547 SP

Costruttore
Constructeur
Manufacturer
Hersteller
Constructor
Fabrikant

OMA S.p.A.
via dell'Artigianato, 64
36045 LONIGO (VI) - Italy
Telefono ++/+444/436199
Fax ++/+444/436208

Centro di Assistenza Autorizzato
Centre d'Assistance Autorisé
Authorized Service Centre
Kundendienstcenter
Centro de Asistencia Autorisado
Geautoriseerde dealer

INDEX

0 FOREWORD 3

0.1. HOW TO READ AND UTILISE THIS MANUAL 3

0.2. IMPORTANCE OF THE MANUAL 3

0.3. CONSERVATION OF THE MANUAL 3

0.4. CONSULTING THE MANUAL 3

0.5. UPDATING THE MANUAL 4

0.6. REQUESTING A NEW MANUAL 4

1 GENERAL REMARKS 5

1.1. CHARACTERISTICS 5

1.2. LIMITATIONS ON USE 5

1.3. IDENTIFICATION DATA 6

1.4. SERVICE 6

2 INSTALLATION 7

2.1. TRANSPORTATION OF PLAY DETECTOR 8

2.2. INSPECTION OF COMPONENTS 8

2.3. INSTALLING THE PLAY DETECTOR 9

2.4. CONNECTION TO MAINS POWER 9

2.5. TAKING THE PLAY DETECTOR OUT OF SERVICE 9

3 DESCRIPTION OF THE PLAY DETECTOR 10

3.1. BEFORE STARTING OPERATION WITH THE PLAY DETECTOR 10

3.2. OPERATION 10

4 SAFETY DEVICES 12

4.1. PRECAUTIONS 12

4.2. SAFETY DEVICE 13

4.3. TROUBLE SHOOTING TABLE 13

5 MAINTENANCE 14

5.1. CONTROLS AND CALIBRATION 14

6 ANNEXE – PARTS LIST 15

0 FOREWORD

0.1. HOW TO READ AND USE THIS MANUAL

This Manual is the official document that provides the necessary instructions for use and maintenance of the Play Detector to which it refers.

The information contained in this Manual is correct at time of printing and can be changed without prior notification. The Manufacturer will not be held responsible for damage to property or persons due to any misuse of the Play Detector.

0.2. IMPORTANCE OF THE MANUAL

This Manual must be considered an integral part of the Play Detector.
The Manual should be kept for the entire life of the Play Detector.
The Manual should accompany the Play Detector if sold or transferred. In this case the seller should inform the Manufacturer of the transfer by letter or fax.
This manual contains, operator, Service information covering all aspects of the Play Detector.

0.3. CONSERVATION OF THE MANUAL

The Manual should be kept in a safe place.

0.4. CONSULTING THE MANUAL

The Manual has been drawn up according to the indications in **Machine Directive 98/37/CEE**

It is basically composed of:

A. The cover page with identification
B. Index of chapters
C. Alphabetical index by subjects
D. Instructions for use of Play Detector.
E. Drawings of single and assembled parts.
F. Tables of Spare Parts
G. Enclosures

A - Cover page

The Manufacturer's Logo
Type of Play Detector
Appointed Service Dealer

B - Index of Chapters

The Index of Chapters lists the topics covered by the Manual.

C - Index

The Index details the Chapters extending the research of subtitles topic by topic.

D - Instructions for use of Play Detector

This part of the Manual provides a detailed description of how the Play Detector operates. The of instructions for installation, safety recommendations and procedures for intervention of the operator.

E - Drawings

This part contains the main construction drawings and assembled drawings relative to the various parts of the Play Detector.

F - Tables of Spare Parts

These Tables, refer to the drawings provided in the previous chapter, identifying parts and relevant part numbers.

0.5. UPDATING THE MANUAL

In case of major modifications, the Manufacturer will provide an updated version of the manual with each modified Play Detector.

0.6. REQUESTING A NEW MANUAL

If them Manual should be lost or damaged, the client can request a copy from the Manufacturer.

Please fax the request with the data of the Play Detector shown on the plate. This will incur an administration charge.

1 GENERAL REMARKS

With the use of advanced tecnology and engineering, combined with reliable components make the Play Detector one of the best available in the market place today.

1.1. CHARACTERISTICS

Max Capacity of the plate	Kg.	1300
Max. stroke platform	mm	± 40
Max. angle platform	°	± 10
Max Thrust of the plate	Kg.	800
Weight	Kg.	45
Power supply	V.	230/400 ±10% / 50 Hz ± 2% and
	V.	24 ±10% / 50 Hz ± 2%
Power	Kw.	3
Maximum oil pressure	Kg/cm^2	165
Nominal Motors Absorption	A.	8,7
Working temperature	°c	-10 +55
Humidity		30 - 95%(without condensation)
Noise	dB (A)	Leq (A) < 75

1.2. LIMITATIONS ON USE

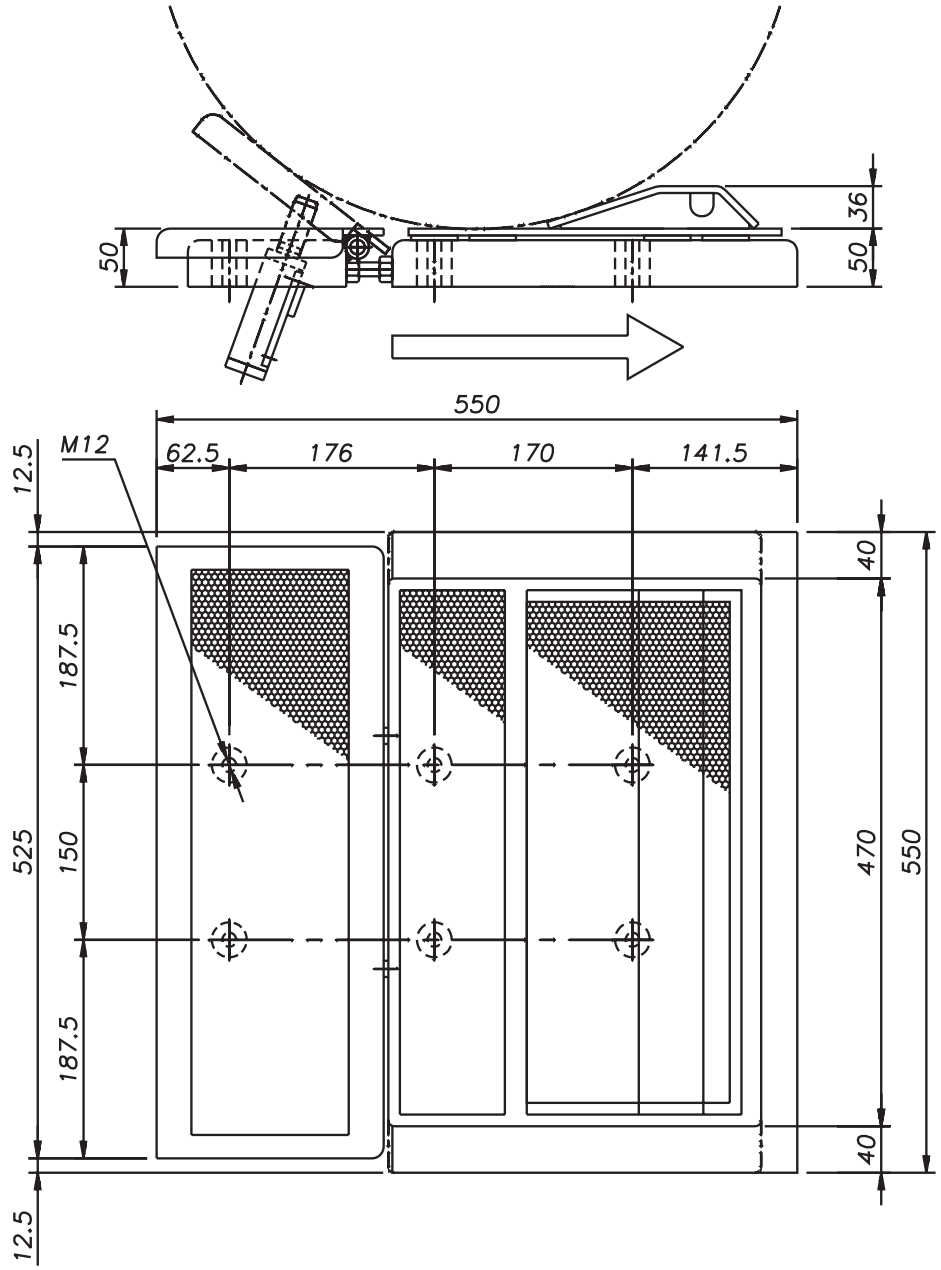
The Play Detector should be used in environments **free of explosion hazards.**

The Play Detector must be housed in an environment having the following characteristics:

- Temperature between -10 and +55 °C
- Humidity between 30 and 95 % without condensation

This Play Detector has been designed and constructed for exclusive use for the lifts manufactured by the company.

PLAY DETECTOR DIMENSIONS



1.3. IDENTIFICATION DATA

The identification data for the Play Detector is displayed on an aluminum foil adhered in a readily visible place on the Play Detector.

1.4. SERVICE

The manifacture warrants the Play Detector for a period of 12 months (parts only) from date of installation.

Service and calibration can be conducted by our local authorized distributors (see front cover).

2 *INSTALLATION*

For safe installation of the Play Detector, the following must be observed:

Verify the max working pressure of the main hydraulic unit does not exceed 185 bar.

Verify that main electrical supply can deliver 230/400V - 50Hz - 3Ph, or 230V - 50Hz - 1Ph.

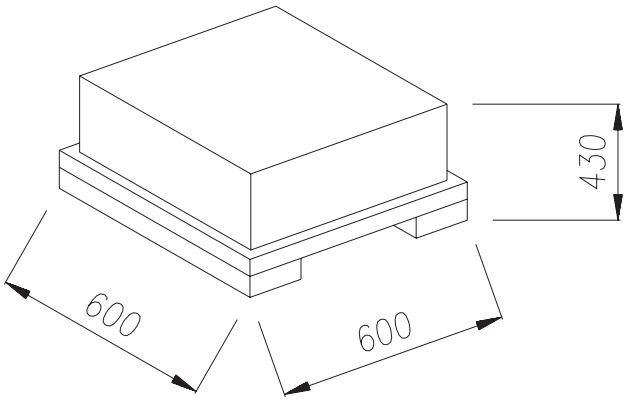
Verify that the control circuit supply can deliver a voltage of 24V 50Hz.

Ensure for both platforms are secured to the crossmembers.

2.1. TRANSPORTATION OF PLAY DETECTOR

All operations of hoisting and unloading the Play Detector must be carried out in full respect of the regulations.

The figures illustrate the method recommended by the Manufacturer for loading and unloading the Play Detectors **in case of delivery without a lift:**



If Play Detector are purchased with the lift they are pre-assembled into the lift platform.

2.2. INSPECTION OF COMPONENTS

On receipt of a shipment, it is very important to inspect the good received.

Particular attention should be given to:

Documents vs. Goods : no. of packages
Weight and dimensions

Physical state of goods :Condition of packages
Absence of damage

The goods should be inspected with the maximum care in the presence of the carrier because, in spite of the extreme care used by the Manufacturer in the selection of packing materials, there is always the possibility of damage occurring during shipment.

In this connection we point out that the goods are shipped at the buyer's risk, therefore OMA is not responsible for damage during transport.

2.3. INSTALLING THE PLAY DETECTOR

Take out the open hydraulic hoses and electric cables connect all hoses (A-B-C-P-T) as per hydraulic circuit diagram.

CAUTION TAKE CARE OF ELECTRIC CABLES

Personnel assigned to perform these operations should en sure that no unauthorized personnel are within the working perimeter of the lift.

2.4. CONNECTION TO MAINS POWER

Pass cables for electro-magnetic valves to the electro-valve block located under the slave platform.

It is up to the user to ascertain that the mains power comply with international and local safety standards. The Manufacturer is not responsible for damage due to "Non-Conformity" of the electrical system. The manufacturer will not be liable for any malfunctioning caused by disturbance from other equipment.

It is essential to make the "*EARTH CONNECTION*", using a 0,03A differential switch, and checking its correct functioning (**W**) by means of an appropriate measuring device.

2.5. TAKING THE PLAY DETECTOR OUT OF SERVICE

In order to facilitate disposal of the different play detector components, they should be sorted into categories. Consider the units to be special waste that must be disposed of by specialised companies in compliance with current regulations.

3 DESCRIPTION OF THE PLAY DETECTOR

3.1. BEFORE STARTING OPERATION OF THE PLAY DETECTOR

Ensure all hydraulic connections are correct as per hydraulic circuit diagram.

Air bleeding
Energize the right push buttom end partially open the connection "A" of the Play Detector cylinder, until no air bubbles are visible.
Next repeat as above using the left buttom and open connection "B".
Next repeat as above using the selector buttom and open connection "C" (balance plate)

You are now ready to operate with the play detector.

3.2 OPERATION

Ensure a qualified operator to be the only person within the operating perimeter of the lift and the Play Detector is clear of the any obstructions.

The lift platforms must be in a locked position at all times prior to entering the working area.

In case of electrical disconnection during descent, check for any obstacles beneath the list. It's important to as certain the causes of failure prior to further use.

The torch is fitted with 3 push buttons:

- one directional left (sliding plate)
- one directional right (sliding plate)
- one selector switch (balance plate)

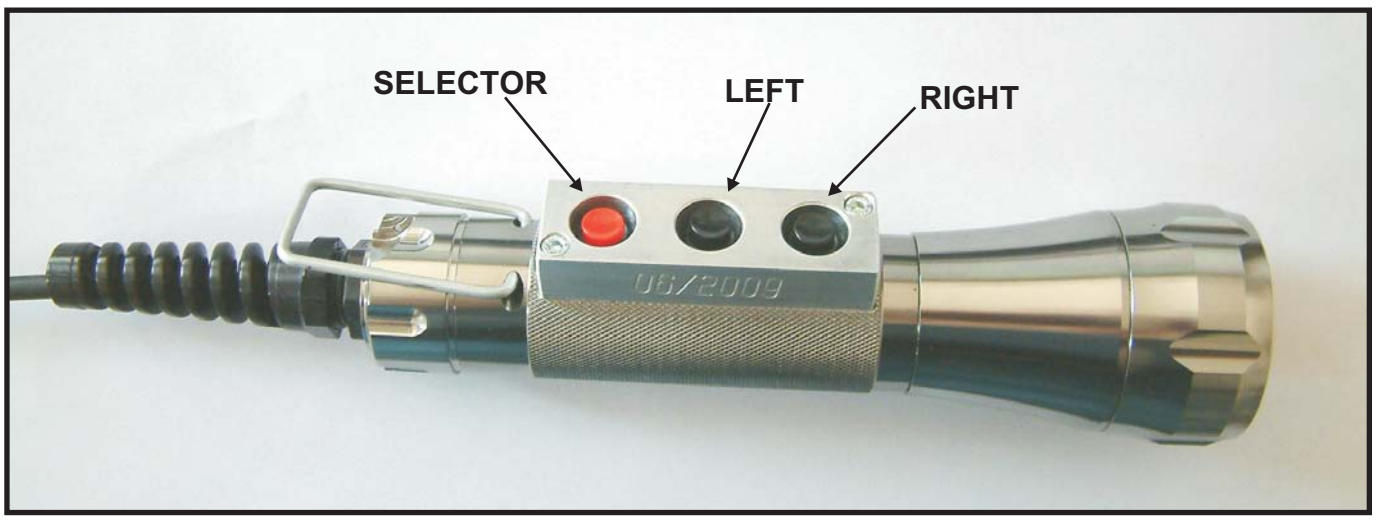
These pushbuttons operate solenoid C13 and C14 (see electric scheme)

The selector switch raises or lowers the balance plate.

The sequence of operation is in accordance with the current issue of:

THE MOT INSPECTION MANUAL Car and Light Commercial vehicle Testing

Do not load any vehicle, exceding the rated working capacity of the Play Detector.



4 SAFETY DEVICES

The Play Detector has been manufactured in compliance with the provisions issued by "Machine Directive 98/37/CEE" and all the following harmonized standards

4.1. PRECAUTIONS

For the safety of the operator the following general rules should be adhered to:

- The Play Detector should be under the control of authorized personnel only.

It is important to remember that the sliding plates of the Play Detector are potentially dangerous for possible crushing, pinching and shearing, of limbs for operators as well as for anyone nearby the machine.

A. Persons working underneath the vehicle, it is required for the operator to have complete visibility of the working area.

B. Make sure the vehicles to be tested do not exceed the maximum capacity of the Play Detector.

- Before lifting the load, make sure the front wheels are straight.
- The work area should be free of unauthorized personnel.

Do not apply external forces on the raised vehicle (Traction, lifting, etc.)

Check stability of the vehicle in the raised position.

4.2. SAFETY DEVICE

The Play Detector has been designed to function with ample safety margins.

Never disconnect the safety devices for any reason. Otherwise the Manufacturer will not be responsible for any damage to property or persons caused by similar negligence.

The main features provided are the following:

- Fixed flow limiter (to limit max cylinder speed).
- Mechanical stops at the end of each plate stroke.
- Hydraulic cylinders with overload valve.
- Dead man operation.

4.3. TROUBLE SHOOTING

SYMPTOM	*POSSIBLE CAUSE*	*REMEDY*
Plates are sliding very slowly, even without load.	Dirt in restrictor screw.	Unscrew delivery hose "P" from the valve block remove M8 allen screw (with 0.8 mm hole) clean with cleaning fluid and blow out with air gun. Check pressure of relief valve.
The balance plate does not work at all.	Problem in the torch selector switch. Does not switch on C10.	Press selector switch (you should hear a click C10). If not check connections an bath end.
Sliding plate work in one direction only.	One of the pushbutton is broken or contacts are failing.	Remove push button cover (on torch) and check push button switches.

5 *MAINTENANCE*

Due to the simplicity of construction and operation of the Play Detector, it requires very little maintenance.

It should be sufficient to follow the few simple rules as listed below to ensure reliable performance.

We strongly recommend for every 6 months operation for the Play Detector to be thoroughly cleaned, serviced and calibrated, sliders to be replaced as necessary to enhance safe and prolonged operation.

Check that other electrical and mechanical parts are in good condition, clean and lubricate as required.

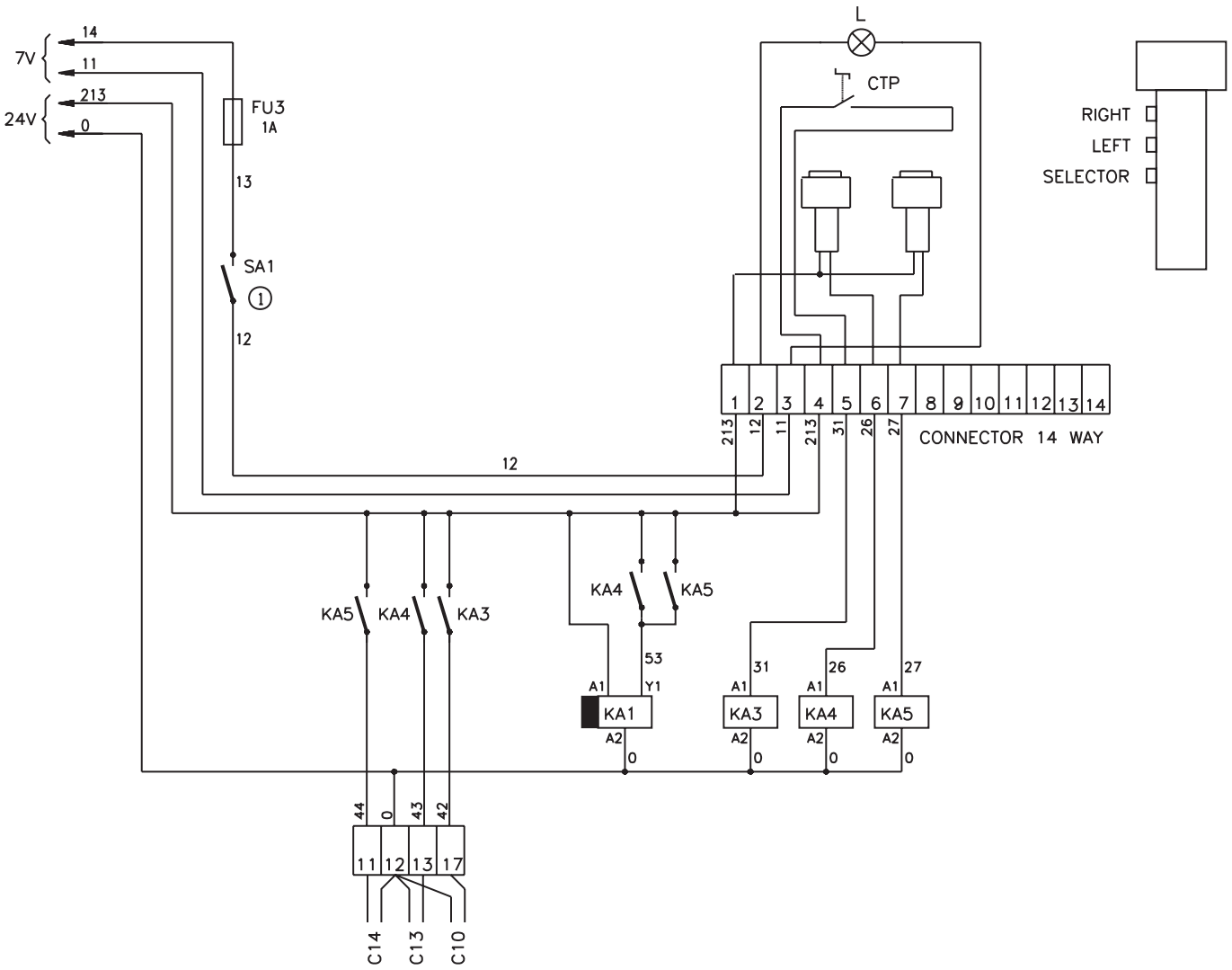
CAUTION !
WHEN DISPOSING OF USED OILS AND LUBRICANTS REFER TO THE NATIONAL/LOCAL REGULATION.

5.1. CONTROLS AND CALIBRATION

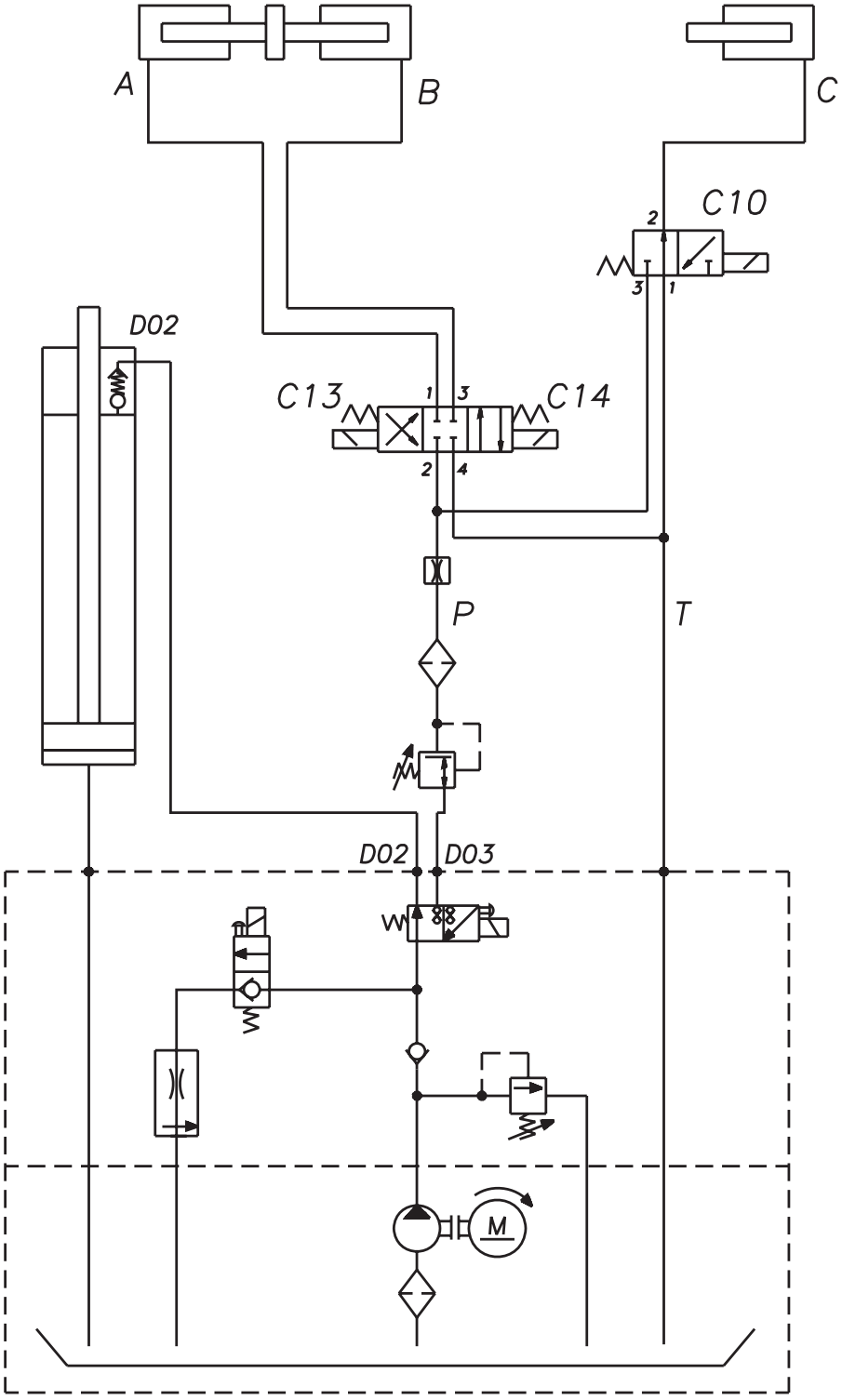
The following checks must be made every 6 months:
- Check solenoid connectors.
- Check all hydraulic hoses and connections.
- Check all internal electric connections are secured correctly.
- Check for any leaks, etc.
- Check pressure overload device.

6 ANNEXES – PARTS LIST

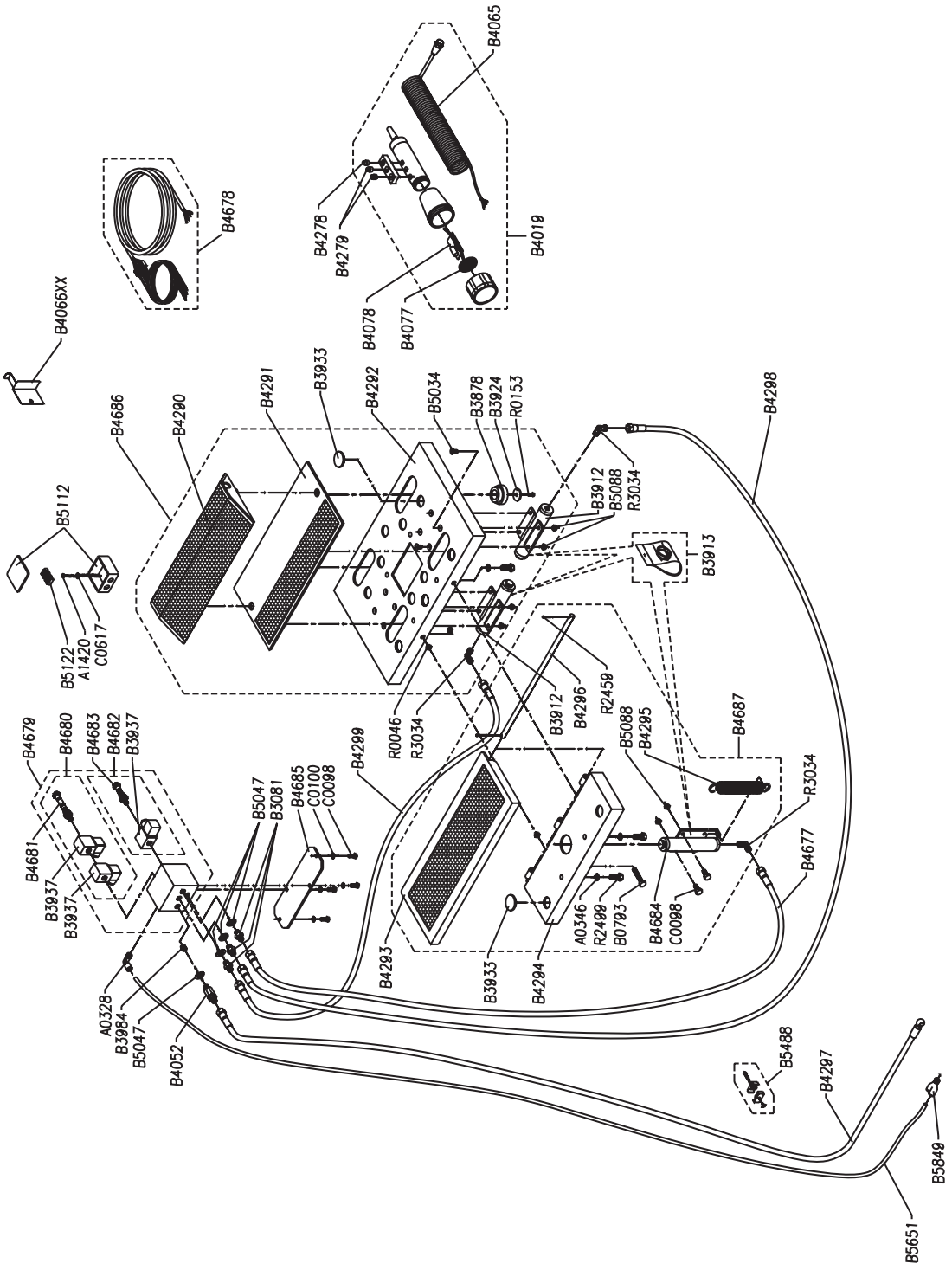
WIRING DIAGRAM AND HYDRAULICS



HYDRAULIC CIRCUIT DIAGRAM



C10	Solenoid valve
C13	Solenoid valve
C14	Solenoid valve


B4065
B4678
B4278
B4279
B4019
B4078
B4077
B4066XX
B4686
B4290
B4281
B3933
B4292
B5034
B3878
B3924
R0153
B4298
B3912
B5088
R3034
B5112
B3913
B5122
A1420
C0617
B4687
B4679
B4680
B4683
B4682
B3937
B4681
B3937
B3937
B5047
B3081
B4685
C0100
C0098
B4299
R0046
R3034
B3912
B4296
R2459
B5088
B4295
R3034
B4677
A0346
R2499
B0793
B4684
C0098
B4293
B3933
B4294
A0328
B3984
B5047
B4052
B5488
B4297
B5849
B5651

Part Code	Sugg.	Description
A0328		“L” MALE CONNECTION G1/4" Ø8
A0346		WASHER 12 X 24 UNI 6592
A1420		SCREW 6X12 8.8 UNI 5739
B0793		SCREW TE M12X65 UNI 5739
B3081		1/4" NIPPLES
B3912		SLIDING PLATE CYLINDER
B3913	*	CYLINDER GASKET KIT
B3924		WASHER Ø12X36 UNI 6592
B3933	*	SLIDE PAD
B3937	*	SOLENOID VALVE COIL
B3984	*	SCREW M8X8 UNI 5923 WITH HOLE Ø0,8
B4019	*	COMPLETE TORCH
B4052	*	OIL FILTER
B4065	*	ELECTRIC CABLE
B4066XX		TORCH COUPLER
B4077	*	GRASS WITH LEDS
B4078		TORCH BOARD
B4278	*	TORCH RED SWITCH
B4279	*	TORCH BLACK PUSH BUTTON
B4290		UPPER SLIDING COVER
B4291		SLIDING PLATE
B4292		BASE SLIDING PLATE
B4293		BALANCE PLATE
B4294		BASE BALANCE PLATE
B4295		SPRING
B4296		PIN
B4297	*	PRIMARY HOSE
B4298	*	"A" HOSE
B4299	*	"B" HOSE
B4677	*	"C" HOSE
B4678	*	ELECTIC CABLES KIT
B4679	*	COMPLETE MANIFOLD
B4680	*	COMPLETE ELECTRO-VALVE C13-C14
B4681	*	VALVE C13-C14
B4682	*	COMPLETE ELECTRO-VALVE C10

B4683	*	VALVE C10
B4684		BALANCE PLATE CYLINDER
B4685		MANIFOLD SUPPORT
B4686		COMPLETE SLIDING PLATE
B4687		COMPLETE BALANCE PLATE
B5034		SCREW M8X12 UNI 5933
B5047		GASKET WITH 1/4" SEAL
B5088		NUT M8 UNI 7474
B5112		CONNECTOR BLOCK
B5122		TERMINAL BOARD
B5488		DOUBLE COLLAR BODY 1/4
B5651	*	RECOVERY PIPE
B5849		QUICK “Y” CONNECTION M1/4"-Ø8 S6450
C0098		SCREW M8X20 UNI 5739
C0100		WASHER Ø8,4X17 UNI 6592
C0617		WASHER Ø6,4X12,5 UNI 6592
R0153		SCREW M8X25 UNI 5739
R0046		NUT M12 UNI 5588
R2459		SPLITPIN 3X30 UNI 1336
R2499		SCREW M12X20 UNI 5739
R3034		“L” CONNECTION M/M 1/4"
Z_RICAMBI		* = RECOMMENDED SPARE PARTS

Dichiarazione di conformità - Declaration of Conformity
Konformitätserklärung - Déclaration de conformité
Declaración de conformidad - Overensstemmelseserklæring
Samsverserklæring - Överensstämmande intyg
EG-Conformiteitsverklaring

OMA S.p.A.
Via dell' Artigianato, 64 36045 LONIGO (Vicenza) Italy
Tel.++/+444/436199 - Fax ++/+444/436208

con la presente dichiariamo che il provagiochi modello
déclare par la presente que le e plaques à jeux modèle
hereby we declare that the play detector model
hiermit erklären wir dass die Gelenkspieltester Modell
por la presente declara que el detector de holguras

547SP

I è stato costruito in conformità alle normative 98/37/CEE - 2004/108/CEE - 2006/95/CE e EN1493

F a été construite en conformité avec les normes 98/37/CEE - 2004/108/ CEE - 2006/95/CE et EN1493

GB was manufactured in conformity with the normes 98/37/CEE - 2004/108/CEE - 2006/95/CE and EN1493

D in Übereinstimmung mit den Richtlinien 98/37/CEE - 2004/108/CEE - 2006/95/CE und EN1493

E ha sido fabricado según las disposiciones 98/37/CEE - 2004/108/CEE - 2006/95/CE y EN1493

DK er fremstillet i overensstemmelse med bestemmelserne i 98/37/EØF - 2004/108/EØF - 2006/95/EØF EN1493

N ble produsert i samsvar med direktivene 98/37/CEE - 2004/108/CEE - 2006/95/CE - EN1493

S är framställt i överensstämelse med bestämelser i RÅDETS DIREKTIV 98/37/EG - 2004/108/EG - 2006/95/EG - EN1493

NL waarop deze verklaring betrekking heeft, voldoet aan de voorschriften van richtlijn 98/37/EEG en 2004/108/EEG en 2006/95/EEG en de daaropvolgende veranderingen en aanvullingen - EN1493

Lonigo, 30/06/2009

ing. Carlo Cordonatto