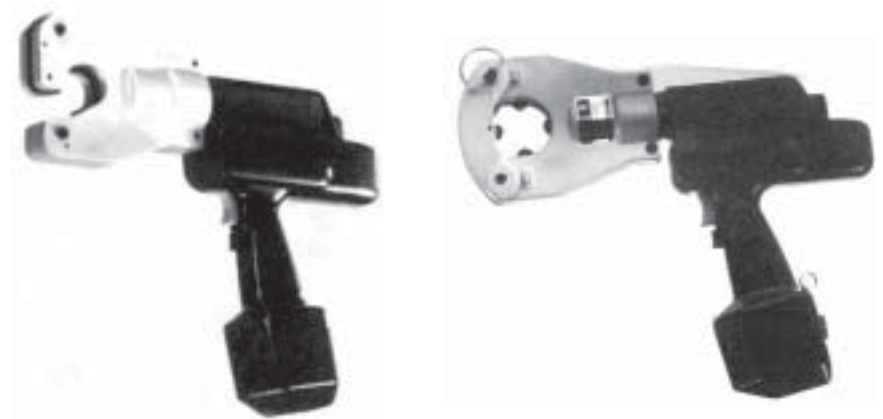


SERVICE AND OPERATION MANUAL



MODELS VC6-3-BP & VC6-FT-BP BATTERY POWERED COMPRESSION TOOLS



POWER SYSTEMS, INC.

ANDERSON

P.O. Box 455, Leeds, AL 35094-0455

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POWER SYSTEMS, INC.

ANDERSON

NOTE: Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.

VC6-3-BP and VC6-FT-BP SPECIFICATIONS

Dieless Crimping Tools (VC6-3-BP and VC6-FT-BP)

Drive Unit:	14.4V DC motor
Dimensions:	14"L x 13"H x 2.5"W
Weight:	11.5 lbs. (VC6-3-BP) 12 lbs. (VC6-FT-BP)

Battery Cartridge (VCBP-SM)

Battery Type:	Sealed nickel cadmium
Voltage:	14.4V DC
Rated current:	1.2Ah
Charge time:	15 min. (w/quick charger)
Dimensions:	3.5"L x 2.7"W x 5.3"H
Weight:	1.6 lbs.

Battery Charger (VCACC-Q)

Input voltage:	120V AC single phase
Input Frequency:	50/60 Hz
Output:	14.4V DC @ 5.6A
Dimensions:	7.9"L x 4.5"W x 3.8"H
Weight:	4 lbs.

Optional Accessories

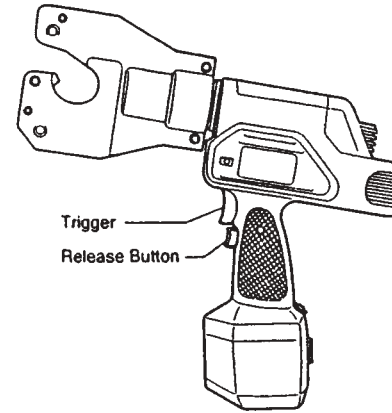
AC Adapter	VCAC
Battery Pack	VCBP-HD
DC Charger	VCDCC

Features

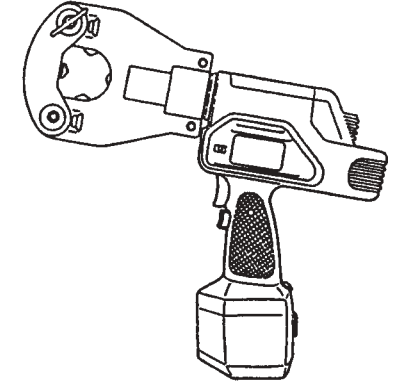
- Fully automatic, self-contained power tool
- Removable battery cartridge - simply change the cartridge for continuous use
- One handed operation - control ram advancement and retraction with one hand
- Effortless crimping - manual crimping by the operator is eliminated

PARTS & ACCESSORIES

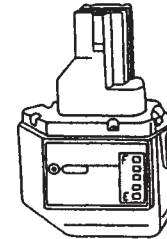
VC6-3-BP Compression Tool



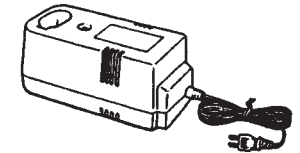
VC6-FT-BP Compression Tool



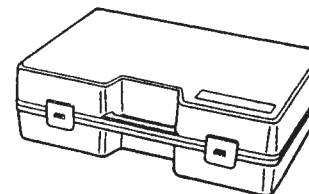
Battery Cartridge VCBP-SM



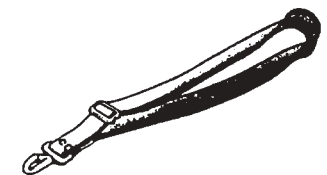
Quick Charger VCACC-Q



Carrying Case

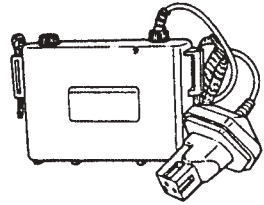


Shoulder Strap

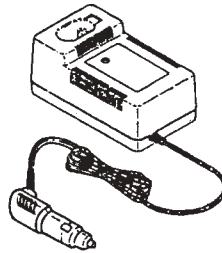


ADDITIONAL ACCESSORIES

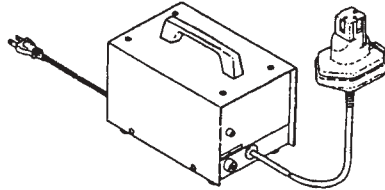
Battery Pack VCBP-HD



DC Charger VCDCC (input 12 V DC)



AC Adapter VCAC



GUIDE TO CRIMPING CYCLES

This guide indicates the number of crimping cycles that the VC6-3-BP or VC6-FT-BP can be expected to perform when the battery is fully charged. These figures are approximate and will vary according to the charging and other operating conditions, such as temperature, humidity, and battery condition.

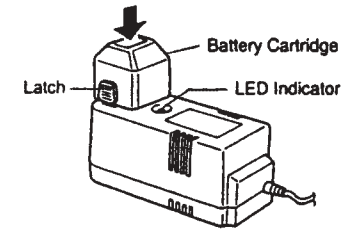
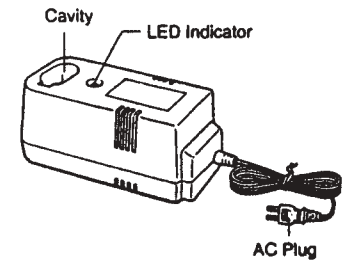
Conductor Size	Average Crimps Per Charge
1/0 CU/AL	Crimp cycles will vary between 30-50 cycles with the VCBP-SM and 90-150 with the VCBP-HD. Conductor size is not a major factor in crimp cycles on these dieless tools. They perform approximately the same on all sizes.
4/0 CU/AL	
500 MCM	
750 MCM	

If the battery indicator LED remains on, charge the battery as soon as possible. Although the battery may still be used 5-10 times, this varies depending on the conductor size, ambient temperature and the condition of the battery. **Please note, however, that the battery indicator LED sometimes flashes briefly during operation.** If the indicator does not remain lit, it is not necessary to charge the battery.

OPERATING INSTRUCTIONS

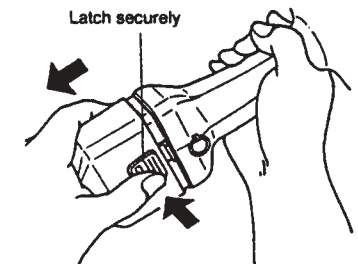
Charging:

1. Connect the AC plug of the charger to a wall outlet. **Note:** The rated charge voltage for this unit is 120V. Use of voltages greater than 120V will result in damage to the charger.
2. To start charging a battery, insert the battery cartridge firmly into the insertion slot of the charger. Make sure red LED light goes on. **Note:** Do not short circuit the charger by placing foreign materials in the slot, as this will damage the charger.
3. Charging takes approximately 15 minutes for the VCBP and VCBP-SM and 45 minutes for the VCBP-HD. The LED indicator will light up while the battery is being charged. When the battery cartridge is fully charged, the LED will go out. **Note:** When the tool is used for the first time, or if it has not been used for a long time, the battery cartridge will need to be charged due to natural power drainage.



Attaching the Battery Cartridge:

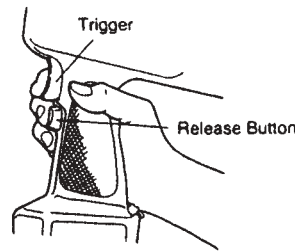
1. While pressing the latch, pull out the battery cartridge. To replace the battery cartridge, push the new cartridge firmly into place.
2. After inserting a battery cartridge, check that it is securely in place by pulling gently. Do not press the latch when pulling the cartridge.



OPERATING INSTRUCTIONS

Trigger and Release Button:

1. The ram advances when the trigger is pressed and stops when the trigger is released.
2. To retract the ram, press the release button. The ram continues to retract while the release button is pressed.

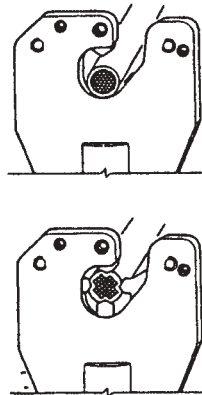


Compression:

1. Check your connector manufacturers recommendations on using a dieless compression tool with the connector and cable being used. Not all connectors are suitable for dieless tool applications.
2. Retract the indenting nibs by pressing the release button.
3. Position the connector, and center it between the indenting nibs. Activate the trigger and advance the nibs so the connector is held in place. Check connector for correct positioning.



4. Insert the cable into the connector and activate the trigger until the compression is completed. A series of clicks will be heard while the compression is being made, followed by the tool running in a "free" mode. This indicates a completed cycle and a full compression.
5. Press release button to retract the indenting nibs and remove the connector from the tool.



IMPORTANT OPERATING PRECAUTIONS

Precautions for the tool:

1. Check your connector manufacturer recommendations on using a dieless compression tool with the connector and cable being used. Not all connectors are suitable for dieless tool applications.
2. Never operate the tool without a connector in place.
3. Always point the tool away from other people.
4. If the tool is stored for an extended period at a temperature of less than 25 degrees F (-5 degrees C), the tool should be allowed to return to room temperature to ensure smooth operation. Use the tool only after it has been at room temperature for 1 hour.
5. Do not drop the tool. Dropping the tool may damage the hydraulic circuit and result in the tool not functioning correctly.
6. Keep the head and ram clean and free of debris. Solvents can be used to clean the head, but should not be used on the plastic body. Use soap and water to clean the body.

Precautions for the battery cartridge:

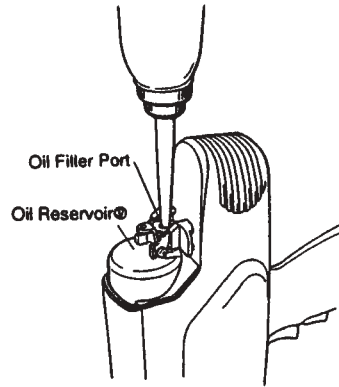
1. Do not short circuit the contacts or expose the cartridge to water, oil or solvents.
2. Do not disassemble or attempt to repair the battery cartridge or dispose of in a fire.
3. Do not drop or otherwise abuse the battery cartridge.
4. Do not leave the cartridge in locations where it will be exposed to a temperature greater than 140 degrees F (60 degrees C) for an extended period.
5. The battery has a limited life. When the crimping capacity becomes about 1/2 that of the original capacity, the battery should be replaced.
6. If the battery cartridge is stored without being charged, natural drainage will cause the power to be reduced. The battery should be charged every 3 months if not in use.

Precautions for the battery:

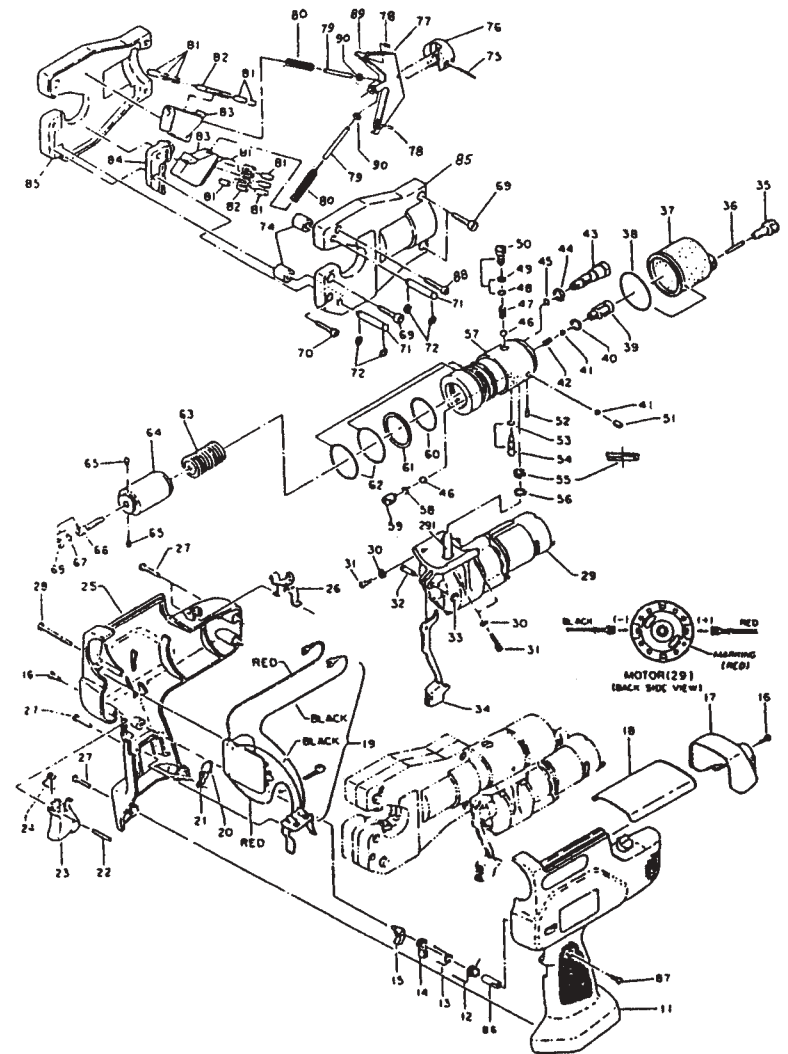
1. The LED indicator lights up and remains lit when the unit starts charging a battery cartridge. The indicator goes out when charging is completed.
2. This unit is for charging battery cartridges VCBP, VCBP-SM and VCBP-HD only. Do not use the charger for any other devices.
3. Allow battery cartridges to cool before charging. Allow at least 15 minutes between charges when charging several cartridges in succession.
4. Charge batteries at an ambient temperature of 50-95 degrees F (10-35 degrees C.) Charging time is approximately 1 hour for the VCBP and VCBP-SM, 3 hours for the VCBP-HD.
5. Never short circuit the output terminals.
6. Do not expose the cartridge to water, oil or solvents.
7. Do not disassemble, attempt to modify, drop or otherwise abuse charger.

MAINTENANCE AND INSPECTION

1. Daily maintenance is required to ensure that the tool is kept in good working condition.
2. Do not store the tool in a humid environment.
3. Replenish the oil as shown in the illustration. Use Shell Tellus T 15 or an equivalent oil when replenishing the oil. Keep the tool facing downward when replenishing the oil. **Note:** When air is trapped in the unit the Ram moves in an unstable fashion.
4. Change the hydraulic oil every 24 months. Approximately 50cc of oil is required. Do not allow air or dust to become mixed with the oil when changing the oil.
5. To replenish the oil, remove the Reservoir Cover (17) to access the Reservoir Cap (35). Carefully remove the Reservoir Cap (35), taking care not to splash any oil onto the housing.
6. Wipe away any excess oil with a soapy cloth.
7. Provided that maintenance of the tool is carried out regularly, the tool should provide many years of service.
8. Should you experience any difficulty with the operation and maintenance of this tool, contact technical support department at



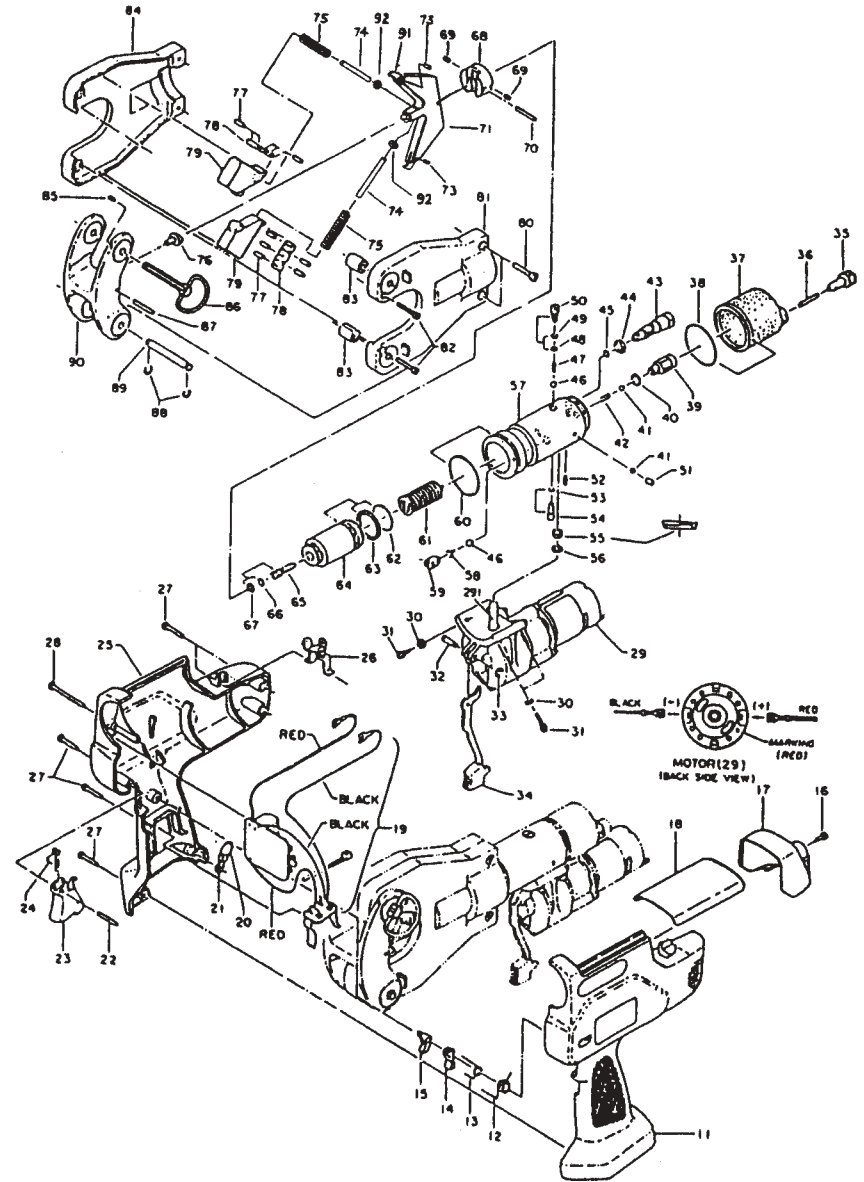
MODEL VC6-3-BP PARTS DIAGRAM



MODEL VC6-3-BP PARTS LIST

NO.	DESCRIPTION	CODE	QTY.	NO.	DESCRIPTION	CODE	QTY.
11	HOUSING (R)	ROB-111	1	61	M6 X 6 SCREW (F.P.)	40U-14	1
12	SPRING (505)	ROB-112	1	62	3 X 8 DOWEL PIN (D)	810F-11	1
13	SPRING (513)	ROB-113	1	63	P-3 O-RING	16-36	1
14	SWITCH PEICE (A)	ROB-114	1	64	RELEASE VALVE STEM	ROB-136	1
15	SWITCH PEICE (B)	ROB-115	1	66	PS-8 PENT SEAL	16-44	1
16	M4 X 10 SCREW	ROB-159	2	66	P-8 BACK-UP RING (B.C.)	85-33	1
17	RESERVOIR COVER	ROB-117	1	67	BODY	ROB-157	1
18	TOP COVER	ROB-118	1	58	SPRING (2)	16-25	1
19	LED UNIT (1)	ROB-119	1	59	VALVE SCREW (3)	16-24	1
20	HANGING RING	ROB-101	1	60	P-34 O-RING	85-23	1
21	RING SUPPORT	ROB-120	1	61	P-34 BACK-UP RING (B.C.)	85-22	1
22	PARALLEL PIN	ROB-121	1	62	S-40 O-RING	C60-25	2
23	TRIGGER	ROB-122	1	63	RETRACTION SPRING ASSY.	UC-17	1
24	SPRING (504)	ROB-123	1	64	RAM	UC-16	1
25	HOUSING (L)	ROB-124	1	65	M4 X 6 SCREW (F.P.)	16-42	2
26	BRIDGE ASSEMBLY	ROB-125	1	66	RETAINING SCREW	UC-12	1
27	M4 X 20 SCREW (T.P.)	ROB-29	4	67	P-8 O-RING	RB-70	1
28	M4 X 40 SCREW (T.P.)	ROB-126	1	68	P-6 BACK-UP RING	UC-28	1
29	POWER UNIT	ROB-127	1	69	1/4"-20 X 1" CAP SCREW	1600140000	3
30	M4 FLAT WASHER	16-81	4	70	#10-32 X 1 1/8" CAP SCREW	1600150000	1
31	M4 X 14 SCREW	ROB-128	4	71	PIVOT PIN	1601500000	2
32	PIN (185)	ROB-129	1	72	RETAINING RING	1601140000	4
33	E-37 SNAP RING	ROB-130	1	74	PIVOT ROLLER	1600020000	2
34	RELEASE LEVER	ROB-131	1	75	5/32" X 1" ROLL PIN	1600230000	1
35	RESERVOIR CAP	410-65	1	76	CAM YOKE HOLDER	UC-13A	1
36	MAGNET	ROB-26	1	77	CAM YOKE	1105890000	1
37	OIL RESERVOIR (28)	ROB-156	1	78	3/32" X 1/2" ROLL PIN	1105910000	2
38	G-30 O-RING	76-26	1	79	SPRING GUIDE PIN	1600050000	2
39	FILTER ASSEMBLY	51-28	1	80	SIDE JAW SPRING	1106180000	2
40	COPPER GASKET (20)	100W-17	1	81	ROLLER BEARING	1600070000	12
41	3/16" BALL	16-49	2	82	BEARING RETAINER	1600080000	2
42	SPRING (340)	51-27	1	83	SIDE JAW	160003	2
43	VALVE CARTRIDGE	ROB-133B	1	84	FIXED NIB	160000	1
44	M10 LOCK NUT	ROB-134	1	85	COVER SET	2761940000	1
45	P-5 O-RING	810F-18	1	86	BUSHING	ROB-161	1
46	7/32" BALL	16-26	2	87	M3 X 10 SCREW	ROB-160	1
47	SPRING (341)	51-20	1	88	#10-32 X 1" CAP SCREW	1601490000	1
48	P-4 O-RING	410-48	1	89	BEARING STOP	1106630000	2
49	P-4 BACK-UP RING (B.C.)	410-47	1	90	SPRING GUIDE COLLAR	1600060000	2
50	PLUG	51-21	1	291	PUMP PISTON (3)	ROB-137	1

MODEL VC6-FT-BP PARTS DIAGRAM



MODEL VC6-FT-BP PARTS LIST

NO.	DESCRIPTION	CODE	QTY.	NO.	DESCRIPTION	CODE	QTY.
11	HOUSING (R)	ROB-111	1	51	M6 X 6 SCREW (F.P.)	4OU-14	1
12	SPRING (506)	ROB-112	1	52	3 X 8 DOWEL PIN (D)	610F-11	1
13	SPRING (513)	ROB-113	1	53	P-3 O-RING	16-36	1
14	SWITCH PEICE (A)	ROB-114	1	54	RELEASE VALVE STEM	ROB-135	1
15	SWITCH PEICE (B)	ROB-115	1	55	PS-8 PENT SEAL	16-44	1
16	M4 X 8 SCREW	ROB-116	2	56	P-8 BACK-UP RING (B.C.)	85-33	1
17	RESERVOIR COVER	ROB-117	1	57	BODY	ROB-168	1
18	TOP COVER	ROB-118	1	58	SPRING (2)	16-26	1
19	LED UNIT (1)	ROB-119	1	59	VALVE SCREW (3)	16-24	1
7	HANGING RING	ROB-101	1	60	P-42 O-RING	9H-17	1
21	RING SUPPORT	ROB-120	1	61	RETRACTION SPRING ASSY.	UC-36	1
22	PARALLEL PIN	ROB-121	1	62	P-28 O-RING	300-21	1
23	TRIGGER	ROB-122	1	63	P-28 BACK-UP RING	65D-03	1
24	SPRING (504)	ROB-123	1	64	PISTON	UC-36	1
25	HOUSING (L)	ROB-124	1	65	RETAINING SCREW	UC-12	1
26	BRIDGE ASSEMBLY	ROB-125	1	66	P-6 O-RING	RB-70	1
27	M4 X 20 SCREW (T.P.)	ROB-29	5	67	P-6 BACK-UP RING	UC-28	1
28	M4 X 40 SCREW (T.P.)	ROB-126	1	68	CAM YOKE HOLDER	UC-32	1
29	POWER UNIT	ROB-127	1	69	M4 X 6 SCREW (F.P.)	16-42	2
30	M4 FLAT WASHER	16-81	4	70	5/32" X 1" ROLL PIN	1600230000	1
31	M4 X 14 SCREW	ROB-128	4	71	CAM YOKE	1105890000	1
32	PIN (185)	ROB-129	1	73	3/32" X 1/2" ROLL PIN	1105910000	2
33	E-37 SNAP RING	ROB-130	1	74	SPRING GUIDE PIN	1600050000	2
34	RELEASE LEVER	ROB-131	1	75	SIDE JAW SPRING	1106180000	2
35	RESERVOIR CAP	410-55	1	76	LATCH NIB	1105940000	1
36	MAGNET	ROB-25	1	77	ROLLER BEARING	1600070000	12
37	OIL RESERVOIR (28)	ROB-166	1	78	BEARING RETAINER	1600080000	2
38	G-30 O-RING	75-26	1	79	SIDE JAW	160003	2
39	FILTER ASSEMBLY	51-28	1	80	1/4"-20 X 1" CAP SCREW	1600140000	2
40	COPPER GASKET (20)	100W-17	1	82	#8-32 X 1" CAP SCREW	1106020000	2
41	3/16" BALL	16-49	2	83	PIVOT ROLLER	1105930000	2
42	SPRING (340)	51-27	1	84	COVER SET	2761930000	1
43	VALVE CARTRIDGE	ROB-133U	1	85	#6-32 X 1/4" SET SCREW	1105990000	1
44	M10 LOCK NUT	ROB-134	1	86	LATCH PIN ASSEMBLY	MM6569	1
45	P-5 O-RING	610F-18	1	87	3/32" X 3/4" ROLL PIN	1105950000	1
46	7/32" BALL	16-26	2	88	RETAINING RING	1601140000	2
47	SPRING (341)	51-20	1	89	PIVOT PIN	1105970000	1
48	P-4 O-RING	410-48	1	90	LATCH	110596	1
49	P-4 BACK-UP RING (B.C.)	410-47	1	91	BEARING STOP	1105900000	2
50	PLUG	51-21	1	92	SPRING GUIDE COLLAR	1600060000	2
				291	PUMP PISTON (3)	ROB-137	1

TROUBLESHOOTING GUIDE

Problem	Cause	Solution
Motor runs, but the tool jaws will not advance.	<ul style="list-style-type: none"> - Insufficient hydraulic oil - Air block in hydraulic system - Defective hydraulic circuit 	<ul style="list-style-type: none"> - Replenish oil supply - Invert tool to allow air to rise towards the top of the oil bladder - Consult factory for repair service
Motor runs, tool jaws advance but will not build pressure.	<ul style="list-style-type: none"> - Insufficient hydraulic oil - Defective suction valve or bypass cartridge 	<ul style="list-style-type: none"> - Replenish oil supply - Consult factory for repair service
Motor will not run at all.	<ul style="list-style-type: none"> - Defective battery - Bad contacts or loose battery connections - Misaligned switch - Defective motor - Low battery 	<ul style="list-style-type: none"> - Charge or replace battery - Check all connections and wires - Check to make sure that switch is properly aligned with trigger - Consult factory for repair service - Recharge battery
Tool jaws will not release.	<ul style="list-style-type: none"> - Tool did not complete a full cycle and bypass - Connector is jammed in tool jaws - Guide bars and bearings are contaminated with dirt and debris 	<ul style="list-style-type: none"> - Press trigger and allow tool to bypass. Then release tool jaws - Press and hold release trigger while prying tool jaws apart - Remove head plates and clean the head assembly with a solvent, re-grease bearings and re-assemble.