

ZHANGJIAKOU SWMC MACHINERY CO., LTD.

# SWMC-SWDS 140C-DTH-Hydraulic Drill

# **OPERATION & MAINTENANCE MANUAL**

Aug. 18<sup>™</sup>, 2019

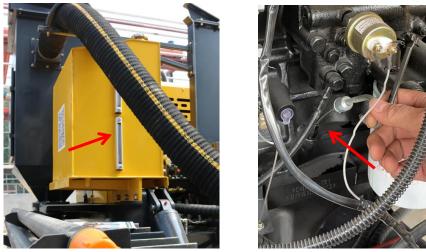


# Use and maintenance

The correct use and normal maintenance of the rig is the key to the life of the rig, so it must be paid great attention and carried out in accordance with regulations.

## 1.1 Use

1. Before starting, check whether the water level and oil level of the engine are normal, and supplement them if necessary.



2. For the hydraulic oil of the rig, 46 # anti-wear hydraulic oil is used in winter in the northern region and 68 # anti-wear hydraulic oil is used in summer in the southern region.

3. Check whether the operating handle of each system is in the neutral position.



4.Connect the high pressure air pipe joint between the air compressor and the drill.

5. Start the engine of the rig and observe whether the indication value of each instrument is normal.

6. When the rig is walking, it is not possible to change gears at will. It should change speed after stopping, otherwise it will cause damage to the walking motor.

7. Move the drilling rig to the downwind position to align with the hole position.



8. Install the drill pipe and drilling tools.

9. Start the air compressor and open the valve to supply air to the rig.

10. Operate the relevant handles for drilling operations, and adjust the rotation speed and propulsion pressure of the rotary head according to the rock hardness.

11. When drilling, keep in mind that the fast and slow push handles cannot be operated in the opposite direction at the same time. When the fast push is performed, the slide cannot collide with the end stop of the carriage, otherwise the hydraulic components will be damaged.

12. During the use of the rig, the operator must not adjust the working oil pressure at will, so as not to cause the failure of the entire hydraulic system.

13. Use a special wrench to connect and disconnect the lever to prevent injury.

14. After completing the drilling depth, lift the drilling tool out of the ground.

#### 4.2 Maintenance

1. A special dust blowing duct is installed at the back of the rig, and the dust on the rig must be cleaned every shift.



### Use this hose to clean rig

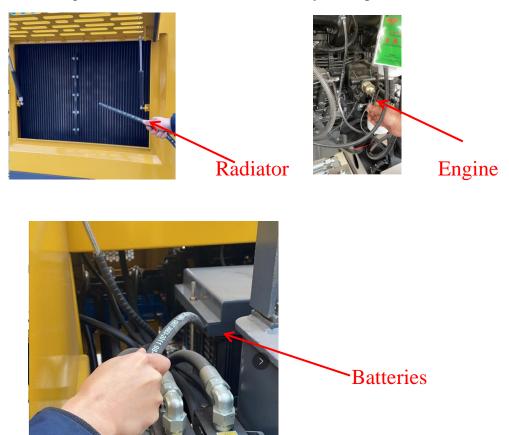
2. Clean the dust of the engine air filter dust cover and filter element every shift. When the filter element is damaged, it should be replaced in time. The oil filter is cleaned once a week.



3. Diesel engine lubricants should be filled with the same brand of lubricant, and radiators should be filled with antifreeze.



4, diesel engines, batteries, radiators should always be kept clean.



5.Regularly check whether there is looseness in the rotating part and other parts of the rig. If found, tighten it in time.

6. Adjust the track, chain and triangle belt if they are loose.



Belt



Chain





7. Every day of using the rig, you should add butter to the grease mouth of each joint to lubricate each joint.



### All of the red points should be add butter

8. If there is leakage or outgassing of hydraulic components and joints, they should be handled or replaced in time.



Parts of hydraulic system



