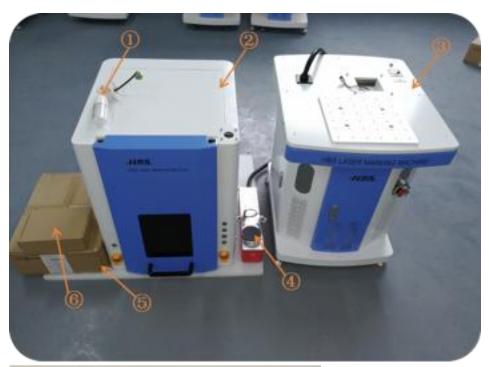
HBS GQ-20A1 Laser Marking System Installation Guide

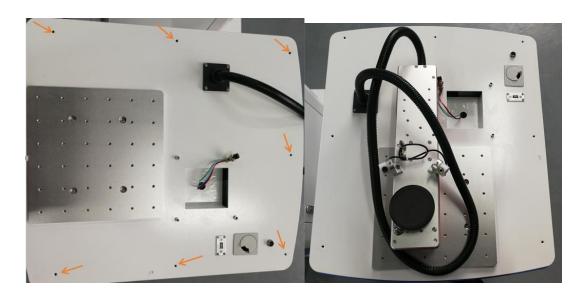
HBS Tech

After unpacking the machine, please check the accessories:
safety warning led light ② the top cover ③ the bottom supply unit ④ laser marking head ⑤ industrial tablet ⑥ computer mount bracket ⑦ laser marking head bracket



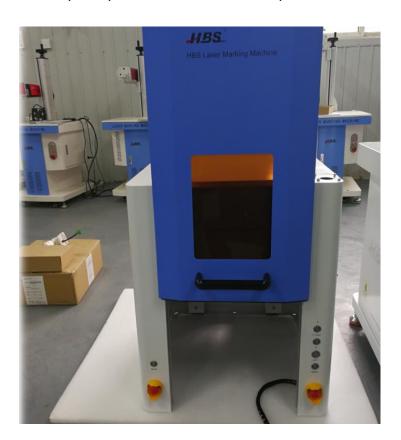


2. The seven screw holes on the supply unit table are fixed. Place the laser marking head as shown below.



3. When installing the top cover, to avoid unnecessary damage to the machine, do not proceed operation with only one person.

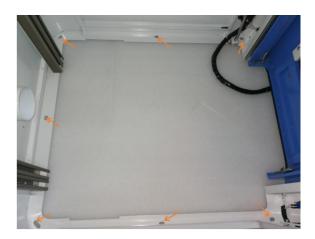
First, open up the front door of the top cover, as shown below.



4. Place the top cover smoothly and move the laser marking head to a safe place. Throughout the installation process, please always pay attention to protect the laser marking head, and the black fiber optic cable connected to the laser marking head, do not trample.



5. Inside the top cover also has seven round holes, as shown below.



6. Open doors on both sides of the top cover to facilitate the tightening screw process, as shown below.



7. Tighten the top cover and the supply unit with 7 hexagon screws, as shown below.

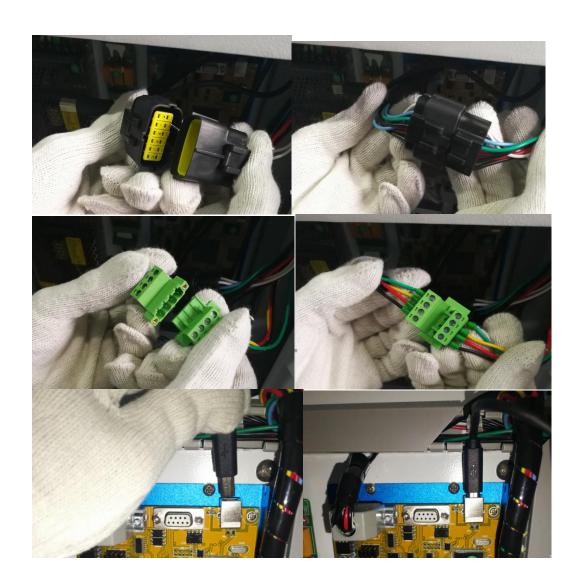


8. The green plug is the safety led light connector, and the big black one connects the button sets on the front panel of the top cover. The other small plug is for the USB cable communication.

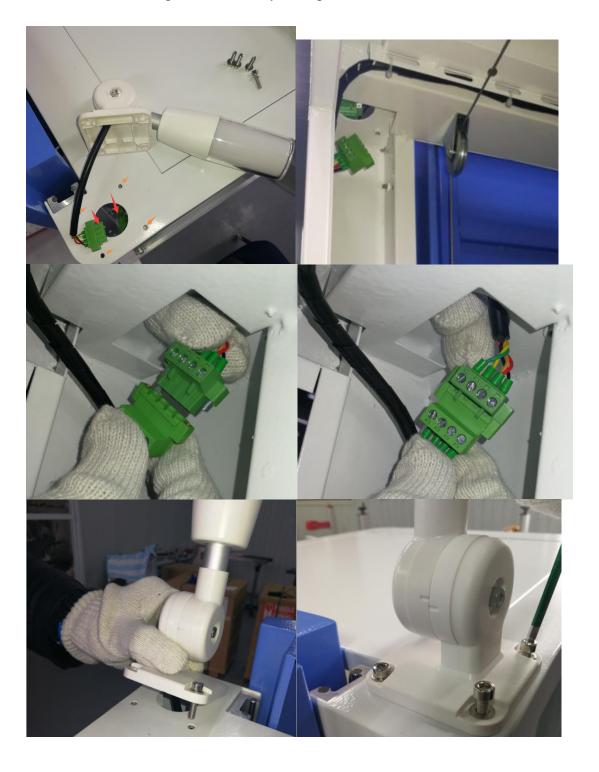
All the plugs should go through the hole, find the corresponding socket, and tightened as shown below.

From left to right in the picture, followed by USB communication cable, safety led light connector, top cover panel button sets.

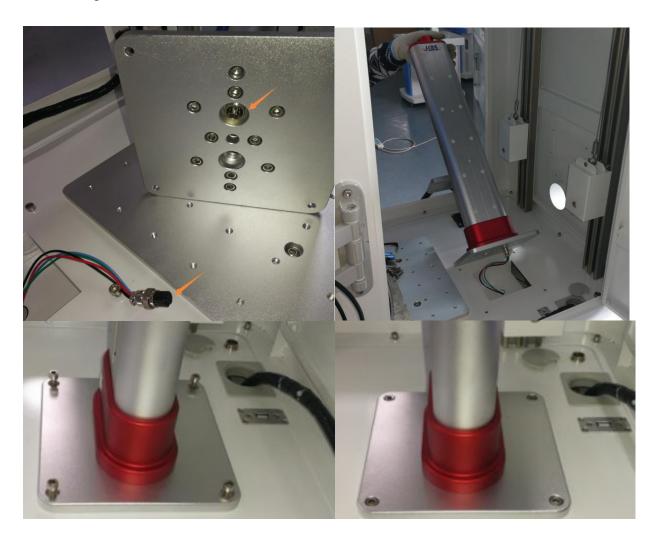


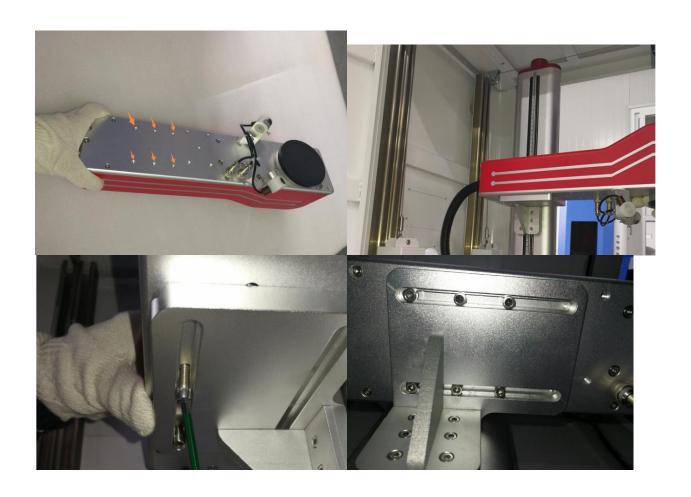


9. Connect the 2 safety led light connectors, and tighten the green plug sets with screwdrivers, and tighten the safety led light base with 4 screws, as shown below.



10. Laser marking head bracket and laser marking head installation. First, plug in the 8-pin connector, then place the bracket on the desktop of the supply unit and align the 4 holes between the base and desktop nicely, and use 4 screws to tighten them. Then place the laser marking head on the bracket, align the 6 screw holes with 6 holes on the bracket, tighten them, as shown below.





11. Install the industrial tablet with mount bracket, as shown below.



12. Plug the 4-pin power cord into the socket, rotating to lock-in position, as shown below.



13. 3-pin head cable is for the footswitch, insert into the socket, rotating to lock-in position, as shown below.



14. 8-pin head dual plug cable is for the rotary clamp accessory(optional), as shown below.



15. The industrial tablet power supply can be installed in two ways, ① Use the 2-pin dual plug connect the industrial tablet USB port with the top cover USB port, as shown below. ② Use the standard power supply cable, you can directly plug into the power outlet.



16. USB communication cable connection, connect the top cover USB port with industrial tablet USB port, as shown below.



17. Connect the power supply to the user-supplied voltage, check the circuit breaker, make sure it is switched "on" position to ensure the standard power supply function, as shown below.



18. SYSTEM STARTUP PROCEDURE Caution! Please strictly follow this order.

- 1. Press the "Control Power" button.
- 2. Turn on the "Laser Power" switch.

SYSTEM SHUTDOWN PROCEDURE

Caution! Please strictly follow this order.

- 1. Turn off the "Laser Power" switch.
- 2. Press the "Control Power" button.



19. Under normal, not marking condition, the safety led light is green. When the machine is marking, the safety led light will turn to yellow, press the emergency stop switch, the safety led light will turn red and accompanied by high pitch noise.



20. At the bottom side of the laser marking head, there is a focus finder switch. This focus finder is designed for smooth and precise focal positioning. Press the Z-AXIS button up and down manually. The laser marking head will automatically lift up and down. When the two red dots are overlapped together and become one, the laser marking head has found the focal position, as shown below.



21. Marking.

Four ways to mark:

- ① Press the MARK button on both side of the top cover, as shown below.
- ② Press the keypad F2 button
- ③ Press foot switch
- 4 Use industrial tablet software command



22. USB communication cable connection instructions.

There are two USB communication cables which are designed to connect the control board inside the supply unit in different circumstances.

Customers can choose the connection method as needed.



① Using the USB port on the side of the top cover. Find the USB cable which tied together with the black line sets, as shown below.





② Using the USB port on the desktop of the supply unit, please select the corresponding USB cable, and plug it in, as shown below.



23. Rotary clamp cable connection description.

There are two ways for the user to choose, respectively.

On the desktop of the supply unit, and the rear side of the supply unit, as shown below.



24. For laser marking machine software instructions, please refer to the laser marking software user manual.