Preventive maintenance mainly consist of routine cleaning and lubrication.

On a weekly bases the control panel filter needs to be inspected and cleaned as required. Prior to 1998 the A1200 control system had an inlet and outlet screen for cooling. Both of these covers can be removed easily and cleaned using shop air. After 1998 a filter assembly was installed over the fan to filter all incoming air. This applies to the later A1200's, A2000, CS101 and the Orion control systems. Remove the plastic filter cover and clean or replace the filter as required. Note, the filter may be cleaned with mild detergent and water and then left to air dry over night before reinstalling.



When cleaning the filters inspect the fan assembly to make sure it is operating correctly and is pulling air through the filter assembly. Also inspect the lower exhaust screen and make sure it is not blocked.

On the CS101 control Pendent there is a filter on the right side of the pendent and installed in the front of the CPU.



To remove the filter on the side of the pendent pick up on the bottom to pop off the plastic filter retainer. Clean as required. The filter in the front of the CPU slide outs to the right. If the filter is cleaned, instead of being replaced, make sure it is completely dry before reinstalling.

It is very important to keep these filters clean. A dirty filter prevents proper cooling of the electrical/electronic components and can cause intermittent problem with the computer.

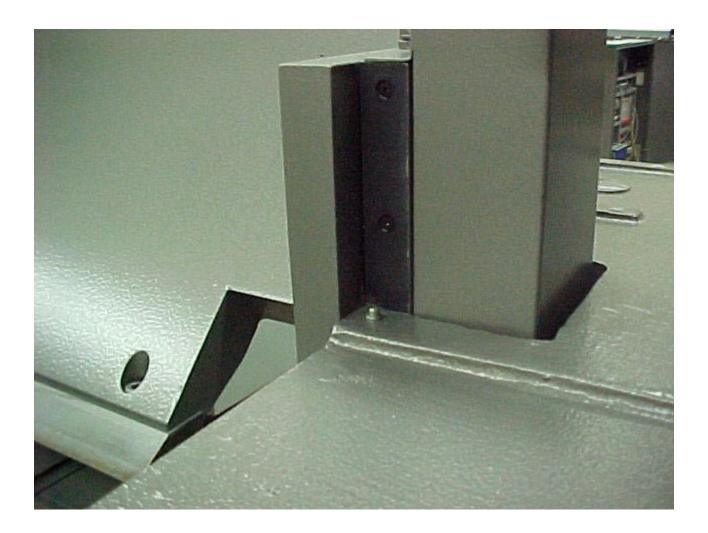
Pull the metal pan out to the right. Remove the filter and blow clean or wash with mild detergent and water. Note, do not reinstall the filter until it is completely dry.



Daily lubrication requirements:

At the beginning of each work day or at the start of each shift the Gibbs for the upper clamping beam must be lubricated.

Right front Gibb lubrication point.



There are four lubrication points; two on each leg, one in the front and one in the back. Open the upper beam to its maximum height and give the oil gun 2 pumps. Lower the beam half way down and repeat. Gibb oil may be applied directly to the gibbs and is drawn down into the leg assembly when clamping. The machine should never be run with dry gibbs.

There are several different types of lubrication available that work well.. However, White Lithium Grease is readily available across the country and comes in grease tubes or quarts can. The grease can be injected using a grease gun or oil gun. Note, an oil gun is supplied with the machine.

Back gauge assembly needs to be cleaned and lubricated monthly. Except for the 1 meter back gauge (39.370") the upper carriage assembly rides on two linear rails and is positioned by a ball screw assembly. The carriage assembly moves on four linear guides.

The guides should be cleaned with a soft towel or rage and a thin layer of grease applied to the rail. Grease the four linear guides until grease starts coming out from around the ways. Use White Lithium grease.



Clean the ball screw assembly of excess grease and dirt. Grease the ball screw with White Lithium grease lightly on both sides of the bearing block for a couple of inches only. Be careful not to use an excessive amount of Lithium grease. Excessive grease may cause damage.





After greasing the ball screw, operate the back gauge several times making sure that all excessive grease is removed. Prior to reinstalling the back gauge cover panels clean the back gauge optical home switch with a "Q" tip or soft clean cotton cloth.

On the 39 inch back gauge assembly the upper carriage assembly slides back and forth on two Thompson rods. The support bearings are of made of plastic material. On a monthly bases clean excessive grease from the guide rods and put a thin film of White Lithium grease on them. Be careful not to use an excessive amount of grease.



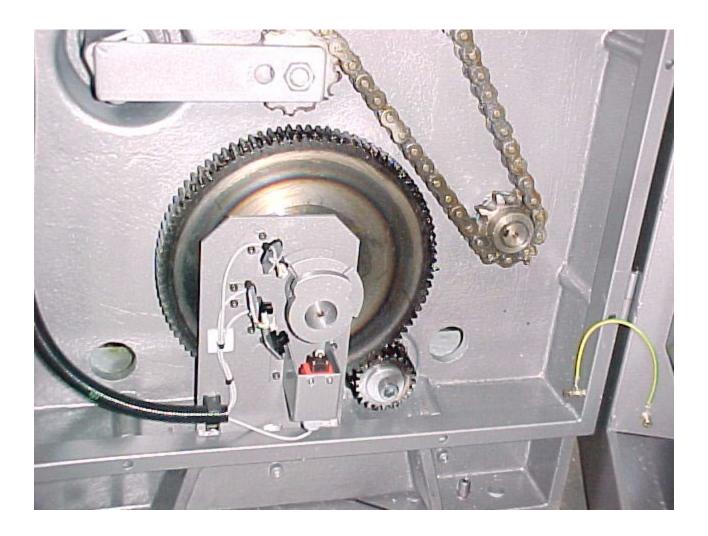
Inspect and clean the backgauge fingers and stops on a monthly bases. Keep the fingers and alumimum channels clean of dirt and foriegn material. Clean the back gauge cover panels with mild detergent.



Do not use any type of lubrication on the electric soleniods for the back gauge fingers. If the soleniods are sticking, disassmbly them completly and clean as required.

Every six months open the left electrical control panel and gain access to the clamping gears and bending apron drive chain. Remove old grease and dirt from the clamping gears and apply open gear lubrication on the clamping pinion drive gear and the bull gear.

Mobil Gear Lube 375 NC is readily available.



Lube the bending apron drive chains every six months with spray chain lube, white lithium or hand pack with grease.