

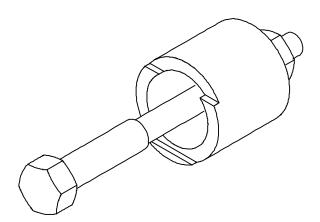
Manual number:
MAN-3G6405G07331
REV. A

Pag. 1 of 17

### **GSE & TOOL MANUAL**

**TITLE** 

TOOL, T/R SCISSORS SHORT COUPLING REM. P/N 3G6405G07331





Manual number:
MAN-3G6405G07331
REV. A

Pag. 2 of 17

### **REVISION HISTORY**

REV	CHANGE DESCRIPTION	DATE
А	First issue	13/10/2021



# Manual number: MAN-3G6405G07331 REV. A

Pag. 3 of 17

### **SUMMARY**

SUMMAF	RY	3
LIST OF	TABLE	4
LIST OF	FIGURE	4
1. SCC	)PE	5
1.1.	APPLICABILITY	5
1.2.	OBJECT	5
1.3.	WARNING AND SAFETY INSTRUCTIONS	5
2. DOC	CUMENTS	6
2.1.	APPLICABLE DOCUMENTS	6
2.2.	ACRONYMS USED	6
3. DES	SCRIPTION	7
4. TOP	ASSEMBLY DRAWINGS	7
5. IDE	NTIFICATION	7
6. OVE	RALL DIMENSIONS	8
7. WEI	GHT	8
8. MAII	N PARTS	9
9. MAII	N FEATURES DESCRIPTION	9
10. W	/ARNING AND SAFETY NOTES	10
10.1.	WARNING NOTE	10
10.2.	SAFETY NOTES	11
11. S	TORAGE	12
11.1.	LUBRICATION BEFORE STORAGE	12
11.2.	STORAGE CONFIGURATION	12
12. M	AINTENANCE	12
12.1.	CLEANING	12
12.1	.1. SPECIAL TOOLS, FIXTURE AND EQUIPMENT	12
12.1	.2. PART REQUIREMENTS	12
12.1	.3. MANUAL CLEANING	12
12.2.	CHECKS	13
12.2	2.1. SPECIAL TOOLS, FIXTURE AND EQUIPMENT	13
12.2	.2. VISUAL EXAMINATION	13
12.2	.3. PERIODICAL CHECKS	14
12.2	2.4. DIMENSIONAL CHECKS	14
12.2	2.5. SPECIAL CHECKS SUMMARY	14
12.3.	REPLACEMENT	14
12.3	.1. REPLACEMENT PROCEDURES	14



Manual number:
MAN-3G6405G07331
REV. A

Pag. 4 of 17

13.	CALIBRATION14
_	
14.	SHELF LIFE
15.	SPARE PARTS15
16.	CE MARKING16
ANNE	X A17
LIST	OF TABLE
Table	1 – Warning Instruction5
Table	2 – Applicable Documents6
Table	3 – Warning Note10
Table -	4 – Visual Check13
Table	5 – Spare Parts15
LIST	OF FIGURE
Figure	1 – Tool, T/R scissors short coupling rem7
Figure	2 – P/N marking area7
Figure	3 – Main Parts9
Figure	4 – Safety Notes11
Figure	5 – Spare Parts15



Manual number:
MAN-3G6405G07331
REV. A

Pag. 5 of 17

### 1. SCOPE

#### 1.1. APPLICABILITY

The contents of this document are meant to provide information on the P/N 3G6405G07331 TOOL, T/R SCISSORS SHORT COUPLING REM.

### 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 3G6405G07331 TOOL, T/R SCISSORS SHORT COUPLING REM.

#### 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



Manual number:
MAN-3G6405G07331
REV. A

Pag. 6 of 17

### 2. DOCUMENTS

### 2.1. APPLICABLE DOCUMENTS

The following table lists the applicable documents

REF	REFERENCE OF DOCUMENT	TITLE
N.A.	N.A.	N.A.

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
T/R	Tail Rotor

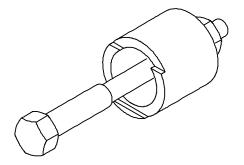


Manual number:
MAN-3G6405G07331
REV. A

Pag. 7 of 17

### 3. DESCRIPTION

This tool is used to pull out the short coupling that attach the two half scissors together. The tool is used as extractor during the removal procedure in order to disassembly the two half scissors.



3G6405G07331\_1

Figure 1 – Tool, T/R scissors short coupling rem.

### 4. TOP ASSEMBLY DRAWINGS

Refer to P/N 3G6405G07331 TOOL, T/R SCISSORS SHORT COUPLING REM.

### 5. IDENTIFICATION

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

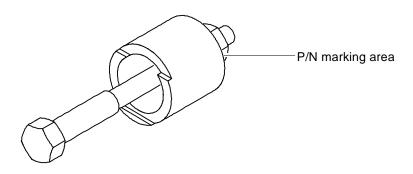


Figure 2 - P/N marking area



Manual number:
MAN-3G6405G07331
REV. A

Pag. 8 of 17

### 6. OVERALL DIMENSIONS

Length: 120 mmWidth: 31 mmHeight: 31 mm

### 7. WEIGHT

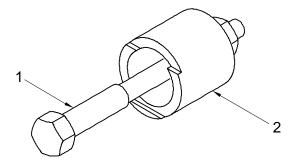
• Total Weight: Not Available.



Manual number: MAN-3G6405G07331 REV. A

Pag. 9 of 17

#### 8. **MAIN PARTS**



3G6405G07331\_2

Figure 3 – Main Parts

The main parts of the TOOL, T/R SCISSORS SHORT COUPLING REM. are:

- Guide
   Reaction

#### 9. MAIN FEATURES DESCRIPTION

This tool is composed of a guide and a reaction.



Manual number:
MAN-3G6405G07331
REV. A

Pag. 10 of **17** 

### 10. WARNING AND SAFETY NOTES

### 10.1. WARNING NOTE

Warning  Caution	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.
Notice	The Manual can never integrally replace the adequate competence of the user.
Warning Caution	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.
Notice	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.
Notice	replace or modify but only to integrate - any general or specific rule, regulation, decree or law that is in force in the place

Table 3 – Warning Note



Manual number:
MAN-3G6405G07331
REV. A

Pag. 11 of 17

### 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



Manual number:
MAN-3G6405G07331
REV. A

Pag. 12 of 17

#### 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.



Manual number:
MAN-3G6405G07331
REV. A

Pag. 13 of 17

#### 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

PERIODICY		CHECK TYPE	COMPONENTS
		Evidence of impact;	All
		Crushing or stripping	All
		Cracks	All
	z	Dents	All
	OIL	Wear	All
BEFORE	MIN/	Distortions	All
AND AFTER EVERY USE	VISUAL EXAMINATION	Corrosion	All
		Loose or defective attaching parts (warning flag)	All
		Unsticking of parts	N.A.
		Damage to the threads	All
		Marking	All

Table 4 – Visual Check



Manual number:
MAN-3G6405G07331
REV. A

Pag. 14 of 17

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

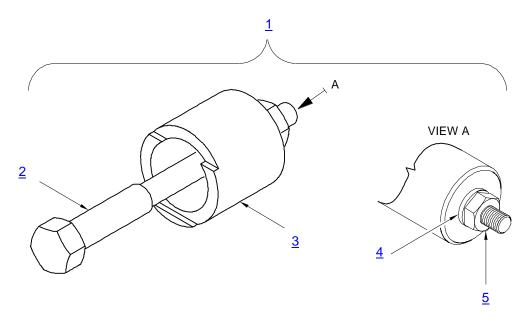
Not Applicable.



Manual number:
MAN-3G6405G07331
REV. A

Pag. 15 of 17

### 15. SPARE PARTS



3G6405G07331\_3

Figure 5 – Spare Parts

ITEM	P/N	DESCRIPTION	Q.TY
1	3G6405G07331	TOOL, T/R SCISSORS SHORT COUPLING REM.	REF.
2	3G6405G07951	GUIDE	1
3	3G6405G08051	REACTION	1
4	NAS1149F0463P	WASHER, FLAT	1
5	AN315C4R	NUT, PLAIN, HEXAGON	1

Table 5 – Spare Parts



Manual number:
MAN-3G6405G07331
REV. A

Pag. 16 of 17

### 16. CE MARKING

No CE marking is required for the P/N 3G6405G07331 TOOL, T/R SCISSORS SHORT COUPLING REM.



Manual number:
MAN-3G6405G07331
REV. A

Pag. 17 of **17** 

# ANNEX A TOOL LOG CARD



### **TOOL LOG CARD**

ISSUE -/-Pag. 1 of 3

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]	[8]	[9]	[10]	[11]	[12]	[13]	CERTIFICATION [14]
N° check	DATE	P/N TO CHECK	CHECK	FREQUENCY	RESULT	NOTE	STAMP & SIGNATURE [15]
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
		-		•		FINAL ACCE	TANCE [16]

FINAL ACCEPTANCE [16]				
STAMP & SIGNATURE [1	DATE [18]			

TLC\_Table 1



### **TOOL LOG CARD**

**ISSUE -/-** Pag. **2** of **3** 

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

	Section 2: HISTOR		
[19]	[8]	[6]	CERTIFICATION [13]
N°USE	DATE	NOTE	STAMP & SIGNATURE [14]
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

RICAL USES RECORD								
'	[19]	[8]		[6]	CERTIFICATION	[13]		
	N°USE	DATE	NOTE		STAMP & SIGNATURE	[14]		
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
	19							
	20							

TLC\_Table 2



### **TOOL LOG CARD**

**ISSUE -/-** Pag. **3** of **3** 

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		