

PERIODIC CHECK		installation	1- 2 months	1 year	5-10 years
1	JACK SEAL TIGHT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
2	VALVE SEAL TIGHT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	OIL LEVEL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
4	OIL CONDITIONS	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	MOTOR PROTECTION EFFICIENCY	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
6	FILTERS	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	PRESSURE CHECKS	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
8	MANOMETER SHUT-OFF VALVE	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
9	VALVE BLOCK OPERATIONS	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
10	TEST AT TWICE MAXIMUM STATIC PRESSURE	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
11	HAND PUMP CHECK	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
12	RELIEF VALVE	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
13	VALVE VC 3006	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
14	ANTI-SLACK ROPES VALVE	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
15	RELEVELLING DEVICE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
16	ALARM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
17	OIL TIGHT (IN GENERAL)	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
18	MAIN SHUT-OFF VALVE	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
19	PLATES AND DIAGRAMS	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
20	OVERALL CHECK-UP				<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	SUGGESTED CHECKS				

## **1 - JACK SEAL TIGHT**

- Check the level of oil in the oil drain pan in the pit to ensure that oil leakage does not exceed 1-2 litres per month. If the oil leakage is higher, replace the seal.

## **2 - VALVE SEAL TIGHTNESS**

- At completion of the installation and when doing regular maintenance, check the valve seals. Before proceeding, check that oil temperature is approximately at room temperature. Close the main shut off valve and check the pressure using a pressure gauge. The pressure should not drop more than 4 to 6 bars in 5 minutes.

## **3 - OIL LEVEL**

- Check that when the car is at the top floor, the oil level in the tank is above the minimum level position (the pump and motor must be completely covered by the oil).

## **4 - OIL CONDITIONS**

- Visually check the condition of the oil. The oil should look the same as it was new. It is recommended that a small quantity of oil be drained from the oil drain plug once a year to check its quality.

## **5 - MOTOR PROTECTION EFFICIENCY**

- Check the operation of the motor protection unit electronic.

## **6 - FILTERS**

- Check the main filter inside the muffler and clean it if necessary.

## **7 - PRESSURE CHECKS**

- Periodically check the working pressures to ensure that the specified values are being maintained. Remember to disconnect the pressure gauge after every inspection.

## **8 - MANOMETER SHUT-OFF VALVE**

- discharge the pressure from valve block.

- With shut-off valve in off position, check that the pressure is zero.

## **9 - VALVE BLOCK OPERATION**

- Ensure that the operation of the elevator with respect to speed, acceleration and deceleration is consistent with the operating specifications.

If necessary, adjust the valve to obtain the proper operation as set at the time of the original installation.

## **10 - TEST AT TWICE MAXIMUM STATIC PRESSURE**

- This test checks that parts subject to pressure are in good working order. These parts may appear in good conditions but only a pressure test can determine their condition.

## **11 - HAND PUMP CHECK**

- with main shut-off valve in off position, the hand pump must achieve the relief pressure value.

## **12 - RELIEF VALVE**

- Check that the pressure at which the relief valve opens does not exceed the specified value.

## **13 - VALVE VC 3006**

- Check the operation of this valve with higher than normal elevator down speed.

## **14 - ANTI-SLACK ROPES VALVE**

- Manually check the proper working of the down valve (VMD) for 1:1 suspension and of the safety valve (VSMA) for 2:1 suspension. For 2:1 suspension check that when a car is blocked on the guide rails by the safety devices, the plunger does not drop even though the down valve is actuated.

### **15 - RE-LEVELLING DEVICE**

- At each floor, manually operate the down valve (VMD) in order to check the electrical circuits and re-leveling switches. It is advisable to carry out this test at releveling speed.

### **16 - ALARM**

- At each floor, check the alarm signal to see that they are operating according to local regulations.

### **17 - OIL TIGHT (IN GENERAL)**

- Check that there are no oil leakages on the various elevator components such as the pump unit, piping, pipe fittings, the rupture valve etcetera. In addition, check to see that pipes and joint have not been damaged.

### **18 - MAIN SHUT-OFF VALVE**

- Close main shut-off valve on the silencer
- discharge the pressure from valve block
- The pressure must be zero.

### **19 - PLATES AND DIAGRAMS**

- Check that the various instruction plates and diagrams are properly located on the equipment. This includes oil plate, instruction plate for manual operation, electrical diagram, hydraulic diagram showing connecting pipes and instruction plate for prolonged shutdown of the elevator.

### **20 - OVERALL CHECK UP**

- Once every 5 to 10 years, depending on the general condition of the elevator, it is advisable to make an overall inspection of all oil-dynamic parts. Any worn parts should be replaced, and any changes due to age or polluted hydraulic oil should be corrected. We recommend the following procedure :

- dismantle the cylinder head and the valves.
- filter the oil (the filtration degree must be at least 30-40 microns) and clean the tank.
- replace , if necessary, all seals, oil rings etcetera , both of the plunger and of the valves.
- re-assemble the unit
- check every part in the same manner as is done for a new installation.