Maintenance Manual

KOMPAN outdoor products





Congratulations on your selection of a KOMPAN play structure

You have chosen a high quality product that will withstand many years of use with proper maintenance. KOMPAN carefully designs and manufactures its play structures with safety features in compliance with all current standards.

The owner is responsible to maintain the structure and its surroundings to ensure the play structure remains safe.

In order to protect children's safety, KOMPAN recommends all play structures and the surrounding resilient surfaces to be inspected and maintained to ensure the play area remains safe and trouble-free.

Please visit the KOMPAN website to see the general warranty valid for our products.

If you have any questions or in other ways need assistance, please feel free to contact your Sales Representative or back office:

KOMPAN International Sales C.F. Tietgens Boulevard 32C 5220 Odense SØ Denmark

Phone: +45 63 62 12 50 E-mail: <u>export@kompan.com</u> Website: <u>www.kompan.com</u>



WARNING!

Failure to follow these inspection and maintenance instructions could result in unsafe conditions on and around the play structure and possibly lead to serious physical injury during use. KOMPAN A/S will not be responsible for any injuries or damages that are the result of a failure to follow these instructions.

Following our maintenance instructions are also necessary for the products to be covered by the KOMPAN General warranty.

Inspections and maintenance of play structures should be scheduled on a daily/weekly, monthly/seasonal, and an annual basis. If your play structure is used heavily, or is located where the climate is severe, it may require more frequent attention than this manual recommends.

On the next pages of this document you'll find our general maintenance instruction specifying how to inspect and if necessary, maintain your product.

Occasionally, parts may need to be replaced due to breakage or wear. Parts should be replaced immediately to avoid dangerous conditions. Repairs should be completed in accordance with this maintenance manual and the installation instructions.

Disposal and Recycling:

All KOMPAN products are as far as possible designed to be disassembled and recycled after a long life on the playground.

Recycling must be done according to local procedures and recommendations:

- Metal components can be recycled directly.
- Plastic components are in general marked with type of material and can be recycled accordingly.
- Wood must be disposed according to local regulations.
- Electrical parts must be disposed for recycling.

Information about replacement parts and copies of installation instructions can be obtained through your KOMPAN sales consultant or on **KOMPAN Master** (See next page).

If any repairs cannot be performed immediately, action must be taken to restrict access to that portion of the play structure or the whole structure if necessary.



KOMPAN Master

On KOMPAN Master you can find a lot of relevant information. Most important is the installation instructions. These were provided with the product, but we know they often disappear or are damaged during installation. Installation instructions are also the key to identifying spare parts.

Below are the steps to access the instructions:

- 1. Open the webpage: http://www.master.kompan.com/KompanMaster
- 2. Scroll towards the bottom of your screen and in the product number box, enter the number of your product, and click on "Product search"
- 3. Once the correct product is found, enter the purchase date and foundation type for your product and click the arrow, and then click on the "Find Spare Parts" button.
- 4. Now you can open the instructions directly or download a full package of every instruction you would have received with the product.
- 5. You can have more information how to use KOMPAN Master in the KOMPAN Master Guide found in the left side menu.

DMPAN Master				
KOMPAN MASTER PRODUCT SEARCH		u can choose your region a ose "Play structures") or ent roduct shows the product w jarding the KOMPAN MAST	er the product number directly eek and year along with the full	
KOMPANMASTER GUIDE	Search for spare parts	Product type Agility and Trim Trails Balancing and Movement Cableways Carousels and Spinners Climbing equipment Electronic playgrounds	Product no.	
		 Fitness Multisport pilches Park Furniture Play Structures Playhouses, tables and benches Sand and water play Seesaws Slides Springers 		



Identification of product

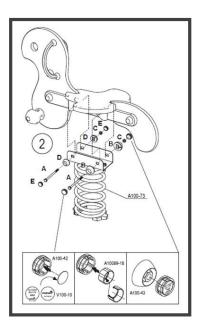
All KOMPAN products come with two identification Do-Nut labels to be placed inside two Do-Nut caps according to specification.

The following information appears from the ID-labels:

No. 1 – Product ID Production week and year Product ID

No. 2 – Supplier ID KOMPAN address (subsidiary or importer) in the country concerned.

It is of vital importance that the information from the ID-labels is given when making a complaint or ordering spare parts.



In case the ID label is not in place and you do not have the ID information from your invoice or other documents provided with the product - we recommend you take a couple of photos and ask your local KOMPAN office for assistance.

Inspections

Daily/weekly inspections can be performed visually to identify developing problems. However, the results of the monthly/seasonal inspections should be recorded into your maintenance log. Further, a comprehensive annual report should be written and entered into a file with all other documentation regarding the play structure.

We recommend the owner/operator establish a file for the play structure or entire playground. This file should contain at least the following.

- Maintenance instruction.
- Installation instructions.
- Sales and warranty documentation.
- Maintenance logs.
- Comprehensive annual inspection reports.

Templates for maintenance inspections can be downloaded from www.kompanmaster.com

Spare parts

It is important for warranty and safety conditions to use only original KOMPAN spare parts. Part numbers can be identified on the installation instructions – which can be found on KOMPAN Master (see page 3).





Robinia

Robinia, like any other species of wood, is a natural and organic material

Robinia will potentially have a number of knots, cracks and other patinas on the surface. The appearance of Robinia wood changes according to the weather conditions and humidity. These are not necessarily imperfections; they are completely natural and give our playground equipment the benefit of an organic and adventurous design.



The tension in Robinia causes openings in the ends as well as along the sides of the posts

These do not affect the strength of the structure and do not carry any additional risk of rot or fungus. This is just a natural reaction that might happen with Robinia and is normally not a safety or a quality issue.

During routine inspections and maintenance, severe deformation must be addressed if it appears on vital areas of the play structure. For example, if an opening appears near a play element that has forced movement (slides, fireman's pole, etc.) the issue of the openings and Cracks/checkings needs to be addressed in accordance with current safety standards in the specific market. If a deformation in the wood does not conflict with the current safety standards, it is considered beneficial characteristics provided by the organic wood Robinia!

To see more specific maintenance instructions, see worksheet 4 on page 11, for Robinia and other wooden product.







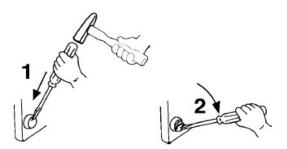
Fastener Maintenance

Over time, some bolts may become loose through heavy use, and result in play events that are loose or wobbly. Loose components on play structures can cause dangerous pinch, crush, or shear points as well as excessive wear. It is therefore important that all nuts, bolts, and screws be checked periodically.

Do-Nut/Bolt Inspection and Maintenance

Do-Nuts are used in various versions throughout KOMPAN products to cover bolt heads and potentially sharp bolt threads:

- 1. To check bolts covered by Do-Nuts, try to rotate them. If the Do-Nut rotates, then the bolt it covers should be tightened.
- 2. To access the bolt, the Do-Nut cap needs to be removed. Remove the cap by gently tapping a screwdriver through the cap and pry the cap loose.



WARNING! - Always use safety glasses when removing Do-Nut cap

IMAGINATOR products (GSP)	Rivet Inspection and maintenance
Be aware to use a tool on both screw and nut when screw is tightened on your IMAGINATOR product:	Remember to check that drive rivet is intact. If rivet is loose or missing - install new rivet.
Follow the link to see video of the procedure to retighthen our PCM connectors:	



IMPORTANT! Inspection should always be done according to this instruction in combination with the installation instruction for the particular products. Remember that there might be a general instruction for the product line as well.

Work Sheet 1

GENERAL

Area	Inspectiton	Maintenance	1	2	3	4
Cleanliness		Remove soil, leaves and debris on or around equipment.	х	x	х	
		Cleaning down with fresh water for salt and sand		Х*	х	
Broken or missing parts	Check for broken, loose or missing parts.	Replace or tighten if necessary.	х	х	х	
Covers	Check for missing covers	Replace if necessary		x	х	
Added parts	Check for items tied or added to products (ropes, clothing etc.)	Remove	х	х	х	
Connections	Check all bolt connections are tight. Check rivets are not loose or broken.	Tighten connections or replace with new hardware if necessary. Use installation instructions for products with specified torque. You may have to remove bolt covers – if damaged replace with new.		x	х	
	Check for gaps around slides, fireman's poles, roofs or bannister bars where clothing may get caught	Re-tighten loose or dislocated items. If this is not enough a non- entanglement devise may be able to solve the issue. This can be supplied from your local KOMPAN representative.		x	х	
Moving parts	Check rotating or moving parts for function and wear.	Replace if necessary.		X*	х	
	Check protective covers are undamaged and in place.	Replace if necessary.		х	х	
	Examples of moving parts:					
	Suspension elements	Replace parts if worn more than 50%, if they show cracks or other sign of deterioration.		X*	х	
	Bearings Rotating items and swing suspension	Replace parts if movement is partly or fully prevented or unsmooth.		X*	х	
	Springs and rubber elements:	Tighten connections if necessary. Replace or repair in case of corrosion.		X*	х	
	Rotating rings e.g. Supernova	Replace parts if movement is partly or fully prevented or unsmooth.		X*	х	
		Re-install or replace if rubber gasket is loose or missing.		X*	х	

Uisual Routine Inspection, Daily to Weekly

3 Main Inspection, Annual or half year

4 Additional to main inspection, 5 year

7

² Operational Inspection, Every 1 to 3 months. *every 1 month in foreshore installations. ** only applicable for foreshore



GENERAL

Area	Inspection	Maintenance	1	2	3	4
Ropes	Inspect rope parts for wear.	Steel wire may be visible but when steel wire starts to fray the rope must be replaced.		X*	х	
Chains	Check chains for damage or wear.	When worn more than 50% they must be replaced.		X*	х	
Cables for Cableways	Check cables for wear damage or corrosion.	If cable starts to fray or show signs of damage it must be replaced.		X*	х	
	Check tension	Adjust according to installation instruction if necessary.			х	
Plastic and rubber	Check plastic and rubber parts for wear, damage or cracks	Replace if necessary.		X*	х	
Plywood panels	Check plywood panels for excessive wear and deterioration	Replace or repair if necessary.		X*	х	
HPL Panels	Check for excessive wear and sharp edges due to vandalism or other damages	Replace if necessary.		x	х	
Metal parts in general	Check for sharp edges. Check welds for fractures or separations	Repair or replace if necessary.		x	х	
Painted steel	Check for scratches, wear and initial corrosion.	Repair paint by removing all corrosion and add a proper coating or replace parts if necessary.		X*	х	
Galvanized	Check for scratches, wear and initial corrosion. Small scratches will repair themselves – larger damages may result in corrosion if not repaired.	Repair galvanizing by removing all corrosion and add a zinc spray or replace parts if necessary.		X**	х	
Aluminum	Check for damage or wear.	Replace if necessary.		X*	х	
Electronics (ICON)	Inspection must be carried out by ICON professional according to ICON Maintenance Instruction.	Maintenance must be carried out by ICON professional according to ICON Maintenance Instruction.		х	х	
Jumper	Check for damage or wear to springs or membrane.	Replace if necessary		х	х	
	Check if area under the membrane is free from items or debris that can prevent a proper operation of the jumper	Remove if necessary. Instruction how to remove springs can be found in the installation instruction		x	х	
Corocord	Follow this general Maintenance Instru inspections and maintenance might be instruction for the specific product.					

Visual Routine Inspection, Daily to Weekly
 Operational Inspection, Every 1 to 3 months
 Main Inspection, Annual or half year

*every 1 month in foreshore installations. ** only applicable for foreshore



FOUNDATION	S					
Area	Inspection	Maintenance	1	2	3	4
Foundations	Check all foundations are stable and sharp edges and concrete is covered by surfacing.	Stabilize foundation and reinstate surfacing.		х	х	

ect the conditions of the post v zinc layer is complete and o visual indications of to steel – rust.	where concreted in. In case of minor scratches repair by use of spray zinc. In case of corrosion weakening the				
o visual indications of to steel – rust.	use of spray zinc.				
atches rosion weakening the post	post – replace the post.				Х
all screwdriver if the wood is	Replace post when more than 20% of the cross section is deteriorated				х
	r use of pointed tool like an nall screwdriver if the wood is ting. ubber surfacing the rubber ca around the post and glue the nd re-instate with new materia	r use of pointed tool like an nall screwdriver if the wood is the cross section is deteriorated	r use of pointed tool like an nall screwdriver if the wood is ting. Replace post when more than 20% of the cross section is deteriorated ubber surfacing the rubber can be removed an re-instated by: around the post and glue the pieces back in after inspection. Ind re-instate with new material by use of the Flexotop repair kit.	r use of pointed tool like an nall screwdriver if the wood is Replace post when more than 20% of the cross section is deteriorated ubber surfacing the rubber can be removed an re-instated by: around the post and glue the pieces back in after inspection. Ind re-instate with new material by use of the Flexotop repair kit.	r use of pointed tool like an nall screwdriver if the wood is ting. Replace post when more than 20% of the cross section is deteriorated ubber surfacing the rubber can be removed an re-instated by: around the post and glue the pieces back in after inspection. Ind re-instate with new material by use of the Flexotop repair kit.

1 Visual Routine Inspection, Daily to Weekly

2 Operational Inspection, Every 1 to 3 months *every 1 month in foreshore installations. ** only applicable for foreshore

3 Main Inspection, Annual or half year



ROBINIA PRODUCTS – AND OTHER WOODEN PRODUCTS

Area	Inspection	Maintenance	1	2	3	4	
Checking and	Check if cracks have occurred.						
Cracking	Large cracks preventing bolts or other connections to be tightened.	Take photos and seek guidance by your local distributor.		х	х		
	Cracks creating a non-compliance with safety standards. Eg. Cracks near slides and other areas with forced movement.			х	x		
	Minor cracks not affecting structural integrity	Sand down edges to prevent splinters and sharp edges. If visual appearance is diminished cracks can be repaired by use of our repair kit. Ask your local distributor for advice.		х	x		
Rot	Check by use of pointed tool like an aw	/l or small screwdriver if the wood is dete	riorating.				
	Structural parts If more than 30% of the cross section is deteriorated	Post is to be replaced. Contact your local distributor for advice.		х	х		
	Nonstructural parts and ends If more than 30% of the cross section is deteriorated over a length of 100mm or more.	Post is to be replaced. Contact your local distributor for advice.		х	x		
Knots	Loose knots	Repair loose knots by use of repair kit. Unrepaired knots may lead to rot which might not be covered if caused by a knot.		Х	х		
Cleaning		Remove dirt, algae or mold by use of power washer.			х		
Paint	Paint on robinia is visual only	We recommend touch up paint to maintain the appearance			Х		

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3 Main Inspection, Annual or half year



SURFACING						
Area	Inspection	Maintenance	1	2	3	4
Loose fill surfacing	Check loose fill according to basic level marks on products.	Reinstate if necessary. Special attention must be paid to heavily used areas like under swings and in the run out area for slides.	х	x	x	
	Check for unintended items in the loose fill surfacing or sand and gravel on rubber surfacing.	Remove if necessary	х	x	x	
	Check depth of loose fill according to: Table 4 of EN1176-1:2017 Table 3 of EN16630:2015.	Reinstate if necessary		x	x x	
Flexotop	For more details see page 10					
	Cleaning	Remove sand, gravel, debris and other unwanted items	х	х	х	
	Check for standing water	Clean for improvement of porosity and drainage	х	х	х	
	Check for algae, moss weeds or fungus	Remove by brush or power washer		х	х	
	Check joints between colors and shapes and surface around posts etc.				х	
	Check for damages and wear.	Flexotop			Х	
Rubber tiles	Check rubber tiles are even and do not present tripping hazards	Re-instate if necessary			х	
	Check maintenance instruction from su	upplier for further instructions			х	
Grass mats	If grass mats are regarded impact surfacing the holes must be kept free from sand or soil.	Re-instate if necessary.		x	x	
Other impact materials	Check maintenance instruction from su	upplier for further instructions				

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 3 Main Inspection, Annual or half year



SIGNAGE					
Area	Inspection	Maintenance	1	2	3
General:	Check product marking, for information about product ID, manufacturer or distributor ID, reference to safety standard if required.	Replace if missing.			х
Fitness equipment:	 Check the site has a sign informing about: How to use equipment Age or height limitations Assurance about medical safety Emergency phone number Contact info for maintenance Address of facility 	Replace if missing.			x

Visual Routine Inspection, Daily to Weekly

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 3 Main Inspection, Annual or half year