

## **EXCAVATOR OPERATIONS**

The following guide to safe work techniques won't tell you all you need to know about operating an excavator but they will point out some of the common hazards and how to avoid them.

Only experience will teach you some things, but following these guidelines and talking to and listening to experienced operators will help you work safely.

### **NOTHING BEATS EXPERIENCE**

#### **Pre Start Checks**

Pre start checks should concentrate on ensuring that the machine is ready to work safely and reliably.

Checks should include:

- Engine coolant
- Engine Oil
- Hydraulic Oil
- Fuel level
- Slew motor oil

While the engine is warming up carry out a visual inspection around the machine for any oil leaks, wear and tear etc.

**ON THE OLDER MACHINES ,CHECK THAT THE SAFETY PIN IS SECURELY FITTED TO THE QUICK HITCH PRIOR TO OPERATING THE EXCAVATOR (newer quick hitches do not have separate pins )**

#### **Start Up checks:**

Before starting up the machine it is important to do the following checks:

- Ensure all other people are clear of the machine
- All controls are in neutral
- Seat is adjusted
- Seat belt is operational and buckled correctly
- The throttle should be no more than 1/3<sup>rd</sup> open

Don't crank the engine for too long, if it doesn't start promptly you can do serious damage to the starter motor and over heat the wiring, if it won't start check for a problem.



### **After Start Checks:**

Once you have started your machine check that the oil pressure is OK, if not shut it down and find out why or serious damage can be done to the engine. After the excavator has warmed up enough to start operating, check the following:

- Work area is clear of personnel
- Hydraulic functions are working OK
- Travel pedals are working OK

### **Shut down procedure:**

When you shut down your machine be sure to park on a level area away from your immediate work area.

Idle the machine for at least 5 minutes before shutting down.

Lower the bucket to the ground; set all locks to prevent machine or attachments from moving. Remove the key from the ignition, isolate if required and lock the cab.

### **Dust Exposure**

**Long term Dust exposure** can cause serious health issues. To minimise dust exposure keep doors and windows shut at all times while operating. The machine cab is positively pressurised. Check that the cab air con / heater filter is maintained and in good condition. Vacuum and wipe out cab regularly.

Do not use a broom to sweep out as this releases more dust into the air.



### **Safe Operating Tips:**

Excavator standing pads should be suitable and high enough for the operator to be able to monitor the feed hopper from the cab. Safe access to the excavator must be provided for the operator, (smooth ramp to walk up and down).

**Don't** operate an excavator unless you have an operators licence or are training under the supervision of a competent operator.

**Read and understand** your machines operator's manual and any warning labels on the machine.

**Keep** your machine clean including all instrumentation, windows and lights.

**Be alert** while operating your machine.

**Clean** any mud or grease from your boots to prevent slipping on the foot pedals.

**Know** the limitations and lift capacity of the machine and work within those limitations.

**Plan** your work, and operate on a level work surface whenever possible.

**Always** be aware of other people, machinery working nearby.

**Keep** your machine's movements as smooth as possible.

**Never** allow anyone to walk under or over the machine while operating.

**Never** allow anyone to ride on the bucket

**Don't** load a truck unless the driver is in a safe position and never lift your loaded bucket over the cab. Load trucks to avoid spillage.

**Never** work close to overhead or underground power lines unless a full risk assessment has been completed and you are satisfied that it is safe to do so. Aurora energy provide specific advice on working near lines. If unsure always check before commencing work.

**Always** keep the machine a safe distance from the edge of a bench or excavation. Be alert for unstable ground.

**Never** undermine the machine while excavating material.

**Never** operate underneath an overhang

**Always** have window guard fitted if breaking rock

**When lifting** always use the machines designated lift point and ensure slings being used are adequate for the job and in good condition.

**Machine must be greased at the end of each shift**

**Remember if you are unsure about something, ask for advice**