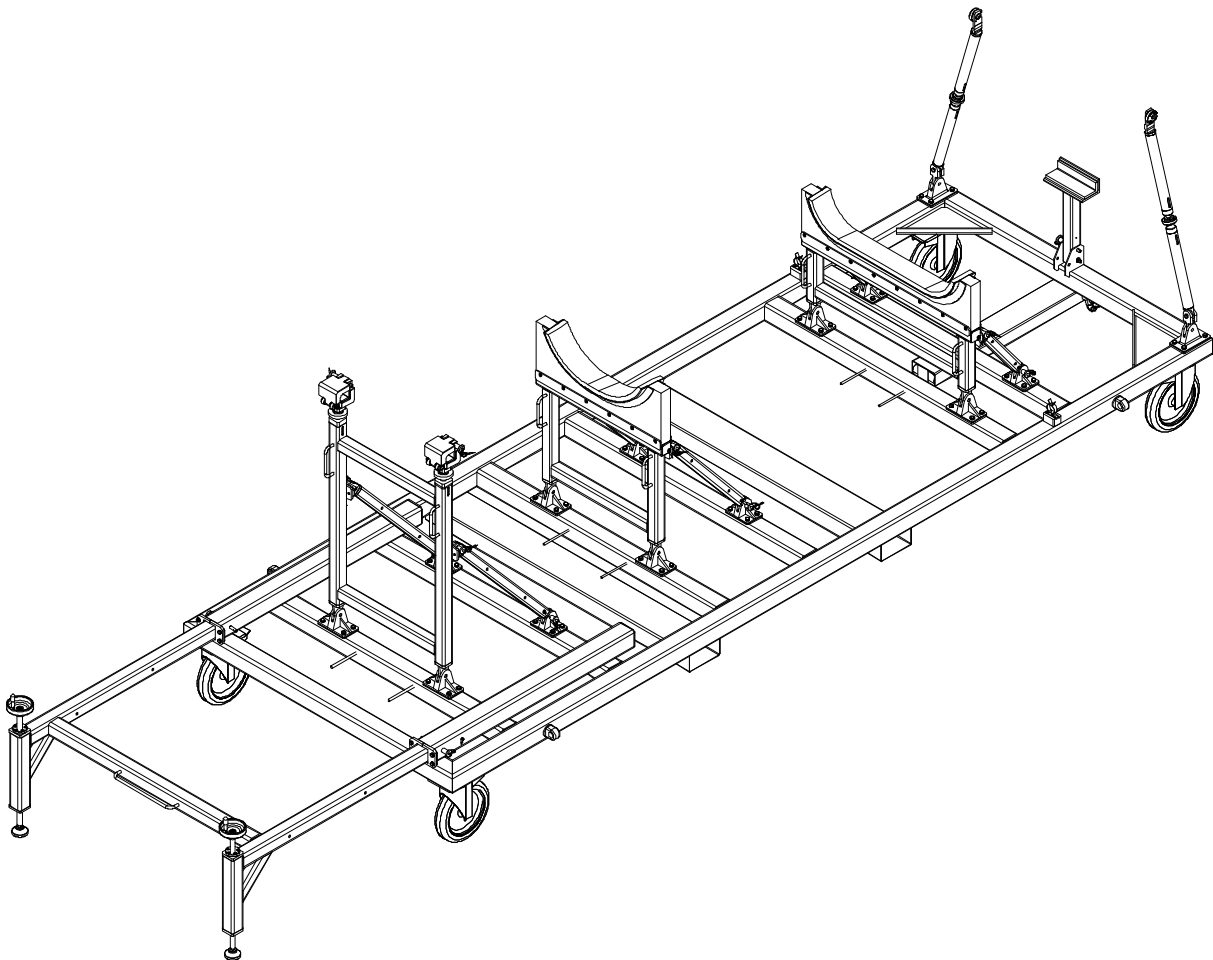


# GSE & TOOL MANUAL

TITLE

**TROLLEY, TAIL BOOM TRANSPORT**  
**P/N 3G5305G00232**



	<b>GSE &amp; TOOL USE AND MAINTENANCE MANUAL</b>	Manual number: <b>MAN-3G5305G00232</b> <b>REV. A</b>
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## REVISION HISTORY

REV	CHANGE DESCRIPTION	DATE
A	First issue	02/11/2021

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## 1. SCOPE

### 1.1. APPLICABILITY




The contents of this document are meant to provide information on the P/N 3G5305G00232 TROLLEY, TAIL BOOM TRANSPORT.

### 1.2. OBJECT

The object of this document is to describe the AGE and its components, its main features and it will also provide all needed maintenance requirements to keep in service the P/N 3G5305G00232 TROLLEY, TAIL BOOM TRANSPORT.

### 1.3. WARNING AND SAFETY INSTRUCTIONS

A number of symbols are used throughout this document to indicate information to which the user should pay attention to. These are indicated below along with the specific meaning.

 <b>Warning</b>	...Indicates a danger that might arise from a product and might result in severe injuries or even death, if no precautions are taken.
 <b>Caution</b>	... Indicates a potentially dangerous situation, which might result injury or damage to the equipment.
 <b>Notice</b>	...Indicates a note providing information to help the reader during the procedure.

*Table 1 – Warning Instruction*

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## 2. DOCUMENTS

### 2.1. APPLICABLE DOCUMENTS

The following table lists the applicable documents

REF	REFERENCE OF DOCUMENT	TITLE
1	2006/42/EC	Directive Of The European Parliament and Of The Council

*Table 2 – Applicable Documents*

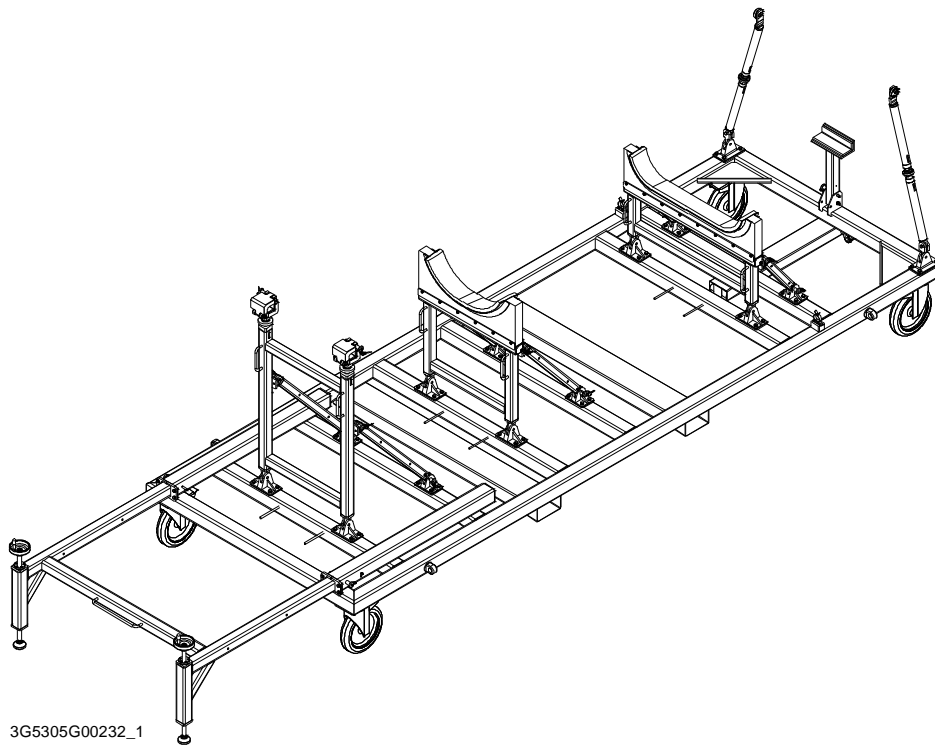
### 2.2. ACRONYMS USED

The main acronyms used in this document are listed below:

LHD	Leonardo Helicopter Division
HC	Helicopter
P/N	Part Number
S/N	Serial Number
N.A.	Not Applicable

### 3. DESCRIPTION

This tool is used to carry out the dressing and undressing, transportation and any other maintenance procedures which requires the removal of the tail assy from the helicopter.



*Figure 1 – Trolley, Tail Boom Transport*

### 4. TOP ASSEMBLY DRAWINGS

Refer to P/N 3G5305G00232 TROLLEY, TAIL BOOM TRANSPORT.

### 5. IDENTIFICATION

The tool identification P/N is marked on the LHD identification tag.

<b>AGUSTA</b>			
P/N	3G5305G00232		
MFG. DATE		MOD	
C. I.		GRWT Kg.	

*Figure 2 – LHD Identification tag with P/N*



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### 6. OVERALL DIMENSIONS

- Length: 1400 mm
- Width: 5100 mm
- Height: 700 mm

### 7. WEIGHT

- Total Weight: 490 kg



## 8. MAIN PARTS

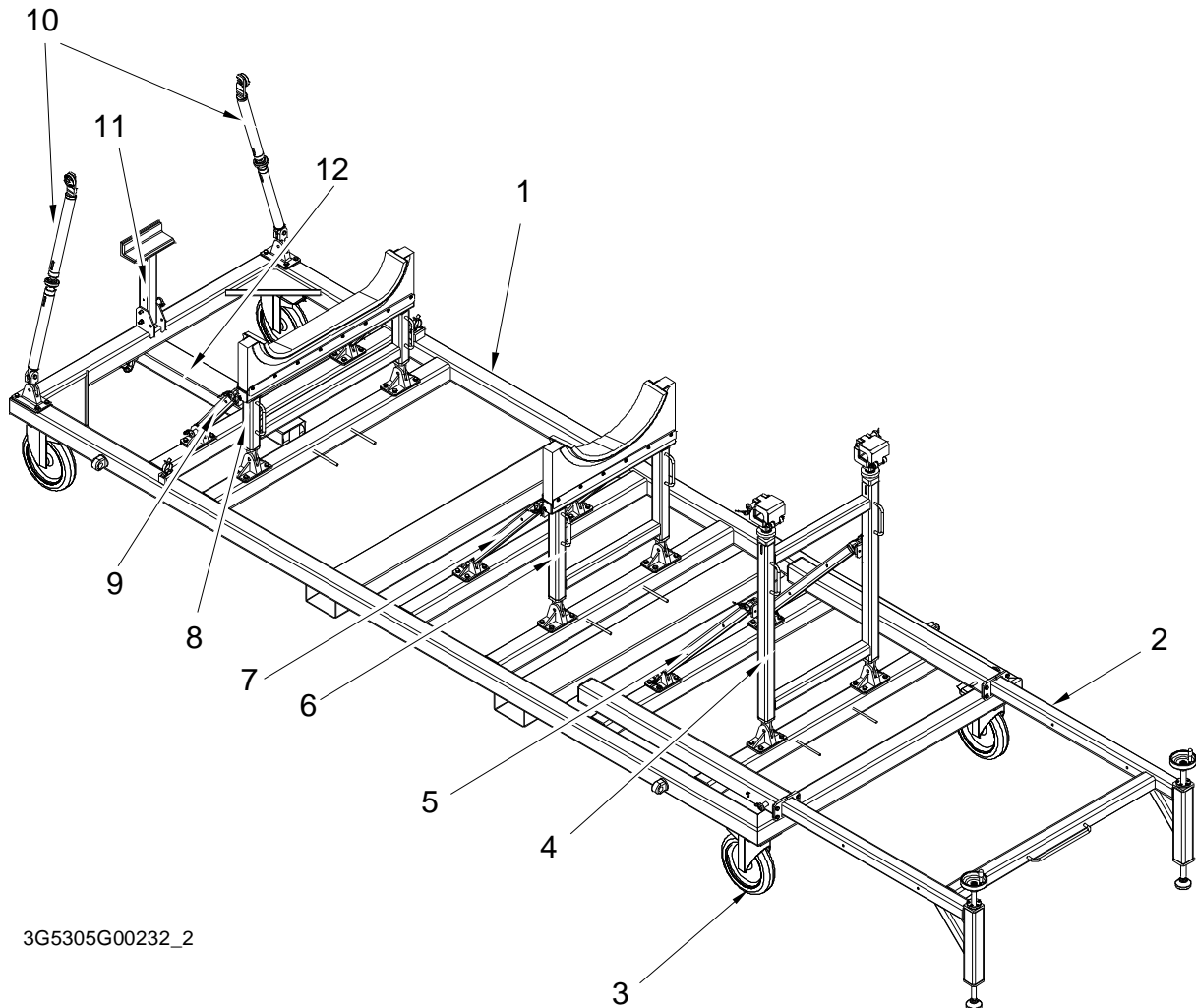


Figure 3 – Main Parts

The main parts of the TROLLEY, TAIL BOOM TRANSPORT are:

1. Chassis Assy
2. Leveller Assy
3. Wheels
4. Rear Support Assy
5. Rod Assy, Rear Support
6. Rear Saddle Assy
7. Rod assy, Rear Saddle
8. FWD Saddle Assy
9. Rod assy, FWD Saddle
10. Turnbuckle Assy



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- 11. FWD Support Assy
- 12. Tow Bar Assy

### **9. MAIN FEATURES DESCRIPTION**







The tool is composed of two saddles and two interfaces with the Tail Assy that allow its transport by the wheels.

The saddles and the interfaces may be folded to ease the storage of the tool.

.

## 10. WARNING AND SAFETY NOTES

### 10.1. WARNING NOTE

 <b>Warning</b>	<p>Use this equipment only for the purpose that it is designed for. Any other use can result in injury or serious material damage to the components.</p>
 <b>Caution</b>	
 <b>Notice</b>	<p>The Manual can never integrally replace the adequate competence of the user.</p>
 <b>Warning</b>	<p>Before and after each use of the equipment is necessary to perform the checks required. Do not operate with a tool damaged or partially completed, or partially assembled.</p>
 <b>Caution</b>	
 <b>Notice</b>	<p>This Manual provides guidelines and instructions of the equipment that are in addition to - but are not intended to replace or modify but only to integrate - any general or specific rule, regulation, decree or law that is in force in the place where the equipment is in use.</p>

*Table 3 – Warning Note*

## 10.2. SAFETY NOTES

Remember to wear protective overalls, safety shoes, protective gloves and glasses during all operational and maintenance phases.



*Figure 4 – Safety Notes*

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## 11. STORAGE

The Tool shall be properly stored to provide protection from external weather conditions, damage and dirty particles.

Ensure that the tool parts are clean before storage.

### 11.1. LUBRICATION BEFORE STORAGE

N.A.

### 11.2. STORAGE CONFIGURATION

The tool has no particular storage configuration.

## 12. MAINTENANCE

NOTE: Correct regular maintenance allows preventing most faults and safeguards of tool performance in time, thereby making it last longer.

Every year carry out regular maintenance on a regular basis as detailed in this manual.

NOTE: Inspection intervals for tool parts placed inside in ready storage is 12 months.

### 12.1. CLEANING

Before inspection and after each use, carry out the cleaning of the tool components.

#### 12.1.1. SPECIAL TOOLS, FIXTURE AND EQUIPMENT

No special tools, fixture and equipment are required for cleaning.

#### 12.1.2. PART REQUIREMENTS

The parts to clean should be free from the moisture, emulsified water, soaps and metal shavings that can develop of corrosive acids.

They must also be free from wide grease and / or slosh deposits.

#### 12.1.3. MANUAL CLEANING

- A. Clean thoroughly all metal surfaces with a clean lint-free cloth (Local supply) moistened with Cleaning Solvent (MIL-PRF-680C, Type II) to do general spot cleaning of large groups areas. For nylon or Teflon surfaces, the use of a biodegradable, water dilutable cleaning compound (MIL-PRF-87937 D, Type II) is required.
- B. Repeat the cleaning process again by means another clean lint-free cloth (Local supply).
- C. Drying.
  - Verify that the solvent should not be trapped in the cavity. Normally, the solvent evaporates at room temperature in a satisfactory manner.

## 12.2. CHECKS

Before and after each use or at least every year, carry out the check of kit component.

Before each use ensure that the manual is available to the operator, in the event of loss, request a copy to Leonardo Helicopters Division.

The Tool kit shall be submitted to following checks to guarantee the functionality.

All required checks shall be registered on CHECK RECORDS Table. Ref. *TLC\_Table 1*

After each use of tool ensure to have registered the number of uses on HISTORICAL USES RECORD Table. Ref. *TLC\_Table 2*

The Tool Log Card template contained in the Annex A of this manual can be replaced with any other log card template in use in the plant where the equipment is in use.

### 12.2.1. SPECIAL TOOLS, FIXTURE AND EQUIPMENT

No special tools, fixture and equipment are required for the checks.

### 12.2.2. VISUAL EXAMINATION

NOTE: Replace the parts that do not obey the inspection requirements.

Restore the marking of the parts that results damaged or not readable.

All required visual checks are listed on Table 4

PERIODICITY	CHECK TYPE	COMPONENTS	
BEFORE AND AFTER EVERY USE	VISUAL EXAMINATION	Evidence of impact;	All
	Crushing or stripping	All	
	Cracks	All	
	Dents	All	
	Wear	All	
	Distortions	All	
	Corrosion	All	
	Loose or defective attaching parts (warning flag)	All	
	Unsticking of parts	All	
	Damage to the threads	All	
	Marking	All	
	Damage to the pins and to the shell	N.A.	
	Damage to the insulation sleeves and wires	N.A.	

*Table 4 – Visual Check*



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### **12.2.3. PERIODICAL CHECKS**

Not Applicable.

### **12.2.4. DIMENSIONAL CHECKS**

Not Applicable.

### **12.2.5. SPECIAL CHECKS SUMMARY**

Not Applicable.

## **12.3. REPLACEMENT**

All the parts for which it is allowed the components replacement are listed in Paragraph 15.

### **12.3.1. REPLACEMENT PROCEDURES**

The replacement of parts of the kit does not require specific procedures.

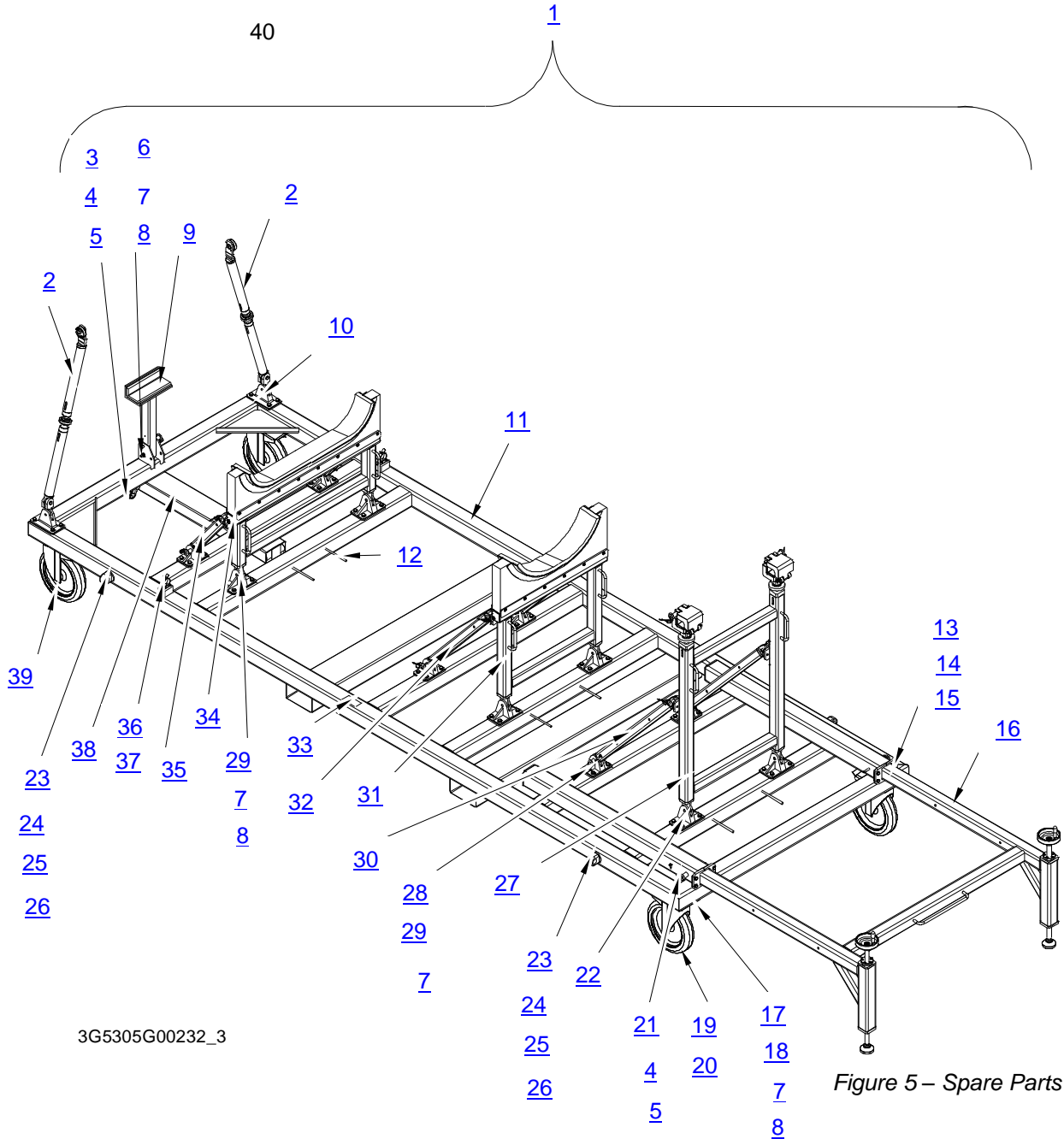
## **13. CALIBRATION**

No Calibration is required.

## **14. SHELF LIFE**

Not Applicable.

## 15. SPARE PARTS

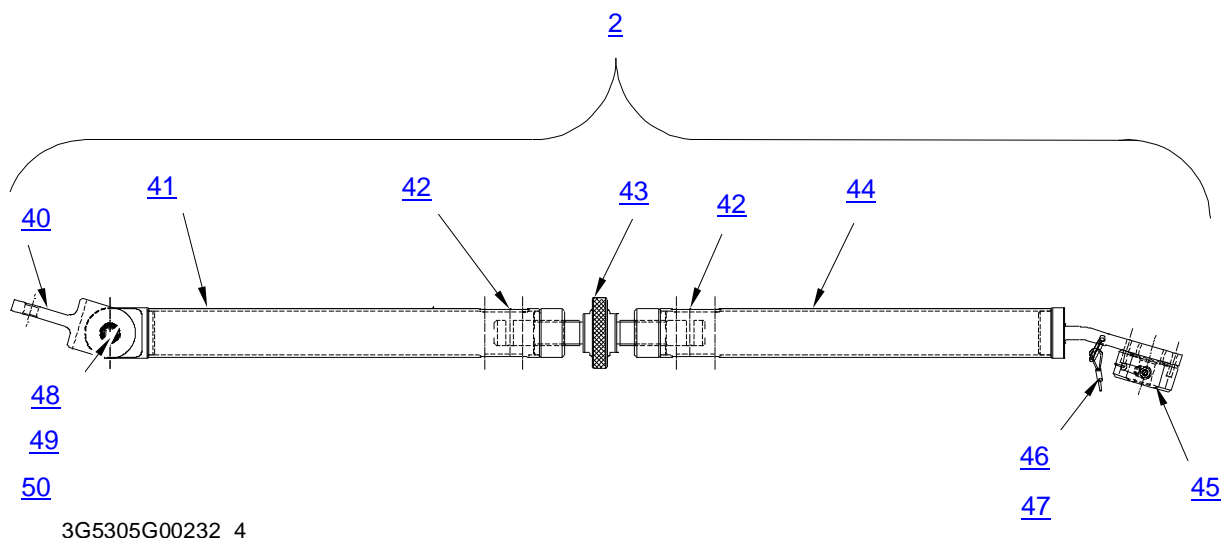


ITEM	P/N	DESCRIPTION	Q.TY
1	3G5305G00232	TROLLEY, TAIL BOOM TRANSPORT	REF.
2	3G5305G05731	TURNBUCKLE ASSY (For Breakdown ref. to <a href="#">Figure 6</a> and <a href="#">Table 6</a> )	2
3	NAS1341A3C50D	PIN, QUICK RELEASE	1
4	EH2240.960	LANYARD	3
5	NAS1351C3-8	SCREW,CAP,SOCKET HEAD	3
6	AN6C31A	BOLT, MACHINE	1
7	NAS1149C0663R	WASHER, FLAT	81



8	MS21043-6	NUT, SLFLKG, EXTENDED WASHER, HEXAGON	13
9	3G5305G05631	FWD SUPPORT ASSY (For Breakdown ref. to <a href="#">Figure 7</a> and <a href="#">Table 7</a> )	1
10	3G5305G07951	FITTING 3	2
11	3G5305G05931	CHASSIS ASSY	1
12	AN315C5R	NUT, PLAIN, HEXAGON	6
13	AN5C5A	BOLT, MACHINE	8
14	NAS1149C0563R	WASHER, FLAT	8
15	3G5305G06151	HALF-GUIDE	4
16	3G5305G06031	LEVELLER ASSY (For Breakdown ref. to <a href="#">Figure 8</a> and <a href="#">Table 8</a> )	1
17	AN6C10A	BOLT, MACHINE	4
18	AN6C15A	BOLT, MACHINE	8
19	1RGK2500GMT	WHEEL ASSY	2
20	7PS02000AS	DIRECTIONAL LOCK	2
21	NAS1341A3C32D	PIN, QUICK RELEASE	2
22	3G5305G05331	FITTING 2	6
23	GP4-1/4.75	SHACKLE, ANCHOR	4
24	3G5305G03151	PIN	4
25	NAS1149C0863R	WASHER, FLAT	4
26	NAS1291-8	NUT, SELF-LOCKING, HEX	4
27	3G5305G04931	REAR SUPPORT ASSY (For Breakdown ref. to <a href="#">Figure 9</a> and <a href="#">Table 9</a> )	1
28	3G5305G05231	FITTING 1	6
29	AN6C5A	BOLT, MACHINE	68
30	3G5305G05531	ROD ASSY, REAR SUPPORT	2
31	3G5305G04831	REAR SADDLE ASSY	1
32	3G5305G05131	ROD ASSY, REAR SADDLE	2
33	A304A001A1	PLATE, IDENTIFICATION	1
34	3G5305G04731	FWD SADDLE ASSY	1
35	3G5305G05031	ROD ASSY, FWD SADDLE	2
36	507-753	CLIP	2
37	MS35206-230	SCREW, MACHINE	2
38	3G5305G05831	TOW BAR ASSY	1
39	1RGK2500GMD	WHEEL ASSY	2

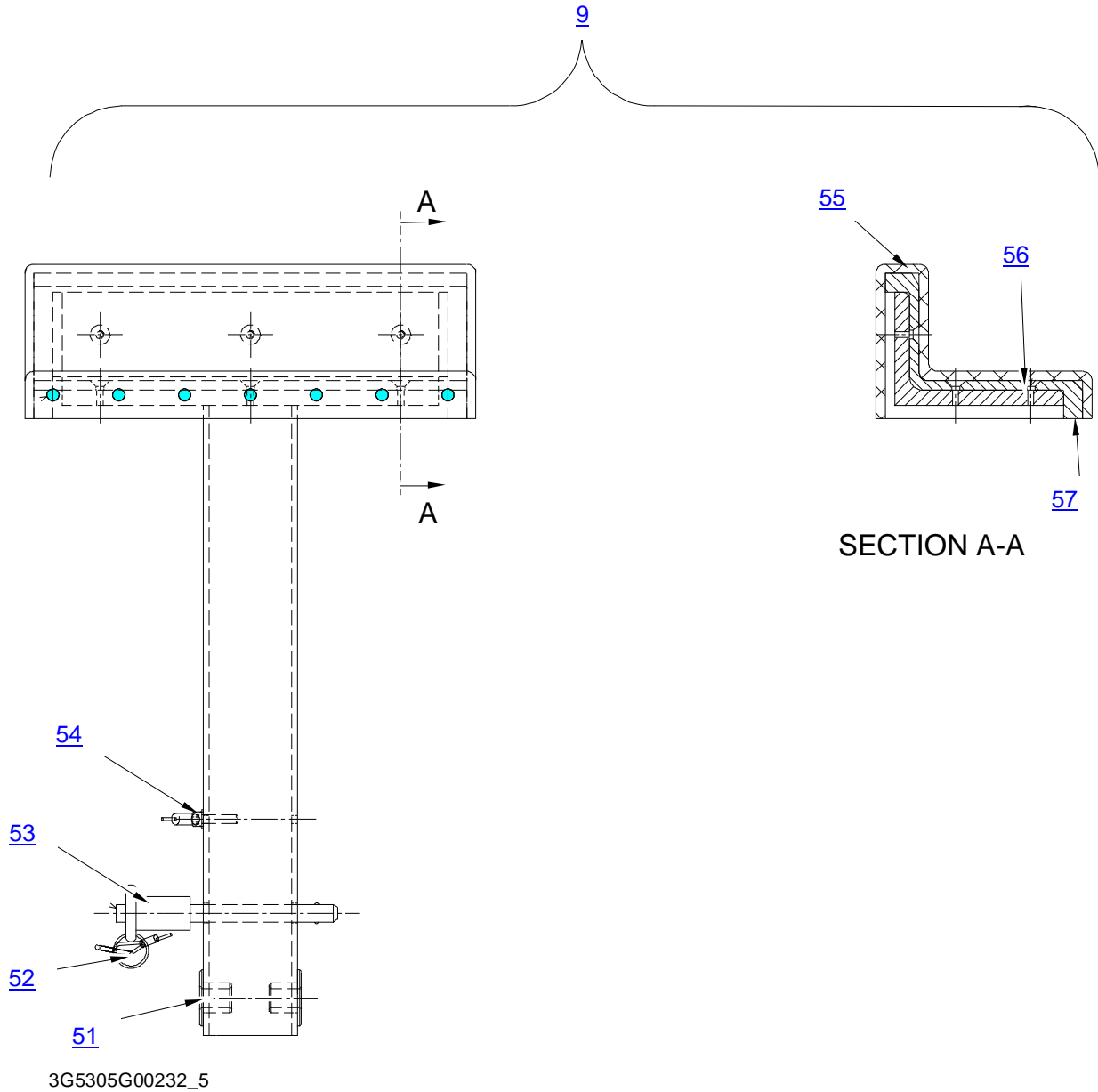
Table 5 – Spare Parts



*Figure 6 – Spare Parts*

ITEM	P/N	DESCRIPTION	Q.TY
2	3G5305G05731	TURNBUCKLE ASSY	REF.
40	3G5305G08451	ADAPTER	1
41	3G5305G08931	TURNBUCKLE BODY RH, ASSY	1
42	MS16562-243	PIN, SPRING	2
43	3G5305G08751	THREADED ROD 2	1
44	3G5305G08831	TURNBUCKLE BODY LH, ASSY	1
45	3G5305G08531	STOP ASSY	1
46	EH2240.960	LANYARD	1
47	NAS1351C3-8	SCREW, CAP, SOCKET HEAD	1
48	AN6C14A	BOLT, MACHINE	1
49	NAS1149C0663R	WASHER, FLAT	1
50	MS21043-6	NUT, SLFLKG, EXTENDED WASHER, HEXAGON	1

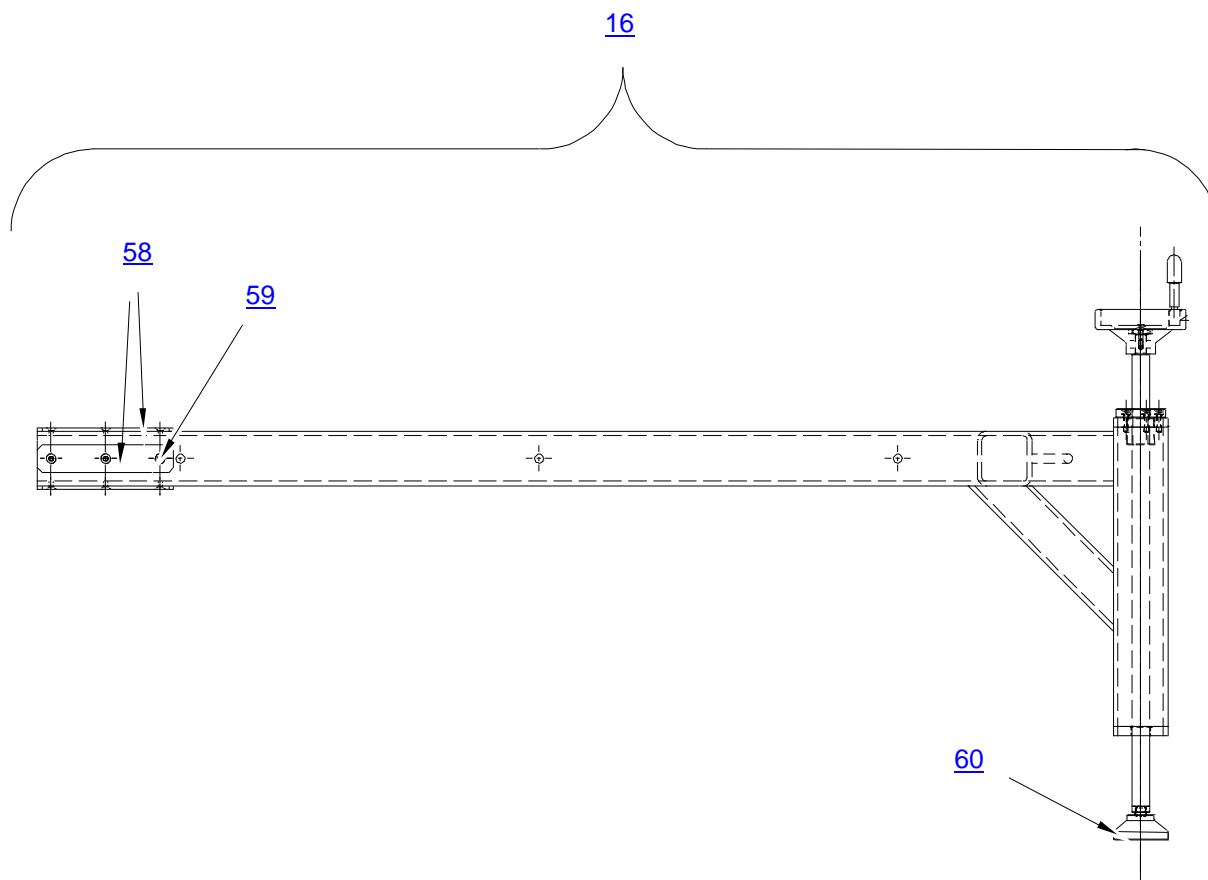
Table 6 – Spare Parts



*Figure 7 – Spare Parts*

ITEM	P/N	DESCRIPTION	Q.TY
9	3G5305G05631	FWD SUPPORT ASSY	REF.
51	3G5305G08251	BUSHING 1	2
52	EH2240.960	LANYARD	1
53	NAS1336A3C26D	PIN, QUICK RELEASE	1
54	NAS1351C3-8	SCREW, CAP, SOCKET HEAD	1
55	3G5305G08051	PROTECTION 1	1
56	MS24693-C249	SCREW, MACHINE	9
57	3G5305G08151	PROTECTION COVER	1

Table 7 – Spare Parts

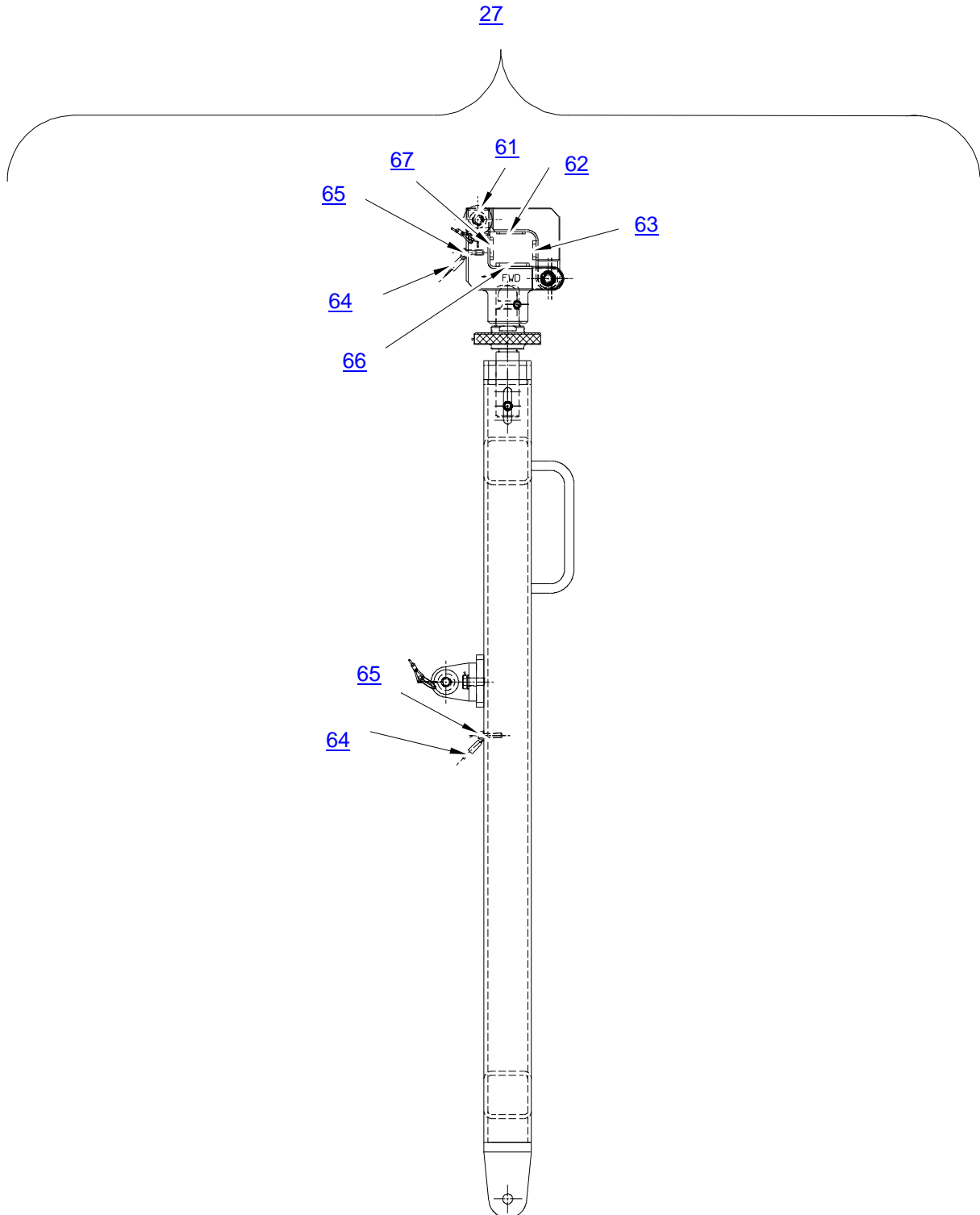


3G5305G00232\_6

*Figure 8 – Spare Parts*

ITEM	P/N	DESCRIPTION	Q.TY
16	3G5305G06031	LEVELLER ASSY	REF.
58	3G5305G09451	PLATE	8
59	MS24693C271	SCREW, MACHINE	24
60	E402160	HAND LEVEL	2

Table 8 – Spare Parts



3G5305G00232\_7

*Figure 9 – Spare Parts*



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<b>ITEM</b>	<b>P/N</b>	<b>DESCRIPTION</b>	<b>Q.TY</b>
27	3G5305G04931	REAR SUPPORT ASSY	REF.
61	NAS1336A3C24D	PIN,QUICK RELEASE	2
62	3G5305G07051	PROTECTION 7	2
63	3G5305G06951	PROTECTION 6	2
64	EH2240.960	LANYARD	4
65	NAS1351C3-8	SCREW, CAP, SOCKET HEAD	4
66	3G5305G06751	PROTECTION 4	2
67	3G5305G06851	PROTECTION 5	2

Table 9 – Spare Parts

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## 16. CE MARKING

The tool P/N 3G5305G00232 TROLLEY, TAIL BOOM TRANSPORT is conform to requirements of [1] and CE marking is applied.

CE label is fixed to the tool.



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# ANNEX A

# TOOL LOG CARD





# TOOL LOG CARD

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<b>TOOL KIT P/N:</b> [1]	<b>TOOL KIT DESCRIPTION:</b> [2]	<b>TOOL KIT S/N:</b> [3]
<b>TOOL P/N:</b> [4]	<b>TOOL S/N:</b> [5]	<b>REMARKS:</b> [6]

## Section 1: CHECKS RECORD

[7] N° check	[8] DATE	[9] P/N TO CHECK	[10] CHECK	[11] FREQUENCY	[12] RESULT	[13] NOTE	CERTIFICATION [14]
							STAMP & SIGNATURE [15]
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
<b>FINAL ACCEPTANCE [16]</b>							
<b>STAMP &amp; SIGNATURE [17]</b>						<b>DATE [18]</b>	

TLC\_Table 1



# TOOL LOG CARD

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<b>TOOL KIT P/N:</b> [1]	<b>TOOL KIT DESCRIPTION:</b> [2]	<b>TOOL KIT S/N:</b> [3]
<b>TOOL P/N:</b> [4]	<b>TOOL S/N:</b> [5]	<b>REMARKS:</b> [6]

## Section 2: HISTORICAL USES RECORD

[19] N°USE	[8] DATE	[6] NOTE	[13] CERTIFICATION	[19] N°USE	[8] DATE	[6] NOTE	[13] CERTIFICATION
			[14] STAMP & SIGNATURE				[14] STAMP & SIGNATURE
1				11			
2				12			
3				13			
4				14			
5				15			
6				16			
7				17			
8				18			
9				19			
10				20			

TLC\_Table 2

## LOG CARD FILLING INSTRUCTIONS

<b>FIELD #</b>	<b>HEADER</b>	<b>NOTE</b>
<b>1</b>	Part number of the tool Kit	
<b>2</b>	Tool Kit denomination	
<b>3</b>	Serial Number of the tool Kit	
<b>4</b>	Part Number of the tool (part of kit)	
<b>5</b>	Serial Number of the tool (if applicable)	
<b>6</b>	Indicate any details of the use	
<b>7</b>	Sequential number of check performed	
<b>8</b>	Date of the activity	
<b>9</b>	PN of tool or component (part of tool) checked/affected by issue	
<b>10</b>	Typology or description of checks /issue	
<b>11</b>	Check frequency	
<b>12</b>	Check result	
<b>13</b>	Check remarks	
<b>14</b>	Performance certification	
<b>15</b>	Stamp and signature of the personnel which performs the check	
<b>16</b>	Section related to the final approval	
<b>17</b>	Stamp and signature of the personnel which performs the final approval	
<b>18</b>	Date on which the final check was made	
<b>19</b>	Sequential number of performed used of the tool	