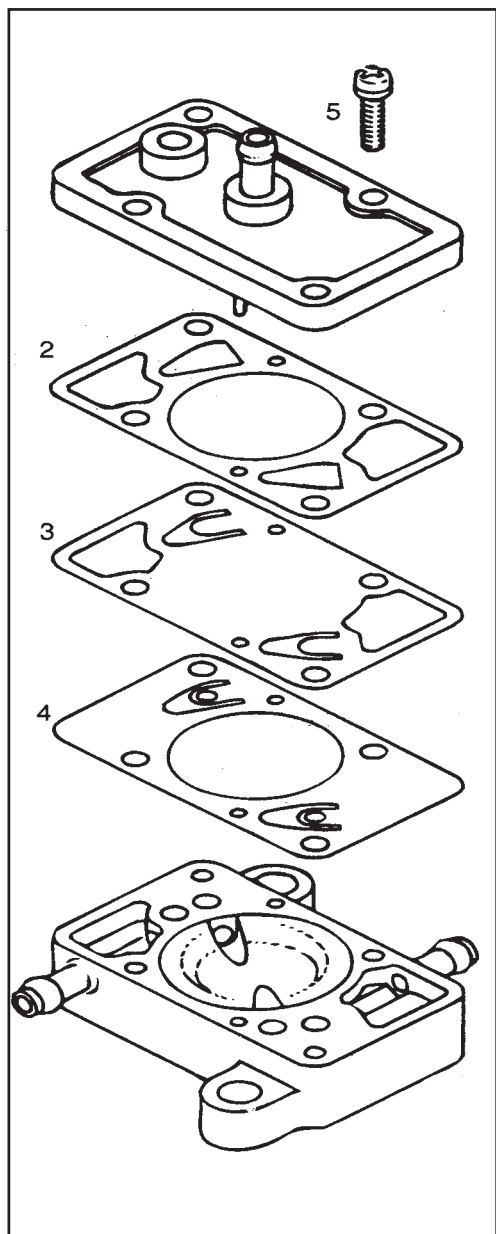
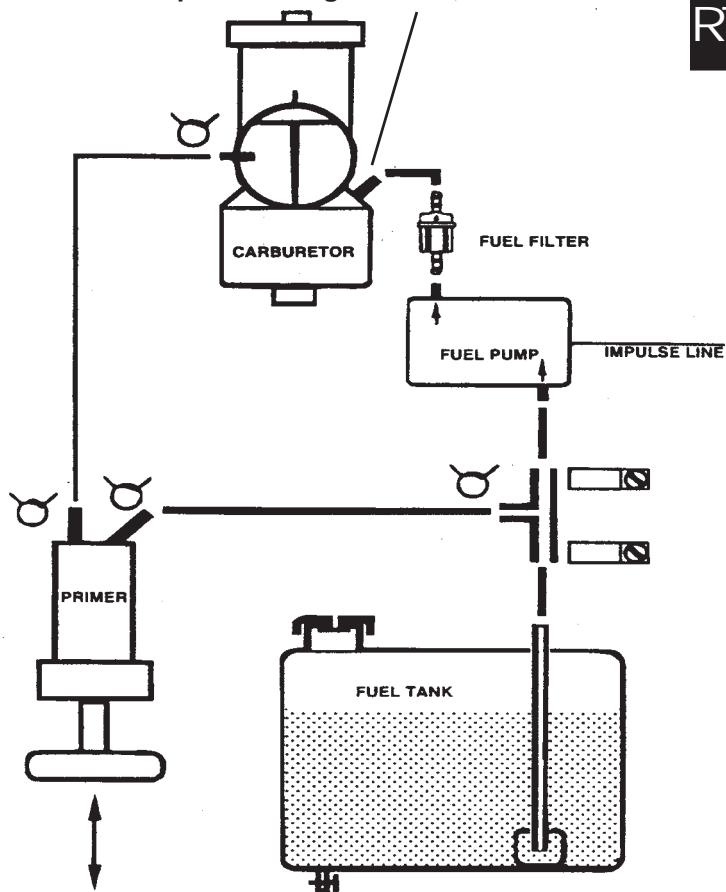


# FUEL PUMP, SINGLE AND PRIMER KIT



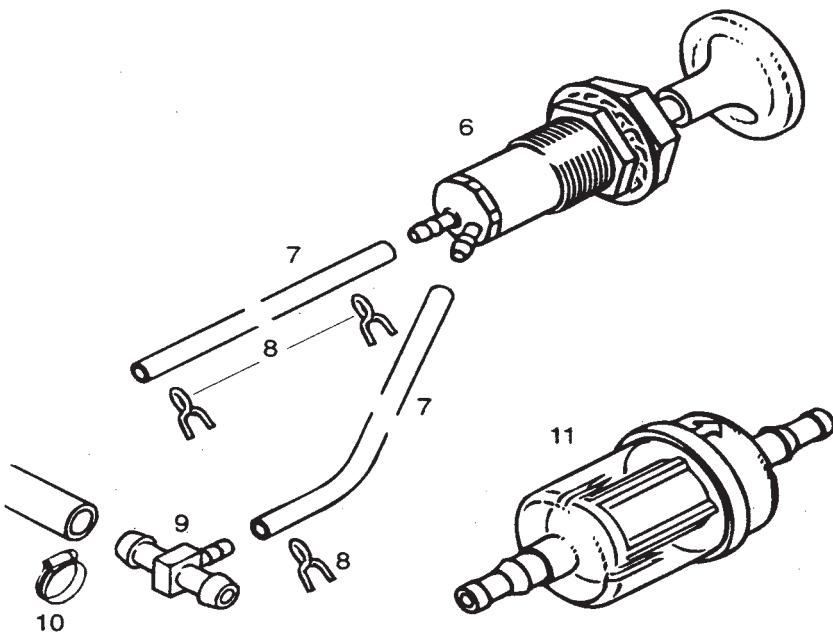
1

Some older carburetors do not have primer fitting installed, use #404-1276



6

IllNo.	Part No.	Description	Qty
1-5	994 483	Mikuni single pump, ROTAX	1
2-5	MK-DF44	Single pump rebuild kit	1
2	831 935	Cover gasket	1
3	861 137	Pump diaphragm	1
4	831 135	Pump case gasket	1
5	841 460	Combined screw M4x16	4
6-10	PKS	Primer kit w/10' hose	1
6	PRVALVE	Primer valve	1
7	FLU180	Primer line, 1/4" od	1
8	HCS-010P	Clamp, 1/4" id, nylon (not shown)	4
	938 195	Clamp, 1/4" id, metal (shown)	4
9	FFT148	Reduction t piece	1
10	HCS-010F	Clamp, 3/8" id, nylon	2
	951 890	Clamp, metal (shown)	2
11	414 3636	In line fuel filter, opaque	1



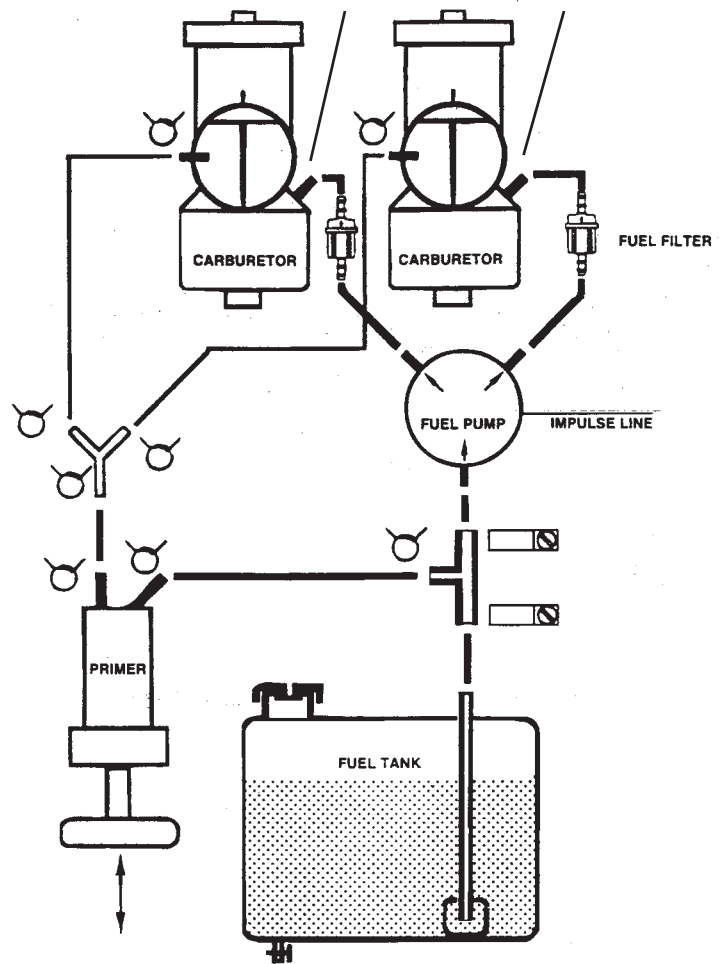
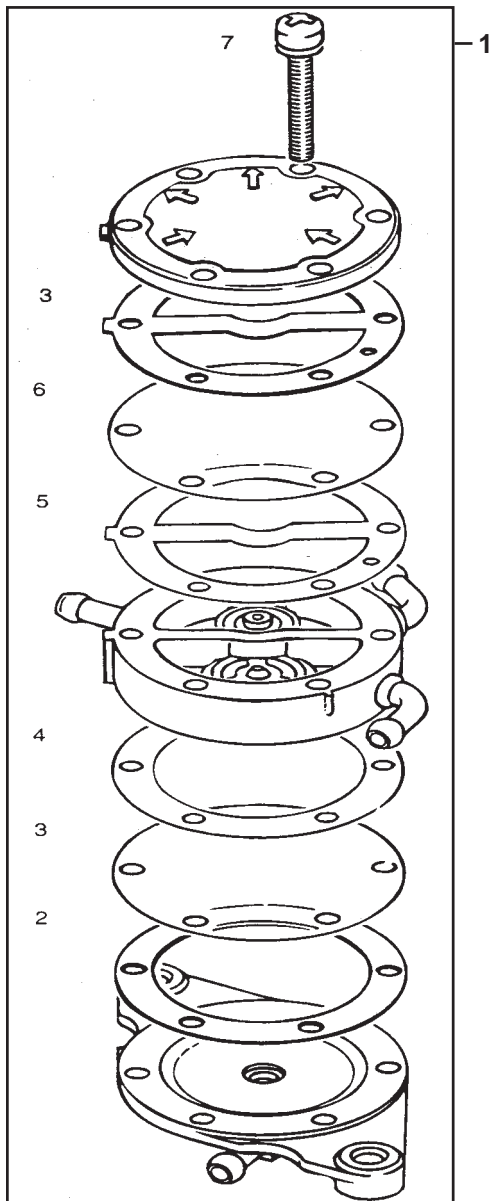
FOR INFORMATION REGARDING CARB ICING SEE SERVICE BULLETIN #4UL94E.

# FUEL PUMP, DUAL AND PRIMER KIT

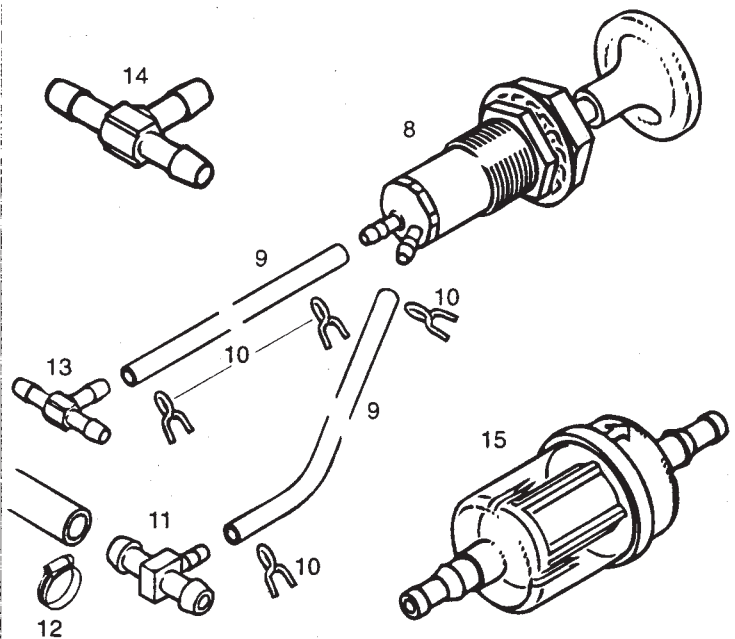
FUEL PUMPS

Some older carburetors do not have primer fitting installed, use #404-1276

RTX

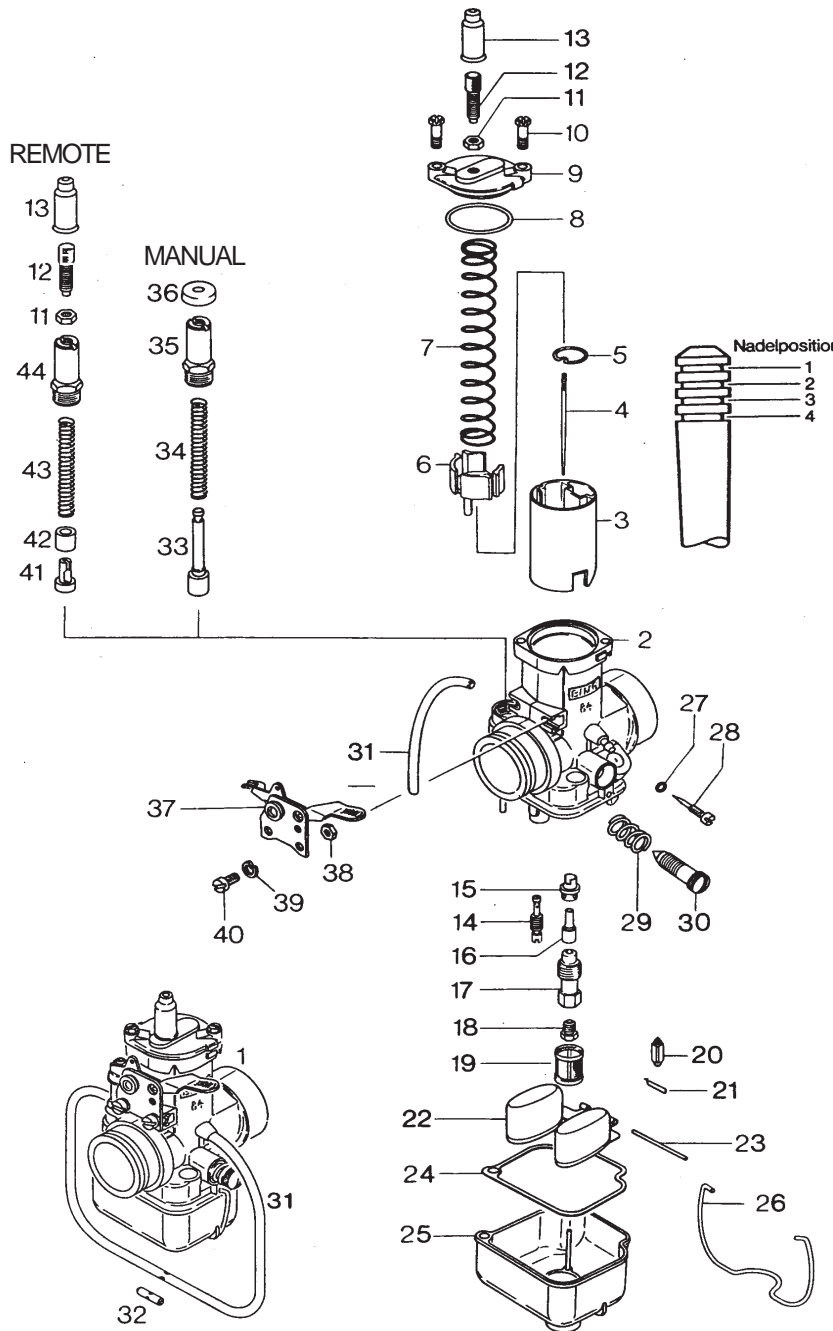


Ill No.	Part No.	Description	Qty
1	994 486	Dual fuel pump, ROTAX	1
2-7	MK-DF52	Dual fuel pump rebuild kit	1
2	850 440	Gasket	1
3	861 210	Diaphragm	2
4	850 445	Gasket	1
5	850 447	Gasket	1
6	850 450	Gasket	1
7	841 035	Combined screw M4x28	6
8-13	PKD	Primer kit w/10' hose	1
8	PRVALVE	Primer pump	1
9	FLU180	Primer line, 1/8" id/1/4" od	1
10	HCS-010P	Clamp, 1/4" id, nylon	8
	938 195	Clamp, metal (shown)	8
11	FFT148	Reduction t piece, 1/4x1/4x1/8	1
12	HCS-010F	Clamp, 3/8" id	2
	951 890	Clamp, metal (shown)	2
13	FFT118	Reduction t piece, 1/8x1/8x1/8	1
14	FFT114	T fitting, 1/4	1
15	414 3636	Fuel filter, opaque	1



FOR INFORMATION REGARDING CARB ICING SEE SERVICE BULLETIN #4UL94E.

# CARBURETOR 32MM BING 84 377/447 DUAL CARB ONLY



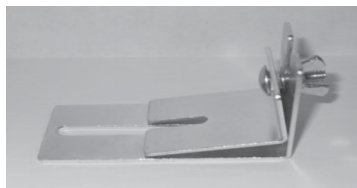
IllNo.	Part No.	Description	Qty
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1	CARB32	32mm Bing carburetor	1
2		Not available as spare part	
3	261-635	Carb piston	1
4		Jet needle, see jetting chart	1
5	261-650	Holding plate	1
6	227-635	Spring cup	1
7	239-700	Throttle valve spring	1
8	261-670	Rubber ring	1
9	261-660	Cover plate	1
10	241-430	Hex screw M5x12	2
11	942-541	Hex nut M6x.75	2
11-13,41-44	995 665	Remote choke kit	1
12	241-440	Adjustment screw M6x.75	2
13	260-370	Rubber grommet	2
14		Idle jet, see jetting chart	1
15	261-692	Diffuser	1
16		Needle jet, see jetting chart	1
17	963-130	Mixing tube	1
18		Main jet, see jetting chart	1
19	261-625	Sieve sleeve	1
20	261-705	Float needle valve w/viton tip	1
21	261-710	Float needle clip	1
22	963-192	Float	1
23	929-700	Pin	1
24	830-720	Gasket	1
25	963-170	Float chamber	1
26	963-180	Spring clip	1
27	831-710	O ring 3.2x1.8	1
28	963-155	Air regulating screw	1
29	938-640	Spring	1
30	963-160	Adjustment screw	1
31	256-421	Air vent line 280mm	1
32	961-300	Pressure compensation pipe	1
33-36	995 667	Hand lever choke set	1
33	268-847	Choke piston with gasket	1
34	239-730	Compression spring	1
35	261-770	Choke housing	1
36	260-490	Rubber cap	1
37	261-750	Choke lever assembly	1
38	261-200	Hex nut M5	2
39	945-750	Lock washer A5	2
40	240-791	Slotted head screw M5x10	2
41	963-740	Choke piston w/gasket	1
42	268-850	Sleeve	1
43	661-050	Compression spring	1
44	963-750	Choke housing	1

Not shown:

995 685 Remote Choke lever

Doesn't include cable to actuate



**KWIK TUNE**, makes reassembly of carburetor piston and throttle cable easier, #KWIKTN, \$9.95

# CARBURETOR

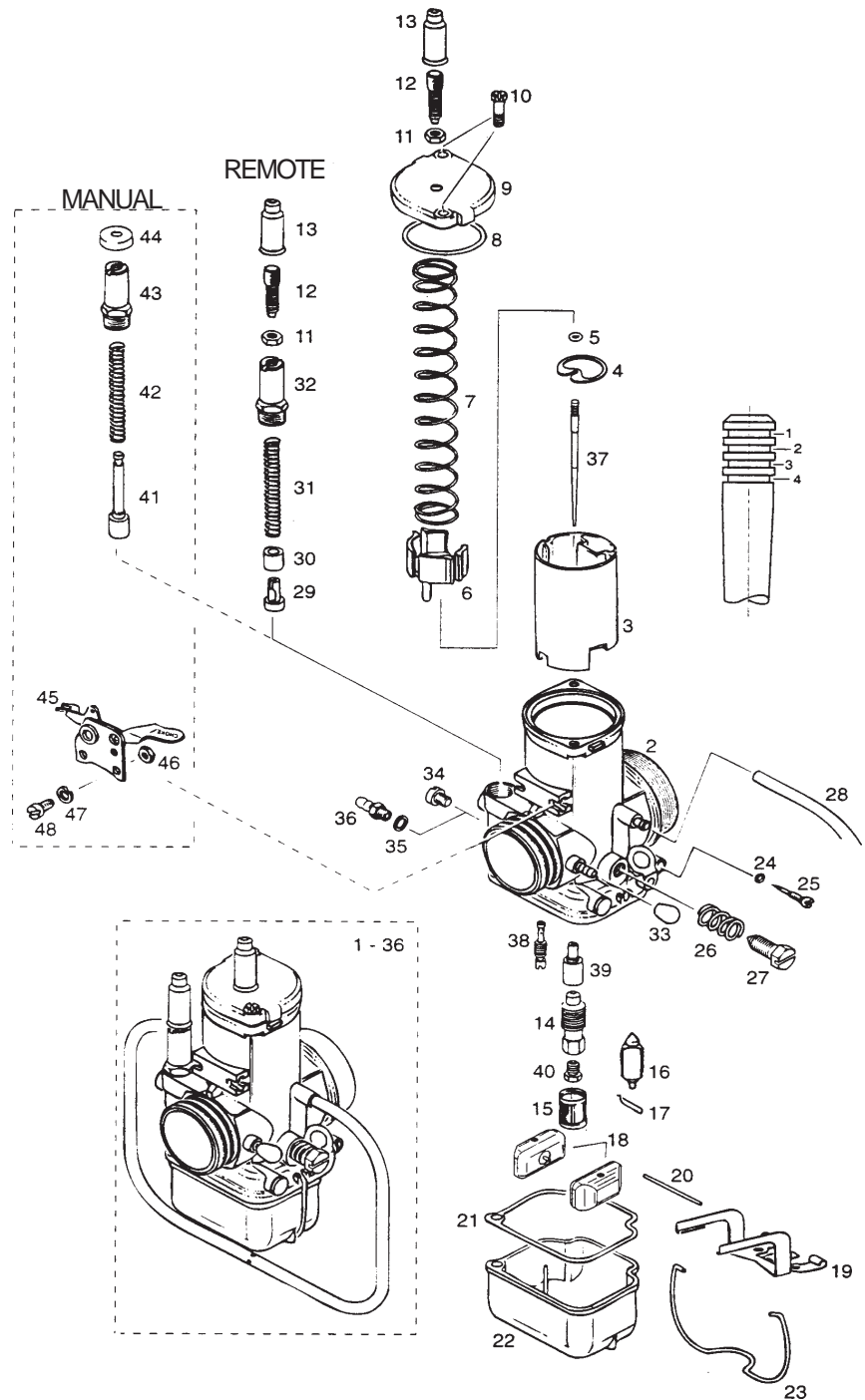
## 36MM BING 54

277/377SC/447SC/503/582/618

CARBURETOR

**RTX**

IllNo.	Part No.	Description	Qty
1-34	CARB36	36mm Bing carburetor	1
2		Not available as spare part	
3	963-679	Carburetor piston	1
4	963-500	Needle clip	1
5	831-715	O ring, 2.5x1.5	1
6	827-345	Spring cup, no recess for o ring	1
	827-347	Spring cup with recess for o ring	1
7	938-655	Carburetor piston spring 1.25/14	1
8	831-450	Rubber ring	1
9	963-721	Cover plate with pin	1
10	241-430	Hex screw M5x12	2
11-13, 29-32	995 665	Remote choke kit, does not include lever assy or cable	1
11	942-541	Hex nut M6x.75, 3mm high	2
12	241-440	Adjustment screw M6x.75	2
13	260-370	Rubber grommet	2
14	963-700	Mixing tube	1
15	261-625	Sieve sleeve	1
16	261-705	Float needle valve w/viton tip	1
17	261-710	Float needle clip	1
18	861-181	Float	2
19	861-190	Float bracket	1
20	929-700	Pin	1
21	830-720	Bowl gasket	1
22	261-010	Float chamber assembly	1
23	963-180	Spring clip	1
24	831-710	O ring 3.2x1.8	1
25	963-155	Air regulating screw	1
26	938-640	Spring	1
27	963-167	Adjustment screw	1
28	256-421	Air vent line 280mm	1
29	963-740	Choke piston w/gasket	1
30	268-850	Sleeve	1
31	661-050	Compression spring	1
32	963-750	Choke housing	1
33	860-610	Rubber cap	1
34	640-220	Slotted head screw M6x5	1
35	830-890	Gasket ring 6.2/8.9/1	1
36	940-557	Hose nipple, HAC connector M6	1
37		Jet needle, see jetting chart	1
38		Idle jet, see jetting chart	1
39		Needle jet, see jetting chart	1
40		Main jet, see jetting chart	1
41-48	995 667	Hand lever choke set (manual)	1
41	268-847	Choke piston w/gasket	1
42	239-730	Compression spring	1
43	261-770	Choke housing	1
44	260-490	Rubber cap	1
45	261-755	Choke lever assy	1
46	261-200	Hex nut M5	2
47	945-750	Lock washer A5	2
48	240-790	Slotted head screw M5x10	2



For carb rebuild kit, use CRK1, 1 per carburetor. Kit does not include any jetting. Kit includes:

- 1 831 450 Rubber ring
- 1 830 720 Bowl gasket
- 1 261 625 Sieve sleeve
- 1 261 705 Float needle valve w/viton tip
- 1 261 710 Float needle clip
- 1 260 370 Rubber grommet
- 1 831 710 O ring for air screw

Not shown:

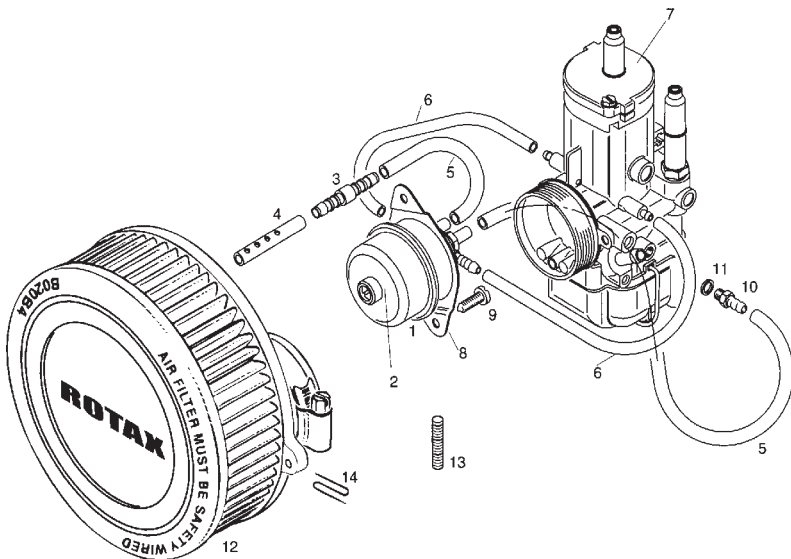
995 685 Remote choke lever

Does not include cable

**Lockwood Aviation Supply** [www.lockwood-aviation.com](http://www.lockwood-aviation.com)

**e-mail:info@lockwood.aero**

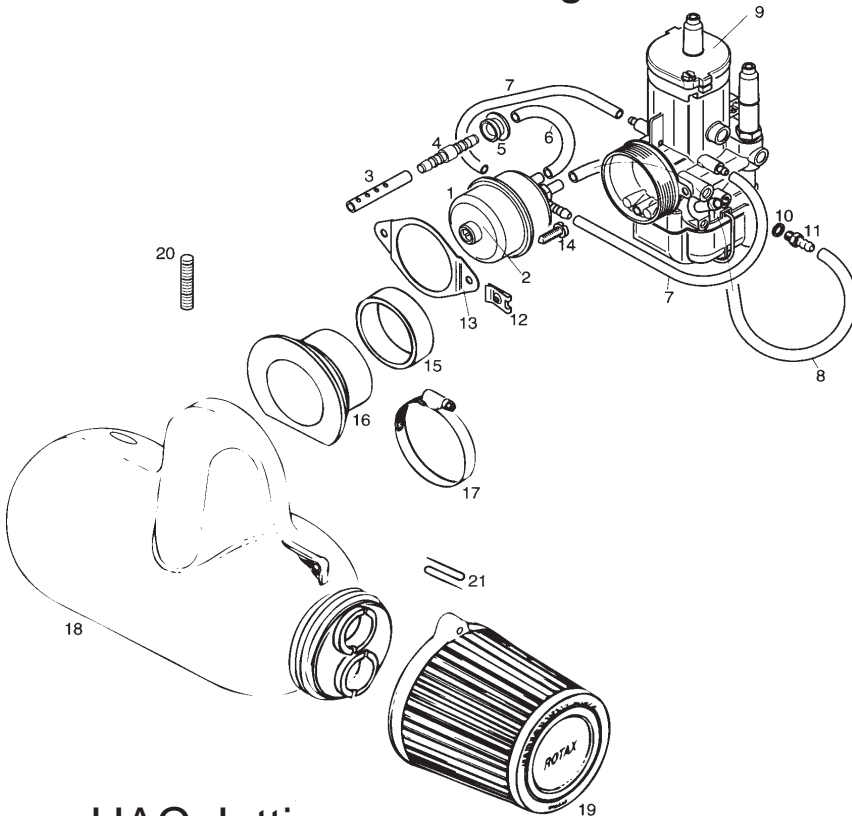
# HAC CARBURETOR single w/out silencer



1-13	886 291	Corrector Kit	1
1	996 465	Compensator, no longer avail.	1
2	861 593	Compensator needle KN03	1
		Not shown	1
3	924 480	Hose joining nipple	1
4	974 525	Venting hose	1
5	974 530	Fuel hose A5x8, 130mm	2
6	256 030	Oil line 4x7-.4, 160mm	2
7	887 800	Carb 54/36/20	1
8	861 650	Compensator flange	1
9	841 495	Self tapping screw 4.8x16	2
10	940 557	Hose nipple M6	1
11	830 890	Gasket ring	1
12	825 715	Air filter	1
13	877 340	Adjustment gauge	1
14		Safety wire	As Rqd



## Single with intake silencer



1-19	886 293	HAC kit	1
1	996 465	Compensator, no longer avail.	1
2	861 594	Compensator Needle KN04	1
		Not shown	1
3	974 535	Plastic line 120mm	1
4	924 480	Hose joining nipple	1
5	960 315	Cable grommet	1
6	974 530	Fuel hose A5x8, 130mm	1
7	256 030	Oil line 4x7-.4, 240mm	2
8		Fuel hose A5x8, 240mm	1
9	887 800	Carburetor 54/36/20	1
10	830 890	Gasket ring	1
11	940 557	Hose nipple M6	1
12	842 390	Spring nut V4.8	2
13	861 650	Compensator flange	1
14	841 495	Self tapping screw 4.8x16	2
15	860 160	Adaptor ring	1
16	825 440	Adaptor	1
17	851 790	Clamp 50-70	1
18	925 334	Intake silencer assy(SISK)	1
19	825 511	Airfilter (CM0300)	1
20	877 340	Adjustment gauge	1
21		Safety wire	As Rqd

## HAC Jetting 503 single carb

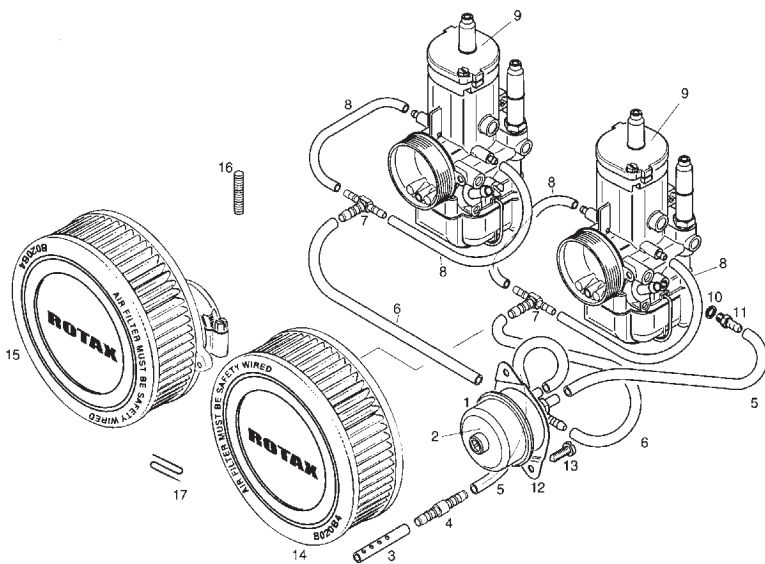
	with silencer	without
Main jet	195	180
Idle jet	45	45
Needle jet	2.72	2.72
Jet needle	15K2	15K2
Needle position	3	4
Cold start jet	150	150
Idle air adjust	.5	.5
Float needle valve	1.5	1.5

# HAC CARBURETOR dual w/out silencer

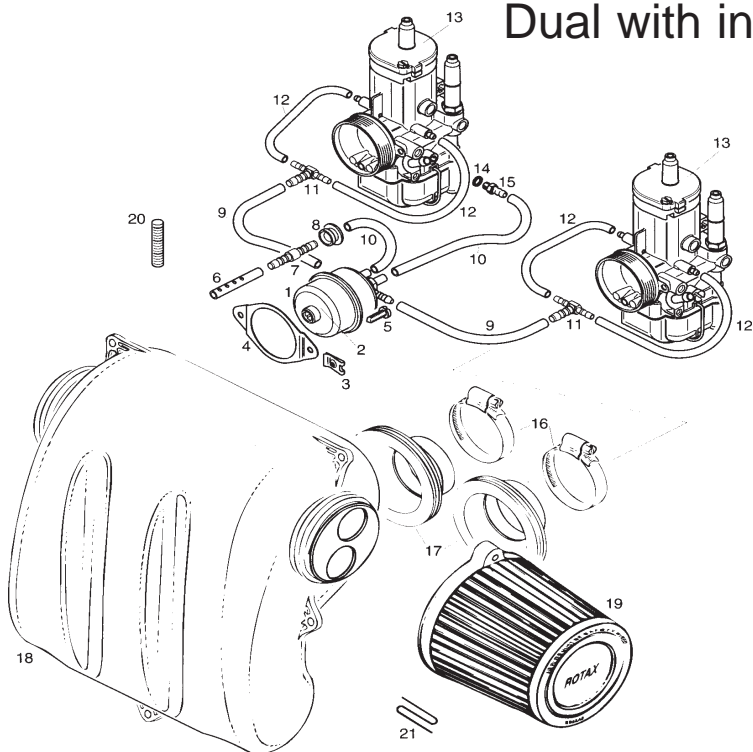
CARBURETOR

RTX

1-16	886 301	Twin HAC kit, 503	1
	886 307	Twin HAC kit, 582 90	1
	886 304	Twin HAC kit, 582 90/99,618	1
1	996 465	Compensator, no longer avail	1
2	861 593	Compensator needle KN03	1
		Not shown	
3	974 525	Venting hose	1
4	924 480	Hose joining nipple	1
5	974 530	Fuel hose, A5x8, 130mm	2
6		Fuel hose, A5x8, 180mm	2
7	974 834	T reducing nipple	2
8	256 030	Oil line 4x7-.4, 120mm	4
9	887 800	Carb, 54/36/20, 503	2
	887 805	Carb, 54/36/21, 582 90/99,618	2
10	830 890	Gasket ring	1
11	940 557	Hose nipple M6	1
12	861 650	Compensator flange	1
13	841 495	Self tapping screw 4.8x16	2
14	825 715	Air filter	1
15	825 711	Aif filter	1
16	877 340	Adjustment gauge	1
17		Safety wire	As Rqd



## Dual with intake silencer



1-20	886 302	HAC kit for 503	1
	886 306	HAC kit for 582 90/99	1
1	996 465	Compensator, no longer avail	1
2	861 593	Compensator needle, KN03	1
3	842 390	Spring nut V4.8	2
4	861 650	Compensator flange	1
5	841 495	Self tapping screw 4.8x16	2
6	974 525	Venting hose	1
7	924 480	Hose joining nipple	1
8	960 315	Cable grommet	1
9	974 530	Fuel hose A5x8, 180mm	2
10		Fuel hose A5x8, 130mm	2
11	974 834	T reducing nipple	2
12	256 030	Oil line 4x7-.4, 120mm	4
13	887 800	Carb 54/36/20	1
	887 805	Carb 54/36/21	1
14	830 890	Gasket ring	1
15	940 557	Hose nipple M6	1
16	951 790	Clamp 50-70	2
17	825 662	Silencer socket	2
18	825 658	Intake silencer, dual	1
19	825 511	Air filter (CM0300)	1
20	877 340	Adjustment gauge	1
21		Safety wire	As Rqd

## HAC Jetting Dual carb installations 503/582/618

	503DC no isk	503DC w/isk	582 no isk	582 w/isk	618 no isk mag	618 no isk pto	618 w/isk mag	618 w/isk pto
Main jet	195	180	175	180	190	175	190	175
Idle jet	45	45	55	55	50	55	55	55
Needle jet	2.72	2.72	2.72	2.68	2.72	2.72	2.72	2.72
Jet needle	15K2	15K2	11G2	15K2	9M10J	9M10J	9M10J	9M10J
Needle position	3	4	3	3	3	3	3	3
Cold start jet	150	150	150	150	150	150	150	150
Idle air adjust	.5	.5	1	1	1	1	1	1
Float needle valve	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

# CARBURETOR JETTING

CARBURETOR

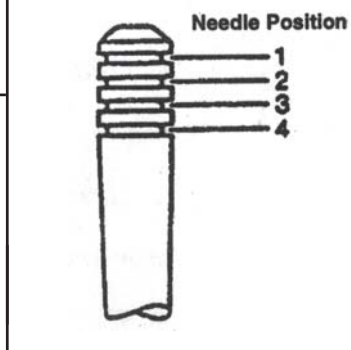
ENGINE	277(A)	227(B)	377(A)	377(B)	447(A)	447(B)	447DC(A)	447DC(C)	503SC(A) UP TO #3785371	503SC(B)
MAIN JET	148	140	165	155	165	155	135	128	180	158
IDLER JET	45	45	45	45	45	45	50	50	45	45
NEEDLE JET	2.72	2.72	2.70	2.70	2.70	2.70	2.70	2.68	2.74	2.74
JET NEEDLE	8L2	8L2	802	802	15K2	15K2	6G1	15K2	8G2	6H2
CLIP POSITION	2	2	2	2	2	2	3	2	3	3
AIR SCREW TURNS	1	1	.5	.5	.5	.5	1	1	.5	.5

ENGINE	503SC(A) FROM #3785372 UP	503SC(B)	503DC(A)	503DC(C)	532/582(A)	532/582(C)	618(A) pto/mag	618(C) pto/mag
MAIN JET	185	165	158	148	165	145	160/170	135/145
IDLER JET	45	45	45	45	55	55	50	50
NEEDLE JET	2.72	2.70	2.70	2.68	2.72	2.68	2.68	2.68
JET NEEDLE	15K2	15K2	11K2	11K2	11G2	15K2	9M10J	9M10J
CLIP POSITION	3	3	2	2	3	2	2	2
AIR SCREW TURNS	.5	.5	.5	1	1	.5	1	1.5



(A) WITHOUT ROTAX INTAKE SILENCER, WITH K&N AIR CLEANER RC1200/SP2704, ETC  
 (B) WITH ROTAX SINGLE INTAKE SILENCER KIT, WITH K&N AIR CLEANER CM0300  
 (C) WITH ROTAX DUAL INTAKE SILENCER, WITH K&N AIR CLEANER CM0300



### MAIN JET



- 125 = 268 978
- 128 = 261 085
- 130 = 268 979
- 135 = 268 980
- 138 = 268 998
- 140 = 268 981
- 142 = 268 994
- 145 = 268 982
- 148 = 268 995
- 150 = 268 983
- 152 = 268 152
- 154 = 268 154
- 155 = 268 984
- 158 = 268 996
- 160 = 268-985
- 162 = 268 990
- 164 = 268 993
- 165 = 268 986
- 170 = 268 987
- 175 = 268 988
- 180 = 268 989
- 185 = 261 080
- 190 = 261 084
- 195 = 268 992
- 200 = 261 082
- 205 = 261 087
- 220 = 261 081

### NEEDLE JET



- 2.62 = 963 262
- 2.68 = 963 691
- 2.70 = 963 698
- 2.72 = 963 697
- 2.74 = 963 699
- 2.76 = 963 693
- 2.78 = 963 696
- 2.80 = 963 695
- 2.82 = 963 694
- 2.94 = 961 022

### JET NEEDLE



- 2H2 = 963 717
- 4E2 = 963 716
- 6G1 = 261 642
- 6H2 = 963 719
- 8FKZ = 961 043
- 8G2 = 963 712
- 8H1 = 261 643
- 8L2 = 963 714
- 802 = 963 711
- 9M10J = 961 047
- 10 = 961 045
- 11G2 = 961 043
- 11K2 = 961 044
- 15K2 = 963 718
- 15E5U = 961 046

### IDLER JET



- 30 = 963 141
- 35 = 963 143
- 40 = 963 142
- 45 = 963 144
- 50 = 963 140
- 55 = 963 147
- 60 = 963 145
- 65 = 963 146

## ALTITUDE COMPENSATION CHART

TEMP (F)	0,000	1,600	3,300	5,000	6,500	8,200	10,000	11,500	13,000
-22	104	103	101	100	98	97	95	94	93
- 4	103	102	100	99	97	96	95	93	92
+14	102	101	99	98	96	95	94	92	91
+32	101	100	98	97	95	94	93	91	90
+50	100	99	97	96	95	93	92	91	89
+59	100	99	97	96	94	93	92	90	89
+68	100	98	97	95	94	93	91	90	88
+86	99	97	96	94	93	92	90	89	88
+104	98	96	95	94	92	91	90	88	87
+122	97	96	94	93	92	90	89	88	86

**EXAMPLE:** You're going to do a lot of flying in Colorado (Elevation about 5,000 feet). Your machine is performing just fine in Galveston, Texas (Elevation 7 feet). Your main jet is size 150. Temperature in Galveston (86°F) — Denver (50°F). The new jet required to obtain the same mixture ratio as was provided by the size 150 is determined from the equation:

$$J_2 = \frac{A_2}{A_1} \times J_1$$

Where

- A<sub>2</sub> = the second altitude (Colorado)
- A<sub>1</sub> = the first altitude (Galveston)
- J<sub>1</sub> = original main jet (150)

- A<sub>2</sub> = 96 (alt 5,000—temp. 50 deg.)
- A<sub>1</sub> = 99 (alt "0"—temp 86 deg.)
- J<sub>1</sub> = 150 (original main jet)

$$J_2 = \frac{96}{99} \times 150 \text{ or } .97 \times 150 = 145$$

Therefore, the same mixture at sea-level with a 150 main jet will be achieved at 5,000 feet with a 145 main jet (AT ABOVE TEMPERATURES ONLY)—If temperature in Colorado was 86 degrees, we would have:

$$J_2 = \frac{94}{99} \times 150 = .95 \times 150 = 142$$

When changing jets for altitude, always make correction for temperature as well.

**NOTE:** Before operating the engine at low altitude, reinstallation of the original jets is necessary or engine damage may occur.