

AVEX

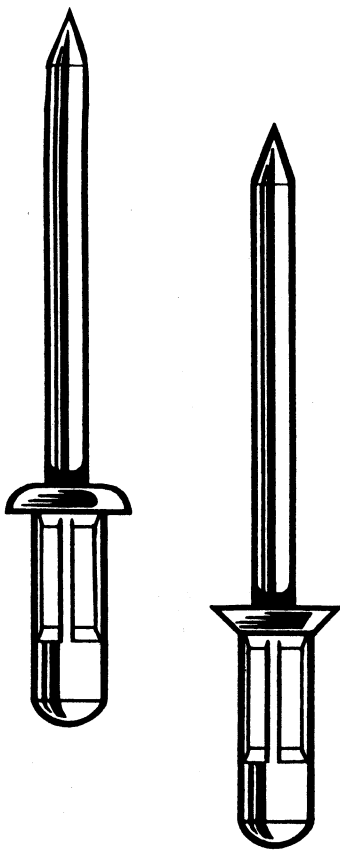
AVDEL

FASTENERS DIVISION OF
ZIP WHOLESALEERS (WGTN) LTD

WELLINGTON
P.O. BOX 30-446 LOWER HUTT
TELEPHONE 60-125

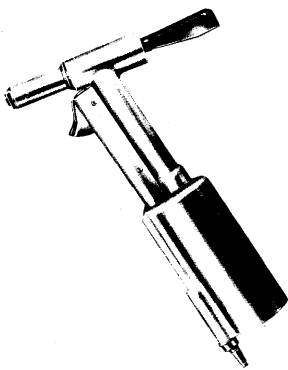
AUCKLAND
P.O. BOX 8037 NEWTON
TELEPHONE 362-480

This is a highly developed aluminium alloy blind rivet with the following characteristics :



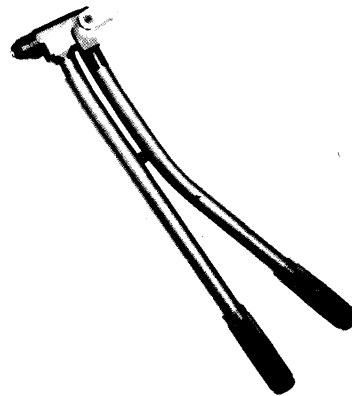
- 1 GIVES HIGH CLENCH - components automatically clamped together during riveting operation.
- 2 IS WEATHER-PROOF - positive stem retention ensures complete weather-proofing.
- 3 REDUCES HOLE LINE-UP PROBLEMS - it can be used for holes over the normal diameter.
- 4 CUTS LABOUR COSTS - it is designed to provide high-class work irrespective of operator skill - requires one operator only.
- 5 ONE LENGTH OF RIVET PER DIAMETER - all regular thicknesses are met by one length of rivet per diameter. This reduces stockholdings and overcomes operator errors where more than one rivet per diameter is in use.
- 6 FOR UNIVERSAL APPLICATION - metal to metal, metal to plastic, plastic to plastic - in general, for any two or more components which must be joined securely.

PLACING TOOLS



TOOL No 734 SERIES

This robust yet lightweight hydro-pneumatic power tool will install 1/8, 5/32 and 3/16 in. diameter Avex rivets. The light weight and mobility of this tool enables high placing speeds to be maintained with negligible operator fatigue. Also available with taper nose (7341) swivel head (7342) and right angle heads (7343).



TOOL No 737

A hand tool for the easy installation of 3/16 in. diameter Avex rivets. Ideal for site work such as roofing and building where a compressed air supply is not available.

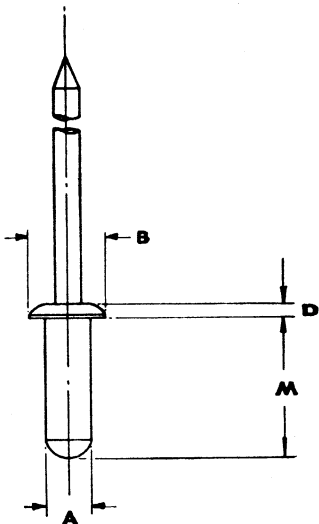


Illustration, one length, 1/8" rivet.

See how the one length Avex gives positive clench and grip over a wide range of thicknesses.

1

PRODUCT CODE	MATERIAL	FINISH
1601	Rivet 2% Mg. Alum. Alloy	Plain
	Stem Steel	Phosphate Treated



2

NOMINAL DIAMETER	$\frac{1}{8}$ "	$\frac{5}{32}$ "	$\frac{3}{16}$ "
DIAMETER CODE	04	05	06
DIMENSION A	.125"/ .128"	.156"/ .160"	.186"/ .190"
DIMENSION B	.215"	.255"	.349"
DIMENSION D	.044"	.057"	.070"
DRILL SIZE	30	20	10

Call-up Explanation *Avdel Part Numbers consist of eight figures*

First four figures (Table One—Product Code) defines the fastener type, head form, material and surface treatment.

Next two figures (Table Two—Diameter Code) defines shank diameter in 32nd ins.

Last two figures (Table Three—Length Code) defines rivet length in 32nd ins.

Example: 1601-0512 Avex Rivet Snap Head Aluminium Alloy Plain $\frac{5}{32}$ " Diameter Grip Range .046"—.250".

3

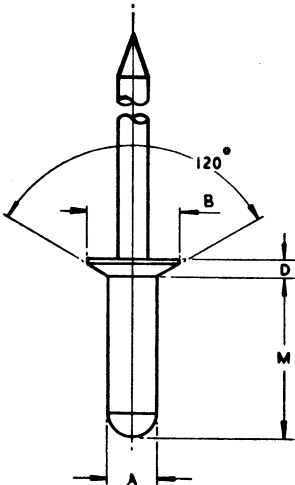
NOM DIA	Lgth Code	M DIM	GRIP RANGE		NOM DIA	Lgth Code	M DIM	GRIP RANGE		NOM DIA	Lgth Code	M DIM	GRIP RANGE
$\frac{1}{8}$ "	10	.400	.031"/ .187"		$\frac{5}{32}$ "	12	.470	.046"/ .250"		$\frac{3}{16}$ "	13	.530	.062"/ .250"
											19	.720	.187"/ .437"



AVEX PLACING SEQUENCE

1

PRODUCT CODE	MATERIAL	FINISH
1604	Rivet 2% Mg. Alum. Alloy	Plain
	Stem Steel	Phosphate Treated



2

NOMINAL DIAMETER	$\frac{1}{8}$ "	$\frac{5}{32}$ "	$\frac{3}{16}$ "
DIAMETER CODE	04	05	06
DIMENSION A	.125"/ .128"	.156"/ .160"	.186"/ .190"
DIMENSION B	.205"	.245"	.339"
DIMENSION D	.030"	.032"	.050"
DRILL SIZE	30	20	10

Call-up Explanation *Avdel Part Numbers consist of eight figures*

First four figures (Table One—Product Code) defines the fastener type, head form, material and surface treatment.
Next two figures (Table Two—Diameter Code) defines shank diameter in 32nd ins.
Last two figures (Table Three—Length Code) defines rivet length in 32nd ins.
Example: 1604-0615 Avex Rivet 120° Countersunk Aluminium Alloy Plain $\frac{3}{16}$ " Dia. Grip Range .125"—.312".

3

NOM DIA	Lgth Code	M DIM	GRIP RANGE		NOM DIA	Lgth Code	M DIM	GRIP RANGE		NOM DIA	Lgth Code	M DIM	GRIP RANGE
$\frac{1}{8}$ "	12	.460"	.093"/ .250"		$\frac{5}{32}$ "	14	.530	.109"/ .312"		$\frac{3}{16}$ "	15	.590	.125"/ .312"
											21	.780	.250"/ .500"

NOTES

1

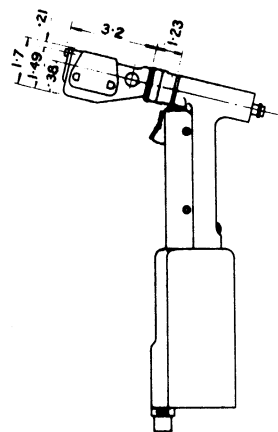
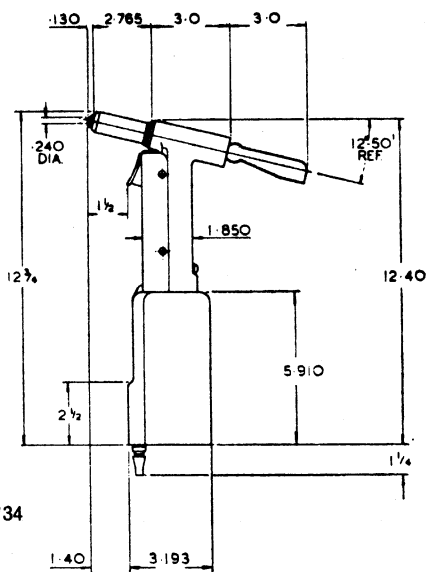
THIS EQUIPMENT WILL INSTALL THESE PRODUCTS
AVEX RIVETS NOM DIA RANGE $\frac{1}{8}$ " - $\frac{5}{32}$ " - $\frac{3}{16}$ "

2

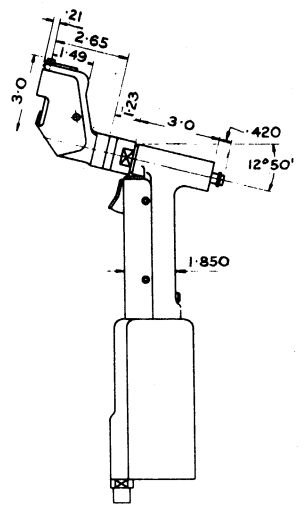
POWER SOURCE	COMPRESSED AIR. NORMAL WP 80 P.S.I. MAX 100 P.S.I.		
POWER CONSUMPTION	.056 CU FT FREE AIR PER ACTUATION		
LUBRICATION	LIGHT OIL THROUGH AIR INLET DAILY		
WEIGHT	3 $\frac{1}{2}$ lbs.		
EFFECTIVE STROKE	$\frac{5}{8}$ "		
CAPACITY LENGTH	N.A.		
CAPACITY NOM DIA	$\frac{1}{8}$ "	$\frac{5}{32}$ "	$\frac{3}{16}$ "
CAPACITY CODE	04	05	06
NOSE TIP CODE (734)	7340-3700	7340-3800	7340-3900
JAW SPREADER ASSY (734)	7340-1300	7340-1400	7340-1501
EXTENDED NOSE TIPS (734)	7340-2801	7340-2802	7340-2803
NOSE TIP 7342	7342-2500	7342-3500	7342-4500
NOSE TIP 7343	7342-2500	7342-3500	7342-4500



Type 734



Type 7342



Type 7343

- NOTES:
1. Service Tool Kit Pt. No. 7900-3400 is available.
 2. Nose Tip Spring Wedge is Pt. No. 7340-4200 and it is essential that this is assembled to the nose tips by using Assembly Tool 7900-0110.

OPERATING INSTRUCTIONS

AVDEL

HYDRO-PNEUMATIC PULL TOOL TYPE 734 SERIES

DESCRIPTION

The AVDEL Hydro-Pneumatic Pull Tool Type 734, is a robust, high-production tool developed for the easy and rapid installation of rivets. A compressed air supply of between 70 and 100 lbs/in² (4.92 and 7.04 kg/cm²) is required for placing rivets, the rate of air consumption being approximately .056 cu. ft. (1.59 litres) of free air at 80 lbs/in² (5.62 kg/cm²) per actuation.

OPERATION

To place rivets with Pull Tool Type 734, insert the rivet into the prepared hole in the work, apply the pull gun and depress the trigger until driving cycle is complete. Alternatively, the rivet mandrel may be inserted into the nose jaws of the pull gun and the rivet then offered up to the work.

LUBRICATION

Daily, before using, or when first putting the pull gun into service, pour a small quantity of clean, light lubricating oil into the air inlet. If the gun is in continuous use, the air hose should be disconnected and the tool lubricated with a few drops of oil every two or three hours.

PREPARING FOR OPERATION

Daily, before putting tool into service, comply with instructions under 'Lubrication'. Always blow air line to clear it of all accumulated dirt or water before connecting air hose to tool. Check to see if pull gun is equipped with correct size jaw spreader assembly and nose tip to fit the rivet being placed.

WARNING

Before changing nose assemblies or dismantling pull tool air line must be removed.

NOSE ASSEMBLY

Before placing rivets check that the correct nose assembly and jaw spreader and spring assembly is fitted for the size of rivet. Select the correct jaw spreader and spring assembly from Table 1 below. To change jaw spreader and spring assembly the nose casing (63) must be unscrewed from the handle assembly (1) then remove jaw housing (65) by means of flats provided. Hold jaw housing with threaded portion uppermost and drop jaws followed by jaw spreader and spring assembly into position. Hold pull gun in right hand with nose downwards and holding assembly in left hand

screw home securely by means of flats.

Note The jaw housing must be assembled complete with the jaws (64) and jaw spreader assembly (60), care being taken not to damage the guide tube on the jaw spreader assembly (1/8" and 5/32" equipment only). Remove nose tip (59) and replace with an appropriate size. Tighten with spanner on flats provided.

Note when replacing nose tip retainer part No 7340-4200 it is essential that assembly tool 7900-0110 is used.

NOSE EQUIPMENT TYPE 734 (STANDARD TOOL)

RIVET TYPE	59 NOSE TIP	60 JAW SPREADER	61 SPRING	62 BUFFER	63 NOSE CASING	64 JAWS	65 JAW HOUSING	66 LOCKING RING
1 8 AVEX Standard Nose	7340-3700	7340-1300	7340-1303	7340-1303	7340-0306	7340-0213	7340-0304	7340-0327
5 32 AVEX Standard Nose	7340-3800	7340-1400	7340-1303	7340-1304	7340-0306	7340-0213	7340-0304	7340-0327
3 16 AVEX Standard Nose	7340-3900	7340-1501	7340-1502	7340-1503	7340-0306	7340-0213	7340-0304	7340-0327
1 8 Self Plug. Stainless Steel and Titanium	7340-2302	7340-1400	7340-1303	7340-1304	7340-0306	7340-0213	7340-0304	7340-0327
5 32 Self Plug. Stainless Steel and Titanium	7340-2402	7340-1501	7340-1502	7340-1503	7340-0306	7340-0213	7340-0304	7340-0327
1 8 AVEX Extended Nose	-	7340-1300	7340-1303	7340-1304	7340-2801	7340-0213	7340-0304	7340-0327
5 32 AVEX Extended Nose	-	7340-1400	7340-1303	7340-1304	7340-2802	7340-0213	7340-0304	7340-0327
3 16 AVEX Extended Nose	-	7340-1501	7340-1502	7340-1503	7340-2803	7340-0213	7340-0304	7340-0327
1 8 AVEX Head Forming Tip	7340-4300	7340-1300	7340-1303	7340-1303	7340-0306	7340-0213	7340-0304	7340-0327
5 32 AVEX Head Forming Tip	7340-4400	7340-1400	7340-1303	7340-1304	7340-0306	7340-0213	7340-0304	7340-0327
3 16 AVEX Head Forming Tip	7340-4500	7340-1501	7340-1502	7340-1503	7340-0306	7340-0213	7340-0304	7340-0327

NOSE EQUIPMENT TYPE 7341 (TAPER NOSE TOOL)

1 8 AVEX Taper Nose	7340-4000	7340-2700	7340-2505	7340-0331	7340-2504	7340-2501	7340-2502	7340-2503
5 32 AVEX Taper Nose	7340-4100	7340-3600	7340-2505	7340-0331	7340-2504	7340-2501	7340-2502	7340-2503
1 8 St.St. & Tit. Taper Nose	7340-2901	7340-3000	7340-2505	7340-0331	7340-2504	7340-2501	7340-2502	7340-2503
5 32 St.St. & Tit. Taper Nose	7340-3202	7340-3201	7340-2505	7340-0331	7340-2504	7340-2501	7340-2502	7340-2503

NOTE: The Wedge Device included in Nose Tip Assemblies is Part No. 7340-4200 (This supersedes Spring 7340-1702 used on the obsolete Nose Tips)

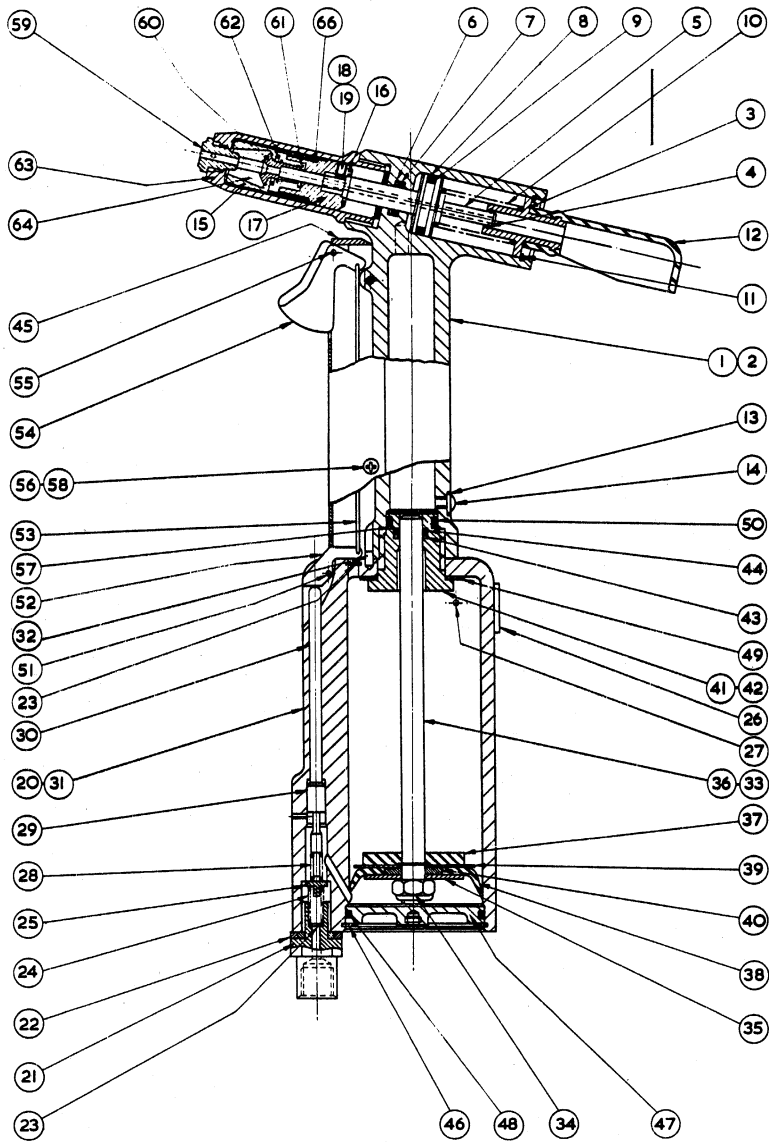
NOTE:- WHEN ORDERING TYPE 734 OR 7341 TOOLS PLEASE INDICATE EQUIPMENT REQUIRED

E.G. 734 TOOL COMPLETE WITH 3/16 AVEX EQUIPMENT

OR 7341 TOOL COMPLETE WITH 1/8 AVEX EQUIPMENT

HYDRO-PNEUMATIC PULL TOOL TYPE
734 SERIES

LIST OF PARTS



ITEM No	PART No	DESCRIPTION	No. OFF
1	7340-0300	Handle Assembly	1
2	7340-0302	Handle Machined	1
3	7340-0314	Piston Guide	1
4	7003-0029	Dirt Excluder	1
5	7340-0311	Piston	1
6	7003-0034	Back-up Ring	1
7	7003-0036	'O' Ring	1
8	7003-0015	'O' Ring	1
9	7003-0035	Head Piston Back-up Ring	1
10	7340-0324	Spring	1
11	7004-0019	Circlip	1
12	7340-0312	Pin Tail Deflector	1
13	7003-0033	Handle Plug Sealing Washer	1
14	7001-0029	Handle Plug	1
15	7340-0325	Jaw Spreader Housing (734)	1
	7340-2506	(7341)	1
16	7340-0329	Nylon Buffer	1
17	7340-0330	Wiper Washer	1
18	7001-0022	Set Screw	1
19	7340-0326	Nylon Pellet	1
20	7340-0400	Cylinder Assembly	1
21	7340-0412	1/4 B.S.P.F. Female Adaptor	1
22	7003-0065	1/4 B.S.P.F. Aluminium Washer	1
23	7330-1302	Filter	2
24	7340-0401	Valve Spring	1
25	7340-0413	Valve	1
26	7340-0206	Label	1
27	7001-0005	Hammer Drive Screws	2
28	7340-0403	Spring	1
29	7340-0404	Valve Plunger	1
30	7340-0405	Valve Plunger Rod	1
31	7340-0407	Cylinder Machined	1
32	7007-0016	Locating Pin	1
33	7340-0500	Piston Assembly	1
34	7002-0011	Piston Rod Nut	1
35	7340-0502	Piston Washer	1
36	7340-0505	Piston Rod	1
37	7340-0506	Buffer	1
38	7003-0038	Air Piston Cup	1
39	7340-0508	Buffer Washer	1
40	7340-0509	Piston Washer (inner)	1
41	7341-0700	Adaptor Assembly	1
42	7340-0701	Adaptor	1
43	7003-0034	Back up Ring	1
44	7003-0036	'O' Ring	1
45	7340-0900	Trigger Mount Assy. (Welded)	1
46	7004-0018	Plug Retaining Ring	1
47	7340-0202	Plug	1
48	7003-0031	Plug 'O' Ring	1
49	7340-0204	Facing Washer	1
50	7003-0032	Adaptor 'O' Ring	1
51	7007-0014	Cam Lever Pin	1
52	7340-0208	Trigger Cam Lever	1
53	7340-0209	Trigger Tie	1
54	7340-0210	Trigger	1
55	7007-0015	Trigger Pin	1
56	1181-0514	Sealing Pin	4
57	7340-0217	Back up Ring	1
58	1121-0514	5/32 Snap Head Steel Chobert Rivet	4
59		Nose Tip	1
60		Jaw Spreader	1
61		Spring	1
62		Buffer	1
63		Nose Casing	1
64		Jaws	1
65		Jaw Housing	1
66		Locking Ring	1

TO PRIME

1. Thoroughly clean the exterior of the pull tool.
2. With the gun held in soft vice jaws, as shown in figure 1, loosen but do not remove plug (14). Remove plug retaining ring (40) and cylinder plug (47), then withdraw the air piston assembly (33). Tighten plug (14).
3. Prime by pouring oil in through the adaptor (41) at the bottom of the air

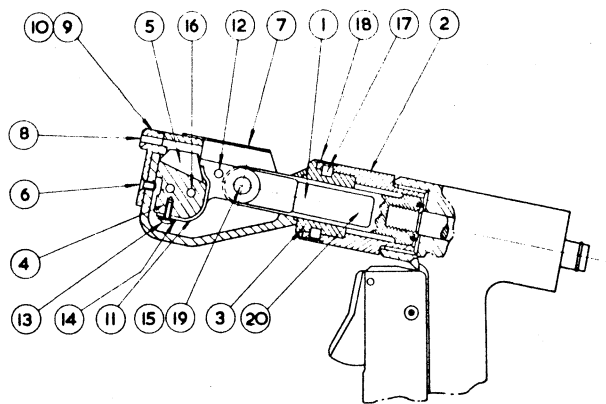
cylinder to the level shown, using the bottle provided. Replace air piston assembly, ensuring that the buffer (37) is not left out, then replace plug (47) and plug retaining ring (46).

4. Loosen plug (14) allowing excess oil to be pushed out by hydraulic piston spring (10), then tighten plug (14) and the gun is ready to use.

ALWAYS USE SPECIAL 734 PRIMING OIL

AVDEL

HYDRO-PNEUMATIC PULL TOOL TYPE 7342



LIST OF PARTS

PRODUCT CODE	DESCRIPTION
7342-0004	Swivel Head Tool Complete for 1/8" Avex
7342-0005	Swivel Head Tool Complete for 5/32" Avex
7342-0006	Swivel Head Tool Complete for 3/16" Avex
7342-2200	Swivel Head only for 1/8"
7342-3200	Swivel Head only for 5/32"
7342-4200	Swivel Head only for 3/16"

ITEM No	PART No	DESCRIPTION	QUAN- TITY
1	7342-2300	Body	1
2	7342-2201	Adaptor	1
3	7342-2202	Clip	1
4	7342-2204	Housing	1
5	7342-2206	Jaw	1
6	7342-2207	Screw	1
7	7342-2208	Plate	1
8	7342-2500	Nose Tip assy. 1/8" Rivets	1
	7342-3500	Nose Tip assy. 5/32" Rivets	1
	7342-4500	Nose Tip assy. 3/16" Rivets	1
9	7342-2501	Nose Tip 1/8" Rivets	1
	7342-3501	Nose Tip 5/32" Rivets	1
	7342-4501	Nose Tip 3/16" Rivets	1
10	7340-4200	Mandrel Retainer	1
11	7350-0210	Spring	1
12	7350-0213	Pin	1
13	7001-0072	Screw	1
14	7002-0016	Washer	1
15	7007-0027	Dust Cap	1
16	7007-0038	Pin	2
17	7007-0039	Roller	2
18	7007-0040	Screw	2
19	7350-0205	Pin	1
20	7342-2400	Spindle	1

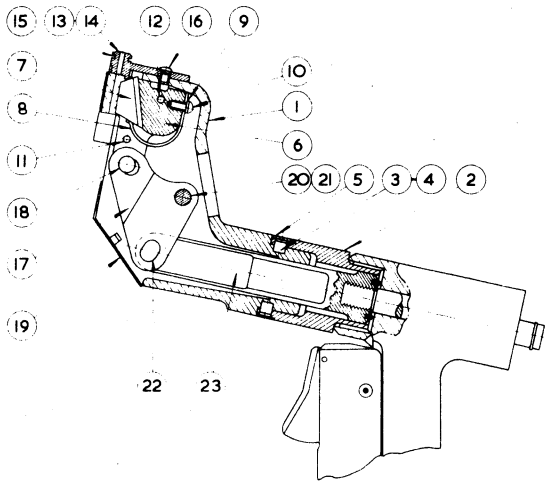
Note Tool Type 734 can be converted to the swivel head 7342 series by fitting of the complete head

Part No. 7342-2200 for 1/8" Rivets
7342- 3200 for 5/32" Rivets
7342-4200 for 3/16" Rivets

It should be noted that spindle 7342-2400 would require fitting to head piston and that pin 7350-0205 is necessary to complete the assembly. (Both these items are required as well as the basic head.)

For all other details refer to 734 tool.

HYDRO-PNEUMATIC PULL TOOL TYPE 7343



LIST OF PARTS

PRODUCT CODE	DESCRIPTION
7343-0004	Right Angle Tool Complete for 1/8" Avex Rivets
7343-0005	Right Angle Tool Complete for 5/32" Avex Rivets
7343-0006	Right Angle Tool Complete for 3/16" Avex Rivets
7343-2206	Right Angle Head only for 1/8" Avex
7343-3200	Right Angle Head only for 5/32" Avex
7343-4200	Right Angle Head only for 3/16" Avex

ITEM No	PART No	DESCRIPTION	QUAN- TITY
1	7343-2202	Body	1
2	7342-2201	Adaptor	1
3	7007-0040	Screw	1
4	7007-0039	Roller	1
5	7342-2202	Clip	1
6	7342-2204	Housing	1
7	7342-2206	Jaw	1
8	7350-0210	Spring	1
9	7002-0016	Washer	1
10	7001-0072	Screw	1
11	7350-0213	Pin	1
12	7007-0038	Pin	1
13	7342-2500	1/8" Nose Tip Assembly	1
	7342-3500	5/32" Nose Tip Assembly	1
	7342-4500	3/16" Nose Tip Assembly	1
14	7342-2501	1/8" Nose Tip	1
	7342-3501	5/32" Nose Tip	1
	7342-4501	3/16" Nose Tip	1
15	7340-4200	Mandrel Retainer	1
16	7342-2207	Screw	1
17	7343-2203	Lever	1
18	7343-2207	Pin	1
19	7343-2204	Guard	1
20	7343-2205	Nut	1
21	7343-2206	Screw	1
22	7342-2400	Spindle	1
23	7350-0205	Pivot Pin	1

Note Tool Type 734 can be converted to the Right Angle Head 7343 Series by fitting the complete head: 7343-2220 for 1/8" Rivets
7343-3200 for 5/32" Rivets
7343-4200 for 3/16" Rivets

It should be noted that Spindle 7342-0205 would require fitting to the Head Piston and that pin 7350-0205 is necessary to complete the Assembly. (Both these items required as well as the basic head.)

FOR ALL OTHER DETAIL REFER TO 734 TOOL.