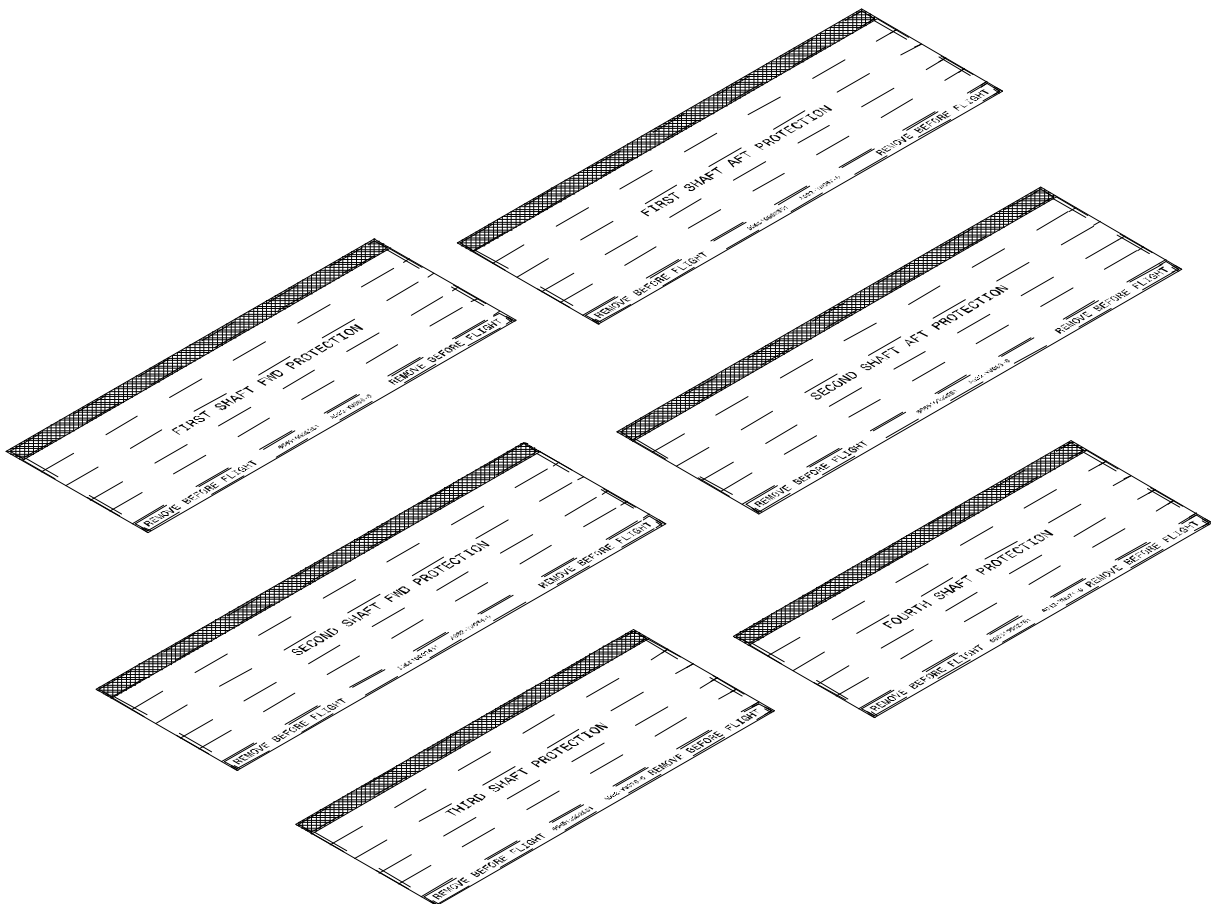


GSE & TOOL MANUAL

TITLE	KIT, TAIL ROTOR DRIVE SHAFT PROTECTIONS P/N 8G6510G02131
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REVISION HISTORY

REV	CHANGE DESCRIPTION	DATE
A	First issue	02/12/2021

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1. SCOPE

1.1. APPLICABILITY

The contents of this document are meant to provide information on the P/N 8G6510G02131 KIT, TAIL ROTOR DRIVE SHAFT PROTECTIONS.

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 8G6510G02131 KIT, TAIL ROTOR DRIVE SHAFT PROTECTIONS.

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.




 Warning	...Indicates a danger that might arise from a product and might result in severe injuries or even death, if no precautions are taken.
 Caution	... Indicates a potentially dangerous situation, which might result injury or damage to the equipment.
 Notice	...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
N.A.	MAN-8G6510G02251 REV. A	FIRST SHAFT FWD PROTECTION
N.A.	MAN-8G6510G02351 REV. A	FIRST SHAFT AFT PROTECTION
N.A.	MAN-8G6510G02451 REV. A	SECOND SHAFT FWD PROTECTION
N.A.	MAN-8G6510G02551 REV. A	SECOND SHAFT AFT PROTECTION
N.A.	MAN-8G6510G02651 REV. A	THIRD SHAFT PROTECTION
N.A.	MAN-8G6510G02751 REV. A	FOURTH SHAFT PROTECTION

Table 2 – Applicable Documents

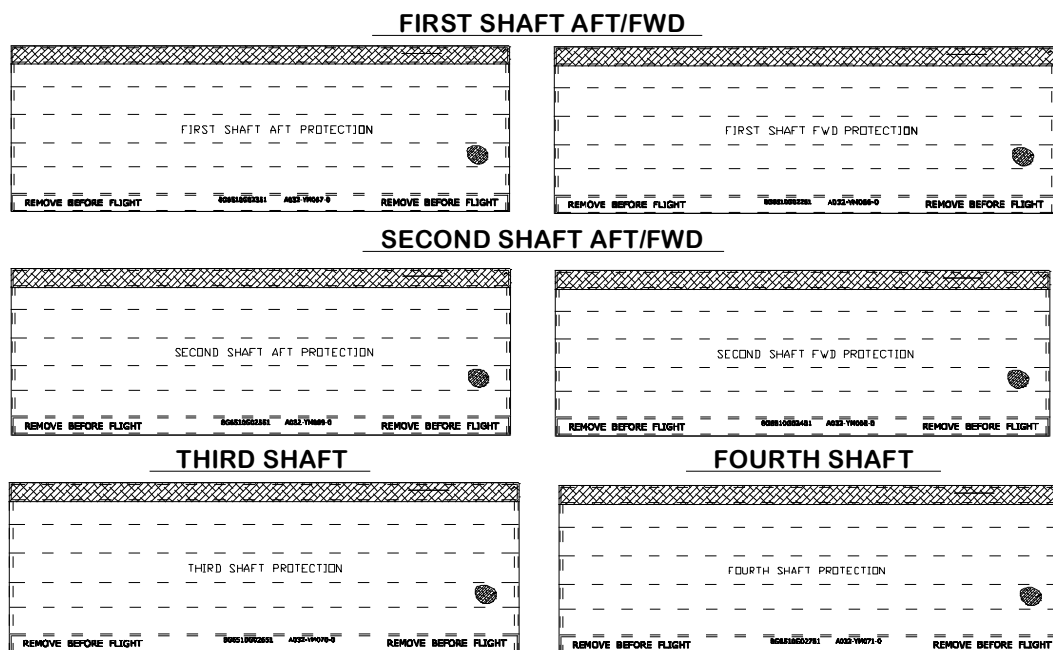
2.2. ACRONYMS USED

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
TRDS	Tail Rotor Drive Shaft
FWD	Forward

3. DESCRIPTION

The kit is composed of a protection covers set, to applied on the TRDS, in order to protect the components during the maintenance activity.



8G6510G02131_1

Figure 1 – Kit, tail rotor drive shaft protections

The kit is provided with the following manuals (one for each part of the kit):

1. MAN-8G6510G02251 REV. A - FIRST SHAFT FWD PROTECTION
2. MAN-8G6510G02351 REV. A - FIRST SHAFT AFT PROTECTION
3. MAN-8G6510G02451 REV. A - SECOND SHAFT FWD PROTECTION
4. MAN-8G6510G02551 REV. A - SECOND SHAFT AFT PROTECTION
5. MAN-8G6510G02651 REV. A - THIRD SHAFT PROTECTION
6. MAN-8G6510G02751 REV. A - FOURTH SHAFT PROTECTION

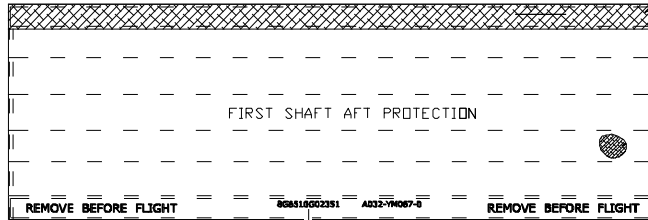
4. TOP ASSEMBLY DRAWINGS

Refer to P/N 8G6510G02131 KIT, TAIL ROTOR DRIVE SHAFT PROTECTIONS.

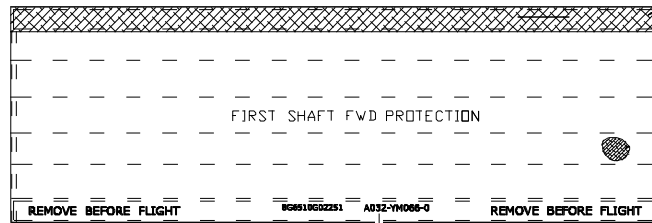
5. IDENTIFICATION

NOTE: The tool has not the main P/N marked. Each part of the tool has its own P/N marked.

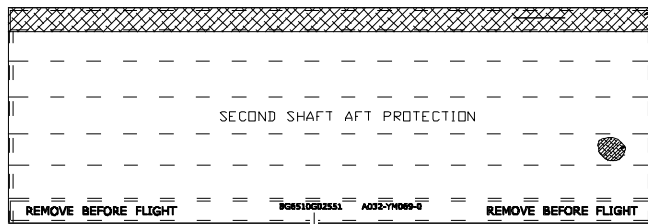
Each tool identification P/N is marked on the tool.



8G6510G2351



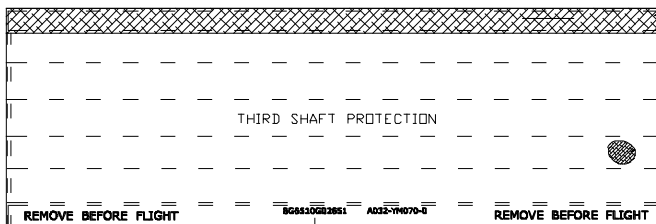
8G6510G2251



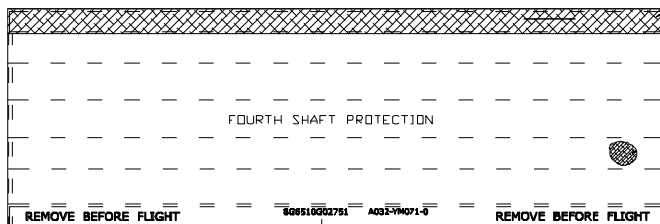
8G6510G2551



8G6510G2451



8G6510G2651



8G6510G2751

Figure 2 – P/N marking area



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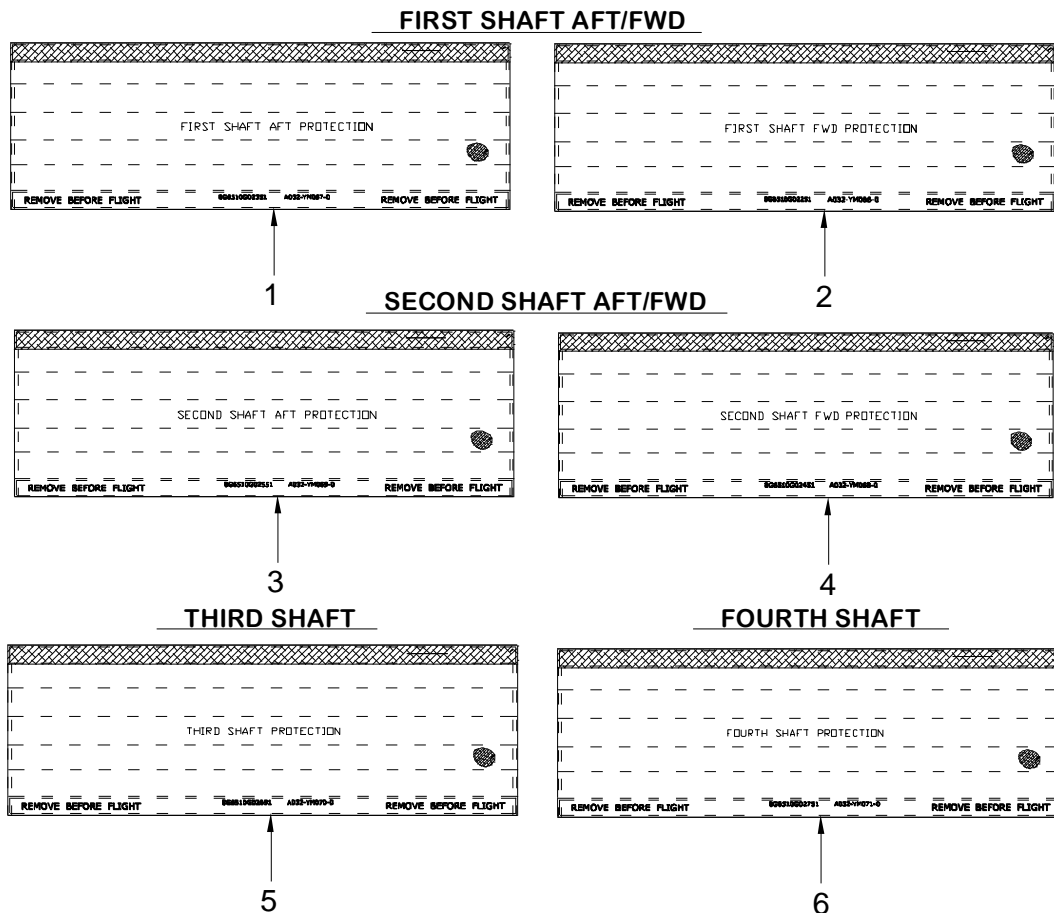
6. OVERALL DIMENSIONS

- Length: 1400 mm
- Width: 500 mm
- Height: 200 mm

7. WEIGHT

- Total Weight: 3,5 kg

8. MAIN PARTS



8G6510G02131_2

Figure 3 – Main Parts

The main parts of the KIT, TAIL ROTOR DRIVE SHAFT PROTECTIONS are:

1. First shaft AFT protection
2. First shaft FWD protection
3. Second shaft AFT protection
4. Second shaft FWD protection
5. Third shaft protection
6. Fourth shaft protection.

9. MAIN FEATURES DESCRIPTION

The tool is composed of six protections for the Tail Rotor Drive Shaft.

10. WARNING AND SAFETY NOTES

10.1. WARNING NOTE







 Warning	<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>
 Caution	
 Notice	<p>The Manual can never integrally replace the adequate competence of the user.</p>
 Warning	<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>
 Caution	
 Notice	<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

11. STORAGE

Refer to each single tool protection manual referred in Para 3 of this publication.

11.1.1. LUBRICATION BEFORE STORAGE

Refer to each single tool protection manual referred in Para 3 of this publication.

11.1.2. STORAGE CONFIGURATION

Refer to each single tool protection manual referred in Para 3 of this publication.

12. MAINTENANCE

Refer to each single tool protection manual referred in Para 3 of this publication.

12.1.1. CLEANING

Refer to each single tool protection manual referred in Para 3 of this publication.

12.1.2. SPECIAL TOOLS, FIXTURE AND EQUIPMENT

Refer to each single tool protection manual referred in Para 3 of this publication.

12.1.3. PART REQUIREMENTS

Refer to each single tool protection manual referred in Para 3 of this publication.

12.1.4. MANUAL CLEANING

Refer to each single tool protection manual referred in Para 3 of this publication.

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	Evidence of impact;	All
	Crushing or stripping	All
	Cracks	N.A.
	Dents	N.A.
	Wear	All
	Distortions	All
	Corrosion	N.A.
	Loose or defective attaching parts (warning flag)	All
	Unsticking of parts	N.A.
	Damage to the threads	N.A.
	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.

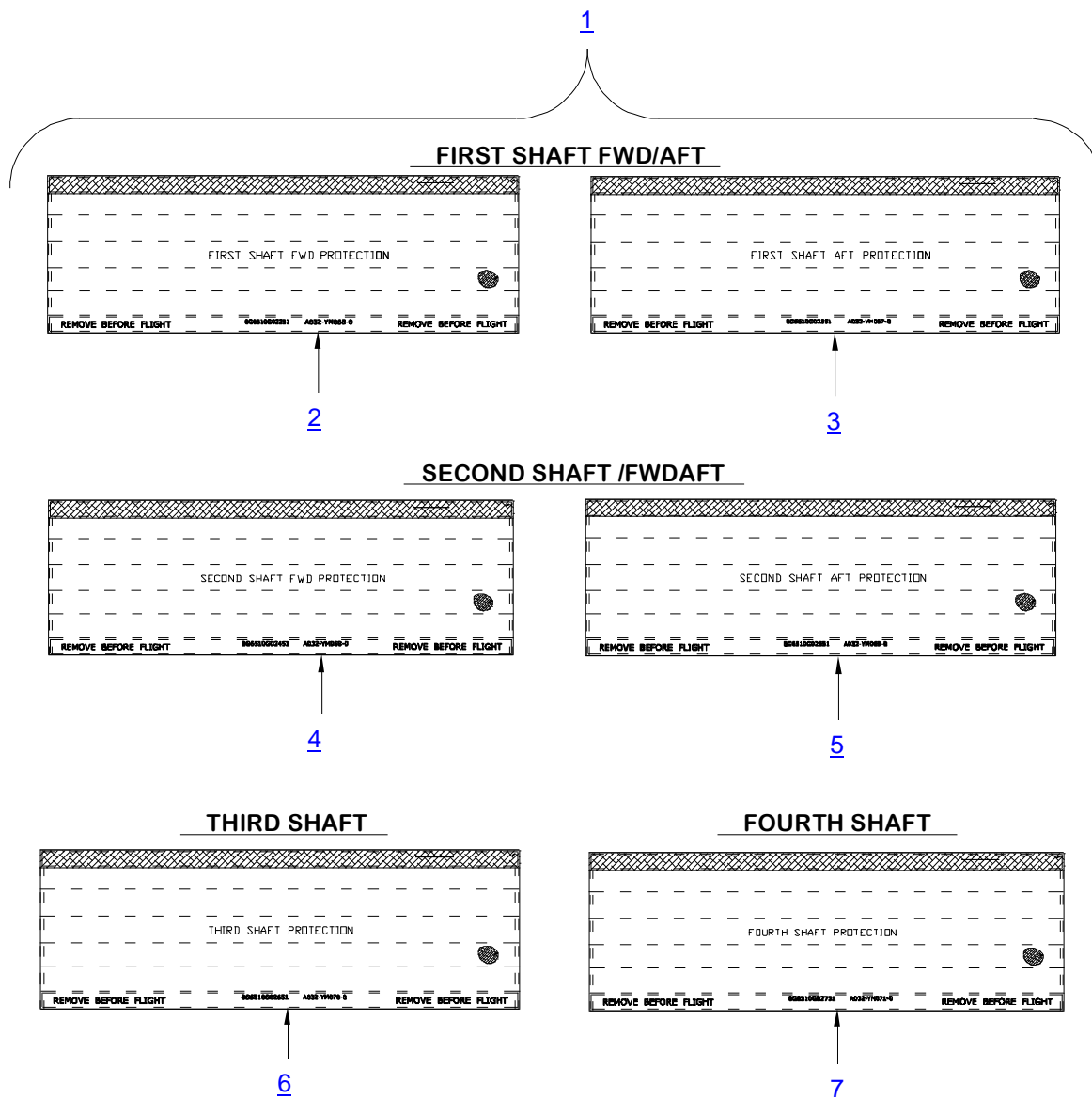
13. CALIBRATION

No Calibration is required.

14. SHELF LIFE

Not Applicable.

15. SPARE PARTS



8G6510G02131_3

Figure 5 – Spare Parts

ITEM	P/N	DESCRIPTION	Q.TY
1	8G6510G02131	KIT, TAIL ROTOR DRIVE SHAFT PROTECTIONS	REF
2	8G6510G02251	FIRST SHAFT FWD PROTECTION	1
3	8G6510G02351	FIRST SHAFT AFT PROTECTION	1
4	8G6510G02451	SECOND SHAFT FWD PROTECTION	1
5	8G6510G02551	SECOND SHAFT AFT PROTECTION	1
6	8G6510G02651	THIRD SHAFT PROTECTION	1
7	8G6510G02751	FOURTH SHAFT PROTECTION	1

Table 5 – Spare Parts

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16. CE MARKING

No CE marking is required for the P/N 8G6510G02131 KIT, TAIL ROTOR DRIVE SHAFT PROTECTIONS.



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ANNEX A

TOOL LOG CARD



TOOL LOG CARD

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TOOL KIT P/N: [1]	TOOL KIT DESCRIPTION: [2]	TOOL KIT S/N: [3]
TOOL P/N: [4]	TOOL S/N: [5]	REMARKS: [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							
FINAL ACCEPTANCE [16]							
STAMP & SIGNATURE [17]						DATE [18]	

TLC_Table 1



TOOL LOG CARD

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

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