



An Acument™ Global Technologies Company



Instruction Manual

Pass onto user to read and keep for reference



Hydro-Pneumatic Power Tool

0749 MkII type

07498 - 07494 - 07495

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.

S P E C I F I C A T I O N S F O R 0 7 4 9 T Y P E T O O L

AIR PRESSURE	■	Minimum - Maximum	■ 4.8 - 7 bar	■ 70 - 100 lbf/in ²
FREE AIR VOLUME REQUIRED	■	@ 5.5 bar / 80 lbf/in ²	■ 3.5 litres	■ .12 ft ³
STROKE	■	07498 Minimum	■ 24.13 mm	■ .950 in
		07494 & 07495 Minimum	■ 15.9 mm	■ .625 in
PULL FORCE	■	@ 4.8 bar / 70 lbf/in ²	■ 10.91 kN	■ 2450 lbf
CYCLE TIME	■	Approximately	■ 1.5 seconds	■
NOISE LEVEL	■	Less than	■ 70 dB(A)	■
WEIGHT	■	Without nose equipment	■ 2.7 kg	■ 6 lb
VIBRATION	■	Less than	■ 2.5 m/s ²	■

SAFETY

General	2
Specific to Type of Tool	3

INTENT OF USE

General	4
07498 Tool Dimensions / Selection	4-5
07494 Tool Dimensions / Selection	6
07495 Tool Dimensions / Selection	7

PUTTING INTO SERVICE

Air Supply	8
Operating Procedure	8
Accessories	9

NOSE ASSEMBLIES

07498 Fitting/Service/Components	10-11
07494 Fitting/Service/Components	12-13
07495 Fitting/Service/Components	12-13

SERVICING

Regular Servicing - Service Kit	14-15
Maintenance	15-17
General Assembly & Parts List	18-19

PRIMING

Priming Oil Details	20
Priming Procedure	20

FAULT DIAGNOSIS

Fault Diagnosis Table	21
-----------------------	----

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 ETC. 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 7 BAR - 100 LBF/IN².

⚠ DO NOT OPERATE THE TOOL WITHOUT FULL NOSE EQUIPMENT IN PLACE. 07494 AND 07495 TOOLS SHOULD NOT BE OPERATED IF THE GUARD IS DAMAGED IN ANY WAY.

⚠ CARE SHALL BE TAKEN TO ENSURE THAT SPENT STEMS ARE NOT ALLOWED TO CREATE A HAZARD.

⚠ 07498 TOOLS MUST BE FITTED WITH AN UNDAMAGED PINTAIL DEFLECTOR OR STEM CATCHER BEFORE OPERATING.

⚠ IF THE 07498 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 0749 type tool is designed to place Avdel breakstem rivets at high speed making it ideal for batch or flow-line assembly in a wide variety of applications throughout all industries.

The three Mk II models described in this manual have improved sealing and supersede the original 0749 type. Their serial numbers run from 30,000 for the 07498 model and from 300 for the 07494 and 07495 models.

The 07498 fitted with a pintail deflector is the standard tool for which a stem catching option and a side ejection accessory are available (see details page 9). It is also possible to order the base tool only (part number 07498-00200) which will not be fitted with a nose assembly.

The base tool part number for the other two tools of this type, the 07494 and 07495, is 07494-00200. Differences with the 07498-00200 are on the general assembly and part list page 18 and 19.

07498 TOOL SELECTION

FASTENER		NOSE (see drawing opposite for A & B)							COMPLETE	
NAME & HEAD	Ø	MATERIAL/DETAIL	NOSE TIP TYPE	A (mm)	B (mm)	A (in)	B (in)	NOSE ASSY PART N°	TOOL PART N°	
AVEX Snap head & 120° csk head except 07498-00024 large flange only.	1/8"	Al. Alloy	Standard	3.3	61	.130	2.4	07490-00900	07498-00001	
		Al. Alloy	Extended	12.9	58	.510	2.3	07490-01000	07498-00002	
	3 mm	Steel	Standard	3.3	61	.130	2.4	07490-01600	07498-00008	
		Al. Alloy	Standard	3.3	61	.130	2.4	07490-01400	07498-00006	
		Al. Alloy	Standard	3.3	61	.130	2.4	07490-01600	07498-00008	
		Al. Alloy	Extended	11.4	58	.450	2.3	07490-01700	07498-00009	
	5/32"	Steel	Standard	3.3	61	.130	2.4	07498-06300	07498-00015	
		Al. Alloy	Standard	3.3	61	.130	2.4	07498-06300	07498-00015	
		Al. Alloy	Extended	10.0	61	.395	2.4	07498-06400	07498-00016	
		Al. Alloy L/flange Steel	Standard	4.1	61	.162	2.4	07498-06600	07498-00024	
	3/16"	Steel	Standard	3.3	61	.130	2.4	07490-04900	07498-00026	
		Al. Alloy	Standard	3.6	61	.140	2.4	07612-02000	07498-00007	
	AVDEL Snap head & 100° csk & 120° csk	1/8"	Al. Alloy	Standard	2.5	56	.100	2.2	07344-02300	07498-00005
			Al. Alloy Oversize	Standard	2.5	56	.100	2.2	07344-02900	07498-00028
5/32"		Stainless Steel	Standard	3.3	56	.130	2.2	07344-02100	07498-00003	
		Titanium	Standard	3.3	56	.130	2.2	07344-02100	07498-00003	
		Al. Alloy	Standard	2.5	56	.100	2.2	07344-02600	07498-00012	
		Al. Alloy Oversize	Standard	2.5	56	.100	2.2	07344-03000	07498-00029	
3/16"		Stainless Steel	Standard	3.3	56	.130	2.2	07344-02400	07498-00010	
		Titanium	Standard	3.3	56	.130	2.2	07344-02400	07498-00010	
		Al. Alloy	Standard	2.5	56	.100	2.2	07498-04000	07498-00019	
		Al. Alloy Oversize	Standard	2.5	56	.100	2.2	07498-04100	07498-00030	
		Stainless Steel	Standard	2.4	71	.093	2.8	07490-02500	07498-00017	
		Titanium	Standard	2.4	71	.093	2.8	07490-02500	07498-00017	
M.B.C. Universal head & 100° csk		1/8"	Al. Alloy	Standard	4.7	56	.185	2.4	07498-06700	07498-00051
			Al. Alloy Oversize	Standard	4.8	56	.190	2.2	07498-07000	07498-00054
	5/32"	Stainless Steel	Standard	4.7	61	.185	2.4	07498-02400	07498-00045	
		Al. Alloy	Standard	4.9	61	.192	2.4	07498-06800	07498-00052	
		Al. Alloy Oversize	Standard	4.9	61	.192	2.4	07498-07100	07498-00055	
		Stainless Steel	Standard	4.9	56	.192	2.2	07498-02500	07498-00046	
	3/16"	Al. Alloy	Standard	5.0	61	.196	2.4	07498-04300	07498-00053	
		Stainless Steel	Standard	5.0	61	.196	2.4	07498-02600	07498-00047	
	AVDEL SR Raised head & 120° csk	1/8"	Al. Alloy	Standard	3.3	61	.130	2.4	07490-00900	07498-00001
			Copper	Standard	3.3	61	.130	2.4	07490-00900	07498-00001
5/32"		Copper Nickel Al.	Standard	3.3	61	.130	2.4	07490-00900	07498-00001	
		Al. Alloy	Standard	3.3	61	.130	2.4	07490-01600	07498-00008	
		Copper	Standard	3.3	61	.130	2.4	07490-01600	07498-00008	
		Copper Nickel Al.	Standard	3.3	61	.130	2.4	07490-01600	07498-00008	
3/16"		Al. Alloy	Standard	3.3	61	.130	2.4	07498-03900	07498-00004	
		Copper	Standard	3.3	61	.130	2.4	07498-03900	07498-00004	
1/4"		Copper Nickel Al.	Standard	3.3	61	.130	2.4	07498-03900	07498-00004	
		Al. Alloy	Standard	3.3	61	.130	2.4	07490-04900	07498-00026	
T-LOK Snap head		4.3 mm	Steel	Standard	3.3	61	.130	2.4	07498-06300	07498-00015
			Steel	Extended	10.0	58	.395	2.3	07241-07500	07498-00014
	3/16"	Steel	Standard	3.3	61	.130	2.4	07498-06300	07498-00015	
		Steel	Extended	10.0	58	.395	2.3	07241-07500	07498-00014	
TLR	3/16"	Al. Alloy	Standard	4.1	61	.160	2.4	07498-02000	07498-00058	
	1/4"	Al. Alloy	Standard	4.0	99	.156	3.9	07498-01100	07498-00059	

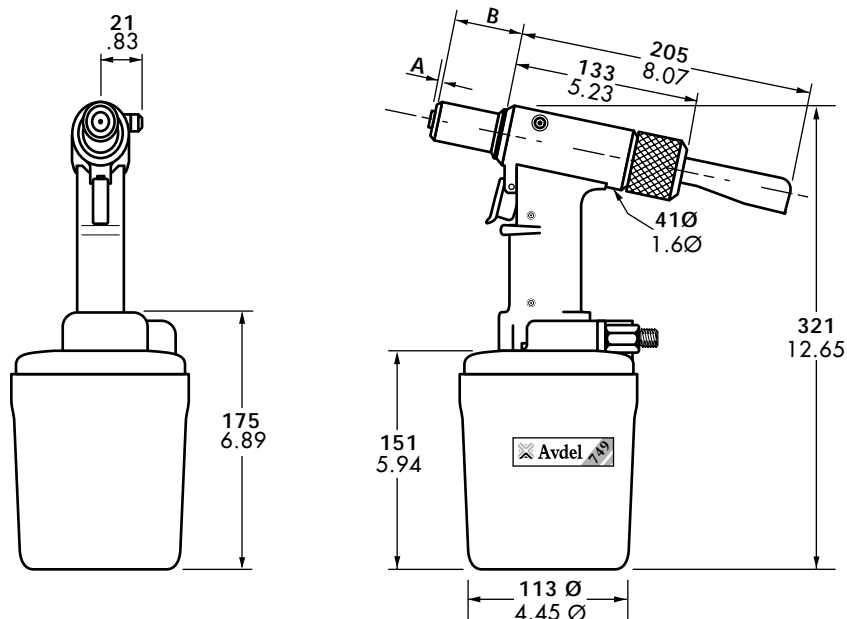
07498 - FIXED NOSE ASSEMBLY

The 07498 is fitted with a fixed straight nose assembly suitable where access is unrestricted.

Use the selection chart below and opposite to select a complete 07498 tool which will include the correct nose assembly for a selected fastener. For details of Nose Assemblies see page 10 and 11.

'A' and 'B' dimensions will help you assess the accessibility of your application.

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



07498 TOOL SELECTION (continued)

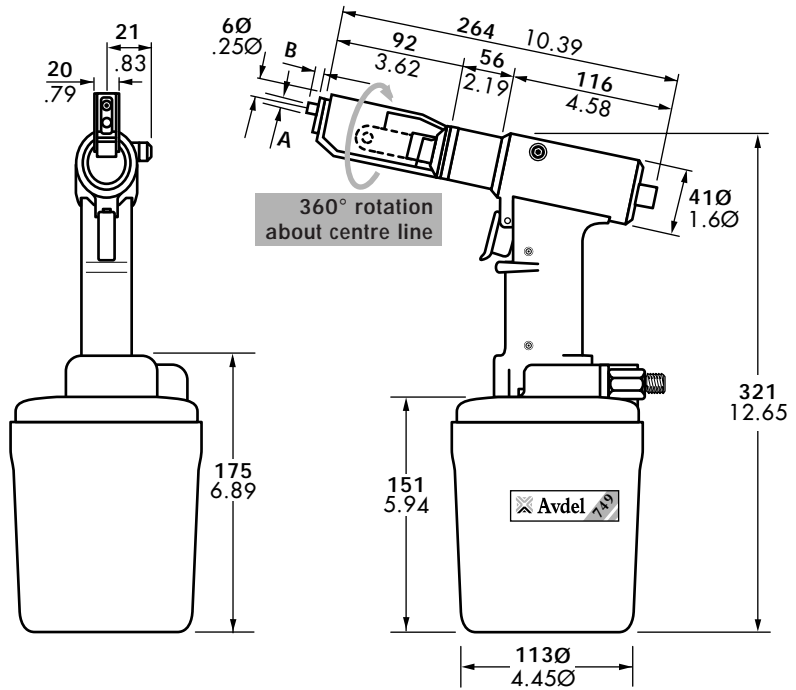
FASTENER			NOSE (see drawing above for A & B)						COMPLETE
NAME & HEAD	Ø	MATERIAL/DETAIL	NOSE TIP TYPE	A (mm)	B (mm)	A (in)	B (in)	NOSE ASSY PART N°	TOOL PART N°
AVSEAL	4mm	Al. Alloy	Standard	4.5	61	.177	2.4	07340-07600	07498-00064
		Al. Alloy	Extended	6.7	61	.264	2.4	07498-08400	07498-00074
	5mm	Al. Alloy	Standard	4.5	61	.177	2.4	07640-02100	07498-00065
		Al. Alloy	Extended	6.7	61	.264	2.4	07640-03100	07498-00075
	6mm	Al. Alloy	Standard	5.3	61	.208	2.4	07640-02200	07498-00066
		Al. Alloy	Extended	7.2	61	.283	2.4	07640-03200	07498-00076
	6.5mm	Al. Alloy	Standard	5.3	61	.208	2.4	07340-08300	07498-00062
		Al. Alloy	Extended	7.2	61	.283	2.4	07498-09100	07498-00072
	7mm	Al. Alloy	Standard	5.3	61	.208	2.4	07640-02400	07498-00067
		Al. Alloy	Extended	7.2	61	.283	2.4	07640-03400	07498-00077
	8mm	Al. Alloy	Standard	5.6	99	.220	3.9	07340-08000	07498-00068
		Al. Alloy	Extended	7.2	99	.285	3.9	07498-08800	07498-00078
	9mm	Al. Alloy	Standard	5.6	99	.220	3.9	07340-08100	07498-00069
		Al. Alloy	Extended	7.2	99	.285	3.9	07498-08900	07498-00079
10mm	Al. Alloy	Standard	5.6	99	.220	3.9	07340-08200	07498-00070	
	Al. Alloy	Extended	7.2	99	.285	3.9	07498-09000	07498-00080	
MONOBOLT Protruding head & 100° csk * The nose tip actually remains the same, it is the nose casing that is longer. See nose assemblies page 10 for details.	3/16"	Al. Alloy	Standard	4.1	61	.160	2.4	07498-04700	07498-00031
		Steel	Standard	4.1	61	.160	2.4	07498-04700	07498-00031
	1/4"	Stainless Steel	Standard	4.1	61	.160	2.4	07498-04700	07498-00031
		Al. Alloy	Standard	4.0	61	.156	2.4	07498-04600	07498-00032
		Al. Alloy	Extended *	4.0	111	.156	4.4	07498-00500 *	07498-00036
		Steel	Standard	4.0	61	.156	2.4	07498-04600	07498-00032
		Steel	Extended *	4.0	111	.156	4.4	07498-00500 *	07498-00036
		Stainless Steel	Standard	4.0	61	.156	2.4	07498-04600	07498-00032
Stainless Steel	Standard	4.0	111	.156	4.4	07498-00500 *	07498-00036		
	Extended *	4.0	111	.156	4.4	07498-00500 *	07498-00036		
AVINOX BE11 & BE61	1/8"	Stainless Steel	Standard	3.3	61	.130	2.4	07490-01600	07498-00008
	5/32"	Stainless Steel	Standard	3.3	61	.130	2.4	07498-06300	07498-00015
	3/16"	Stainless Steel	Standard	3.3	61	.130	2.4	07498-01300	07498-00027
M.B.C. L/C Universal head & 100° csk	1/8"	Al. Alloy	Lock Creator	4.7	61	.185	2.4	07498-07600	07498-00033
		Al. Alloy <i>Oversize</i>	Lock Creator	4.7	61	.185	2.4	07498-07600	07498-00033
		Stainless Steel	Lock Creator	4.7	61	.185	2.4	07344-04700	07498-00037
	5/32"	Hybrid <i>Oversize</i>	Lock Creator	4.8	56	.190	2.2	07498-07300	07498-00041
		Al. Alloy	Lock Creator	4.9	61	.192	2.4	07498-07700	07498-00034
		Al. Alloy <i>Oversize</i>	Lock Creator	4.9	61	.192	2.4	07498-07700	07498-00034
	3/16"	Stainless Steel	Lock Creator	4.7	61	.185	2.4	07344-04700	07498-00037
		Hybrid <i>Oversize</i>	Lock Creator	4.9	61	.192	2.4	07498-07400	07498-00043
		Al. Alloy	Lock Creator	5.0	61	.196	2.4	07498-07800	07498-00035
		Al. Alloy <i>Oversize</i>	Lock Creator	5.0	61	.196	2.4	07498-07800	07498-00035
		Stainless Steel	Lock Creator	5.0	61	.196	2.4	07498-06200	07498-00038
		Hybrid <i>Oversize</i>	Lock Creator	5.0	61	.196	2.4	07498-07500	07498-00044
BULBEX	5/32"	Al. Alloy	Standard	3.3	61	.130	2.4	07490-01600	07498-00008
		Al. Alloy	Extended	11.4	58	.450	2.3	07490-01700	07498-00009
	3/16"	Al. Alloy	Standard	3.3	61	.130	2.4	07498-06300	07498-00015
		Al. Alloy	Extended	10.0	61	.395	2.4	07498-06400	07498-00016
AVIBULB Low profile	1/8"	Steel	Standard	3.3	61	.130	2.4	07490-01600	07498-00008
	5/32"	Steel	Standard	3.3	61	.130	2.4	07498-06300	07498-00015
	3/16"	Steel	Standard	3.3	61	.130	2.4	07498-02700	07498-00025
AVTAINER	3/8"	Steel	Standard	4.1	88	.160	7.4	07498-00700	07498-00042

07494 - STRAIGHT SWIVEL NOSE ASSEMBLY

The 07494 is fitted with a "straight" swivel type of nose assembly for use on applications with restricted access.

It will place all the fasteners listed in the selection table below. Use this table to select a complete 07494 tool which will include the correct nose assembly for a selected fastener. For details of Nose Assemblies see pages 12.

'A' and 'B' dimensions will help you assess the accessibility of your application.



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

07494 TOOL SELECTION

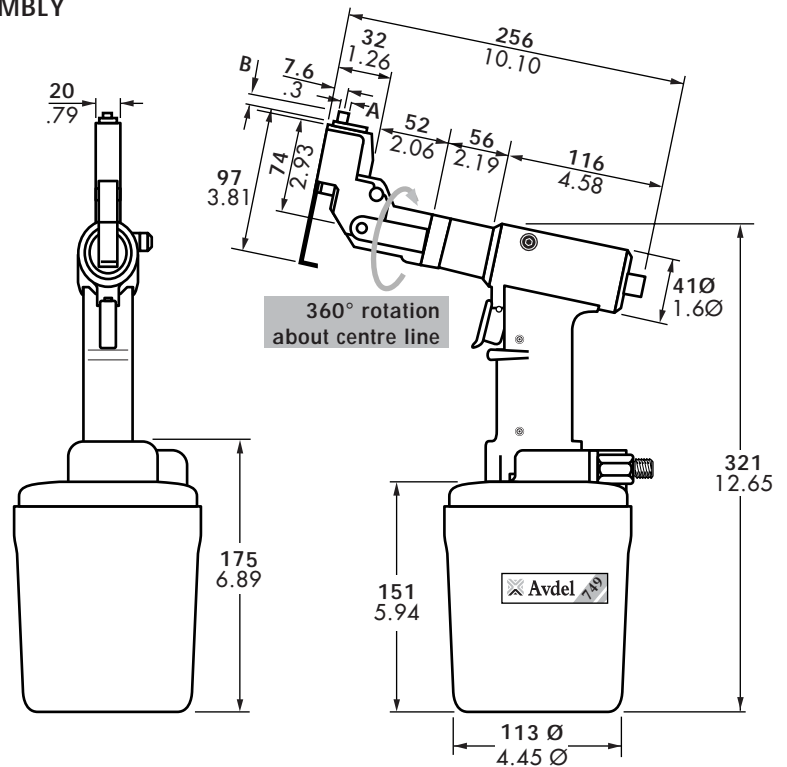
FASTENER		NOSE (see drawing above for A & B)						COMPLETE		
NAME & HEAD	Ø	MATERIAL/DETAIL	NOSE TIP TYPE	A (mm)	B (mm)	A (in)	B (in)	NOSE ASSY PART N°	TOOL PART N°	
AVEX Snap head & 120° csk head.	1/8"	Al. Alloy	Standard	7.9	3.8	.310	.150	07345-03000	07494-00004	
	5/32"	Steel	Standard	7.9	3.8	.310	.150	07345-03100	07494-00005	
		Al. Alloy	Standard	7.9	3.8	.310	.150	07345-03100	07494-00005	
	3/16"	Steel	Standard	7.9	3.8	.310	.150	07345-03200	07494-00006	
		Al. Alloy	Standard	7.9	3.8	.310	.150	07345-03200	07494-00006	
	Steel	Standard	7.7	4.1	.301	.165	07494-04000	07494-00036		
AVDEL Snap head & 100° csk & 120° csk	3/32"	Stainless Steel	Standard	5.1	1.3	.200	.050	07494-03400	07494-00023	
	1/8"	Al. Alloy	Standard	5.1	1.2	.200	.046	07345-03300	07494-00014	
		Al. Alloy <i>Oversize</i>	Standard	5.1	1.2	.200	.046	07494-03600	07494-00017	
		Stainless Steel	Standard	5.1	3.8	.200	.150	07494-03000	07494-00024	
	5/32"	Titanium	Standard	5.1	3.8	.200	.150	07494-03000	07494-00024	
		Al. Alloy	Standard	6.6	0.9	.260	.033	07345-03400	07494-00015	
		Al. Alloy <i>Oversize</i>	Standard	6.6	0.9	.260	.033	07494-03700	07494-00018	
	3/16"	Stainless Steel	Standard	6.6	3.8	.260	.150	07494-03100	07494-00025	
		Titanium	Standard	6.6	3.8	.260	.150	07494-03100	07494-00025	
		Al. Alloy	Standard	8.1	0.3	.320	.010	07345-03500	07494-00016	
		Al. Alloy <i>Oversize</i>	Standard	8.1	0.3	.320	.010	07494-03800	07494-00019	
		Stainless Steel	Standard	8.1	3.9	.320	.150	07494-03200	07494-00026	
		Titanium	Standard	8.1	3.9	.320	.150	07494-03200	07494-00026	
	M.B.C. Universal head & 100° csk	1/8"	Al. Alloy	Standard	4.8	1.9	.187	.075	07345-04000	07494-00051
			Al. Alloy <i>Oversize</i>	Standard	4.8	1.9	.187	.075	07345-04300	07494-00054
Stainless Steel			Standard	4.8	1.9	.187	.075	07345-04000	07494-00051	
5/32"		Al. Alloy	Standard	6.4	2.4	.250	.093	07345-04100	07494-00052	
		Al. Alloy <i>Oversize</i>	Standard	6.4	2.4	.250	.093	07345-04400	07494-00055	
		Stainless Steel	Standard	6.4	2.4	.250	.093	07345-04100	07494-00052	
3/16"		Al. Alloy	Standard	7.9	2.5	.312	.097	07345-04200	07494-00053	
		Stainless Steel	Standard	7.9	2.5	.312	.097	07345-04200	07494-00053	
		Al. Alloy	Standard	7.9	3.8	.312	.150	07345-03100	07494-00005	
BULBEX	5/32"	Al. Alloy	Standard	7.9	3.8	.312	.150	07345-03100	07494-00005	
	3/16"	Al. Alloy	Standard	7.9	3.8	.312	.150	07345-03200	07494-00006	
AVSEAL	4mm	Al. Alloy	Standard	6.4	2.0	.250	.077	07494-06000	07494-00064	
		Al. Alloy	Extended	6.4	4.1	.250	.162	07494-06600	07494-00074	
	5mm	Al. Alloy	Standard	7.6	2.0	.300	.077	07494-06100	07494-00065	
		Al. Alloy	Extended	7.6	4.1	.300	.162	07494-06700	07494-00075	
AVINOX BE11 & BE61	1/8"	Stainless Steel	Standard	7.9	3.8	.312	.150	07345-03100	07494-00005	
	5/32"	Stainless Steel	Standard	7.9	3.8	.312	.150	07345-03200	07494-00006	
	3/16"	Stainless Steel	Standard	7.7	4.1	.301	.162	07494-04000	07494-00036	

07495 - RIGHT ANGLE SWIVEL NOSE ASSEMBLY

The 07495 is fitted with a "right angle" swivel type of nose assembly for use on applications with no direct access to the fixing point.

It will place all the fasteners listed in the selection table below. Use this table to select a complete 07495 tool which will include the correct nose assembly for a selected fastener. For details of Nose Assemblies see pages 12.

'A' and 'B' dimensions will help you assess the accessibility of your application.



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

07495 TOOL SELECTION

FASTENER		NOSE (see drawing above for A & B)						COMPLETE	
NAME & HEAD	Ø	MATERIAL/DETAIL	NOSE TIP TYPE	A (mm)	B (mm)	A (in)	B (in)	NOSE ASSY PART N°	TOOL PART N°
AVEX Snap head & 120° csk head.	1/8"	Al. Alloy	Standard	7.9	3.8	.310	.150	07346-03000	07495-00004
		Steel	Standard	7.9	3.8	.310	.150	07346-03100	07495-00005
	5/32"	Al. Alloy	Standard	7.9	3.8	.310	.150	07346-03100	07495-00005
		Steel	Standard	7.9	3.8	.310	.150	07346-03200	07495-00006
		Al. Alloy	Standard	7.9	3.8	.310	.150	07346-03200	07495-00006
		Steel	Standard	7.7	4.1	.301	.165	07495-03500	07495-00036
AVDEL Snap head & 100° csk & 120° csk	3/32"	Stainless Steel	Standard	5.1	1.3	.200	.050	07495-03400	07495-00023
		Al. Alloy	Standard	5.1	1.2	.200	.046	07346-03300	07495-00014
	1/8"	Al. Alloy <i>Oversize</i>	Standard	5.1	1.2	.200	.046	07495-03600	07495-00017
		Stainless Steel	Standard	5.1	3.8	.200	.150	07495-03000	07495-00024
	5/32"	Titanium	Standard	5.1	3.8	.200	.150	07495-03000	07495-00024
		Al. Alloy	Standard	6.6	0.9	.260	.033	07346-03400	07495-00015
		Al. Alloy <i>Oversize</i>	Standard	6.6	0.9	.260	.033	07495-03700	07495-00018
		Stainless Steel	Standard	6.6	3.8	.260	.150	07495-03100	07495-00025
	3/16"	Titanium	Standard	6.6	3.8	.260	.150	07495-03100	07495-00025
		Al. Alloy	Standard	8.1	0.3	.320	.010	07346-03500	07495-00016
		Al. Alloy <i>Oversize</i>	Standard	8.1	0.3	.320	.010	07346-03800	07495-00019
		Stainless Steel	Standard	8.1	3.9	.320	.150	07495-03200	07495-00026
		Titanium	Standard	8.1	3.9	.320	.150	07495-03200	07495-00026
		Al. Alloy	Standard	4.8	1.9	.187	.075	07346-04000	07495-00051
M.B.C. Universal head & 100° csk	1/8"	Al. Alloy <i>Oversize</i>	Standard	4.8	1.9	.187	.075	07346-04300	07495-00054
		Stainless Steel	Standard	4.8	1.9	.187	.075	07346-04000	07495-00051
	5/32"	Al. Alloy	Standard	6.4	2.4	.250	.093	07346-04100	07495-00052
		Al. Alloy <i>Oversize</i>	Standard	6.4	2.4	.250	.093	07346-04400	07495-00055
	3/16"	Stainless Steel	Standard	6.4	2.4	.250	.093	07346-04100	07495-00052
		Al. Alloy	Standard	7.9	2.5	.312	.097	07346-04200	07495-00053
Stainless Steel	Standard	7.9	2.5	.312	.097	07346-04200	07495-00053		
	Al. Alloy	Standard	7.9	3.8	.312	.150	07346-03100	07495-00005	
BULBEX	5/32"	Al. Alloy	Standard	7.9	3.8	.312	.150	07346-03100	07495-00005
	3/16"	Al. Alloy	Standard	7.9	3.8	.312	.150	07346-03200	07495-00006
AVSEAL	4 mm	Al. Alloy	Standard	6.4	2.0	.250	.077	07495-04000	07495-00064
		Al. Alloy	Standard	6.4	4.1	.250	.162	07495-04700	07495-00074
	5 mm	Al. Alloy	Standard	7.6	2.0	.300	.077	07495-04100	07495-00065
		Al. Alloy	Standard	7.6	4.1	.300	.162	07495-04800	07495-00075
AVINOX BE11 & BE1	1/8"	Stainless Steel	Standard	7.9	3.8	.312	.150	07346-03100	07495-00005
	5/32"	Stainless Steel	Standard	7.9	3.8	.312	.150	07346-03200	07495-00006
	3/16"	Stainless Steel	Standard	7.7	4.1	.301	.162	07495-03500	07495-00036

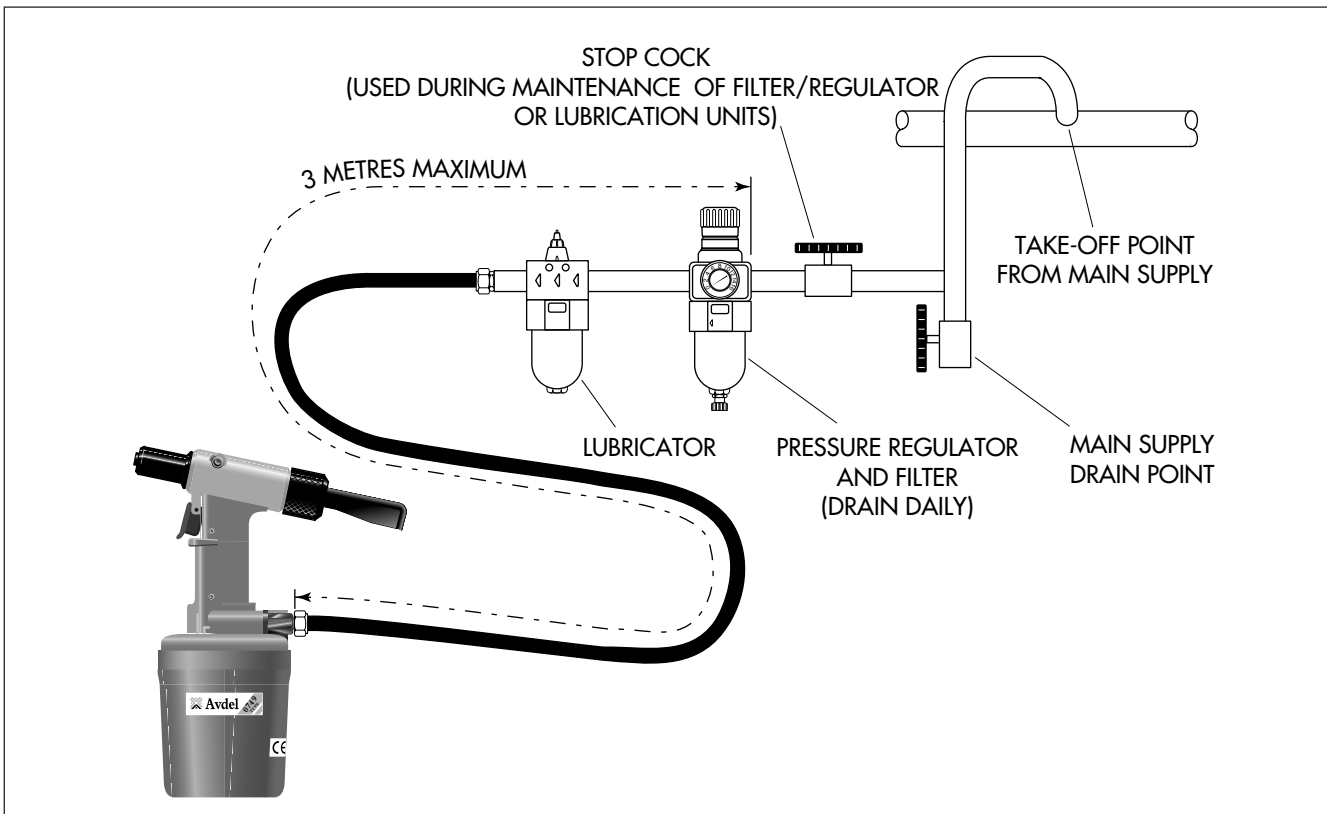
PUTTING INTO SERVICE

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 millimetres or $\frac{1}{4}$ inch.

Read servicing daily details page 14.



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 rivet stem.
- Fully depress the trigger. The tool cycle will ensure the rivet is placed.

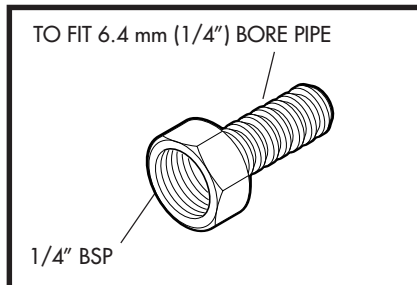
OPTION 2

- 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 depress the trigger. The tool cycle will ensure the rivet is placed.

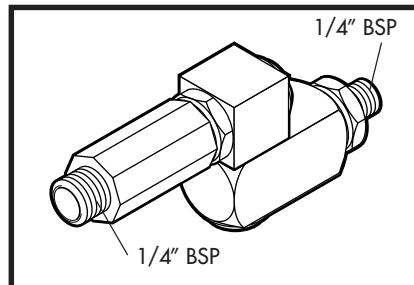
ACCESSORIES

Three different accessories are available to make the connection to your air supply:

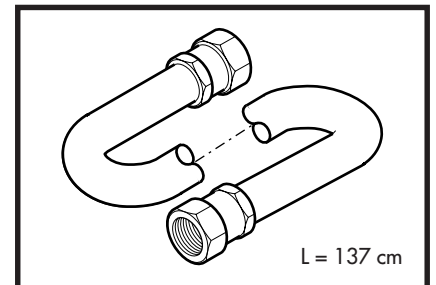
Hose Connector
part n° 07005-00276



Swivel Connector assembly
part n° 07640-01400



Hose Assembly
part n° 07008-000324



You may want to consider two more accessories to improve efficiency. THESE ARE ONLY AVAILABLE FOR THE 07498.

STEM CATCHER UNIT

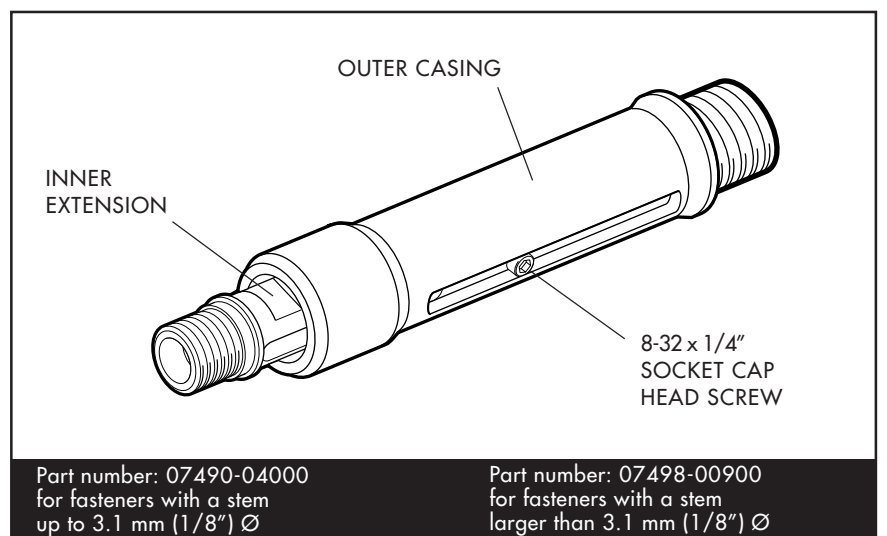
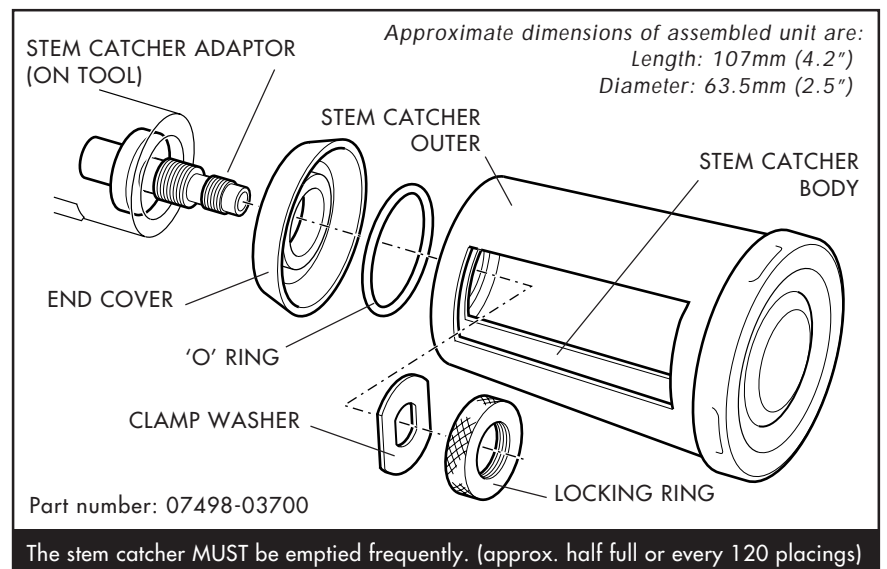
- To replace the pin tail deflector with the stem catcher unit unscrew the end cap and remove together with pintail deflector (items 53 and 54 of page 18).
- Assemble all items in the order shown on the diagram opposite.
- Offer the assembly to the stem catcher adaptor (item 52 of page 18).
- Start tightening the locking ring onto stem catcher adaptor.
- Rotate the stem catcher body until the opening is in the desired position.
- Fully tighten the locking ring.

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.

While an option on all other breakstem fasteners, this adaptor must always be used when placing Avtainer fasteners. The side ejection adaptor part number 07498-00900 is therefore included in the nose assembly for Avtainer (see the 07498 nose assemblies components table page 11).

- To install the side ejection adaptor, remove all nose equipment.
- Remove the socket cap screw.
- Screw the inner extension onto the jaw spreader housing assembly (item 19 of page 18).
- Screw the outer casing into the tool handle (item 10 of page 18).
- Replace the screw securing with Loctite Screwlock 222, part number 07900-00371.
- Fit the nose assembly to the side ejection adaptor.



NOSE ASSEMBLIES

There are three types of nose assemblies which are used with the 0749 type of tooling and thus three models 07498, 07494 and 07495. If you have purchased a complete tool, it will already be fitted with the correct nose assembly for your fastener.

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 pages 4, 5, 6 and 7 according to the tool model you are using.

07498 MODEL

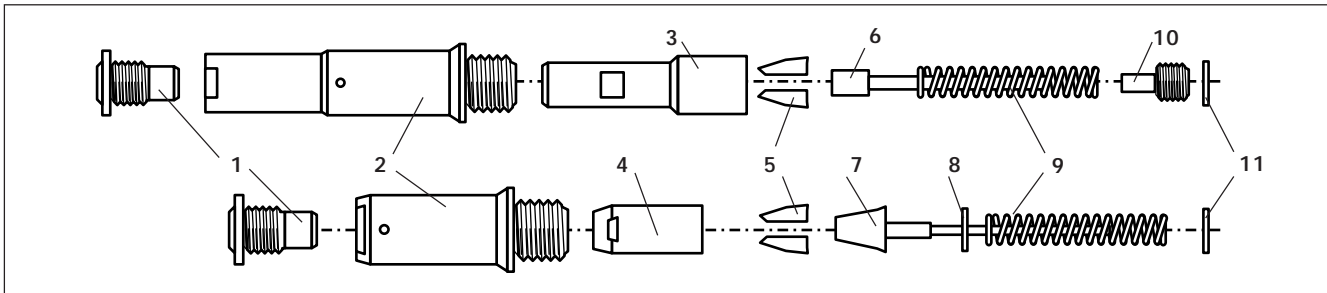
While this model always uses fixed nose assemblies, there are two very different size nose casings depending on the fastener being placed (see dimensions 'A' and 'B' on pages 4 and 5). Other components within the nose assembly will also vary. Check part numbers on component table.

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.



SERVICING INSTRUCTIONS

Nose assemblies should be 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.

07498 NOSE ASSEMBLY COMPONENTS

The upper table lists all nose assemblies with a long nose casing and the lower table all those with a short nose casing. Each nose assembly represents a unique assembly of components which can be ordered individually. Component numbers refer to the illustration on the opposite page. 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 (see illustration opposite).

NOSE ASSY	1	2	3	5	6	9	10
07340-08000	07340-08001	07498-00501	07498-00502	07497-03002	07498-00507	07500-02005	07498-00503
07340-08100	07340-08101	07498-00501	07498-00502	07497-03002	07498-00507	07500-02005	07498-00503
07340-08200	07340-08201	07498-00501	07498-00502	07497-03002	07498-00507	07500-02005	07498-00503
07498-00500	07497-03202	07498-00501	07498-00502	07497-03002*	07498-00507	07500-02005	07498-00503
07498-00700 **	07498-00802	07498-00501	07498-00801	07220-02302	07498-00803	07500-02005	07498-00503
07498-01100	07498-01101	07498-00501	07498-00502	07498-03002*	07498-00507	07500-02005	07498-00503
07498-08800	07498-08801	07498-00501 e	07498-00502	07497-03002*	07498-00507	07500-02005	07498-00503
07498-08900	07498-08901	07498-00501 e	07498-00502	07497-03002*	07498-00507	07500-02005	07498-00503
07498-09000	07498-09001	07498-00501 e	07498-00502	07497-03002*	07498-00507	07500-02005	07498-00503

NOSE ASSY	1	2	4	5	7	8	9
07241-07500	07241-07101	07340-02804	07340-00304	07340-00213	07498-03600	07498-03003	07100-04003
07340-07600	07340-07601	07340-00306	07340-00304	07340-00213	07344-01400	07340-01304	07340-01303
07340-08300	07340-08301	07340-00306	07340-00304	07490-04602	07498-03002	07498-03003	07100-04003
07344-02100	07344-02101	07344-02001	07340-00304	07340-00213	07344-01400	07340-01304	07340-01303
07344-02300	07140-02104	07344-02001	07340-00304	07340-00229	07344-01400	07340-01304	07340-01303
07344-02400	07344-02401	07344-02001	07340-00304	07340-00213	07340-01501	07340-01503	07340-01502
07344-02600	07140-02105	07344-02001	07340-00304	07340-00229	07344-02002	07340-01503	07340-01502
07344-02900	07344-02901	07344-02001	07340-00304	07340-00229	07344-02002	07340-01503	07340-01502
07344-03000	07344-03001	07344-02001	07340-00304	07340-00229	07344-02002	07340-01503	07340-01502
07344-04700	07344-04701	07498-02601	07498-04503	07498-04501*	07498-04800	07498-03003	07100-04003
07490-00900	07340-06000	07340-00306	07340-00304	07340-00213	07340-01300	07340-01304	07340-01303
07490-01000	07340-02805	07340-02804	07304-00304	07340-00213	07340-01300	07340-01304	07340-01303
07490-01400	07340-06300	07340-00306	07340-00304	07340-00222	07340-02000	07340-01304	07340-01303
07490-01600	07340-06100	07340-00306	07340-00304	07340-00213	07340-05700	07340-01304	07340-01303
07490-01700	07340-02806	07340-02804	07340-00304	07340-00213	07340-05700	07340-01304	07340-01303
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
07498-02400	07340-06701	07344-02001	07340-00304	07498-04401	07340-01300	07340-01304	07340-01303
07498-02500	07340-06801	07344-02001	07498-04503	07498-04501*	07498-04800	07498-03003	07100-04003
07498-02600	07340-06901	07498-02601	07498-04503	07498-04501*	07498-04900	07498-03003	07100-04003
07498-02700	07498-01400	07340-00306	07340-00304	07340-00213	07498-03600	07498-03003	07100-04003
07498-04000	07140-02106	07344-02001	07340-00304	07340-00229	07498-03600	07498-03003	07100-04003
07498-04100	07344-03101	07344-02001	07340-00304	07340-00229	07498-03600	07498-03003	07100-04003
07498-04300	07340-06901	07344-02001	07340-00304	07340-00229	07498-03600	-	07498-04301
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
07498-06200	07344-04701	07498-02601	07340-00304	07498-04501*	07498-04900	07498-03003	07100-04003
07498-06300	07340-06200	07340-00306	07340-00304	07340-00213	07498-03600	07498-03003	07100-04003
07498-06400	07340-02807	07340-02804	07340-00304	07340-00213	07498-03600	07498-03003	07100-04003
07498-06600	07340-04800	07340-00306	07340-00304	07340-00213	07498-03600	07498-03003	07100-04003
07498-06700	07340-06701	07344-02001	07340-00304	07340-00229	07344-01400	07340-01304	07340-01303
07498-06800	07340-06801	07344-02001	07340-00304	07340-00229	07344-02002	-	07498-06801
07498-07000	07340-07001	0734402001	07340-00304	07340-00229	07344-02002	-	07498-06801
07498-07400	07344-04701	07498-02601	07498-04503	07498-04501*	07498-04900	-	07100-04003
07498-07500	07344-04701	07498-02601	07340-00304	07498-04501*	07498-04502	-	07100-04003
07498-07600	07344-04701	07498-02601	07340-00304	07340-00229	07344-01500	-	07100-04003
07498-07700	07344-04701	07498-02601	07340-00304	07340-00229	07498-03600	-	07100-04003
07498-07800	07344-04701	07498-02601	07340-00304	07340-07502	07498-07801	-	07100-04003
07498-08400	07498-08401	07340-00306 e	07340-00304	07340-00213	07241-03702	07340-01304	07340-01303
07498-09100	07498-09001	07340-00306 e	07498-00502	07490-04602	07498-03002	07498-03003	07100-04003
07612-02000	07612-02001	07340-00306	07612-02003	07612-02002*	07498-04502	07498-03003	07007-00418
07640-02100	07340-07701	07340-00306	07340-00304	07100-08203	07241-03702	07241-02001	07498-04301
07640-02200	07340-07801	07340-00306	07340-00304	07340-07502	07241-03702	07241-02001	07498-04301
07640-02400	07340-07901	07340-00306	07340-00304	07340-07502	07241-03702	07241-02001	07498-04301
07640-03100	07498-08501	07340-00306 e	07340-00304	07100-08203	07241-03702	07241-02001	07498-04301
07640-03200	07498-08601	07340-00306 e	07340-00304	07340-07502	07241-03702	07241-02001	07498-04301
07640-03400	07498-08701	07340-00306 e	07340-00304	07340-07502	07241-03702	07241-02001	07498-04301

The number of jaws in a nose assembly is normally two. * indicates three jaws. 'e' indicates a long nose casing.

** This nose assembly is specifically for Avtainer fasteners and includes a side ejection adaptor, part number 07498-00900.

07494 & 07495 MODELS

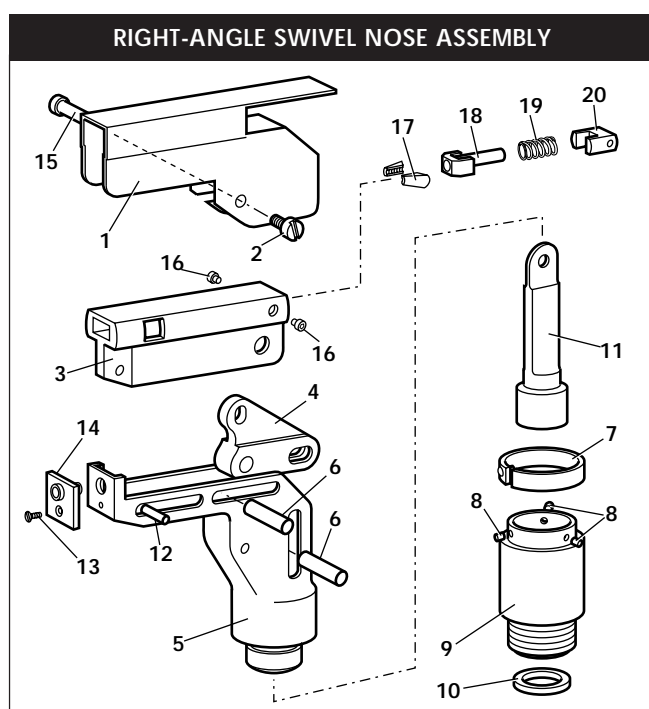
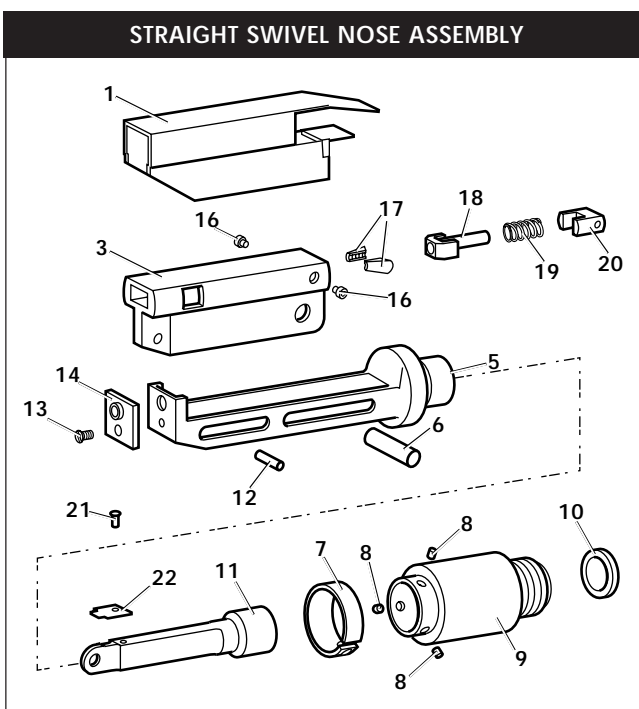
As described on pages 6 and 7 the fitting of a straight swivel nose assembly to a 07494-00200 base tool will create a 07494 tool model and the fitting of a right-angle swivel nose assembly to the same base tool will create a 07495 tool model. Because there are few differences between the two nose assemblies, the fitting and servicing procedures are almost identical. Differences clearly refer to the model they apply to.

FITTING INSTRUCTIONS

The following procedure will allow you to fit either of the swivel nose assemblies (as illustrated below) to the tool. If you order a complete nose assembly rather than individual components, you will only need to start at stage L.

All moving parts should be lubricated. Unless stated otherwise use Moly lithium grease (details page 14). When on grey tint, instructions refer only to the right-angle nose assembly fitted to 07495 models.

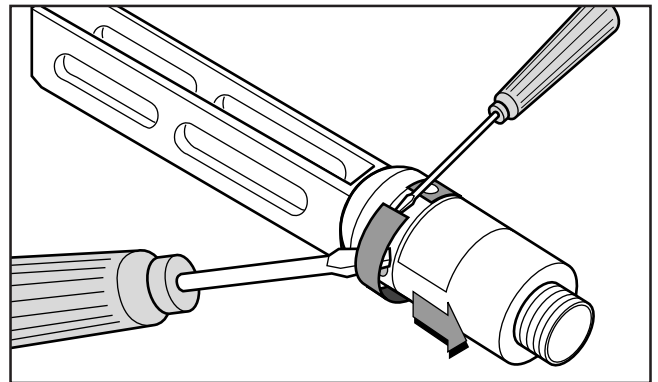
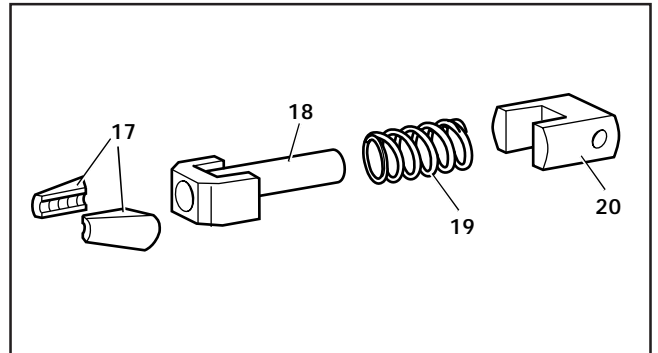
- A Fit locking ring 10 over jaw spreader housing of tool (item 19 page 18).
- B Coat screw 13 with thread locking adhesive and use to secure nose tip 14 onto body 5.
- C Lightly lubricate items 17,18,19,20 and insert into jaw carrier 3 as shown. Secure with screws 16.
- D Position lever 4 into body 5 and hold in place with pin 15 through the hole of body 5 (not a slot).
- E Lubricate the sides of the jaw carrier assembly and insert into body 5.
- F Lubricate rollers 8 and ENSURE that they will freely rotate in the holes of adaptor 9. If necessary ream the holes.
- G Position spring clip 7 over adaptor 9 past the holes for the rollers and rotate until the locating peg is aligned with the corresponding hole in adaptor 9(smallest hole).
- H Fit adaptor 9 over the end of body 5 and drop rollers 8 into place. Push spring clip 7 over rollers 8.
- I Insert spindle 11 through adaptor 9 into jaw carrier 3 until the hole lines up with slot in body 5. Temporarily hold in place with pin 6.
- J Insert pin 12 through the front slot of body 5 into jaw carrier 3.
- K Hold the assembly vertical to prevent all pins dropping and slide the jaw carrier assembly back and forth a few times to ensure free movement.
- L Push pin(s) 6 out and let spindle 11 drop out. Screw spindle 11 onto the jaw spreader housing of the tool, leaving the small screw fixing hole uppermost for straight swivel nose assemblies. Tighten gently with a tommy bar.
- M Screw the assembly over spindle 11 onto the tool handle. Replace pin(s) 6.
- N On straight swivel nose assemblies attach platform 22 onto the top of the spindle with screw 21. Deburr the back end of platform 22 so that it cannot catch on guard 1.
- O Snap guard 1 over the assembly, carefully sliding cut-out around the head of screw 15 and secure with screw 2.



SERVICING INSTRUCTIONS

Nose assemblies should be serviced at weekly intervals.
Item numbers refer to both illustrations on page 12.

- Remove the complete nose assembly using the reverse procedure to the 'Fitting instructions'.
- If guard 1 is at all damaged it must be replaced by a new one.
- Any worn or damaged parts should be replaced.
- Pay particular attention to jaw carrier items in the upper illustration opposite as follows:
Check wear on jaws 17.
Check that jaw spreader tube 18 is not distorted.
Check that spring 19 is neither broken or distorted.
Check that spring guide 20 is not damaged.
- Check that spring clip 7 is not distorted. When removing spring clip 7, use two screwdrivers as shown in the lower illustration opposite.
- Check for excessive wear on slots of body 5.
- Assemble according to fitting instructions.



07494 - 07495 NOSE ASSEMBLY COMPONENTS

Nose tips and jaws will vary for each nose assembly while other components remain the same as shown in the tables below. Jaws are always in pairs.

CONSTANT COMPONENTS				VARYING COMPONENTS					
	ITEM	07494	07495	NOSE ASSY	NOSE TIP(14)	JAWS(17)	NOSE ASSY	NOSE TIP(14)	JAWS(17)
1	GUARD	7494-05000	07495-03003	07345-03000	07345-03600	07340-00213	07494-03100	07494-03012	07340-00213
2	BLADE SCREW	-	07210-02015	07345-03100	07345-03700	07340-00213	07494-03200	07494-03013	07498-04401
3	JAW CARRIER	07494-03026	07494-03026	07345-03200	07345-03800	07490-04602	07494-03400	07494-03401	07340-00222
4	LEVER	-	07495-03004	07345-03300	07345-03301	07340-00229	07494-03600	07494-03601	07340-00229
5	BODY	07494-03015	07495-03002	07345-03400	07345-03401	07340-00229	07494-03700	07494-03701	07340-00229
6	PIVOT PIN	07343-02207	07343-02207	07345-03500	07345-03501	07498-04401	07494-03800	07494-03801	07498-04401
7	SPRING CLIP	07495-03900	07495-03900	07345-04000	07165-00701	07340-00229	07494-04000	07494-04001	07490-04602
8	ROLLER	07007-00039	07007-00039	07345-04100	07165-00702	07340-00229	07494-06000	07494-06001	07340-00213
9	ADAPTOR	07345-03001	07345-03001	07345-04200	07165-00703	07498-04401	07494-06100	07494-06101	07340-00213
10	LOCKING RING	07345-03003	07345-03003	07345-04300	07165-00801	07340-00229	07494-06600	07494-06601	07340-00213
11	SPINDLE	07345-03002	07345-03002	07345-04400	07165-00802	07498-04401	07494-06700	07494-06701	07340-00213
12	DOWEL PIN	07007-00038	07007-00038	07346-03000	07345-03600	07340-00213	07495-03000	07494-03011	07340-00213
13	SCREW	07342-02207	07342-02207	07346-03100	07345-03700	07340-00213	07495-03100	07494-03012	07340-00213
15	PIVOT PIN	-	07495-03005	07346-03200	07345-03800	07490-04602	07495-03200	07494-03013	07498-04401
16	SCREW	07494-03028	07494-03028	07346-03300	07345-03301	07340-00229	07495-03400	07494-03401	07340-00222
18	JAW SPREADER	07166-01100	07166-01100	07346-03400	07345-03401	07340-00229	07495-03500	07494-04001	07490-04602
19	SPRING	07166-01102	07166-01102	07346-03500	07345-03501	07498-04401	07495-03600	07494-03601	07340-00229
20	SPRING GUIDE	07494-03027	07494-03027	07346-04000	07165-00701	07340-00229	07495-03700	07494-03701	07340-00229
21	CSK. SCREW	07001-00368	-	07346-04100	07165-00702	07340-00229	07495-03800	07494-03801	07498-04401
22	PLATFORM	07345-00401	-	07346-04200	07165-00703	07498-04401	07495-04000	07494-06001	07340-00213
				07346-04300	07165-00801	07340-00229	07495-04100	07494-06101	07340-00213
				07346-04400	07165-00802	07498-04401	07495-04700	07494-06601	07340-00213
				07494-03000	07494-03011	07340-00213	07495-04800	07494-06701	07340-00213

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 the stroke of the tool meets the minimum specification (inside front page). It is the difference in the measurement between the front face of the jaw spreader housing assembly and the front face of the handle top bore before pressing the trigger and when it is fully depressed.

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

FIRST AID

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.

ENVIRONMENT

Scrape up for burning or disposal on approved site.

FIRE

FLASH POINT: Above 220°C.

Not classified as flammable.

Suitable extinguishing media: CO₂, Halon or water spray if applied by an experienced operator.

HANDLING

Use barrier cream or oil resistant gloves

STORAGE

Away from heat and oxidising agent.

For all servicing we recommend the use of the service kit below (part number 07900-04980) supplied in its own plastic case.

SERVICE KIT			SERVICE KIT (Continued)		
ITEM PART N°	DESCRIPTION	N° OFF	ITEM PART N°	DESCRIPTION	N° OFF
07001-00092	SOCKET HEAD CAP SCREW 10 UNC X 2"	6	07900-00004	RIGHT ANGLE CIRCLIP PLIERS	1
07900-00001	SPRING COMPRESSION TOOL	1	07900-00249	PRIMING PUMP ASSEMBLY	1
07900-00006	'O' RING ASSEMBLING TOOL	1	07900-00252	SEAL EXTRACTOR	1
07900-00008	7/16 x 1/2 A/F SPANNER	1	07900-00382	TUBULAR SCREWDRIVER	1
07900-00009	3/32 A/F ALLEN KEY	1	07900-00421	RING SPANNER 13/16 A/F	1
07900-00012	9/16 x 5/8 A/F SPANNER	1	07900-00432	PLASTIC CASE	1
07900-00013	1/8 A/F ALLEN KEY	1	07900-00357	TOOL INSTRUCTION MANUAL	1
07900-00015	5/8 x 11/16 A/F SPANNER	1	07992-00020	80g TIN MOLY LITHIUM GREASE EP3753	1
07900-00078	5/32 A/F ALLEN KEY	1	07900-00539	SPANNER	1
07900-00137	TOMMY BAR	1	07900-00540	SPANNER (ANVIL ADAPTOR & COLLAR)	1
07900-00429	SPANNER ASSEMBLY FOR HEAD PISTON	1	03201-00615	PIP PIN	1
07900-00158	PIN PUNCH	1	07900-00236	COMBINATION SPANNER	1
07900-00159	7/16 x 1/2 A/F RING SPANNER	1	07900-00628	HEAD PISTON ROD SEAL ENTRY GUIDE	1
07900-00160	NOSE BULLET	1	07900-00629	HEAD PISTON ROD INSTALLATION TOOL	1
07900-00164	CIRCLIP PLIERS	1	07900-00630	PISTON SEAL ENTRY GUIDE	1
07900-00163	5/64 A/F ALLEN KEY	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.

Before proceeding with dismantling, empty the oil from the tool. Remove bleed screws **32** and **33** from the handle assembly and drain the oil into a suitable container.

Prior to dismantling the tool it is necessary to remove the nose assembly. For simple removal instructions see the nose assemblies section, pages 10 to 13.

For total tool servicing we advise that you proceed with dismantling of sub-assemblies in the order shown below. The procedure is the same for all tools once the nose assembly has been removed.

HYDRAULIC PISTON

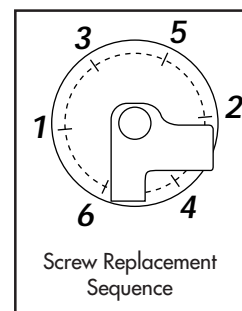
- Unscrew end cap 53 and remove together with pin tail deflector 54 (remove stem catcher unit if fitted).
- Grip spring compression tool* in a vice and compress spring 6, applying the clamp screw ball end to cylinder end plug 8 or stem catcher adaptor 52 depending on tool model.
- Remove internal circlip 9 using the circlip pliers*.
- Unscrew the compression tool and remove cylinder end plug 8 or stem catcher adaptor 52 then spring 6.
- Unscrew jaw spreader housing assembly 19 with spanner* and special spanner assembly*, then withdraw hydraulic piston 5.
- Remove piston stop 17 and extrude wiper ring 18.
- Extract head piston stop 3 and rod seal 2 using the circlip pliers*.
- Remove piston seal 4 from hydraulic piston 5.

- Clean all parts.
- Inspect the piston diameters and the cylinder bore for wear and damage.
- Insert the head piston rod seal entry guide* into the hydraulic bore.
- With rod seal 2 on the rod seal installation tool* push the seal into its housing with the lip of the seal towards the back of the tool.
- Replace head piston stop 3 inside bore.
- Screw the nose bullet* onto the end of the piston rod.
- Insert the piston seal entry guide* into the hydraulic bore.
- Position piston seal 4 with lip towards the front of the tool onto the piston and insert the piston into the hydraulic bore. Remove bullet*.
- Fit piston stop 17 with new wiper ring 18. Always screw on a new jaw spreader housing assembly 19 and tighten to achieve a maximum gap of .335" between its rear face and the front face of the handle assembly 1 (as shown in illustration on page 18). Discard old jaw spreader housing 19.
- Complete assembly in reverse order of dismantling.

AIR PISTON/INTENSIFIER ROD

- With tool connected to air supply, depress the trigger and disconnect the air supply.
- Remove double male connector 42, washer 43 and silencer 20.
- Using Allen key* remove screws 51, ONE AT A TIME, and install the service screws*. The order of removal and installation is important and must follow the sequence shown on diagram opposite.
- Withdraw handle assembly 1 to full extent of service screws*.
- Remove service screws*, withdraw handle sub-assembly 10 and piston assembly 35 from air cylinder.
- Remove gasket 47.
- Remove all eight screws 13 with Allen key* to free retaining plate 12.
- Using seal extractor* withdraw seal housing assembly 11.

- Clean all parts.
- To replace 'O' ring 50 use 'O' ring assembling tool*.
- Inspect intensifier rod 39 and buffers 37 and/or spacer 55. If damaged replace by new items using tommy bar* and kit spanner assembly for head piston*.
- Lubricate bores with Moly Lithium grease EP 3753*.
- Rebuild seal housing assembly 11 and insert into handle sub-assembly 10 with 'O' rings 14.
- Attach retaining plate 12 with screws 13 tightened to a 3.39 Nm (30 lb/in) torque.
- Insert intensifier rod 39 through the seal housing into the handle assembly.
- Fit new gasket 47.
- If Kay locknut 38 is removed, it MUST be replaced by a new one.
- Assemble handle to air cylinder and complete assembly in reverse order to dismantling.



* refers to items included in the Avdel service kit. For complete list see page 15.

AIR VALVE

- Remove plastic handle covers 44 and 46 by removing four screws 45 using Allen key*.
- Unscrew end plug 21, remove spring 22 and withdraw spool 23.
- Using the same Allen key*, remove screws 28 to release silencer retainer 26.
- Withdraw silencer bush assembly 25.

- Clean all parts particularly the silencer assembly.
- Complete assembly in reverse order of dismantling.

TRIGGER

- Remove plastic handle covers 44 and 46 by removing four screws 45 using Allen key*.
- With the same Allen key, remove both screws 28 releasing crank pin retainer 29, pivot blocks 30, silencer retainer 26 and crank pin 27.
- Knock out grooved pin 16 using the pin punch*.
- Remove trigger assembly 15 from handle assembly 1.

- Clean and examine all parts for wear and damage. Renew as necessary.
- Complete assembly in reverse order of dismantling.

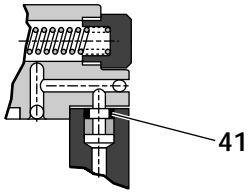
IMPORTANT

Check the tool against daily and weekly servicing.

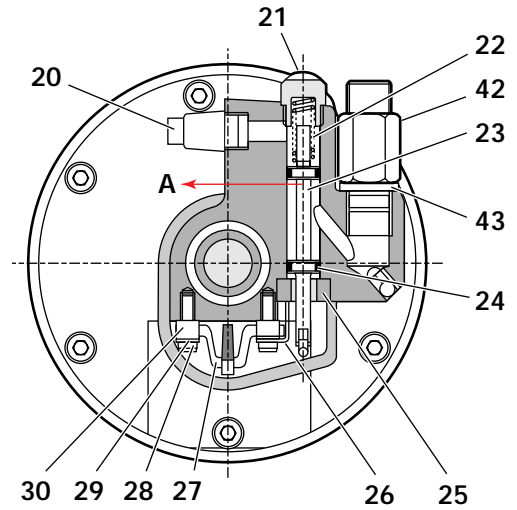
Priming is ALWAYS necessary after the tool has been dismantled and prior to operating.

* refers to items included in the Avdel service kit. For complete list see page 15.

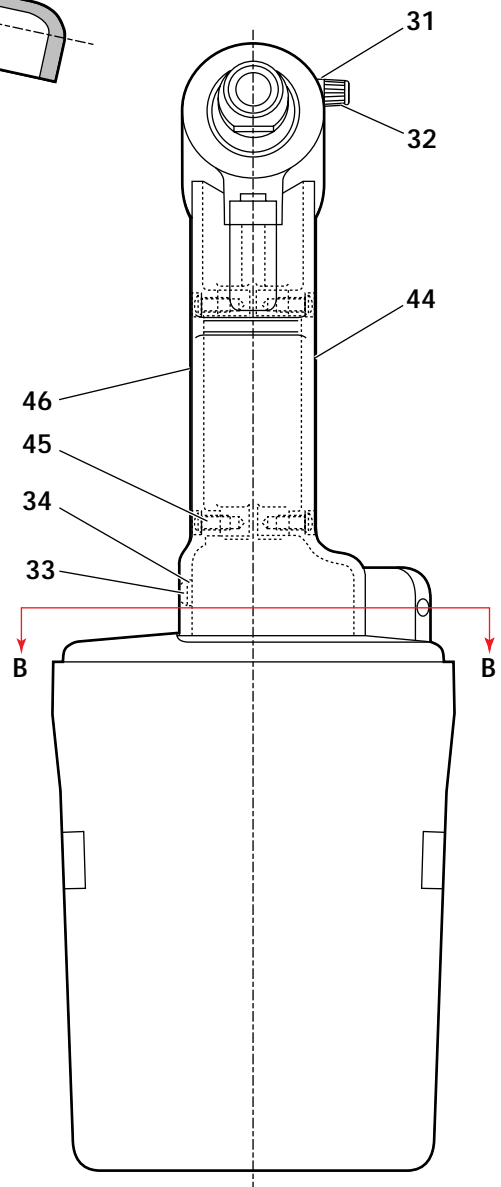
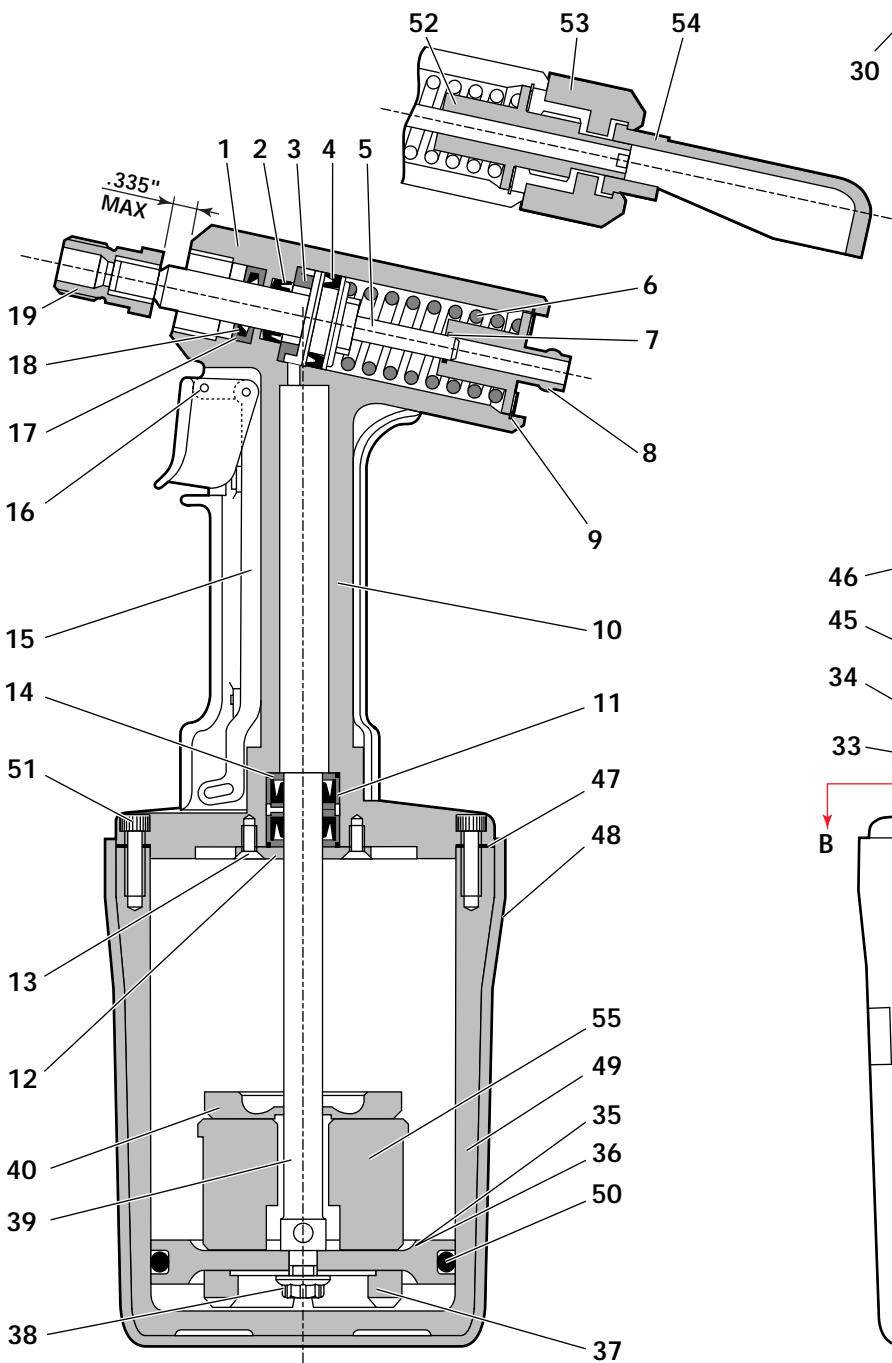
GENERAL ASSEMBLY OF BASE TOOLS 07498-00200 & 07494-00200



SECTION A-A



SECTION B-B



Spare are minimum recommended levels.

07494-00200 PARTS LIST				
ITEM	PART N°	DESCRIPTION	QTY	SPARES
1	07494-01400	HEAD & HANDLE ASSY	1	-
2	07003-00245	• ROD SEAL	1	2
3	07498-02302	• HEAD PISTON STOP	1	2
4	07003-00244	• PISTON SEAL	1	2
5	07498-02301	• HYDRAULIC PISTON	1	-
6	07490-03002	• SPRING	1	1
7	07003-00029	• 'O' RING SEAL	1	3
8	07490-00307	• CYLINDER END PLUG	1	-
9	07004-00022	• INTERNAL CIRCLIP	1	1
10	07498-02800	• HANDLE SUB-ASSY	1	-
11	07498-02200	• SEAL HOUSING ASSY	1	1
12	07498-00301	• RETAINING PLATE	1	-
13	07001-00339	• 8-32x ³ / ₈ CSK HD SCREW	8	8
14	07003-00100	• 'O' RING SEAL	2	4
15	07490-00600	• TRIGGER ASSY	1	2
16	07007-00301	• ³ / ₃₂ Ø GROOVED PIN	1	-
17	07498-02304	• PISTON STOP	1	1
18	07003-00156	• WIPER RING	1	2
19	07490-00700	• JAW SPREADER HOUSING ASSY	1	-
20	07007-00311	• SINTERED BRONZE SILENCER	1	1
21	07490-03506	• END PLUG	1	-
22	07340-01303	• SPRING	1	2
23	07490-03507	• SPOOL	1	-
24	07003-00001	• 'O' RING SEAL	2	4
25	07490-03800	• SILENCER BUSH ASSY	1	-
26	07490-03501	• SILENCER RETAINER	1	-
27	07490-03503	• CRANK PIN	1	-
28	07001-00109	• 6-32x ¹ / ₂ SKT CAP HD SCREW	2	2
29	07490-03504	• CRANK PIN RETAINER	2	-
30	07490-03502	• PIVOT BLOCK	2	2
31	07003-00033	• 2 B. A. BONDED SEAL	1	4
32	07498-00206	• SKT CAP HD SCREW	1	2
33	07001-00114	• 10-24 x ¹ / ₄ SKT BUT HD SCREW	1	2
34	07003-00033	• 2 B. A. BONDED SEAL	1	4
35	07498-02900	AIR PISTON ASSY	1	-
36	07490-03601	• PISTON	1	-
37	07490-03104	• PISTON BUFFER - BONDED (BOTTOM)	1	-
38	07002-00017	• KAY-LOCK NUT	1	2
39	07498-02901	• INTENSIFIER ROD	1	-
40	07490-00201	PISTON BUFFER (TOP)	1	-
41	07003-00029	'O' RING SEAL	1	4
42	07490-02201	DOUBLE MALE CONNECTOR	1	1
43	07005-00015	¹ / ₄ " BSP WASHER	1	1
44	07490-00206	HANDLE COVER LEFT HAND	1	-
45	07001-00130	6-32x ⁵ / ₁₆ SKT BUT HD SCREW	4	4
46	07490-00205	HANDLE COVER RIGHT HAND	1	-
47	07490-00209	GASKET	1	1
48	07498-00203	COVER- AIR CYLINDER	1	1
49	07498-00600	AIR CYLINDER	1	-
50	07003-00131	'O' RING SEAL	1	4
51	07001-00108	10-24 x ⁵ / ₈ SKT CAP HD SCREW	6	6
52				
53				
54				
55	07494-00203	SPACER	1	1
56	07490-00357	TOOL INSTRUCTION MANUAL	1	N/I
57	07900-00354	TIE-ON SAFETY LABEL	1	N/I

07498-00200 PARTS LIST				
ITEM	PART N°	DESCRIPTION	QTY	SPARES
01	07498-02300	HEAD & HANDLE ASSY	1	-
02	07003-00245	• ROD SEAL	1	2
03	07498-02302	• HEAD PISTON STOP	1	2
04	07003-00244	• PISTON SEAL	1	2
05	07498-02301	• HYDRAULIC PISTON	1	-
06	07490-03002	• SPRING	1	1
07	07003-00029	• 'O' RING SEAL	1	3
08				
09	07004-00022	• INTERNAL CIRCLIP	1	1
10	07498-02800	• HANDLE SUB-ASSY	1	-
11	07498-02200	• SEAL HOUSING ASSY	1	1
12	07498-00301	• RETAINING PLATE	1	-
13	07001-00339	• 8-32x ³ / ₈ CSK HD SCREW	8	8
14	07003-00100	• 'O' RING SEAL	2	4
15	07490-00600	• TRIGGER ASSY	1	2
16	07007-00301	• ³ / ₃₂ Ø GROOVED PIN	1	-
17	07498-02304	• PISTON STOP	1	1
18	07003-00156	• WIPER RING	1	2
19	07490-00700	• JAW SPREADER HOUSING ASSY	1	-
20	07007-00311	• SINTERED BRONZE SILENCER	1	1
21	07490-03506	• END PLUG	1	-
22	07340-01303	• SPRING	1	2
23	07490-03507	• SPOOL	1	-
24	07003-00001	• 'O' RING SEAL	2	4
25	07490-03800	• SILENCER BUSH ASSY	1	-
26	07490-03501	• SILENCER RETAINER	1	-
27	07490-03503	• CRANK PIN	1	-
28	07001-00109	• 6-32x ¹ / ₂ SKT CAP HD SCREW	2	2
29	07490-03504	• CRANK PIN RETAINER	2	-
30	07490-03502	• PIVOT BLOCK	2	2
31	07003-00033	• 2 B. A. BONDED SEAL	1	4
32	07498-00206	• SKT CAP HD SCREW	1	2
33	07001-00114	• 10-24x ¹ / ₄ SKT BUT HD SCREW	1	2
34	07003-00033	• 2 B. A. BONDED SEAL	1	4
35	07498-02900	AIR PISTON ASSY	1	-
36	07490-03601	• PISTON	1	-
37	07490-03104	• PISTON BUFFER - BONDED (BOTTOM)	1	-
38	07002-00017	• KAY-LOCK NUT	1	2
39	07498-02901	• INTENSIFIER ROD	1	-
40	07490-00201	PISTON BUFFER (TOP)	1	-
41	07003-00029	'O' RING SEAL	1	4
42	07490-02201	DOUBLE MALE CONNECTOR	1	1
43	07005-00015	¹ / ₄ " BSP WASHER	1	1
44	07490-00206	HANDLE COVER LEFT HAND	1	-
45	07001-00130	6-32x ⁵ / ₁₆ SKT BUT HD SCREW	4	4
46	07490-00205	HANDLE COVER RIGHT HAND	1	-
47	07490-00209	GASKET	1	1
48	07498-00203	COVER- AIR CYLINDER	1	1
49	07498-00600	AIR CYLINDER	1	-
50	07003-00131	'O' RING SEAL	1	4
51	07001-00108	10-24x ⁵ / ₈ SKT CAP HD SCREW	6	6
52	07498-02303	STEM CATCHER ADAPTOR	1	-
53	07498-00313	END CAP	1	-
54	07340-00342	PIN TAIL DEFLECTOR	1	1
55				
56	07490-00357	TOOL INSTRUCTION MANUAL	1	N/I
57	07900-00354	TIE-ON SAFETY LABEL	1	N/I

PRIMING

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

OIL DETAILS

The recommended oil for priming is Hyspin VG32 available in 0.5l (part number 07992-00002) or one gallon containers (part number 07992-00006). Please find specific table and safety data below.

H Y S P I N V G 3 2 O I L S A F E T Y D A T A			
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 Suitable extinguishing media: CO ₂ , dry powder, foam or water fog. DO NOT use water jets.		ENVIRONMENT WASTE DISPOSAL: Through authorised contractor to a licenced 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.	
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	
Relative density	0.875	in minutes to 0.2% air content @ 50°C	4
Viscosity Index	95	Seal compatability index	10
Pour point	°C - 30	Water separation time	
Open Flash point	°C 232	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 general assembly and parts list pages 18 and 19.

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.

- Thoroughly clean exterior of placing tool.
- Fill priming pump part number 07900-00249 with oil. Depress pump slightly to expel air. A threaded nipple is available as a spare part, number 07900-00250.
- Remove filler screw **33** and seal **34** at the base of the handle. Screw the priming pump into the tool.
- Stand tool upright and remove bleed screw **32** and bonded seal **31** on the side of the head cylinder.
- Depress priming pump body slowly until non-aerated oil issues freely from bleed screw. Replace bleed screw.
- Lay placing tool horizontally with priming pump uppermost. Remove priming pump.
- Replace filler screw **33** and seal **34**.

F A U L T D I A G N O S I S T A B L E

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 jaws.	→ New jaws.
	→ Oil level in tool low or air in oil.	→ Prime tool. (see page 20)
Jaws will not grip rivet stem	→ Worn or dirty jaws.	→ Clean or renew as necessary.
	→ Jaw housing loose.	→ Tighten against nylon locking ring.
	→ Weak or broken nose assembly spring.	→ Replace spring.
	→ Incorrect nose equipment fitted.	→ Replace as necessary.
	→ Bent jaw spreader assembly tube preventing it from moving forward into jaw housing.	→ Replace jaw spreader assembly.
Jaws will not release spent rivet stem.	→ Dirty jaws or jaw housing.	
	→ Jaw housing, nose tip or nose casing not properly seated.	→ Tighten nose equipment.
	→ Weak or broken spring around jaw spreader assembly.	→ New spring.
Spent rivet stem is jamming in tool.	→ Incorrect jaw spreader fitted.	→ Replace by correct part.
	→ Bent or dirty jaw spreader assembly tube.	→ Renew or clean as applicable.
	→ Collector bottle too full.	→ Empty and ensure bottle never exceeds half full.

Engineered Fastening and Assembly Systems



Declaration of Conformity

We, *Avdel UK Limited, Mundells, Welwyn Garden City, Herts, AL7 1EZ*

declare under our sole responsibility that the product

type 0749

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

ISO 3744

ISO PREN792 part 14

following the provisions of the Machine Directive 98/37/EC
This box contains a power tool which is in conformity with Machines Directive 98/37/EC. The 'Declaration of Conformity' is contained within.

Welwyn Garden City - date of issue

A. Seewraj
 Product Engineering Manager - Automation Tools



An Acument™ Global Technologies Company

AUSTRALIA

Acument Australia Pty Ltd.

891 Wellington Road
Rowville, Victoria 3178
Tel: +61 3 9765 6400
Fax: +61 3 9765 6445
Email: info@acument.com.au

CANADA

Avdel Canada, a Division of Acument

Canada Limited
87 Disco Road
Rexdale
Ontario M9W 1M3
Tel: +1 416 679 0622
Fax: +1 416 679 0678
Email: infoAvdel-Canada@acument.com

CHINA

Acument China Ltd.

RM 1708, 17/F., Nanyang Plaza,
57 Hung To Rd., Kwun Tong
Hong Kong
Tel: +852 2950 0631
Fax: +852 2950 0022
Email: infochina@acument.com

FRANCE

Avdel France S.A.S.

33 bis, rue des Ardennes
BP4
75921 Paris Cedex 19
Tel: +33 (0) 1 4040 8000
Fax: +33 (0) 1 4208 2450
Email: AvdelFrance@acument.com

GERMANY

Avdel Deutschland GmbH

Klusriede 24
30851 Langenhagen
Tel: +49 (0) 511 7288 0
Fax: +49 (0) 511 7288 133
Email: AvdelDeutschland@acument.com

ITALY

Avdel Italia S.r.l.

Viale Lombardia 51/53
20047 Brugherio (MI)
Tel: +39 039 289911
Fax: +39 039 2873079
Email: vendite@acument.com

JAPAN

Acument Japan Kabushiki Kaisha

Center Minami SKY,
3-1 Chigasaki-Chuo, Tsuzuki-ku,
Yokohama-city, Kanagawa Prefecture
Japan 224-0032
Tel: +81 45 947 1200
Fax: +81 45 947 1205
Email: info@acument.co.jp

SINGAPORE

Acument Asia Pacific (Pte) Ltd.

#05-03/06 Techlink
31 Kaki Bukit Road 3
Singapore, 417818
Tel: +65 6840 7431
Fax: +65 6840 7409
Email: Tlim@acument.com

SOUTH KOREA

Acument Korea Ltd.

212-4, Suyang-Ri,
Silchon-Eup, Kwangju-City,
Kyunggi-Do, Korea, 464-874
Tel: +82 31 798 6340
Fax: +82 31 798 6342
Email: info@acumentkorea.com

SPAIN

Avdel Spain S.A.

C/ Puerto de la Morcuera, 14
Poligono Industrial Prado Overa
Ctra. de Toledo, km 7,8
28919 Leganés (Madrid)
Tel: +34 (0) 91 3416767
Fax: +34 (0) 91 3416740
Email: ventas@acument.com

UNITED KINGDOM

Avdel UK Limited

Pacific House
2 Swiftfields
Watchmead Industrial Estate
Welwyn Garden City
Hertfordshire
AL7 1LY
Tel: +44 (0) 1707 292000
Fax: +44 (0) 1707 292199
Email: enquiries@acument.com

USA

Avdel USA LLC

614 NC Highway 200 South
Stanfield,
North Carolina 28163
Tel: +1 704 888-7100
Fax: +1 704 888-0258
Email: infoAvdel-USA@acument.com

© Avdel UK Limited 2007

Manual No.	Issue	Change Note No.
07900-00357	B	07/325