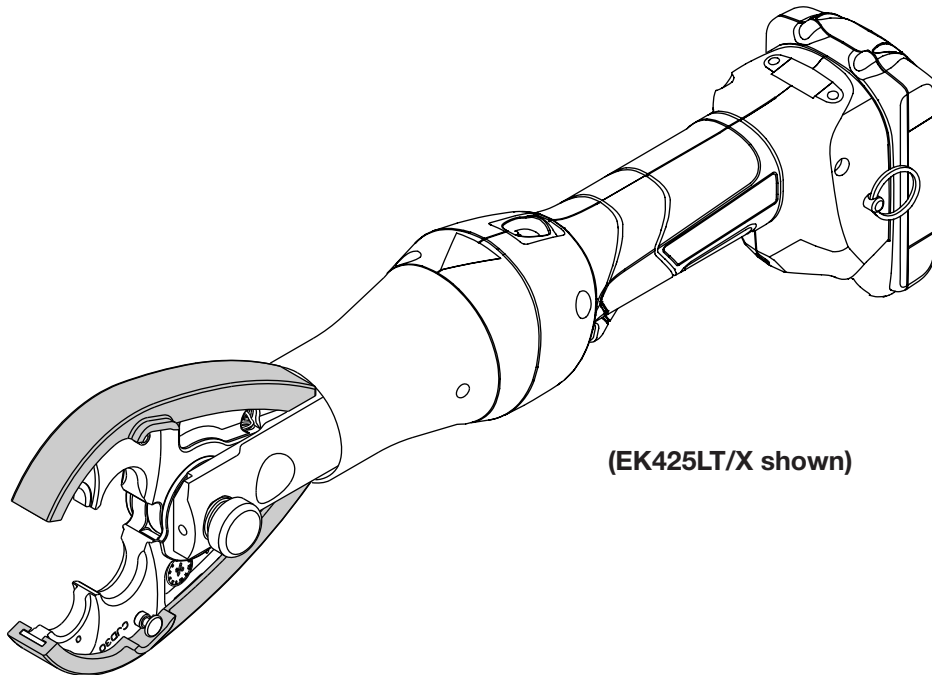


SERVICE MANUAL



GATOR®

Battery-powered In-line T/X Tools



Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

Register this product at www.greenlee.com

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Safety

Safety is essential in the use and maintenance of Greenlee tools and equipment. This manual and any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool. Observe all of the safety information provided.

Purpose of this Manual

This manual is intended to familiarize authorized Greenlee service personnel with the service parts for the Greenlee Battery-powered In-line T/X Tools listed on this page.

Keep this manual available to all personnel.

Replacement manuals are available upon request at no charge at www.greenlee.com.

Other Publications

Operation Manuals

- EK6IDLT/X 52080021
- EK410LT/X 52080011
- EK425LT/X 52080010
- EK622LT/X 52080013
- EK628LT/X 52080012
- ES20LT/X 52080507
- ES32LT/X 52080507
- ES32FLT/X 52080507
- ESC35LT/X 52080507
- ESG25LT/X 52080507
- ESG45LT/X 52080507
- ETS8LT/X 52080507
- ETS12LT/X 52080507
- LS100X 52068346



Do not discard this product or throw away!

For recycling information, go to www.greenlee.com.

All specifications are nominal and may change as design improvements occur. Greenlee Textron Inc. shall not be liable for damages resulting from misapplication or misuse of its products. GATOR is a registered trademark of Textron Innovations Inc.

KEEP THIS MANUAL

IMPORTANT SAFETY INFORMATION



SAFETY ALERT SYMBOL

This symbol is used to call your attention to hazards or unsafe practices which could result in an injury or property damage. The signal word, defined below, indicates the severity of the hazard. The message after the signal word provides information for preventing or avoiding the hazard.

⚠ DANGER

Immediate hazards which, if not avoided, **WILL** result in severe injury or death.

⚠ WARNING

Hazards which, if not avoided, **COULD** result in severe injury or death.

⚠ CAUTION

Hazards or unsafe practices which, if not avoided, **MAY** result in injury or property damage.



⚠ WARNING

Skin injection hazard:

Do not use hands to check for oil leaks. Oil under pressure easily punctures skin. If injured, seek medical attention immediately to remove oil.

Failure to observe this warning could result in serious injury, gangrene, or death.



⚠ WARNING

Do not use solvents or flammable liquids to clean the tool body. Solvents or flammable liquids could ignite and cause serious injury or property damage.

⚠ WARNING

Do not dispose of batteries in a fire. They will vent fumes and may explode.

Failure to observe this warning could result in severe injury from harmful fumes or burns from flying debris.



⚠ WARNING

Read and understand all of the instructions and safety information in this manual before operating or servicing this tool. Refer also to the Operation Manual, which is listed under "Other Publications."

Failure to observe this warning could result in severe injury or death.

⚠ CAUTION

Do not perform any service or maintenance other than as described in this manual. Injury or damage to the tool may result.

Failure to observe this precaution may result in injury and property damage.



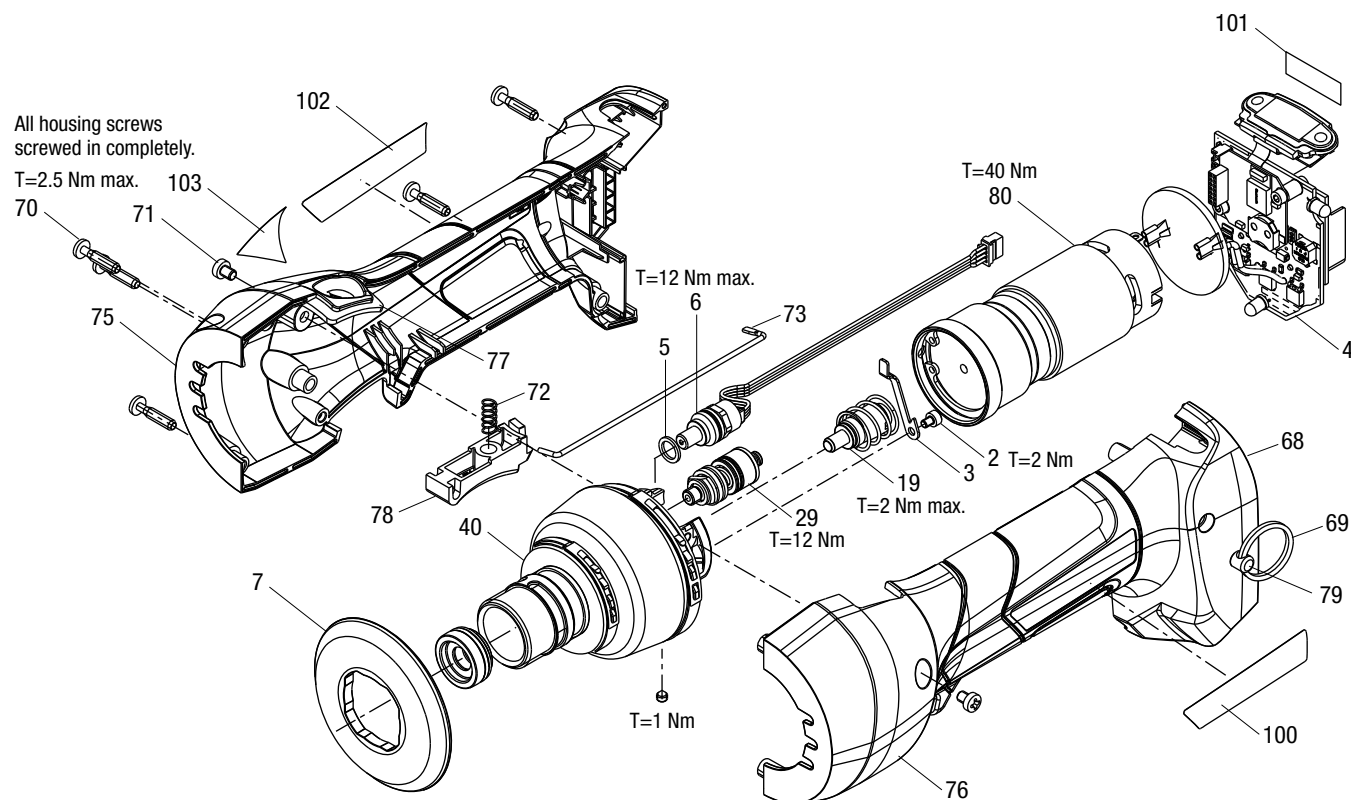
⚠ WARNING

Wear eye protection when operating or servicing this tool.

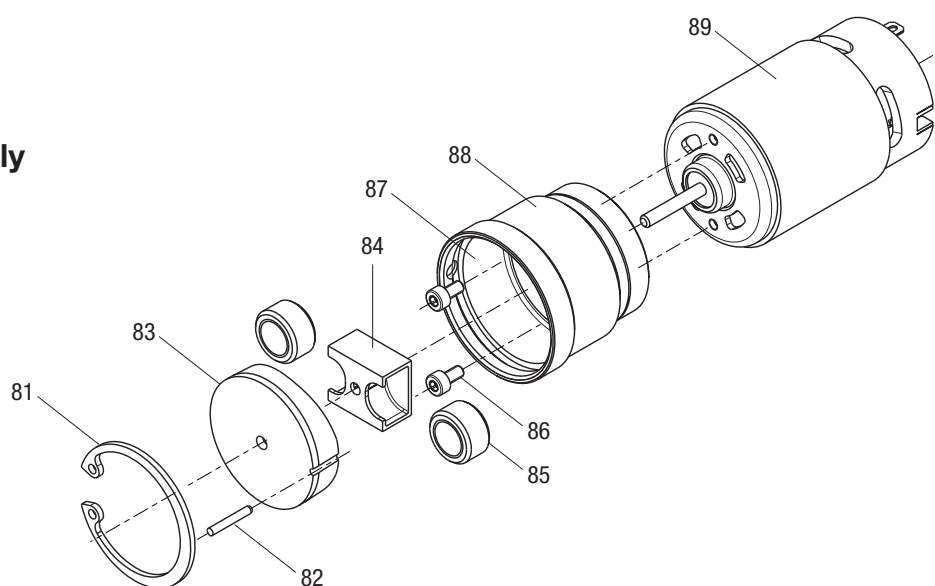
Failure to wear eye protection could result in serious eye injury from flying debris or hydraulic oil.

Note: Keep all decals clean and legible, and replace when necessary.

Main Illustrations—All Tools



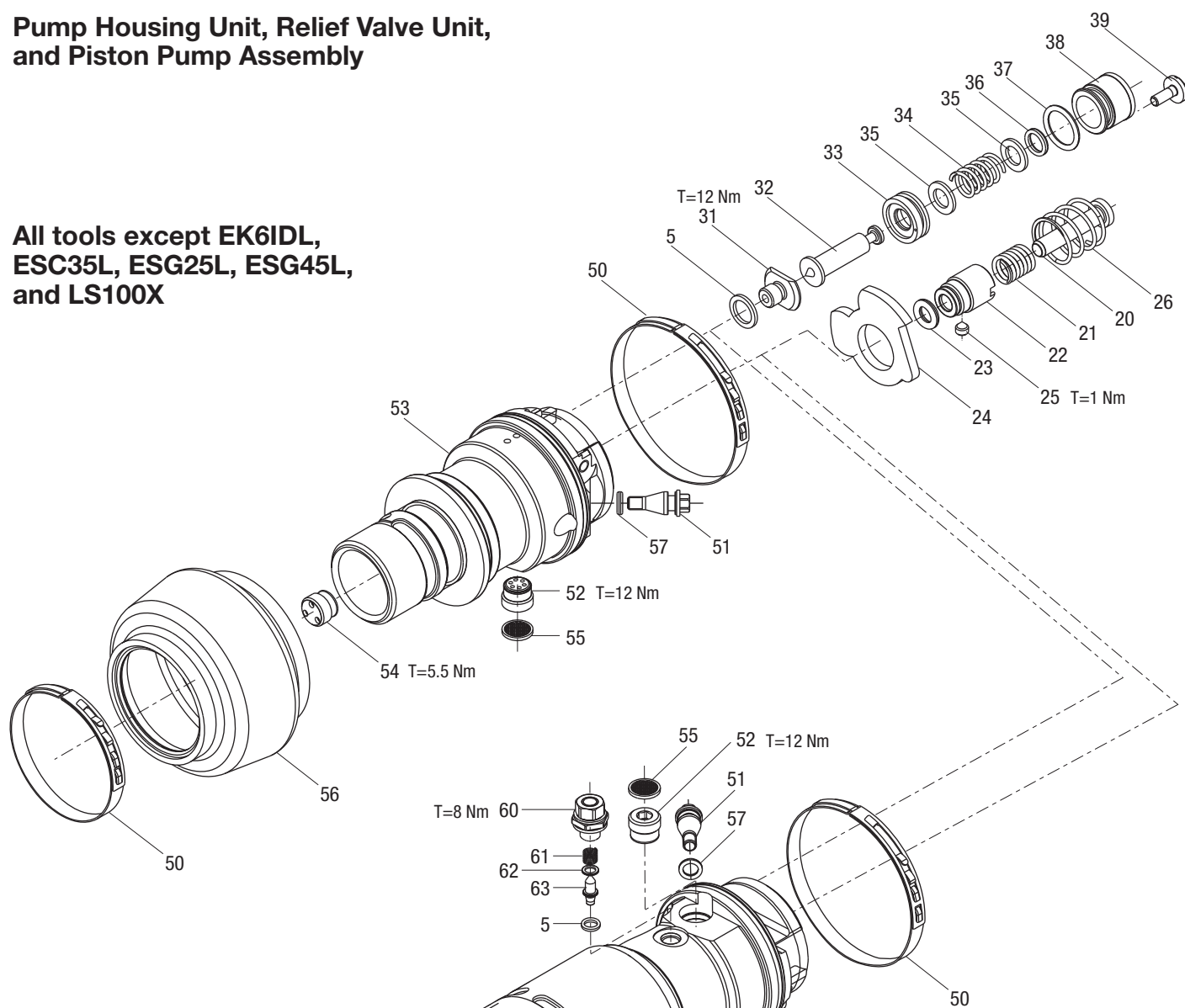
Motor Assembly



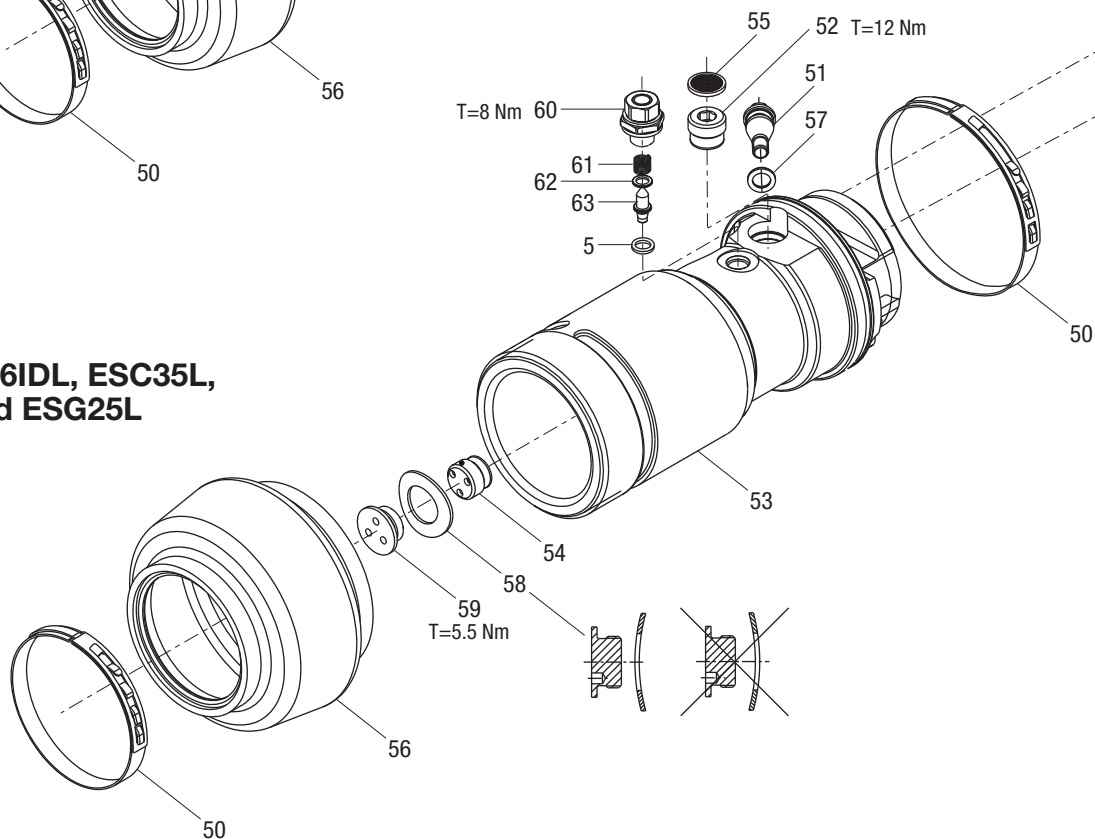
Main Illustrations—All Tools (cont'd)

Pump Housing Unit, Relief Valve Unit, and Piston Pump Assembly

All tools except EK6IDL,
ESC35L, ESG25L, ESG45L,
and LS100X



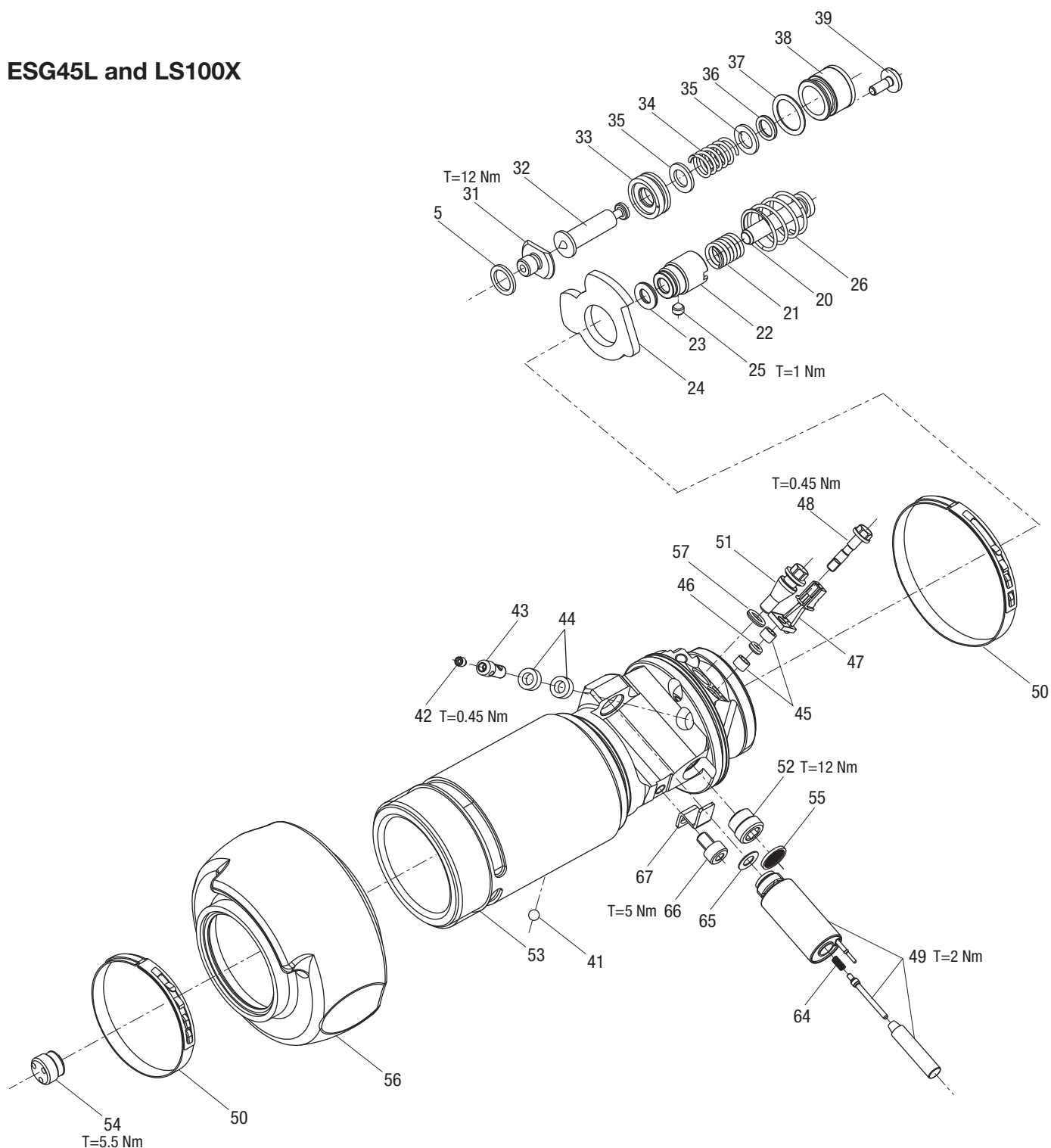
EK6IDL, ESC35L,
and ESG25L



Main Illustrations—All Tools (cont'd)

Pump Housing Unit, Relief Valve Unit, and Piston Pump Assembly

ESG45L and LS100X



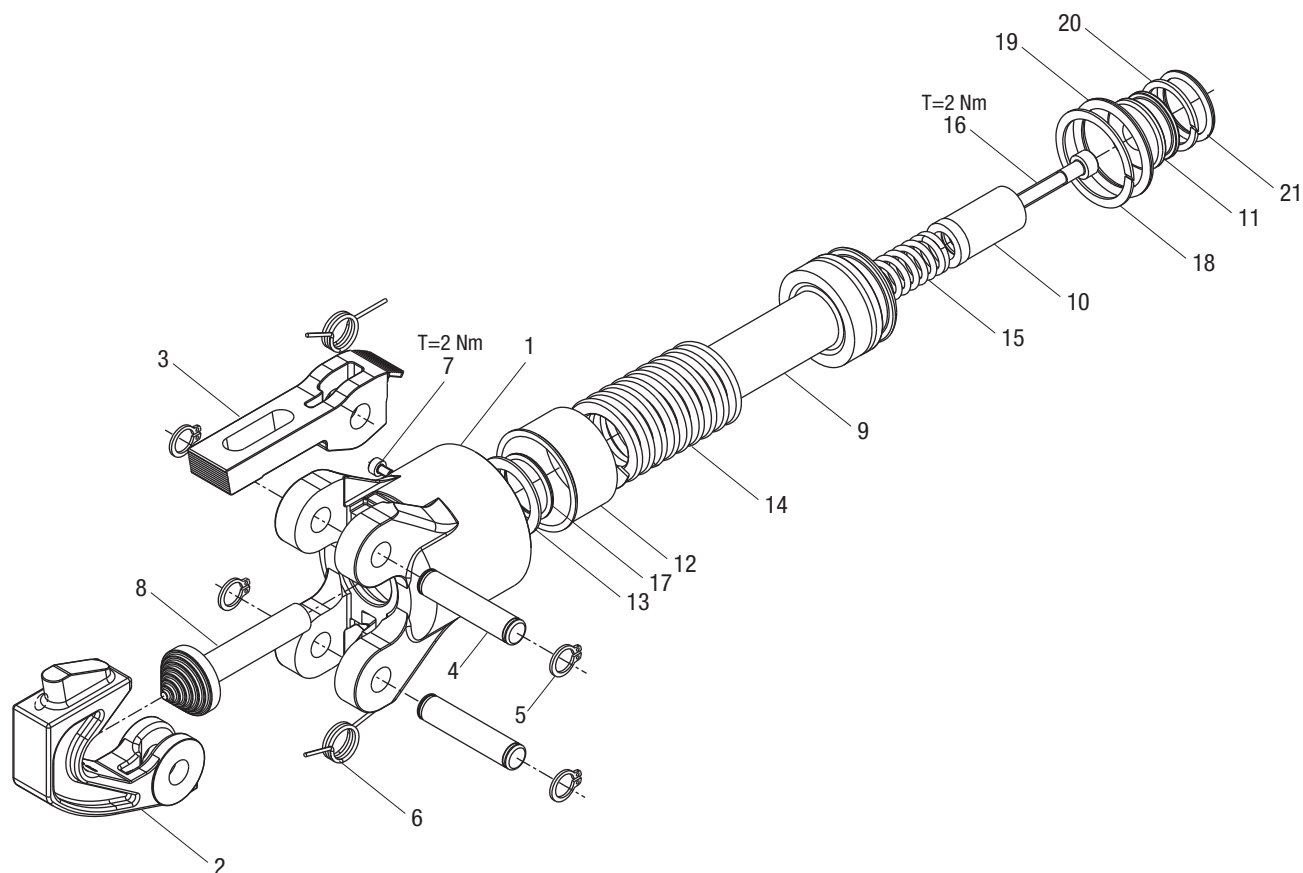
Main Parts List—All Tools

Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	52055860	Relief lever kit (includes 2, 3)		40	52057116	Pump housing unit (includes 24, 50–63) (EK6IDL, ESC35L, ESG25L)	1
2		Screw	1		52054796	Pump housing unit (includes 24, 50–57) (EK410L, ETS12L)	1
3		Relief valve lever	1		52048120	Pump housing unit (includes 24, 50–57) (EK425L, EK628L, ETS8L)	1
4	52080596	Control board (T version)	1		52054795	Pump housing unit (includes 24, 50–57) (EK622L)	1
	52080597	Control board (X version)	1		52072068	Pump housing unit (includes 24, 50–63) (ES20L, ES32L, ES32FL)	1
	52080632	Control board (LS100X)	1		52080598	Pump housing unit (includes 24, 41–57, 64–67) (ESG45L)	1
5*		Seal	2		52079407	Pump housing unit (includes 24, 41–57, 64–67) (LS100X)	1
6	52049205	Sensor (EK6IDL, EK410L, EK425L, EK622L, EK628L, LS100X)	1	41		Ball	1
	50121839	Screw (cutters)	1	42		Screw	1
7	52080885	Ring (EK6IDL, EK410L, EK622L, ESC35L, ESG25L, ESG45L, ETS12L)	1	43		Shaft	1
	52080884	Ring (EK425L, EK628L, ETS8L)	1	44		Bushing	2
	52080891	Ring (ES20L, ES32L, ES32FL, LS100X)	1	45		Bearing	2
19	50018990	Piston pump assembly (includes 20–26)	1	46		O-ring	1
20		Piston pump	1	47		Plate	1
21		Spring	1	48		Screw	2
22	50019309	Piston pump housing	1	49		Solenoid	1
23*		Piston seal	1	50	52055861	Clamp, nylon, 10 pack	1
24*		Felt seal	1	50*		Clamp	2
25		Screw	1	51		Screw	1
26		Spring	1	52	50109162	Threaded bushing	1
29	50018922	Relief valve unit (includes 31–39) (all except EK6IDL, EK622L, ESC35L, ESG25L, ESG45L, ETS12L, LS100X)	1	53		Pump block	1
	52054799	Relief valve unit (includes 31–39) (EK6IDL, EK622L, ESC35L, ETS12L)	1	54	50109308	Threaded bushing	1
	52072069	Relief valve unit (includes 31–39) (ESC35L, ESG25L)	1	55	50109316	Screen	1
	52080599	Relief valve unit (includes 31–39) (ESG45L, LS100X)	1	56	52049296	Reservoir (all except ESG45L, LS100X)	1
					52080654	Reservoir (ESG45L, LS100X)	1
31	52072070	Valve seat	1	57*		O-ring	1
32		Needle valve	1	58		Washer	1
33		Plunger	1	59		Threaded bushing	1
34		Spring	1		52082059	Valve kit (includes 60–63)	
35		Lock washer (all except EK622L, ESG25L, ETS12L)	2	60		Valve seat	1
		Lock washer (EK622L, ESG25L, ETS12L)	6	61		Spring	1
36*		O-ring	1	62		Washer	1
37*		O-ring	1	63		Needle valve	1
38		Pressure relief	1	64		Spring	1
39		Screw	1	65		Washer	1
				66		Screw	1

Main Parts List—All Tools (cont'd)

Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
67		Top.....	1		52079291	Identification decal (ES20LX)	1
68	52080591	Housing unit (includes 69–79) (all except LS100X).....	1		52079286	Identification decal (ES32LT).....	1
	52079476	Housing unit (includes 70–78) (LS100X)....	1		52079287	Identification decal (ES32LX)	1
69		Ring	1		52079288	Identification decal (ES32FLT).....	1
70		Screw	5		52079289	Identification decal (ES32FLX)	1
71	50019767	Screw	2		52079311	Identification decal (ESC35LT)	1
72		Compression spring, DA5.5 x L14.0	1		52079312	Identification decal (ESC35LX).....	1
73		Trigger link	1		52079292	Identification decal (ESG25LT)	1
75		Housing half	1		52079293	Identification decal (ESG25LX).....	1
76		Housing half	1		52079302	Identification decal (ESG45LT)	1
77		Relief valve button.....	1		52079303	Identification decal (ESG45LX).....	1
78		Trigger cover	1		52079282	Identification decal (ETS8LT).....	1
79		Stud.....	1		52079283	Identification decal (ETS8LX)	1
80	52048132	Motor assembly (includes 81–89)	1		52079284	Identification decal (ETS12LT).....	1
81		Retaining ring	1		52079285	Identification decal (ETS12LX)	1
82	50019589	Pin	1	103	52068571	Warning decal, crimping tool	1
83		Motor cap.....	1		52025832	Warning decal, cutter	1
84		Disc housing.....	1		50122746	Carrying strap	
85		Disc	2		52080038	Carrying case	
86		Screw	2		52080165	Carrying case (LS100X)	
87		Gear lube, 1.5 g.....	1		52022041	Carrying pouch	
88		Motor adapter	1		52067905	Connector compatibility decal (EK6IDL)	
89		Electric motor.....	1		52047649	Connector compatibility decal (EK410L)	
100	52079315	In-line GATOR decal.....	1		52067054	Connector compatibility tag (EK425L)	
	52081566	In-line Intelli-PUNCH decal	1		52047648	Connector compatibility decal (EK622L)	
101	52080504	FCC T version decal.....	1		52047647	Connector compatibility decal (EK628L)	
	52080505	FCC X version decal.....	1	*	50047957	Seal kit (includes items marked with an asterisk, bushings not included)	
102	52079270	Identification decal (EK6IDLT)	1		52049190	18 V battery 2.0 Ah	
	52079271	Identification decal (EK6IDLX).....	1		52070023	18 V battery 4.0 Ah	
	52079250	Identification decal (EK410LT).....	1		52049201	18 V charger 120 VAC	
	52079251	Identification decal (EK410LX)	1		52049202	18 V charger 230 VAC	
	52079248	Identification decal (EK425LT).....	1		52049204	18 V charger 12 VDC	
	52079249	Identification decal (EK425LX)	1		52047087	18 V corded adapter 120 VAC	
	52079254	Identification decal (EK622LT).....	1		52047088	18 V corded adapter 230 VAC	
	52079255	Identification decal (EK622LX)	1		52054992	Li (18 V) to NiCd, NiMH (12 V) charger adapter	
	52079252	Identification decal (EK628LT).....	1		52057878	Biodegradable hydraulic fluid	
	52079253	Identification decal (EK628LX)	1				
	52079290	Identification decal (ES20LT).....	1				

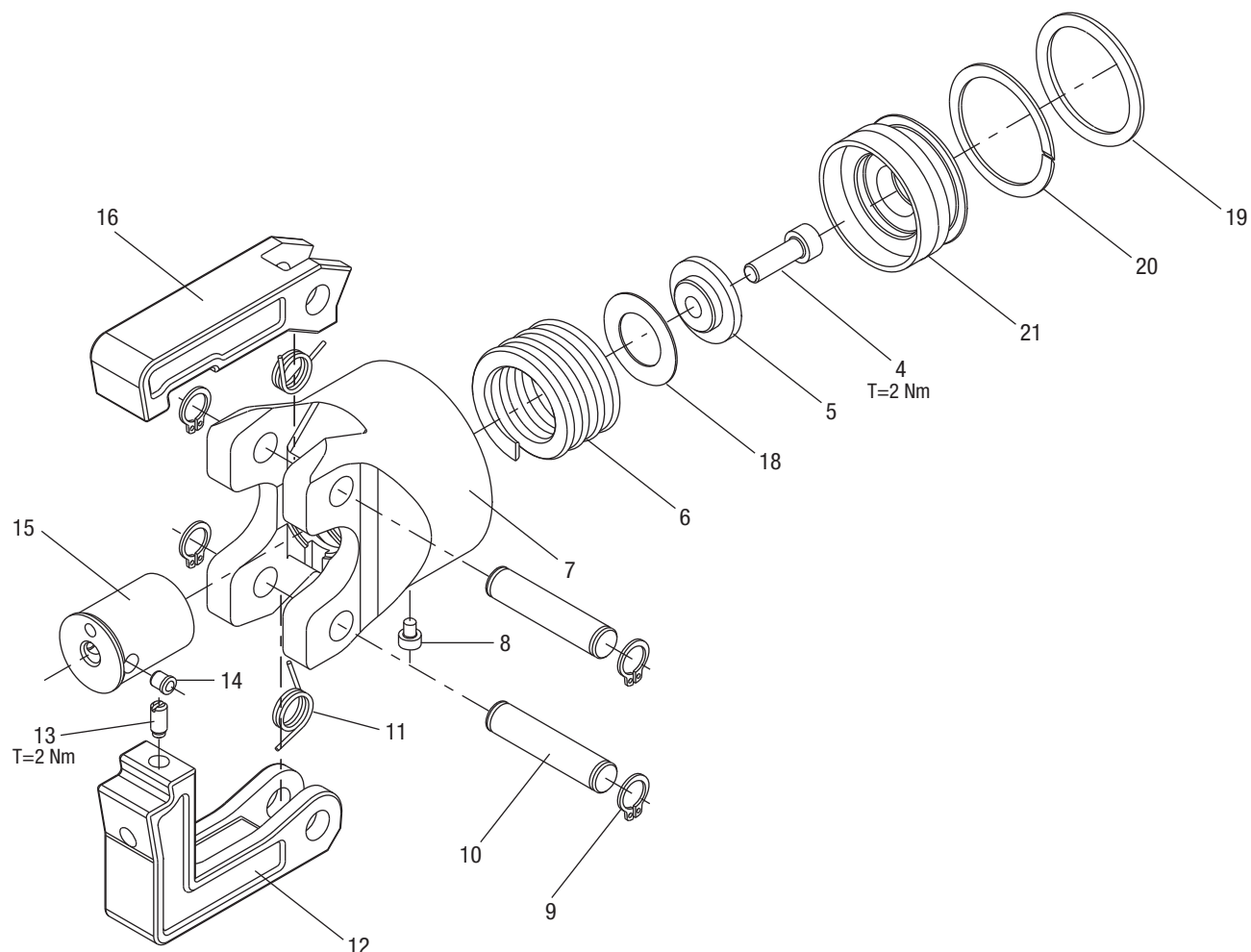
Head and Ram Illustration and Parts List—EK6IDL



Key	Part No.	Description	Qty
	52067839	Head and ram (includes 1–21)	
1	52067891	Fixed head.....	1
	52068198	Head and latch kit (includes 2, 3)	
2		Movable head.....	1
3		Latch head	1
	52068196	Fastener kit (includes 4–7)	
4		Pin	2
5		Retaining ring	4
6		Spring.....	2
7		Screw	1
8	52067893	Cone die.....	1
	52068197	Ram kit (includes 9–13)	
9		Ram.....	1
10		Sleeve.....	1

Key	Part No.	Description	Qty
11	52067840	Piston cup, small.....	1
12		Bushing	1
13		Adapter disk	1
	52068199	Spring kit (includes 14, 15)	
14		Compression spring	1
15		Spring.....	1
16	52068200	Hex screw, M5 x 3.....	1
17*		O-ring (included in 50047957).....	1
18*		Piston backup ring (included in 50047957)	1
19*		O-ring, 28.17 x 3.53 N870 (included in 50047957)	1
20*		Backup ring (included in 50047957).....	1
21*		O-ring (included in 50047957).....	1

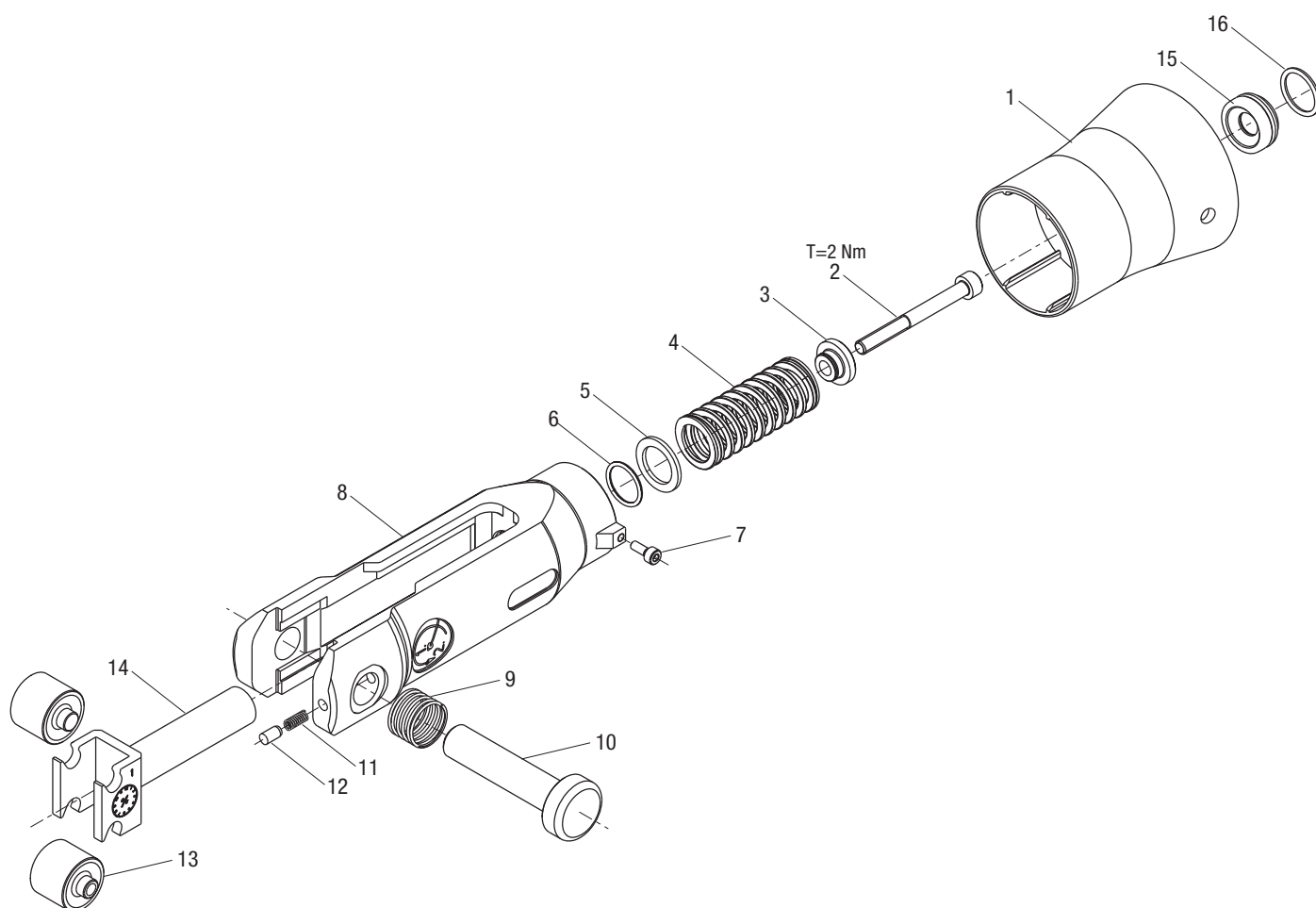
Head and Ram Illustration and Parts List—EK410L



Key	Part No.	Description	Qty
	50018981	Head and ram (includes 4–18)	
	52055863	Ram kit (includes 4–6, 14, 15, 18)	
4		Shoulder bolt.....	1
5		Disc	1
6		Spring.....	1
7	50019180	Fixed head.....	1
	52055864	Hardware kit (includes 8–11, 13, 14)	
8		Screw	1
9		Retaining ring	4
10		Pin	2
11		Spring.....	2

Key	Part No.	Description	Qty
	52040994	Head and latch kit (includes 12, 16)	
12		Movable head.....	1
13		Screw	1
14		Pin	1
15		Ram adapter.....	1
16		Latch head	1
18		Washer	1
19*		O-ring (included in 50047957).....	1
20*		Piston backup ring (included in 50047957)	1
21	50019082	Bushing	1

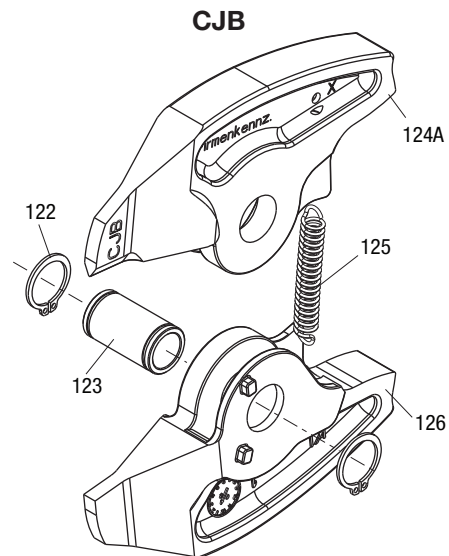
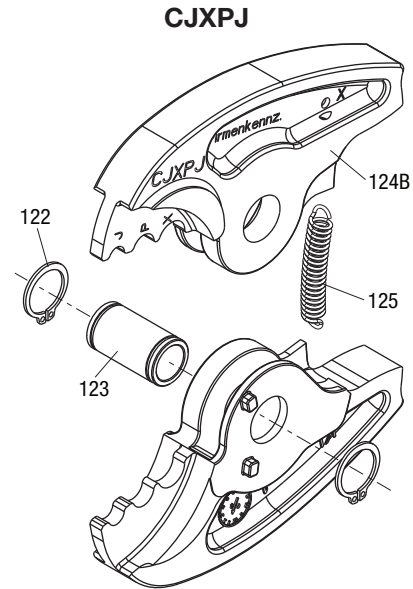
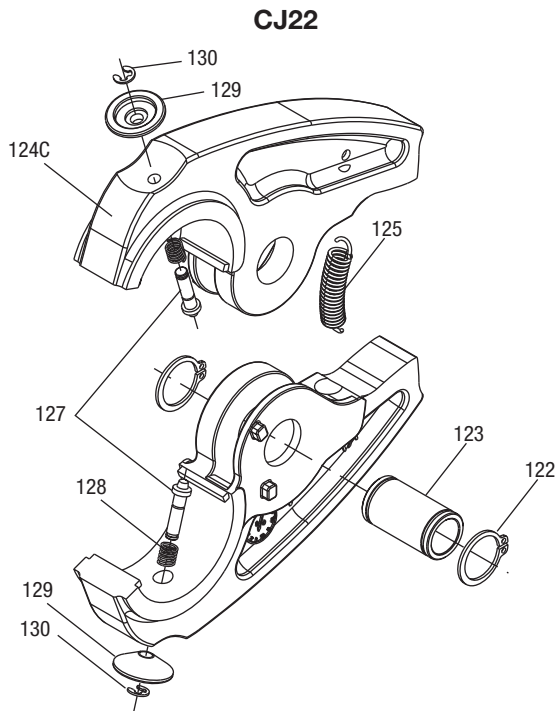
Ram Illustration and Parts List—EK425L and EK628L



Key	Part No.	Description	Qty
	52080600	Ram unit (includes 1–14).....	1
1	52080623	Sheath	1
	52049399	Spring kit (includes 2–6).....	
2		Shoulder bolt.....	1
3		Disc	1
4		Compression spring.....	1
5		Washer	1
6*		O-ring (included in 50047957).....	1
7	52057496	Screw	1
8		Jaw holder.....	1

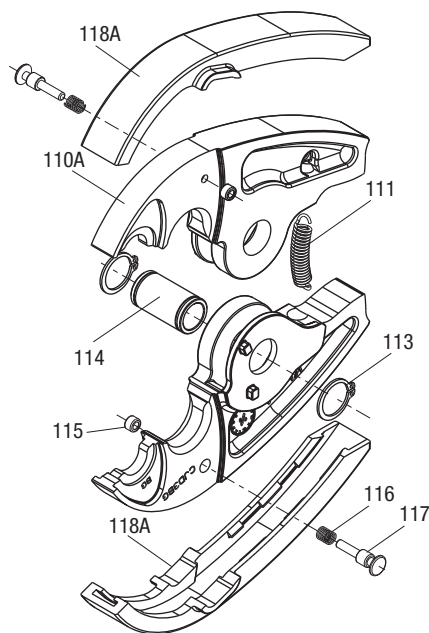
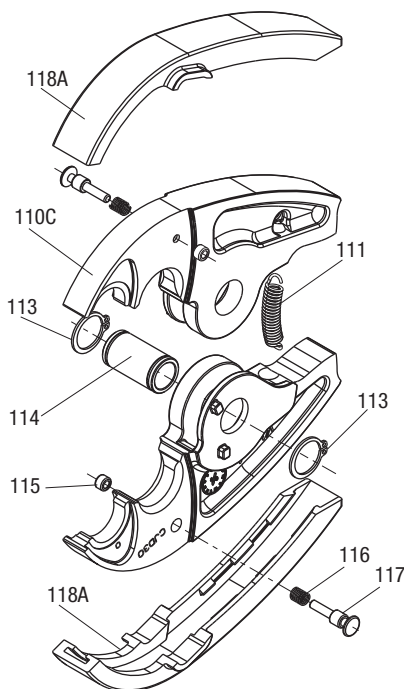
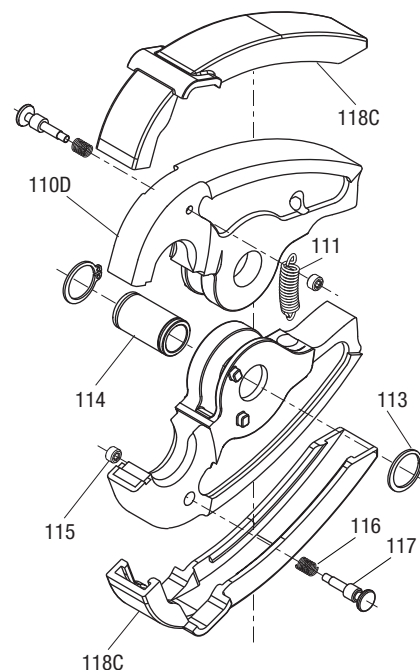
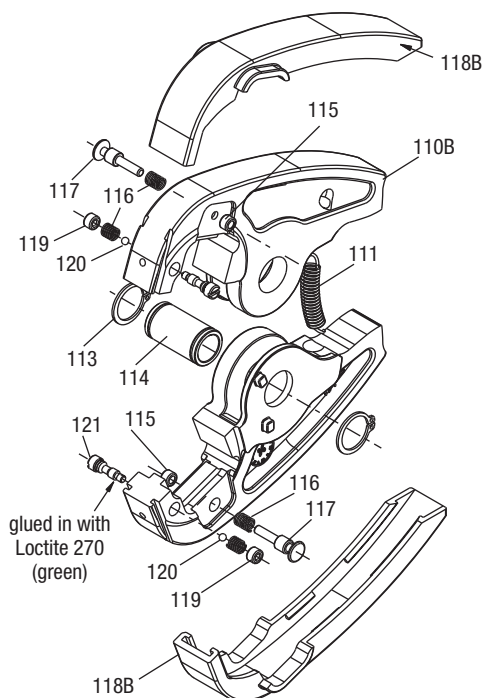
Key	Part No.	Description	Qty
	52049400	Latch kit (includes 9–12).....	
9		Compression spring.....	1
10		Locking pin.....	1
11		Compression spring.....	1
12		Pin	1
	52049401	Roller kit (includes 13, 14).....	
13		Roller	2
14		Ram.....	1
15	50120050	Bushing with seal	1
16*		Seal bushing (included in 50047957)	1

Jaw Units Illustration and Parts List



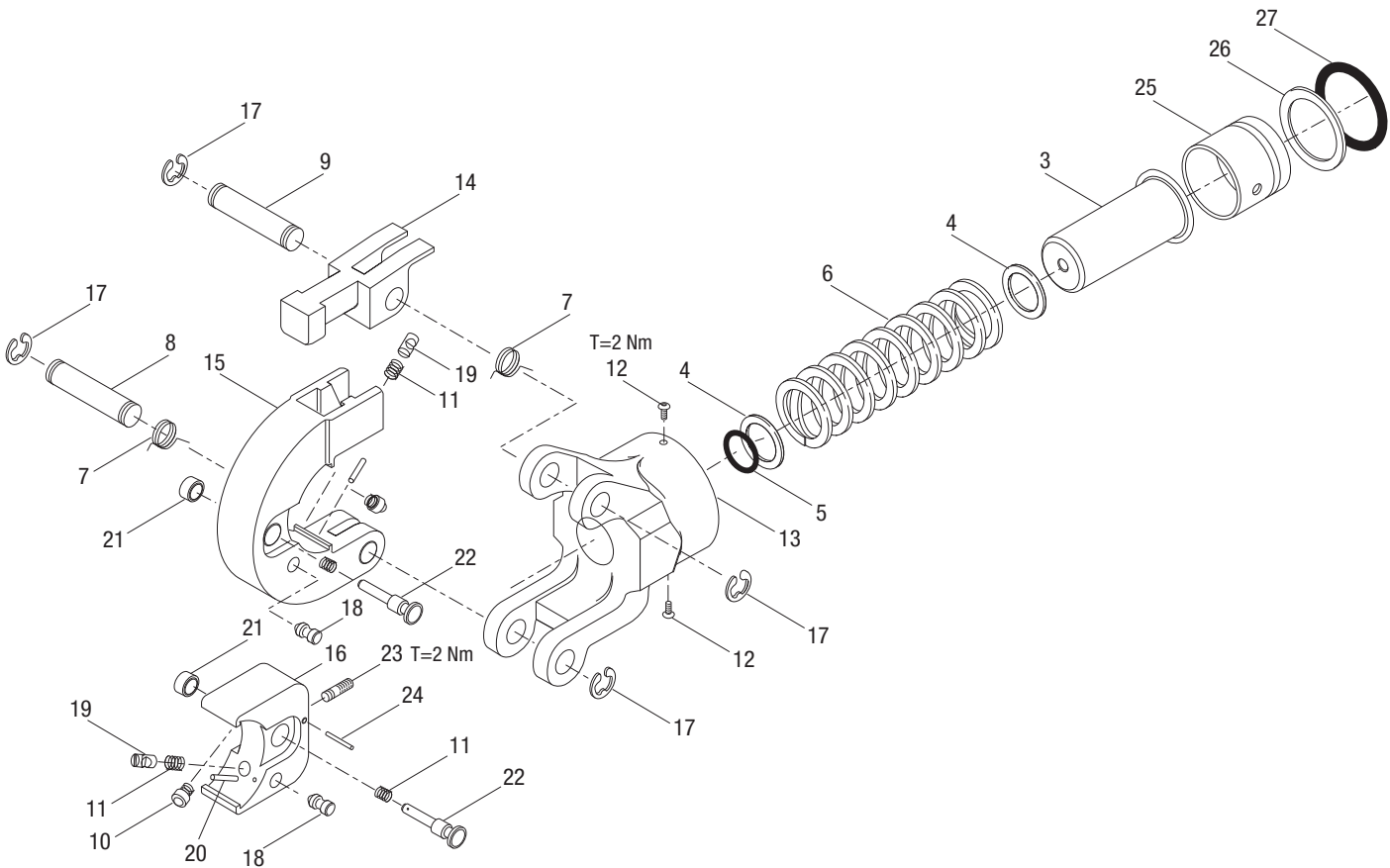
Key	Part No.	Description	Qty
	52024683	CJ22 crimping jaw unit for cUL and UL classified crimps	
	52025649	CJXPJ crimping jaw unit (includes 122-125)	
	52025648	CJB single-use lock cutter (includes 122-126)	
	52049402	Jaw pivot kit (includes 122, 123)	
122		Retaining ring	2
123		Pivot pin	1
124A		Jaw, sharp—CJB	1
124B		Jaw, CJXPJ	2
124C		Jaw, CJ22.....	2
125	52022544	Extension spring.....	1
126		Jaw, flat—CJB.....	1
	52023623	Die retaining pin kit (includes 127–130)	
127		Die retaining pin	2
128		Compression spring.....	2
129		Release button	2
130		Retaining ring	2

Jaw Units Illustration and Parts List (cont'd)

CJD3BG

CJD3O

CJD3

CJK Kearney


Key	Part No.	Description	Qty
	52027121	CJD3BG crimping jaw unit (includes 110–118)	
	52027122	CJD3O crimping jaw unit (includes 110–118)	
	52024068	CJD3 crimping jaw unit (includes 110–118)	
	52020114	CJK Kearney crimping jaw unit (includes 110–118, 119–121)	
110A		Jaw, CJD3BG.....	2
110B		Jaw, CJK	2
110C		Jaw, CJD3O	2
110D		Jaw, CJD3	2
111	52022544	Extension spring.....	1
	52049402	Jaw pivot kit (includes 113, 114)	
113		Retaining ring	2
114		Pin pivot	1
115		Bushing	2
116		Compression spring.....	2
117		Lock adapter	2
118A	52025125	Jaw covers, CJD3O/CJD3BG (set of 2)	1
118B	52022386	Jaw covers, CJK (set of 2)	1
118C	52021086	Jaw covers, CJD3 (set of 2)	1
119		Bushing	2
120		Ball, 3 mm	2
121		Locking pin.....	1
	50103750	Die pin kit, “W”-style dies (includes 115–117)	
	50105108	Die pin kit, Kearney-style dies (includes 116, 119–121)	

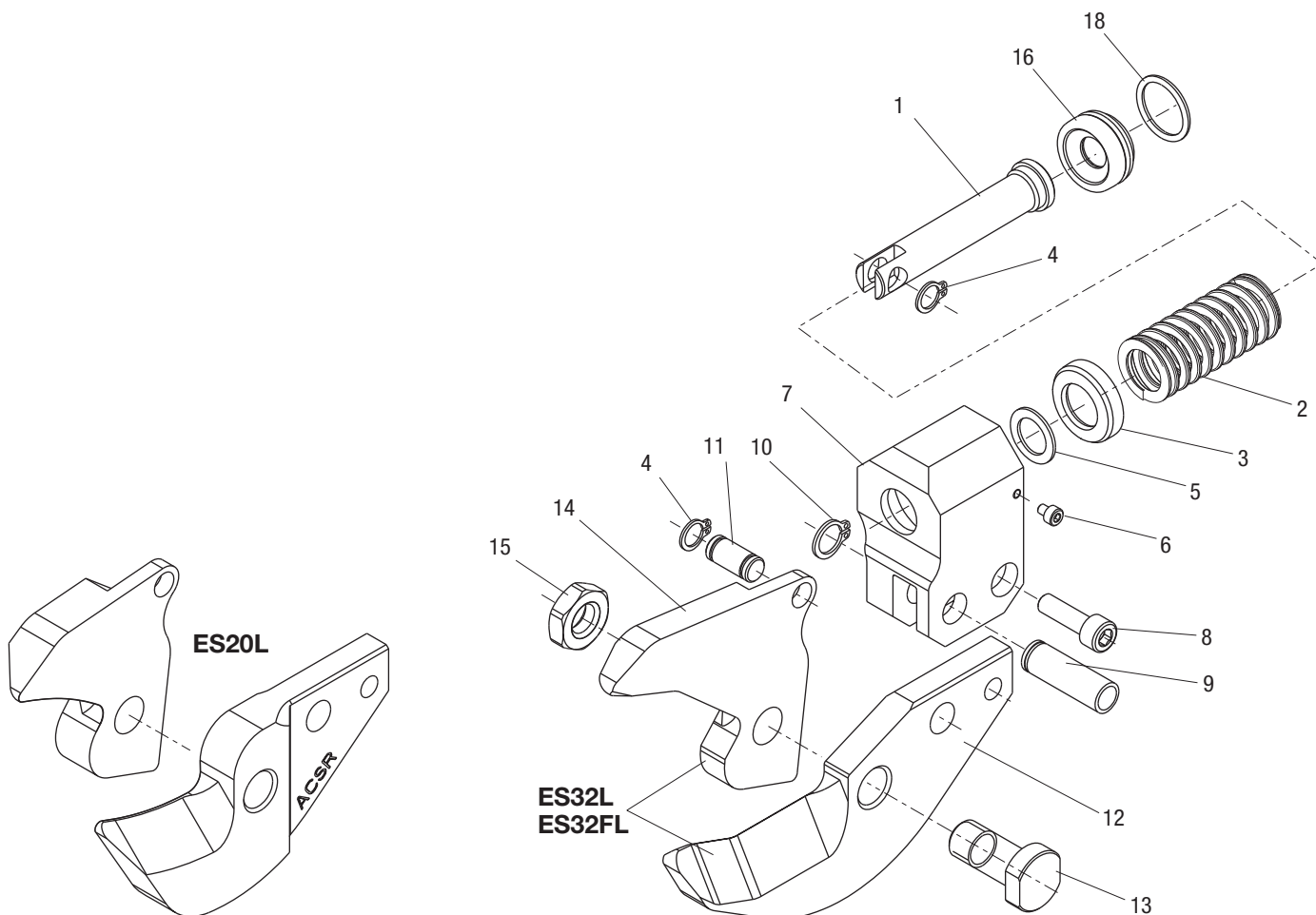
Head and Ram Illustration and Parts List—EK622L



Key	Part No.	Description	Qty
	52054798	Head and ram (includes 3–24)	
3	52055797	Ram	1
4	52080214	Adapter disk	2
5*		O-ring (included in 50047957)	1
6	50058398	Compression spring	1
	52055866	Pin kit (includes 7–9, 17)	
7		Spring	2
8		Pin	1
9		Pin	1
	52055867	Die retainer kit (includes 10, 11, 18–22)	
10		Die retainer	2
11		Compression spring	4
12	50041681	Screw	2
13	50058304	Bottom crimp head	1
14	50121693	Latch	1

Key	Part No.	Description	Qty
15	50121731	Top die holder	1
16	50121715	Bottom die holder	1
17		Retaining ring	4
18		Die release button	2
19		Die retainer	2
20		Roll Pin	2
21		Die release button	2
22		Locking pin	2
	52055865	Die holder kit (includes 23, 24)	
23		Threaded stud	1
24		Pin	1
25	52020648	Piston cup	1
26*		Backup ring (included in 50047957)	1
27*		O-ring (included in 50047957)	1

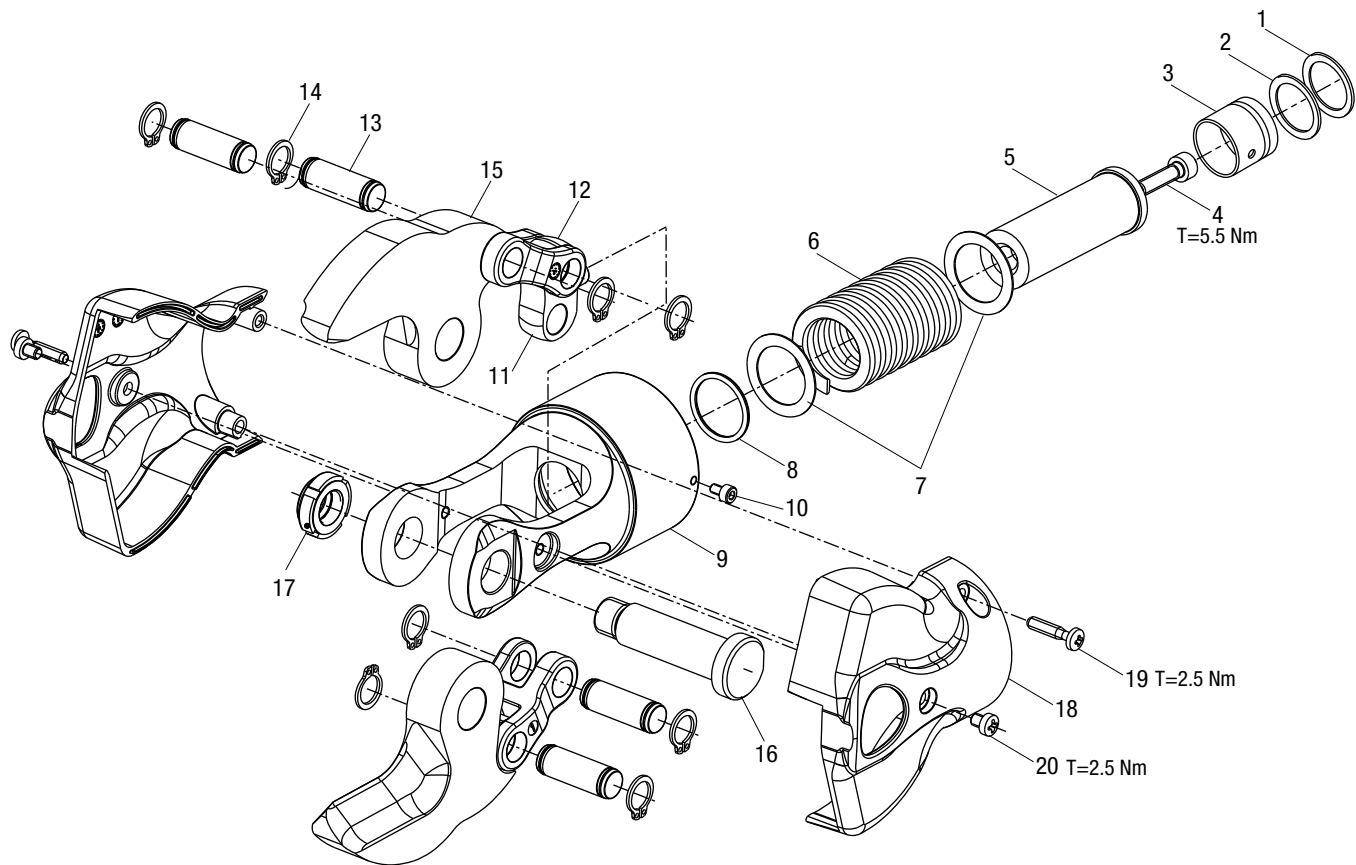
Head and Ram Illustration and Parts List—ES20L, ES32L, and ES32FL



Key	Part No.	Description	Qty
	52080212	Head assembly, ES20L (includes 1–15)	
	50121197	Head assembly, ES32L (includes 1–15)	
	52056587	Head assembly, ES32FL (includes 1–15)	
	52055868	Ram kit (includes 1–3, 5)	
1		Piston	1
2		Coil spring	1
3		Steel washer.....	1
	52055870	Hardware kit (includes 4, 8–11, 13, 15)	
4		Retaining clip.....	2
5		Steel washer.....	1
6	50019295	Screw	1

Key	Part No.	Description	Qty
7	50120913	Aluminum head	1
8		Screw	1
9		Pivot	1
10		Retaining clip.....	1
11		Pivot	1
	52055869	Blade kit, ES32L (includes 12–15)	
	52056589	Blade kit, ES32FL (includes 12–15)	
	52057271	Blade kit, ES20L (includes 12–15)	
12		Fixed blade.....	1
13		Pivot bolt.....	1
14		Movable blade.....	1
15		Hex nut.....	1
16	50120050	Bushing with seal	1
18*		Seal bushing (included in 50047957)	1

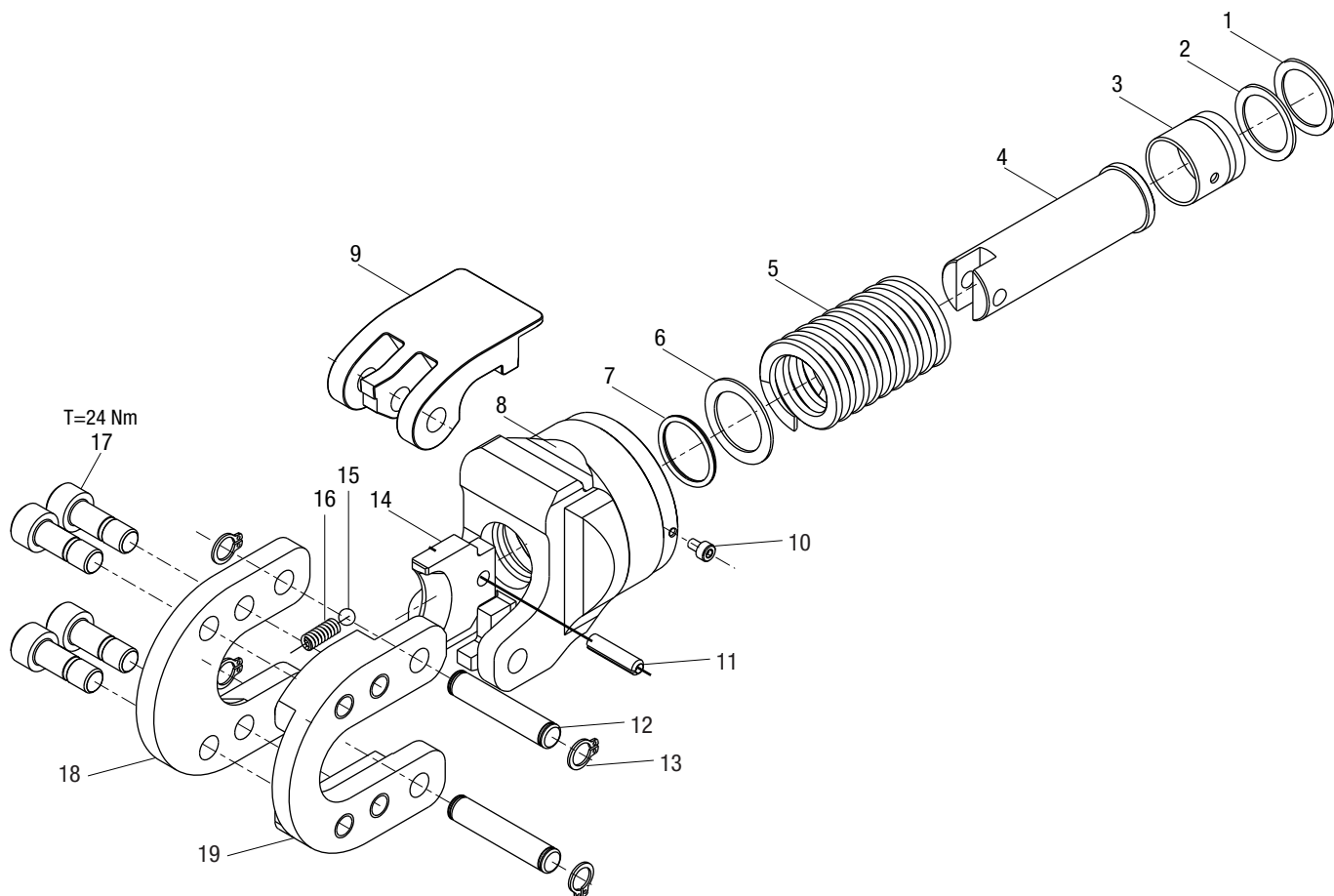
Head and Ram Illustration and Parts List—ESC35L



Key	Part No.	Description	Qty
	52081523	Head assembly (includes 4–20)	
1*		Backup ring (included in 50047957).....	1
2*		O-ring (included in 50047957).....	1
3	52020648	Piston cup	1
4	52081532	Screw	1
5	52081526	Piston rod	1
6	50058398	Spring.....	1
7	52080214	Shim	2
8	50058380	O-ring	1
9	52081525	Base	1
10	52057106	Screw	1

Key	Part No.	Description	Qty
11	52081524	Block	1
12	52081528	Link.....	1
13	52081529	Pin	4
14	50034308	Ring	8
15	52081521	Blade	2
16	52081527	Pivot pin	1
17	52081530	Nut.....	1
18	52081531	Cover.....	2
19	52024232	Screw	2
20	50019767	Screw	2

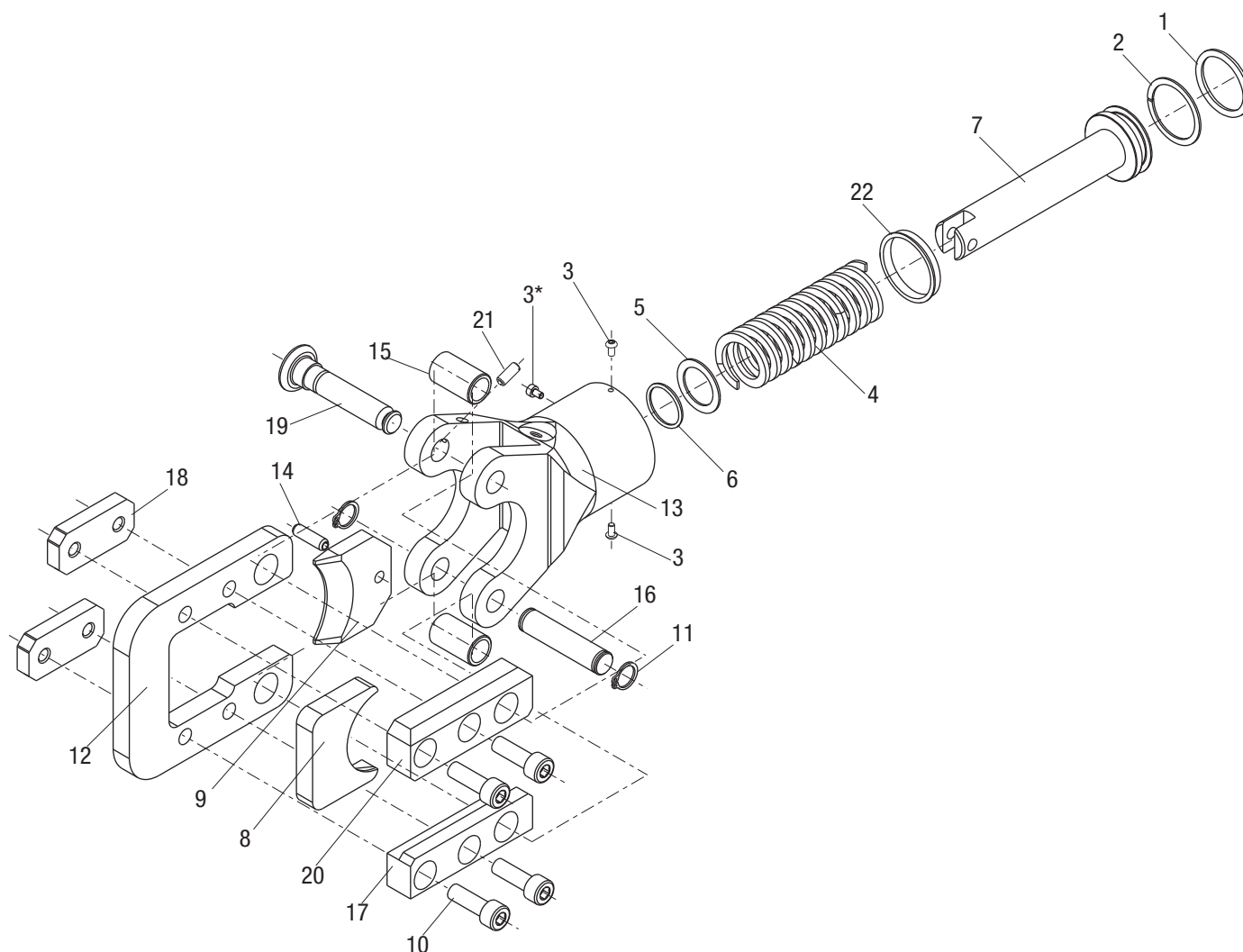
Head and Ram Illustration and Parts List—ESG25L



Key	Part No.	Description	Qty
	52057103	Head assembly (includes 4–19)	
1*		Backup ring (included in 50047957).....	1
2*		O-ring (included in 50047957).....	1
3	52020648	Piston cup	1
4	52057107	Ram	1
5		Compression spring	1
6		Adapter disk.....	1
7*		O-ring (included in 50047957).....	1
8	52057109	Base	1
9	52057108	Latch	1

Key	Part No.	Description	Qty
10	52057106	Screw	1
11	52057111	Blade pin	1
12	52057115	Pivot pin	2
13		Retaining clip.....	4
14	52057105	Movable blade.....	1
15	52057114	Ball	1
16	52057113	Spring.....	1
17	52057112	Screw	4
18	52057104	Fixed blade.....	1
19	52057110	Guide plate.....	1

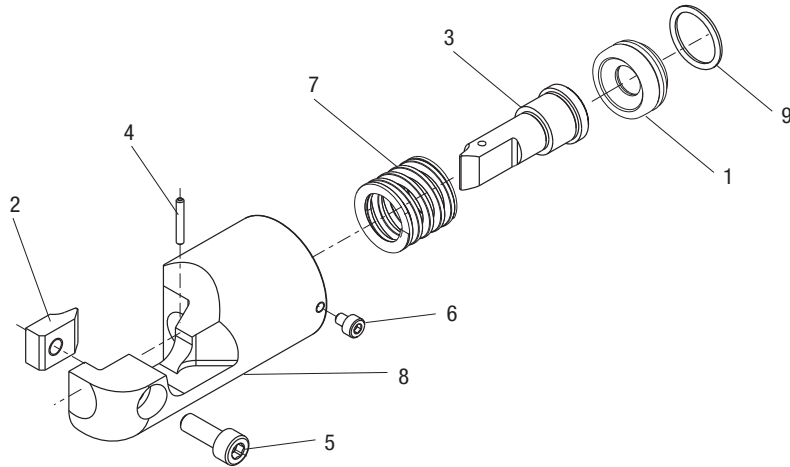
Head and Ram Illustration and Parts List—ESG45L



Key	Part No.	Description	Qty
	52080213	Head and ram (includes 1–22)	
1		O-ring (included in 52054906).....	3
2		Piston backup ring (included in 52054906).....	1
3	50041681	Screw, M3x6 mm button hd cap (units without item 22).....	2
*	52057106	Screw, M3x5 mm socket hd cap (units with item 22).....	1
4	50058258	Compression spring.....	2
5	50058371	Adapter disk.....	2
6		O-ring (included in 52054906).....	1
7	50103962	Piston.....	1
8	50103970	Stationary blade.....	1
9	50103989	Cutting blade.....	1

Key	Part No.	Description	Qty
10	50103997	Screw.....	4
11	50104004	Snap ring.....	2
12	50104012	Cutting head.....	1
13	50104020	Cutting head base.....	1
14	50106600	Pin, 8 x 20.....	1
15	50104039	Sleeve.....	2
16	50104047	Pin.....	1
17	50104055	Guide plate.....	1
18	50104063	Side plate.....	2
19	50104071	Pull pin.....	1
20	50104080	Brace plate.....	1
21	50104101	Screw.....	1
22	52065822	Stroke adjustor (used in models with M3x5 mm screw).....	1

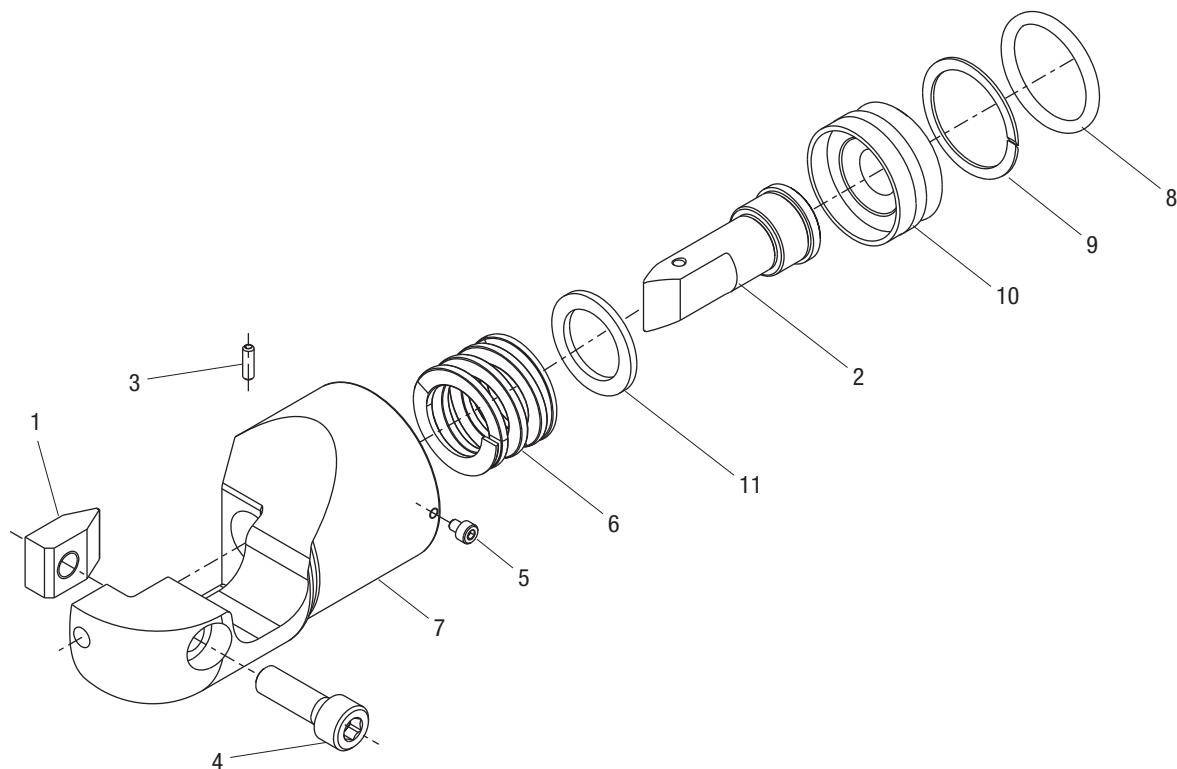
Head and Ram Illustration and Parts List—ETS8L



Key	Part No.	Description	Qty
	52024562	Head and ram (includes 2–8)	
1	50120050	Bushing with seal	1
	52024565	Cutter blade kit (includes 2–5)	
2		Cutter plate	1
3		Cutting rod	1
4		Spring-type straight pin	1
5		Socket head cap screw, m5-14	1

Key	Part No.	Description	Qty
6	50019295	Hex head cap screw, m3x4.....	1
7	50019120	Compression spring.....	1
8	52026760	Cutter head	1
9*		Seal bushing (included in 50047957)	1

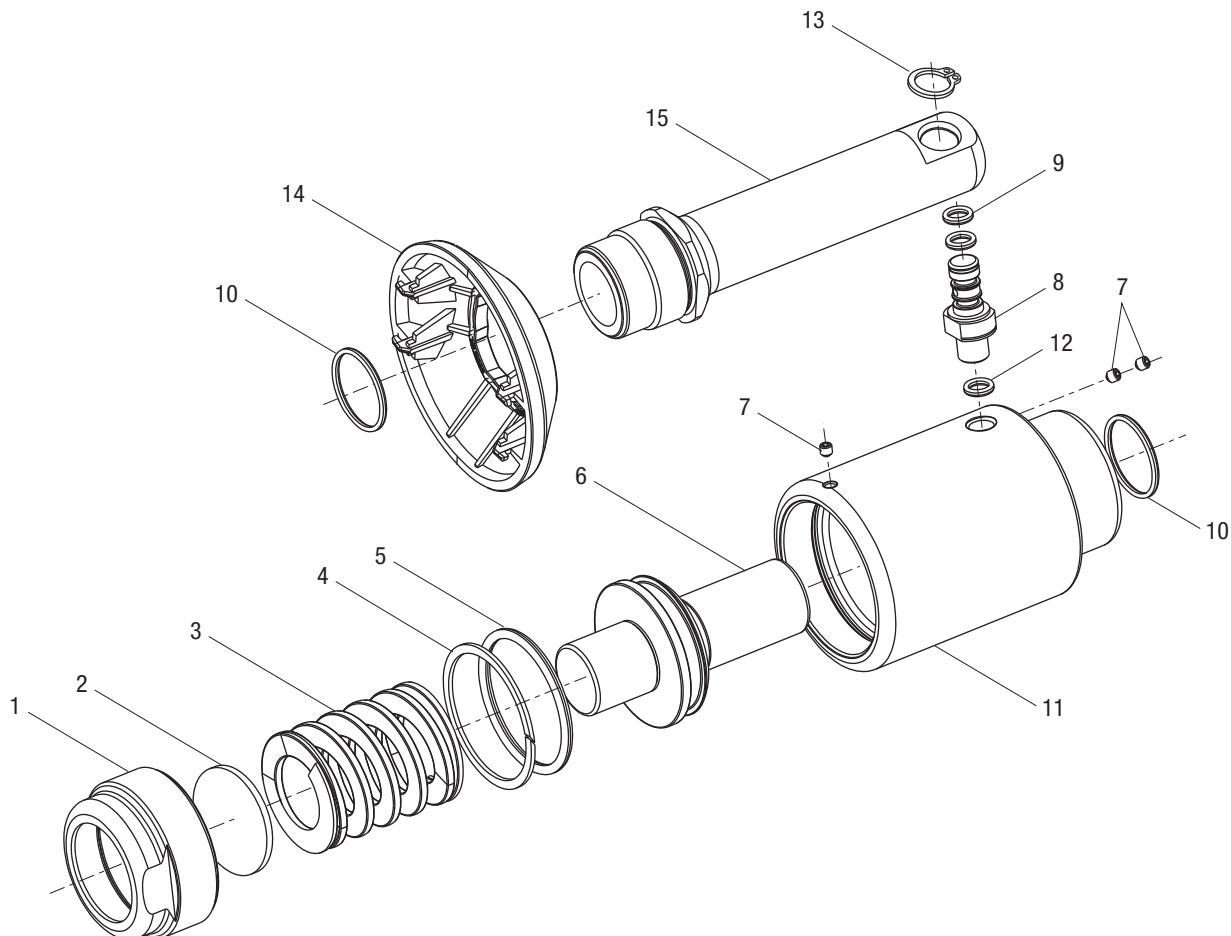
Head and Ram Illustration and Parts List—ETS12L



Key	Part No.	Description	Qty
	52033626	Head assembly (includes 1–7, 11)	
	52033628	Cutter blade kit (includes 1–4).....	1
1		Fixed blade.....	1
2		Movable blade.....	1
3		Roll pin	1
4		Socket head cap screw.....	1
5	50019295	Hex head cap screw, m3x4.....	1

Key	Part No.	Description	Qty
6	50019236	Compression spring.....	1
7		Cutter head	1
8*		O-ring (included in 50047957).....	1
9*		Piston backup ring (included in 50047957)	1
10	50019082	Bushing	1
11		Washer	1

Head and Ram Illustration and Parts List—LS100X



Key	Part No.	Description	Qty
	52079409	Punch head assembly (includes 1–12)	
1	52068308	Cylinder cap	1
2	52068309	Cylinder cap cover	1
3	50066919	Spring, 40 mm.....	1
4		Backup ring.....	1
5		O-ring, 44 x 3 mm (black).....	1
6	52081110	Piston	1
7		Screw, set hex socket (DIN 916 M4 x 4) ...	3
8		Cylinder adapter.....	1

Key	Part No.	Description	Qty
9		O-ring, 6.7 x 2 mm (green)	2
10		O-ring, 26 x 2 mm (green)	2
11	52081122	Cylinder	1
12		O-ring	1
13		Retaining ring	1
14	52080891	Cover	1
15	52079480	Pump block extension.....	1
	52079982	Seal kit (includes 4, 5, 7, 9, 10, 12, 13)	
	52079983	Adapter kit (includes 8, 9, 12, 13)	



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