Carter A type Starting up intructions

Important

Instructions for Starting up a Drive

Having filled the Carter gear and, where fitted, the flange mounted reduction gear with the correct grades and quantities of oil, set the control speed to '5' on the scale. Then, where possible, turn the input shaft by hand in the direction in which it will normally rotate.This will assist in distributing oil over the working sufaces before subjecting them to high speed and load conditions. If hand turning is not pratical then 'inch' the drive using the motor 'START' and 'STOP' buttons. Afterwards, to further assist in establishing full lubrication, run the drive for a few minutes on a light load, working the speed control through it's full range. The gear should now be ready to drive under full load conditions.

Where Carter Variable Speed Gears are installed within a short time of testing at our works, steady quiet running at all output speeds should be immediately achieved. However, when Carter Gears have been in storage for long periods it may be necessary to clear air from the hydralic system. Whilst air is present in the system in any considerable quantity on load the output speed will be erratic and a considerable volume of noise will be emmited by the gear. Initially this noise can only be described as a groaning note of varying pitch and frequency , accompanied by a rattling sound. These sounds are not indicative of impending breakdown of the gear, being entirely due to the reaction of elasticity of trapped air under pressure through fine clearances in the working parts between the pistons and cylinder walls. The following notes indicate the correct method of clearing trapped air.

Clearing the Hydraulic System of Air

If possible, apply a light varying load to the output shaft and at the same time work the speed control up and down between No. 5 and No. 10 on the scale. Where a coupling or 'V' rope pulley is fitted on the output shaft, this varying load can be applied by means of a wood plank used as a break when levered against the floor or baseplate. After a few minutes the intensity of the noise should be reduced considerably and at this point the load on the output shaft may be increased slightly (still moving the control between No. 5 and No. 10 on the scale). Final clearance of air is indicated by the complete absence of 'beat' notes when the gear is running in top speed position (No. 10 on the scale) and quiet steady running will then be achieved at all output speeds. Carter Gears installed in relativley quiet surroundings will be noticed to produce at all speeds below maximum a continuous note of low intensity which will increase slightly in volume as the output speed is decreased.