

INTEGRAL ELECTRIC MOTOR WITH SPEED SENSOR, PLANETARY GEARBOX AND STEERING MEANS

Abstract

5 A steerable wheel motor assembly for moving construction lifts and scaffold equipment is disclosed and claimed which includes a spindle bracket configured to be pivotably mounted at an upper end to a steering mechanism for rotation about a vertical axis. The output shaft is supported by a first set of bearings and a second set of bearings with the second set of bearings including a speed and direction sensor integral therewith for detecting the speed and direction of rotation of the output shaft. The sensor outputs to a control system which controls the speed and direction of the equipment. A thrust washer is
10 used to position the output sun gear accurately reducing manufacturing and maintenance costs of the assembly. Use of the thrust washer reduces the cost of machining the output shaft to a high tolerance.

Figure 4