



# Instruction Manual

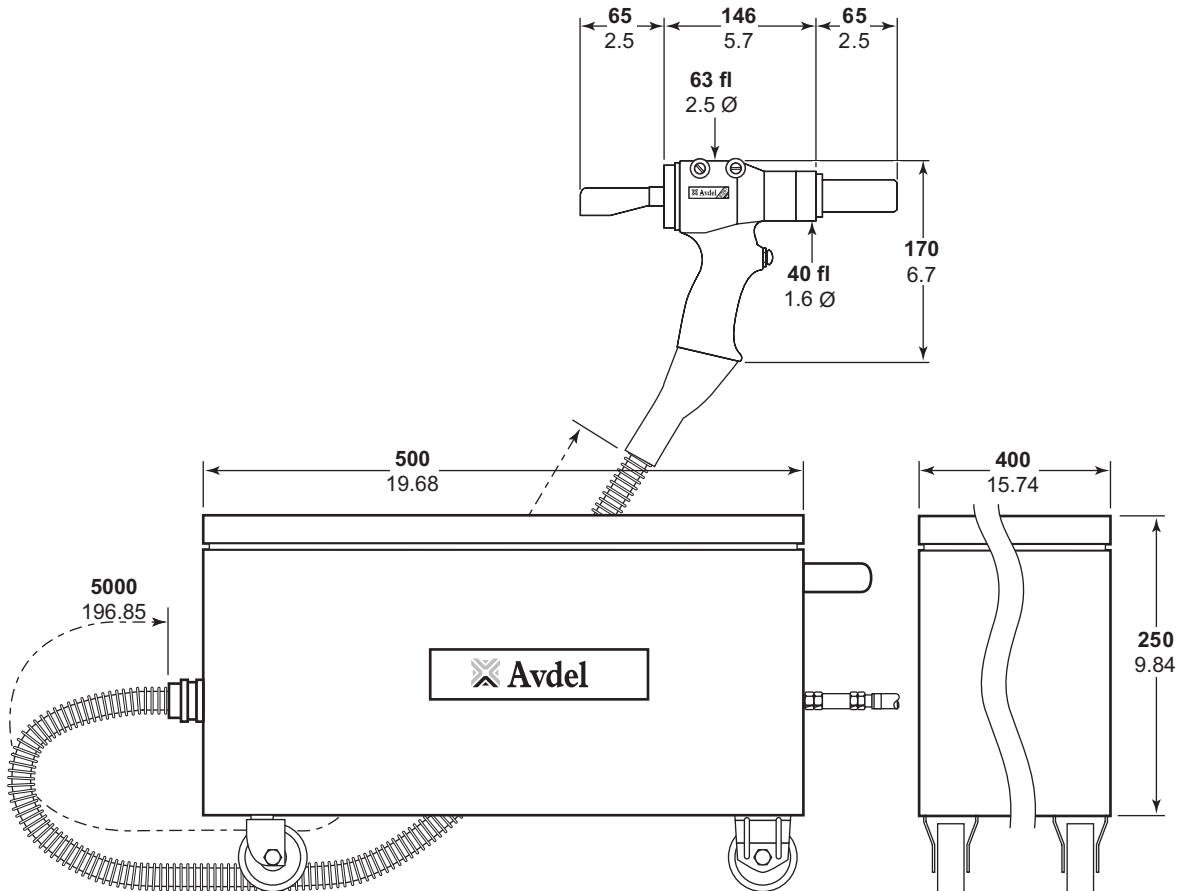
Original Instruction



**07267**

**Hydro-Pneumatic Power Tool**

AVDEL policy is one of continuous development. Specifications shown in this document may be subject to changes which may be introduced after publication. For the latest information always consult Avdel.



### SPECIFICATIONS FOR 07267 TOOL

AIR PRESSURE	■	Minimum - Maximum	■ 4.6 - 6.6 bar	■ 65 - 90 lbf/in <sup>2</sup>
FREE AIR VOLUME REQUIRED	■	@ 5.5 bar / 80 lbf/in <sup>2</sup>	■ 3.5 litres	■ .12 ft <sup>3</sup>
STROKE	■	Minimum	■ 21 mm	■ 1.03 in
PULL FORCE	■	@ 5.5 bar / 80 lbf/in <sup>2</sup>	■ 27.35 kN	■ 6.1501 lbf
CYCLE TIME	■	Approximately	■ 1.6 seconds	
NOISE LEVEL	■	Less than	■ 75 dB(A)	
PISTOL WEIGHT	■	Without Nose Assembly	■ 2.27 kg	■ 5 lb
TOTAL WEIGHT	■	Without Nose Assembly	■ 30 kg	■ 66 lb
VIBRATION	■	Less than	■ 2.5 m/s <sup>2</sup>	

## SAFETY

General	2
Specific to Type of Tool	3

## INTENT OF USE

General	4
07267 Tool Dimensions / Selection	4-5

## PUTTING INTO SERVICE

Air Supply	8
Operating Procedure	8
Accessories	9

## NOSE ASSEMBLIES

07267 Fitting/Service/Components	10-12
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## SERVICING

Regular Servicing - Service Kit	15
Maintenance	16-17
General Assembly & Parts List	18-19

## PRIMING

Priming Oil Details	20
Priming Procedure	20

## FAULT DIAGNOSIS

Fault Diagnosis table	21
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# S A F E T Y

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

⚠ DO NOT USE OUTSIDE THE DESIGN INTENT.

⚠ DO NOT USE EQUIPMENT WITH THIS TOOL/MACHINE OTHER THAN THAT RECOMMENDED AND SUPPLIED BY AVDEL.

⚠ ANY MODIFICATION UNDERTAKEN BY THE CUSTOMER TO THE TOOL/MACHINE, NOSE ASSEMBLIES, ACCESSORIES OR ANY EQUIPMENT SUPPLIED BY AVDEL OR THEIR REPRESENTATIVES, SHALL BE THE CUSTOMER'S ENTIRE RESPONSIBILITY. AVDEL WILL BE PLEASED TO ADVISE UPON ANY PROPOSED MODIFICATION.

⚠ 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 PROCEDURES. DO NOT DISMANTLE THIS TOOL/MACHINE WITHOUT PRIOR REFERENCE TO THE MAINTENANCE INSTRUCTIONS. CONTACT AVDEL WITH YOUR TRAINING REQUIREMENTS.

⚠ 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.

⚠ THE PRECAUTIONS TO BE OBSERVED WHEN USING THIS TOOL/MACHINE MUST BE EXPLAINED BY THE CUSTOMER TO ALL OPERATORS.

⚠ ALWAYS DISCONNECT THE AIRLINE FROM THE TOOL/MACHINE INLET BEFORE ATTEMPTING TO ADJUST, FIT OR REMOVE A NOSE ASSEMBLY.

⚠ DO NOT OPERATE A TOOL/MACHINE THAT IS DIRECTED TOWARDS ANY PERSON(S).

⚠ ALWAYS ADOPT A FIRM FOOTING OR A STABLE POSITION BEFORE OPERATING THE TOOL/MACHINE.

⚠ ENSURE THAT VENT HOLES DO NOT BECOME BLOCKED OR COVERED AND THAT HOSES ARE ALWAYS IN GOOD CONDITION.

In addition to the general safety rules opposite, the following specific safety points must also be observed:

- ⚠ THE OPERATING PRESSURE SHALL NOT EXCEED 6.5 BAR - 90 LBF/IN<sup>2</sup>.
- ⚠ DO NOT OPERATE THE TOOL WITHOUT FULL NOSE EQUIPMENT IN PLACE.
- ⚠ CARE SHALL BE TAKEN TO ENSURE THAT SPENT STEMS ARE NOT ALLOWED TO CREATE A HAZARD.
- ⚠ THE TOOL MUST BE FITTED WITH AN UNDAMAGED PINTAIL DEFLECTOR OR STEM CATCHER BEFORE OPERATING.
- ⚠ IF THE TOOL IS FITTED WITH A PINTAIL DEFLECTOR AND IS USED IN THE VERTICAL NOSE DOWNWARD POSITION, THE PINTAIL DEFLECTOR SHOULD BE ROTATED UNTIL THE APERTURE IS FACING AWAY FROM THE OPERATOR AND OTHER PERSON(S) WORKING IN THE VICINITY.
- ⚠ WHEN USING THE TOOL, THE WEARING OF SAFETY GLASSES IS REQUIRED BOTH BY THE OPERATOR AND OTHERS IN THE VICINITY TO PROTECT AGAINST RIVET EJECTION, SHOULD A FASTENER BE PLACED 'IN AIR'. WE RECOMMEND WEARING GLOVES IF THERE ARE SHARP EDGES OR CORNERS ON THE APPLICATION.
- ⚠ 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.
- ⚠ WHEN CARRYING THE TOOL FROM PLACE TO PLACE KEEP HANDS AWAY FROM THE TRIGGER/LEVER TO AVOID INADVERTENT START UP.
- ⚠ EXCESSIVE CONTACT WITH HYDRAULIC OIL SHOULD BE AVOIDED. TO MINIMIZE THE POSSIBILITY OF RASHES, CARE SHOULD BE TAKEN TO WASH THOROUGHLY.

# INTENT OF USE

The hydro-pneumatic 07267 tool is 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.

The 07267 is of the remote intensifier or split tool concept consisting of; Pistol Grip head, Air Oil Intensifiers and Steel Enclosure (see pages 5, 16, 18 and 20).

Pistol Grip type head fitted with a pintail deflector is the standard tool for which a stem catching option and a side ejection accessory are available (see details pages 7 and 9). It is also possible to order the base tool only (part number 07267-0200) which will not be fitted with a nose assembly.

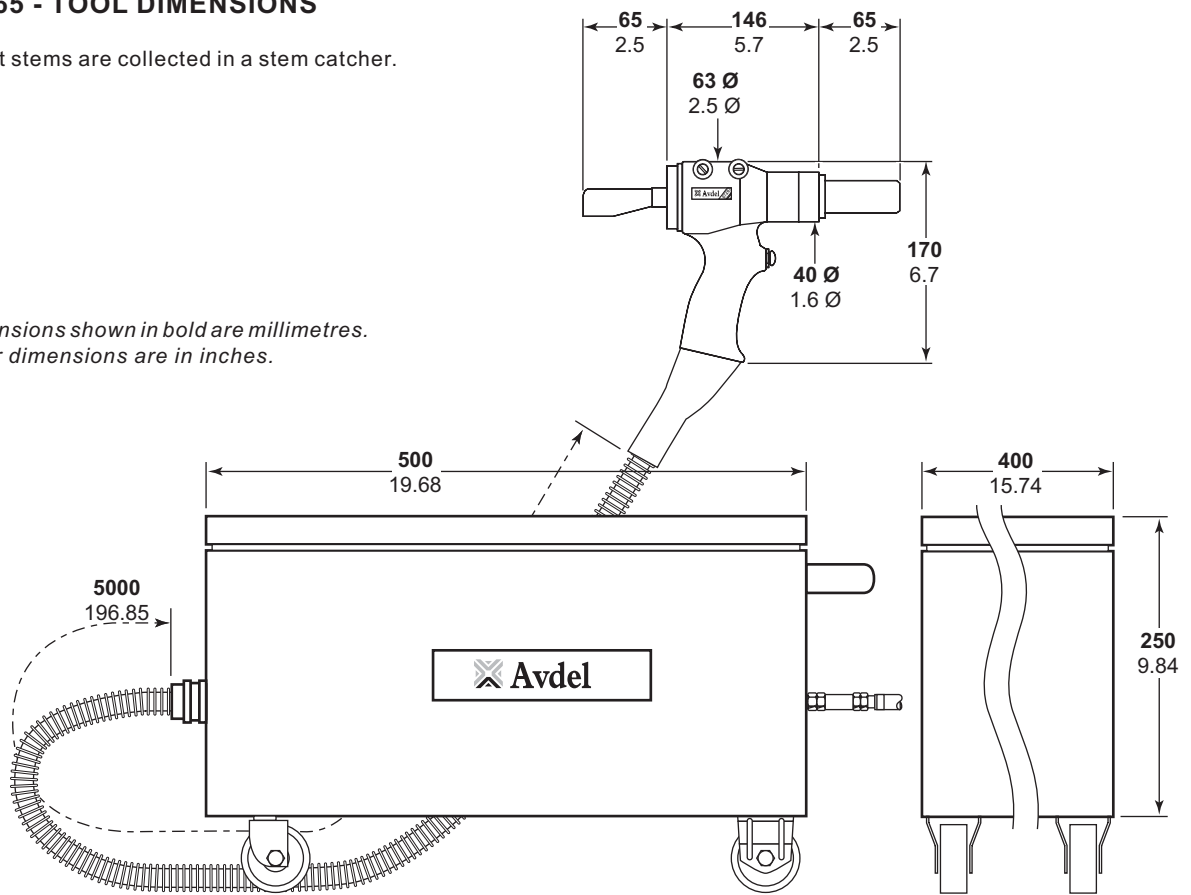
## 07267 TOOL SELECTION

FASTENER		NOSE TIP TYPE	BASIC TOOL 5M HOSE	ADAPTOR	NOSE ASSY PART N°	COMPLETE TOOL PART N°	
NAME & HEAD	Ø						MATERIAL/DETAIL
<b>MAXLOCK</b>	3/16" (4.8mm)	Stainless Steel	Standard	07267-00100	07267-00900	07610-02000	07267-00001
	1/4" (6.4 mm)	Stainless Steel	Standard	07265-00100	07267-00900	07610-02100	07267-00002
<b>HEMLOCK</b>	1/4" (6.4mm)	Stainless Steel	Standard	07265-00100	07267-00800	07612-02000	07267-00004
<b>AVTAINER</b>	3/8" (10 mm)	Stainless Steel	Standard	07265-00100	07267-00800	07498-00800	07267-00006
<b>TLR</b>	3/16" (5.2 mm)	Al. Alloy	Standard	07265-00100	07267-00800	07498-02000	07267-00008
	1/4" (6.4 mm)	Al. Alloy Oversize	Standard	07265-00100	07267-00800	07498-01100	07267-00009
<b>MONOBOLT (LONG)</b>	3/16" (4.8 mm)	Al. Alloy	Standard	07265-00100	07267-00800	07498-04700	07267-00012
	1/4" (6.4 mm)	Al. Alloy	Standard	07265-00100	07267-00800	07498-04600	07267-00014
	1/4" (6.4 mm)	Al. Alloy Oversize	Standard	07265-00100	07267-00800	07498-00500	07267-00016
<b>AVEX</b>	3/16" (4.8 mm)	Steel	Standard	07265-00100	07267-00800	07490-04900	07267-00030
<b>AVINOX</b>	3/16" (4.8 mm)	Al. Alloy Oversize	Standard	07265-00100	07267-00800	07498-01300	07267-00036
<b>AVDELOK</b>	3/16" (4.8 mm)	Al. Alloy	Standard	07265-00100	07220-02500	07200-02500	07267-00050
	3/16" (4.8 mm)	Al. Alloy Oversize	Standard	07265-00100	07220-02500	07200-02700	07267-00051
	1/4" (6.4 mm)	Stainless Steel	Standard	07265-00100	07220-02500	07200-02600	07267-00052
	1/4" (6.4 mm)	Al. Alloy Oversize	Standard	07265-00100	07220-02500	07200-02800	07267-00053
	1/4" (6.4 mm)	Al. Alloy	Standard	07265-00100	07220-02500	07200-03300	07267-00054
	1/4" (6.4 mm)	Al. Alloy	Standard	07265-00100	07220-02500	07200-03500	07267-00055
	5/16" (8.0 mm)	Al. Alloy	Standard	07265-00100	07220-02500	07220-02700	07267-00056
	5/16" (8.0 mm)	Al. Alloy	Standard	07265-00100	07220-02500	07220-03400	07267-00057
	3/8" (10 mm)	Al. Alloy	Standard	07265-00100	07220-02500	07220-02000	07267-00058
	3/8" (10 mm)	Al. Alloy	Standard	07265-00100	07220-02500	07220-03500	07267-00059

## 07265 - TOOL DIMENSIONS

Spent stems are collected in a stem catcher.

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



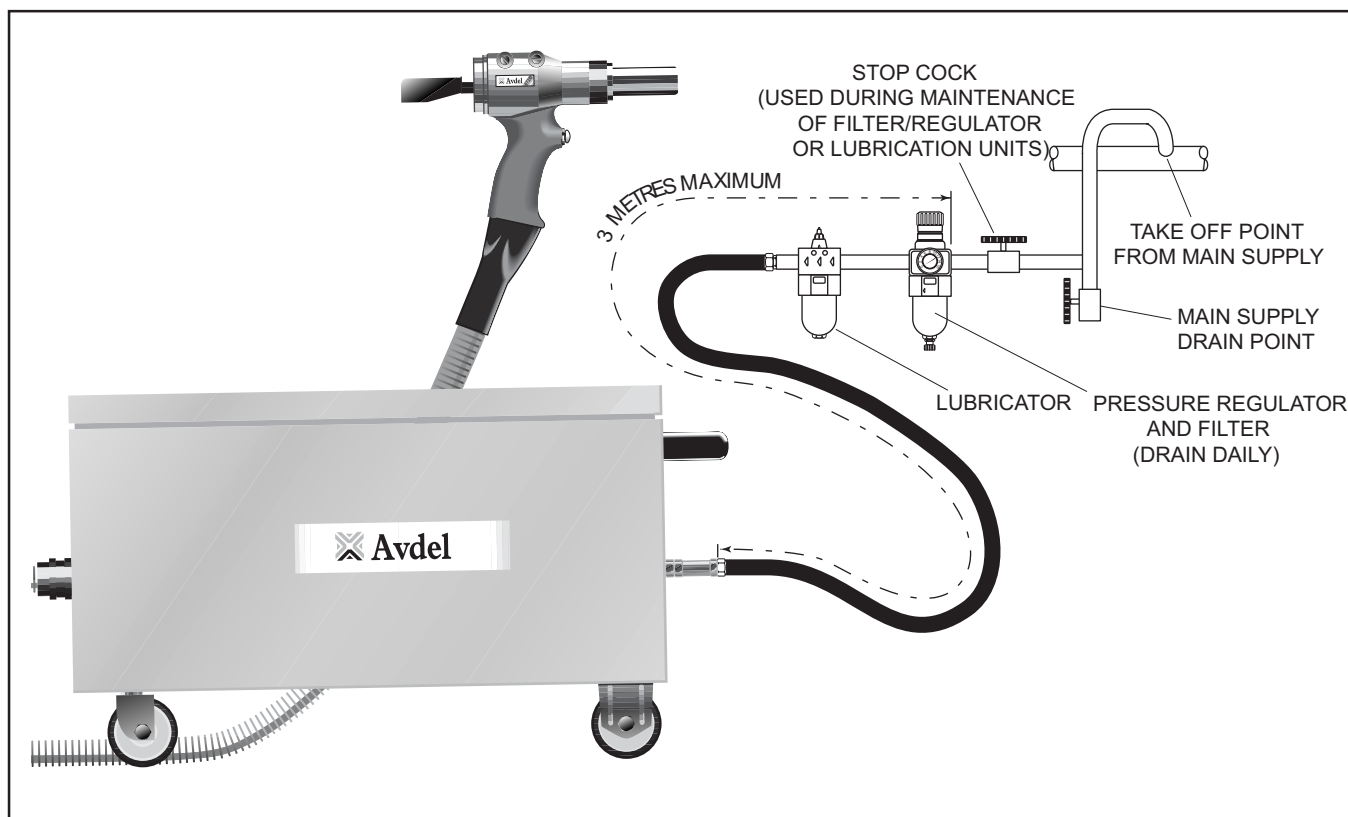
# PUTTING INTO SERVICE

## 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 automatic oiling/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 working effective 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 mm or  $\frac{1}{4}$  inch.

Read servicing daily details page 12.



## OPERATING PROCEDURE

### OPTION 1

- Ensure that the correct nose equipment is fitted.
- Connect the tool to the air supply.
- Insert the fastener body squarely into the prepared hole of the application.
- Apply the tool to the protruding fastener stem.
- Fully operate the trigger. The tool cycle will ensure the fastener is placed.

### OPTION 2

- Ensure that the correct nose equipment is fitted.
- Connect the tool to the air supply.
- Insert the fastener stem into the nose of the tool.
- Insert the tool with the fastener squarely into the prepared hole of the application.
- Fully operate the trigger. The tool cycle will ensure the fastener is placed.

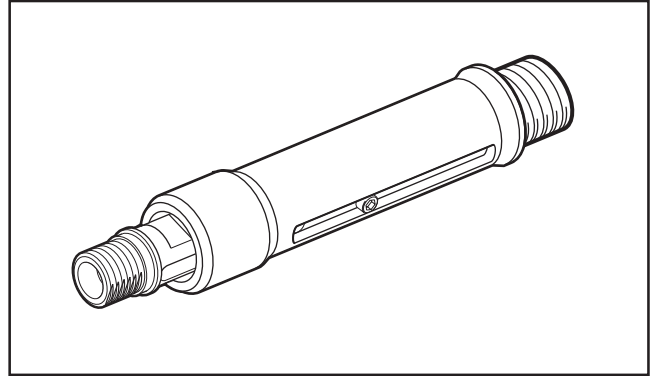


## ACCESSORIES

Four different accessories are available:

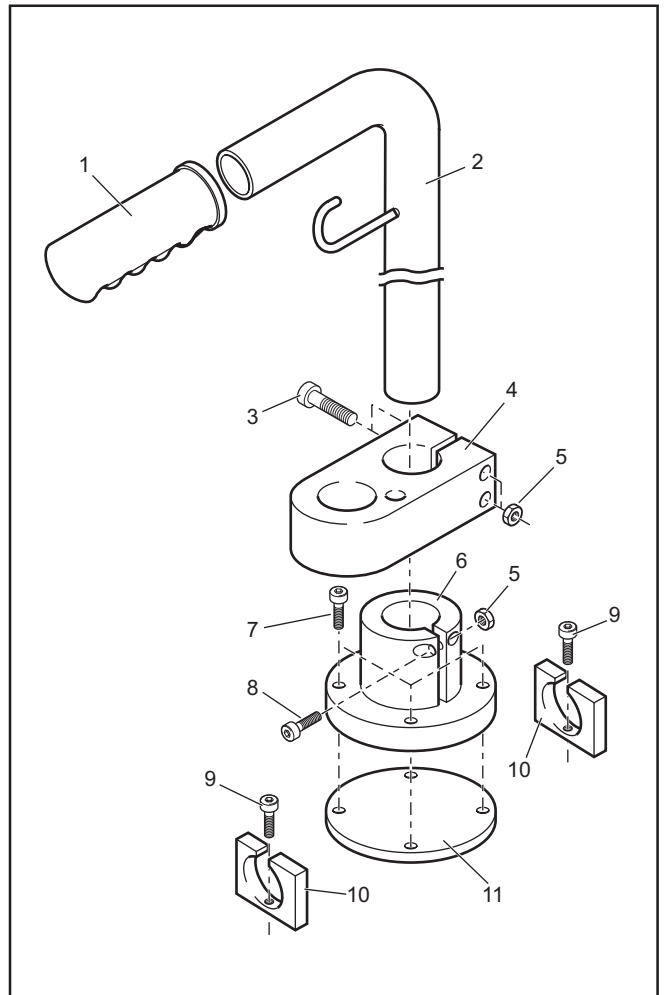
### SIDE EJECTION ADAPTOR

When fitted between the tool and the nose assembly, this accessory forces fastener stems to eject at the front of the tool. Choose the correct part number according to the stem diameter of the fastener.



### HANDLING AND HOLSTER KIT

This kit enables an easier handling of the cabinet around the workplace and allows the tool pistol to be stored in a convenient position.

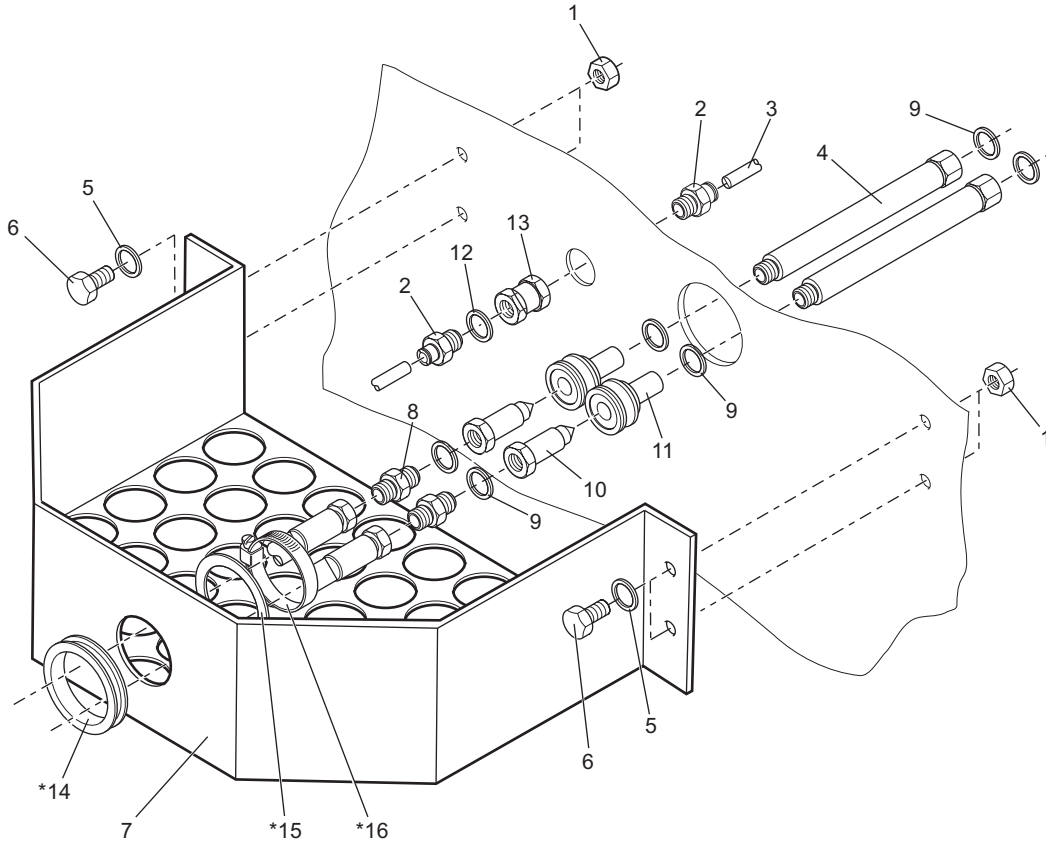


#### 07265-09500 PARTS LIST

ITEM	PART N°	DESCRIPTION	QTY	SPARES
1	07265-09501	RUBBER HANDLE	1	-
2	07265-09502	TUBE WITH HOOK	1	-
3	07265-09504	M5 BOLTS	2	-
4	07265-09503	HOLSTER	1	-
5	07265-09505	M5 NUTS	3	-
6	07265-09508	BASE	1	-
7	07265-09507	M5 BOLT	4	-
8	07265-09506	M5 BOLT	1	-
9	07265-09512	M5 BOLT	2	-
10	07265-09511	CLIPS	2	-
11	07265-09509	PLATE	1	-

## QUICK CONNECT FITTINGS KIT

When fitted between the tool and the nose assembly, this accessory forces fastener stems to eject at the front of the tool. Choose the correct part number according to the stem diameter of the fastener.



### 07267-01250 PARTS LIST

ITEM	PART N°	DESCRIPTION	QTY	SPARES
1	07265-03206	NUT	4	-
2	07265-03269	CONNECTION	4	-
3	07265-03295	AIR HOSE EXTENSION	1	-
4	07265-09296	OIL HOSE EXTENSION	2	-
5	07265-03204	WASHER	4	-
6	07265-03205	SCREW	4	-
7	07265-03275	TRAY	1	-
8	07267-01022	NIPPLE	2	-
9	07265-02031	WASHER	6	-
10	07265-03278	QUICK FITTING NIPPLE	2	-
11	07267-03277	QUICK FITTING COUPLER	2	-
12	07265-03272	WASHER	1	-
13	07265-03221	CONNECTOR	2	-
* 14	07267-03251	RUBBER RING	1	-
* 15	07267-03252	SPACER WASHER	1	-
* 16	07265-03292	CLAMP	1	-

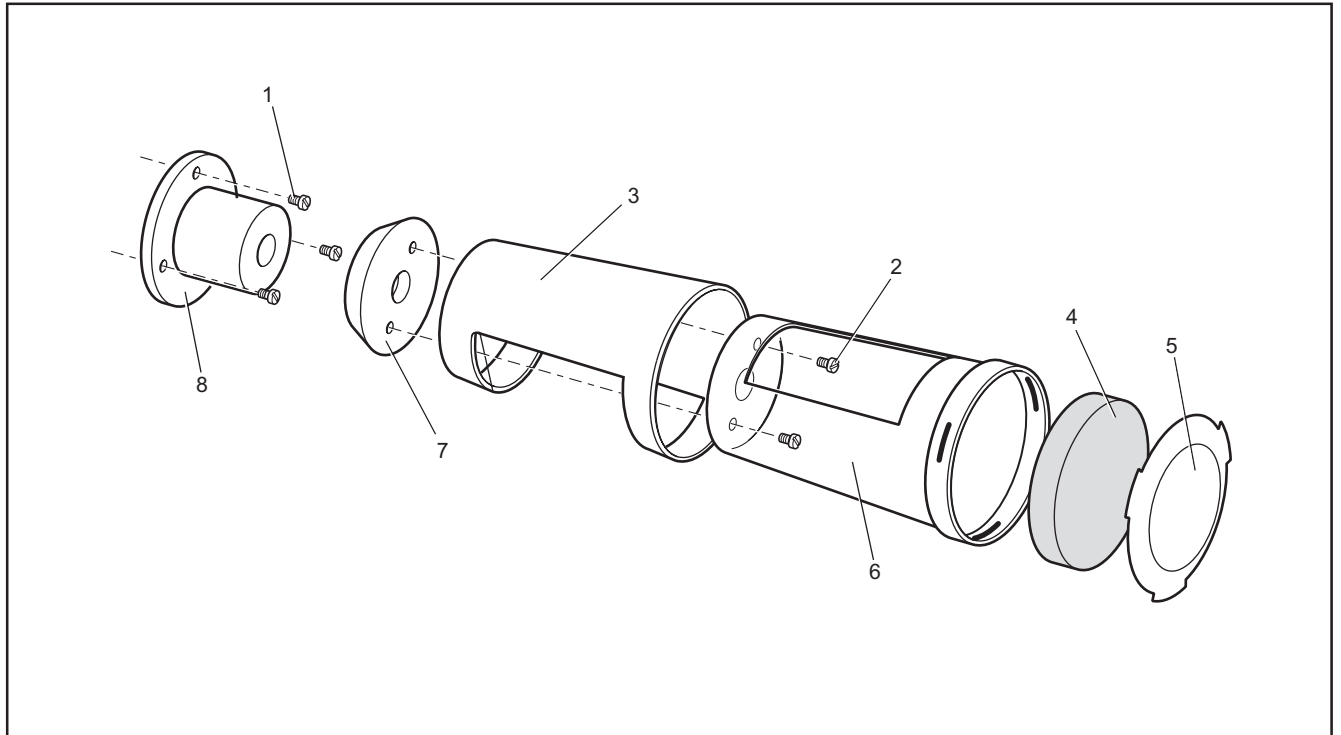
\* These items are part of the Base Tool and are not part of the Quick Connect kit.

## STEM CATCHER UNIT

Fitted to the rear of the tool, this unit catches the spent stems, preventing them fouling the work area.

### 07265-03800 PARTS LIST

ITEM	PART N°	DESCRIPTION	QTY	SPARES
1	07267-01039	SCREW	3	-
2	07265-02013	SCREW	2	-
3	07640-00239	OUTER BODY	1	-
4	07265-02054	FOAM SILENCER	1	-
5	07340-00335	END CAP	1	-
6	07640-00241	INNER BODY	1	-
7	07498-00310	END COVER	1	-
8	07267-01038	ADAPTOR	1	-



# NOSE ASSEMBLIES

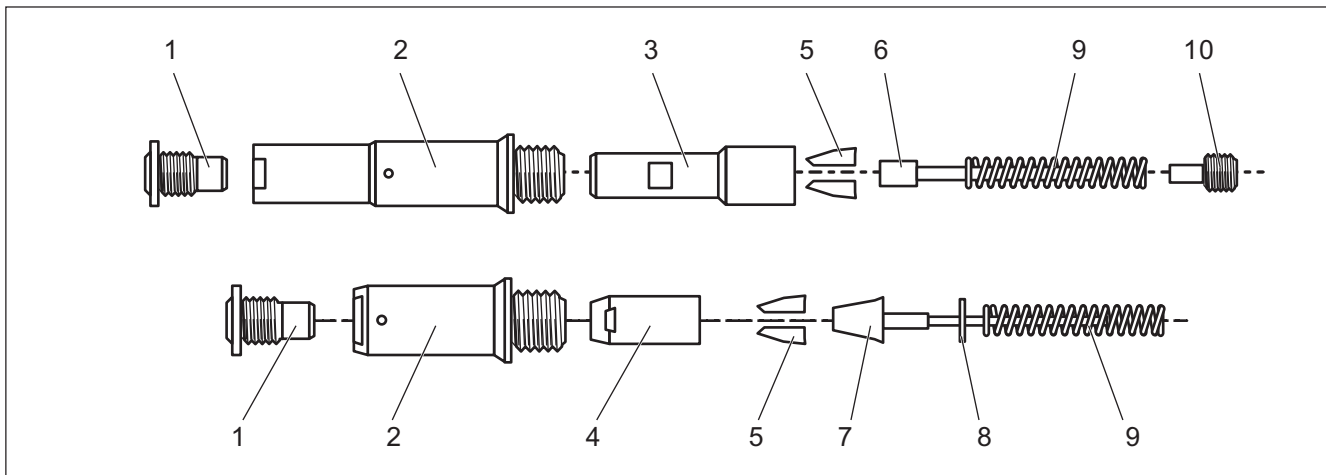
It is essential that the correct nose assembly is fitted prior to operating the tool. By knowing your original complete tool part number or the details of the fastener to be placed, you will be able to order a new complete nose assembly using the selection tables on page 8.

## FITTING INSTRUCTIONS

### IMPORTANT

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

- Lightly coat the jaws with Moly lithium grease.
- Drop jaws 5 into jaw housing 4 or chuck collet 3, depending on whether you have a short or long nose assembly (see table opposite for identification).
- Insert jaw spreader 7 into jaw housing 4 (locating in the 'V' shape formed by the jaws) or insert front spring guide 6 into chuck collet 3.
- Locate buffer 8 on jaw spreader 7.
- Locate spring 9 onto jaw spreader 7 or onto front spring guide 6.
- On long nose assemblies, screw rear spring guide 10 into chuck collet 3.
- Fit locking ring 11 onto the jaw spreader housing assembly of the tool.
- Holding tool pointing down, screw on the assembled jaw housing or chuck collet onto the jaw spreader housing assembly and tighten with spanner.
- Screw nose tip 1 into nose casing 2.
- Place nose casing 2 over jaw housing 4 or chuck collet 3 and screw onto tool, tightening with spanner.

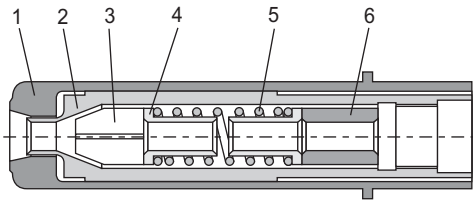


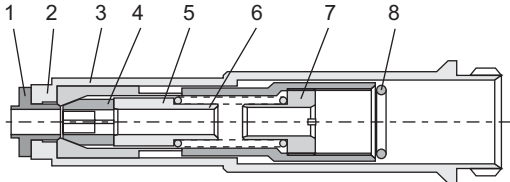
## 07267 NOSE ASSEMBLY COMPONENTS

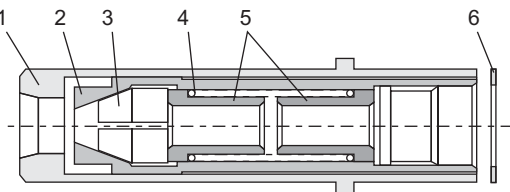
This table lists nose assemblies. Each nose assembly represents a unique assembly of components which can be ordered individually. Component numbers refer to the illustration above. We recommend some stock as items will need regular replacement. Read the Nose Assemblies servicing instructions opposite carefully. All nose assemblies also include a locking ring part number 07340-00327.

NOSE ASSY	1	2	3	5	6	9	10
07498-00500	07497-03202	07498-00501	07498-00502	07497-03002*	07498-00507	07500-02005	07498-00503
07498-01100	07498-01101	07498-00501	07498-00502	07498-03002*	07498-00507	07500-02005	07498-00503

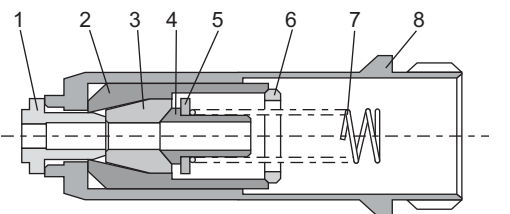
NOSE ASSY	1	2	4	5	7	8	9
07490-04900	07490-04400	07340-00306	07340-00304	07340-07502	07340-07503	07340-01503	07340-01502
07498-01300	07498-01400	07340-00306	07340-00304	07340-07502	07340-07503	07340-01503	07340-01502
07498-02000	07605-00220	07340-00306	07498-04503	07498-04501*	07498-04900	07498-03003	07100-04003
07498-04600	07498-03202	07340-00306	07340-00304	07498-04501*	07498-04502	07498-03003	07100-04003
07498-04700	07498-03001	07340-00306	07498-04503	07498-04501*	07498-04900	07498-03003	07100-04003

AVDELOK						
DESCRIPTION	ANVIL	CHUCK COLLET	CHUCK JAWS	SPRING GUIDE	SPRING	SPACER
ITEM N°	1	2	3	4	5	6
						
NOSE ASSY						
07200-02500	07200-02501	07200-02101	07220-02102	07220-02104	07220-02103	-
07200-02600	07200-02601	07200-02201	07220-02302	07220-02104	07220-02103	-
07200-02700	07220-02601	07220-02701	07220-02606	07220-02603	07220-02605	07220-02604
07200-02800	07200-02801	07200-02201	07220-02302	07220-02104	07220-02103	-
07200-03300	07200-03301	07200-03302	07220-02302	07220-02104	07220-02103	-
07200-03500	07220-03501	07220-03502	07220-02003	07220-02603	07220-02605	-
07220-02000	07220-02001	07220-02002	07220-02003	07220-02603	07220-02605	-
07220-02700	07200-02701	07200-02101	07220-02102	07220-02104	07220-02103	-
07220-03400	07220-03401	07220-03402	07220-02606	07220-02603	07220-02605	07220-02604
07220-03500	07200-03501	07200-02201	07220-02302	07220-02104	07220-02103	-

AVTAINER 07498-00800				
ITEM	DESCRIPTION	PART N°	QTY	
				
1	NOSE TIP	07498-00802	1	
2	NOSE CASING	07498-00501	1	
3	CHUCK COLLET	07498-00801	1	
4	JAWS	07220-02302	1 SET	
5	SPRING GUIDE	07498-00803	1	
6	SPRING	07500-02005	1	
7	THREADED SPRING GUIDE	07498-00503	1	
8	LOCKING RING	07340-00327	1	

MAXLOK 07610-02000 & 07610-02100				
ITEM	DESCRIPTION	07610-02000 PART N°	07610-02100 PART N°	QTY
				
1	ANVIL	07610-02001	07610-02101	1
2	CHUCK COLLET	07610-02002	07610-02102	1
3	CHUCK JAWS	07610-02003	07610-02103	1 SET
4	SPRING	07220-02103	07220-02103	1
5	SPRING GUIDE	07220-02104	07220-02104	1
6	FRICITION RING	07610-02004	07610-020041	1

Anvils are stamped " 3/ 16M" or " 1/ 4M" to aid identification

HEMLOK 07612-02000				
ITEM	DESCRIPTION	PART N°	QTY	
				
1	NOSE TIP	07612-02001	1	
2	JAW HOUSING	07612-02003	1	
3	JAWS	07612-02002	1 SET	
4	JAW SPREADER	07612-04502	1	
5	BUFFER	07498-03003	1	
6	LOCKING RING	07340-00327	1	
7	SPRING	07007-00458	1	
8	NOSE CASING	07340-00306	1	

## SERVICING INSTRUCTIONS

Nose assemblies should serviced at weekly intervals.

- Remove the complete nose assembly using the reverse procedure to the 'Fitting instructions'.
- Any worn or damaged part should be replaced by a new part.
- Particularly check wear on jaws.
- Ensure jaw spreader assembly tube 7 (where fitted) or front spring guide 6 is not distorted.
- Check spring 9 is not distorted.
- Assemble according to fitting instructions.

# SERVICING THE TOOL

Regular servicing should be carried out and a comprehensive inspection performed annually or every 500000 cycles, whichever is sooner.

## IMPORTANT

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.

### 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 by new items.
- 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 equipment is correct.
- Check oil level in intensifier's reservoir. If necessary top up with the prescribed priming oil.

### 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.

Grease can be ordered as a single item, the part number is shown in the service kit opposite.

MOLY LITHIUM GREASE EP 3753 SAFETY DATA	
<b>FIRST AID</b> SKIN: As the grease is completely water resistant it is best removed with an approved emulsifying skin cleaner.  INGESTION: Make the individual drink 30ml Milk of Magnesia, preferably in a cup of milk.  EYES: Irritant but not harmful. Irrigate with water and seek medical attention.	<b>FIRE</b> 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.
<b>ENVIRONMENT</b> Scrape up for burning or disposal on approved site.	<b>HANDLING</b> Use barrier cream or oil resistant gloves.  <b>STORAGE</b> Away from heat and oxidising agent.

For all servicing we recommend the use of the service kit, part number 07900-06270.

SERVICE KIT		
ITEM PART N°	DESCRIPTION	N° OFF
07900-00589	SPREADER	1
07900-00590	PUSHER	1
07900-00591	BULLET	1
07900-00592	GAUGE	1

## MAINTENANCE

Every 500000 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 Moly Lithium grease EP 3753 before assembling.

### IMPORTANT

Safety Instructions appear on page 3.

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 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.

Item **numbers in bold** refer to the general assembly and parts list page 20 and 21.

Prior to dismantling the tool it is necessary to remove the nose assembly. For simple removal instructions see the nose assemblies section, pages 10 - 11.

Remove bleed screw **6** and washer **5** and drain oil from tool.

For total tool servicing we advise that you proceed with dismantling of sub-assemblies in the order shown overleaf.

To disconnect the oil hose **46/47** and air delivery and return hose **44/45** from the tool, lower the sleeve **43** to gain access to the hoses. Disconnect air hoses by pushing and releasing the quick release connectors. Using two spanners, undo oil hose at double male connector **42**, leaving the double male connector attached to the handle of the tool. Remove the tool.

## STEM CATCHER UNIT

- To remove the stem catcher assembly from the tool, loosen three screws **26** and slide stem catcher adaptor **25** together with the stem catcher from off of the stop cover **24**.
- Remove two screws **36** and separate the stem catcher assembly from stem catcher adaptor.
- Assemble in reverse order of dismantling.

## PISTON ASSEMBLY

- Grip tool handle **14** in a vice fitted with soft jaws and, using a spanner on the flats of the protrusion on the stop cover **24**, unscrew stop cover, together with 'O' rings **22** & **23**.
- Undo screws **20** from stop cover **24** and remove piston stop **21**.
- Remove 'O' rings **22** from their grooves on outer surface of stop cover **24**, and hook out 'O' rings **23** from inside stop cover **24**.
- Withdraw buffer **19** from piston **17** shaft.
- Push piston **17** as far forward as possible to allow a thin spanner to locate the flats on nose end of piston **17**. Using another suitable spanner, unscrew end plug **12** and withdraw from piston **17**.
- Withdraw scraper ring **13**.
- Push piston **17** out of rear of tool (some oil will be ejected from tool during this action).
- Using circlip pliers, remove circlip **16** from tool casting and withdraw scraper ring **15**.
- Remove seal (air tight) **10** and seal (oil tight) **9** from piston **17**.
  
- Assemble in reverse order of dismantling, ensuring that seals **9** & **10** are assembled in correct order, also scraper ring **13** is inserted right way round.
- Use piston insertion tool\* to install piston.
- A guide tube may be fitted over end plug **12** shaft to prevent jamming of fastener stem.

## TRIGGER ASSEMBLY

- Using a spanner, undo locknut **28** and remove trigger **27**, 'O' ring **29**, and spring **30** from handle **14**.
- Assemble in reverse order of dismantling.

## CABINET

The cabinet comprise an intensifier, a pilot valve, a pressure regulator and filtering unit and an air pressure indicating assembly together with the air hoses internal to the cabinet.

Servicing is limited to removal/replacement of complete assemblies and the renewal of seals within the pilot valve.

## INTENSIFIER

- To remove the intensifier and oil reservoir, disconnect the oil hose using two spanners, (be prepared for oil spillage from hose/intensifier), then remove the hoses (quick release connectors) connecting the intensifier to the pilot valve.
- Using a spanner, remove the two nuts and associated washers securing the intensifier to the baseplate.
- Lift intensifier clear of cabinet.
  
- Replacement is in reverse order of removal.

### IMPORTANT

Check the tool against daily and weekly servicing.

Priming is ALWAYS necessary after the tool has been dismantled and prior to operating.

\* refers to items included in the Avdel service kit. For complete list see page 13.



## PILOT VALVE

Servicing of the valve is limited to the removal/replacement of 'O' rings.

- Remove screws **24** and remove pilot assembly .
- Remove pilot valve **11** and discard 'O' rings **3, 10, 4** and **5**.
- Remove screws **26 & 21** and remove end caps **22 & 25** .
- Withdraw pistons **12 & 18** and remove 'O' rings **7 & 9** from pistons.
- Withdraw spool **16** from bore, taking care not to damage surface of spool and remove location washers **14 & 17**, 'O' ring **8**, spacers **15** and 'O' ring **6** from each end of valve body.
- Remove the five interface 'O' rings **4**.
- Discard ALL 'O' rings removed.
  
- Clean all parts with paraffin or white spirit. DO NOT USE SOLVENTS. Dry all parts.
  
- Lightly smear bores of valve body **23**, pilot valve body **19**, both end caps **22 & 25** and all replacement 'O' rings with 'CENTOPLEX 2' grease.
- Fit new seals **10, 4** and **5** to pilot valve spool **11** and insert into pilot valve body.
- Fit new seals **3, 10** and **6** to pilot valve body, place top cap **20** in position and secure pilot valve assembly to the main valve body **23** with screws **24**. Ensure that the interface seal housing faces upward with the G1/4 at the bottom. Ensure orientation of pilot valve **11** is correct.
- With main valve body **23** in the same position, fit green location washer **17** to the left hand side of the valve assembly.
- Starting from the right hand side of the valve, assemble alternately the 'O' rings **8** and spacers **15** (6 seals and 5 spacers) and finally complete the stack assembly with white location washer **14**.
- Lightly smear spool **16** with 'CENTOPLEX 2' grease and slide spool through seal/spacer stack.
- Fit seals **9 & 7** to respective pistons **12 & 18**, fit seals **6** to ends of main valve body **23**.
- Insert pistons into end caps **25 & 22** and assemble end caps to valve, taking care to locate piston shafts into holes in the ends of the spool **16**.
- Secure end cap assemblies to main valve body **23** with screws **26 & 21**.
- Fit interface 'O' rings **4** into their housings in the main valve body.
- If the pipe connection to the pilot assembly is damaged, replace the plastic collet **2** and lift out the 'O' ring from the cartridge **27**. Fit new 'O' ring **1** and insert plastic collet **2** into the cartridge.

## PRESSURE REGULATOR AND FILTERING ASSEMBLY

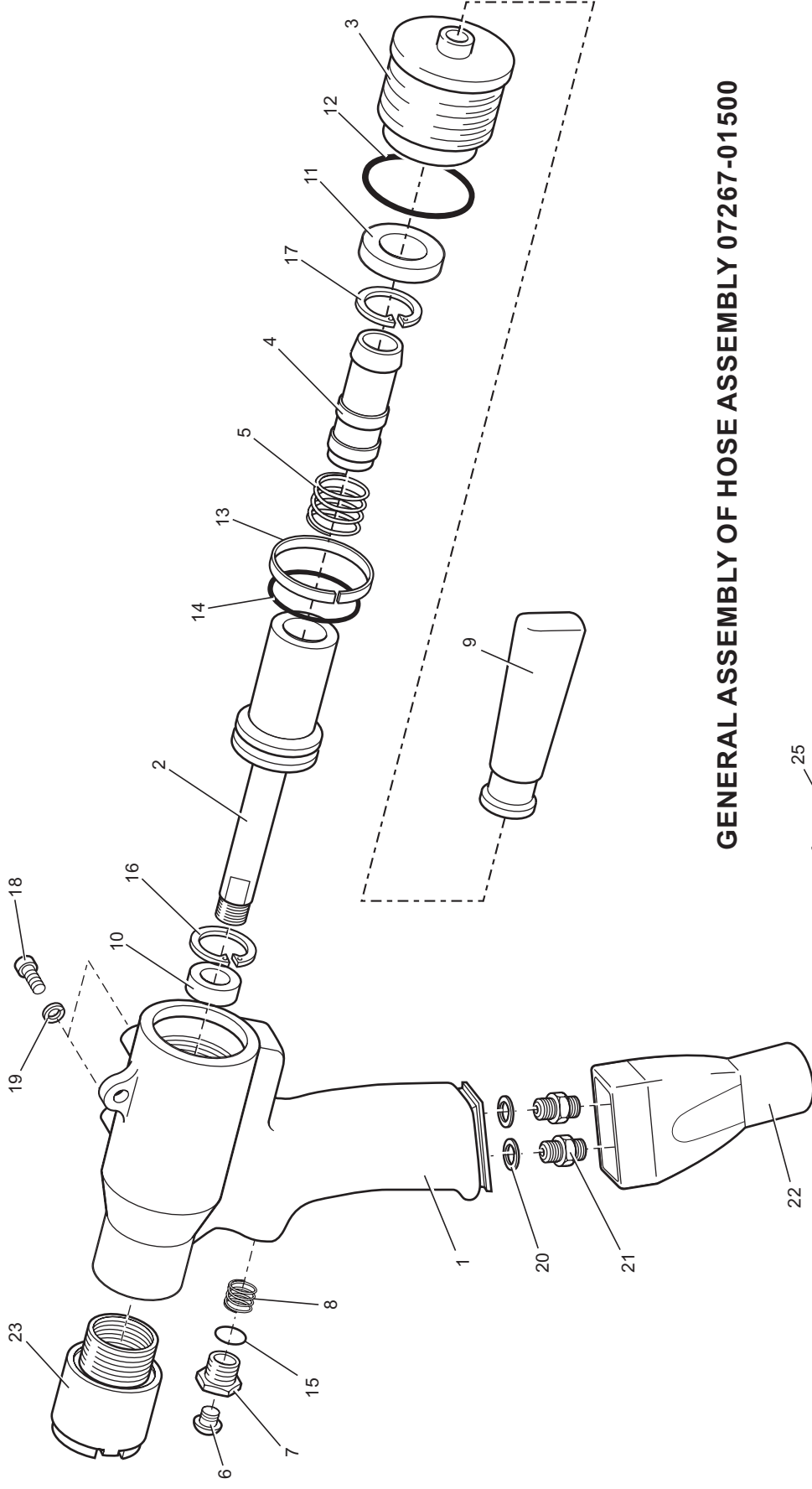
- To remove the assembly from the cabinet, disconnect the two hoses at the regulator.
- Remove the two screws, spacers, washers and nuts securing the regulator to the cabinet.
- Remove assembly from the cabinet.
  
- Replacement is in reverse order of removal.

## AIR PRESSURE INDICATOR ASSEMBLY

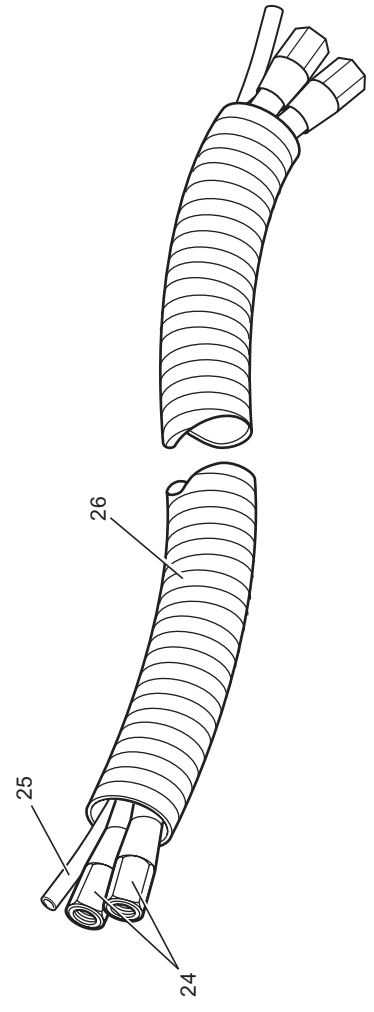
- To remove the assembly, remove the air hose from the rear of the gauge.
- Remove the clamp from the rear of the gauge and withdraw gauge from front of the cabinet.
  
- Replacement is in reverse order of removal.
  
- After any dismantling/assembling has occurred, the system MUST be primed.

\* refers to items included in the Avdel service kit. For complete list see page XX.

GENERAL ASSEMBLY OF TOOL HANDLE ASSEMBLY 07267-01000



GENERAL ASSEMBLY OF HOSE ASSEMBLY 07267-01500



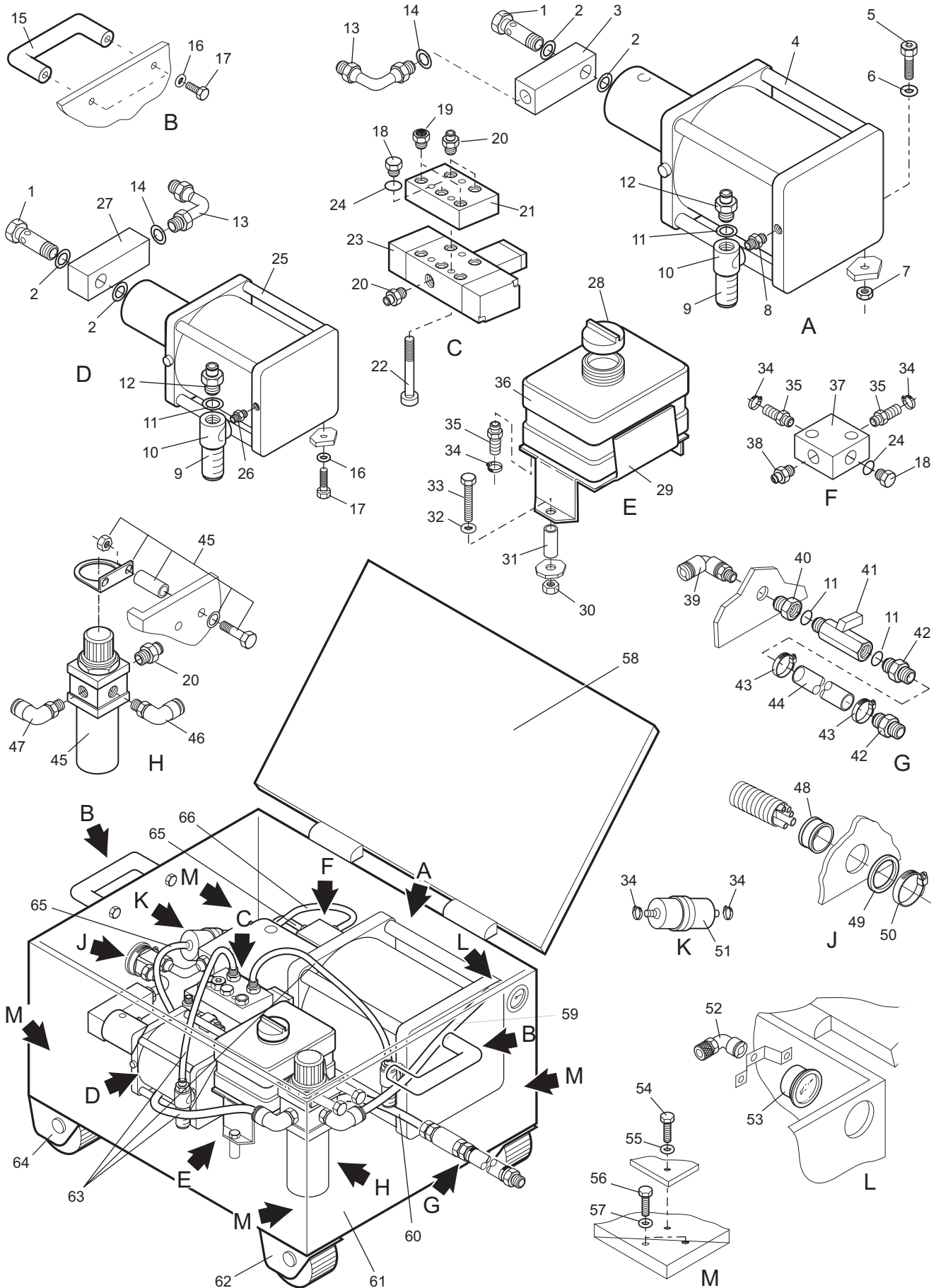
**07267-01000 PARTS LIST**

ITEM	PART N°	DESCRIPTION	QTY	SPARES	ITEM	PART N°	DESCRIPTION	QTY	SPARES
1	07267-01001	HANDLE	1	-	13	07267-01013	GRAPHITE RING	1	-
2	07267-01002	PISTON	1	-	14	07267-01014	'O' RING	1	-
3	07267-01003	STOP COVER	1	-	15	07555-00502	'O' RING	1	-
4	07267-01004	DEFLECTOR SUPPORT	1	-	16	07267-01016	CIRCLIP	1	-
5	07267-01005	SPRING	1	-	17	07267-01017	CIRCLIP	1	-
6	07265-03023	TRIGGER	1	-	18	07265-02010	BLEED SCREW	2	-
7	07265-03022	LOCKNUT	1	-	19	07265-02011	WASHER	2	-
8	07555-09219	SPRING	1	-	20	07265-02031	WASHER	2	-
9	07220-00215	STEM DEFLECTOR	1	-	21	07267-01022	CONNECTOR	2	-
10	07267-01010	SEAL	-	-	22	07267-01025	SLEEVE	1	-
11	07267-01011	SEAL	1	-	23	07220-01500	HEAD EXTENSION	1	-
12	07267-01012	'O' RING							

**07267-01500 PARTS LIST**

ITEM	PART N°	DESCRIPTION	QTY	SPARES	ITEM	PART N°	DESCRIPTION	QTY	SPARES
24	07267-01501	5m OIL HOSE	2	-	26	07267-01502	5m PROTECTIVE SLEEVE	1	-
25	07265-02063	5m AIR HOSE	1	-					

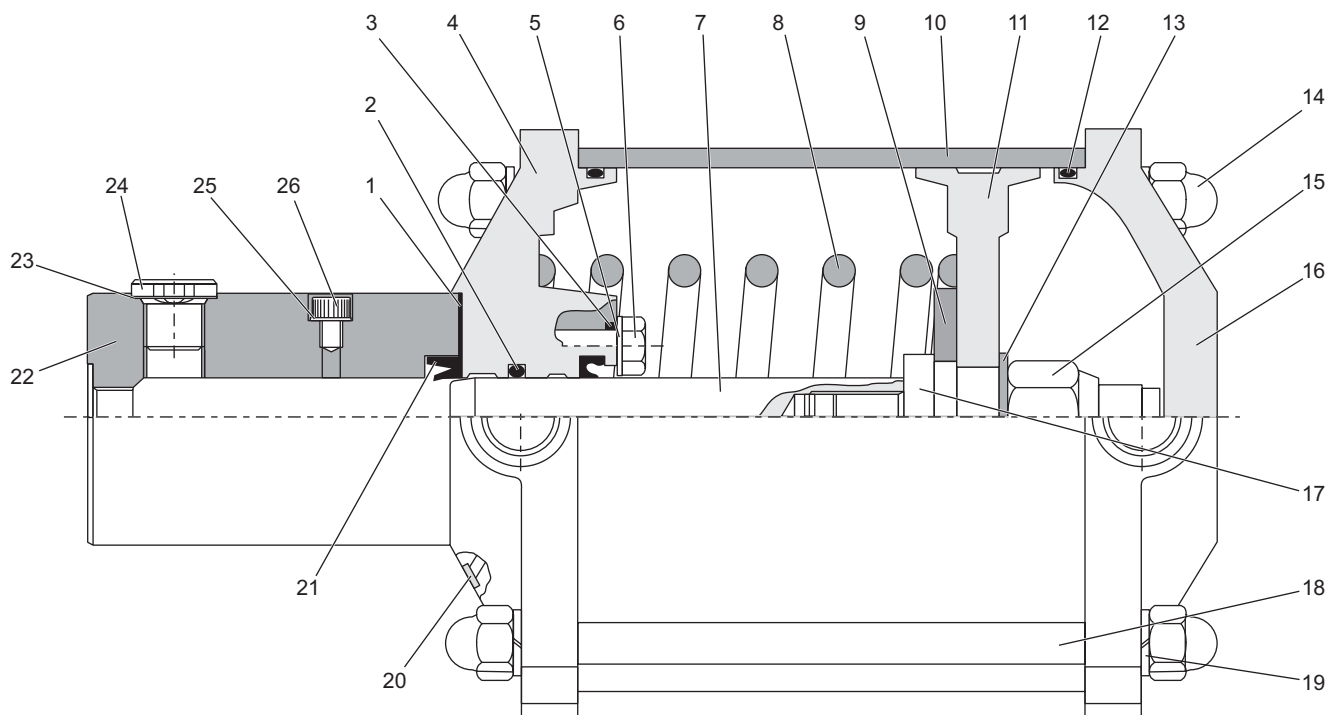
# GENERAL ASSEMBLY OF CABINET 07267-03200



## PARTS LIST OF CABINET 07267-03200

07267-03200 CABINET PARTS LIST									
ITEM	PART N°	DESCRIPTION	QTY	SPARES	ITEM	PART N°	DESCRIPTION	QTY	SPARES
1	07267-03224	SCREW	2	-	37	07267-03207	OIL DISTRIBUTOR	1	-
2	07265-03259	WASHER	4	-	38	07267-03209	CONNECTOR	1	-
3	07267-03227	DISTRIBUTOR	1	-	39	07267-03262	ELBOW CONNECTOR	2	-
4	07005-01652	INTENSIFIER	1	-	40	07267-03263	BUSH	1	-
5	07265-02267	BOLT	2	-	41	07267-03264	AIR TUBE	1	-
6	07625-02268	WASHER	2	-	42	07265-03253	CONNECTOR	2	-
7	07265-02269	NUT	2	-	43	07265-02076	CLAMP	2	-
8	07265-03260	CONNECTOR	1	-	44	07265-03219	AIR HOSE (2500mm)	1	-
9	07265-03263	SILENCER	2	-	45	07265-03220	PRESSURE REG & FILTER ASSY	1	-
10	07265-03225	QUICK EXHAUST	2	-	46	07265-03256	ELBOW CONNECTOR	1	-
11	07265-03261	WASHER	5	-	47	07265-03257	ELBOW CONNECTOR	1	-
12	07267-03204	HOSE CONNECTOR	2	-	48	07267-03251	RING	1	-
13	07267-03226	ELBOW CONNECTOR	2	-	49	07267-03252	WASHER	1	-
14	07265-02031	WASHER	2	-	50	07265-03292	CLAMP	1	-
15	07265-03202	HANDLE	2	-	51	07267-03212	OIL FILTER	1	-
16	07265-02284	WASHER	6	-	52	07265-03255	ELBOW CONNECTOR	1	-
17	07265-02283	SCREW	4	-	53	07265-03254	AIR PRESSURE INDICATOR ASSY	1	-
18	07267-03208	PLUG	2	-	54	07265-03231	SCREW	4	-
19	07265-03270	SILENCER	2	-	55	07265-03232	WASHER	4	-
20	07265-03271	STRAIGHT CONNECTOR	4	-	56	07265-03205	SCREW	8	-
21	07265-03222	SUB BASE	2	-	57	07265-03204	WASHER	8	-
22	07265-03266	SCREW	3	-	58	07265-03201	BOX (inc. KEY)	1	-
23	07005-00590	VALVE	1	-	59	07265-03216	6mm AIR HOSE (270mm)	1	-
24	07265-03268	WASHER	2	-	60	07265-03215	10mm AIR HOSE (100mm)	1	-
25	07005-00659	INTENSIFIER	1	-	61	07265-03230	BASE PLATE	1	-
26	07267-03221	CONNECTOR	1	-	62	07265-03203	WHEEL	2	-
27	07267-03222	DISTRIBUTOR	1	-	63	07267-03268	10mm AIR HOSE (450mm)	3	-
28	07267-03213	OIL RESERVOIR PLUG	1	-	64	07265-03207	WHEEL	2	-
29	07267-03215	OIL RESERVOIR BASE	1	-	65	07267-03265	OIL HOSE (400mm)	2	-
30	07267-03219	NUT	2	-	66	07267-03266	OIL HOSE (200mm)	1	-
31	07267-03217	SPACER	2	-	67	07267-03267	OIL HOSE	1	NOT SHOWN
32	07267-03218	WASHER	2	-	68	07267-03271	10mm AIR HOSE	1	NOT SHOWN
33	07267-03216	BOLT	2	-	69	07267-03272	6mm AIR HOSE	1	NOT SHOWN
34	07267-03211	CLAMP	6	-	70	07265-03272	WASHER	5	NOT SHOWN
35	07267-03210	HOSE CONNECTOR	4	-	71	07265-03273	WASHER	8	NOT SHOWN
36	07267-03214	OIL RESERVOIR	1	-	72	07265-03206	NUT	8	NOT SHOWN

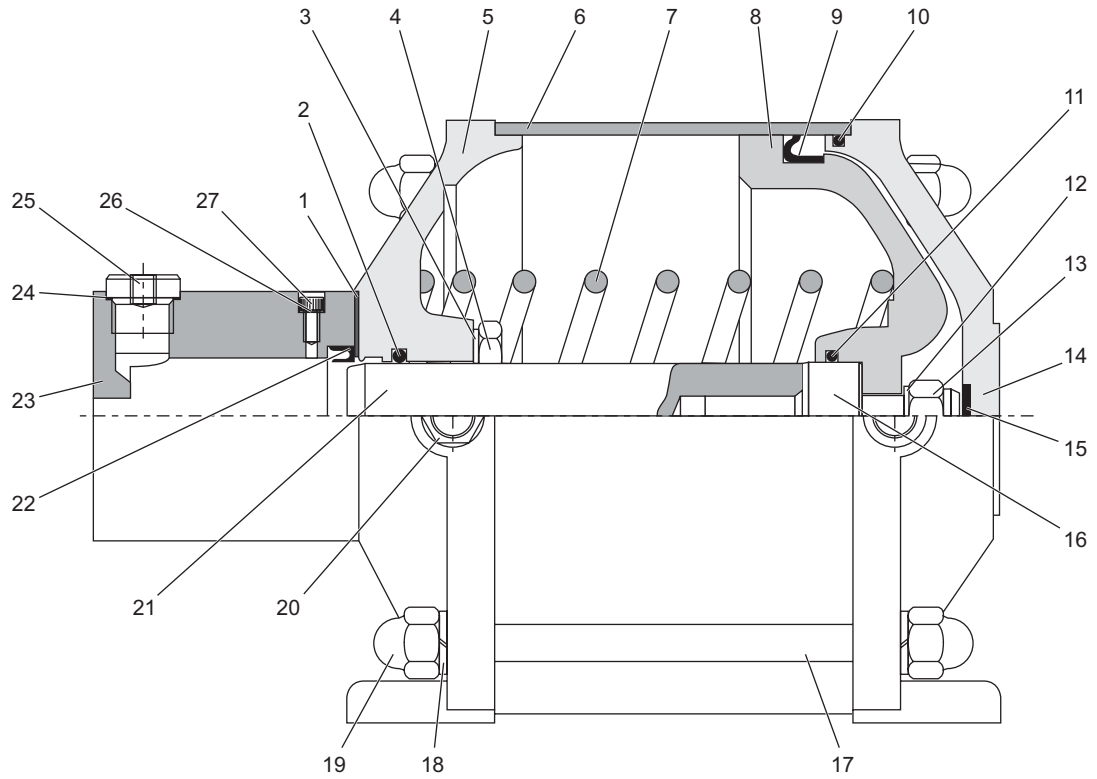
## GENERAL ASSEMBLY OF PUSH INTENSIFIER 07005-00659



## PARTS LIST OF PUSH INTENSIFIER 07005-00659

07005-00659 PUSH INTENSIFIER PARTS LIST									
ITEM	PART N°	DESCRIPTION	QTY	SPARES	ITEM	PART N°	DESCRIPTION	QTY	SPARES
1	07267-08119	SEAL	4	-	15	07267-08015	LOCKNUT	1	-
2	07267-08104	SEAL	1	-	16	07267-08116	REAR FLANGE	1	-
3					17	07267-08130	ROD EXTENSION	1	-
4	07627-08107	FRONT FLANGE	1	-	18	07267-08114	TENSION ROD	4	-
5	07267-08125	WASHER	4	-	19	07267-08126	SPRING WASHER	8	-
6	07267-08106	SCREW	4	-	20	07267-08122	FILTER	1	-
7	07267-08109	ROD	1	-	21	07267-08103	SEAL	1	-
8	07267-08134	SPRING	1	-	22	07267-08102	STEEL HEAD	1	-
9	07267-08133	SPRING GUIDE	1	-	23	07267-08128	WASHER	1	-
10	07267-08117	PNEUMATIC CYLINDER	1	-	24	07267-08101	PLUG	1	-
11	07267-08110	PISTON	1	-	25	07267-08123	WASHER	1	-
12	07267-08031	WASHER	1	-	26	07267-08121	BLEED SCREW	1	-
13	07267-08112	SEAL	1	-	27	07267-08135	FILTER	1	NOT SHOWN
14	07267-08113	BLIND NUT	8	-					

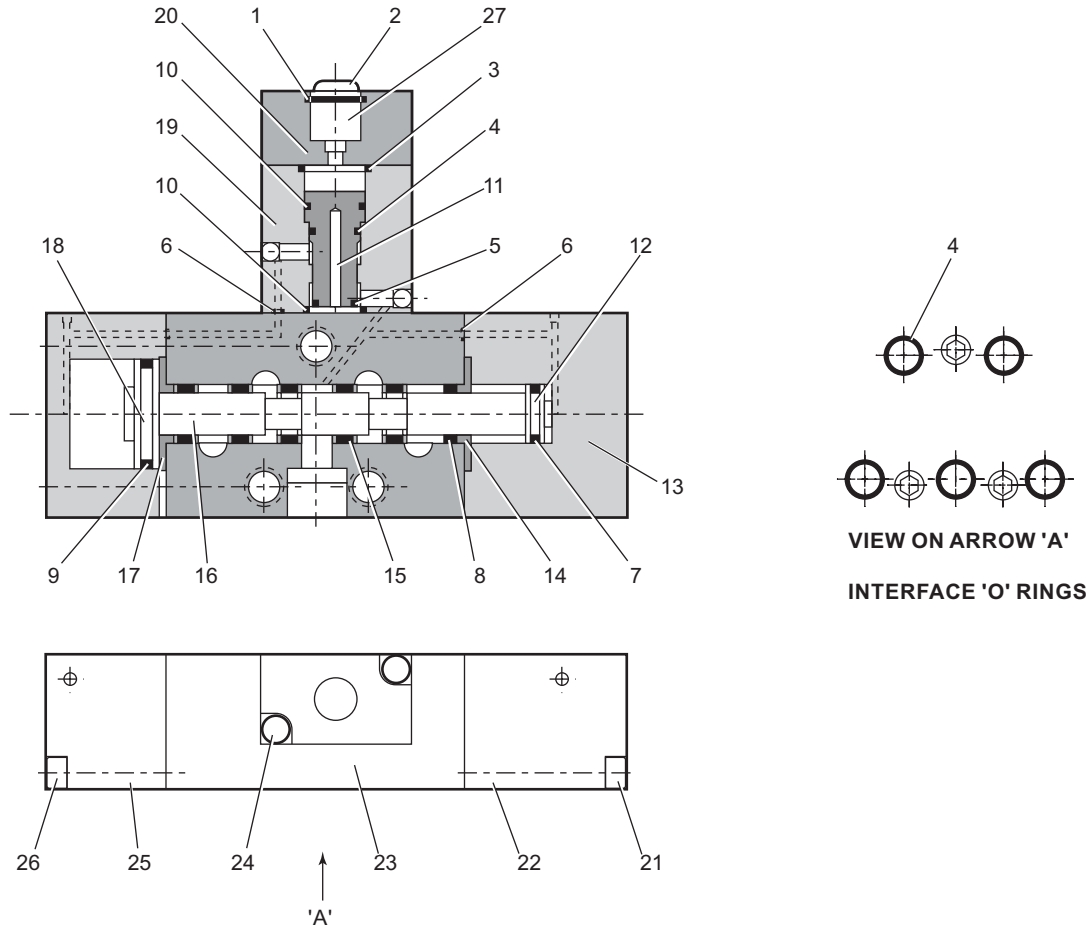
## GENERAL ASSEMBLY OF PULL INTENSIFIER 07005-01652



## PARTS LIST OF PULL INTENSIFIER 07005-01652

07005-01652 PULL INTENSIFIER PARTS LIST									
ITEM	PART N°	DESCRIPTION	QTY	SPARES	ITEM	PART N°	DESCRIPTION	QTY	SPARES
1	07267-08019	SEAL	4	-	15	07267-08035	SHOCK ABSORBER	1	-
2	07267-08004	SEAL	1	-	16	07267-08032	ROD EXTENSION	1	-
3	07267-08022	WASHER	4	-	17	07267-08014	TENSION ROD	4	-
4	07267-08006	SCREW	4	-	18	07267-08026	SPRING WASHER	8	-
5	07627-08007	FRONT FLANGE	1	-	19	07267-08013	BLIND NUT	8	-
6	07267-08017	PNEUMATIC CYLINDER	1	-	20	07267-08033	FILTER	1	-
7	07267-08008	SPRING	1	-	21	07267-08009	ROD	1	-
8	07267-08010	PISTON	1	-	22	07267-08003	SEAL	1	-
9	07267-08011	PISTON SEAL	1	-	23	07267-08002	STEEL HEAD	1	-
10	07267-08012	SEAL	1	-	24	07267-08030	WASHER	1	-
11	07267-08020	SEAL	1	-	25	07267-08029	PLUG	1	-
12	07267-08031	WASHER	1	-	26	07267-08034	WASHER	1	-
13	07267-08015	LOCKNUT	1	-	27	07267-08021	BLEED SCREW	1	-
14	07267-08016	REAR FLANGE	1	-					

## GENERAL ASSEMBLY OF VALVE 07005-00590



07005-00590 VALVE PARTS LIST

ITEM	PART N°	DESCRIPTION	QTY	SPARES	ITEM	PART N°	DESCRIPTION	QTY	SPARES
1	07005-00599	* 'O' RING	-	-	15	-	SPACER	5	-
2	07005-00598	* PLASTIC COLLET	-	-	16	-	SPOOL	1	-
3	07003-00204	* 'O' RING	1	-	17	-	WASHER	1	-
4	07003-00103	* 'O' RING	6	-	18	-	PISTON	1	-
5	07003-00042	* 'O' RING	1	-	19	-	BODY	1	-
6	07003-00121	* 'O' RING	4	-	20	-	TOP CAP	1	-
7	08005-00127	* 'O' RING	1	-	21	-	SCREW	2	-
8	07003-00105	* 'O' RING	6	-	22	-	END CAP	1	-
9	07003-00178	* 'O' RING	1	-	23	-	BODY	1	-
10	07003-00017	* 'O' RING	2	-	24	-	SCREW	2	-
11	-	PISTON	1	-	25	-	END CAP	1	-
12	-	PISTON	1	-	26	-	SCREW	2	-
13	07005-00590	VALVE ASSEMBLY	-	-	27	-	CARTRIDGE	1	-
14	-	WASHER	1	-					

\* Together these items make up a Service Kit for the valve with the addition of one CENTOPLEX 2 tube of grease, the kit is available from Avdel, part number 07005-01538.





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 litres (part number 07992-00002) or one gallon containers (part number 07992-00006). Please find specific table and safety data below.

HYSPIN VG 32 OIL SAFETY DATA			
<b>FIRST AID</b> <b>SKIN:</b> Wash thoroughly with soap and water as soon as possible. Casual contact requires no immediate attention. Short term contact requires no immediate attention. <b>INGESTION:</b> Seek medical attention immediately. DO NOT induce vomiting. <b>EYES:</b> Irrigate immediately with water for several minutes. Although NOT a primary irritant, minor irritation may occur following contact. <b>FIRE</b> Suitable extinguishing media: CO2, dry powder, foam or water fog. DO NOT use water jets.		<b>ENVIRONMENT</b> <b>WASTE DISPOSAL:</b> Through authorised contractor to a licensed site. May be incinerated. Used product may be sent for reclamation. <b>SPILLAGE:</b> Prevent entry into drains, sewers and water courses. Soak up with absorbent material. <b>HANDLING</b> Wear eye protection, impervious gloves (e.g. of PVC) and a plastic apron. Use in well ventilated area. <b>STORAGE</b> No special precautions.	
PROPERTIES	RESULT	PROPERTIES	RESULT
ISO oil type	HL	Foaming tendency/stability	
ISO viscosity grade	32	ml @ 24°C	Trace/Nil
Kinematic viscosity		ml @ 93.5°C	20/Nil
	cS @ 40°C	ml @ 24°C after test @ 93.5°C	Trace/Nil
	@ 100°C	Air release value minutes to	
Relative density	at 20°C	0.2% air content @ 50°C	4
Viscosity Inde		Seal compatibility index	10
Pour point	°C	Water separation time	
Open Flash point	°C	in minutes to 40-40-0 @54°C	15
Neutralisation value mg KOH/g	1.5	@83°C	15

## PROCEDURE

Item numbers in bold refer to the Push Intensifier general assembly 20.

### IMPORTANT

**CONNECT AIR SUPPLY (this causes the piston to bottom, allowing more priming oil into the tool).**

**DO NOT OPERATE THE TRIGGER WHILE THE BLEED SCREW IS REMOVED.**

**All operations should be carried out on a clean bench, with clean hands in a clean area.**

**Ensure that the priming pump is free from foreign matter and that the 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.**

- Prior to starting the priming procedure, obtain a suitable container to collect excess oil.
- Disconnect the air supply and undo the intensifier oil reservoir cap.
- Top up the reservoir with VG32 Castrol Hyspin priming oil to a level of 20mm (0.8") below top of reservoir.
- Remove bleed screw **6** and associated washer **5** from placing tool.
- Connect the tool to the air supply.
- Place tool handle over the container with bleed hole orientated towards container and depress the trigger.
- When oil is ejected from bleed hole, release trigger.
- Depress trigger again, replace bleed screw **6** and washer **5** BEFORE releasing trigger again.
- Repeat the trigger depressing/releasing sequence, allowing a few seconds between cycles to allow priming oil to circulate.
- Continue until oil flowing from bleed hole is free of air bubbles, (ensure that the reservoir is not starved of oil, otherwise air will be drawn into the system introducing air bubbles in the oil stream).
- When oil is flowing unrestricted by air, tighten the bleed screw with an Allen key and release trigger.
- If necessary, top up the oil reservoir.

## FAULT DIAGNOSIS TABLE

SYMPTOM	POSSIBLE CAUSE	REMEDY
Several pulls required to set rivet	→ Low air pressure.	→ Increase air pressure.
	→ Lack of lubrication.	→ Lubricate tool at air inlet point.
	→ Worn or broken tail jaws.	→ New tail jaws.
	→ Oil level in tool low or air in oil.	→ Prime tool. (see page 24)
Jaws will not grip rivet stem	→ Worn or dirty tail jaws	→ Clean or renew as necessary.
	→ Tail jaw housing loose.	→ Tighten against nylon locking ring.
	→ Weak or broken nose assembly spring.	→ Replace spring.
	→ Incorrect nose equipment fitted.	→ Replace as necessary.
Jaws will not release spent rivet stem.	→ Dirty tail jaws or tail jaw housing.	→ Clean.
	→ Tail jaw housing, nose tip or nose casing not properly seated.	→ Tighten nose equipment.
	→ Weak or broken spring around tail jaw spreader assembly.	→ New spring.
Spent rivet stem is jamming in tool.	→ Incorrect tail jaw spreader fitted.	→ Replace with correct part.
	→ Collector bottle too full.	→ Empty and ensure bottle never exceeds half full.



## Engineered Fastening and Assembly Systems

### Declaration of Conformity

We, *Avdel UK Limited, Watchmead Industrial Estate, Welwyn Garden City, Herts, AL7 1LY*  
*Avdel SRL, Via Mannin 350-21, 20099 Sesto Giovanni, Milan, Italy*

declare under our sole responsibility that the product

*type 07267*

Serial N.....

to which this declaration relates is in conformity with the following standards or other formative documents

EN292 part 1 and part 2

ISO 8662 part 1 & 7

ISO 3744 and PNEUROP test code PN8NTC1

ISO PREN792 part 6 & 14

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

*Delle Lore Michele*

Milan - date of issue

M. Dellefave - Quality Manager



Since 1922 Since 1936

**Avdel® iForm™**

2010



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