

OPERATING INFORMATION



When a new bit is installed, drill at reduced weight for a short period



Provide adequate air to the bit to ensure trouble free bearing performance and reduced abrasion wear on cones and shirttails. (recommended is 40 – 45 psi at the bit)



Turn the air on before lowering the bit to collar the hole. Keep the air on until the bit is finished drilling and is out of the hole.



Always rotate the bit when moving in or out of the hole.



Some indications that the hole is not being properly cleaned are:

- Increase in torque indication through higher hydraulic pressure.
- Increase in air pressure.
- Heavy wear and /or damage indications on shirttails.



Always rotate when coming out of the hole to:

- Help in cleaning the cuttings from the hole.
- Keeps cuttings from entering the bearings around the back face of the cone.



Never use the hydraulic pressure on the bit for levelling the machine.



When adding extra drill steel in wet holes, always make three or four cleaning passes to get a cleaner hole bottom.



Bit cones should be checked periodically to be sure that all are about the same temperature. One hot cone generally indicates that the air passage to that bearing is obstructed. Clean the bit with water and continue drilling



A bit should never be left down the hole when repairs require lowering the head assembly to the deck. This bit should be substituted by a dull bit to protect the drill pipe threads.



Properly maintain the drill pipe and its threaded connections. A bent pipe will often cause early failure.



Blasthole bits drill most economically when sufficient weight is applied to cause spalling of the formation. Selecting correct rotary speed is usually a matter of trial and- error, depending upon the formation being drilled or use the factory recommended weight and rotation speeds.



Always record footage drilled, time in the hole, RPM, WOB (weight on bit), air pressure psi, formation drilled and any unusual drilling conditions.



After the bit is discarded it is necessary to make a comparative analysis of each bit type dulling and causes. Evaluating those findings can increase drilling efficiency while reducing drilling cost and will precisely determine what bit design features are required for the application.