

# 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.

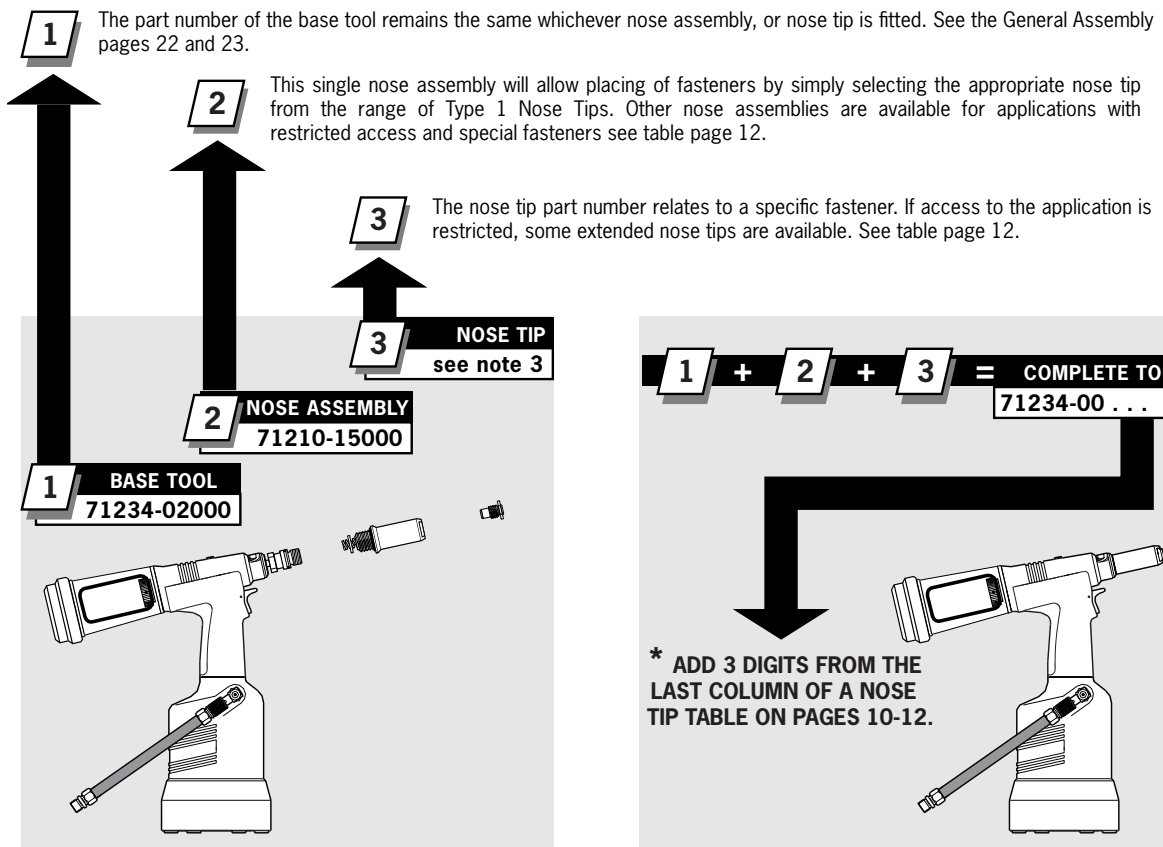
**NOSE EQUIPMENT MUST BE FITTED AS DESCRIBED ON PAGE 9.**

FASTENER NAME	FASTENER SIZE ( $\frac{MM}{IN}$ )													
	4.3	4.8	5	5.2	6	6.4	6.5	7	8	9	9.5	10	11	12
	-	$\frac{3}{16}$	-	-	-	$\frac{1}{4}$	-	-	-	-	$\frac{3}{8}$	-	-	-
AVEX®		●				●								
STAVEX®		●				●								
AVINOX®II		●				●								
AVIBULB®		●			●	●								
BULBEX®		●				●								
T-LOK®	●	●												
AVDEL® SR		●				●								
HEMLOK®		●				●								
MAXLOK®		●				●								
AVTAINER®											●			
** AVSEAL® II								●	●	●		●	●	●
Q RIVET		●				●								
T RIVET		●				●								
AVDELMATE®		●				●								
KLAMP-TITE®		●				●								
KLAMPTITE KTR®		●				●								
* LOCKBOLT		●				●								

\* For  $\frac{3}{16}$ " and  $\frac{1}{4}$ " Lockbolt® equipment refer to separate Data Sheet 07900-00795.

\*\* For Avseal® equipment refer to separate Data Sheet 07900-00840.

## Part Numbering



# Nose Assemblies

## Nose Tip Selection

### IMPORTANT

**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. If you are placing Avtainer® a Type 5, Hemlok® and 1/4" Interlock® a Type 6 must be used. 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®

### IMPORTANT

**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 **3** or Chuck Collet **9** 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\*.

## Servicing Instructions

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.

Use Spanner 07900-00849 (supplied with tool) to assist when servicing nose equipment.

- Remove the nose equipment using the reverse procedure to the 'Fitting instructions'.
- Any worn or damaged part should be replaced.
- Clean and check wear on Jaws.
- Ensure that neither the Jaw Spreader nor the Front Spring Guide is distorted.
- Check Spring **7** is not distorted.
- Assemble according to fitting instructions above.

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

# Nose Assemblies

## Nose Tips

### TYPE 1 NOSE TIPS

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

NAME	FASTENER		MATERIAL	NOSE TIP (mm)			see below
	Ø <sup>1</sup>			PART N°	'A'	'B'	
<b>AVEX®</b> Large flange	3/16	4.8	Aluminium	07381-04701	12.7	2.8	... <b>010</b>
	3/16	4.8	Aluminium	07340-04800	19.0	3.3	... <b>016</b>
	3/16	4.8	Steel	07490-04401	12.7	3.3	... <b>017</b>
	3/16	4.8	Aluminium	07340-06601 <sup>2</sup>	12.7	4.1	... <b>015</b>
	1/4	6.4	Aluminium	07612-02001	12.7	3.3	... <b>021</b>
<b>STAVEX®</b> Countersunk	3/16	4.8	Steel	07381-04701	19.0	3.3	... <b>016</b>
	3/16	4.8	Steel	07381-04701	12.7	2.8	... <b>010</b>
	3/16	4.8	Stainless Steel	07381-04701	12.7	2.8	... <b>010</b>
Large flange	3/16	4.8	Steel	07340-04800	12.7	2.8	... <b>010</b>
	3/16	4.8	Aluminium	71220-16080	12.7	2.8	... <b>010</b>
<b>BULBEX®</b>	3/16	4.8	Aluminium	71220-16080	12.7	2.8	... <b>010</b>
<b>AVINOX® II</b>	3/16	4.8	Stainless Steel	07498-01401	12.7	4.8	... <b>082</b>
<b>T-LOK®</b>	-	4.3	Steel	07340-06201	12.7	3.3	... <b>120</b>
	3/16	4.8	Steel	07340-06201	12.7	3.3	... <b>120</b>
<b>AVIBULB®</b>	3/16	4.8	Steel	07498-01401	12.7	4.8	... <b>082</b>
	-	6.0	Steel	07612-02001	12.7	3.3	... <b>021</b>
<b>AVDEL® SR</b> Countersunk	3/16	4.8	Any	07348-07001 <sup>5</sup>	12.7	5.7	... <b>062</b>
	1/4	6.4	Any	71220-60001	12.7	3.3	... <b>063</b>
	3/16	4.8	Any	71210-16050 <sup>6</sup>	12.7	5.7	... <b>064</b>
<b>Q RIVET</b>	3/16	4.8	Any	07340-06201	12.7	3.3	... <b>120</b>
	1/4	6.4	Any	07612-02001	12.7	3.3	... <b>021</b>
<b>AVDELMATE®</b>	3/16	4.8	Any	07340-06201	12.7	3.3	... <b>120</b>
	1/4	6.4	Any	07612-02001	12.7	3.3	... <b>021</b>
<b>T RIVET</b> Large flange	3/16	4.8	Al/Al <sup>4</sup>	703-A-25-6TA	15.9	9.5	... <b>380</b>
	3/16	4.8	Al/Al <sup>4</sup>	703-B-21	12.7	8.0	... <b>381</b>
Large flange	3/16	4.8	Al/Steel <sup>4</sup>	703-A-25-6T	15.9	9.5	... <b>383</b>
	3/16	4.8	Al/Steel <sup>4</sup>	703-B-26	12.7	9.0	... <b>384</b>
Large flange	1/4	6.4	Al/Al <sup>4</sup>	743-A-25-8TA	17.5	11.2	... <b>385</b>
	1/4	6.4	Al/Al <sup>4</sup>	743-B-21	12.7	8.0	... <b>386</b>
Large flange	1/4	6.4	Al/Steel <sup>4</sup>	743-A-25-8T	16.7	10.2	... <b>387</b>
	1/4	6.4	Al/Steel <sup>4</sup>	743-B-26	12.7	8.3	... <b>388</b>
<b>KLAMPTITE KTR®</b>	3/16	4.8	Al Alloy	71220-16060	12.7	4.8	... <b>500</b>
	1/4	6.4	Al Alloy	71220-16061	12.7	4.8	... <b>501</b>
<b>KLAMP-TITE®</b>	3/16	4.8	Al Alloy	07381-04701	12.7	2.8	... <b>010</b>
	1/4	6.4	Al Alloy	07162-02001	12.7	2.8	... <b>021</b>

#### NOSE ASSEMBLY part n° 71210-15000

ITEM	DESCRIPTION	PART N°
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

**COMPLETE TOOL  
PART NUMBER :**  
precede with  
71234-00

# Nose Assemblies

## Nose Tips

### TYPE 2 NOSE TIPS

**NOSE ASSEMBLY**  
part n° 71210-15200

ITEM	DESCRIPTION	PART N°
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
17	JAW SPREADER HOUSING	71210-02101
18	'O' RING	07003-00277

NAME	FASTENER		NOSE TIP (mm)			see below	
	Ø <sup>1</sup>	MATERIAL	PART N°	'A'	'B'		
AVEX®	3/16	4.8	Aluminium	07340-02807	12.7	10.0	... 0 1 4
	3/16	4.8	Steel	07340-07301	12.7	11.8	... 0 1 8
BULBEX®	3/16	4.8	Aluminium	07340-02807	12.7	10.0	... 0 1 4
T-LOK®	-	4.3	Steel	07241-07101	12.7	10.0	... 1 2 1
	3/16	4.8	Steel	07241-07101	12.7	10.0	... 1 2 1

<sup>1</sup> In inches then in millimetres.

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

**COMPLETE TOOL PART NUMBER :**  
precede with  
71234-00

### TYPE 5 NOSE TIP

**NOSE ASSEMBLY**  
part n° 71230-15600

ITEM	DESCRIPTION	PART N°
1	NOSE CASING	07498-00501
2	'O' RING	07003-00067
9	CHUCK COLLET	07498-00801
4	JAWS	07220-02302

NAME	FASTENER		NOSE TIP (mm)			see below	
	Ø <sup>1</sup>	MATERIAL	PART N°	'A'	'B'		
AVTAINER®	3/8	9.6	Steel	07498-00802	19.1	4.1	... 2 4 3

<sup>1</sup> In inches then in millimetres.

ITEM	DESCRIPTION	PART N°
10	FRONT SPRING GUIDE	07498-00803
7	SPRING	07500-02005
11	REAR SPRING GUIDE	07498-00503
8	LOCKING RING	07340-00327
13	STOP NUT ASSY	71233-20200

**COMPLETE TOOL PART NUMBER :**  
precede with  
71234-00

### TYPE 6 NOSE TIPS

**NOSE ASSEMBLY**  
part n° 71230-15800

ITEM	DESCRIPTION	PART N°
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		NOSE TIP (mm)			see below	
	Ø <sup>1</sup>	MATERIAL	PART N°	'A'	'B'		
HEMLOK®	1/4	6.4	Any	07612-02001	14.3	3.6	... 2 6 1
STAVEX®	1/4	6.4	Any	07612-02001	14.3	3.6	... 2 6 1

<sup>1</sup> In inches then in millimetres.

**COMPLETE TOOL PART NUMBER :**  
precede with  
71234-00

# Nose Assemblies

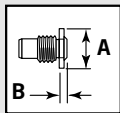
## Nose Tips

### TYPE 7 NOSE TIPS

**NOSE ASSEMBLY**  
 part n° 71233-15000

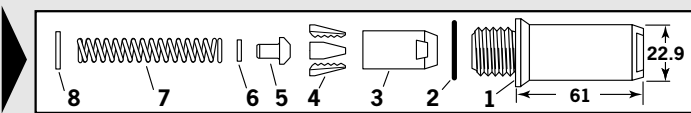
ITEM	DESCRIPTION	PART N°
1	NOSE CASING	07340-00306
2	'O' RING	07003-00067
3	JAW HOUSING	07612-02003
4	JAWS	71230-16101
5	JAW SPREADER	71233-15003
6	BUFFER	07498-03003
7	SPRING	07500-00418
8	LOCKING RING	07340-00327

NAME	FASTENER		MATERIAL	NOSE TIP (mm)		see below
	NAME	Ø <sup>1</sup>		PART N°	'A'	
AVIBULB®	1/4	6.4	Any	71233-15001	14.3	3.0 ... <b>0 8 4</b>
AVINOX®	1/4	6.4	Any	71233-15002	14.3	3.0 ... <b>0 8 3</b>



**COMPLETE TOOL PART NUMBER :**  
 precede with 71234-00

<sup>1</sup> In inches then in millimetres.



### MAXLOK® - NOSE ASSEMBLY

NAME	FASTENER		NOSE ASSEMBLY PART N°	see below
	NAME	Ø <sup>1</sup>		
MAXLOK®	3/16	4.8	All	07610-02000 ... <b>3 7 1</b>
	1/4	6.4	All	07610-02100 ... <b>3 7 2</b>

<sup>1</sup> In inches then in millimetres

**COMPLETE TOOL PART NUMBER :**  
 precede with 71234-00

**NOSE ASSEMBLY**  
 part n° 07610-02000 for 3/16" Ø

ITEM	DESCRIPTION	PART N°
4	JAWS	07610-02003
7	SPRING	07610-02107
8	LOCKING RING	07610-02004
9	CHUCK COLLET	07610-02002
10	SPRING GUIDE	07220-02104
12	ANVIL	07610-02001

**NOSE ASSEMBLY**  
 part n° 07610-02100 for 1/4" Ø

ITEM	DESCRIPTION	PART N°
4	JAWS	07610-02103
7	SPRING	07610-02107
8	LOCKING RING	07610-02004
9	CHUCK COLLET	07610-02102
10	SPRING GUIDE	07220-02104
12	ANVIL	07610-02101

**ADAPTOR KIT**  
 part n° 71234-03400 for 3/16" Ø and 1/4" Ø

13	STOP NUT ASSY	71233-20200
14	CHUCK COLLET ADAPTOR	07610-00501
15	ANVIL ADAPTOR	71230-02063
16	ANVIL NUT	07610-00307



**READ MAXLOK® 'FITTING INSTRUCTIONS' PAGE 14.**



# Nose Assemblies

## Fitting instruction for Avtainer® and Maxlok® Nose Assemblies

### IMPORTANT

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 71233-20200 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 22 and 23. Other items numbers refer to the 'Type 5 Nose Tip' table page 12.

- 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®

Item numbers in **bold** refer to the general assembly and parts list pages 22-23. Other items numbers refer to the 'Maxlok® Nose Tip' table page 13.

- 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 Stop Nut Assy 13 onto Head Piston **36**.
- Substitute Jaw Spreader Housing 1 with Chuck Collet Adaptor 14. Tighten fully onto piston before tightening the Stop Nut Assy 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 15 into the Head Assembly.
- Place Anvil 12 over Chuck Collet 9 and lock into place with Anvil Nut 16.

## 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 22 and 23.