

TPC



Mirage 2.0 Mobile Cart Delivery System Installation Instructions MC 500 / 501



TPC

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Unpacking and Inventory

Each Mirage 2.0 Mobile Cart Delivery system will contain the following items in the box.

1. Delivery unit head installed on H frame.
 - Delivery unit head
 - HVE / SE (MC501 unit only)
 - 3 way syringe with tip
 - Skid Pad
 - Suction Canister 2 1/8" trap
 - 1500 ml Water bottle
 - Junction Box
 - Air / Water master controls.
 - Wet / Dry Foot control
 - Factory installed low voltage wire / terminal block in unit head. 24V AC/DC Max

- If at any time you have questions regarding your installation please don't hesitate to contact TPC toll free @ 800-560-8222 or via E-mail @ service@tpcdental.com

Installation Instructions

1. The MC 500 / 501 mobile delivery carts come completely assembled. Once removed from the shipping box, you will only need to connect the Air and Water pilot valves to the city water supply and dental air compressor supply. MC501 carts will need to have the suction line connected to a central vacuum system.



2. To raise or lower the height of the cart, loosen the securing knob and gently lift the unit head assembly to raise. You will need to lay the umbilical flat to decrease the resistance when pulling up. In some cases, you may need to feed the umbilical into the frame to assist with raising the height. Tighten securing knob to lock in place.



Junction Box Connections

3. Clear the supply lines prior to making connections in the junction box. If there are any debris in the air line it will collect on the micron filter. Verify the line is clear.
4. Both master controls look similar. One is for the Air which is identified by the large yellow tubing that exits the back end of the master control valve. The master control for the water line is identified by the large light blue tubing that exits the back of the master control valve.
5. Once the connections are made you may open the angle stops or equivalent shut off valve. Once the valve is open you may check the mater control gauges and verify that the pressures are set accordingly. Air pressure should read approximately 80 PSI. Water pressure should read 40 PSI.

Light Blue / City Water Supply

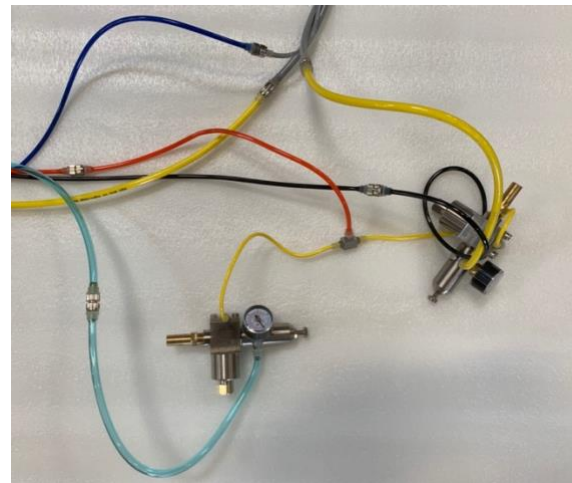
Orange / Master switch return

Black / Master switch supply

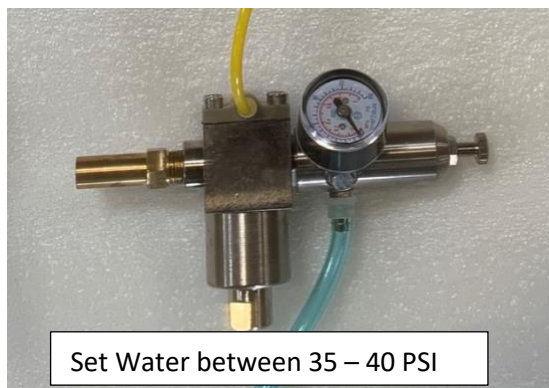
Dark Blue / Water relay F.C

Yellow / Foot control in from Master control.

Yellow / Foot control out to Delivery unit



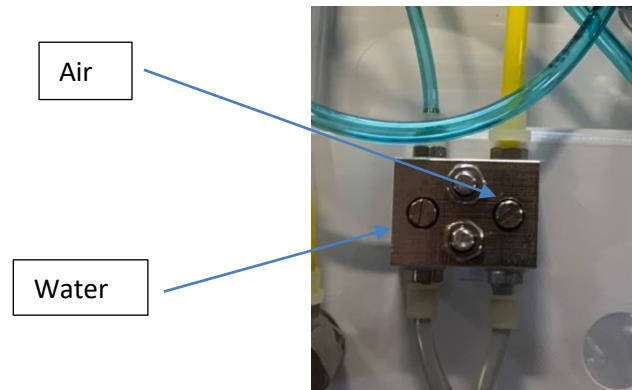
6. Set the water pressure mini regulator between 35 – 40 PSI. Set the air pressure on the mini regulator to 80 PSI. Loosen the stop nut and turn the adjustment knob clockwise to increase the pressure. Turn the regulator adjustment knob counterclockwise to decrease the pressure. Once the desired pressures are set, secure the stop nut.



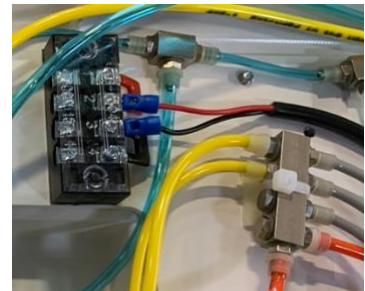
7. Adjust the water bottle pressure gauge to 35 PSI if using the clean water system. This regulator is inside the unit head. Loosen the stop nut and turn the adjustment knob clockwise to increase the pressure. Turn the regulator adjustment knob counterclockwise to decrease the pressure. Once the desired pressures are set, Secure the stop nut.



8. Syringe Pressure adjustments. To adjust the pressure on the syringe block. Turn the adjustment screw clockwise to decrease, Counterclockwise to increase.



9. If you require low voltage power installation. There is a pre-installed low voltage wire and block in the unit head. Only use low voltage through the pre-installed power lines and terminal block. 30Vac or 30DC max.



Operation Instructions

1. To turn the delivery unit “ON” switch the toggle on the right side of the delivery unit head to the “ON” position. To turn the unit “OFF” toggle switch to the “OFF” position.



Figure 1.1

2. To select “city” water or “bottle” water, set the toggle selector switch to the correct position. When setting the system to “bottle” you must also turn the ON / OFF switch to the “ON” position. When changing the bottle, turn the toggle to the “OFF” position to decompress the bottle system, prior to removal. If you need to increase the water pressure from the bottle system remove the top cover of the unit head. Locate the mini regulator shown in figure 2.2. Turn the adjustment knob clockwise to increase the water pressure. Do-Not Exceed 35 PSI or damage to the bottle may occur.



Figure 2.1

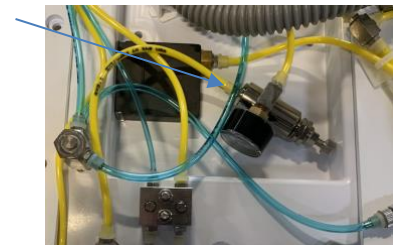


Figure 2.2

3. Air Coolant adjustment. You can adjust the air coolant to the handpiece by adjusting the air coolant knob on the right side of the delivery unit head figure 3.1. Turn the knob clockwise to decrease, counterclockwise to increase.



Figure 3.1

4. Flush Function. To perform a HP flush remove all three Handpieces from the delivery unit handpiece holders. Place the HP tubing's in a bucket or container to catch the water that will be purged from the tubings Use a suitable shock treatment and add to the water bottle system. Toggle and hold the flush option on the side of the delivery unit head. This will force the water to flush directly from the water bottle system through the water lines in the unit head figure 4.1.



Figure 4.1

5. Variable speed wet dry foot control. Depress the disc on the foot control to supply air to the unit head. If a handpiece is removed from its holder, that will be the active handpiece. Using the toggle on the foot control will turn the water on / off to the unit's handpiece positions. Note: the blue dot on the shroud indicates the water is in the "ON" position.



6. To adjust the handpiece pressure, use the adjustment knobs on the bottom of the unit. Figure 6.1 Turning the adjustment knobs clockwise will decrease the pressure. Turning the adjustment knobs counterclockwise will increase the pressure. To reference the HP pressure to the HP position you can use the pressure gauge on the side of the delivery unit head Figure 6.2.



Figure 6.1



Figure 6.2

7. To adjust the handpiece water flow, use the adjustment knobs on the bottom of the unit. Turning the adjustment knobs clockwise will decrease the water flow. Turning the adjustment knobs counterclockwise will increase the water flow.

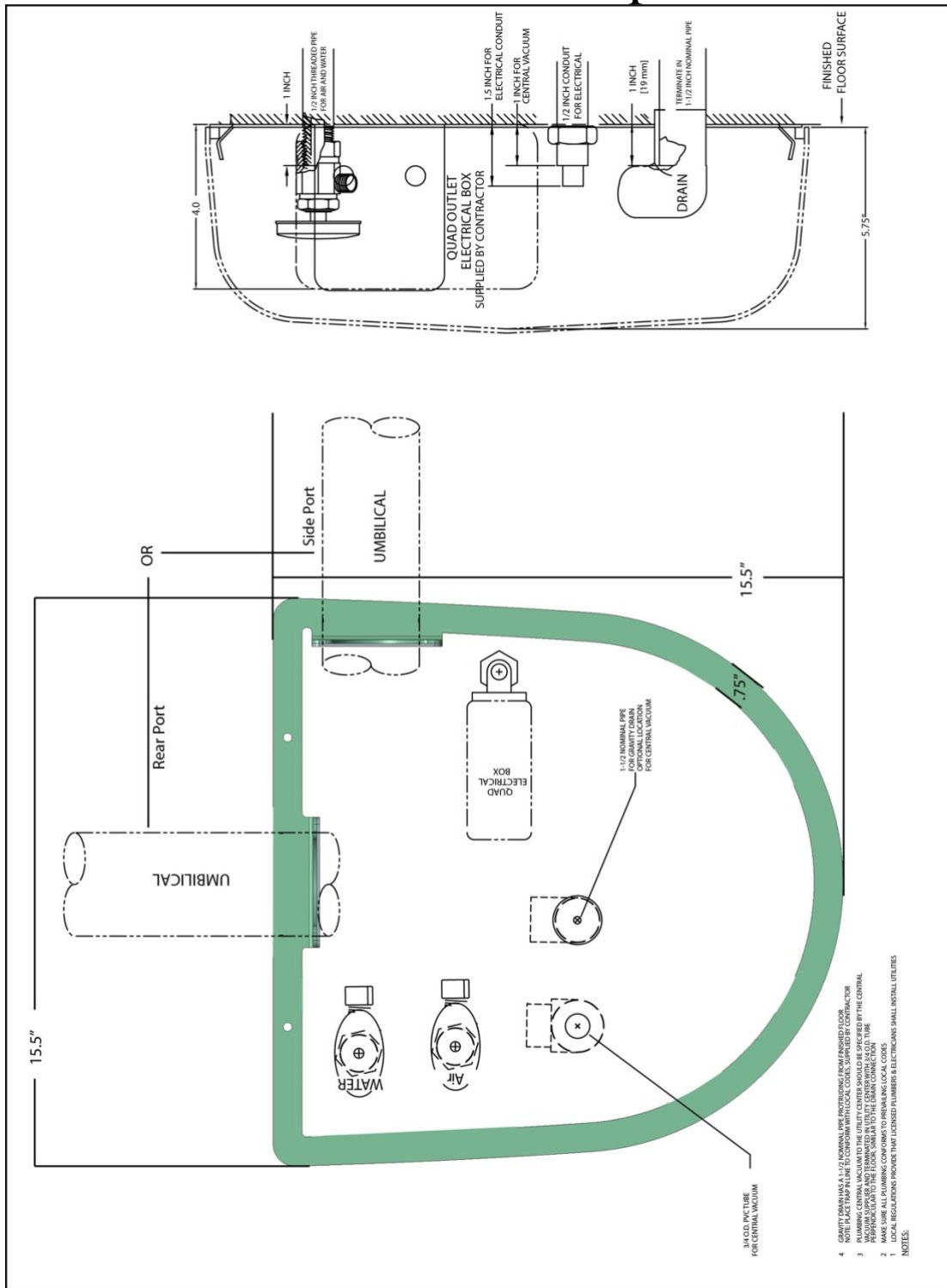


Delivery Head Leveling

8. If you need to level the unit head or adjust the tilt, use the following adjustments.
 - Loosen the 4 Allen screws that attach the unit head to the short support arm. See image. Once the screws are loose, use the 4 adjustment set screws in the center on each side to level the head.
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Junction box template





TPC 5-YEAR LIMITED WARRANTY



Warranty Information All of our products sold are guaranteed to be free from defects in workmanship and materials for a 1-year from date of purchase, unless otherwise stated. TPC will repair or replace any defective part at no charge. TPC will not be responsible for labor charges or shipping charges to / from the TPC facility. This guarantee does not cover normal wear or stains on surface finish. The guarantee does not cover damage resulting from improper installation, misuse or accidents incurred in shipping and handling. All claims against the freight carrier must be initiated at the time the damaged items are received. The claim is the responsibility of the customer. We are improving our products on a continuous basis. We reserve the right to make modifications without the need for prior notification and are not obliged to modify previously manufactured items. Main hydraulic pumps and hydraulic parts are covered under the 5-year warranty. Main chair PCB, transformer and solenoids are also covered under a 5-year warranty. Major cast components are covered under the TPC limited 5-year warranty. Upholstery, arm rests and any plastic components are covered under a 1-year warranty. Only authorized service technicians should attempt to service TPC equipment. Service performed by any unauthorized technicians may result in a voided warranty

5 Year Limited Warranty

Covered under 5-year warranty:

- Flex Arm
- Rigid Arm
- Light Post
- Brake assembly
- Unit head frame and holder bar
- PMU (excluding plastic covers- top, front, sides)
- Tri Block

Covered under 1-year warranty:

- Handpiece tubing
- Syringe tubing
- Hve & Saliva ejector tubing
- Internal plumbing (only defects in workmanship)
- Plastics (hangers, unit head cover, side box covers, 4 position asst holder, arm caps, j box frame and cover)
- Air brake push button valve
- Hve & Se valves & 3-way syringe
- Block gasket
- Cuspidor bowl and frame assembly
- Telescoping assistants' arm