

*OPERATION and
MAINTENANCE MANUAL*

*HCR9-DSII
HCR9-EDSII*

HYDRAULIC CRAWLER DRILL

⚠ WARNING

Read and fully understand this manual
before operating, inspecting or adjusting
the crawler drill.



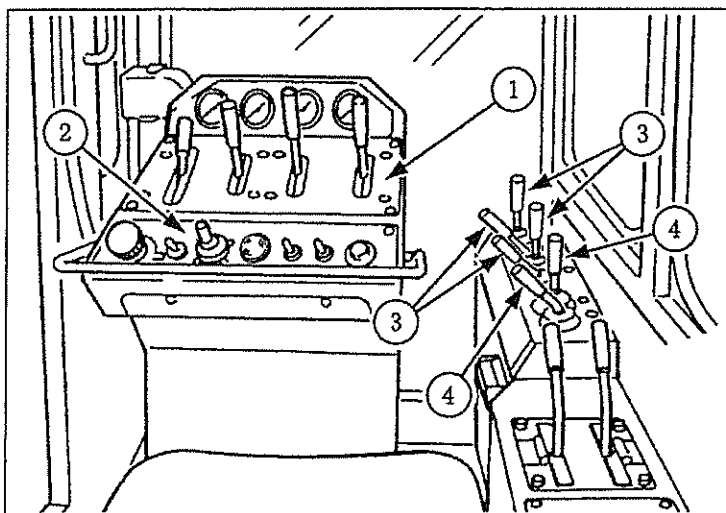
3. Operating units

NOTICE

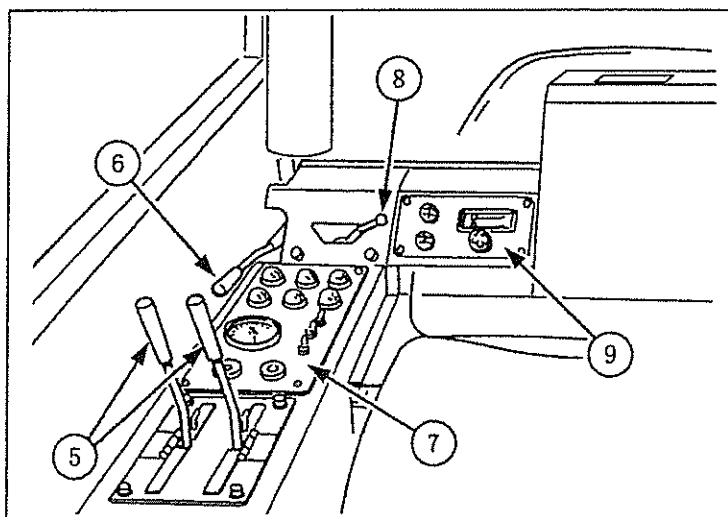
The operating units are described on condition that the [standard cabin] is mounted.

Be careful since the mounting layout of the engine throttle lever, and other attached devices inside the cabin of this crawler drill is different as compared with the mounting layout in the ROPS/FOPS cabin.

★ For the operating units of ROPS/FOPS cabin, refer to 21. [Operation cabin].



- ① Drilling control panel
- ② Drilling switch panel
- ③ Hydraulic cylinder control levers
- ④ Rod changer control levers



- ⑤ Traveling levers
- ⑥ Engine throttle lever
- ⑦ Meter panel
- ⑧ Oscillating lock lever
- ⑨ Switch panel

4. Running operation

4.1 Check before starting the engine

WARNING

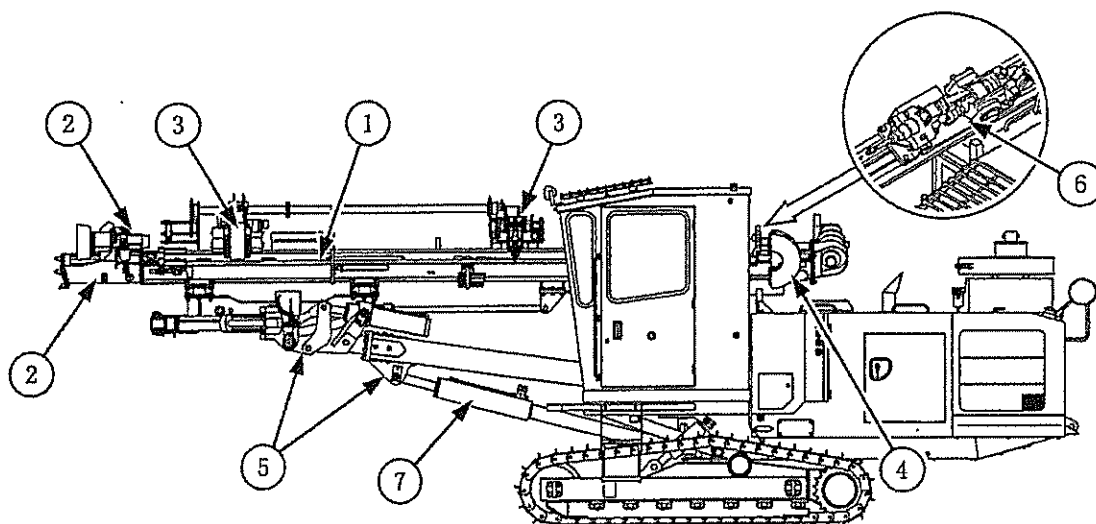
If a trouble was detected by the check before starting the daily work, repair or replace defective parts without fail before use.

The daily execution of the check before starting the daily work ensures a safe use of the crawler drill and also prevents troubles in advance.

Carry out this very important check without fail.

■ Walk-around check

Check the surrounding and lower part of the crawler drill by visual inspection for fuel or oil leak, missing bolts and nuts, and conditions of the work units and hydraulic system.



The external view shows HCR9-EDS II

- ① Check the guide shell for excessive wear, cracking, and deformation.
- ② Check the foot pad and centralizer for excessive wear, cracking, and deformation.
- ③ Check the rod changer for damage, deformation, and cracking.
Check the rotator roller for excessive wear.
- ④ Check the hose reel for excessive deformation, wear, and damage.
- ⑤ Check the boom and boom mounting section for excessive deformation, wear, and damage.
- ⑥ Check the drifter for excessive wear, damage, and deformation.
- ⑦ Check the high-pressure hose joints and hydraulic cylinders for oil leak.

15.1 Adjusting impact pressure

WARNING

Hydraulic oil is combustible.

Drain hydraulic oil into a drain oil pan when removing the oil hose.

Wipe off hydraulic oil carefully, if spilt.

CAUTION

The impact pressure changes according to the rock quality, drilling conditions, etc.
For optimum setting of the impact pressure, contact your nearest distributor.

Adjust the impact pressure, while checking the gauge pressure being indicated on the pressure gauge during drilling.

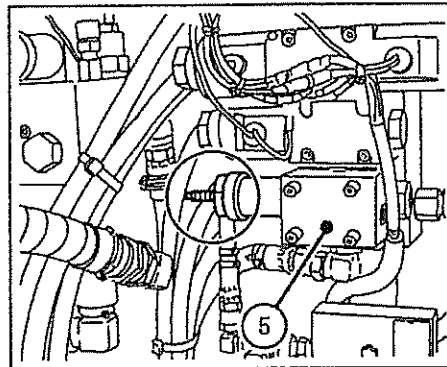
Increase the pressure for hard rock or large-diameter drilling and decrease it for soft rock and small-diameter drilling, in general.

★ The impact pressure is adjustable when the mode selector switch ① is set to [N] mode.

1. Adjust the impact pressure by turning the impact pressure adjusting screw ⑥ of the modular valve (P) ⑤.

Loosen the fixing nut ⑦ and turn the adjusting screw ⑥.

★ The modular valve (P) ⑤ is at the right in the engine side cover on the right of the body.



The impact pressure decreases when turning the adjusting screw ⑥ clockwise and increases when turning the adjusting screw ⑥ counterclockwise.

After adjustment, fasten fixing nut ⑦.

