4. Standard check-out procedure

The scope of the present chapter is to provide a standard check-out procedure that guides the dealer performing check-out of the robot to assure proper operation of all the parts.

Execution of this procedure is useful at least in the following situations:

- at completion of repair
- after winter service
- in case the robot shows anomalous behavior and it is not easy to understand what is wrong.

Execution of the procedure allows to perform 100% check-out the robot.

Proper functioning of the robot during all the tests called out in the procedure clearly point out that the causes of some anomalous behaviors in the real installation are to be found on installation.

Standard check-out procedure is provided in the next paragraph for L85 robot models.

For L30, L200, L200R and L300, please use "Autocheck" procedure ad described in the "MD-CT-RO-52 Robot set-up document" with additional battery test according to the procedure provided in "MD-CT-RO-51 AmbrogioClient" document.

4.1 L85 robots

Step	Description	Result
1	Turn robot ON	
2	Verify that the display shows correct information at start-up. In particular, if	
	accessories are installed, verify that the following letters are showed on robot	
	display:	
	A: alarm	
	G: GSM	
3	Verify that the robot enters PAUSE condition	
4	Turn robot OFF	
5	Connect recharge power to the recharging bolts (use correct power supply	
	and winter recharge kit or locate the robot inside the recharging station)	
6	Turn robot ON	
7	Wait for end of start-up and verify that the robot shows CHARGE information	
	(charge process started)	
8	Turn robot OFF	
9	Execute inspection about proper recharge efficiency according to the	
	procedures provided in paragraph 3.2.2 and sub-paragraphs	
10	Turn robot OFF	
11	Turn robot ON	
12	Enter SERVICE MENU - TEST MOTORS	
13	Verify for proper functioning of the wheel and blade motors according to the	
	information provided in "MD-CT-RO-52 Robot set-up" document.	
	More detailed test could be executed thanks to the motor test procedure	
	described in "MD-CT-RO-51 AmbrogioClient" document.	
14	Enter TEST TILT menu	
15	Verify for proper functioning of the tilt sensor according to the information	
	provided in "MD-CT-RO-52 Robot set-up" document.	
16	If the robot is equipped with GYRO component, Enter GYRO menu, otherwise	
	jump to step 18	

Step	Description	Result
17	Verify for proper functioning of the gyro sensor according to the information	
	provided in "MD-CT-RO-52 Robot set-up" document.	
18	If the robot is equipped with GSM board, Enter TEST GSM menu, otherwise	
	jump to step 20	
19	Verify capability of the robot to send Test SMS	
20	Locate the robot inside a perimeter (do not use too small perimeter wire	
	otherwise the transmitter could stop due to current protection and avoid	
	location of the perimeter over the pavement where metal could cause	
	disturbances to the signal)	
21	Enter SAFETY LIFT menu	
22	Verify for proper functioning of the hall effect sensors according to the	
	information provided in "MD-CT-RO-52 Robot set-up" document.	
23	Enter TEST SIGNAL MENU	
24	Verify for proper functioning of the signal receiver according to the	
	information provided in "MD-CT-RO-52 Robot set-up" document.	
25	Turn robot OFF	
26	Turn robot ON	
27	Set robot in AUTOMATIC mode (change working times if necessary)	
28	Leave the robot running for at least 30 minutes and check for absence of	
	anomalous behaviors / errors	
29	Push CHARGE to send the robot to the recharging station and check that the	
	robot starts driving in clockwise mode according to the desired method (on-	
	wire, on-bounce, V-meter). Stop the robot after the verification has been	
	performed.	
30	Turn robot OFF	
31	Perform battery test according to the procedure provided in "MD-CT-RO-51	
	AmbrogioClient"	
32	Verify that the remaining battery capacity guarantees proper operation of the	
	robot (it is not always necessary to have 100% capacity of the battery to allow	
	proper operation)	

Table 9 - L85 robots: standard checkout procedure