

OCT 2004

# MAINTENANCE TRAINING

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*Proludic*



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or children, the pleasure of playing is all the greater if the equipment that is provided for their use is in good condition and checked regularly. This means that they can make the most of the facilities in all tranquillity.

The durability and safety of a playground depend to a great extent on the servicing and maintenance work carried out, together with the fact, of course, that the products have been designed in accordance with quality principles, as PROLUDIC products are.

## SAFETY STANDARDS

Since the European safety standards were issued in 1998, the obligations to be met by the operating entity and the equipment supplier have been clearly defined in the form of the normative texts EN1176-1 and EN1176-7.

The latter determines various checks to be made at specific intervals.

These intervals are given for information purposes only; they must be adapted to suit the frequency of use and the site

### EVERY MONTH:

- Routine visual inspection to identify the risks stemming from acts of vandalism, use or specific weather conditions.
- Inspection of tightness of all fastenings.
- Checking for missing or broken parts.
- Making sure that the protective covers are in place.

### EVERY 3 MONTHS:

- Functional check to make sure that the equipment, or the part concerned, is operating correctly.
- Thorough cleaning.
- Checking all the fastenings.
- Checking the stability of the equipment.
- Inspection of wear (flooring, bars, chains, cables, etc.)

### EVERY YEAR:

- Inspection of the anchoring systems.
- Control of the condition of the framework.
- Checking the condition of the lacquered plates.

Once these checks have been made, corrective actions must be taken if the results found so require...

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he PROLUDIC Maintenance manual is a practical working document that sums up 15 years of experience, together with a body of advice put at the disposal of our clients and more generally those responsible for maintenance work on playground equipment for collective use.

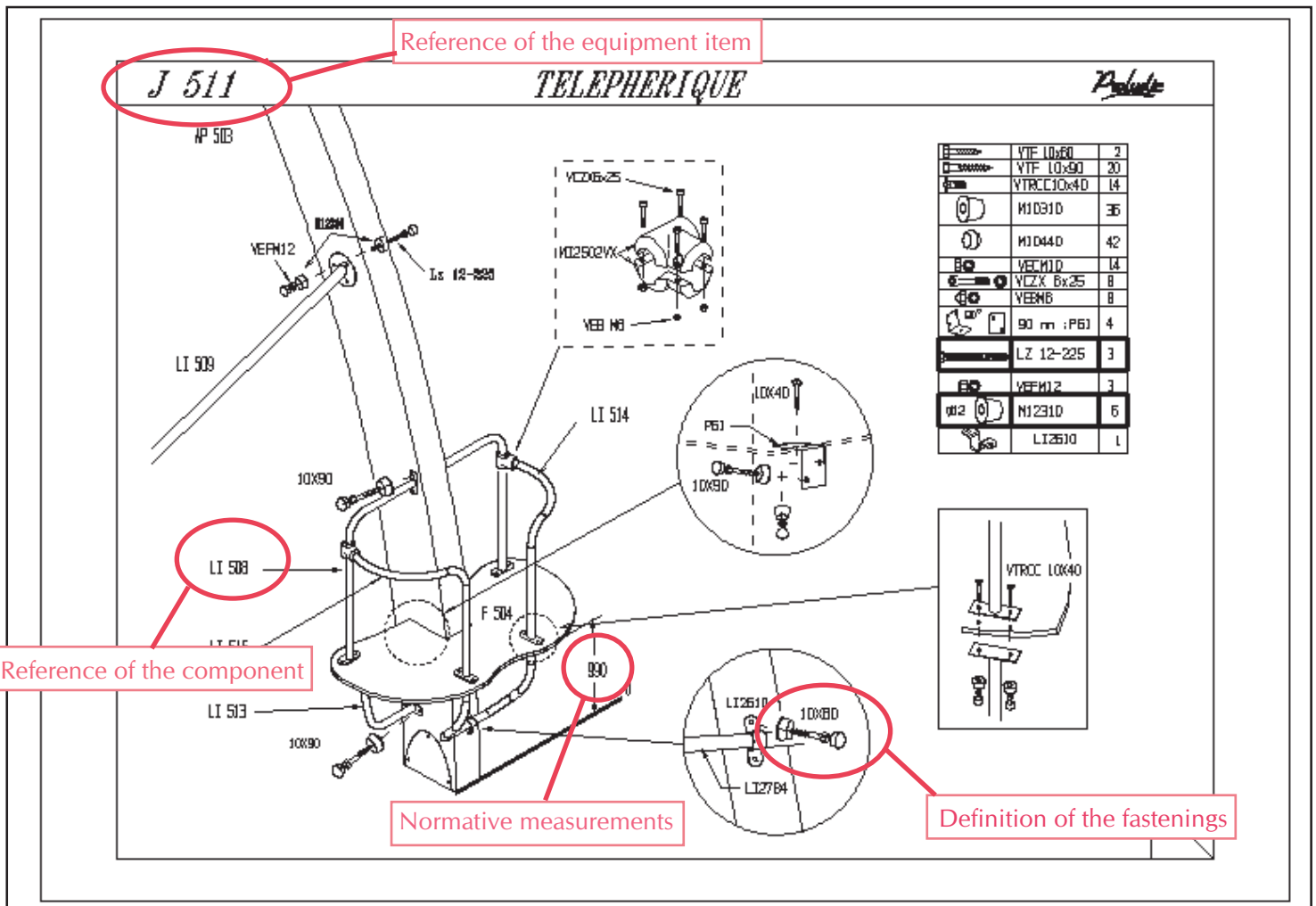
For each type of product, we have drawn up a list of controls to be carried out together with their periodicity.

# ASSEMBLY INSTRUCTIONS

The first step to be taken to ensure that an equipment item lasts a long time and can be used by children in all safety is to make sure that the installation complies with the information supplied in the assembly instructions.

Some key information:

- The measurements shown enable assembly in compliance with normative constraints.
- Definition of the fastenings: each assembly is defined with a specific type of fastenings to ensure its efficiency.
- The product reference constitutes its initial identification.
- The references of the parts or assemblies make it easy to forward information concerning an element to our After-Sales Department for its replacement if necessary.



# 1 - MAINTENANCE OF THE AREA AND ITS ENVIRONMENT:

A playground is not limited to the items of equipment making it up; it also includes the safety flooring and its surroundings that must also be maintained to ensure safe use over a long period.

## SAFETY FLOORING:

There are various types of flooring, synthetic surfaces or loose-fill surfaces. They have to be maintained to conserve all their characteristics.

### EVERY MONTH:

- Raking to remove all unwanted or potentially dangerous objects (loose-fill surfaces.)
- Levelling (loose-fill surfaces)

### EVERY 3 MONTHS:

- High-pressure cleaning of rubber floors.

### EVERY YEAR:

- Checking the thickness of the layer of loose-fill materials and adding materials as necessary.

## SURROUNDING OPEN SPACES:

- Make sure at regular intervals that the state of the vegetation present in or around the playground does not present a risk for the users.
- Cut the vegetation back if necessary to ensure that it does not reach the impact zones for the playground equipment, which must remain free of all obstacles
- Checking the signs in the playground (updating the telephone numbers and addresses of the organizations to be contacted in the event of an accident, if necessary).

## 2-EQUIPMENT MAINTENANCE:

Each playground has a variety of equipment, concerning both the elements installed and the specific playing functions provided.

As far as PROLUDIC equipment is concerned, wooden posts and lacquered plates are recurrent components in most of our ranges.

They require specific controls. Here is some advice on how to carry out the controls.

### WOODEN POSTS

#### EVERY MONTH:

- Checking that there are no splinters.

#### EVERY YEAR:

- Checking that the wood has not split open and that no layers have come unstuck. There must be no splits enabling penetration of a tool such as a screwdriver blade to a depth of more than 2 cm. At lesser depths, the strength of the post is not brought into question.
- Checking that the post is in good condition.  
The surfaces must resist pressure from a pointed object.

### LACQUERED PLATES:

#### EVERY 3 MONTHS:

- Cleaning with water and detergent using a high-pressure cleaner.

#### EVERY YEAR:

- Checking the overall condition of the lacquered plates. Checking for chipped paintwork and the parts most exposed to friction.  
It is essential to touch up the paintwork if the colour has been removed.

## NETS

### ● EVERY MONTH:

- Making sure that the linking elements are in place.

### ● EVERY YEAR:

- Checking the fastenings.
- Checking the cable for wear. It is necessary to plan for replacement of the cable if the metal core is visible.

## FLOORS:

### ● EVERY 3 MONTHS:

- Cleaning with water and detergent using a high-pressure cleaner.

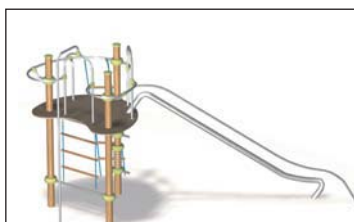
### ● EVERY YEAR:

- Checking the overall condition of the elements.
- Checking the areas subjected to frequent use for wear.  
(Wear involving fewer than 5 plies does not affect the solidity of the structure, but if more plies are worn, it is necessary to plan for replacement of the element).



### 3 -LIST OF THE CHECKS AND THEIR PERIODICITY DEPENDING ON THE TYPES OF EQUIPMENTS:

#### MULTI-FUNCTION EQUIPMENT ITEMS:



IXO



ECOLUDIC



KANOPE



VIVAREA



BASIC

#### THEMATIC and CLASSIC EQUIPMENT ITEMS:



TEMA



MAISONNETTE

#### EVERY MONTH:

- Routine visual inspection to identify the risks stemming from acts of vandalism, use or specific weather conditions.
- Inspection of tightness of all fastenings.
- Checking for missing or broken parts.
- Making sure that the protective covers are in place.
- Checking that there are no splinters.

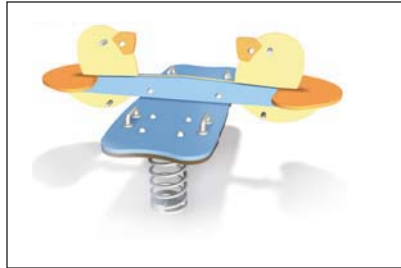
#### EVERY 3 MONTHS:

- Functional check to make sure that the equipment, or the part concerned, is operating correctly.
- Thorough cleaning of the equipment item.
- Checking all the fastenings.
- Checking the stability of the equipment.
- Inspection of wear (flooring, bars, chains, cables, etc.)

#### EVERY YEAR:

- Inspection of the anchoring systems.
- Control of the condition of the framework.
- Checking the condition of the lacquered plates.
- Checking that the wood has not split open and that no layers have come unstuck.
- Checking that the post is in good condition.
- Checking the overall condition of the lacquered plates.

## SPRINGS RIDERS:



### ● EVERY MONTH:

- Routine visual inspection to identify the risks stemming from acts of vandalism, use or specific weather conditions.
- Inspection of tightness of all fastenings.
- Checking for missing or broken parts.
- Making sure that the protective covers are in place.

### ● EVERY 3 MONTHS:

- Functional check to make sure that the equipment, or the part concerned, is operating correctly.
- Thorough cleaning of the equipment item.
- Checking all the fastenings.
- Checking the stability of the equipment

### ● EVERY YEAR:

- Inspection of the anchoring systems.
- Checking the condition of the lacquered plates.
- Checking the overall condition of the lacquered plates.
- Checking to make sure that the spring or springs are not corroded.

## SWINGS:



### EVERY MONTH:

- Routine visual inspection to identify the risks stemming from acts of vandalism, use or specific weather conditions.
- Inspection of tightness of all fastenings.
- Checking for missing or broken parts.
- Making sure that the protective covers are in place.
- Checking that there are no splinters on the posts

### EVERY 3 MONTHS:

- Functional check to make sure that the equipment, or the part concerned, is operating correctly.
- Thorough cleaning of the equipment item.
- Checking all the fastenings.
- Checking the stability of the equipment.

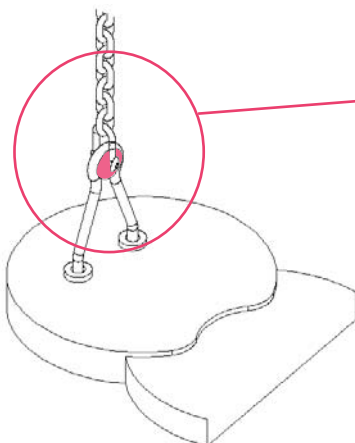
### EVERY YEAR:

- Inspection of the anchoring systems.
- Checking that the wood has not split open and that no layers have come unstuck.
- Checking that the posts are in good condition.
- Checking the overall condition of the lacquered plates.
- Checking the seat fastenings.
- Checking that there is no corrosion on the chains or the linking systems.
- Checking the chain links for wear.
- Checking the wearing parts on J450-J454-J452-J470- J440 equipment items

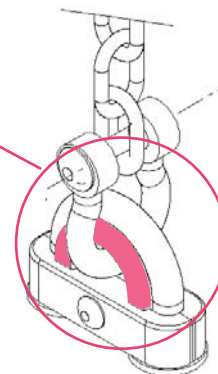
(see the drawings below)

J450-J454-J452-J470

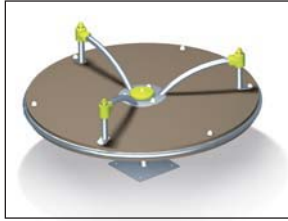
J440



Wearing parts



## ROTARY and TRANSLATION EQUIPMENT:



### EVERY MONTH:

- Routine visual inspection to identify the risks stemming from acts of vandalism, use or specific weather conditions.
- Inspection of tightness of all fastenings.
- Checking for missing or broken parts.
- Making sure that the protective covers are in place.
- Checking that there are no splinters on the posts

### EVERY 3 MONTHS:

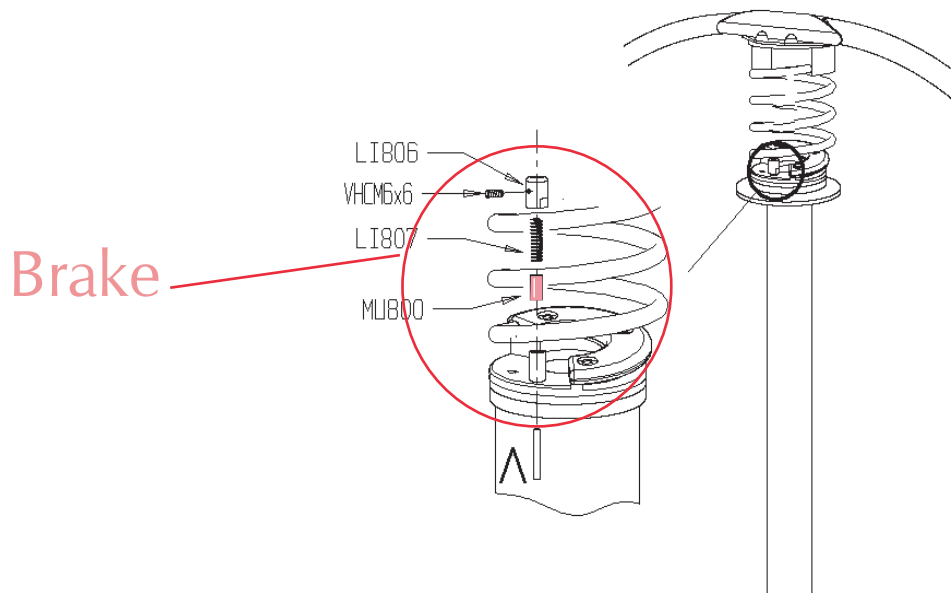
- Functional check to make sure that the equipment, or the part concerned, is operating correctly.
- Thorough cleaning of the equipment item.
- Checking all the fastenings.
- Checking the stability of the equipment.

### EVERY YEAR:

- Inspection of the anchoring systems.
- Checking that the wood has not split open and that no layers have come unstuck.
- Checking that the posts are in good condition.
- Checking the overall condition of the lacquered plates.

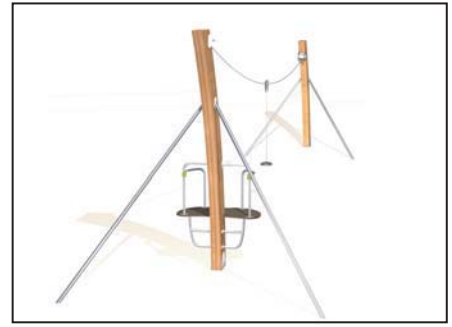
### J831:

- Checking that the equipment does not rotate freely (when pushed by hand, the equipment must not rotate through more than one complete turn).
- Tightening the brake, or replacing MU800 if tightening is insufficient.



## CABLE CHAIRS J510- J511:

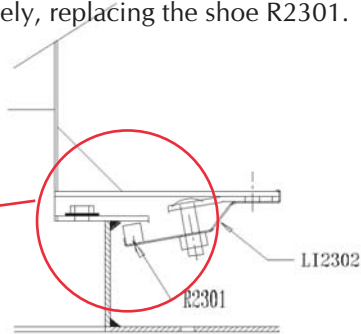
- Checking the cable tension (the chair must stay at least 400 mm above the ground)
- Checking the efficiency of the spring.
- Checking that the trolley runs correctly.
- Checking the cable for wear.



## J2322:

- Checking that the equipment does not rotate freely (when pushed by hand, the equipment must not rotate through more than one complete turn).
- If it turns too freely, replacing the shoe R2301.

BRAKE



## J2582:

- Checking that the trolley runs correctly along the inside of the rail.
- Checking the handle and chain for wear.



## J2581:

- Checking the trolley bearing.
- Checking the handle chains for wear.
- Checking that the stops are in place at each end of the rail.



## SLIDES:



### ● EVERY MONTH:

- Routine visual inspection to identify the risks stemming from acts of vandalism, use or specific weather conditions.
- Inspection of tightness of all fastenings.
- Checking for missing or broken parts.
- Making sure that the protective covers are in place.
- Checking that there are no splinters on the posts.

### ● EVERY 3 MONTHS:

- Thorough cleaning of the equipment item.
- Checking all the fastenings.
- Checking the stability of the equipment.
- Checking that the lacquered plates are correctly in place to prevent any risks of cords being caught at the top of the slides.

### ● EVERY YEAR:

- Inspection of the anchoring systems.
- Checking that the wood has not split open and that no layers have come unstuck.
- Checking that the posts are in good condition.
- Checking the overall condition of the lacquered plates.

## WATER GAMES:



### ● EVERY MONTH:

- Routine visual inspection to identify the risks stemming from acts of vandalism, use or specific weather conditions.
- Inspection of tightness of all fastenings.
- Checking for missing or broken parts.
- Making sure that the protective covers are in place.
- Checking that there are no splinters on the posts.

### ● EVERY 3 MONTHS:

- Thorough cleaning of the equipment item.
- Checking all the fastenings.
- Checking the stability of the equipment

### ● EVERY YEAR:

- Inspection of the anchoring systems.
- Checking that the wood has not split open and that no layers have come unstuck.
- Checking that the posts are in good condition.
- Checking the overall condition of the lacquered plates.
- Checking for any leaks.
- Checking that the containers are in good condition.

## DYNAMIC STRUCTURES:



### ● ONCE A MONTH:

- Routine visual inspection to identify any risk resulting from acts of vandalism, wear and tear or particular weather conditions.
- Check tightness of the fastenings.
- Check for any broken or missing parts.
- Make sure all the protective covers are in place.

### ● EVERY 3 MONTHS:

- Check for correct operation.
- Thoroughly clean the equipment.
- Check the state of the fixing elements.
- Check the stability of the equipment

### ● ONCE A YEAR:

- Check the anchoring systems.
- Check that there is no corrosion on the chain or the fixing system.
- Check the cables for wear. Schedule replacement of the link cables if the metal core is visible (TWINFLY handles).
- Check that the unit rotates correctly (remove the upper part and lubricate if necessary).
- Check the wearing parts at the end of the handle chains (SKYSURF).

## DYNAMIC STRUCTURES:

### RODEOBOARD:



#### ● ONCE A MONTH:

- Routine visual inspection to identify any risk resulting from acts of vandalism, wear and tear or particular weather conditions.
- Check tightness of the fastenings.
- Check for any broken or missing parts.
- Make sure all the protective covers are in place.

#### ● EVERY 3 MONTHS:

- Check for correct operation.
- Thoroughly clean the equipment.
- Check the state of the fixing elements.
- Check the stability of the equipment.

#### ● ONCE A YEAR:

- Check the anchoring systems.
- Check that there is no corrosion on the springs.
- Check that the unit rotates correctly (remove the upper part and lubricate if necessary).

# DYNAMIC STRUCTURES:

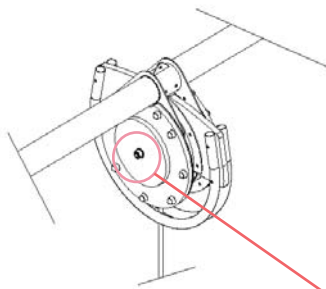
## WOOPER:



### ONCE A MONTH:

- Routine visual inspection to identify any risk resulting from acts of vandalism, wear and tear or particular weather conditions.
- Check tightness of the fastenings.
- Check for any broken or missing parts.
- Make sure all the protective covers are in place.

### EVERY 3 MONTHS:

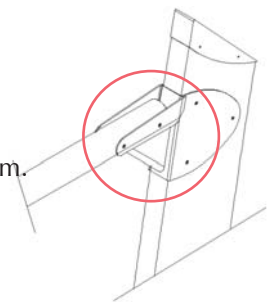


- Check for correct operation.
- Thoroughly clean the equipment.
- Check the state of the fixing elements.
- Check the stability of the equipment.
- Check that the central nut holding the winding system in place is correctly tightened.

TIGHTEN THE NUT (if necessary)

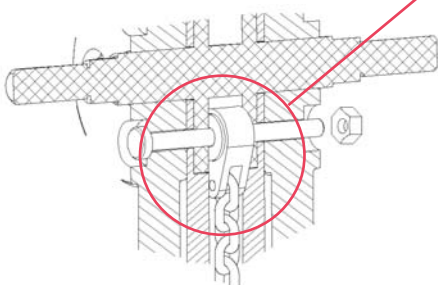
### EVERY 6 MONTHS:

- Check the state of the welds on the load-bearing beam.

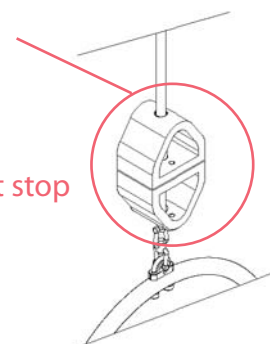


### ONCE A YEAR:

- Check the anchoring systems.
- Dismantle the winding system to check for wear on the element holding the chain on the
- Check that there are no splinters on the wood and that no layers have come loose.
- Check the wearing parts at the level of the handle fastenings.
- Check the state of the limit stop.
- Check the chain links for wear.

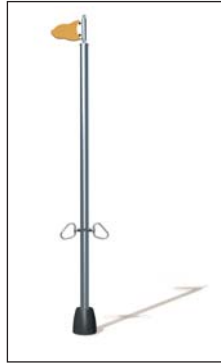


Check the state of the limit stop



## DYNAMIC STRUCTURES:

ALTIMA:  
BLUE BAC BALL:



### ● ONCE A MONTH:

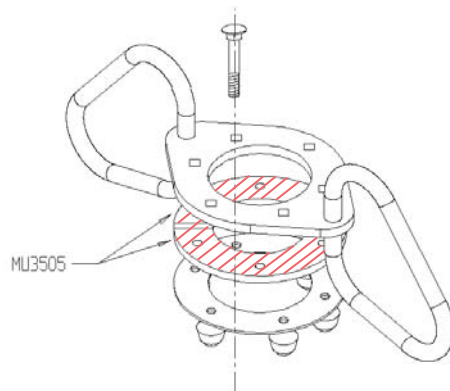
- Routine visual inspection to identify any risk resulting from acts of vandalism, wear and tear or particular weather conditions.
- Check tightness of the fastenings.
- Check for any broken or missing parts.
- Make sure all the protective covers are in place.

### ● EVERY 3 MONTHS:

- Thoroughly clean the equipment.
- Check the state of the fixing elements.
- Check the stability of the equipment.
- Check for correct operation.

### ● ONCE A YEAR:

- Check the anchoring systems.
- Check the rubber parts (MU3505) holding the elements on the tube for wear (ALTIMA).



## SKATE MODULES:



### ● ONCE A MONTH:

- Routine visual inspection to identify any risk resulting from acts of vandalism, wear and tear or particular weather conditions.
- Check tightness of the fastenings.
- Check for any broken or missing parts.

### ● EVERY 3 MONTHS:

- Thoroughly clean the elements.
- Check the state of the fixing elements.
- Check the stability of the equipment.
- Make sure there are no elements on the skating surface that could constitute an obstacle (e.g. loose screws)

### ● ONCE A YEAR:

- Check the anchoring systems.

## MULTISPORTS:



### ● ONCE A MONTH:

- Routine visual inspection to identify any risk resulting from acts of vandalism, wear and tear or particular weather conditions.
- Check tightness of the fastenings.
- Check for any broken or missing parts.

### ● EVERY 3 MONTHS:

- Check the state of the fixing elements.
- Check the stability of the equipment.
- Tighten the fastenings if necessary.

### ● ONCE A YEAR:

- Check the anchoring systems.
- Check the welds on the various load-bearing elements.

## VITALITY AREAS:



### ● ONCE A MONTH:

- Routine visual inspection to identify any risk resulting from acts of vandalism, wear and tear or particular weather conditions.
- Check tightness of the fastenings.
- Check for any broken or missing parts.

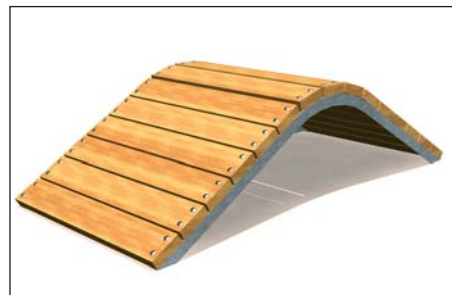
### ● EVERY 3 MONTHS:

- Check the various moving parts for correct operation.
- Check the state of the fixing elements.
- Check the stability of the equipment.
- Tighten the fastenings if necessary.

### ● ONCE A YEAR:

- Check the anchoring systems.
- Check that there are no splinters on the wood and that no layers have come loose on the beam.

## CYCLOGYM MODULES:



### ● ONCE A MONTH:

- Routine visual inspection to identify any risk resulting from acts of vandalism, wear and tear or particular weather conditions.
- Check tightness of the fastenings.
- Check for any broken or missing parts.

### ● ONCE A YEAR:

- Check the anchoring systems.
- Check that there are no splinters on the wood that could create a real danger for the user.
- Check the welds on the load-bearing elements.



## 4 - ORGANIZATION OF MAINTENANCE

European standard EN1176-7:1997 recommends that the operating entity draw up a specific MAINTENANCE SCHEDULE for each playground, taking into account the manufacturer's instructions and the local conditions of use.

To do so, we recommend keeping various documents likely to make maintenance easier and ensure that it is rational and efficient.

These various documents are to be kept in a folder: The OPERATING ENTITY'S FOLDER.

### DRAWING UP THE OPERATING ENTITY'S FOLDER.

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- Layout of the playground (drawn up by the municipal engineering department or the manufacturer).
  - Technical data sheets for the equipment items.
  - Assembly instructions
  - Certificates of conformity with standards.
  - Maintenance sheet issued by the manufacturer.
  - Maintenance schedule for each equipment item.
  - Records of the various interventions.
  - Accident declaration form
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*Rigorous organization is an essential criterion for efficient maintenance.*

*It ensures optimum durability of playgrounds and their equipment and enables the products to remain in compliance with the standards applicable.*

*This maintenance can be carried out by the municipal engineering department, in relation with the manufacturer and in accordance with the manufacturer's recommendations, for all or part of the maintenance schedule.*