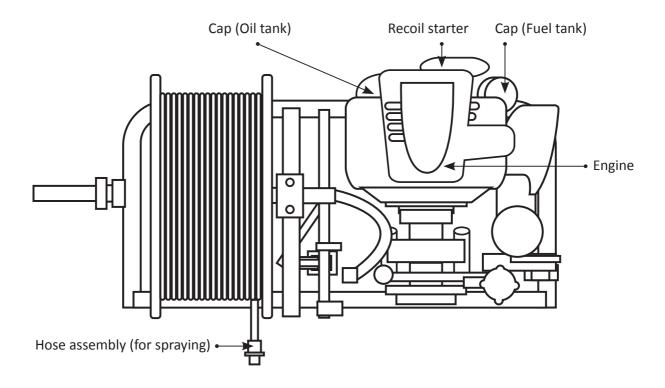
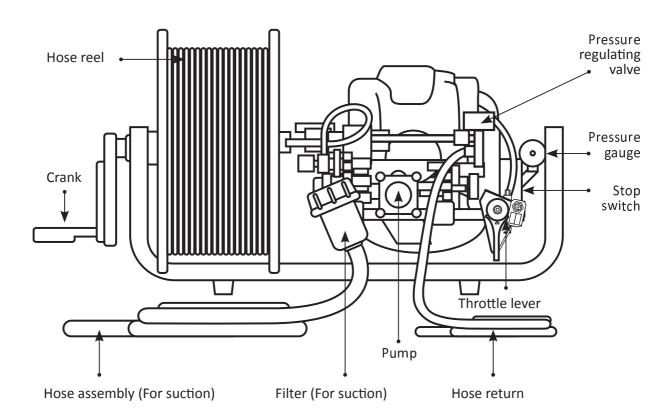
# Unit Identification Diagram



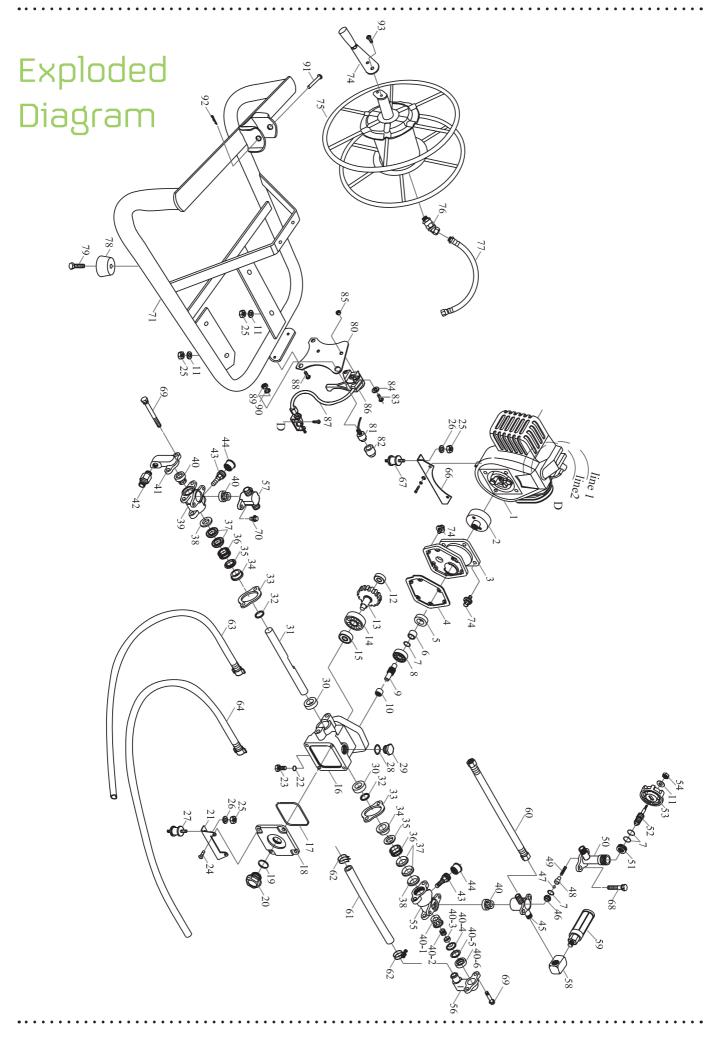


## **Unit Specifications**

	Engine	Pump
MODEL	GX35 Honda 4-Stroke	Rapid Commando
TYPE	4-stroke, OHC single cylinder	Duplex piston pump
MAX. POWER/PRESSURE	1.0kW (1.3HP) @ 7,000RPM	25BAR (360PSI)
MAX. FLOW		12L/min
OIL TYPE	10W/30 API SG	SAE30/30W
OIL CAPACITY	0.1L (100ml)	0.1L (100ml)

### Trouble Shooting

Issue	Possible Cause	Resolution	
Pump will not prime	<ol> <li>Insufficient motor RPM</li> <li>Air leak on suction plumbing</li> </ol>	<ol> <li>Increase motor RPM until pump engages</li> <li>Tighten/replace fittings</li> </ol>	
Pressure drops under load and pump is noisy	Insufficient motor RPM to prevent clutch slippage	Increase motor RPM	
Pressure drops/fluctuates during standard operation	<ol> <li>Restriction on suction line</li> <li>Pump sucking air</li> <li>Residue on valves</li> </ol>	<ol> <li>Remove restriction</li> <li>Tighten/replace fittings</li> <li>Disassemble and clean valves/ replace broken valve springs if necessary</li> </ol>	
Unable to get any pressure	<ol> <li>Residue on valves</li> <li>Broken regulator spring</li> </ol>	Disassemble and clean valves/ replace broken valve springs if necessary     Replace regulator spring	



#### Parts List

1         Engine GX35         1           2         Clutch Drum         CPUPP002         1           3         Gearbox housing         CPUPP003         1           4         Housing Gesket         CPUPP004         1           5         Oil seal         CPUPP005         17.28.7         1           6         Steal Spacer         1         1           7         O-ring         CPUPP007         9x13         4           8         Bearing 6201         CPUPP008         1         1           9         Sheft         1 <th>No.</th> <th>Part Name</th> <th>Part Number</th> <th>Size</th> <th>Per. Set</th>	No.	Part Name	Part Number	Size	Per. Set
3   Gearbox housing   CPUPP003   1   1   1   1   1   1   1   1   1	1	Engine GX35			1
4         Housing Gesket         CPUPP005         17.28.7         1           5         Oil seal         CPUPP005         17.28.7         1           6         Steel Spacer         1         1           7         O-ring         CPUPP007         9x13         4           8         Bearing 6201         CPUPP008         1         1           9         Shaft         1         1         1           10         Bearing HXIDID         CPUPP010         1         1           11         Wesher         CPUPP011         2         1           12         Bearing 608         CPUPP012         1         1           12         Bearing 608         CPUPP012         1         1           12         Bearing 6203         CPUPP012         1         1           14         Bearing 6200         CPUPP015         1         1           15         Bearing 6200         CPUPP015         1         1           16         Crank case         CPUPP017         G60         1           17         O-ring         CPUPP017         G60         1           18         Crank case cover         CPUPP018         <	2	Clutch Drum	CPUPP002		1
5         Dil seal         CPUPP005         17.28.7         1           6         Steel Spacer         1           7         O-ring         CPUPP007         9x13         4           8         Bearing 6201         CPUPP008         1         1           9         Shaft         1         1         1         1           10         Bearing HK1010         CPUPP010         1	3	Gearbox housing	CPUPP003		1
6         Steel Spacer         1           7         Orring         CPUPP007         9x13         4           8         Bearing 6201         CPUPP008         1         1           9         Shaft         1         1         1         1           10         Bearing HK1010         CPUPP010         1         1           11         Washer         CPUPP011         2         2           12         Bearing 608         CPUPP012         1         1           13         Gear shaft         1         1         1         1           14         Bearing 6203         CPUPP014         1	4	Housing Gasket	CPUPP004		1
7         O-ring         CPUPP007         9x13         4           8         Bearing 6201         CPUPP008         1           9         Shaft         1           10         Bearing HK1010         CPUPP010         1           11         Washer         CPUPP011         2           12         Bearing 608         CPUPP012         1           13         Geer sheft         1         1           14         Bearing 6203         CPUPP014         1           15         Bearing 6200         CPUPP015         1           16         Crank case         CPUPP015         1           17         O-ring         CPUPP017         G60         1           18         Crank case cover         CPUPP018         1         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         1         1           21         Pump stand         1         1         1           22         O-ring         CPUPP028         1         1           23         Drain plug         CPUPP023         1         1           24	5	Oil seal	CPUPP005	17.28.7	1
8         Bearing 6201         CPUPP008         1           9         Shaft         1           10         Bearing HH1010         CPUPP010         1           11         Washer         CPUPP011         2           12         Bearing 608         CPUPP012         1           13         Gear shaft         1         1           14         Bearing 6203         CPUPP014         1           15         Bearing 6200         CPUPP015         1           16         Crank case         CPUPP015         1           17         O-ring         CPUPP017         G60         1           18         Crank case cover         CPUPP018         1         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         1         1           21         Pump stand         1         1         1           22         O-ring         CPUPP023         1         1           23         Drain plug         CPUPP023         1         1           24         Screw         M6x12         6           25         Nut	6	Steel Spacer			1
9         Shaft         1           10         Bearing HH1010         CPUPP010         1           11         Washer         CPUPP011         2           12         Bearing 608         CPUPP012         1           13         Gear shaft         1         1           14         Bearing 6203         CPUPP014         1           15         Bearing 6200         CPUPP015         1           16         Crank case         CPUPP016         18mm         1           17         O-ring         CPUPP017         G60         1           18         Crank case cover         CPUPP018         1         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         1         1           21         Pump stand         1         1         2           22         O-ring         CPUPP020         1         1           23         Drain plug         CPUPP023         1         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring wa	7	0-ring	CPUPP007	9x13	4
10         Bearing HK1010         CPUPP010         1           11         Washer         CPUPP011         2           12         Bearing 608         CPUPP012         1           13         Gear shaft         1         1           14         Bearing 6203         CPUPP014         1           15         Bearing 6200         CPUPP015         1           16         Crank case         CPUPP016         18mm         1           17         O-ring         CPUPP017         G60         1           18         Crank case cover         CPUPP018         1         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP019         G25         1           21         Pump stand         1         1           22         O-ring         CPUPP020         1           23         Drain plug         CPUPP023         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP	8	Bearing 6201	CPUPP008		1
11         Washer         CPUPP011         2           12         Bearing 608         CPUPP012         1           13         Gear shaft         1           14         Bearing 6203         CPUPP014         1           15         Bearing 6200         CPUPP015         1           16         Crank case         CPUPP016         18mm         1           17         O-ring         CPUPP017         G60         1           18         Crank case cover         CPUPP018         1         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         1         1           21         Pump stand         1         1         1           22         O-ring         CPUPP020         1         1           22         O-ring         CPUPP023         1         1           24         Screw         M6x12         6         6           25         Nut         M6         4         4           26         Spring washer         M6         8         8           27         Rubber Mount         CPUPP029         1	9	Shaft			1
12   Bearing 608   CPUPP012   1   1   1   1   1   1   1   1   1	10	Bearing HK1010	CPUPP010		1
13         Gear shaft         1           14         Bearing 6203         CPUPP014         1           15         Bearing 6200         CPUPP015         1           16         Crank case         CPUPP016         18mm         1           17         O-ring         CPUPP017         G60         1           18         Crank case cover         CPUPP018         -         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         -         1           21         Pump stand         -         1         1           22         O-ring         CPUPP022         1         1           23         Drain plug         CPUPP023         1         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP027         2           28         O-ring         CPUPP029         1           30         Oil seal         CPUPP030         2           31         Pist	11	Washer	CPUPP011		2
14         Bearing 6203         CPUPP015         1           15         Bearing 6200         CPUPP016         18mm         1           16         Crank case         CPUPP017         G60         1           17         O-ring         CPUPP018         1           18         Crank case cover         CPUPP018         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         1         1           21         Pump stand         1         1         1           22         O-ring         CPUPP022         1         1           23         Drain plug         CPUPP023         1         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP027         2           28         O-ring         CPUPP030         2           30         Oil seal         CPUPP030         2           31         Piston         CPUPP031         18mm         1 <td< td=""><td>12</td><td>Bearing 608</td><td>CPUPP012</td><td></td><td>1</td></td<>	12	Bearing 608	CPUPP012		1
15         Bearing 6200         CPUPP015         1           16         Crank case         CPUPP016         18mm         1           17         O-ring         CPUPP017         G60         1           18         Crank case cover         CPUPP018         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         1         1           21         Pump stand         1         1         1           22         O-ring         CPUPP022         1         1           23         Drain plug         CPUPP023         1         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP027         2           28         O-ring         CPUPP028         1           29         Oil Filler Cap         CPUPP030         2           31         Piston         CPUPP031         18mm         1           32         O-ring         CPUPP032         2mm         2	13	Gear shaft			1
16         Crank case         CPUPP016         18mm         1           17         O-ring         CPUPP017         G60         1           18         Crank case cover         CPUPP018         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         1           21         Pump stand         1         1           22         O-ring         CPUPP022         1           23         Drain plug         CPUPP023         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP027         2           28         O-ring         CPUPP028         1           29         Oil Filler Cap         CPUPP029         1           30         Oil seal         CPUPP030         2           31         Piston         CPUPP031         18mm         1           32         O-ring         CPUPP032         2mm         2           33         Fixed plate         CPUPP034<	14	Bearing 6203	CPUPP014		1
17         O-ring         CPUPP017         G60         1           18         Crank case cover         CPUPP018         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         1           21         Pump stand         1         1           22         O-ring         CPUPP022         1           23         Drain plug         CPUPP023         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP027         2           28         O-ring         CPUPP028         1           29         Oil Filler Cap         CPUPP029         1           30         Oil seal         CPUPP030         2           31         Piston         CPUPP031         18mm         1           32         O-ring         CPUPP032         2mm         2           33         Fixed plate         CPUPP034         2mm         2	15	Bearing 6200	CPUPP015		1
18         Crank case cover         CPUPP018         1           19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         1           21         Pump stand         1         1           22         O-ring         CPUPP022         1           23         Drain plug         CPUPP023         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP027         2           28         O-ring         CPUPP028         1           29         Oil Filler Cap         CPUPP029         1           30         Oil seal         CPUPP030         2           31         Piston         CPUPP031         18mm         1           32         O-ring         CPUPP032         2         2           33         Fixed plate         CPUPP034         2mm         2	16	Crank case	CPUPP016	18mm	1
19         O-ring         CPUPP019         G25         1           20         Oil glass         CPUPP020         1           21         Pump stand         1           22         O-ring         CPUPP022         1           23         Drain plug         CPUPP023         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP027         2           28         O-ring         CPUPP028         1           29         Oil Filler Cap         CPUPP029         1           30         Oil seal         CPUPP030         2           31         Piston         CPUPP031         18mm         1           32         O-ring         CPUPP032         2           33         Fixed plate         PUPP034         2mm         2           34         Adjusting ring         CPUPP034         5         2mm         2	17	0-ring	CPUPP017	G60	1
20       Oil glass       CPUPP020       1         21       Pump stand       1         22       O-ring       CPUPP022       1         23       Drain plug       CPUPP023       1         24       Screw       M6x12       6         25       Nut       M6       4         26       Spring washer       M6       8         27       Rubber Mount       CPUPP027       2         28       O-ring       CPUPP028       1         29       Oil Filler Cap       CPUPP029       1         30       Oil seal       CPUPP030       2         31       Piston       CPUPP031       18mm       1         32       O-ring       CPUPP032       2         33       Fixed plate       CPUPP034       2mm       2         34       Adjusting ring       CPUPP034       2	18	Crank case cover	CPUPP018		1
21       Pump stand       1         22       O-ring       CPUPP022       1         23       Drain plug       CPUPP023       1         24       Screw       M6x12       6         25       Nut       M6       4         26       Spring washer       M6       8         27       Rubber Mount       CPUPP027       2         28       O-ring       CPUPP028       1         29       Oil Filler Cap       CPUPP029       1         30       Oil seal       CPUPP030       2         31       Piston       CPUPP031       18mm       1         32       O-ring       CPUPP032       2         33       Fixed plate       CPUPP034       2mm       2         34       Adjusting ring       CPUPP034       2	19	0-ring	CPUPP019	G25	1
22         O-ring         CPUPP023         1           23         Drain plug         CPUPP023         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP027         2           28         O-ring         CPUPP028         1           29         Oil Filler Cap         CPUPP029         1           30         Oil seal         CPUPP030         2           31         Piston         CPUPP031         18mm         1           32         O-ring         CPUPP032         2           33         Fixed plate         Zmm         2           34         Adjusting ring         CPUPP034         2	20	Oil glass	CPUPP020		1
23         Drain plug         CPUPP023         1           24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP027         2           28         O-ring         CPUPP028         1           29         Oil Filler Cap         CPUPP029         1           30         Oil seal         CPUPP030         2           31         Piston         CPUPP031         18mm         1           32         O-ring         CPUPP032         2         2           33         Fixed plate         2mm         2           34         Adjusting ring         CPUPP034         2         2	21	Pump stand			1
24         Screw         M6x12         6           25         Nut         M6         4           26         Spring washer         M6         8           27         Rubber Mount         CPUPP027         2           28         O-ring         CPUPP028         1           29         Oil Filler Cap         CPUPP029         1           30         Oil seal         CPUPP030         2           31         Piston         CPUPP031         18mm         1           32         O-ring         CPUPP032         2         2           33         Fixed plate         2mm         2           34         Adjusting ring         CPUPP034         3         2	22	0-ring	CPUPP022		1
25       Nut       M6       4         26       Spring washer       M6       8         27       Rubber Mount       CPUPP027       2         28       O-ring       CPUPP028       1         29       Oil Filler Cap       CPUPP029       1         30       Oil seal       CPUPP030       2         31       Piston       CPUPP031       18mm       1         32       O-ring       CPUPP032       2       2         33       Fixed plate       2mm       2         34       Adjusting ring       CPUPP034       1       2	23	Drain plug	CPUPP023		1
26       Spring washer       M6       8         27       Rubber Mount       CPUPP027       2         28       O-ring       CPUPP028       1         29       Oil Filler Cap       CPUPP029       1         30       Oil seal       CPUPP030       2         31       Piston       CPUPP031       18mm       1         32       O-ring       CPUPP032       2         33       Fixed plate       2mm       2         34       Adjusting ring       CPUPP034       2	24	Screw		M6x12	6
27       Rubber Mount       CPUPP027       2         28       O-ring       CPUPP028       1         29       Oil Filler Cap       CPUPP029       1         30       Oil seal       CPUPP030       2         31       Piston       CPUPP031       18mm       1         32       O-ring       CPUPP032       2         33       Fixed plate       2mm       2         34       Adjusting ring       CPUPP034       2	25	Nut		M6	4
28       O-ring       CPUPP028       1         29       Oil Filler Cap       CPUPP029       1         30       Oil seal       CPUPP030       2         31       Piston       CPUPP031       18mm       1         32       O-ring       CPUPP032       2         33       Fixed plate       2mm       2         34       Adjusting ring       CPUPP034       2	26	Spring washer		M6	8
29       Oil Filler Cap       CPUPP029       1         30       Oil seal       CPUPP030       2         31       Piston       CPUPP031       18mm       1         32       O-ring       CPUPP032       2         33       Fixed plate       2mm       2         34       Adjusting ring       CPUPP034       2	27	Rubber Mount	CPUPP027		2
30       Oil seal       CPUPP030       2         31       Piston       CPUPP031       18mm       1         32       O-ring       CPUPP032       2         33       Fixed plate       2mm       2         34       Adjusting ring       CPUPP034       2	28	0-ring	CPUPP028		1
31       Piston       CPUPP031       18mm       1         32       O-ring       CPUPP032       2         33       Fixed plate       2mm       2         34       Adjusting ring       CPUPP034       2	29	Oil Filler Cap	CPUPP029		1
32         O-ring         CPUPP032         2           33         Fixed plate         2mm         2           34         Adjusting ring         CPUPP034         2	30	Oil seal	CPUPP030		2
33 Fixed plate 2mm 2 34 Adjusting ring CPUPP034 2	31	Piston	CPUPP031	18mm	1
34 Adjusting ring CPUPP034 2	32	0-ring	CPUPP032		2
, 0	33	Fixed plate		2mm	2
35 Grease ring CPUPP035 2	34	Adjusting ring	CPUPP034		2
	35	Grease ring	CPUPP035		2

No.	Part Name	Part Number	Size	Per. Set
36	V-packing upper seal	CPUPP036		2
37	V-packing	CPUPP037		4
38	Packing seat	CPUPP038		1
39	Cylinder Head LEFT	CPUPP039		1
40	Valve Assembly	CPUPP040		1
40-1	Valve nut			1
40-2	Valve spring			1
40-3	Valve plug			1
40-4	Valve seat			4
40-5	Valve ring			1
40-6	Valve packing			1
41	Suction Manifold LEFT	CPUPP041		1
42	Connector Nipple			2
43+44	Grease cup	CPUPP043 & CPUPP044		1
45	Outlet Manifold	CPUPP045		1
46	Regulator seat	CPUPP046		1
47	Regulator ball	CPUPP047		1
48	Regulator ball cup	CPUPP048		1
49	Regulator Spring	CPUPP049		1
50	Regulator valve Housing	CPUPP050		1
51	Regulator Housing Nut	CPUPP051		1
52	Regulator valve screw	CPUPP052		1
53	Regulator knob	CPUPP053		1
54	Nyloc nut	CPUPP054	M6	1
55	Cylinder head RIGHT	CPUPP055		1
56	Suction Manifold RIGHT	CPUPP056		6
57	Outlet manifold LEFT			4
58	Elbow 1/4NPT			8
59	Pressure gauge	CPUPP059		2
60	Pressure Manifold Hose	CPUPP060		1
61	Suction manifold hose	CPUPP061		1
62	Hose clamp	CPUPP062		2
63	Bypass hose	CPUPP063		1
64	Suction hose			2
66	Engine stand			1

No.	Part Name	Part Number	Size	Per. Set
67	Rubber Mount	CPUPP067		2
68	Screw		M6x45	2
69	Screw		M6x75	2
70	Screw		M6x12	2
71	Steel Frame	CPUPP071		1
74	Screw		M6×16	10
75	Hose Reel Spool	CPUPP075		1
76	Hose reel swivel	CPUPP076		1
77	Hose reel whip hose	CPUPP077		1
78	Rubber Foot	CPUPP078		4
79	Screw		M8*25	4
80	Throttle mounting plate			1
81	Kill switch			1
82	Rubber sheath			1
83	Screw		3/16"x3/8"L	2
84	Washer		3/16"	2
85	Nut		3/16"	2
86	Throttle			1
87	Throttle Cable comp			1
88	Screw			2
89	Washer			2
90	Nut			2
93	Screw			2
94	Screw			2
122	Ball valve & tee piece	CPUPP0122		1

# Spare Parts Kit

Part Name	Part Number	Parts Included
Regulator Assembly for Rapid Commando	CPUPK050	
Spare Seals and Valves Kit	CPUPK120	5×1, 7×1, 17×1, 19×1, 22×1, 28×1, 30×2, 32×2, 36×2, 37×4, 38×2, 40×4
Spare Seals Kit for Rapid Commando	CPUPK121	30x2, 32x2, 36x2, 37x4, 38x2
Regulator Spares Kit for Rapid Commando	CPUPK122	7×3, 46×1, 47×1, 48×1, 49×1
Rubber Mount Kit for Spray Marshal	CPUPK123	27×2, 67×2, 78×4, 79×4
30m Hose for Spray Marshal	CPUPK130	Includes fittings