Image of Mast:

2. The Installation of Hydraulic Parts

The Hydraulic Parts includes: Oil Tank, Oil Tube, Oil Pump, Group Valve and Oil Cylinder.

The Oil Pump linked with the Power-Output Shaft, it is the Power Source of the Hydraulic circuit. Group Valve includes Throttle Valve, Overflow Valve and Solenoid Operated Directional Valve, it is the Control Parts of Hydraulic circuit, to control the mechanical parts to complete related operations. Throttle Valve control the liquid flow, Overflow Valve adjust the pressure of circuit, and Magnetic Exchange Valve control the Cylinder to stretch out and drawback, then it can make the scraper to go up and down.
Image of the Installation for Oil Pump:
Installing for Oil Pump: Fix the Oil Pump on the Tractor with pump bracket, then link the Power-Output Shaft and Oil Pump Shaft with the shaft coupling. Different pump brackets will be needed for different Tractors, sometimes the pump bracket will be changed according to the rear support bracket of the Tractor. When install them, you must pay attention to that the Power-Output Shaft and the Oil Pump Shaft must be coaxial.

Image of the Installing of Group Valve:
Installing of Group Valve: Fix the Group Valve and Valve Block on the Oil Tank, and install the Oil Pressure Gauge on the Valve Block. In the above image, the blue ones is Solenoid Operated Directional Valve and Throttle Valve, the black one is Overflow Valve; the one which has wiring on both ends is Magnetic Exchange Valve, the flat one which is under the Magnetic Exchange Valve is Throttle Valve. The Overflow Valve can adjust the pressure, and the Throttle Valve can adjust the liquid flow.
The installing of Oil Cylinder

Fix the Oil Cylinder with Hinge Pin, and pay attention to the direction of the cylinder.
Image of Installation for Oil Tubes

The Oil Tubes should be installed in pairs, one input and one output.
3. The Installation of Laser Control Parts

1. Installation of Control Box KB-508.

The Control Box should to be installed at a place where is easy to see, easy to operate, easy to install and dismantle for the driver. Make sure that this place will not affect the driver’s other mechanical operation.

The draining and venting holes (at the back of the Control Box) must be down. The knobs for installation are at the ends of the Control Box, they will cooperate with the installing bracket of the Control Box for the installation of Control Box KB-508.

The installing bracket of the Control Box:

2. Installation of Laser Receiver LS-508

Laser Receiver LS-508 is a integrated electronic receiver, it is able to receive the laser beam signal launched from the Laser Transmitter KF-308. This Laser Receiver can work with many other types of Laser Transmitter, it can also receive the visible and invisible laser beam.

The Laser Receiver LS-508 can be installed on a round tube (outer diameter is about 42mm—50mm).
3. System Cable Connection

Connect all the wires. In order to reduce the attrition caused by the activities of the cable, please fix the cable on the machine every 60 cm. Pay attention to the places where is bending, ensure that the cable can move freely, avoid the friction between the cable and other hose, accessories or machine. The cable should be long enough to prevent stretching or steep bending. To prevent the damage caused by high temperature, don’t fix the cable on heat pipe or accessories.

1. Connect the 2-hole Power Cable to the 2-pin plug of the Control Box KB-508.
2. Connect the joint of the Power Cable on the electrode of the Storage Battery. To prevent the accident caused by reversed connection, the Power Cable has a reverse connect protection device.
3. Connect the 7-hole cable of the Control Box KB-508 to the 7-pin connector of the Laser Receiver LS-508.
4. Connect the 3-hole Valve Cable to the 3-pin connector of the Control Box KB-508.
5. Connect the Valve Cable to the Solenoid Operated Directional Valve correctly. The black wire is used for both red wire and white/grey wire, the red wire controls the rise of the scraper, and the white/grey wire controls the scraper to go down. (details please check the image in page 23)
Image of System Cable Connection
Image of Cable Connection for Solenoid Operated Directional Valve

1. **red wire** control the rise of the scraper

2. **white or grey wire** control the scraper to go down

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![Diagram of Solenoid Operated Directional Valve](image.png)

- red wire
- white or grey wire
- black wire
- cable with 3-hole