TEXTRON Fastening Systems Inc.

Instruction Manual

Genesis®*n*G4 model

Hydro-Pneumatic Power Tool

Textron Fastening Systems Inc. is a wholly owned subsidary of Textron Inc.

Contents

Safety Instructions

This instruction manual must be read with particular attention to the following safety rules, by any person installing, operating, or servicing this tool.

1 Do not use outside the design intent.

2 Do not use equipment with this tool/machine other than that recommended and supplied by Textron Fastening Systems Inc.

3 Any modification undertaken by the customer to the tool/machine, nose assemblies, accessories or any equipment supplied by Textron Fastening Systems Inc. or their representatives, shall be the customer's entire responsibility. Textron Fastening Systems Inc. will be pleased to advise upon any proposed modification.

4 The tool/machine must be maintained in a safe working condition at all times and examined at regular intervals for damage and function by trained competent personnel. Any dismantling procedure shall be undertaken only by personnel trained in Textron Fastening Systems Inc. procedures. Do not dismantle this tool/machine without prior reference to the maintenance instructions. Please contact Textron Fastening Systems Inc. with your training requirements.

5 The tool/machine shall at all times be operated in accordance with relevant Health and Safety legislation. In the U.K. the "Health and Safety at Work etc. Act 1974" applies. Any question regarding the correct operation of the tool/machine and operator safety should be directed to Textron Fastening Systems Inc.

6 The precautions to be observed when using this tool/machine must be explained by the customer to all operators.

7 Always disconnect the airline from the tool/machine inlet before attempting to adjust, fit or remove a nose assembly.

8 Do not operate a tool/machine that is directed towards any person(s) or the operator.

9 Always adopt a firm footing or a stable position before operating the tool/machine.

10 Ensure that vent holes do not become blocked or covered.

11 The operating pressure shall not exceed 7 bar.

12 Do not operate the tool if it is not fitted with a complete nose assembly or swivel head unless specifically instructed otherwise.

13 Care shall be taken to ensure that spent stems are not allowed to create a hazard.

14 Vacuum Air MUST be turned off using the Trigger before removing the Stem Collector Bottle which Must be emptied when half full.

15 The Tool MUST NOT be operated with the Stem Collector Bottle removed.

16 If the tool is fitted with a stem deflector, it should be rotated until the aperture is facing away from the operator and other person(s) working in the vicinity.

17 When using the tool, the wearing of safety glasses is required both by the operator and others in the vicinity to protect against fastener ejection, should a fastener be placed 'in air'. We recommend wearing gloves if there are sharp edges or corners on the application.

18 Take care to avoid entanglement of loose clothes, ties, long hair, cleaning rags etc. in the moving parts of the tool which should be kept dry and clean for best possible grip.

19 When carrying the tool from place to place keep hands away from the trigger/lever to avoid inadvertent start up.

20 Excessive contact with hydraulic fluid oil should be avoided. To minimize the possibility of rashes, care should be taken to wash thoroughly.

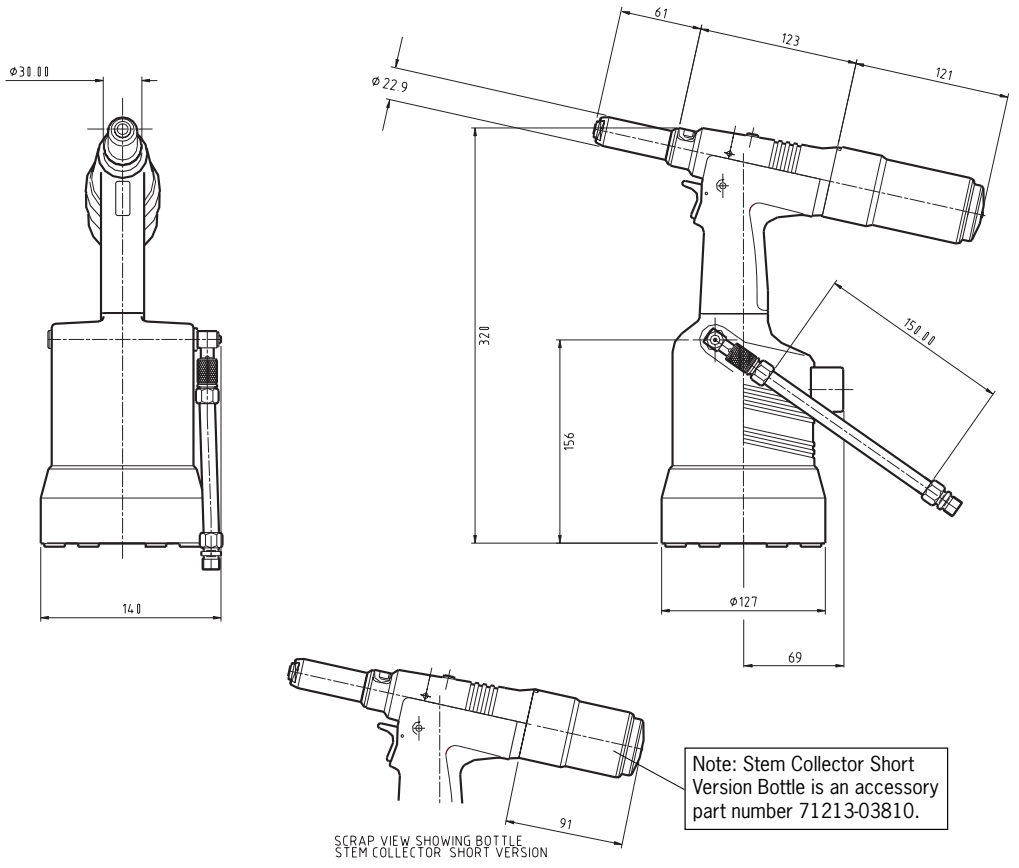
21 C.O.S.H.H. data for all hydraulic oils and lubricants is available on request from your tool supplier.

Specifications

Tool Specification

Air Pressure	Minimum - Maximum	5-7 bar
Free Air Volume Required	@ 5.5 bar	4.3 litres (0.15 cu ft)
Stroke	Minimum	17 mm
Pull Force	@ 5.5 bar	18.68 kN (4200 lbf)
Cycle Time	Approximately	1.2 seconds
Noise Level		75 dB(A)
Weight	Including nose equipment	2.3 kg
Vibration	Less than	2.5 m/s^2

Tool Dimensions



Dimensions in millimetres

Intent of Use

Range of Fasteners

nG4 is a hydro-pneumatic tool designed to place Avdel® breakstem fasteners at high speed making it ideal for batch or flow-line assembly in a wide variety of applications throughout all industries. It can place all fasteners listed opposite.

The tool features a vacuum system for fastener retention and trouble free collection of the spent stems regardless of tool orientation.

A complete tool is made up of three separate elements which will be supplied individually. See diagram below.

FASTENER NAME	FASTENER SIZE (MM / IN)												
	4.3	4.8	5	5.2	6	6.4	6.5	7	8	9	9.5	10	11	12
	–	3/16	–	–	–	1/4	–	–	–	–	3/8	–	–	–
AVEX®		●				●								
STAVEX®		●				●								
AVINOX®		●												
AVIBULB®		●			●									
BULBEX®		●												
T-LOK®	●	●												
AVDEL® SR		●				●								
INTERLOCK®		●				●								
HEMLOK®						●								
TLR®		●				●								
MAXLOK®		●				●								
AVTAINER®											●			
AVDEL®		●												
MBC®		●												
MBC/LC®		●												
AVSEAL® II								●	●	●		●	●	●
Q™ RIVET		●				●								
T™ RIVET		●				●								
CHERRYMATE™		●				●								

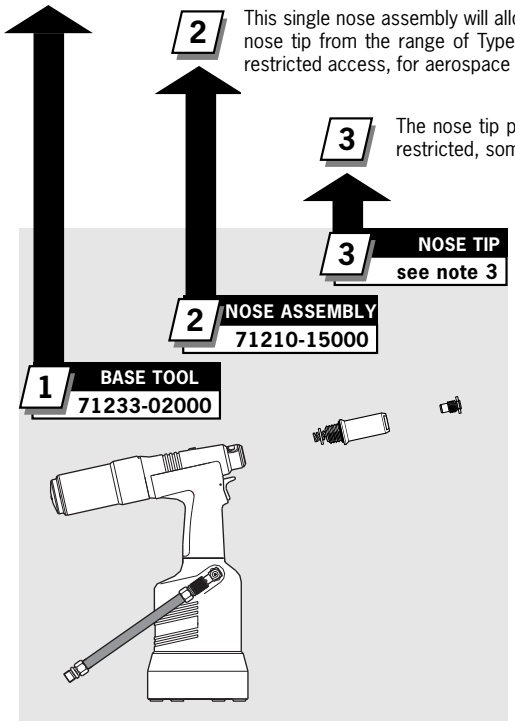
NOSE EQUIPMENT MUST BE FITTED AS DESCRIBED ON PAGE 9.

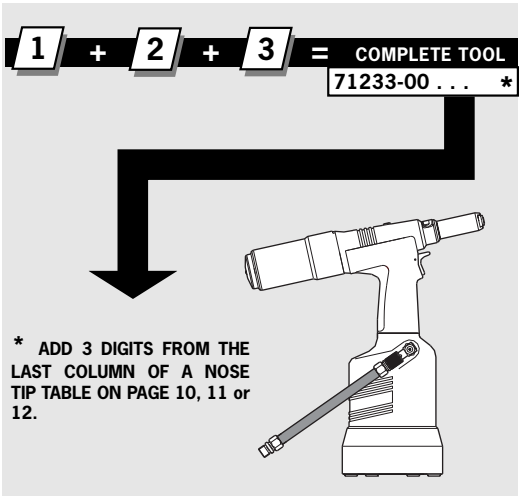
Part Numbering

1 The part number of the base tool remains the same whichever nose assembly, or nose tip is fitted. See the General Assembly pages 24 and 25.

2 This single nose assembly will allow placing of non-aerospace fasteners by simply selecting the appropriate nose tip from the range of Type 1 Nose Tips. Other nose assemblies are available for applications with restricted access, for aerospace and special fasteners see table page 12.

3 The nose tip part number relates to a specific fastener. If access to the application is restricted, some extended nose tips are available. See table page 12.



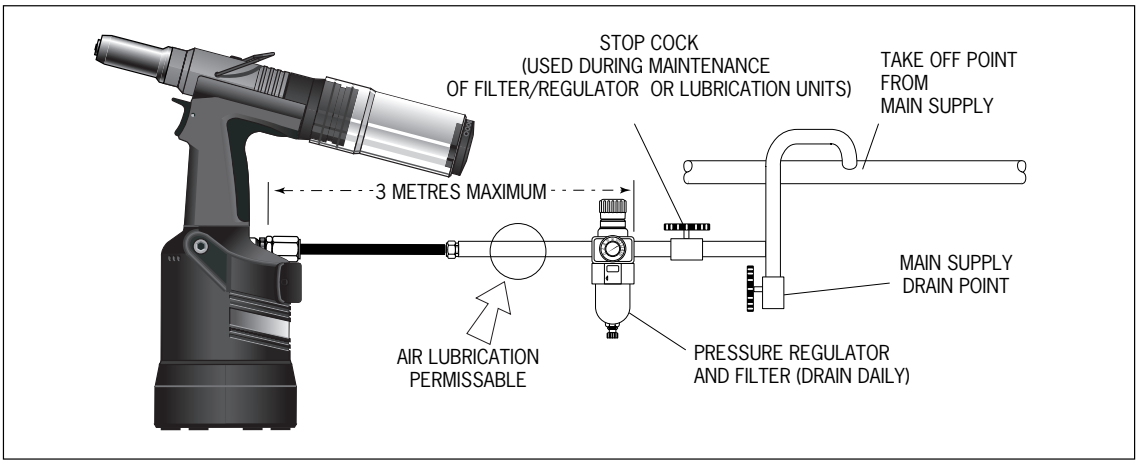


Putting into Service

Air Supply

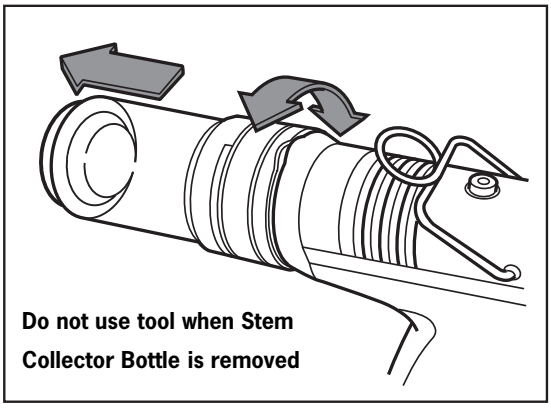
All tools are operated with compressed air at an optimum pressure of 5.5 bar. We recommend the use of pressure regulators and filtering systems on the main air supply. These should be fitted within 3 metres of the tool (see diagram below) to ensure maximum tool life and minimum tool maintenance.

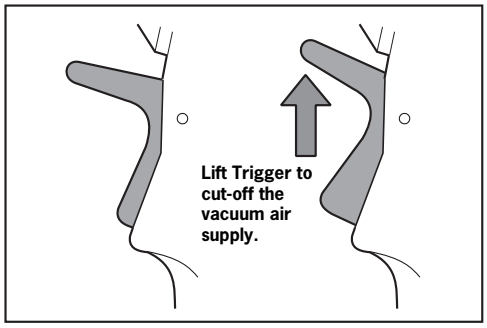
Air supply hoses should have a minimum effective working pressure rating of 150% of the maximum pressure produced in the system or 10 bar, whichever is the highest. Air hoses should be oil resistant, have an abrasion resistant exterior and should be armoured where operating conditions may result in hoses being damaged. All air hoses MUST have a minimum bore diameter of 6.4 millimetres or 1/4 inch.



Operating Procedure -All fasteners except Avtainer® and Maxlok®

- Ensure that the correct nose assembly suitable for the fastener is fitted.
- Connect the tool to the air supply.
- Insert the fastener stem into the nose of the tool. If using a standard nose assembly, the fastener should remain held in by the vacuum system.
- Bring the tool with the fastener to the application so that the protruding fastener enters squarely into the hole of the application.
- Fully actuate the trigger. The tool cycle will broach the fastener and with standard nose assemblies the broken stem will be projected to the rear of the tool into the collector bottle.
- A partial rotation and pull movement removes the collector bottle. The Trigger should be lifted to cut-off the vacuum supply air prior to removing the collector bottle.
- To minimise air consumption, the trigger should be 'lifted' to cut-off the vacuum air supply if the tool is not to be used for a period of time.



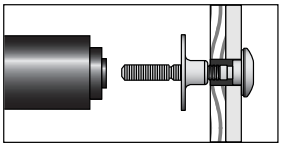


Putting into Service

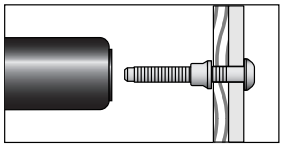
Operating Procedure

AVTAINER® AND MAXLOK®

- Ensure that the correct nose assembly is fitted see page 13.
- Connect the tool to the air supply.
- Push the Maxlok® or Avtainer® stem through the application hole.
- Place the collar on the stem (orientation as shown below).
- Keeping the head of the stem against the application, push the tool onto the protruding stem.
- Fully depress the trigger. One cycle will ensure that the collar is swaged into the lock grooves of the stem and that the stem breaks at the breaker groove.
- Release the trigger. The tool completes its cycle by pushing itself off the collar and the spent stem will be pushed to the rear of the tool on insertion of the next fastener.



Placing AVTAINER®



Placing MAXLOK®

Nose Assemblies

Nose Tip Selection

I M P O R T A N T

Nose assemblies do NOT include nose tips. Nose tips must be ordered separately.

A tool must always be fitted with the correct nose assembly and nose tip for your fastener and must be ordered separately, refer to the 'NOSE TIPS' tables on pages 10 to 13.

If your application presents no access restriction use a Type 1 nose tip unless you are placing aerospace fasteners which require a Type 3 nose tip, Avtainer® a Type 5, Hemlok® and 1/4" Interlock® a Type 6. Maxlok® requires a special nose assembly which does not make use of any nose tip, see pages 10 to 13.
Dimensions 'A' and 'B' will help you assess the suitability of a particular nose tip.
You should also check that the dimensions of the nose casing will not restrict access to your application. If access is restricted Type 2 nose tips with extra reach, are available for some fasteners. Refer to the table on page 12.
It is essential that a fastener-compatible nose assembly and nose tip are fitted prior to operating the tool (no nose tip with Maxlok®).

Fitting Instructions - All Nose Assemblies except Avtainer® and Maxlok®

I M P O R T A N T

The air supply must be disconnected when fitting or removing nose assemblies.

Item numbers in **bold** refer to nose assembly components in all nose tip tables.

- Lightly coat Jaws **4** with Moly Lithium grease*.
- Drop Jaws **4** into Jaw Housing **3** or Chuck Collet **9** depending on which nose assembly you are using.
- Insert Jaw Spreader **5** into Jaw Housing **3** or insert Front Spring Guide **10** into Chuck Collet **9**.
- Locate Buffer **6** on Jaw Spreader **5**.
- Locate Spring **7** onto Jaw Spreader **5** or onto Front Spring Guide **10**.
- Screw Rear Spring Guide **11** into Chuck Collet **9**.
- Fit Locking Ring **8** onto the Jaw Spreader Housing of the tool.
- Holding tool pointing down, screw the assembled Jaw Housing or Chuck Collet onto the Jaw Spreader Housing and tighten with spanner*.
- Screw the nose tip into Nose Casing **1** and tighten with spanner*.
- Place Nose Casing **1** over Jaw Housing **3** or Chuck Collet **9** and screw onto the tool, tightening with spanner*.

* Item included in the nG4 Service Kit. For complete list see page 18.

Nose Assemblies

Nose Tips

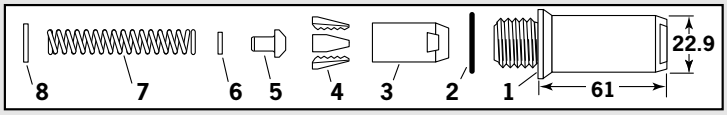
TYPE 1 *NOSE TIPS*

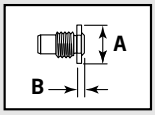
[1] *In inches then in millimetres.*
[2] *Head forming nose tips for use with countersunk heads ONLY.*
[3] *Long nose tip for deep placing.*
[4] *Material of the body then of the stem. 'Al' is the abbreviation for Aluminium.*
[5] *Domehead.*
[6] *Countersunk.*

NOSE ASSEMBLY
part nº 71210-15000

ITEM	DESCRIPTION	PART Nº
1	NOSE CASING	07340-00306
2	'O' RING	07003-00067
3	JAW HOUSING	07340-00304
4	JAWS	71210-15001
5	JAW SPREADER	07498-04502
6	BUFFER	71210-05001
7	SPRING	07500-00418
8	LOCKING RING	07340-00327

NAME	FASTENER Ø[1]		MATERIAL	NOSE TIP (mm) PART Nº	'A'	'B'	see below
AVEX®	3/16	4.8	Aluminium	07381-04701	12.7	2.8	...010
Large flange	3/16	4.8	Aluminium	07340-04800	19.0	3.3	...016
	3/16	4.8	Steel	07490-04401	12.7	3.3	...017
	3/16	4.8	Aluminium	07340-06601[2]	12.7	4.1	...015
	1/4	6.4	Aluminium	07612-02001	12.7	3.3	...021
STAVEX®	3/16	4.8	Steel	07381-04701	19.0	3.3	...016
Countersunk	3/16	4.8	Steel	07381-04701	12.7	2.8	...010
	3/16	4.8	Stainless Steel	07381-04701	12.7	2.8	...010
Large flange	3/16	4.8	Steel	07340-04800	12.7	2.8	...010
	1/4	6.4	Steel	07612-02001	12.7	2.8	...021
BULBEX®	3/16	4.8	Aluminium	07381-04701	12.7	2.8	...010
TLR®	3/16	4.8	Aluminium	07605-00220	12.7	4.1	...140
	1/4	6.4	Aluminium	71220-16080	12.7	4.4	...141
AVINOX® II	3/16	4.8	Stainless Steel	07498-01401	12.7	4.8	...082
T-LOK®	–	4.3	Steel	07340-06201	12.7	3.3	...120
	3/16	4.8	Steel	07340-06201	12.7	3.3	...120
AVIBULB®	3/16	4.8	Steel	07498-01401	12.7	4.8	...082
	–	6.0	Steel	07612-02001	12.7	3.3	...021
AVDEL® SR	3/16	4.8	Any	07348-07001[5]	12.7	5.7	...062
	1/4	6.4	Any	71220-60001	12.7	3.3	...063
Countersunk	3/16	4.8	Any	71210-16050[6]	12.7	5.7	...064
INTERLOCK®	3/16	4.8	Any	07381-04701	12.7	2.8	...010
Q™ RIVET	3/16	4.8	Any	07340-06201	12.7	3.3	...120
	1/4	6.4	Any	07612-02001	12.7	3.3	...021
CHERRYMATE®	3/16	4.8	Any	07340-06201	12.7	3.3	...120
	1/4	6.4	Any	07612-02001	12.7	3.3	...021
T™ RIVET	3/16	4.8	Al/Al[4]	703-A-25-6TA	15.9	9.5	...380
Large flange	3/16	4.8	Al/Al[4]	703-B-21	12.7	8.0	...381
	3/16	4.8	Al/Steel[4]	703-A-25-6T	15.9	9.5	...383
Large flange	3/16	4.8	Al/Steel[4]	703-B-26	12.7	9.0	...384
	1/4	6.4	Al/Al[4]	743-A-25-8TA	17.5	11.2	...385
Large flange	1/4	6.4	Al/Al[4]	743-B-21	12.7	8.0	...386
	1/4	6.4	Al/Steel[4]	743-A-25-8T	16.7	10.2	...387
Large flange	1/4	6.4	Al/Steel[4]	743-B-26	12.7	8.3	...388





COMPLETE TOOL PART NUMBER :
precede with
71233-00

Nose Assemblies

Nose Tips

AVSEAL®II *NOSE TIPS*

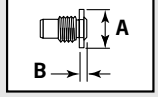
FASTENER NAME		Ø	MATERIAL	NOSE ASSEMBLY	NOSE TIP (mm) PART Nº	'A'	'B'	see below
AVSEAL®II	–	7.0	Standard Al. Alloy - Flush Nose Tip	71210-16100	71210-16105	12.7	2.5	... 410
	–	7.0	Standard Al. Alloy - 2mm Extended Nose Tip	71210-16100	71210-16109	12.7	5.4	... 411
	–	7.0	Standard Al. Alloy - 8mm Extended Nose Tip	71210-16100	71210-16113	12.7	11.4	... 412
	–	8.0	Standard & Low Pressure - Flush Nose Tip	71220-16100	71220-16102	14.3	2.5	... 413
	–	8.0	Standard & Low Pressure - 2mm Ext Nose Tip	71220-16100	71220-16103	14.3	5.4	... 414
	–	8.0	Standard & Low Pressure - 8mm Ext Nose Tip	71220-16100	71220-16104	14.3	11.4	... 415
	–	9.0	Standard Al. Alloy - Flush Nose Tip	71230-15800	71220-16102	14.3	2.5	... 416
	–	9.0	Standard Al. Alloy - 2mm Extended Nose Tip	71230-15800	71220-16104	14.3	5.4	... 417
	–	9.0	Standard Al. Alloy - 8mm Extended Nose Tip	71230-15800	71220-16106	14.3	11.4	... 418
	–	10.0	Standard & Low Pressure - Flush Nose Tip	71230-16100	71230-16103	14.3	2.5	... 419
	–	10.0	Standard & Low Pressure - 2mm Ext Nose Tip	71230-16100	71230-16205	14.3	5.4	... 420
	–	10.0	Standard & Low Pressure - 8mm Ext Nose Tip	71230-16100	71230-16107	14.3	11.4	... 421
	–	9.0	Low Pressure Al. Alloy - Flush Nose Tip	71230-15800	71230-16105	13.9	3.3	... 430
	–	9.0	Low Pressure Al. Alloy - 2mm Ext Nose Tip	71230-15800	71230-16106	13.9	5.4	... 431
	–	9.0	Low Pressure Al. Alloy - 8mm Ext Nose Tip	71230-15800	71230-16107	13.9	11.4	... 432
	–	10.0	Low Pressure Al. Alloy - Flush Nose Tip	71230-15800	71230-16109	13.9	3.3	... 433
	–	10.0	Low Pressure Al. Alloy - 2mm Ext Nose Tip	71230-15800	71230-16112	13.9	5.4	... 434
	–	10.0	Low Pressure Al. Alloy - 8mm Ext Nose Tip	71230-15800	71230-16115	13.9	11.4	... 435
	–	11.0	Low Pressure Al. Alloy - Flush Nose Tip	71230-16100	71230-16110	17.3	3.3	... 436
	–	11.0	Low Pressure Al. Alloy - 2mm Ext Nose Tip	71230-16100	71230-16113	17.3	5.4	... 437
	–	11.0	Low Pressure Al. Alloy - 8mm Ext Nose Tip	71230-16100	71230-16116	17.3	11.4	... 438
	–	12.0	Low Pressure Al. Alloy - Flush Nose Tip	71230-16100	71230-16111	17.3	3.3	... 439
	–	12.0	Low Pressure Al. Alloy - 2mm Ext Nose Tip	71230-16100	71230-16114	17.3	5.4	... 440
	–	12.0	Low Pressure Al. Alloy - 8mm Ext Nose Tip	71230-16100	71230-16117	17.3	11.4	... 441

NOSE ASSEMBLY
part nº 71210-16100

ITEM	DESCRIPTION	PART Nº
1	NOSE CASING	07340-00306
2	'O' RING	07003-00067
3	JAW HOUSING	07430-00304
4	JAWS	71210-16101
5	JAW SPREADER	07498-04502
6	BUFFER	71210-05001
7	SPRING	07500-00418
8	LOCKING RING	07340-00327

NOSE ASSEMBLY
part nº 71220-16100

ITEM	DESCRIPTION	PART Nº
1	NOSE CASING	07340-00306
2	'O' RING	07003-00067
3	JAW HOUSING	07612-02003
4	JAWS	71220-16120
5	JAW SPREADER	07498-04502
6	BUFFER	07498-03003
7	SPRING	07500-00418
8	LOCKING RING	07340-00327



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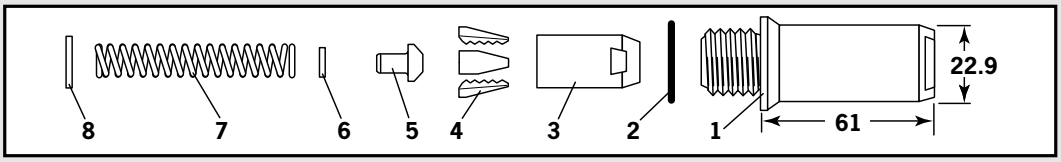


NOSE ASSEMBLY
part nº 71230-15800

ITEM	DESCRIPTION	PART Nº
1	NOSE CASING	07340-00306
2	'O' RING	07003-00067
3	JAW HOUSING	07612-02003
4	JAWS	07612-02002
5	JAW SPREADER	07498-04502
6	BUFFER	07498-03003
7	SPRING	07500-00418
8	LOCKING RING	07340-00327

NOSE ASSEMBLY
part nº 71230-16100

ITEM	DESCRIPTION	PART Nº
1	NOSE CASING	07340-00306
2	'O' RING	07003-00067
3	JAW HOUSING	07612-02003
4	JAWS	71230-16101
5	JAW SPREADER	07498-04502
6	BUFFER	07948-03003
7	SPRING	07500-00418
8	LOCKING RING	07340-00327

Nose Assemblies

Nose Tips

TYPE 2 NOSE TIPS

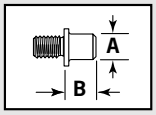
NOSE ASSEMBLY
part nº 71210-15200

ITEM	DESCRIPTION	PART Nº
1	NOSE CASING	07340-02804
2	'O' RING	07003-00067
3	JAW HOUSING	07340-00304
4	JAWS	71210-15001
5	JAW SPREADER	07498-04502
6	BUFFER	71210-05001
7	SPRING	07500-00418
8	LOCKING RING	07340-00327
9	JAW SPREADER HOUSING	71210-02101
10	'O' RING	07003-00277

NAME	FASTENER Ø[1]	MATERIAL	NOSE TIP (mm) PART Nº	'A'	'B'	see below
AVEX®	3/16 : 4.8	Aluminium	07340-02807	12.7	10.0	... 014
	3/16 : 4.8	Steel	07340-07301	12.7	11.8	... 018
BULBEX®	3/16 : 4.8	Aluminium	07340-02807	12.7	10.0	... 014
T-LOK®	– : 4.3	Steel	07241-07101	12.7	10.0	... 121
	3/16 : 4.8	Steel	07241-07101	12.7	10.0	... 121

[1] *In inches then in millimetres.*

TYPE 2 NOSE TIPS ARE EXTENDED TO ALLOW ACCESS INTO APPLICATIONS WHERE TYPE 1 NOSE TIPS WILL NOT REACH.



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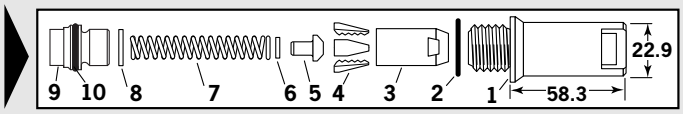


NOTE: Items **9** & **10** are not required when assembling Type 2 or 3 Nose Tips to base tool nG4 (71233-02000).

TYPE 3 NOSE TIPS

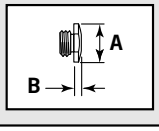
NOSE ASSEMBLY
part nº 71210-15300

ITEM	DESCRIPTION	PART Nº
1	NOSE CASING	07344-02001
2	'O' RING	07003-00067
3	JAW HOUSING	07340-00304
4	JAWS	71210-15001
5	JAW SPREADER	07498-04502
6	BUFFER	71210-05001
7	SPRING	07500-00418
8	LOCKING RING	07340-00327
9	JAW SPREADER HOUSING	71210-02101
10	'O' RING	07003-00277

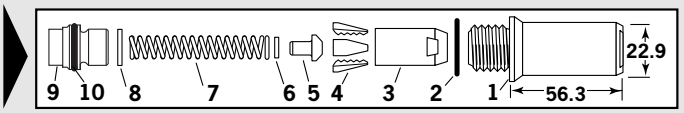
NAME	FASTENER Ø[1]	MATERIAL	NOSE TIP (mm) PART Nº	'A'	'B'	see below
AVDEL®	3/16 : 4.8	Aluminium	71210-16036	12.7	2.5	... 293
	3/16 : 4.8	Aluminium ***O***	71210-16037	12.7	2.5	... 294
	3/16 : 4.8	Stainless Steel	71220-16038	12.7	2.4	... 295
MBC®	3/16 : 4.8	Any	07340-06901	12.7	5.1	... 310
MBC L/C®	3/16 : 4.8	Any	07344-04701	12.7	4.6	... 320

[1] *In inches then in millimetres.* ***O*** *Oversize*

TYPE 3 NOSE TIPS ARE SPECIFICALLY FOR THE AEROSPACE FASTENERS LISTED ABOVE.



COMPLETE TOOL PART NUMBER : precede with 71233-00



NOTE: Items **9** & **10** are not required when assembling Type 2 or 3 Nose Tips to base tool nG4 (71233-02000).

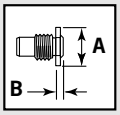
TYPE 6 NOSE TIPS

NOSE ASSEMBLY
part nº 71230-15800

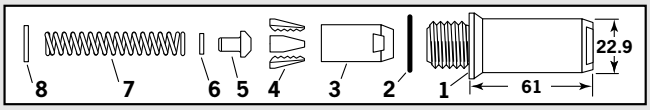
ITEM	DESCRIPTION	PART Nº
1	NOSE CASING	07340-00306
2	'O' RING	07003-00067
3	JAW HOUSING	07612-02003
4	JAWS	07612-02002
5	JAW SPREADER	07498-04502
6	BUFFER	07498-03003
7	SPRING	07500-00418
8	LOCKING RING	07340-00327

NAME	FASTENER Ø[1]	MATERIAL	NOSE TIP (mm) PART Nº	'A'	'B'	see above
HEMLOK®	1/4 : 6.4	Any	07612-02001	14.3	3.6	... 261
INTERLOCK®	1/4 : 6.4	Any	07612-02001	14.3	3.6	... 261

[1] *In inches then in millimetres.*



COMPLETE TOOL PART NUMBER : precede with 71233-00



Nose Assemblies

Nose Tips

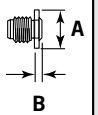
TYPE 5 *AVTAINER®*- *NOSE TIP*

FASTENER NAME	Ø[1]		MATERIAL	NOSE TIP (mm) PART Nº	'A'	'B'	see below
AVTAINER®	3/8	9.6	Steel	07498-00802	19.1	4.1	... 243

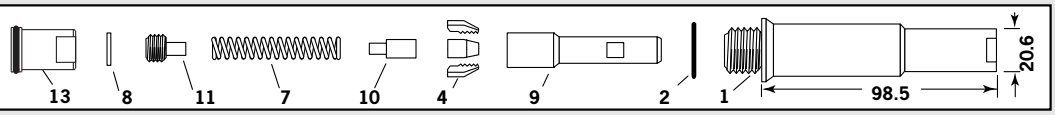
[1] *In inches then in millimetres*

NOSE ASSEMBLY part nº 71230-15600

ITEM	DESCRIPTION	PART Nº
1	NOSE CASING	07498-00501
2	'O' RING	07003-00067
9	CHUCK COLLET	07498-00801
4	JAWS	07220-02302
10	FRONT SPRING GUIDE	07498-00803
7	SPRING	07500-02005
11	REAR SPRING GUIDE	07498-00503
8	LOCKING RING	07340-00327
13	VAC SHUT-OFF STOP NUT ASSY	71233-20200



COMPLETE TOOL PART NUMBER : precede with 71233-00



MAXLOK®- *NO NOSE TIP*

FASTENER NAME	Ø[1]		MATERIAL	NOSE ASSEMBLY PART Nº	see below
MAXLOK®	3/16	4.8	All	07610-02000	... 371
	1/4	6.4	All	07610-02100	... 372

[1] *In inches then in millimetres*

NOSE ASSEMBLY part nº 07610-02000 for 3/16" ø

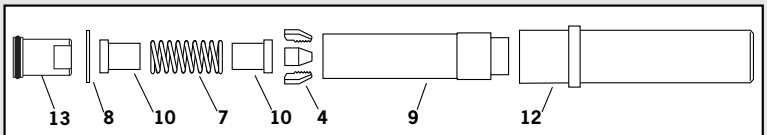
ITEM	DESCRIPTION	PART Nº
9	CHUCK COLLET	07610-02002
4	JAWS	07610-02003
10	SPRING GUIDE	07220-02104
7	SPRING	07610-02107
8	LOCKING RING	07610-02004
12	ANVIL	07610-02001
13	VAC SHUT-OFF STOP NUT ASSY	71233-20200

NOSE ASSEMBLY part nº 07610-02100 for 1/4" ø

ITEM	DESCRIPTION	PART Nº
9	CHUCK COLLET	07610-02102
4	JAWS	07610-02103
10	SPRING GUIDE	07220-02104
7	SPRING	07610-02107
8	LOCKING RING	07610-02004
12	ANVIL	07610-02101
13	VAC SHUT-OFF STOP NUT ASSY	71233-20200

COMPLETE TOOL PART NUMBER : precede with 71233-00

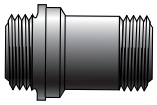
The three adapting components illustrated below left are not included in the nose assembly part number. Each item must be ordered separately, using individual part numbers.



MAXLOK® NOSE ASSEMBLIES will place both the ordinary flange collar and the large flange collars.

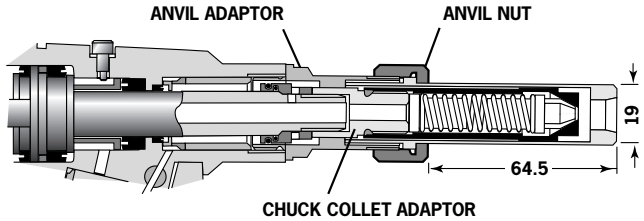
07610-00501
CHUCK COLLET ADAPTOR

71230-02063
ANVIL ADAPTOR



07610-00307
ANVIL NUT

THE THREE COMPONENTS ILLUSTRATED LEFT ARE ESSENTIAL WHEN FITTING A MAXLOK® NOSE ASSEMBLY TO THE G4 TOOL.
READ MAXLOK® 'FITTING INSTRUCTIONS' PAGE 13.



Nose Assemblies

Fitting instruction for Avtainer® and Maxlok® Nose Assemblies

I M P O R T A N T

The air supply must be disconnected when fitting or removing any nose assembly unless specifically instructed otherwise.

The air vacuum extraction system MUST be disabled by fitting Vacuum 'Shut-Off' Stop Nut 71233-02020 before operating a nG4 tool with a Maxlok® or Avtainer® nose assembly.
Refer to the 'Operating Procedure' for Avtainer® and Maxlok®, page 8.

AVTAINER®

Item numbers in **bold** refer to the general assembly and parts list pages 24 and 25. Other items numbers refer to the 'Type 5 Nose Tip' table page 13.

- Remove Jaw Spreader Housing **41**, 'O' ring **12**, Locknut **40**, Vacuum Sleeve **42** and Seal Housing **52**.
- Screw Vacuum 'Shut-off' Stop Nut Assy 13 onto Head Piston **36**. (Items **40, 42** and **52** are not refitted).
- Replace Jaw Spreader Housing **41** and 'O' Ring **12**.
- Lightly coat jaws 4 with Moly Lithium grease*.
- Drop jaws 4 into Chuck Collet 9.
- Insert Front Spring Guide 10 into Chuck Collet 9.
- Locate Spring 7 onto Front Spring Guide 10.
- Screw Rear Spring Guide 11 into Chuck Collet 9.
- Fit Locking Ring 8 onto the Jaw Spreader Housing of the tool.
- Screw the assembled Chuck Collet onto the Jaw Spreader Housing and tighten with spanner.
- Screw the Nose Tip into Nose Casing 1 and tighten with spanner*.
- Place Nose Casing 1 with 'O' Ring 2 over Chuck Collet 9 and screw onto the tool, tightening with spanner*

MAXLOK®

When fitting a Maxlok® nose assembly, the base tool must be adapted using three auxiliary components illustrated page 13 and Vacuum 'Shut-off' Stop Nut Assembly 13, must be fitted.

Item numbers in **bold** refer to the general assembly and parts list pages 26-27. Other items numbers refer to the 'Maxlok® No Nose Tip' table page 12.

- Remove Jaw Spreader Housing **41**, 'O' Ring **12**, and Vacuum Sleeve **42**. Seal housing **52** and Locknut **40**. (None of the above parts are refitted).
- Screw Vacuum Shut-off 'Stop Nut' 13 onto Head Piston **36**.
- Substitute Jaw Spreader Housing 1 with Chuck Collet Adaptor 07610-00501. Tighten fully onto piston before tightening the Stop Nut 13 against it.
- Fit Locking Ring 8 onto the Chuck Collet Adaptor.
- Lightly coat Jaws 4 with Moly Lithium grease.
- Drop Jaws 4 into Chuck Collet 9.
- Insert one Spring Guide 10 into Chuck Collet 9.
- Locate Spring 7 onto the Spring Guide already in place.
- Drop the other Spring Guide 10 into Spring 7.
- Holding tool pointing down, screw the assembled Chuck Collet onto the Chuck Collet Adaptor and tighten with spanner.
- Screw Anvil Adaptor 71230-02063 into the Head Assembly.
- Place Anvil 12 over Chuck Collet 9 and lock into place with Anvil Nut 07610-00307.

Servicing Instructions for all Nose Assemblies

Nose assemblies should be serviced at weekly intervals. You should hold some stock of all internal components of the nose assembly and nose tips as they will need regular replacement.

- Remove the nose assembly using the reverse procedure to the 'Fitting instructions'.
- Any worn or damaged part should be replaced.
- Clean and check wear on jaws.
- Ensure that the jaw spreader is not distorted.
- Check that the spring is not distorted.
- On nose assemblies for Maxlok® and Avtainer® check that the spring guides are not distorted.
- On nose assemblies for Maxlok® check that the anvil is neither cracked nor has any scoring or corrosion marks on the inside face of the concave shape at the front end.

- Assemble according to fitting instructions.

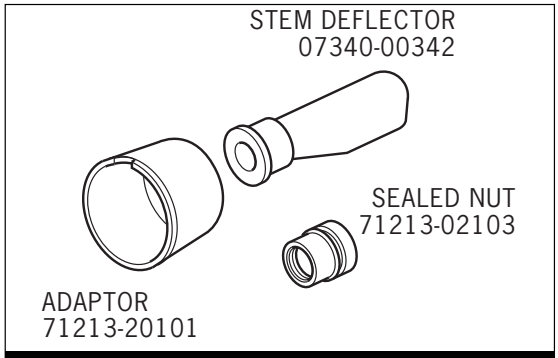
* Item included in the nG4 service kit. For complete list see page 18
Item numbers in **bold** refer to the general assembly drawing and parts list on pages 24 and 25.

Accessories

Stem Deflector

The stem deflector is a very simple alternative to the standard stem collector and allows access in restricted areas. To replace the stem collector with the stem deflector proceed as follows:

- A partial rotation and pull movement removes the collector bottle. The Trigger should be lifted to cut-off the vacuum supply air prior to removing the collector bottle.
- Fit Stem Deflector (07340-00342) into Adaptor (71213-20101).
- Push the assembled Stem Deflector and Adaptor over Bottle Adaptor **32** and align with the cut-out feature.

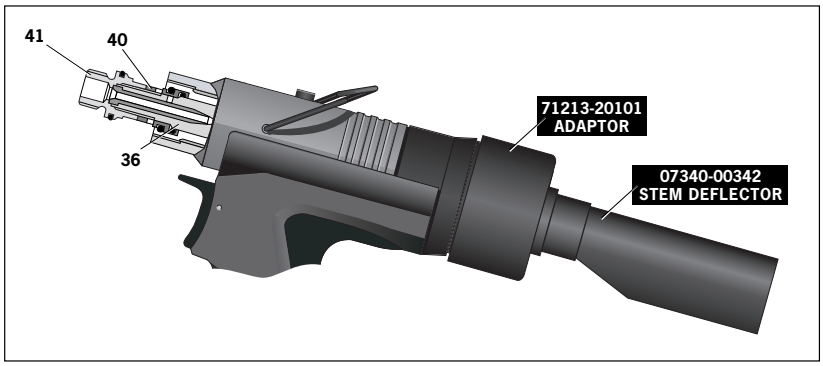


STEM DEFLECTOR: 71213-20100

Preparing the Base Tool for use with Stem Deflector

'Sealed' Nut 71213-02200 replaces Locknut **40** (to cut-off air supply to Vacuum System) as follows:

- Loosen Locknut **40** using 16mm A Spanner.
- Unscrew and remove both Jaw Spreader Housing **41** and Locknut **40**.
- Replace Locknut **40** with 'Sealed' Nut 71213-02200, screw 'Sealed" Nut onto Piston **36**.
- Jaw Spreader Housing **41** must be tightened onto Piston **36**, finally tightening 'Sealed' Nut against it.

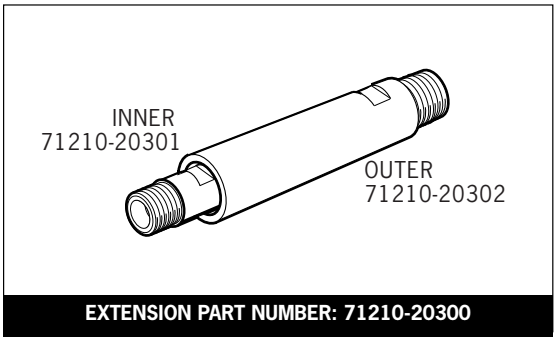


Note: If Pintail Deflector is used with Maxlok® equipment then Seal Housing **52** will need to be removed and Stop Nut 71233-20200 fitted instead of 'Sealed' Nut 71213-02200.

Extension

Fitted between the tool and the nose assembly the extension allows access into deep channels.

- To fit the extension, remove any nose assembly components.
- Screw the inner extension to Jaw Spreader Housing **41**.
- Screw the outer onto Head Assembly **58**.
- Fit the nose assembly onto the extension.



EXTENSION PART NUMBER: 71210-20300

Item numbers in **bold** refer to the general assembly drawing and parts list on pages 24 and 25.

Servicing the Tool

I M P O R T A N T
Read Safety Instructions on page 4.
The employer is responsible for ensuring that tool maintenance instructions are given to the appropriate personnel.
The operator should not be involved in maintenance or repair of the tool unless properly trained.
The tool shall be examined regularly for damage and malfunction.

Daily

- Daily, before use or when first putting the tool into service, pour a few drops of clean, light lubricating oil into the air inlet of the tool if no lubricator is fitted on air supply. If the tool is in continuous use, the air hose should be disconnected from the main air supply and the tool lubricated every two to three hours.
- Check for air leaks. If damaged, hoses and couplings should be replaced.
- If there is no filter on the pressure regulator, bleed the air line to clear it of accumulated dirt or water before connecting the air hose to the tool. If there is a filter, drain it.
- Check that the nose assembly or swivel head is correct for the fastener to be placed.
- Check the stroke of the tool meets the minimum specification (page 5). The last step of the Priming Procedure on page 25 explains how to measure the stroke.
- Either a stem collector or a stem deflector must be fitted to the tool unless using a swivel head.
- Check that Base Cover **31** is fully tightened onto Body **30**.
- Stem Collector Bottle: 'O' Rings **20** and **28** to be cleaned and lubricated with Molykote® 55m.

Weekly

- Dismantle and clean the nose assembly with special attention to the jaws. Lubricate with Moly Lithium grease before assembling.
- Check for oil leaks and air leaks in the air supply hose and fittings.

Moly Lithium Grease EP 3753 Safety Data

Grease can be ordered as a single item, the part number is shown in the Service Kit page 18.

First Aid

SKIN:

As the grease is completely water resistant it is best removed with an approved emulsifying skin cleaner.

INGESTION:

Ensure the individual drinks 30ml Milk of Magnesia, preferably in a cup of milk.

EYES:

Irritant but not harmful. Irrigate with water and seek medical attention.

Fire

FLASH POINT: Above 220°C.

Not classified as flammable.

Suitable extinguishing media: CO_2, Halon or water spray if applied by an experienced operator.

Environment

Scrape up for burning or disposal on approved site.

Handling

Use barrier cream or oil resistant gloves

Storage

Away from heat and oxidising agent.

Item numbers in **bold** refer to the general assembly drawing and parts list on pages 24 and 25.

Servicing the Tool

Molykote® 55m Grease Safety Data

First Aid

SKIN:

Flush with water. Wipe off.

INGESTION:

No first aid should be needed.

EYES:

Flush with water.

Fire

FLASH POINT: Above 101.1°C. (closed cup)

Explosive Properties: No

Suitable Extinguishing Media: Carbon Dioxide Foam, Dry Powder or fine water spray.

Water can be used to cool fire exposed containers.

Environment

Do not allow large quantities to enter drains or surface waters.

Methods for cleaning up: Scrape up and place in suitable container fitted with a lid. The spilled product produces an extremely slippery surface.

Harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment. However, due to the physical form and water - insolubility of the product the bioavailability is negligible.

Handling

General ventilation is recommended. Avoid skin and eye contact.

Storage

Do not store with oxidizing agents. Keep container closed and store away from water or moisture.

Molykote® 111 Grease Safety Data

First Aid

SKIN:

No first aid should be needed.

INGESTION:

No first aid should be needed.

EYES:

No first aid should be needed.

INHALATION:

No first aid should be needed.

Fire

FLASH POINT: Above 101.1°C. (closed cup)

Explosive Properties: No

Suitable Extinguishing Media: Carbon Dioxide Foam, Dry Powder or fine water spray.

Water can be used to cool fire exposed containers.

Environment

No adverse effects are predicted.

Handling

General ventilation is recommended. Avoid eye contact.

Storage

Do not store with oxidizing agents. Keep container closed and store away from water or moisture.

Servicing the Tool

Service Kit

For an easy complete service, Textron Fastening Systems Inc offers the complete service kit below.

SERVICE KIT : 71210-99990		Spanners are specified in inches and across flats unless otherwise stated	
PART N°	**DESCRIPTION**	**PART N°**	**DESCRIPTION**
07900-00667	PISTON SLEEVE	07900-00164	CIRCLIP PLIERS
07900-00692	TRIGGER VALVE EXTRACTOR	07900-00008	$^{7}/_{16}$ x $^{1}/_{2}$ SPANNER
07900-00670	BULLET	07900-00012	$^{9}/_{16}$ x $^{5}/_{8}$ SPANNER
07900-00672	'T' SPANNER	07900-00015	$^{5}/_{8}$ x $^{11}/_{16}$ SPANNER
07900-00706	'T' SPANNER SPIGOT	07900-00686	PEG SPANNER
07900-00684	GUIDE TUBE	07900-00677	SEAL EXTRACTOR
07900-00685	INSERTION ROD	07900-00698	STOP NUT
07900-00351	3 MM ALLEN KEY	07900-00700	PRIMING PUMP
07900-00469	2.5 MM ALLEN KEY	07992-00020	GREASE - MOLY LITHIUM E.P.3753
07900-00158	2 MM PIN PUNCH	07992-00075	GREASE - MOLYKOTE® 55M
		07900-00755	GREASE - MOLYKOTE® 111

Maintenance

(Annually or every 500,000 cycles whichever is the soonest)

Annually or every 500,000 cycles the tool should be completely dismantled and new components should be used where worn, damaged or recommended. All 'O' rings and seals should be renewed and lubricated with Molykote® 55m grease for pneumatic sealing or Molykote® 111 for hydraulic sealing.

I M P O R T A N T
Read Safety Instructions on page 4.
The employer is responsible for ensuring that tool maintenance instructions are given to the appropriate personnel.
The operator should not be involved in maintenance or repair of the tool unless properly trained.
The tool shall be examined regularly for damage and malfunction.

The airline must be disconnected before any servicing or dismantling is attempted unless specifically instructed otherwise.

It is recommended that any dismantling operation be carried out in clean conditions.

Before proceeding with dismantling, empty the oil from the tool following the first three steps of the 'Priming Procedure' on page 26.

Prior to dismantling the tool it is necessary to remove the nose equipment. For instructions see the nose assemblies section, pages 9 to 14.

For a complete service of the tool, we advise that you proceed with dismantling of sub-assemblies in the order shown.

After any dismantling REMEMBER to prime the tool see page 26 and to fit an appropriate nose assembly see pages 9 to 14.

Nose Equipment

- Unscrew Nose Casing **1** and Nose Tip.
- Unscrew Jaw Housing **3** and remove Jaws **4**, Jaw Spreader **5**, Spring **7** and Buffer **6**.
- Inspect all components. Renew all damaged or worn parts.
- Clean all parts and apply Moly Lithium Grease EP 3753 (07992-00020) to taper bore of Jaw Housing **3**.
- Insert Jaws **4**, Jaw Spreader **5**, Spring **7** and Buffer **6** into Jaw Housing **3** and assemble onto Jaw Spreader Housing **41***.
- Screw Nose Tip into Nose Casing and tighten.

Item numbers in **bold** refer to Nose Tip Tables on pages 10 to 13.

41* refers to illustration on page 24.

Servicing the Tool

Dismantling the Tool

Before dismantling the tool the oil must be emptied from it.

- With the air supply switched OFF at ON/OFF Valve Assembly **62** remove Bleed Screw **1** and Bonded Seal **6**.
- Insert tool over a suitable container, switch air supply ON and actuate tool.
- Oil will expel from bleed screw orifice into container.
- Switch air supply OFF after all oil is expelled.

This operation must have the Bleed Screw orifice facing away from the person performing this operation.

Head Assembly

- Twist and pull off Stem Collector Bottle Assembly **25**. See illustration on page 7.
- Remove Stop Plate Assembly **104** by unscrewing Screws **89** 2 off.
- Unscrew Retaining Nut **50**.
- Pull off Bottle Adaptor Assembly **32** together with 'O' Rings **20** and **28**.
- Remove End Cap Assembly **35** together with 'O' Ring **97** and Lip Seal **9**.
- Remove Spring **91**.
- Loosen Locknut **40** with a spanner* and unscrew Jaw Spreader Housing **41** together with 'O' Ring **12**.
- Remove Locknut **40** together with 'O' Rings **19** and **15**, withdraw Vacuum Sleeve **42**..
- Push Head Piston **36** to the rear and out of Head Assembly **58** taking care not to damage the cylinder bore
- Remove Seal Retainer **43**. Push Lip Seal **8** and Bearing Tape **26** to the rear and out of Head Assembly **58** taking care not to damage the cylinder bore.
- Remove Seal Housing **52** and Lip Seal **2**.

Assemble in reverse order noting the following points:

- Place Lip Seal **8** onto the insertion rod* ensuring correct orientation. Locate the guide tube* into the head of the tool and push the insertion rod* with the seal in place through the guide tube*. Pull the insertion rod* out and then the guide tube*.
- After fitting Lip Seals **11**, 'O' Rings **18** and Bearing Tape **27** onto the Head Piston **36** ensuring correct orientation, lubricate the cylinder bore and place the piston sleeve* into the back of Head Assembly **58**. Slide the bullet* onto the threaded part of Head Piston **36** and push the piston with the seals through the piston sleeve* as far as it will go. Slide the bullet* off the piston and remove piston sleeve*.
- Jaw Spreader Housing **41** must be fully tightened onto Head Piston **36** before tightening Locknut **40** against it.
- Reprime in accordance with the instructions on page 26.

* Item included in the nG4 Service Kit. For complete list see page 18.
Item numbers in **bold** refer to the general assembly drawing and parts list on pages 24 and 25.

Servicing the Tool

Pneumatic Piston Assembly

- Remove 'ON/OFF' valve assembly **62**.
- Clamp the body of the inverted tool **ACROSS THE AIR INLET BOSSES** in a vice fitted with soft jaws.
- Pull off Rubber Boot **48**.
- Using the peg spanner* unscrew Base Cover **31**.
- Unscrew Nyloc Nuts **67** (2 off) and remove Base Plate Assembly **65**.
- Remove Cylinder Liner **37** together with Sealing Washers **29** (2 off) and 'O' Rings **66** (2 off).
- Remove Pneumatic Piston Assembly **57** together with 'O' Ring **75**, Lip Seal **90** (3 off) and Guide Ring **51**.
- Engage the Seal Extractor* into Intensifier Seal Assembly **63** and withdraw Seal Assembly from intensifier tube of the Head Assembly **58**.

Assemble in reverse order to dismantling.

* seals should be checked for damage and replaced as necessary. Lubricate Pneumatic seals with Molykote® 55m Grease and Hydraulic seals with Molykote® 111 Grease.

Air Valve

Dismantling

- Remove Pneumatic Piston Assembly **57** as described above in Pneumatic Piston Assembly.
- Using Spanner (07900-00672), and Location Spigot (07900-00671). Unscrew Clamp Nut **39** and remove together with Top Plate Assembly **44** together with Tie Rods **56**, Transfer Tube Assembly **61**, 'O' Rings **14** and Silencer **53**.
- Remove tool from vice and separate Body **30** from Handle Assembly **64**. Remove 'O' ring **17**.
- Push out the Valve Seat **34**, from the Body **30**, together with 'O' Rings **14.**
- Pull out Valve Spool Assembly **59** from Handle Assembly **64**. Remove 'O' Ring **7** from handle counterbore.

Assembly

Assemble in reverse order to Dismantling Instructions

- Seals should be checked for damage and replaced if necessary, lubricated with Molykote® 55M Grease.
- Apply Loctite® 243 to Clamp Nut **39** and tighten to torque 11ftlb (14.91 Nm)

I M P O R T A N T

Check the tool against daily and weekly servicing.
Priming is ALWAYS necessary after the tool has been dismantled and prior to operating.

* Item included in the nG4 Service Kit. For complete list see page 18.
Item numbers in **bold** refer to the general assembly drawing and parts list on pages 24 and 25.

Servicing the Tool

Rotary Valve

Dismantling

- Using a 4mm pin punch (07900-00158) drive Trigger Pin **46** out and remove Trigger Assembly **33.**
- Remove Pneumatic Piston Assembly **57** as described in Pneumatic Piston Assembly, see page 20.
- Using Spanner (07900-00672), and Location Spigot (07900-00671), unscrew Clamp Nut **39** and remove together with Top Plate Assembly **44** together with Tie Rods **56**, Transfer Tube Assembly **61**, seperate Body **30** from Handle Assembly **64**. Remove 'O' Rings **16** and **17** NOTE ORIENTATION OF ROTARY VALVE **38**.
- Seperate Head Assembly **58** from Handle Assembly **64**. NOTE ORIENTATION OF ROTARY VALVE **38**
- Push out Rotary Valve **38** together with 'O' Rings **5**.

Assemble in reverse order to Dismantling Instructions noting the following:

- Seals should be checked for damage and replaced if necessary, lubricated with Molykote® 55m grease.
- Ensure Rotary Valve **38** is assembled in correct orientation, align pins with forks on the Trigger **33**. See illustration below.

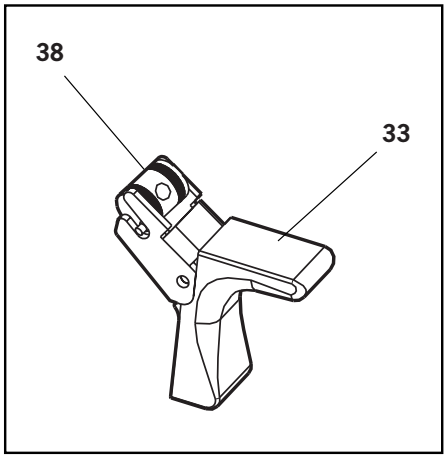
Trigger

Dismantling

- Using a 4mm pin punch (07900-00158) drive Trigger Pin **46** out and remove Trigger Assembly **33.**
- Unscrew Trigger Valve **21** using trigger valve extractor (0900-00692).

Assemble in reverse order to Dismantling Instructions noting the following:

- When assembling Trigger **33** the trigger forks locate on the pins each side of the Rotary Valve **38**.
- Ensure Rotary Valve **38** is orientated correctly. See illustration below.



Item numbers in **bold** refer to the general assembly drawing and parts list on pages 24 and 25.

Servicing the Tool

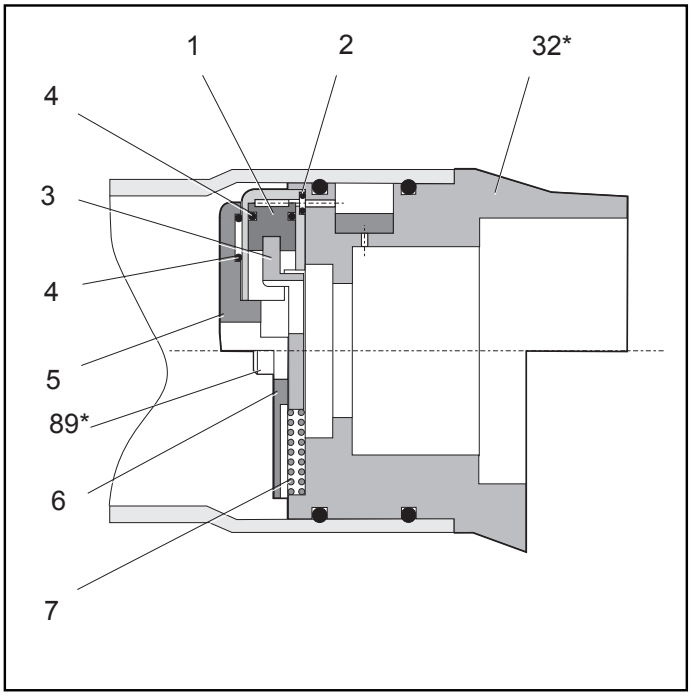
Stop Plate Assembly (71213-03900)

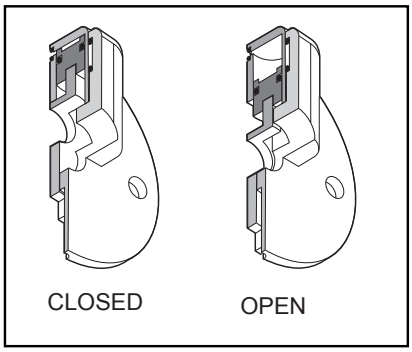
Assembly (see illustration below)

- Place 'O' Ring **2** into the recess in Housing **5** retain in position using grease Molykote® 55.
- Assemble 'O' Ring **4** onto Piston **1** and push assembly into Housing **5** making sure it is in as far as it will go.
- Position the slot in Piston **1** parallel to the step face in Housing **5**.
- Slide Plate Shut Off **3** into the assembled parts **1**, **2**, **4**, and **5**. Retain parts in place using grease Molykote® 55.
- Place 'O' Ring **4** into the recess of Cover Plate **6** retain in position using grease Molykote® 55.
- Place Spring **7** into position locate using the recesses in both Plate Shut Off **3** and Bottle Adaptor Assembly **32***.
- Position the above assembled parts onto Bottle Adaptor Assembly **32***.
- Secure in position using two Screws **89***.

*see pages 24 and 25.

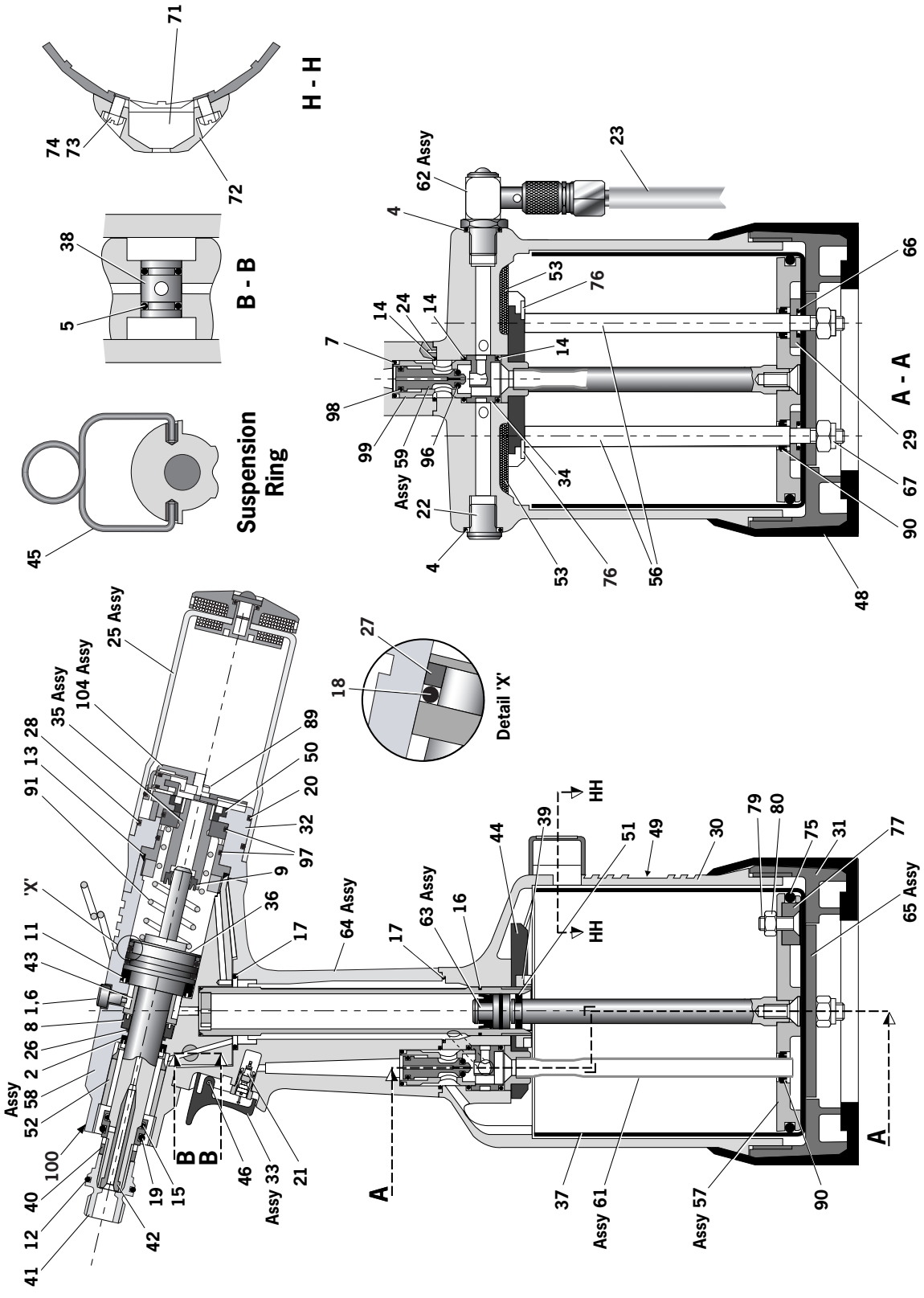
ITEM	PART No	DESCRIPTION
1	71213-03901	PISTON
2	07003-00412	O RING
3	71213-03902	PLATE SHUT OFF
4	07003-00411	O RING
5	71213-03904	HOUSING
6	71213-03905	COVER PLATE
7	71213-03906	SPRING





Notes

General Assembly of Base Tool 71233-02000



Parts List For 71233-02000

71233-02000 PARTS LIST * These are minimum recommended levels of spares based on regular servicing

ITEM	PART Nº	DESCRIPTION	QTY	SPARES
01	71230-02041	BLEED SCREW	1	
02	07003-00333	LIP SEAL	1	
04	07003-00127	'O' RING	1	
05	07003-00189	'O' RING	2	
06	07003-00194	M5 BONDED SEAL	1	
07	07003-00271	'O' RING	1	
08	07003-00273	LIP SEAL	1	
09	07003-00374	LIP SEAL	1	
11	07003-00341	LIP SEAL	1	
12	07003-00277	'O' RING	1	
13	07003-00278	'O' RING	1	
14	07003-00281	'O' RING	3	
15	07003-00204	'O' RING	1	
16	07003-00287	'O' RING	1	
17	07003-00288	'O' RING	2	
18	07003-00342	'O' RING	2	
19	07003-00310	'O' RING	1	
20	07003-00415	'O' RING	1	
21	07005-00088	TRIGGER VALVE	1	
22	07005-01274	1/8" BSP PLUG	1	
23	07008-00010	6" FLEXIBLE HOSE	1	
24	07007-00224	3mm DIAx10mm SPIROL PIN	2	
25	71213-03800	STEM COLLECTOR BOTTLE ASSEMBLY	1	
26	71233-02021	BEARING TAPE - PISTON ROD	1	
27	71213-02022	BEARING TAPE - PISTON	1	
28	07003-00416	'O' RING	1	
29	71221-02006	SEALING WASHER	2	
30	71223-02001	BODY MACHINED	1	
31	71221-02002	BASE COVER	1	
32	71213-03000	BOTTLE ADAPTOR ASSEMBLY	1	
33	71213-02008	TRIGGER ASSEMBLY	1	
34	71210-02009	VALVE SEAT	1	
35	71233-02025	END CAP ASSEMBLY	1	
36	71233-02121	HEAD PISTON	1	
37	71221-02008	CYLINDER LINER	1	
38	71213-02012	ROTARY VALVE	1	
39	71210-02014	CLAMP NUT	1	
40	71230-02015	LOCKNUT	1	
41	71210-02101	JAW SPREADER HOUSING	1	
42	71230-02102	VACUUM SLEEVE	1	
43	71210-02019	SEAL RETAINER	1	
44	71213-02010	TOP PLATE ASSEMBLY	1	
45	71210-02022	SUSPENSION RING	1	
46	71210-02024	TRIGGER PIN	1	
48	71221-02007	RUBBER BOOT	1	
49	71233-02027	LABEL	1	
50	71213-02028	RETAINING NUT	1	
51	71230-03205	GUIDE RING	1	
52	71210-02104	SEAL HOUSING	1	
53	71210-02031	SILENCER	2	
56	71221-02004	TIE ROD	2	
57	71231-03200	PNEUMATIC PISTON ASSEMBLY	1	
58	71233-03300	HEAD ASSEMBLY	1	
59	71210-03400	VALVE SPOOL ASSEMBLY	1	
61	71230-03600	TRANSFER TUBE ASSEMBLY	1	
62	71210-03700	ON/OFF VALVE ASSEMBLY	1	
63	71230-03800	INTENSIFIER SEAL ASSEMBLY	1	
64	71213-02013	HANDLE ASSEMBLY	1	
65	71221-02014	BASE PLATE ASSEMBLY	1	
66	07003-00027	'O' RING	2	
67	07002-00108	M6 NYLOC NUT	2	
71	71221-20105	MODIFIED COUNTER	1	
72	71221-20101	COUNTER MOULDING	1	
73	71221-20103	MOULDING RETAINING NUT	2	
74	71221-20102	SPECIAL M4 SCREW	2	
75	07003-00182	'O' RING	1	
76	07002-00163	WASHER	2	
77	07007-01993	CENTRE POLE MAGNET	1	
79	71221-20104	M5 X 19 COUNTERSUNK SCREW	1	
80	07002-00098	M5 NYLOK NUT	1	
89	07001-00677	SCREW	2	
90	07003-00274	LIP SEAL	3	
91	07940-03002	SPRING	1	
96	07003-00268	'O' RING	1	
97	07003-00398	'O' RING	2	
98	07003-00042	'O' RING	1	
99	71210-03401	VALVE BODY	1	
100	07007-01503	LABEL BOOK SYMBOL	1	
103	07900-00844	TOOL INSTRUCTION MANUAL	1	
104	71213-03900	STOP PLATE ASSEMBLY	1	

Priming

Priming is ALWAYS necessary after the tool has been dismantled and prior to operating. It may also be necessary to restore the full stroke after considerable use, when the stroke may be reduced and fasteners are not fully placed by one operation of the trigger.

Oil Details

The recommended oil for priming is Hyspin® VG32 available in 0.5 litre (part number 07992-00002) or one gallon containers (part number 07992-00006). Please see safety data below.

Hyspin® VG 32 Oil Safety Data

First Aid

SKIN:

Wash thoroughly with soap and water as soon as possible. Casual contact requires no immediate attention. Short term contact requires no immediate attention.

INGESTION:

Seek medical attention immediately. DO NOT induce vomiting.

EYES:

Irrigate immediately with water for several minutes. Although NOT a primary irritant, minor irritation may occur following contact.

Fire

Flash point 232°C. Not classified as flammable.

Suitable extinguishing media: CO_2, dry powder, foam or water fog. DO NOT use water jets.

Environment

WASTE DISPOSAL: Through authorised contractor to a licensed site. May be incinerated. Used product may be sent for reclamation.

SPILLAGE: Prevent entry into drains, sewers and water courses. Soak up with absorbent material.

Handling

Wear eye protection, impervious gloves (e.g. of PVC) and a plastic apron. Use in well ventilated area.

Storage

No special precautions.

Priming Kit

To enable you to follow the priming procedure opposite, you will need to obtain a Priming Kit:

PRIMING KIT : 07900-00688	
PART Nº	**DESCRIPTION**
07900-00351	3mm ALLEN KEY
07900-00700	PRIMING PUMP
07900-00224	4mm ALLEN KEY

Priming

Priming Procedure

I M P O R T A N T

DISCONNECT THE TOOL FROM THE AIR SUPPLY OR SWITCH OFF AT VALVE 55.
REMOVE NOSE ASSEMBLY OR SWIVEL HEAD COMPONENTS.
All operations should be carried out on a clean bench, with clean hands in a clean area.
Ensure that the new oil is perfectly clean and free from air bubbles.
Care MUST be taken at all times, to ensure that no foreign matter enters the tool, or serious damage may result.

- Switch OFF air supply at ON/OFF Valve Assembly **62**.
- Remove all nose equipment. (see pages 9 and 14)
- Remove Bleed Screw **1** and Bonded Seal **6.**
- Invert tool over suitable container, switch ON air supply at ON/OFF Valve Assembly **62** and actuate tool.
- Residual oil in the tools hydraulic system will empty through bleed screw orifice.

CARE SHALL BE TAKEN TO ENSURE THAT THE BLEED HOLE IS NOT DIRECTED TOWARDS THE OPERATOR OR OTHER PERSONNEL.

- Switch air supply OFF at ON/OFF Valve Assembly **62**.
- Screw priming pump (07900-00700) into bleed screw port, utilising Bonded Seal **6**.
- Actuate Priming Pump by pressing down and releasing several times until resistance is evident and the Head Piston starts to move rearward.

ENSURE PUMP IS KEPT 'SQUARE' TO BLEED SCREW PORT DURING PRIMING OPERATION TO PREVENT BREAKAGE OF BLEED NIPPLE ON PRIMING PUMP.

- Remove the Priming Pump, surplus oil will expel from bleed screw port.
- Replace the Bleed Screw **1** together with Bonded Seal **6.**
- Switch ON air supply at ON/OFF Valve Asembly **62.**
- Check that the stroke of the Head Piston reaches specification. If not repeat above procedure.
- Switch OFF air supply and refit nose equipment. (see pages 9 to 14).

Item numbers in **bold** refer to the general assembly drawing and parts list on pages 24 and 25.

Fault Diagnosis

Symptom	Possible Cause	Remedy	Page Ref
More than one operation of the trigger needed to place fastener	Air leak	Tighten joints or replace components	
	Insufficient air pressure	Adjust air pressure to within specification	5
	Worn or broken jaws	Fit new jaws	9 to 14
	Low oil level or air in oil	Prime tool	26, 27
	Build up of dirt inside the nose assembly	Service nose assembly	14
Tool will not grip stem of fastener	Worn or broken jaws	Fit new jaws	9 to 14
	Build up of dirt inside the nose assembly	Service nose assembly	14
	Loose jaw housing	Tighten against locking ring	8
	Weak or broken spring in nose assembly	Fit new spring	9 to 14
	Incorrect component in nose assembly	Identify and replace	9 to 14
Jaws will not release broken stem of fastener	Build up of dirt inside the nose assembly	Service nose assembly	9
	Jaw housing, nose tip or nose casing not properly seated	Tighten nose assembly	9 to 14
	Weak or broken spring in nose assembly	Fit new spring	9 to 14
	Air or oil leak	Tighten joints or replace components	
	Low oil level or air present in oil	Prime tool	26, 27
Cannot feed next fastener	Broken stems jammed inside tool	Empty stem collector	7
		Check jaw spreader is correct	9 to 14
		Adjust air pressure to within specification	5
Slow cycle	Low air pressure	Adjust air pressure to within specification	5
	Build up of dirt inside the nose assembly	Service nose assembly	14
Tool fails to operate	No air pressure	Connect and adjust to within specification	5
	Damaged Trigger Valve **21**	Replace	21
Fastener fails to break	Insufficient air pressure	Adjust air pressure to within specification	5
	Fastener outside tool capability	Use more powerful Genesis tool. Contact Textron Fastening Systems	
	Low oil level or air present in oil	Prime tool	26, 27

Item numbers in **bold** refer to the general assembly drawing and parts list on pages 24 and 25.

Other symptoms or failures should be reported to your local TFS authorised distributor or repair centre.

Notes

Notes

Declaration of Conformity

We, Textron Fastening Systems Inc, Watchmead Industrial Estate, Welwyn Garden City, Herts, AL7 1LY
declare under our sole responsibility that the product:

Model nG4

Serial No.

to which this declaration relates is in conformity with the following standards:

EN ISO 12100 - parts 1 & 2

BS EN ISO 8662 - part 6	BS EN ISO 11202
BS EN ISO 3744	BS EN 982
ISO EN 792 part 13 - 2000	BS EN 983

following the provisions of the Machine Directive 89/392/EC
(as amended by Directive 91/368/EC, 93/44/EC as superceded by 98/37/EC and 93/68/EC)

A. Seewraj - Product Engineering Manager - Automation Tools

Date of issue

CE **This box contains a power tool which is in conformity with Machines Directive 89/392/EC. The 'Declaration of Conformity' is contained within.**

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