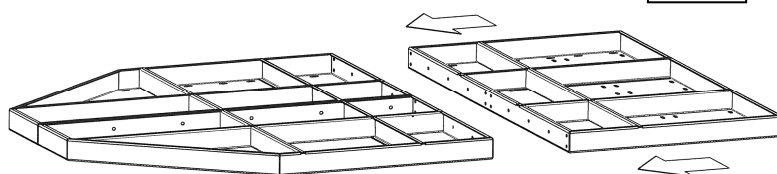


Fig 5



- Make sure the tower is supported and stable since the next step might require a person on top of the tower.
- Make sure that the top plate assembly is placed in right position in reference to the exhaust hose reel connection. Tight the bolts firmly so they don't get loose later when they will be exposed to heavy force from the hose reels.
- Look on the order or in the separate instruction which describes what equipment belongs to respective tower.
- Mount all the hose reels which are intended to be placed on respective tower. Consider the balance of the tower when doing this. Mount the reels alternately on both sides. The exhaust reel should also be mounted at this time.
- (Fig 7) Connect all hoses from the reels to respective bulkhead coupling and tighten them properly to prevent any risk of leakage. Normal connection is it an adapter with an inner conical part at 60°. (If necessary use floating sealant as Loctite 577, never use flax or Teflon tape).

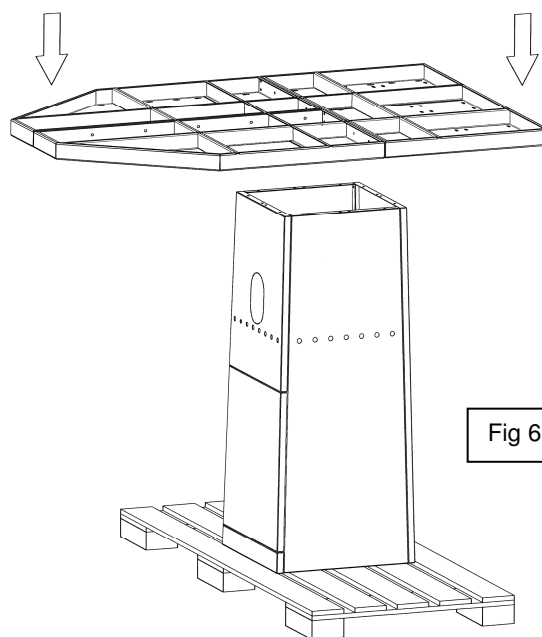
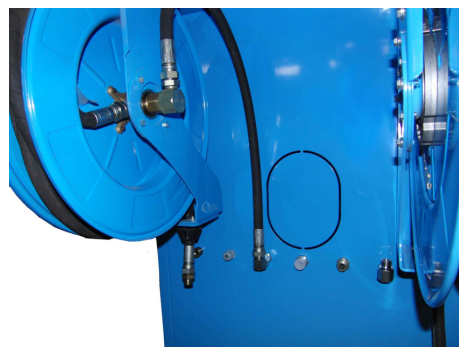


Fig 6



Fig 7

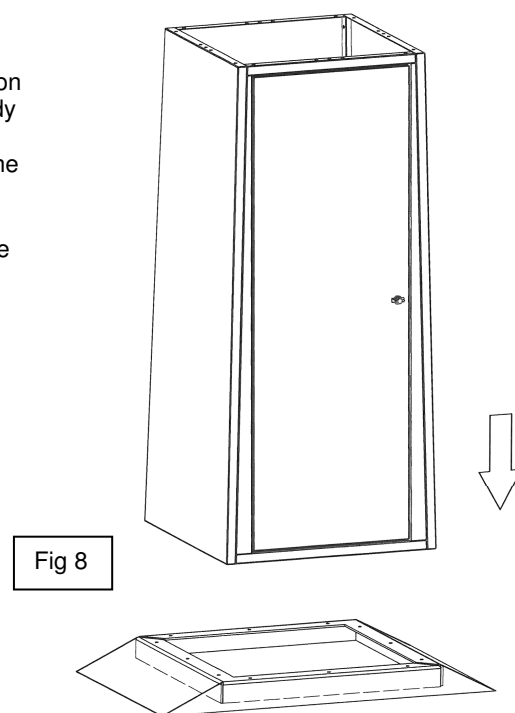


- Now the upper part of the service tower is complete. It can be placed directly on the lower part if that part is placed on its final position in the workshop. Otherwise it will be stored until the lower part is complete.

### 3. Assembly of lower part of the tower

- Mount the lower part directly onto the frame (Fig 8) which already is fixed on its right position in the workshop. It is assumed that the tower frame already has been placed on its location and been moulded into the concrete floor and that the concrete is dry enough to withstand the forces created from the big service tower.
- Tighten the bolts with suitable torque so they don't get loose later when the tower will be exposed to heavy force and possible vibrations.

***Make sure the tower is not leaning in any direction.***



### 4. Mounting complete tower

- Now is it time to lift the pre mounted upper part of the tower on to its position (Fig 9).
- Fix the upper part with the enclosed M10x20 screws on top of the lower section. All holes are pre drilled. The four screws in the corners should be mounted with the thread upwards.
- Mount all internal hoses and seal them against the bulk head or meter, which should have an inner conical surface at 60°. Connect the exhaust reel to its tube and connect all cables from the meters.
- When everything is connected and ready, mount the loose shutter and place the floor grid inside the tower.

