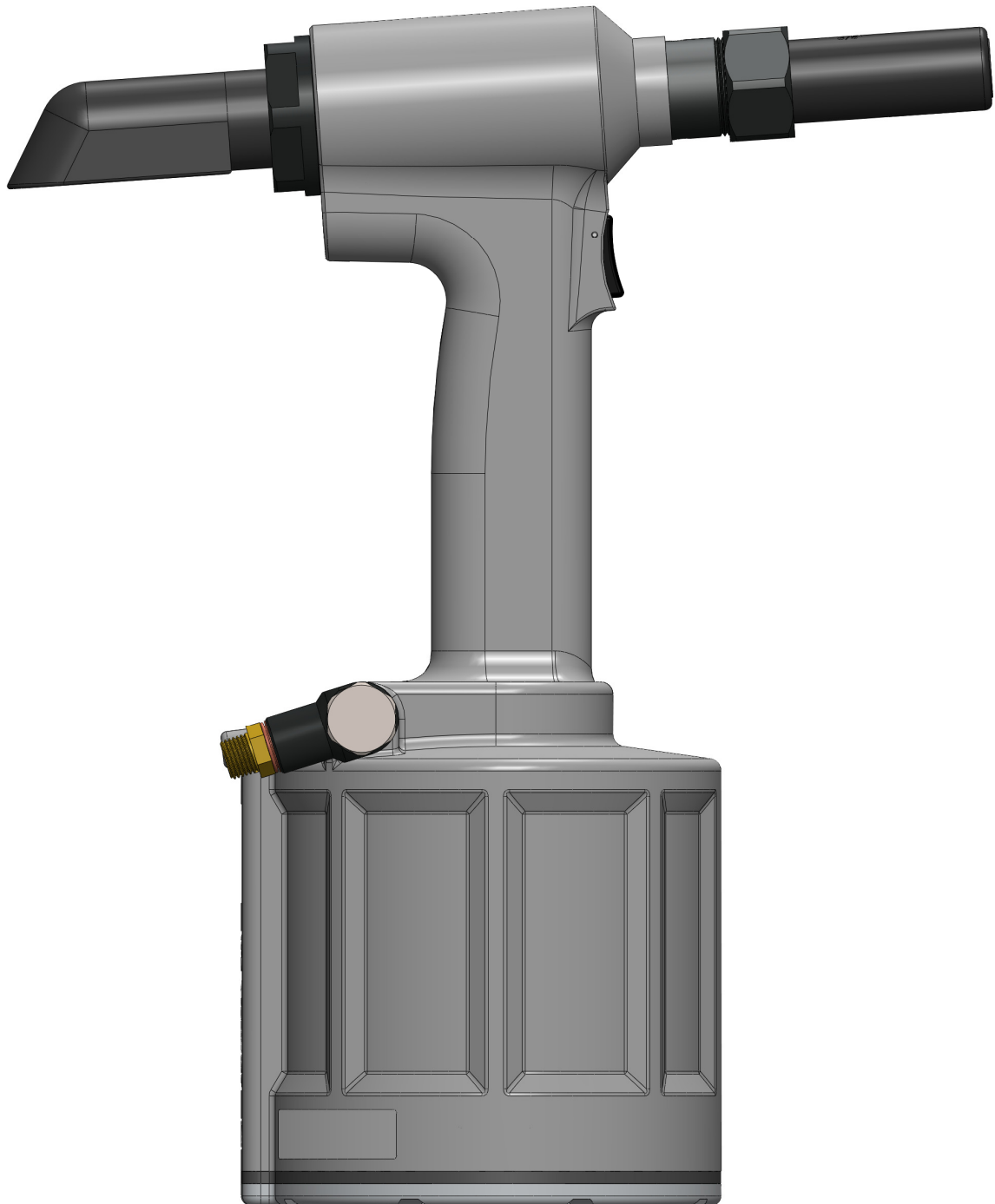




## Instruction Manual

Original Instruction



**73200 Tool**

Hydro-Pneumatic Power Tool

**STANLEY**  
Engineered Fastening



# Contents

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## LIMITED WARRANTY

Avdel makes the limited warranty that its products will be free of defects in workmanship and materials which occur under normal operating conditions. This Limited Warranty is contingent upon: (1) the product being installed, maintained and operated in accordance with product literature and instructions, and (2) confirmation by Avdel of such defect, upon inspection and testing. Avdel makes the foregoing limited warranty for a period of twelve (12) months following Avdel's delivery of the product to the direct purchaser from Avdel. In the event of any breach of the foregoing warranty, the sole remedy shall be to return the defective Goods for replacement or refund for the purchase price at Avdel's option. THE FOREGOING EXPRESS LIMITED WARRANTY AND REMEDY ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES. ANY IMPLIED WARRANTY AS TO QUALITY, FITNESS FOR PURPOSE, OR MERCHANTABILITY ARE HEREBY SPECIFICALLY DISCLAIMED AND EXCLUDED BY AVDEL.

Avdel UK Limited policy is one of continuous product development and improvement and we reserve the right to change the specification of any product without prior notice.

# Safety Instructions

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**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 Avdel UK Limited.
- 3 Any modification undertaken by the customer to the tool/machine, nose assemblies, accessories or any equipment supplied by Avdel UK Limited or their representatives, shall be the customer's entire responsibility. Avdel UK Limited 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 Avdel UK Limited procedures. Do not dismantle this tool/machine without prior reference to the maintenance instructions. Please contact Avdel UK Limited 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 Act 1974" applies. Any question regarding the correct operation of the tool/machine and operator safety should be directed to Avdel UK Limited.
- 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 and that hoses are always in a good condition.
- 11 The operating pressure shall not exceed 8.5 bar.
- 12 Do not operate the tool if it is not fitted with a complete nose assembly unless specifically instructed otherwise.
- 13 Care shall be taken to ensure that spent stems are not allowed to create a hazard.
- 14 The tool must be fitted with an undamaged pintail deflector before operating.
- 15 When the tool is fitted with a stem deflector, it should be rotated until the aperture is facing way from the operator and other person(s) working in the vicinity.
- 16 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'.
- 17 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.
- 18 When carrying the tool from place to place keep hands away from the trigger/lever to avoid inadvertent start up.
- 19 Excessive contact with hydraulic fluid oil should be avoided. To minimise the possibility of rashes, care should be taken to wash thoroughly.
- 20 C.O.S.H.H. data for all hydraulic oils and lubricants is available on request from your tool supplier.
- 21 Gloves shall be worn at all times.

# Specification

## Intent of Use

The hydro-pneumatic 73200 is designed to place Avdel® lockbolt and breakstem fasteners.

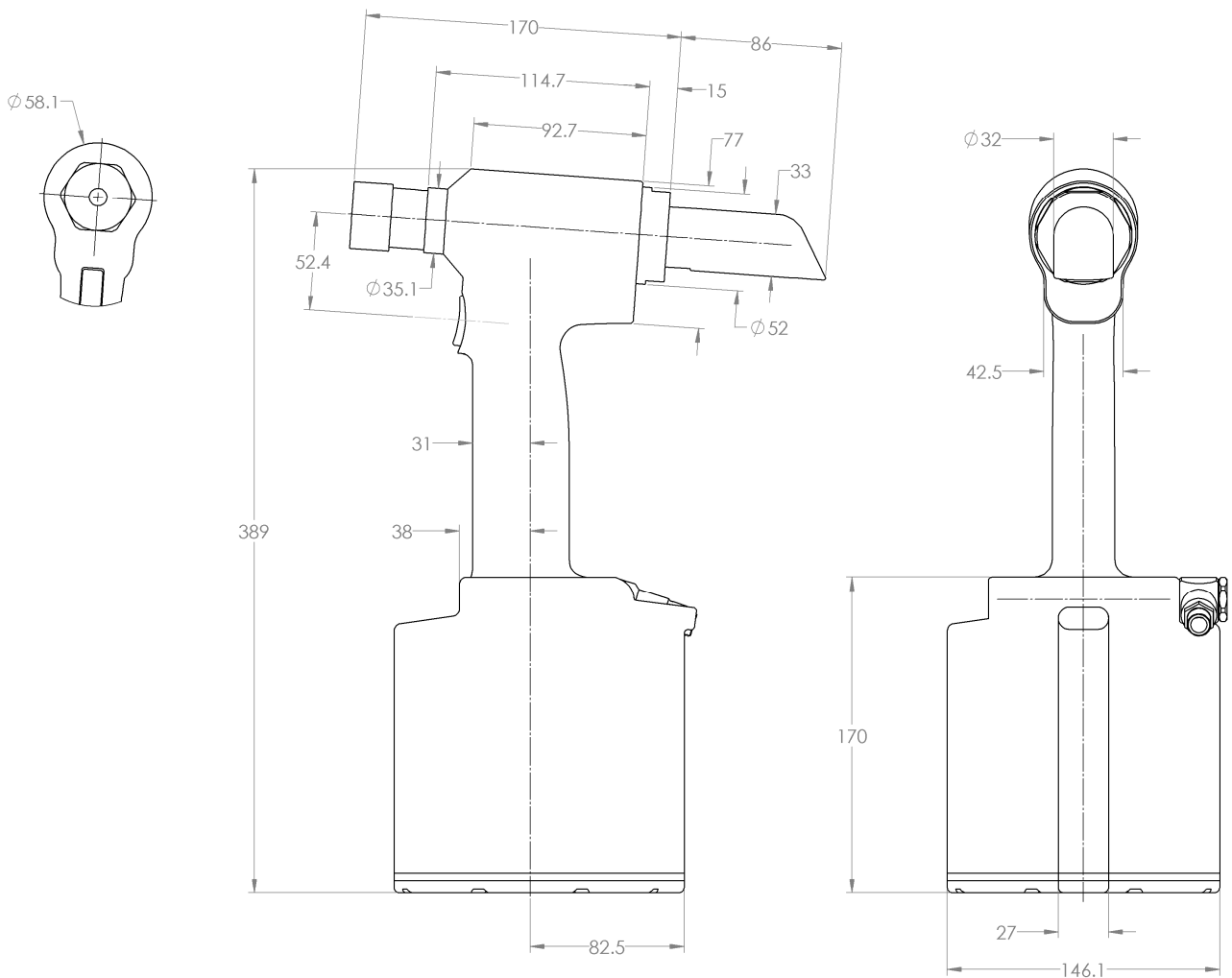
For a complete tool, order a base tool part number 73200-02000 and select a nose assembly from the Nose Assemblies section on page 7 to suit your application.

The safety instructions must be followed at all times.

## Tool Specification

<b>Air Pressure</b>	Minimum – Maximum	5.0 – 7.0 bar (73 – 102 lbf/in <sup>2</sup> )
<b>Free Air Volume Required</b>	@ 5.0 bar / 73 lbf/in <sup>2</sup>	14.2 litres
	@ 7.0 bar / 102 lbf/in <sup>2</sup>	19.9 litres
<b>Stroke</b>	Minimum	20 mm (0.79 in)
<b>Pull Force</b>	@ 5.0 bar / 73 lbf/in <sup>2</sup>	25.9 kN (5823 lbf)
	@ 7.0 bar / 102 lbf/in <sup>2</sup>	36.2 kN (8138 lbf)
<b>Cycle Time</b>	Approximately	3 seconds
<b>Noise Level</b>	Less than	L <sub>Aeq,T</sub> = 75 dB(A)
<b>Weight</b>	Without nose equipment	4.90 kg (10lb 13oz)
<b>Vibration</b>	Less than	2.5 m/s <sup>2</sup>

## Tool Dimensions



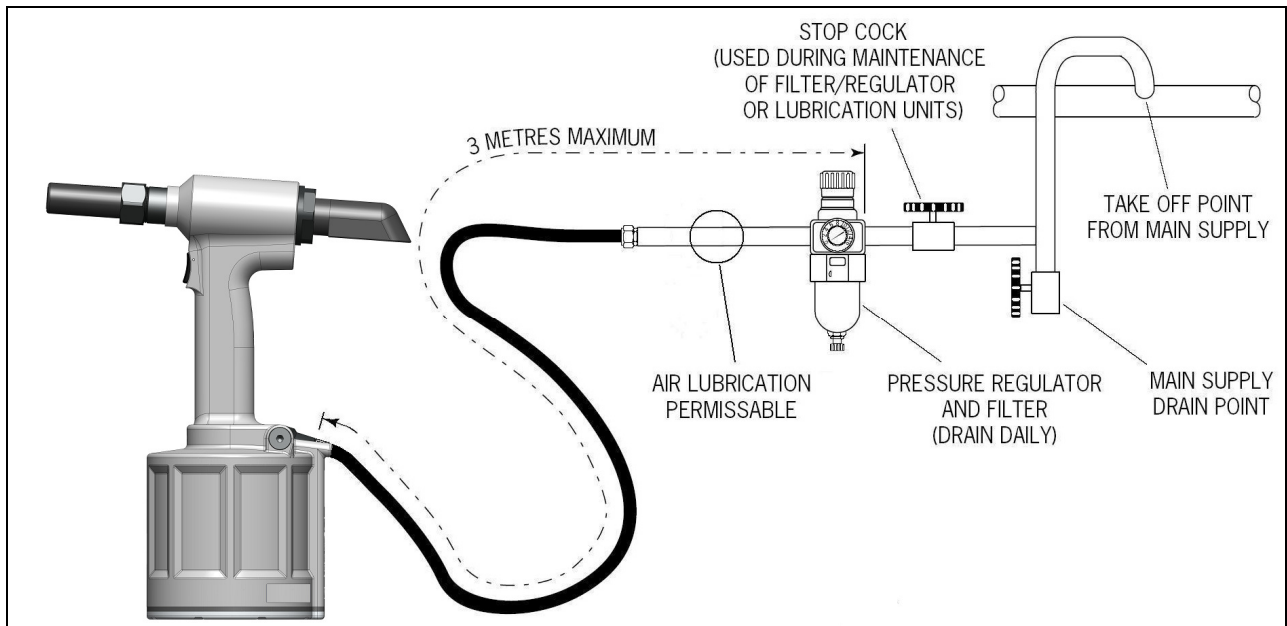
All dimensions are shown in millimetres.

# 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 ¼ inch.



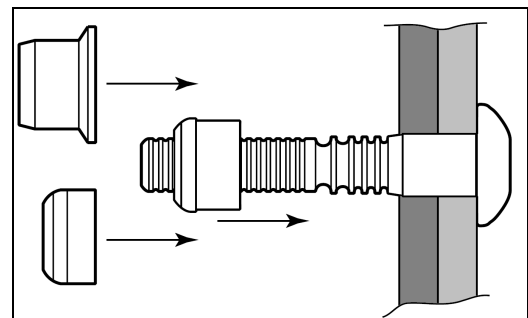
## Operating Procedure

### IMPORTANT

Do not attempt to break off a pintail without the installation of a collar. This will cause the unsecured portion of the pintail to eject from the nose at a high speed and force.

When installing lockbolt products:-

- Ensure that the correct nose assembly is fitted.
- Connect the tool to the air supply.
- Push the Avdelok® pin through the application hole.
- Place the collar on the pin (orientate as shown).
- Keeping the head of the pin against the application, push the tool on to the protruding pin tail.
- Fully depress the trigger. One cycle will ensure that the collar is swaged into the lock grooves of the pin and that the pin breaks at the breaker groove.
- Release the trigger. The tool completes its cycle by pushing itself off the collar and ejecting the pin tail at the rear.



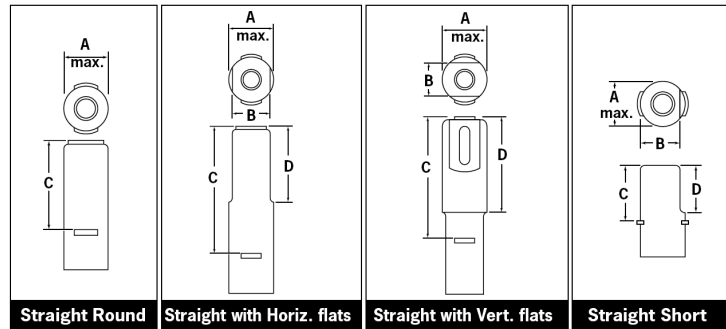
When installing breakstem products:-

- Ensure that the correct nose assembly is fitted.
- Connect the tool to the air supply.
- Insert the fastener stem into the nose of the tool.
- Bring the tool with the fastener to the application so that the protruding fastener enters squarely into the hole of the application.
- Fully depress the trigger. The tool cycle will broach the fastener.
- Release the trigger. The tool completes its cycle.

# Nose Assemblies

## Avdelok® Nose Assembly Selection

Avdelok® nose equipment is available in four types. It is essential that the correct nose assembly is fitted prior to operating the tool.



AVDELOK® NOSE ASSEMBLY SELECTION										
Ø	DESCRIPTION	NOSE EQUIPMENT								PART NO.
		A		B		C		D		
		mm	inch	mm	inch	mm	inch	mm	inch	
3/16"	Vertical Flats	21	0.812	16	0.625	54	2.120	25	1.000	07200-02500 *
3/16"	Horizontal Flats	21	0.812	16	0.625	54	2.120	25	1.000	07200-02700 *
1/4"	Vertical Flats	21	0.812	16	0.625	54	2.120	25	1.000	07200-02600 *
1/4"	Horizontal Flats	21	0.812	16	0.625	54	2.120	25	1.000	07200-02800 *
1/4"	Horizontal Flats (Stepped)	21	0.812	16	0.625	54	2.120	25	1.000	07200-03300 *
1/4"	Round	21	0.812	-	-	54	2.120	-	-	07200-03500 *
5/16"	Horizontal Flats	27	1.060	23.6	0.930	91	3.580	40	1.580	07220-02700
5/16"	Horizontal Flats (Stepped)	27	1.060	23.6	0.930	94	3.700	46	1.830	07220-03400
5/16"	Round	27	1.060	-	-	91	3.580	-	-	07220-05600
3/8"	Round	27	1.060	-	-	70	2.750	-	-	07220-02000
3/8"	Round (Stepped)	27	1.060	-	-	74.2	2.920	-	-	07220-03500
3/8"	Short	27	1.060	25.2	0.992	37	1.450	32	1.250	07220-06100

\* It is necessary to use adaptor kit (part number 73200-04300) to fit these nose assemblies to the tool.

Stepped anvils give a less severe deformation of the collars thus allowing placing of Avdelok® in softer materials like plastics, wood, etc.

## Standard Nose Assembly Selection

The fasteners below can also be placed on the 73200 tool. It is essential that the correct nose assembly is fitted prior to operating the tool.

STANDARD NOSE ASSEMBLY SELECTION			
FASTENER		NOSE EQUIPMENT	
NAME	Ø	DESCRIPTION	PART NO.
AVBOLT®	3/16" (4.8mm)	Refer to 07900-00905 datasheet	07220-08100
	1/4" (6.4mm)	Refer to 07900-00905 datasheet	07220-07500
	5/16" (8.0mm)	Refer to 07900-00905 datasheet	07220-07700 Δ
AVSEAL® II	11mm Standard	For Nose Tip selection refer to 07900-00840 datasheet	07220-06600
	12mm Standard	For Nose Tip selection refer to 07900-00840 datasheet	07220-06700
	13mm Low Pressure	For Nose Tip selection refer to 07900-00840 datasheet	07220-06600
	14mm Low Pressure	For Nose Tip selection refer to 07900-00840 datasheet	07220-06700
	16mm Low Pressure	For Nose Tip selection refer to 07900-00840 datasheet	07220-06800 Δ
INTERLOK®	3/8" (10mm)	Standard straight equipment	73200-04500 †
MAXLOK®	1/4" (6.4mm)	Standard straight equipment	*07610-02100
	3/16" (4.8mm)	Standard straight equipment	*07610-02000
MONOBOLT®	3/8" (10mm)	Standard Nose Tip	07220-07200 †

Δ Air inlet pressure of 7.0 bar required.

† Two tool actuations are needed to place these fasteners.

\* It is necessary to use adaptor kit (part number 73200-04300) to fit these nose assemblies to the tool.

# Nose Assemblies

## Fitting Instructions

It is essential that the correct nose assembly is fitted prior to operating the tool. By knowing the details of the fastener to be placed, you will be able to order a new complete nose assembly using the selection tables on pages 7.

### IMPORTANT

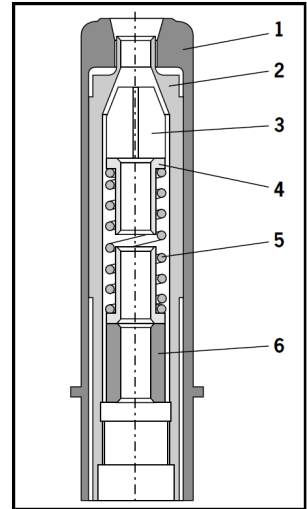
The air supply must be disconnected when fitting or removing nose assemblies unless specifically instructed otherwise.

Nose assemblies must be pre-assembled before fitting.

#### STRAIGHT HORIZONTAL, VERTICAL OR ROUND NOSE ASSEMBLIES

- Lightly coat the jaws with Moly Lithium grease.
- Assemble Spring Guides **4** and Spring **5**
- Balance the three Chuck Jaws **3** on the upper Spring guide **4** (using a spent pintail to aid positioning if necessary)
- Carefully lower Chuck Collect **2** over the assembled components
- Insert Spacer **6** (if required) into Chuck Collet **2** (5/16" dia only)
- Assembly can then be located in anvil

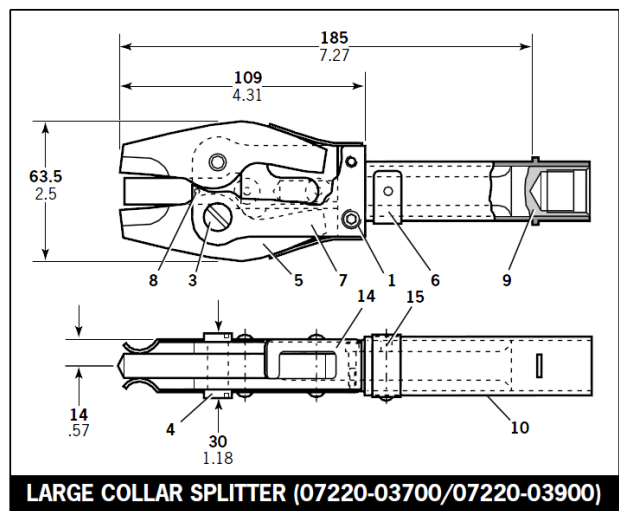
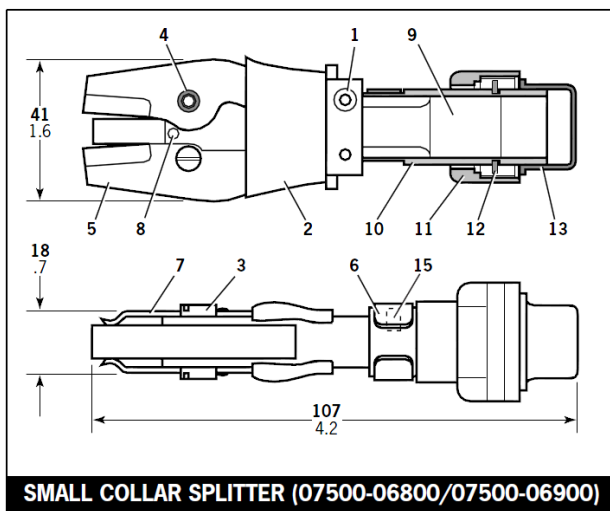
Item numbers in **bold** refer to the drawing opposite.



## Accessories

### Collar Splitters

You can order collar splitters to cut the collars off placed Avdelok®. The small size shown below left is for cutting 3/16" and 1/4" collars. The larger size shown below right is for 5/16" and 3/8" collars.

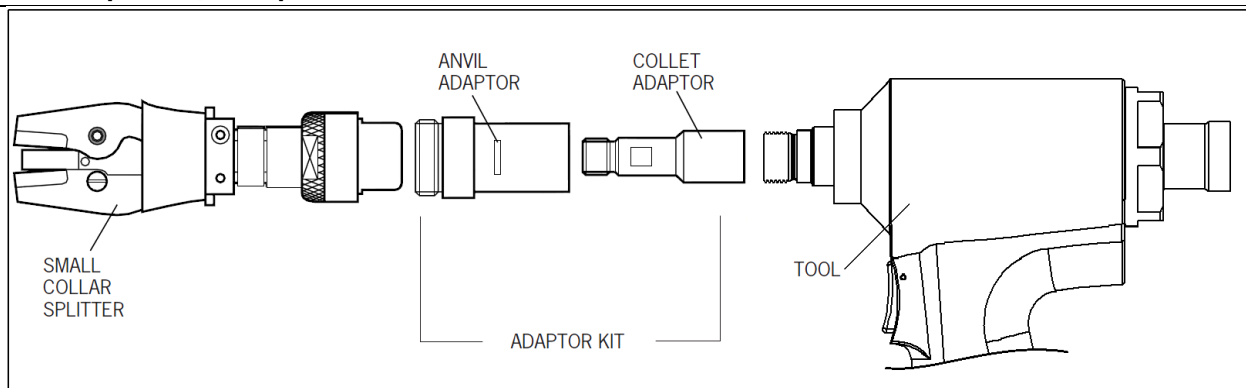


Dimensions shown in **bold** are millimetres. Other dimensions are in inches



COLLAR SPLITTERS - COMPONENT PART NUMBERS						
ITEM N°	DESCRIPTION	3/16" COLLAR SPLITTER 07500-06800	1/4" COLLAR SPLITTER 07500-06900	5/16" COLLAR SPLITTER 07220-03700	3/8" COLLAR SPLITTER 07220-03900	QTY
1	SOCKET HEAD CAP SCREW	07001-00004	07001-00004	07001-00142	07001-00142	2
2	SLEEVE	07210-02012	07210-02012	-	-	1
3	BLADE PIN	07210-02014	07210-02014	07220-03712	07220-03712	2
4	BLADE PIN SCREW	07210-02015	07210-02015	07220-03713	07220-03713	2
5	BLADE	07210-02016	07210-02104	07220-03710	07220-03902	2
6	SPRING CLIP ASSEMBLY	07500-08000	07500-08000	07220-04500	07220-04500	1
7	BLADE CARRIER ASSEMBLY	07210-02500	07210-02600	07220-04200	07220-04300	2
8	SPACER PIN	07210-02703	07210-02703	07220-03714	07220-03714	1
9	CAM ROD	07500-06801	07500-06801	07220-03701	07220-03701	1
10	OUTER SLEEVE	07500-06803	07500-06803	07220-03715	07220-03715	1
11	NOSE RETAINING NUT	07500-00212	07500-00212	-	-	1
12	EXTERNAL CIRCLIP	07004-00041	07004-00041	-	-	1
13	RETAINING CAP	07007-00076	07007-00076	-	-	1
14	BLADE SPRING	-	-	07220-03706	07220-03706	2
15	INDEPENDENT RETAINING PIN	07500-08003	07500-08003	07220-04501	07220-04501	1

## Collar Splitter, Adaptor Kit (73200-04600)

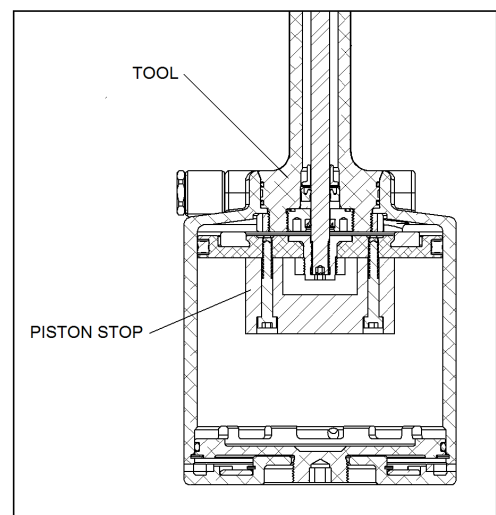


### Installation instructions

#### Body Disassembly

- To fit these collar splitters, disconnect tool from air supply
- Remove pin tail deflector **47**.
- Remove nose assembly, if fitted
- Lubricate the collar splitter cam faces, bearing faces and any moving parts with Moly Lithium Grease.
- Holding the head piston with a 10mm A/F" Allen Key through the back of the tool, tighten the collet adaptor onto the head piston with a spanner.
- Push the anvil adaptor over the collet adaptor and screw on. Tighten with a spanner
- Insert the assembled collar splitter into the anvil adaptor and screw onto the end of the collet adaptor. Tighten the nose retaining nut on the anvil adaptor with a spanner
- To operate, push the collar splitter hard over the collar and depress the trigger.
- To cut 5/16" or 3/8" Avdelok® use 07220-03700 and 07220-03900 collar splitters respectively – no adaptor kit is required.

- Fit Head Vice Jaw\* to Head **63** and use soft jaws to hold the Head Vice Jaw in the inverted orientation.
- Use Locknut Socket\* to unscrew Locknut **38**. If necessary, use a 10mm A/F Allen key to prevent rotation of Base Plate **32**.
- Remove Base Cap **31** and Gasket **36**.
- Remove Retaining Ring **25** and Silencer **37**.
- Push Base Plate **32** into Body **65** and remove Retaining Ring **24**.
- With Base Plate extractor\* fitted to underside of Body **65**, screw Locknut **38** onto Base Plate **32**, extracting Base Plate from Body. If necessary, use a 10mm A/F Allen key to prevent rotation of Base Plate.
- Screw Piston Stop to underside of Air Piston **33** locate using M6 screws into base and screw on.



\* Contained in Service Kit

It is necessary to remove these accessories for priming of the tool.

# Servicing the Tool

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Regular servicing should be carried out and a comprehensive inspection performed annually or every 500,000 cycles, whichever is sooner.

## IMPORTANT

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

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- 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.
- Check for oil leaks.
- 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 is correct for the fastener to be placed.
- Ensure Deflector **47** is fitted to the tool.
- Check the stroke of the tool meets the minimum specification (page 5). The last steps of the Priming Procedures on pages 19 and 20 explain how to measure the stroke.
- Check that the anvil is not worn. This can be confirmed by referring to the installed data on the fastener datasheet. Excessive wear can cause the anvil to rupture.

## Weekly

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

## MolyLithium Grease EP 3753 Safety Data

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Grease can be ordered as a single item, the part number is shown in the Service Kit page 12.

### 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<sub>2</sub>, Halon or water spray if applied by an experienced operator.

### Environment

Scrape up for incineration 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 (pages 15 – 16).

# Servicing the Tool

## Molykote® 55m Grease Safety Data

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### 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

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### 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 all servicing we recommend the use of the 73200 Service Kit.

SERVICE KIT : 73200-99990			
PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
07900-01040	AIR PISTON ROD BULLET	07900-01054	SEAL HOUSING PUSH ROD
07900-01041	BASE PLATE EXTRACTOR	07900-01055	SEAL RETAINER WRENCH
07900-01042	HANDLE RETAINING NUT WRENCH	07900-00427	SLIDING OFFSET HANDLE
07900-00043	HEAD PISTON BULLET	07900-00151	T HANDLE EXTENSION
07900-01043	HEAD PISTON FRONT SEAL SLEEVE	07900-00692	TRIGGER VALVE EXTRACTOR
07900-01044	HEAD PISTON REAR SEAL SLEEVE	07900-00158	2mm PIN PUNCH
07900-01045	HEAD PISTON SEAL GUIDE	07992-00020	GREASE – MOLYLITHIUM EP 3753
07900-01046	HEAD VICE JAW	07992-00075	GREASE – MOLYKOTE® 55M
07900-01047	LIP SEAL HOUSING PUSH ROD	07900-00755	GREASE – MOLYKOTE® 111
07900-01048	LIP SEAL HOUSING SLEEVE	07900-00756	LOCTITE® 243 THREAD LOCK
07900-01049	LOCKNUT SOCKET	07900-01060 *	PRIMING SYRINGE (x2)
07900-01050	REAR LIP SEAL GUIDE	07900-01061 *	PULL STROKE SETTER
07900-01051	REAR LIP SEAL PLUNGER	07900-01062 *	RETURN STROKE SETTER
07900-01052	REAR PISTON BULLET	07900-01063 *	PRIMING SYRINGE EXTENSION
07900-01053	RETURN PISTON EXTRACTOR	07900-01066	STARTER NUT

\* Priming Kit 73200-99991 also includes these parts and can be supplied separately.

For servicing the following standard tools are needed (not supplied with Service Kit).

- 4mm Allen key
- 5mm Allen key
- 6mm Allen key
- 10mm Allen key
- 14mm Spanner
- 22mm Spanner or Socket
- 27mm Spanner
- 48mm Spanner
- 10mm PTFE Tape

Spanners and Allen keys are specified across flats unless otherwise stated.

## Maintenance

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

### IMPORTANT

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.

Prior to dismantling the tool it is necessary to remove the nose equipment. For fitting and servicing instructions see page 8.

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.

# Servicing the Tool

## Dismantling Instructions

---

### Preparation

- Connect tool to air supply.
- Depress Trigger **29** and hold.
- Disconnect air supply and release Trigger **29**.
- Remove Deflector **47**, Retaining Nut **49**, Adaptor Ring **50** and Adaptor **48**.

### Operating Valve

- Unscrew Swivel Bolt **44** using 22mm A/F spanner or socket and remove Swivel **43**. Remove 'O' Rings **4** from Swivel Bolt.
- Use 6mm A/F Allen key to remove Valve Retainer **40**. Remove 'O' Ring **7**.
- Push Valve Spool **39** out of Body **65**. Remove 'O' Rings **11**.
- Pull Valve Body **42** out of Body **65**. Remove 'O' Rings **10** and **11**.

### Body Assembly

- Fit Head Vice Jaw\* to Head **63** and use soft jaws to hold the Head Vice Jaw in the inverted orientation.
- Use Locknut Socket\* to unscrew Locknut **38**. If necessary, use a 10mm A/F Allen key to prevent rotation of Base Plate **32**.
- Remove Base Cap **31** and Gasket **36**.
- Remove Retaining Ring **25** and Silencer **37**.
- Push Base Plate **32** into Body **65** and remove Retaining Ring **24**.
- With Base Plate extractor\* fitted to underside of Body **65**, screw Locknut **38** onto Base Plate **32**, extracting Base Plate from Body. If necessary, use a 10mm A/F Allen key to prevent rotation of Base Plate.
- Remove 'O' Ring **8** from Base Plate **32**.
- Fit 14mm A/F spanner or 5mm A/F Allen key on to Air Piston Connector **41**. Unscrew Nut **3** with 27mm A/F spanner.
- Extract Air Piston **33** using M6 threaded holes. Remove Quad Seal **9** and Force Reduction Seal **35**.
- Fit 4mm A/F Allen key into Air Piston Rod **58** and using 14mm A/F spanner unscrew Air Piston Connector **41**. Push Air Piston Rod into Head **63** up to stop.
- Using Handle Retaining Nut Wrench\* unscrew Handle Retaining Nut **34** and remove Body **65**.

### Head Assembly

- Remove 4 Bleed Screws **1** and Bonded Seals **5** and drain oil into a suitable container.
- Fit Head Vice Jaw\* to Head **63** and use soft jaws to hold the Head Vice Jaw in the inverted orientation.
- Remove 'O' Rings **13** from Head **63**.
- Using a 2mm Pin Punch\* drive Trigger Pin **30** out and remove Trigger **29**.
- Unscrew Trigger Valve **28** using Trigger Valve Extractor\*.
- Using Seal Retainer Wrench\* remove Seal Retainer **55**. Remove Lip Seal **16** and 'O' Ring **12**.
- Extract Air Piston Rod **58**. Remove Bearing Ring **62**, Lip Seal **15**, Seal Stop **61**, Lip Seal **14** and Pull Piston **56**.
- Remove Bearing Ring **60** from Air Piston Rod End **59**.
- Fit 4mm A/F Allen key into Air Piston Rod **58** and using 14mm A/F spanner or 5mm A/F Allen key unscrew Air Piston Rod End **59**.
- Using Return Piston Extractor\* remove Return Piston **57**. Remove Lip Seal **14** from Return Piston.
- Remove the Head Vice Jaw\*. Using soft jaws to hold the tool Handle, position the tool in the nose-down orientation.
- Using 48mm A/F spanner unscrew End Cap **51**. Remove Bearing Ring **53**, Wiper **22** and 'O' Ring **6** from End Cap.
- Remove Head Piston **64** from Head **63**. Remove Head Piston Seals **19**, Anti-extrusion Rings **20** and Lip Seal **21** from Head Piston.
- Using Seal Housing Push Rod\* remove Seal Housing **52**. Remove Lip Seal **17**, Bearing Ring **54**, Wiper **18** and 'O' Ring **23** from Seal Housing.

\* Refers to items included in 73200 Service Kit. For complete list see page 12.  
Item numbers in **bold** refer to the General Assembly drawing and parts list (pages 15 – 16).

# Servicing the Tool

## Assembly Instructions

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- All 'O' rings and seals should be renewed and lubricated with Molykote® 55m\* for pneumatic sealing or Molykote® 111\* for hydraulic sealing.

### Head Assembly

- Using soft jaws to hold the tool Handle, position the tool in the nose-down orientation.
- Install Bearing Ring **54**, Lip Seal **17**, Wiper **18** and 'O' Ring **23** on to Seal Housing **52**.
- Fit Anti-extrusion Rings **20** to both seal grooves on Head Piston **64**. Anti-extrusion Rings should be installed in seal grooves close to breather hole into Head Piston, as shown in Detail 'C' on General Assembly drawing.
- Fit Head Piston Seals **19** to both seal grooves on Head Piston **64**. Head Piston Seals should be installed in seal grooves furthest from breather hole into Head Piston, as shown in Detail 'C' on General Assembly drawing.
- Fit Head Piston Bullet\* to Head Piston **64** and load Seal Housing assembly on to Head Piston.
- Before inserting Head Piston **64** into Head **63** fit Head Piston Seal Guide\* to rear of Head. Once Head Piston **64** is installed in the fully forward position, remove Head Piston Seal Guide and Head Piston Bullet.
- Before inserting Lip Seal **21** into Head **63** fit Rear Head Piston Bullet\* to Head Piston **64** and Rear Lip Seal Sleeve\* to rear of Head. Use Rear Lip Seal Plunger\* to insert Lip Seal up to stop.
- Install Bearing Ring **53**, Wiper **22** and 'O' Ring **6** into End Cap **51**.
- Apply Loctite® 243\* to thread of End Cap **51** and using 48mm A/F spanner screw End Cap into Head **63**.
- Fit Head Vice Jaw\* to Head **63** and use soft jaws to hold the Head Vice Jaw in the inverted orientation.
- Fit Lip Seal **14** on to Return Piston **57**.
- Fit Return Piston on to Return Piston Extractor\* and insert into Head **63** to depth mark indicated on Return Piston Extractor.
- Apply Loctite® 243\* to thread of Air Piston Rod End **59**. Fit 4mm A/F Allen key into Air Piston Rod **58** and use 14mm A/F spanner or 5mm A/F Allen key to wind on Air Piston Rod End.
- Fit Bearing Ring **60** on to Air Piston Rod End **59**.
- Fit Air Piston Rod Bullet\* to Air Piston Rod **58** and install Pull Piston **56**, Lip Seal **14**, Seal Stop **61**, Lip Seal **15** and Bearing Ring **62** in orientation and order shown on General Assembly.
- Insert Air Piston Rod assembly into Head **63**.
- Install Lip Seal **16** and 'O' Ring **12** into Seal Retainer **55**.
- Apply Loctite® 243\* to thread of Seal Retainer **55** and use Seal Retainer Wrench\* to wind into Head **63**.
- Remove Air Piston Rod Bullet\*.
- Fit 2 'O' Rings **13** on to Head **63**.
- Install Trigger Valve **28** using Trigger Valve Extractor\*.
- Fit Trigger **29** and insert Trigger Pin **30** into Head **63**.
- Remove the Head Vice Jaw\*. Using soft jaws to hold the tool Handle, position the tool in the nose-down orientation.
- Fit 4 Bleed Screws **1** and 4 Bonded Seals **5** to seal bleed ports.

### Body Assembly

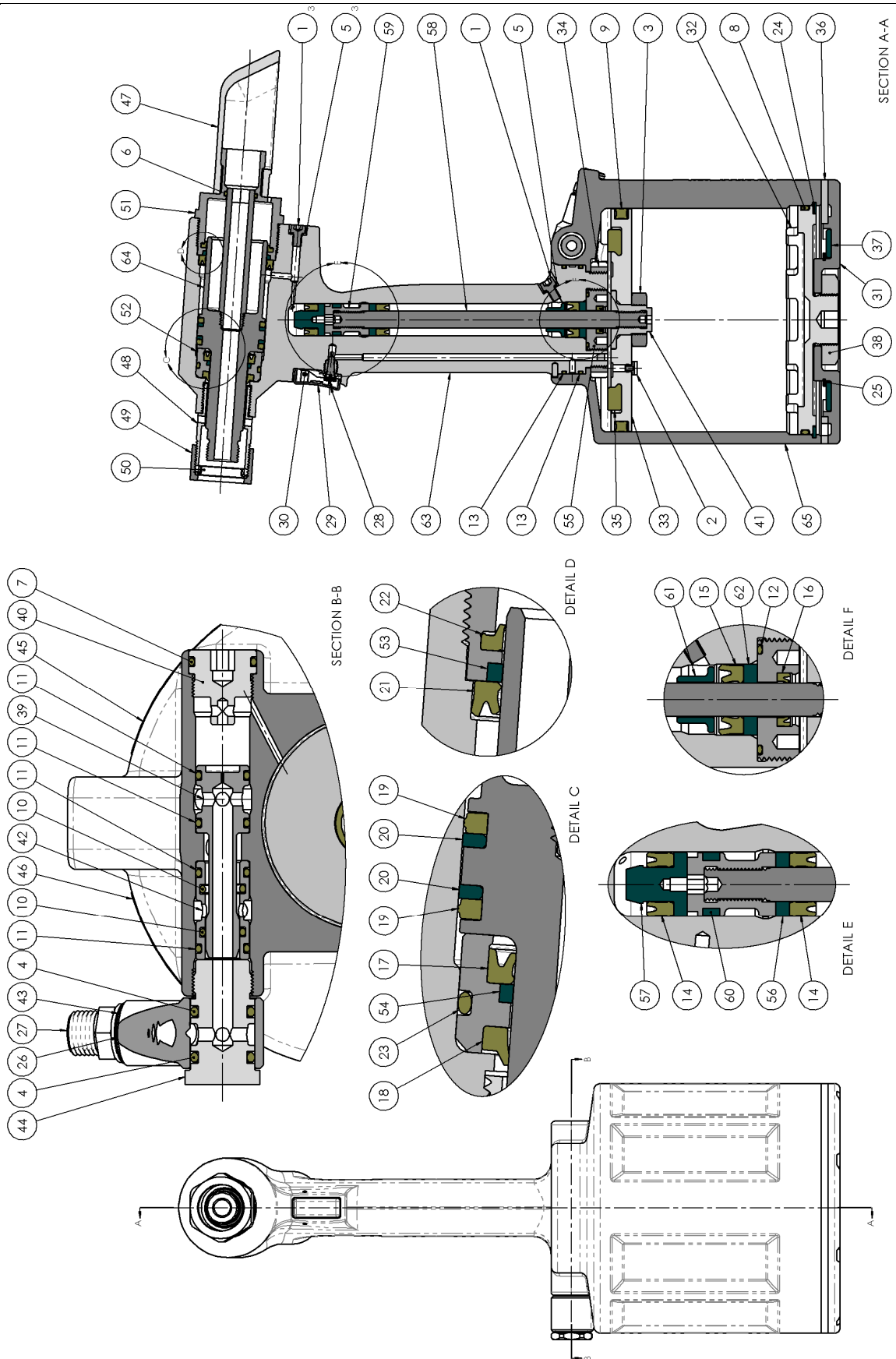
- Fit Head Vice Jaw\* to Head **63** and use soft jaws to hold the Head Vice Jaw in the inverted orientation.
- Fit Body **65** on to Head **63**.
- Apply Loctite® 243\* to thread of Handle Retaining Nut **34** and wind on to Handle **63** using Handle Retaining Nut Wrench\* to tighten.
- Apply Loctite® 243\* to thread of Air Piston Rod **58** and wind Air Piston Connector **41** on to Air Piston Rod. Tighten using 4mm A/F Allen key in Air Piston Rod and 14mm A/F spanner on Air Piston Connector.
- Fit Quad Seal **9** and Force Reduction Seal **35** to Air Piston **33**.
- Insert Air Piston **33** into Body **65** until it fits on to Air Piston Connector **41**.
- Apply Loctite® 243\* to thread of Air Piston Connector **41**. Tighten Nut **3** using 27mm A/F Spanner with 14mm A/F spanner or 5mm A/F Allen key on Air Piston Connector to prevent rotation.
- Fit 'O' Ring **8** on to Base Plate **32**.
- Insert Base Plate **32** into Body **65** and install Retaining Ring **24**.
- Thoroughly clean Silencer **37** or renew if worn. Fit Silencer to Base Cap **31** and install Retaining Ring **25**.
- Place Gasket **36** on to Base Cap **31** and fit on to Body **65**.
- Screw Locknut **38** on to Base Plate **32** using Locknut Socket\*. If necessary, use a 10mm A/F Allen key to prevent rotation of Base Plate.

### Operating Valve

- Fit 2 'O' Rings **10** into Valve Body **42** and 2 'O' Rings **11** on to Valve Body.
- Insert Valve Body **42** into Body **65**.
- Fit 2 'O' Rings **11** on to Valve Spool **39**.
- Insert Valve Spool **39** into Body **65**.
- Fit 'O' Ring **7** to Valve Retainer **40**.
- Apply Loctite® 243\* to thread of Valve Retainer **40** and use 6mm A/F Allen key to install Valve Retainer into Body **65**.
- Fit 2 'O' Rings **4** on to Swivel Bolt **44**.
- Fit Swivel **43** on to Swivel Bolt **44**.
- Apply PTFE Tape to thread of Swivel Bolt **44** and using 22mm A/F spanner or socket, wind Swivel Bolt into Body **65**.
- Fit Adaptor **48**, Adaptor Ring **50**, Retaining Nut **49** and Deflector **47**.

\* Refers to items included in 73200 Service Kit. For complete list see page 12.  
Item numbers in **bold** refer to the General Assembly drawing and parts list (pages 15 – 16).

# General Assembly of Base Tool 73200-02000



# Parts List for 73200-02000

ITEM NO.	PART NO.	DESCRIPTION	QTY.	SPARES	ITEM NO.	PART NO.	DESCRIPTION	QTY.	SPARES
1	07001-00507	M5 x 8 Socket Hd Screw	4	10	34	73200-02004	Handle Retaining Nut	1	1
2	07001-00690	Orifice Plug	1		35	73200-02005	Force Reduction Seal	1	
3	07002-00200	Nut - M18 x 1.5	1		36	73200-02006	Gasket	1	2
4	07003-00028	O Ring - Swivel Bolt	2	6	37	73200-02007	Sintered Silencer	1	
5	07003-00194	M5 Bonded Seal	4	10	38	73200-02008	Locknut - Base Cap	1	
6	07003-00277	O Ring - End Cap	1	6	39	73200-02009	Valve Spool	1	2
7	07003-00388	O Ring - Valve Retainer	1	6	40	73200-02010	Valve Retainer	1	
8	07003-00469	O Ring - Base Plate	1	6	41	73200-02011	Air Piston Connector	1	
9	07003-00470	Quad Ring - Air Piston	1	6	42	73200-02012	Valve Body	1	2
10	07003-00471	O Ring - Valve Minor	2	6	43	73200-02013	Swivel	1	
11	07003-00472	O Ring - Valve Major	4	6	44	73200-02014	Swivel Bolt	1	
12	07003-00473	O Ring - Seal Retainer	1	5	45	73200-02021	73200 Label	1	
13	07003-00474	O Ring - Handle	2	6	46	73200-02022	Safety Label	1	
14	07003-00475	Lip Seal - Power & Return	2	6	47	73200-02030	Deflector	1	3
15	07003-00476	Lip Seal - Handle	1	6	48	73200-02041	Adaptor	1	1
16	07003-00477	Pneumatic Lip Seal - Seal Retainer	1	6	49	73200-02042	Retaining Nut	1	
17	07003-00478	Lip Seal - Front Head	1	6	50	73200-02043	Adaptor Ring	1	
18	07003-00479	Wiper Ring - Front Head	1	6	51	73200-03101	End Cap	1	
19	07003-00482	Seal - Head Piston	2	6	52	73200-03102	Seal Housing	1	1
20	07003-00483	Anti Extrusion Ring - Head Piston	2	6	53	73200-03103	Bearing Ring - Rear Head	1	2
21	07003-00484	Lip Seal - Rear Head	1	6	54	73200-03104	Bearing Ring - Front Head	1	2
22	07003-00485	Wiper Ring - Rear Head	1	6	55	73200-03105	Seal Retainer	1	
23	07003-00486	O Ring - Hydraulic Seal Housing	1	4	56	73200-03106	Pull Piston	1	
24	07004-00109	Retaining Ring - Base	1	3	57	73200-03107	Return Piston	1	
25	07004-00111	Retaining Ring - Silencer	1	3	58	73200-03108	Air Piston Rod	1	
26	07005-00015	Washer - 1/4" BSP	1		59	73200-03109	Air Piston Rod End	1	
27	07005-00041	Double Male Connector - 1/4" BSPF	1		60	73200-03110	Bearing Ring - Rod End	1	2
28	07005-00088	Schrader Valve	1	2	61	73200-03111	Seal Stop	1	
29	71210-02008	Trigger	1	2	62	73200-03112	Bearing Ring - Handle	1	2
30	71210-02024	Trigger Pin	1	4	63	73200-03200	Head	1	
31	73200-02001	Base Cap Machined	1		64	73200-03300	Head Piston	1	
32	73200-02002	Base Plate Machined	1		65	73200-03400	Body	1	
33	73200-02003	Air Piston	1					1	



# Priming

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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 have been reduced and fasteners are not now being fully placed by one operation of the trigger.

## Oil Details

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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® VG32 Oil Safety Data

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### 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<sub>2</sub>, 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

## Priming Kit

The 73200 Service Kit includes all of the parts needed to prime the tool. However, if required, a Priming Kit can be supplied separately.

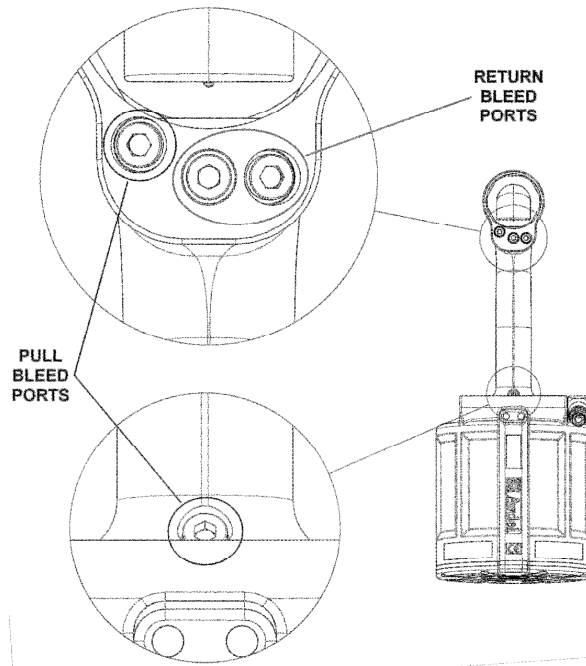
PRIMING KIT : 73200-99991		
PART NO.	DESCRIPTION	QTY.
07900-01060	PRIMING SYRINGE	2
07900-01061	PULL STROKE SETTER	1
07900-01062	RETURN STROKE SETTER	1
07900-01063	PRIMING SYRINGE EXTENSION	1
07900-01066	STARTER NUT	1

To fit the Pull Stroke Setter and Return Stroke Setter, the following standard tools are needed (not supplied with Priming Kit).

- 27mm Spanner
- 10mm Allen key

Spanners and Allen keys are specified across flats unless otherwise stated.

## Priming Ports



## Stroke Setting

The Pull Stroke Setter is used to advance the Head Piston **64** to full stroke. The external threads on the Pull Stroke Setter wind into the Head **63**, pushing the Head Piston back. With the Head Piston fully forward, only one side of the Pull Stroke Setter will wind into the Head, as the Head Piston prevents thread engagement when using the other side. When the Pull Stroke Setter is wound up to a stop in the Head, the Head Piston has been advanced to half of the available stroke. The Pull Stroke Setter is then unscrewed and the other side is wound into the Head, completing the stroke.

The Return Stroke Setter is used to draw the Head Piston **64** fully forward. The Return Stroke Setter stops against the Head **63**, whilst the internal threads wind on to the Head Piston, drawing it forward. With the Head Piston at full stroke, only one side of the Return Stroke Setter will wind on to the Head Piston, as the Head prevents thread engagement when using the other side. When the Return Stroke Setter is wound up to a stop in the Head, the Head Piston has been returned to approximately half of the available stroke. The Return Stroke Setter is then unscrewed and the other side is wound on to the Head Piston, returning it to the fully forward position.

When either Setter is used, the Head Piston should not rotate. If necessary, a 10mm A/F Allen key should be fitted to the rear of the Head Piston to prevent rotation. It may be necessary to move the Head Piston forward with the Starter Nut to allow the Return Stroke Setter to engage the thread.

\* Refers to items included in 73200 Service Kit. For complete list see page 12.  
Item numbers in **bold** refer to the General Assembly drawing and parts list (pages 15 – 16).

# Priming

## Initial Priming Procedure

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Follow these instructions if all of the oil has been emptied from the tool, e.g. following tool disassembly and maintenance. If the tool has stroke loss, follow the Top-up Priming Procedure on page 20.

Follow the Hyperlink below or alternatively scan the QR-code for a video of the Initial priming procedure for this tool.



<http://youtu.be/k4ggiT4hh18>

\*Bullet numbering below relates each step to relevant section of the priming video

### Preparation

- ① Ensure tool is disconnected from air supply.
- ① Remove all bleed screws **1** and seals **5**.
- ① Using soft jaws to hold the tool Handle, position the tool in the nose-down orientation.

### Pull side priming

- ① Ensure tool is disconnected from air supply.
- ① Remove all bleed screws before priming.
- ① Using a 27mm A/F spanner and the Return Stroke Setter\*, ensure that the Head Piston **64** is fully forward. Remove Return Stroke Setter.
- ① Fit Extension\* to one Priming Syringe\*.
- ① Fill both Priming Syringes\* with approximately 30ml of oil and remove any air from the syringes.
- ① Fit Priming Syringe\* to lower pull bleed port.
- ① Fit Priming Syringe\* with Extension\* to upper pull bleed port.
- ② Push oil from the first syringe until no air bubbles are evident in the second syringe, or until the oil drops below 5ml.
- ② Push oil from the second syringe until no air bubbles are evident in the first syringe, or until the oil drops below 5ml.
- ② Repeat previous 2 steps until no air bubbles are evident.
- ② Even out oil volumes between each syringe. Including oil and air, the plunger must not be above 25ml volume in either syringe.
- ③ Connect tool to air supply.
- ③ Press and hold Trigger. This ensures the Air Piston **33** is at the end of the pull stroke.
- ③ Disconnect tool from air supply.
- ④ Remove the Priming Syringe\* from the lower pull bleed port and reseal this port.
- ⑤ Using a 27mm A/F spanner and both sides of the Pull Stroke Setter\*, wind the Head Piston **64** back to 21mm stroke, applying pressure to the plunger at all times. This ensures that no air is drawn into the system as the Head Piston is pushed back.
- ⑥ With the Head Piston at 21mm stroke, remove Pull Stroke Setter.
- ⑦ Remove the Priming Syringe\* with Extension\* and reseal this port.

### Return side priming

- ⑦ Ensure tool is disconnected from air supply.
- ⑦ Ensure Extension\* is fitted to one Priming Syringe\*.
- ⑦ Fill both Priming Syringes\* with approximately 30ml of oil and remove any air from the syringes.
- ⑦ Fit Priming Syringe\* to return bleed port.
- ⑦ Fit Priming Syringe\* with Extension\* to second return bleed port.
- ⑧ Push oil from the first syringe until no air bubbles are evident in the second syringe, or until the oil drops below 5ml.
- ⑧ Push oil from the second syringe until no air bubbles are evident in the first syringe, or until the oil drops below 5ml.
- ⑧ Repeat previous 2 steps until no air bubbles are evident.
- ⑧ Even out oil volumes between each syringe. Including oil and air, the plunger must not be above 25ml volume in either syringe.
- ⑨ Connect tool to air supply. This ensures the Air Piston **33** is at the end of the return stroke.
- ⑨ Disconnect tool from air supply.
- ⑩ Remove Priming Syringe\* fitted with Extension\* and reseal this port.
- ⑩ Using a 27mm A/F spanner, Starter Nut and both sides of the Return Stroke Setter\*, wind the Head Piston **64** forward to 0mm stroke, applying pressure to the plunger at all times. This ensures that no air is drawn into the system as the Head Piston is drawn forward.
- ⑪ With the Head Piston fully forward, apply reasonable pressure to the plunger to push oil from the syringe up to a stop. Approximately 0.5ml will be pushed from the syringe into the tool.
- ⑪ Remove Return Stroke Setter.
- ⑪ Remove the Priming Syringe\* and reseal this port.

### Pull and return test

- ⑫ Measure the distance from the end of the Head Piston **64** to the front of the Head **63**.
- ⑫ Connect tool to air supply.
- ⑫ Cycle the tool. Measure the distance from the end of the Head Piston to the front of the Head. Ensure the Head Piston stroke is 21mm and that Head Piston fully returns at the end of the cycle. If not, follow the Top-up Priming Procedure on page 20.
- ⑫ Disconnect tool from air supply. The tool is now primed.

\* Refers to items included in 73200 Service Kit. For complete list see page 12.  
Item numbers in **bold** refer to the General Assembly drawing and parts list (pages 15 – 16).

# Priming

## Top-up Priming Procedure

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If the tool has stroke loss, follow these instructions. If all of the oil has been emptied from the tool, e.g. following tool disassembly and maintenance, follow the Initial Priming Procedure on page 19.

Follow the Hyperlink below or alternatively scan the QR-code for a video of the Initial priming procedure for this tool.



<http://youtu.be/ZxIkLygiKCI>

\*Bullet numbering below relates each step to relevant section of the priming video

### Preparation

- ① Ensure tool is disconnected from air supply.
- ① Using soft jaws to hold the tool Handle, position the tool in the nose-down orientation.

### Pull side priming

- ① Connect tool to air supply.
- ① Press and hold Trigger. This ensures the Air Piston **33** is at the end of the pull stroke.
- ① Disconnect tool from air supply.
- ② Remove pull bleed screws.
- ② Fit Extension\* to one Priming Syringe\*.
- ② Fill both Priming Syringes\* with approximately 30ml of oil and remove any air from the syringes.
- ③ Fit Priming Syringe\* to lower pull bleed port.
- ③ Fit Priming Syringe\* with Extension\* to upper pull bleed port.
- ③ Push oil from the first syringe until no air bubbles are evident in the second syringe, or until the oil drops below 5ml.
- ③ Push oil from the second syringe until no air bubbles are evident in the first syringe, or until the oil drops below 5ml.
- ③ Repeat previous 2 steps until no air bubbles are evident.
- ④ Remove the Priming Syringe\* from the lower pull bleed port and reseal this port.
- ④ Using a 27mm A/F spanner and both sides of the Pull Stroke Setter\*, wind the Head Piston **64** back to 21mm stroke, applying pressure to the plunger at all times. This ensures that no air is drawn into the system as the Head Piston is pushed back.
- ④ With the Head Piston at 21mm stroke, remove Pull Stroke Setter.
- ⑤ Remove the Priming Syringe\* with Extension\* and reseal this port.

### Return side priming

- ⑥ Connect tool to air supply. This ensures the Air Piston **33** is at the end of the return stroke.
- ⑥ Disconnect tool from air supply.
- ⑥ Remove return bleed screws.
- ⑦ Ensure Extension\* is fitted to one Priming Syringe\*.
- ⑦ Fill both Priming Syringes\* with approximately 30ml of oil and remove any air from the syringes.
- ⑧ Fit Priming Syringe\* to return bleed port.
- ⑧ Fit Priming Syringe\* with Extension\* to second return bleed port.
- ⑧ Push oil from the first syringe until no air bubbles are evident in the second syringe, or until the oil drops below 5ml.
- ⑧ Push oil from the second syringe until no air bubbles are evident in the first syringe, or until the oil drops below 5ml.
- ⑧ Repeat previous 2 steps until no air bubbles are evident.
- ⑨ Remove Priming Syringe\* fitted with Extension\* and reseal this port.
- ⑨ Using a 27mm A/F spanner, Starter Nut and both sides of the Return Stroke Setter\*, wind the Head Piston **64** forward to 0mm stroke, applying pressure to the plunger at all times. This ensures that no air is drawn into the system as the Head Piston is drawn forward.
- ⑨ With the Head Piston fully forward, apply reasonable pressure to the plunger to push oil from the syringe up to a stop. Approximately 0.5ml will be pushed from the syringe into the tool.
- ⑩ Remove Return Stroke Setter.
- ⑩ Remove the Priming Syringe\* and reseal this port.

### Pull and return test

- ⑪ Measure the distance from the end of the Head Piston **64** to the front of the Head **63**.
- ⑪ Connect tool to air supply.
- ⑪ Cycle the tool. Measure the distance from the end of the Head Piston to the front of the Head. Ensure the Head Piston stroke is 21mm and that Head Piston fully returns at the end of the cycle. If not, repeat this Top-up Priming Procedure.
- ⑪ Disconnect tool from air supply. The tool is now primed.

\* Refers to items included in 73200 Service Kit. For complete list see page 12.  
Item numbers in **bold** refer to the General Assembly drawing and parts list (pages 15 – 16).

# Fault Diagnosis

Symptom	Possible Cause	Remedy	Page Ref.	
Short stroke or incomplete return	Reduced air pressure	Adjust air pressure Check for leaks	17 – 20	
	Oil level in tool low or air in oil	Reprime tool		
Tool fails to grip Lockbolt	Incorrect nose assembly fitted	Change to correct nose assembly	7 – 8	
	Broken jaws in nose assembly	Replace	8	
	Worn or dirty jaws	Clean or renew as necessary	8	
	Oil level in tool low or air in oil	Reprime tool	17 – 20	
Tool fails to break Lockbolt	Insufficient air pressure	Adjust air pressure Check for leaks	17 – 20	
	Incorrect length of bolt	Change to correct length bolt		
	Tool requires priming	Reprime tool		
	Control valve dirty	Remove and clean valve		13 – 14
	Exhaust silencer dirty	Clean silencer		13 – 14
Tool fails to swage collar	Insufficient air pressure	Adjust air pressure Check for leaks	17 – 20	
	Worn anvil	Replace		8
	Tool requires priming	Reprime tool		
	Swaging anvil cracked	Replace		8
	Incorrect length of bolt	Change to correct length bolt		
Placing tool does not eject the collar from the anvil	Reduced air pressure	Adjust air pressure Check for leaks	17 – 20	
	Oil level in tool low or air in oil	Reprime tool		
	Worn or damaged hydraulic seals in tool	Inspect tool – replace worn or damaged seals		13 – 14
Pull grooves on fastener pintail stripped during installation	Operator not pushing nose equipment completely on to fastener pintail before operating tool	Instruct operator in correct installation method	6	
	Incorrect fastener length / grip length	Use correct fastener	8	
	Worn or damaged jaw segments	Check and replace jaw set		
	Debris in jaw segments and / or pintail grooves	Clean jaw segments	8	
	Excessive sheet gap	Close gap between sheets	17 – 20	
	Oil level in tool low or air in oil	Reprime tool		
Tool slows and fails to actuate	Control valve dirty	Remove and clean valve	13 – 14	
	Exhaust silencer dirty	Clean silencer	13 – 14	

# Declaration of Conformity

We, Avdel UK Limited, Watchmead Industrial Estate, Welwyn Garden City, Herts, AL7 1LY declare under our sole responsibility that the product:

73200

## Serial Number

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 3744 (Pneurop PN8NCT1)  
ISO EN 792 part 13 – 2000  
BS EN ISO 11202  
BS EN 982  
BS EN 983

following the provisions of the Machine Directive 2006/42/EC.



A. Seewraj – Technology Manager

Date of issue



This box contains a power tool which is in conformity with Machines Directive 2006/42/EC. The 'Declaration of Conformity' is contained within.

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For an authorized distributor nearby please check [www.StanleyEngineeredFastening.com/econtact/distributors](http://www.StanleyEngineeredFastening.com/econtact/distributors)

Manual Number	Issue	C/N
07900-01033	E2	14/173

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